Technical Memorandum No. 33-99

Volume 2, Part C

Earth-Venus Trajectories, 1965-66

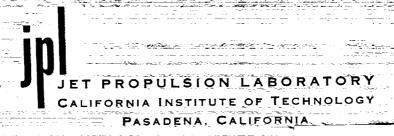
V. C. Clarke, Jr.

R. Y. Roth

W. E. Bollman

T. W. Hamilton

C. G. Pfeiffer



June 1, 1963

OTS PRICE

XEROX



W1600F114



.

-

CONTENTS

I.	Introduction	vii
	A. Heliocentric Conic Computation	vii
	B. Planetocentric Conic Computation	vii
	C. Differential Corrections	vii
	D. Mid-Course Guidance	vii
	E. Orbit Determination	viii
	F. Accuracy of Computations	viii
II.	Analytical Model for Interplanetary Trajectories	ix
	A. Heliocentric Motion	ix
	B. Launch Planet Escape Hyperbola	X
	C. Differential Corrections	xiii
	D. Mid-Course Execution Accuracy	XV
	E. Orbit Determination Accuracy	xvii
III.	Explanation of Trajectory Tables	xx
	A. Heliocentric Conic Group	XX
	B. Planetocentric Conic Group	xxii
	C. Differential Corrections Group	XXV
	D. Mid-Course Execution Accuracy Group	xxv
	E. Orbit Determination Accuracy Group	xxvi
IV.	Constants	xvii
Ref	erences , ,	xxi
Err	itum	xxi
Ear	th—Venus Trajectories, 1965-66	XX

TABLES

1. Trajectory parameters influencing tracking accuracy		٠		xix
2. Tracking station parameters influencing tracking accuracy			xix	
FIGURES				
1. Heliocentric transfer geometry				x
2. In-plane transfer geometry				x
3. Determination of the hyperbolic-excess velocity vector \mathbf{V}_{hL} .				хi
4. Vehicle flight plane				xii
5. Impact parameter B				xiii
6. The R, S, T target coordinate system				xiii
7. The mapping of mid-course execution error				xvi
8. Projection of three-dimensional error ellipsoid on the $T ext{-}R$ plane				xviii
9. Orientation of the \mathbf{X}_i Cartesian coordinate system to describe uncertainties in the hyperbolic-excess velocity vector \mathbf{V}_{hL}				xviii
10. Generalized geometry for aiming point angles		•	•	xxiii
11. Definition of σ_p and γ_p				xxiii

FOREWORD

This volume is one of a set of five giving key characteristics of Earth-to-Venus trajectories during the period 1964–1970. This period is divided into five 120-day launch intervals spaced about 19.2 months apart. During each interval, trajectory characteristics are given for flight times of from 70 to 220 days in 2-day steps. Thus each volume contains 9,120 trajectories.

The applicability of these books may be extended by noting the 8-year cyclic recurrence of Earth–Venus trajectories. Thus trajectories in 1972 are very nearly identical to 1964 trajectories; 1973 trajectories are very nearly identical to 1965 trajectories, etc. Simply by updating the trajectories by 8 years, the results may be reapplied.

It is intended that these books provide trajectory and guidance analysts with data, in volume, so that they may perform preliminary design studies, conduct investigations of the properties of ballistic interplanetary trajectories, and make interplanetary guidance and orbit determination analyses. While not exact, these trajectories are sufficiently accurate to be quite useful for the above purposes.

In generating such a large amount of data, it is impossible to check the correctness of each number. Should the reader detect any errors, the authors would appreciate being advised.

Companion volumes (Ref. 1) give the characteristics of Earth-Mars trajectories during the period 1964-1977.

I. INTRODUCTION

This report presents the results of extensive machine computations of three-dimensional ballistic interplanetary trajectories. The analytic model used to represent these trajectories is based upon two-body, inverse-square, force field mechanics. A brief explanation of the model is presented in Section II.

Basically, the trajectories are calculated in two distinct parts: (1) the heliocentric transfer ellipse and (2) the launch-planet-centered escape trajectories. Following these trajectories, differential corrections or error coefficients and guidance and tracking parameters are given.

A. Heliocentric Conic Computation

The heliocentric trajectory is obtained by specifying the launch date and flight time only. Given these, the positions of the launch planet on the launch date and the target planet on the arrival date may be obtained by interrogating the ephemerides. By assuming the planets to be massless, a unique heliocentric trajectory may then be computed which passes through the centers of the launch and target planets. Though this assumption may at first seem gross, experience has proved it to be perfectly reasonable for this purpose. After the solution has been obtained by an iterative procedure, the orbital elements, heliocentric position, and velocity vectors at launch and arrival are computed. Other heliocentric quantities of engineering interest are also computed.

B. Planetocentric Conic Computation

After the heliocentric orbit is obtained, the launch and arrival hyperbolic-excess velocity vectors are computed by subtracting the velocity vectors of the launch and target planets from the heliocentric launch and arrival velocity vectors of the probe. The launch hyperbolic-excess vector is, in fact, the most important result of these computations because it yields the energy and direction of fire required to achieve interplanetary transfer.

Further computations are done to exhibit properties of the near-Earth portion of the trajectories. Given the launch hyperbolic-excess vector, a launch site (Cape Canaveral), a launch azimuth, and certain properties of a typical interplanetary boost vehicle, and assuming a 100-nm parking orbit, quantities such as launch time, injection position and velocity vectors, parking orbit coast time, and injection time are computed. In essence, then, approximate trajectories are obtained from the

launch pad to the target. The terminal portions of the trajectories are assumed to impact vertically on the target planet.

C. Differential Corrections

To augment the trajectory parameters, differential corrections or error coefficients relating variations in the launch hyperbolic-excess velocity vector to variations in target miss and flight time are computed. Actually, the variables at launch in these coefficients are the square of the hyperbolic-excess speed, or vis viva energy C_3 , and the declination and right ascension of a unit vector S, collinear with the outgoing asymptote of the escape hyperbola. The target variables are the components of the impact parameter S, defined below, and the flight time. These coefficients are obtained by a numerical differencing technique developed by William Kizner of JPL.

Based upon these error coefficients, guidance and tracking parameters are calculated as described below.

D. Mid-Course Guidance

Interplanetary guidance is currently being accomplished by determining the orbit of the probe from radio tracking data and then applying one or more impulsive velocity corrections to null the predicted target error. The guidance task closely parallels the trajectory problem, for it is convenient to define the following guidance "phases":

- 1. Planetocentric phase, in which, after the launch vehicle has placed the probe on its escape hyperbola, the orbital elements of this trajectory are determined and the hyperbolic-excess velocity is corrected to the desired value.
- Heliocentric phase, in which additional velocity corrections may be made to correct any error in orbit determination and/or maneuver execution in phase 1.
- 3. Approach phase, in which the probe is in the sphere of influence of the planet and the final vernier corrections may be made to trim the results of phase 2.

The preflight analysis of phase-1 guidance is primarily concerned with the statistical problem of determining how much propellant to carry aboard the spacecraft in order to correct a "three-sigma" injection guidance error. These studies are well-documented elsewhere (Ref. 2–4) and will not be discussed here. Suffice it to say that correcting the hyperbolic-excess velocity is a reasonably good approximation to nulling the miss components at the planet. Such an analysis need only be concerned with the planetocentric phase of flight.

The analysis of the heliocentric phase is more complicated, since maneuvers there depend upon errors in applying the first midcourse maneuver (phase 1). In order to understand the effect of phase 1 errors, or to specify a tolerance on them, it is convenient to ask how a unit error in hyperbolic-excess velocity maps to miss at the target. This unit velocity error can be thought of as due to uncertainties in phase-I maneuver execution and orbit determination. Conceptually, this analysis can be accomplished by letting a unit velocity error trace out a sphere at the tip of the hyperbolic-excess velocity vector and observing the semimajor and semiminor axes of the miss ellipse at the target (only two miss components are normally of interest). Mathematically, this is done by simply forming a matrix of the differential corrections, multiplying this matrix by its own transpose, diagonalizing the resulting symmetric matrix, and observing that the two diagonal terms are the desired semimajor and semiminor axes of the unit error ellipse.1 It is easy to show that if the coordinate system chosen to describe the target error is collinear with these axes, the rows of the resulting differential correction matrix (which are gradient vectors) are orthogonal, and their norms are the magnitudes of the error-ellipse axes.

The approach guidance phase is not conveniently treated with this kind of analysis, and is not discussed further. Here, it can be assumed that the approach maneuvers are always negligibly small.

E. Orbit Determination

A spacecraft boosted toward Mars or Venus by the current generation of launch vehicles requires the accuracy obtainable using Earth-based radio guidance in order to accomplish most planet-oriented experiments. The steps in radio guidance are:

1. Track the transponder signal from the spacecraft from several stations located at a spread of latitudes to determine the orbit of the spacecraft.

- 2. Calculate the velocity changes required to alter the orbit to pass through the desired region at the target. The maneuver is then applied with a small rocket motor; the pointing direction and burning time (of the velocity increment) are calculated to perfectly correct the orbit if both the estimate of the orbit and the application of the maneuver are without error.
- Track the spacecraft after the first maneuver for a sufficient interval to form a new estimate of the perturbed orbit.

This process of tracking and maneuvering may be repeated several times to achieve high accuracies at the target. There is, however, a limit to the process imposed by our uncertainties in the actual location of the target planet as well as the unpredictable forces acting on the spacecraft.

For extremely high accuracy at the target planet, onboard measurements must be used in conjunction with the Earth-based tracking in order to further reduce the above-mentioned uncertainties. It is not the function of this report to discuss on-board measurement systems but rather to describe the capabilities of current Earth-based radio guidance techniques when applied to interplanetary trajectories.

An adequate description of the accuracy to which orbits may be determined and maneuvers executed for the case of several corrective maneuvers is beyond the scope of this report. The results presented here may be strictly interpreted as corresponding to the accuracy capabilities for a single mid-course maneuver occurring anywhere between 1 and 14 days after injection. The relative contribution to the target uncertainty caused by orbit determination errors and mid-course execution errors depends directly upon the size of the correction required on a particular flight. For this reason, then, two error sources are considered separately. While our results do correspond to the single maneuver case, they are very valuable in providing a general description of the way in which these errors vary over the selected set of trajectories. Such utilization of the results is discussed later herein.

F. Accuracy of Computations

Extensive accuracy studies were performed to verify the adequacy of these trajectories for preliminary design use. Both Mars and Venus trajectories were computed on the JPL precision-integrating trajectory program using

¹It should be apparent to readers familiar with statistical concepts that this is equivalent to mapping a three-dimensional gaussian distribution of velocity errors, with unit standard deviation along each axis, to a two-dimensional gaussian distribution of position errors at the target.

initial conditions obtained from the approximate trajectories contained herein. Of 56 Mars cases run, 29 missed the target by less than 500,000 km; 16 missed by between 500,000 and 1,000,000 km; and 5 missed by between 1,000,000 and 1,500,000 km. The worst case missed by 3,500,000 km. For the flight time errors, 16 varied between 1 and 2 days; 14 varied between 2 and 3 days; and 9 were greater than 3 days. The worst case was 7.2 days. No systematic properties of these errors were noted except that they appear to get worse for the higher-energy trajectories.

For Venus, the accuracy was considerably better, averaging 322,000-km miss error and 0.67-day flight time errors. Based on these comparisons, the model used to generate the trajectories contained herein is considered to be adequate and the results suitable for preliminary mission design studies. These results are very useful for initializing the precision trajectory search program.

When used for the stated purposes, these trajectories provide an excellent source of data obtained at considerably less time and expense than precision cases.

II. ANALYTICAL MODEL FOR INTERPLANETARY TRAJECTORIES

The analytical model consists of three distinct phases of two-body motion: (1) an escape hyperbola near the launch planet, (2) elliptical² motion under the attraction of the Sun, and (3) terminal hyperbolic motion near the target planet.

A. Heliocentric Motion

Solution of the heliocentric elliptic motion is obtained first under the following assumptions:

- 1. The launch and target planets move in orbits about the Sun as given in the national ephemerides. Their velocity components are obtained by using two-body conic formulas, mean orbital elements, and their tabular positions as listed in the ephemerides.
- 2. The launch and target planets are massless. Thus the only force acting on the probe is that of the Sun.
- 3. The position of the probe at launch into the heliocentric orbit is the center of the massless launch planet. Its position at arrival on the heliocentric orbit is the center of the massless target planet.

Thus for solution to the heliocentric phase of motion, the attractions of the launch and target planets are temporarily disregarded. The primary result to be obtained from the solution of the heliocentric transfer problem is the hyperbolic-excess velocity vector relative to the launch planet.

1. Determination of Planar Orientation

Since the launch and arrival positions of the probe are assumed to be the centers of the launch and target planets, they can immediately be determined, given the launch and arrival³ times, by consulting the ephemeris. Further, the orientation of the heliocentric transfer plane can immediately be found. Let R_L be the Sun-launch planet position vector at launch time T_L , and let R_p be the Sun-target planet position vector at arrival time T_p (Fig. 1). Then, planar orientation is found from the unit normal W to the plane as follows:

$$\mathbf{W} = \frac{\mathbf{R}_L \times \mathbf{R}_p}{\mathbf{R}_L \, \mathbf{R}_p \sin \mathbf{\Psi}} \tag{1}$$

² Hyperbolic heliocentric motion is not considered herein.

³Or, for convenience, the launch date and flight time can be specified.

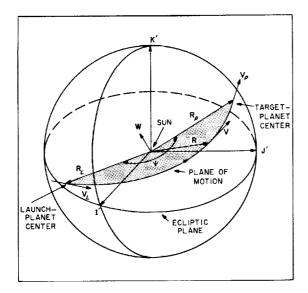


Fig. 1. Heliocentric transfer geometry

where the angle Ψ is defined below. The inclination i to the ecliptic plane can be found by

$$\cos i = \mathbf{W} \cdot \mathbf{K'} \tag{2}$$

where K' is a unit vector pointing in the direction of the ecliptic north pole.

2. In-Plane Relations

The heliocentric central angle Ψ (Fig. 1) is also readily determined by utilizing the positions of the launch and target planets. This angle may be obtained from

$$\cos \Psi = \frac{\mathbf{R}_L \cdot \mathbf{R}_p}{|\mathbf{R}_L| |\mathbf{R}_p|} \tag{3}$$

$$\sin \Psi = \operatorname{sgn} \left[(\mathbf{R}_L \times \mathbf{R}_p) \cdot \mathbf{K}' \right] (1 - \cos^2 \Psi)^{\frac{1}{2}} \tag{4}$$

The velocity vector V of the spacecraft anywhere along its path may be obtained from

$$\mathbf{V} = \frac{V}{R} \left[(\mathbf{W} \times \mathbf{R}) \cos \Gamma + \mathbf{R} \sin \Gamma \right] \tag{5}$$

Here, **R** is the heliocentric position vector, $R = |\mathbf{R}|$, and V is the heliocentric speed obtained from

$$V = \sqrt{\langle GM_s \rangle \left(\frac{2}{R} - \frac{1}{a}\right)} \tag{6}$$

and the path angle Γ is found from

$$\sin \Gamma = \left[\sqrt{\frac{R}{(1 - e^2)(2a - R)}} \right] e \sin v \tag{7}$$

In Eq. (6) and (7), GM_s is the universal gravitational constant times the mass of the Sun (= $2.959122083 \times 10^{-4}$ au³/day²), a and e are the semimajor axis and eccentricity of the transfer ellipse, respectively, and v is the true anomaly of the probe given by

$$\cos v = \frac{a(1-e^2)-R}{eR} \tag{8}$$

3. Lambert's Theorem

Now there are two unknowns in Eq. (5)–(8) which prevent their immediate evaluation. These two unknowns are the semimajor axis a and the eccentricity e. The determination of these quantities is the main problem. Battin (Ref. 5) has shown that the eccentricity is actually a function of the semimajor axis. Thus it is first necessary to determine a. The semimajor axis is related to the time of flight T_F by Lambert's Theorem, which states: The transfer time between any two points on an ellipse is a function of the sum of the distances of each point from the focus, the distance between the points, and the semimajor axis of the ellipse. Functionally, the theorem is stated as

$$T_F = T_F (R_L + R_n, C, a) \tag{9}$$

where the distance C between the launch planet at launch time and the target planet at arrival time is shown in Fig. 2 and is obtained from

$$C = |\mathbf{R}_p - \mathbf{R}_L| \tag{10}$$

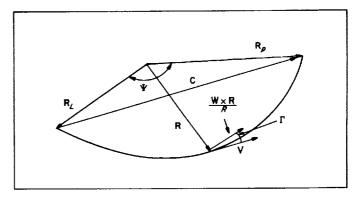


Fig. 2. In-plane transfer geometry

Since the time of flight T_F and the launch and arrival positions R_L and R_p are knowns, only the semimajor axis

In this report, we are interested only in transfers which have the same rotational motion about the Sun as the planets; thus, $0 \le i \le \pi/2$.

remains to be found by iterative solution of Eq. (9). After the semimajor axis a is obtained, the heliocentric velocities of the probe at launch and arrival time V_L and V_p may be evaluated from Eq. (5) under the conditions $R = R_L$ and $R = R_p$. The path angles Γ_L , Γ_p and true anomalies v_L , v_p at launch and arrival times may also be evaluated from Eq. (8) and (7) under the same conditions.

Finally, the desired end result, the hyperbolic-excess velocity V_{hL} relative to the launch planet may be found (Fig. 3) by

$$\mathbf{V}_{hL} = \mathbf{V}_L - \mathbf{V}_1 \tag{11}$$

where V_1 is the velocity of the launch planet at launch time.

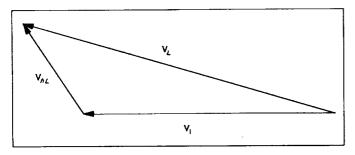


Fig. 3. Determination of the hyperbolic-excess velocity vector $\mathbf{V}_{\hbar L}$

B. Launch Planet Escape Hyperbola

The key result from the solution of heliocentric transfer is the hyperbolic-excess velocity vector \mathbf{V}_{hL} at launch. The reason for the importance of this vector is that it tells the direction in which the probe must be traveling relative to the launch planet when just leaving its gravitational influence. There are an infinite number of escape trajectories (all hyperbolas) which can have the same hyperbolic-excess velocity vector. However, only a portion of these are practical for use when related to existing launch sites and boost vehicle constraints. For example, it would be ridiculously costly in payload—and impractical—to shoot a vehicle straight up. Criteria for selection of a family of feasible escape trajectories are given below.

1. Assumptions

The solution of the escape phase of motion is obtained under the following assumptions: (1) The probe is acted on only by the gravitational force of the launch planet, and (2) the oblateness effects of the launch planet are neglected. The direction of the asymptote of the escape hyperbola is found by normalizing the hyperbolic-excess vector \mathbf{V}_{hL} . The injection energy 6 \mathbf{C}_{3} of the escape hyperbola is found by squaring the hyperbolic-excess speed, or

$$C_3 = V_{hL}^2 \tag{12}$$

Thus, in contrast to the heliocentric problem, the launch planet is now "massy," while the influence of the Sun is neglected. However, the hyperbolic-excess velocity vectors found by solving the heliocentric problem are used as a starting point to solve the escape problem.

2. Size and Shape of the Escape Hyperbola

As previously stated, only some of the infinite number of escape trajectories are practical. Two of the practical aspects of a set of trajectories are the sizes and shapes of the hyperbolas.

Size is basically determined by the energy C_3 , which in turn is a function of boost vehicle capability. For boost vehicles in use (or shortly to be available) at this writing, values of energy less than or equal to $25 \text{ km}^2/\text{sec}^2$ are considered reasonable. The larger the value of energy that the booster is required to deliver, the smaller the payload and launch period over which the vehicle may be fired.

The shape of the hyperbola is determined by its eccentricity, which is a function of both the energy and perifocal distance according to

$$e = 1 + \frac{R_p C_3}{GM} \tag{13}$$

where R_p is the perifocal distance and GM is the universal gravitational constant times the mass of the launch planet. From Eq. (13) it can be seen that for a fixed perifocal distance the eccentricity increases linearly with the energy. The value of perifocal distance is not arbitrary, but depends strongly on the boost vehicle trajectory. It has been shown (Ref. 6) that in the great majority of cases it is necessary and desirable to use a circular parking orbit as part of the preinjection phase of the escape trajectory. It is further an interesting fact that the altitude of the parking orbit determines the perifocal distance. If h is the parking orbit altitude and R_0 is the launch planet's radius, then, to an extremely close degree of approximation,

$$R_n = R_0 + h \tag{14}$$

⁸The details of quadrant choice for these angles are found in Ref. 5.

⁶C₃ is actually twice the total energy per unit mass, i.e., the vis viva integral.

or the perifocal distance is equal to the launch-planetcentered radius of the parking orbit. In Ref. 6 it also has been shown that the lowest possible parking orbit (80–100 nm) allows greatest payload capability. Thus, using 100 nm for the parking orbit altitude, a practical value of perifocal distance is 6560 km. The perifocal distance will vary only slightly about this value for other parking orbit altitudes, or even for direct-ascent-type preinjection trajectories. Therefore, both the size and shape are essentially determined by the energy alone, which is found from Eq. (12).

Given the size and shape of the escape hyperbola, its planar orientation must be determined, and this can be done by considering two vectors: (1) the direction of the hyperbolic-excess vector, denoted by a unit vector \mathbf{S} , and (2) a unit vector \mathbf{R}_L^1 directed from the center of the launch planet to the launch site. The vehicle's flight plane will essentially be determined by these two vectors, as shown in Fig. 4. A unit normal W to the launch-planet-centered flight plane is determined by

$$\mathbf{W} = \frac{\mathbf{R}_L^1 \times \mathbf{S}}{|\mathbf{R}_L^1 \times \mathbf{S}|} \tag{15}$$

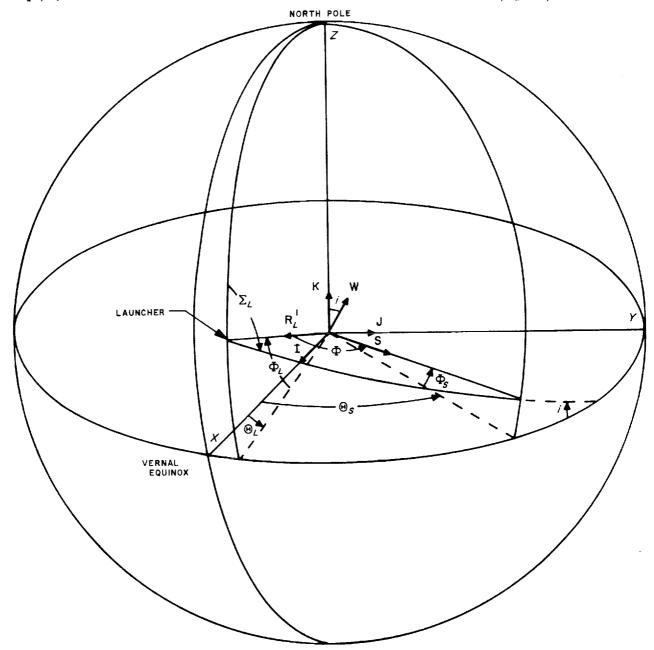


Fig. 4. Vehicle flight plane

with the constraint that the Z component of W is always positive.

Since \mathbf{R}_L^1 is a function of time, according to the rotation rate of the launch planet, the planar orientation must continually change. In effect, this says that the launch azimuth is a continuous function of launch time.

A detailed description of the geometrical aspects of the launch planet ascent trajectory is not given here but may be found in Ref. 6.

C. Differential Corrections

The calculation of differential corrections for interplanetary trajectories may be accomplished in several ways and depends on choice of independent and dependent variables. In this report, a numerical differencing scheme is used. Basically, the independent variables—the injection energy C_3 , declination Φ_8 , and right ascension Θ_8 of the outgoing asymptote S of the escape hyperbola—are varied, one at a time, to produce variations in the dependent variables—the components of the impact parameter **B** and the time-of-flight T_F .

The impact parameter **B** is defined as a vector originating at the center of the target planet and directed perpendicular to the incoming asymptote of the target-centered approach hyperbola (Fig. 5). The impact parameter **B** is resolved into two components which lie in a

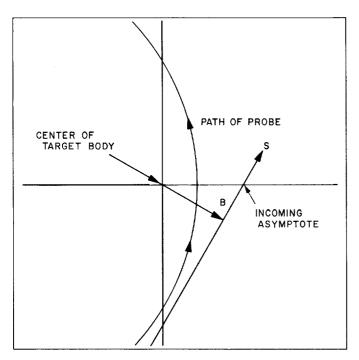


Fig. 5. Impact parameter B

plane normal to the incoming asymptote S. The orientations of the reference axes in this plane are arbitrary, but one is usually selected to lie in a fixed plane. Thus, define a unit vector T, lying in the *ecliptic* plane according to

$$\mathbf{T} = \frac{\mathbf{S} \times \mathbf{K'}}{|\mathbf{S} \times \mathbf{K'}|} \tag{16}$$

where K' is a unit normal vector to the ecliptic plane. The remaining axis is then given by a unit vector R, defined by

$$\mathbf{R} = \mathbf{S} \times \mathbf{T} \tag{17}$$

Figure 6 illustrates the orientation of the R, S, T target coordinates.

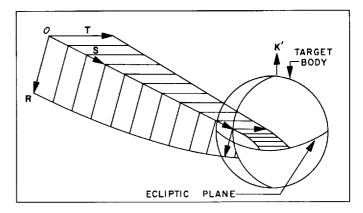


Fig. 6. The R, S, T target coordinate system

The impact parameter **B** lies in the **R**-**T** plane and has miss components $\mathbf{B} \cdot \mathbf{T}$ and $\mathbf{B} \cdot \mathbf{R}$. $\mathbf{B} \cdot \mathbf{T} = \mathbf{B} \cdot \mathbf{R} = 0$ denotes vertical impact on the target. Thus, $\mathbf{B} \cdot \mathbf{T}$, $\mathbf{B} \cdot \mathbf{R}$, and T_F are the three target-dependent variables. If Q_i represents a set of generalized independent variables, such as injection position and velocity or other convenient variables, then the partial derivatives $\partial \mathbf{B} \cdot \mathbf{T}/\partial Q_i$, $\partial \mathbf{B} \cdot \mathbf{R}/\partial Q_i$, $\partial T_F/\partial Q_i$ are first-order differential corrections or error coefficients relating miss at the target and flight time errors to the independent variables.

A convenient set of independent variables for interplanetary trajectories is the *vis viva* injection energy C_3 , the declination Φ_S , and the right ascension Θ_S of the asymptote of the escape hyperbola. These variables essentially describe the launch hyperbolic-excess velocity vector since

$$\mathbf{V}_{hL} = (C_3)^{1/2} (\cos \Phi_S \cos \Theta_S, \cos \Phi_S \sin \Theta_S, \sin \Phi_S) \quad (18)$$

As stated above, the differential corrections are calculated by a numerical differencing method which uses

quantities obtained from the conic trajectory. The basic idea is to compute a varied or perturbed trajectory and then difference it with the reference case. Let primed quantities denote variables on the perturbed trajectory. A small variation ΔV_{hL} in the hyperbolic-excess velocity vector is equivalent to a small variation ΔV_L in the launch heliocentric velocity vector. The launch heliocentric velocity on the perturbed trajectory is, then,

$$\mathbf{V}_L' = \mathbf{V}_L + \Delta \mathbf{V}_{hL} \tag{19}$$

where

$$\begin{split} \Delta \mathbf{V}_{hL} &= (C_3)^{1\!\!/}_{\!\!\!4} \; \Delta \Phi_{\mathcal{S}} \left[\, - \sin \, \Phi_{\mathcal{S}} \, \cos \, \Theta_{\mathcal{S}}, \, - \sin \, \Phi_{\mathcal{S}} \, \sin \, \Theta_{\mathcal{S}}, \, \cos \, \Phi_{\mathcal{S}} \right] \; , \\ & (C_3)^{1\!\!/}_{\!\!\!4} \; \Delta \Theta_{\mathcal{S}} \left[\, - \cos \, \Phi_{\mathcal{S}} \, \sin \, \Theta_{\mathcal{S}}, \, \cos \, \Phi_{\mathcal{S}} \, \cos \, \Theta_{\mathcal{S}}, \, 0 \right], \\ & \frac{- \, \Delta C_3}{2 \, (C_3)^{1\!\!/}_{\!\!\!4}} \left[\cos \, \Phi_{\mathcal{S}} \, \cos \, \Theta_{\mathcal{S}}, \, \cos \, \Phi_{\mathcal{S}} \, \sin \, \Theta_{\mathcal{S}}, \, \sin \, \Phi_{\mathcal{S}} \right] \end{split}$$

where $\Delta \Phi_s$, $\Delta \Theta_s$ are small angular variations (0.2 deg), and the energy variation is $\Delta C_3 = 0.005 C_3$.

The semimajor axis a' is obtained from

$$a' = \frac{R_L}{2 - \frac{V_L'^2 R_L}{GM_R}}$$
 (20)

The radial rate R_L' is

$$\dot{R}_L' = \frac{\mathbf{V}_L' \cdot \mathbf{R}_L}{\mathbf{R}_L} \tag{21}$$

The semilatus rectum p' and eccentricity e' are

$$p' = \frac{R_L^2 \left(V_L'^2 - \dot{R}_L'^2 \right)}{GM_8} \tag{22}$$

$$e' = \left(1 - \frac{p'}{a'}\right)^{\frac{1}{4}} \tag{23}$$

The eccentric anomaly at launch E'_{L} is

$$\sin E'_{L} = \frac{R_{L} \dot{R}'_{L}}{e' (a'GM_{S})^{\frac{1}{2}}}$$

$$\cos E'_{L} = \frac{1}{e'} \left(1 - \frac{R_{L}}{a'} \right)$$
(24)

The mean anomaly at launch M'_{L} is obtained from

$$M_L' = E_L' - e' \sin E_L' \tag{25}$$

The mean orbital rate n' is

$$n' = \frac{(GM_s)^{\frac{1}{2}}}{a'^{\frac{3}{2}}} \tag{26}$$

The mean anomaly at the target M'_n is

$$M_p' = n' T_F + M_L' \tag{27}$$

The eccentric anomaly at the target E'_p is obtained from the expansion

$$E'_{p} = E_{p} + \left(\frac{1}{1 - e'\cos E_{p}}\right) \Delta M - \frac{1}{2} \left[\frac{e'\sin E_{p}}{(1 - e'\cos E_{p})^{3}}\right] \Delta M^{2}$$

$$+ \frac{1}{6} \left[\frac{3 e'\sin E_{p})^{2} - (1 - e'\cos E_{p})(e'\cos E_{p})}{(1 - e'\cos E_{p})^{5}}\right] \Delta M^{3}$$
if (28)

 $\cos E_p \ge 0$

$$E'_{p} = E_{p} + \frac{e \cos E_{p} - 1 + \sqrt{(e \cos E_{p} - 1)^{2} + (2e \sin E_{p}) \Delta M}}{e \sin E_{p}}$$
if

$$\cos E_n < 0$$

where

$$\Delta M = M_p' - (E_p - e' \sin E_p)$$

The true anomalies at launch and the target v'_L and v'_p are found from

$$\cos v_L' = \frac{p' - R_L}{e' R_L} \tag{30}$$

 $0 < v'_L < \pi$ if \dot{R}'_L is positive

 $\pi < v_L' < 2\pi$ if R_L' is negative

$$\cos v_p' = \frac{\cos E_p' - e'}{1 - e' \cos E_p'}$$

$$\sin v_p' = \frac{(1 - e'^2)^{\frac{1}{2}} \sin E_p'}{1 - e' \cos E_p'}$$
(31)

The heliocentric central angle Ψ' is

$$\Psi' = v_p' - v_L' \tag{32}$$

The angular momentum h' is

$$\mathbf{h}' = \mathbf{R}_L \times \mathbf{V}_L' \tag{33}$$

The heliocentric position vector at the target is

$$\mathbf{R}_{p}' = R_{p}' \left(\frac{\mathbf{R}_{L}}{R_{L}} \cos \Psi' + \frac{\mathbf{h}' \times \mathbf{R}_{L}}{h' R_{L}} \sin \Psi' \right)$$
(34)

where

$$R'_{p} = a' (1 - e' \cos E'_{p})$$
 (35)

A vector in the direction of perihelion with magnitude e' is

$$\varepsilon' = \frac{V_L' \times h'}{GM_S} - \frac{R_L}{R_L}$$
 (36)

The heliocentric velocity at the target is

$$\mathbf{V}_{p}' = \frac{\mathbf{h}'}{p'} \times \left(\frac{\mathbf{R}_{p}'}{\mathbf{R}_{p}} + \mathbf{\epsilon}'\right) \tag{37}$$

The hyperbolic-excess velocity at the target is

$$\mathbf{V}_{hp}' = \mathbf{V}_p' - \mathbf{V}_2 \tag{38}$$

The difference between the heliocentric position vectors on the perturbed and reference trajectories is

$$\Delta \mathbf{R}_p' = \mathbf{R}_p' - \mathbf{R}_p \tag{39}$$

The impact parameter B is

$$\mathbf{B} = -\frac{(\Delta \mathbf{R}_p' \cdot \mathbf{V}_{hp}') \, \mathbf{V}_{hp}'}{\mathbf{V}_{hp}'^2} + \Delta \mathbf{R}_p'$$

The flight time error is

$$\Delta T_F = \frac{\Delta \mathbf{R}_p' \cdot \mathbf{V}_{hp}'}{V_{hp}'^2} \tag{40}$$

The partial derivatives are formed by dividing $\Delta\Theta_8$, $\Delta\Phi_8$, and ΔC_3 into the miss components ${\bf B}\cdot{\bf T}$, ${\bf B}\cdot{\bf R}$, and flight time error ΔT_F . In addition to the component partials, the quantity $\partial B/\partial Q_i$ is defined by

$$\frac{\partial B}{\partial Q_i} = \left[\left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial Q_i} \right)^2 + \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial Q_i} \right)^2 \right]^{\frac{1}{2}}$$
(41)

The three partials, $\partial B/\partial \Theta_s$, $\partial B/\partial \Phi_s$, $\partial B/\partial C_3$, are important measures of the error sensitivity of a trajectory.

The effect of uncertainty in the knowledge of the astronomical unit-to-kilometer conversion factor on target miss and flight time may be determined by the following formulae,

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial a u} = \frac{-2C_3}{a u} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial a u} = \frac{-2C_3}{a u} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3}$$
(42)

from whence

$$\frac{\partial B}{\partial au} = \frac{2C_3}{au} \frac{\partial B}{\partial C_2} \tag{43}$$

and

$$\frac{\partial T_F}{\partial au} = \frac{-2C_3}{au} \frac{\partial T_F}{\partial C_3} \tag{44}$$

where au is the astronomical unit-to-kilometer conversion factor.

The effect of solar radiation pressure acting on the probe may also be evaluated as follows: In Eq. (19) let $\Delta V_{hL} = 0$, but in Eq. (20), (22), (24), (26), (36), vary GM_s by adding an increment ΔGM_s . This procedure gives rise to a varied trajectory from which the impact parameter B and flight time error ΔT_F may be obtained. The partials $\partial B/\partial GM_s$ and $\partial T_F/\partial GM_s$ may then be calculated. Since the acceleration caused by solar radiation pressure acts opposite to the gravitational attraction of the Sun, radiation pressure has the effect of decreasing the Sun's gravitational attraction, or decreasing GMs. A decrease, $\Delta GM_8 = -2.4 \times 10^6 \, \mathrm{km^3/sec^2}$ corresponds to the solar radiation pressure acting on a 300-kg spacecraft having a perfectly reflecting area of 3.6 square meters. Thus the miss, always being a positive number, is obtained by $\Delta B_{sp} = 2.4 \times 10^6 \, \partial B/\partial GM_s$, and the corresponding flight time error is $\Delta T_{F_{sp}} = -2.4 \times 10^6 \, \partial T_F / \partial G M_S$, which is sign sensitive.

D. Mid-Course Execution Accuracy

The effect of mid-course execution errors on target accuracy can be rather simply described if it is assumed that the guidance maneuver is made on the asymptote of the escape hyperbola and that the velocity errors are spherically distributed (that is, the three-dimensional statistical distribution of velocity errors is composed of three orthogonal, independent velocity errors, each with the same variance). The mapping of these errors to the target (Fig. 7) results in a three-dimensional ellipsoid of position errors, which is the "one-sigma ellipsoid." The semiaxes are the respective standard deviations of the position errors. As pointed out above, this ellipsoid can be thought of as the locus of target errors that results from a unit velocity error at the mid-course point tracing out a sphere.

Let the differential corrections discussed above be expressed in matrix form as

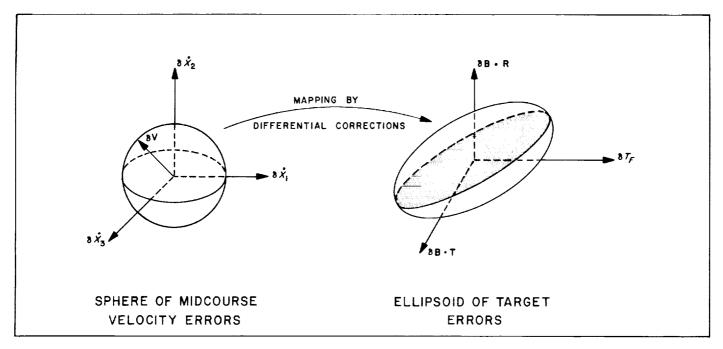


Fig. 7. The mapping of mid-course execution error

$$K = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}} \\ \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{3}} \\ \\ \frac{\partial T_{F}}{\partial \Phi_{S}} & \frac{\partial T_{F}}{\partial \Theta_{S}} & \frac{\partial T_{F}}{\partial C_{3}} \end{bmatrix}$$
(45)

Now define a Cartesian coordinate system X_1, X_2, X_3 such that

$$\delta \dot{X}_{1} = V_{hL} \delta \Phi_{S}$$

$$\delta \dot{X}_{2} = - (V_{hL} \cos \Phi_{S}) \delta \Theta_{S}$$

$$\delta \dot{X}_{3} = \delta V_{hL} = \frac{\delta C_{3}}{2V_{hL}}$$

$$(46)$$

Then a new matrix F can be formed,

$$F = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{1}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{2}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{3}} \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{1}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{3}} \\ \frac{\partial \mathbf{T}_{F}}{\partial \dot{X}_{1}} & \frac{\partial \mathbf{T}_{F}}{\partial \dot{X}_{2}} & \frac{\partial \mathbf{T}_{F}}{\partial \dot{X}_{3}} \end{bmatrix}$$
(47)

where

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{1}} = \frac{1}{V_{hL}} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{2}} = \frac{-1}{V_{hL} \cos \Phi_{S}} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \dot{X}_{3}} = 2V_{hL} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{1}} = \frac{1}{V_{hL}} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} = \frac{-1}{V_{hL} \cos \Phi_{S}} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}}$$

$$\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{X}_{2}} = 2V_{hL} \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{2}}$$

(48)

$$\begin{aligned} \frac{\partial T_F}{\partial \dot{X}_1} &= \frac{1}{V_{hL}} \frac{\partial T_F}{\partial \Phi_S} \\ \frac{\partial T_F}{\partial \dot{X}_2} &= \frac{-1}{V_{hL} \cos \Phi_S} \frac{\partial T_F}{\partial \Theta_S} \\ \frac{\partial T_F}{\partial \dot{X}_3} &= 2V_{hL} \frac{\partial T_F}{\partial C_3} \end{aligned}$$

Let the spherical distribution of midcourse velocity errors be described in the X_1 , X_2 , X_3 system as

$$\delta \dot{X}_{1}^{2} + \delta \dot{X}_{2}^{2} + \delta \dot{X}_{3}^{2} = \sigma_{v}^{2}$$
 (49)

where σ_{ν} will be taken equal to 0.1 meters/sec. The resultant one-sigma ellipsoid of target errors is described by the quadratic form,

$$\delta \mathbf{M} \, \Lambda^{-1} \, \delta \mathbf{M}^T = 1 \tag{50}$$

where

$$\Lambda = \sigma_v^2 F F^T = \begin{bmatrix} \lambda_{11} & \lambda_{12} & \lambda_{13} \\ & \lambda_{22} & \lambda_{23} \\ & \text{symmetric} & \lambda_{33} \end{bmatrix}$$
 (51)

and

$$\delta \mathbf{M} = (\delta \mathbf{B} \cdot \mathbf{T}, \delta \mathbf{B} \cdot \mathbf{R}, \delta T_F)$$

The elements of the Λ matrix are:

$$\begin{split} \lambda_{11} &= \sigma_v^2 \Bigg[\frac{1}{C_3} \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_S} \bigg)^2 + \frac{1}{C_3 \cos^2 \Phi_S} \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_S} \bigg)^2 \\ &+ 4C_3 \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \bigg)^2 \Bigg] \end{split}$$

$$\lambda_{12} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_S} \right) \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_S} \right) + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_S} \right) \right]$$

$$\times \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S} \right) + 4C_3 \left(\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} \right) \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3} \right) \right]$$

$$egin{aligned} \lambda_{13} &= \sigma_v^2 igg[rac{1}{C_3} igg(rac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{\mathcal{S}}} igg) igg(rac{\partial T_F}{\partial \Phi_{\mathcal{S}}} igg) + rac{1}{C_3 \cos^2 \Phi_{\mathcal{S}}} igg(rac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{\mathcal{S}}} igg) igg(rac{\partial T_F}{\partial \Theta_{\mathcal{S}}} igg) igg. \ &+ 4C_3 igg(rac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3} igg) igg(rac{\partial T_F}{\partial C_3} igg) igg] \end{aligned}$$

$$\begin{split} \lambda_{22} &= \sigma_v^2 \Bigg[\frac{1}{C_3} \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_S} \bigg)^2 + \frac{1}{C_3 \cos^2 \Phi_S} \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S} \bigg)^2 \\ &+ 4C_3 \bigg(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3} \bigg)^2 \Bigg] \end{split}$$

$$egin{aligned} \lambda_{23} &= \sigma_v^2 \Bigg[rac{1}{C_3} igg(rac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_S} igg) igg(rac{\partial T_F}{\partial \Phi_S} igg) + rac{1}{C_3 \cos^2 \Phi_S} igg(rac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_S} igg) igg(rac{\partial T_F}{\partial \Theta_S} igg) \Bigg] \ &+ 4C_3 igg(rac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3} igg) igg(rac{\partial T_F}{\partial C_3} igg) \Bigg] \end{aligned}$$

$$\lambda_{33} = \sigma_v^2 \left[\frac{1}{C_3} \left(\frac{\partial T_F}{\partial \Phi_S} \right)^2 + \frac{1}{C_3 \cos^2 \Phi_S} \left(\frac{\partial T_F}{\partial \Theta_S} \right)^2 + 4C_3 \left(\frac{\partial T_F}{\partial C_3} \right)^2 \right]$$

The quantities in the Λ matrix can be interpreted as standard deviations (sigmas) and correlation coefficients (rhos) according to

$$\sigma_{T} = (\lambda_{11})\frac{1}{2}$$

$$\sigma_{R} = (\lambda_{22})\frac{1}{2}$$

$$\sigma_{F} = (\lambda_{33})\frac{1}{2}$$

$$\rho_{RT} = \frac{\lambda_{12}}{(\lambda_{11}\lambda_{22})\frac{1}{2}}$$

$$\rho_{TF} = \frac{\lambda_{13}}{(\lambda_{11}\lambda_{33})\frac{1}{2}}$$

$$\rho_{RF} = \frac{\lambda_{23}}{(\lambda_{22}\lambda_{33})\frac{1}{2}}$$
(53)

Then the A matrix becomes

$$\Lambda = \begin{bmatrix} \sigma_T^2 & \rho_{RT} \, \sigma_R \, \sigma_T & \rho_{TF} \, \sigma_F \, \sigma_T \\ & & & & & \\ \sigma_R^2 & & \rho_{RF} \, \sigma_R \, \sigma_F \end{bmatrix}$$
symmetric
$$\sigma_F^2$$
 (54)

It is often of interest when describing only miss components to consider

$$\sigma_B = (\sigma_R^2 + \sigma_T^2)^{1/2} \tag{55}$$

and to diagonalize the upper 2×2 portion of the Λ (the miss component elements) to get

$$\lambda_{23} = \sigma_{v}^{2} \left[\frac{1}{C_{3}} \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}} \right) \left(\frac{\partial T_{F}}{\partial \Phi_{S}} \right) + \frac{1}{C_{3} \cos^{2} \Phi_{S}} \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}} \right) \left(\frac{\partial T_{F}}{\partial \Theta_{S}} \right) \right]$$

$$+ 4C_{3} \left(\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{3}} \right) \left(\frac{\partial T_{F}}{\partial C_{3}} \right) \right]$$

$$\Lambda^{*} = L\Lambda L^{T} = \begin{bmatrix} \sigma_{1}^{2} & 0 & \rho_{13} \sigma_{1} \sigma_{3} \\ \sigma_{2}^{2} & \rho_{23} \sigma_{2} \sigma_{3} \\ \sigma_{2}^{2} & \rho_{23} \sigma_{2} \sigma_{3} \end{bmatrix}$$
(56)
$$\int_{0}^{2} \left[\frac{1}{2} \left(\frac{\partial T_{F}}{\partial C_{S}} \right)^{2} + \frac{1}{2} \left(\frac{\partial T_{F}}{\partial C_{S}} \right)^{2} \right] dS$$

where the matrix L is given by

(52)

$$L = \begin{bmatrix} \cos \theta & \sin \theta & 0 \\ -\sin \theta & \cos \theta & 0 \\ 0 & 0 & 1 \end{bmatrix}$$
 (57)

The angle θ is positive when turned counterclockwise from the T axis, and has been chosen such that $\sigma_1 \geq \sigma_2$. This is accomplished by

$$\theta = \frac{1}{2} \tan^{-1} \left[\frac{2\rho_{RT}}{\left(\frac{\sigma_T}{\sigma_R}\right) - \left(\frac{\sigma_R}{\sigma_T}\right)} \right]$$
 (58)

where θ is in first quadrant if ρ_{RT} is positive and θ is in second quadrant if ρ_{RT} is negative. Notice that $\sigma_3 = \sigma_F$. The two-dimensional error ellipse described by σ_1 , σ_2 , and θ is the projection of all points of the three-dimensional ellipsoid of position errors (discussed in Section IIE) onto the T-R plane, as shown in Fig. 8.

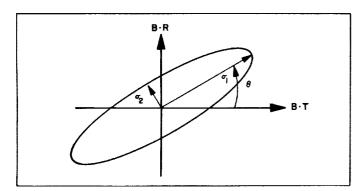


Fig. 8. Projection of three-dimensional error ellipsoid on the T-R plane

E. Orbit Determination Accuracy

In this section the analytic model used for describing orbit determination accuracy (tracking error) for interplanetary trajectories is discussed, and the factors upon which the tracking error depends are reviewed. The dominant error sources are defined for the easterly launchings from Cape Canaveral using tracking coverage supplied by NASA's Deep Space Instrumentation Facility (DSIF). Probable generalization to other situations is suggested. Finally, the method of describing target errors is presented along with all formulae relating the tracking errors to the target error parameters chosen.

1. Method of Describing Orbit Determination Accuracy

As discussed in Section IID, the uncertainties in our knowledge of an interplanetary trajectory are well described in terms of the direction and magnitude of the geocentric hyperbolic-excess velocity vector, \mathbf{V}_{hL} . Figure 9 defines the right-handed Cartesian coordinate system we have adopted for describing uncertainties in \mathbf{V}_{hL} . The X_3 axis is along \mathbf{V}_{hL} ; the X_1 axis is in the direction of a positive differential change in asymptote declination Φ_8 ; and the X_2 axis completes the system.

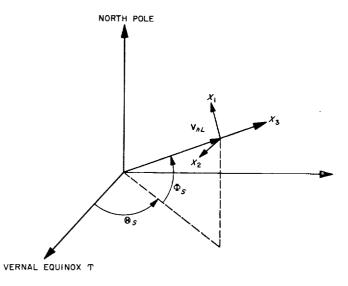


Fig. 9. Orientation of the X_i Cartesian coordinate system to describe uncertainties in the hyperbolic-excess velocity vector $\mathbf{V}_{\hbar L}$

Let $\hat{\mathbf{X}}$ represent the vector of velocity *errors* in the X_i system just described; $\hat{\mathbf{X}} = (\delta \dot{X}_1, \delta \dot{X}_2, \delta \dot{X}_3)^T$, where T indicates the transpose. The average of any function of $\dot{\mathbf{X}}$, $f(\dot{\mathbf{X}})$, over an *ensemble* of randomly generated tracking runs may assist in describing our statistical knowledge of $\dot{\mathbf{X}}$ based on tracking noise, station location, and physical constant uncertainties. The ensemble average is usually written $Ef(\dot{\mathbf{X}})$ or as $f(\dot{\mathbf{X}})$. When $\dot{\mathbf{X}}$ has a Gaussian (normal) probability density function, the distribution can be described completely by specifying $E\dot{\mathbf{X}}$ and $E[(\dot{\mathbf{X}} - \ddot{\mathbf{X}})(\dot{\mathbf{X}} - \dot{\mathbf{X}})^T]$, the mean and covariance of $\dot{\mathbf{X}}$, respectively.

When all parameters influencing our knowledge of $\dot{\mathbf{X}}$ have been considered, $E\dot{\mathbf{X}}$ should be zero and then the description of our uncertainties in $\dot{\mathbf{X}}$ can be adequately given by Covar $\dot{\mathbf{X}}$, defined above. For convenience, the symbol $\Lambda_{\dot{\mathbf{X}}}$, for Covar $\dot{\mathbf{X}}$, is introduced.

$$\Lambda_{\dot{\mathbf{X}}} = \operatorname{Covar} \dot{\mathbf{X}} = E \left[(\dot{\mathbf{X}} - \mathbf{X})^{\mathsf{T}} (\dot{\mathbf{X}} - \mathbf{X})^{\mathsf{T}} \right]$$
 (59)

Note that

$$\Lambda_{\dot{\mathbf{X}}} = \begin{pmatrix} \tilde{\delta}\dot{\mathbf{X}}_{1}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{1} & \tilde{\delta}\dot{\mathbf{X}}_{1}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{2} & \tilde{\delta}\dot{\mathbf{X}}_{1}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{3} \\ \tilde{\delta}\dot{\mathbf{X}}_{2}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{1} & \tilde{\delta}\dot{\mathbf{X}}_{2}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{2} & \tilde{\delta}\dot{\mathbf{X}}_{2}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{3} \\ \tilde{\delta}\dot{\mathbf{X}}_{3}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{1} & \tilde{\delta}\dot{\mathbf{X}}_{3}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{2} & \tilde{\delta}\dot{\mathbf{X}}_{3}^{\dagger}\tilde{\delta}\dot{\mathbf{X}}_{3} \end{pmatrix}$$
(60)

is a 3×3 real symmetric matrix. The diagonal terms are the variances of the three components, and the off-diagonal terms measure the correlation between the three components.

Before describing how $\Lambda_{\dot{\mathbf{X}}}$ has been "mapped" into target error uncertainties, a discussion is given of the dependence of $\Lambda_{\dot{\mathbf{X}}}$ upon the relevant factors describing near-Earth tracking as well as the typical errors assumed in preparing the estimates given in this report.

2. Accuracy of Near-Earth Tracking

By expressing the accuracy of near-Earth tracking in terms of $\dot{\mathbf{X}}$ and its associated covariance $\Lambda_{\dot{\mathbf{X}}}$, the dependence upon almost all trajectory parameters has been eliminated. The remaining relevant trajectory parameters are listed in Table 1.

Table 1. Trajectory parameters influencing tracking accuracy

Note the limited number of trajectory parameters on which $\Lambda_{\hat{x}}$ depends. Table 2 summarizes the key tracking station parameters which influence accuracy in the geocentric tracking phase.

The first three factors listed in Table 2 define the tracking configuration, whereas the last three are station performance factors. Usually, tracking accuracy studies are carried out with the tracking configuration relatively fixed, and the influence of the station performance factors are determined.

The final source of tracking error is uncertainty in physical constants. The influence of GM-Earth errors is somewhat smaller than the above-mentioned errors and should be reduced to negligible contribution in the next two years. Sections IIC and IIIC describe how the uncertainty in the astronomical unit affects the target error; this error

Table 2. Tracking station parameters influencing tracking accuracy

Station locations
2. Total tracking time 3. Tracking data typesRange R, range rate Å, and angles are most commonly taken.
 Delay in acquiring first dataDelay is measured from the injection region as well as station acqui- sition delays.
5. Tracking data accuraciesExpressed in terms of equivalent uncorrelated noise at a given sampling rate.
6. Uncertainty in tracking Important when high data accuracies are available. Longitude errors usually are most important.

can be important for very long flights, but should also be reduced to a negligible contribution in the next two years. Errors in the target's mass cause minor variations in flight time T_F and negligible effect on **B**. The last important target error source currently recognized is the uncertainty in the effect of the standard solar radiation pressure on spacecraft trajectory. The source of uncertainty is that effective reflecting area (largely solar panels) is not perfectly known. Techniques for the accurate measurement of this quantity are currently under development. Our studies show that unless this error is held below 5% it will be the dominant error source on many of our flights. Sections IIC and IIIC describe the calculation of the standard solar radiation pressure on a typical spacecraft deriving electrical power from the Sun.

The tracking accuracies reported here are representative of those available from tracking with the DSIF stations in South Africa, Australia, and the United States. Launch azimuths between 90 and 114 deg east of north were considered. Data accuracies of 0.02 m/sec in R and 0.05 deg in angle sampled every 10 minutes were assumed; no range measurements were assumed. Station location errors were assumed to be uncorrelated with standard deviations of 0.001 deg in latitude, 0.0005 deg in longitude, and 30 meters in radius. Each station was allowed 10 minutes to acquire the spacecraft transponder, and tracking was simulated in the first 24 hours so that at least one pass was available to each station. The transfer of transmitting assignment from one station to another (simultaneous transmission was not allowed) followed a pattern which has been found to be near-optimum.

The $\Lambda_{\mathbf{x}}$ matrix used in these calculations was assumed to be independent of the trajectory parameters listed in Table 1. This approximation is good for the range of energies and asymptotic declinations considered to be

most feasible. In the future these approximations will be refined as necessary. The Λ_X^* used for orbit determination accuracy in this report is given in Section IIIE. The target accuracies calculated here are typical for any reasonable multistation tracking configuration, with the data types and accuracies corresponding to this conservative representation of DSIF capabilities.

3. Calculation of Target Errors

The representation of tracking accuracy in the geocentric phase in terms of $\Lambda_{\dot{\mathbf{X}}}$, the covariance of the \mathbf{V}_{hL} in a particular rectangular coordinate system, was developed earlier in this section. In order to express the effect of these uncertainties in \mathbf{V}_{hL} in terms of target error, two steps must be performed. First, a set of coordinates \mathbf{M}_1 at the target planet for expressing the errors (\mathbf{M}_1 cannot exceed 3 dimensions) must be chosen. (A convenient set with desirable linearity properties is the \mathbf{T} - \mathbf{R} - \mathbf{S} system defined previously.) The matrix U_1 , which maps $\dot{\mathbf{X}}$ to the desired \mathbf{M}_1 , is then determined.

$$\mathbf{M}_{1} = U_{1}\dot{\mathbf{X}} = \begin{pmatrix} \delta \mathbf{B} \cdot \mathbf{T} \\ \delta \mathbf{B} \cdot \mathbf{R} \\ \delta S \end{pmatrix} \tag{61}$$

The covariance of M_1 is given by

$$Covar [\mathbf{M}_1] = \mathbf{M}_1 \mathbf{M}_1^T = U_1 \Lambda_{\mathbf{X}}^{\cdot} U_1^T = \Lambda_{\mathbf{M}_1}$$
 (62)

The determination of U_1 for the coordinates chosen follows the lines of Section IID. It is presumed that the K-matrix is given, where

$$K = \begin{bmatrix} \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_{3}} \\ \\ \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Theta_{S}} & \frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_{3}} \\ \\ \frac{\partial T_{F}}{\partial \Phi_{S}} & \frac{\partial T_{F}}{\partial \Theta_{S}} & \frac{\partial T_{F}}{\partial C_{3}} \end{bmatrix}$$
(45)

By postmultiplying K by

$$A = \begin{bmatrix} \frac{1}{V_{hL}} & 0 & 0\\ 0 & \frac{-1}{V_{hL}\cos\Phi_{S}} & 0\\ 0 & 0 & 2V_{hL} \end{bmatrix}$$
 (63)

the F matrix is obtained.

$$F = KA \tag{47}$$

The F matrix must now be adjusted to transform into the T-R-S coordinates used for M_1 . This transformation B is simply

$$B = \begin{bmatrix} 1 & 0 & 0 \\ 0 & 1 & 0 \\ 0 & 0 & -V_{hp} \end{bmatrix}$$
 (64)

since $\delta S = -V_{hp} \delta T_L$. Thus our U_1 matrix is given by

$$U_1 = B(KA) = BF \tag{65}$$

Now the mapping given in Eq. (62) to obtain Λ_{M_1} is applied. Since all of the coordinates of M_1 have the same dimensions (length squared), the one-sigma ellipsoid described by the quadratic form

$$\delta \mathbf{M}_1 \Lambda_{\mathbf{M}_1}^{-1} \delta \mathbf{M}_1^T = 1 \tag{66}$$

has physical significance. The three principal axes of this ellipsoid are the square roots of the 3-eigenvalues of the Λ_{M_1} matrix. The formulas used are standard and are not reproduced here. The projection of the three-dimensional ellipsoid on to the T–R plane is an ellipse. Its major and minor semiaxes and orientation of the major axis are calculated by the same procedure used in Section IID. It is often convenient to write Λ_{M_1} in an alternate form:

$$\Lambda_{\mathbf{M}_{1}} = \begin{bmatrix} \sigma_{T}^{2} & \rho_{RT}\sigma_{T}\sigma_{R} & \rho_{TS}\sigma_{T}\sigma_{S} \\ \rho_{RT}\sigma_{R}\sigma_{T} & \sigma_{R}^{2} & \rho_{RS}\sigma_{R}\sigma_{S} \\ \rho_{TS}\sigma_{S}\sigma_{T} & \rho_{RS}\sigma_{S}\sigma_{R} & \sigma_{S}^{2} \end{bmatrix}$$
(67)

It can be seen that $\Lambda_{\mathbf{M}_1}$ is completely described by σ_T , σ_R , σ_S , ρ_{TS} , ρ_{RS} , ρ_{TR} , because of its symmetry.

III. EXPLANATION OF TRAJECTORY TABLES

Tabular listings of pertinent quantities of the heliocentric and planetocentric trajectories, differential corrections, guidance, and orbit determination parameters are given at 1-day launch date intervals and 2-day flight time intervals over the selected launch period. The launch period is selected to encompass the minimum energy transfer dates obtained from Ref. 7 and 8. A summary of the characteristics of these trajectories is given in Ref. 7.

Each trajectory begins with a header giving launch date, flight time (in days), and arrival date. All the heliocentric transfer trajectories are calculated assuming launch into the heliocentric orbit at 0 hours of the launch date and arrival at 0 hours of the arrival date. Later, however, when the launch-planet ascent trajectories are computed, the actual launch times during the launch day for each launch azimuth are given.

Each page lists four trajectories, each of which is divided into five basic print groups: HELIOCENTRIC CONIC, PLANETOCENTRIC CONIC, DIFFERENTIAL CORRECTIONS, MID-COURSE EXECUTION ACCURACY, and ORBIT DETERMINATION ACCURACY. Each quantity is assigned an identifying alphabetic symbol of no more than three letters. The definitions of the symbols and quantities they represent are given below. All pertinent quantities are referenced to the mean equinox and equator, or ecliptic, of *launch* date.

A. Heliocentric Conic Group

The HELIOCENTRIC CONIC group gives the characteristics of the heliocentric transfer ellipse, such as the position and velocity vectors at launch and arrival, some orbital elements, and other quantities of engineering interest. The printout array is as follows:

HELIOCENTRIC CONIC DISTANCE

RL LAL LOL VL GAL AZL HCA SMA ECC INC V1
RP LAP LOP VP GAP AZP TAL TAP RCA APO V2
RC GL GP ZAL ZAP ETS ZAE ETE ZAC ETC CLP

After the words HELIOCENTRIC CONIC, the heliocentric arc DISTANCE traveled by the spacecraft from launch to arrival is printed. The quantities are defined as follows (all angles are in deg; distances are in millions of km; speeds are in km/sec):

Line 1

AZL, Σ_L

HCA, Ψ

SMA, a

 $RL, R_L = |R_L|$ the heliocentric in

the heliocentric radius of the launch planet at 0 hours of the launch date.

LAL, β_L the celestial latitude of the launch planet at 0 hours of the launch date.

LOL, λ_L the celestial longitude of the launch planet at 0 hours of the launch date.

VL, $V_L = |V_L|$ the heliocentric speed of the probe at 0 hours of the launch date.

GAL, Γ_L the path angle of the probe at 0 hours of the launch date, i.e., the complement of the angle between the position and velocity vectors, \mathbf{R}_L and \mathbf{V}_L , defined by

 $\sin \Gamma_L = \frac{\mathbf{R}_L \cdot \mathbf{V}_L}{\mathbf{R}_L \, \mathbf{V}_L} \qquad -\frac{\pi}{2} \le \Gamma_L \le \frac{\pi}{2}$

the azimuth angle of the probe at 0 hours of the launch date, i.e., the angle, measured in a plane perpendicular to the radius vector \mathbf{R}_L , between the projection of the ecliptic north and the projection of the velocity vector \mathbf{V}_L on the plane perpendicular to \mathbf{R}_L , defined by

$$\cos \Sigma_L = \frac{\mathbf{V}_L \cdot \mathbf{\Psi}^1}{\mathbf{V}_L \cos \Gamma_L} \qquad 0 \le \Sigma_L \le 2\pi$$

$$\sin \Sigma_L = \frac{(\mathbf{R}_L \times \mathbf{V}_L) \cdot \mathbf{\Psi}^1}{|\mathbf{R}_L \times \mathbf{V}_L|}$$

where $\Psi^1 = (\mathbf{K}' - \mathbf{R}_L^1 \sin \beta_L) \sec \beta_L$, where the superscript 1 denotes a unit vector.

the heliocentric central angle, or angle between the position vector \mathbf{R}_{ι} , of the launch planet at 0 hours of the launch date and the position vector \mathbf{R}_{p} , of the target planet at 0 hours of the arrival date. This angle is defined by Eq. (3) and (4) and illustrated in Fig. 1.

the semimajor axis of the heliocentric transfer ellipse.

ECC, e	the eccentricity of the heliocentric transfer ellipse.	GL, γ_L	the angle between the launch hyperbolic-excess velocity vector \mathbf{V}_{hL} and its
INC, i	the inclination of the heliocentric transfer ellipse.		projection on the orbital plane of the launch planet, defined by
$V1, V_1 = V_1 $	the heliocentric speed of the launch planet at 0 hours of the launch date.		$\sin \gamma_L = \frac{\mathbf{W}_1 \cdot \mathbf{V}_{hL}}{\mathbf{V}_{hL}} \qquad -\frac{\pi}{2} \leq \gamma_L \leq \frac{\pi}{2}$
Line 2			where W_1 is a unit normal to the
$RP, R_p = R_p $	the heliocentric radius of the target planet at 0 hours of the arrival date.		launch planet's orbital plane. This angle is useful in describing the direction in which the probe leaves the
LAP, β_p	the celestial latitude of the target planet at 0 hours of the arrival date.		launch planet.
LOP, λ_p	the celestial longitude of the target planet at 0 hours of the arrival date.	GP , γ_p	the angle between the incoming arrival hyperbolic-excess velocity vector V_{hp} , and its projection on the target
$VP, V_p = V_p $	the heliocentric speed of the probe at 0 hours of the arrival date.		planet's orbital plane, defined by
GAP, Γ_p	the path angle of the probe at 0 hours of the arrival date, defined the same as Γ_L except that \mathbf{R}_p and \mathbf{V}_p are sub-		$\sin \gamma_p = \frac{\mathbf{W}_2 \cdot \mathbf{V}_{hp}}{\mathbf{V}_{hp}} \qquad -\frac{\pi}{2} \leq \gamma_p \leq \frac{\pi}{2}$ where \mathbf{W} is a unit partial to the target
AZP, Σ_p	stituted for \mathbf{R}_L and \mathbf{V}_L . the azimuth angle of the probe at 0 hours of the arrival date, defined the same as Σ_L except that \mathbf{R}_p and \mathbf{V}_p are substituted for \mathbf{R}_L and \mathbf{V}_L .		where W_2 is a unit normal to the target planet's orbital plane. This angle is useful in determining whether the probe is approaching from above or below the target planet. If γ_p is posi- tive, the probe approaches from below
TAL, v_L	the true anomaly of the probe in the heliocentric transfer ellipse at 0 hours of the launch date.	ZAL , ζ_L	-if negative, from above. the angle between the outgoing launch
TAP, v_p	the true anomaly of the probe in the heliocentric transfer ellipse at 0 hours of the arrival date.		asymptote (or hyperbolic-excess velocity vector) and the launch <i>heliocentric</i> radius vector \mathbf{R}_L at launch time. This
RCA, R_{CA}	the perihelion distance of the helio- centric transfer ellipse. This distance is printed even though the probe may not transit perihelion.		is the Sun-launch-planet-probe angle and is a good approximation to the launch-planet-probe-Sun angle as the probe leaves the launch planet. It is an important quantity in the design of
APO, R_A	the aphelion distance of the heliocen- tric transfer ellipse. This distance is printed even though the probe may not transit aphelion.		attitude control systems which use the Sun and launch planet as optical references. The quantity ζ_L is defined as follows:
V2, $V_2 = \mid \mathbf{V}_2 \mid$	the heliocentric speed of the target planet at 0 hours of the arrival date.		$\cos \zeta_L = \frac{\mathbf{V}_{hL} \cdot \mathbf{R}_L^1}{\mathbf{V}_{hL}} \qquad 0 \le \zeta_L \le \pi$
Line 3		The next six qu	nantities, all angles, have the same gen-
RC, R_C	the communication distance, or distance between the launch and target planets at 0 hours of the arrival date.	near-target trajec aiming point for	hey are important in the design of the tory and are used in determining the interplanetary flyby trajectories. Contentered geometry of Fig. 10.

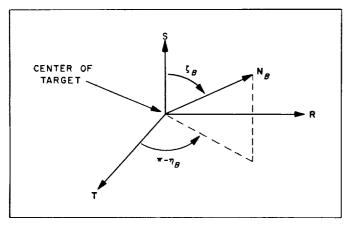


Fig. 10. Generalized geometry for aiming point angles

In this diagram, the reference coordinate system is the same target \mathbf{R} , \mathbf{S} , \mathbf{T} system defined in Section IIC. A unit vector \mathbf{N}_B (subscript B for body) is directed from the target center to another celestial body. The angular quantity ζ_B is the angle subtended at the target center between the incoming asymptote \mathbf{S} and the target–celestial body line \mathbf{N}_B . Thus

$$\cos \zeta_B = \mathbf{S} \cdot \mathbf{N}_B = \frac{\mathbf{V}_{hp} \cdot \mathbf{N}_B}{\mathbf{V}_{hp}} \qquad 0 \le \zeta_B \le \pi$$

since

$$\mathbf{S} = rac{\mathbf{V}_{hv}}{\mathbf{V}_{hv}}$$

The angle η_B is the supplement of the angle between the T direction and the projection of N_B on the R-T plane, defined by

$$\sin \eta_B = \frac{-\mathbf{R} \cdot \mathbf{N}_B}{\sin \zeta_B} \qquad 0 \le \eta_B \le 2\pi$$

$$\cos \eta_B = \frac{-\mathbf{T} \cdot \mathbf{N}_B}{\sin \zeta_B}$$

These quantities are computed for three celestial bodies: the Sun (ζ_S and η_S), the Earth (ζ_E and η_E), and the star Canopus (ζ_C and η_C). Thus,

ZAP, $\zeta_{\mathcal{S}}$ (or $\zeta_{\mathcal{P}}$) the Sun-target-probe angle. Actually, this angle should be symbolized ZAS, but, for historical reasons, is not. This angle is useful in that it indicates the direction of the probe's approach to

the target. If $\zeta_s < \pi/2$, the probe approaches from the target planet's dark side. If $\zeta_s > \pi/2$, it approaches from the light side.

ETS, η_s defined as above.

ZAE, ζ_E

the Earth-target-probe angle. This angle is useful in locating the Earth as the probe approaches the target.

ETE, η_E defined as above.

ZAC, ζ_c the Canopus–target–probe angle.

ETC, η_C defined as above.

CLP, σ_p the angle between the projection of the incoming asymptote S on the target planet's orbital plane and the target–Sun line at arrival time, defined by

$$\cos \sigma_p = -\mathbf{R}_p^1 \cdot \mathbf{S}_{p\tau} \quad -\pi \leq \sigma_p \leq \pi$$

$$\sin \sigma_p = -\mathbf{S}_{pr} \cdot (\mathbf{W}_2 \times \mathbf{R}_p^1)$$

where S_{pr} is the projection of S on the target's orbital plane given by

$$\mathbf{S}_{pr} = \frac{\mathbf{S} - \mathbf{W}_{2} \left(\mathbf{S} \cdot \mathbf{W}_{2} \right)}{\left| \mathbf{S} - \mathbf{W}_{2} \left(\mathbf{S} \cdot \mathbf{W}_{2} \right) \right|}$$

Recall that W_2 is the unit normal vector to the target's orbital plane. This angle is illustrated in Fig. 11.

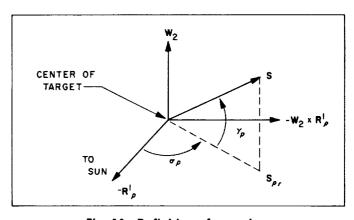


Fig. 11. Definition of σ_p and γ_p

B. Planetocentric Conic Group

The second group, PLANETOCENTRIC CONIC, gives the characteristics of primarily the launch-planet ascent trajectories, but also includes the hyperbolic-excess vector at the target. Injection conditions are given for three launch azimuths, assuming both short and long parking orbits. As explained in Ref. 6, there may be two launch times per day for each launch azimuth, resulting in a short and long parking orbit. The injection conditions for each set are given in geocentric space-fixed spherical coordinates and, by assuming a 100-nm parking orbit altitude and typical boost vehicle trajectory characteristics, the longitude of injection is calculated, along with the latitude and longitude of ignition of final burn out of the parking orbit.

A special case may arise when the declination of the outgoing asymptote of the escape hyperbola is greater than the launch site latitude (Cape Canaveral). In this case, owing to geometrical restrictions, it may not be possible to fire in a symmetrical band of azimuths about due east, as explained in Ref. 6. This band of restricted azimuths may eliminate part or all of the selected launch azimuths, 90, 100, and 110 deg. When this happens, only those trajectories with permissible azimuths are printed, in addition to the limiting azimuths, or the most northerly and southerly azimuths, that are possible.

The ascent trajectory profile is as shown in Fig. 12. Its characteristics are defined as follows:

- Φ_1 the arc subtended at Earth's center during ascent from launch into parking orbit.
- t, the time from launch to parking-orbit injection.
- Φ_2 the arc subtended at Earth's center during final burn out of the parking orbit, to injection.
- t_a the time of final burn.
- **k**; the inverse parking orbital rate, equal to $1/\dot{\Phi}_c$.
- v_1 the true anomaly in the hyperbolic orbit at injection.
- R_p the perifocal distance of the escape hyperbola, taken equal to the Earth-centered radius of the parking orbit.

- ϕ_L the longitude of the launch site.
- θ_L the latitude of the launch site.

The values of these quantities for all trajectories contained herein are:

 $\Phi_1 = 17 \deg$

 $t_1 = 500 \, \text{sec}$

 $\Phi_2 = 8 \deg$

 $t_2 = 100 \sec$

 $k_{\bullet} = 14.689 \sec/\deg$

 $v_1 = 3.7 \deg$

 $R_p = 6560 \, \text{km}$

 $\phi_L = 28.317 \deg$

 $\theta_L = 279.457 \deg$

An inherent assumption here is that these quantities are relatively invariant with injection energy. This is a reasonable assumption and will affect the injection coordinates only slightly.

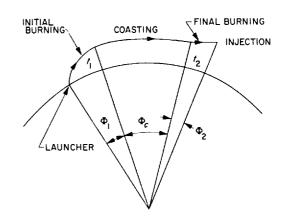


Fig. 12. Ascent trajectory profile

The print array for the PLANETOCENTRIC CONIC group is:

C3 VHL DLA RAL RAD VEL PTH VHP DPA RAP ECC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

or midnight. In this case, the

launch date may be advanced to the following day for times after

midnight, or it may be retarded

to the previous day for times before midnight, whichever the

The quantities are defined as follows (all angles are in deg; distances are in km; speeds are in km/sec, launchinjection (L-I)time and parking orbit coast time (PO CST TIM) are in sec; launch time and injection time are in hr, min, and sec, GMT):

Line 1

ne l			reader wishes.	
C3, C ₃	the vis viva integral (Moulton),	L-I TIME, t_{Ll}	the launch-to-injection time.	
	or twice the total energy per unit mass, expressed in km^2/sec^2 and defined by $C_3 = V_{hL}^2$.	INJ LAT, ϕ	the injection latitude (or declination Φ).	
VHL, V_{hL}	the launch hyperbolic-excess speed.	INJ LONG, θ	the injection longitude, measured positive east of Greenwich, $0 \le \theta \le 2\pi$.	
$\mathrm{DLA},\Phi_{\scriptscriptstyle S}$	the declination of the outgoing asymptote of the escape hyper-	INJ RT ASC, ⊖	the injection right ascension.	
	bola defined in Eq. (18).	INJ AZMTH, Σ	the injection azimuth, or angle	
RAL, Θ_8	the right ascension of the outgoing asymptote of the escape hyperbola defined in Eq. (18).		between the projection of the velocity vector V, on the local horizontal plane and the projection of true north on this plane,	
RAD, R = R	the launch-planet-centered injection radius.		measured positive east of true north.	
VEL, V = V	the inertial injection speed.	INJ TIME, T_I	the injection time. The same	
РТН, Г	the injection path angle defined		comment applies to this quantity regarding launch date as applied	
	$\sin \Gamma = \frac{\mathbf{V} \cdot \mathbf{R}}{\mathbf{V}\mathbf{R}} \qquad -\frac{\pi}{2} \leq \Gamma \leq \frac{\pi}{2}$,	to the launch time. However, both times must be consistent.	
VHP, V_{hp}	the hyperbolic-excess speed at the target.		For example, if launch time is on the previous day, injection time may fall on the launch date	
$\mathrm{DPA,}\Phi_{8p}$	the declination of the incoming asymptote at the target. The ref-		shown, or it may be on the following day.	
	erence coordinate system here is vernal equinox, Earth equatorial, mean of <i>launch</i> date	PO CST TIM, t_c	the coast time in the parking orbit, in sec.	
RAP, Θ_{sp}	the right ascension of the incoming asymptote at the target. Same	INJ 2 LAT, ϕ_2	the latitude of the start of final burn out of the parking orbit.	
	reference coordinates as for Φ_{Sp} .	INJ 2 LONG, θ_2	the longitude of the start of final	
ECC, e	the eccentricity of the escape hyperbola.		burn out of the parking orbit, $0 \le \theta_2 \le 2\pi$.	
		The quantities T	P & O V E S form a consistent set	

Line 2

LNCH AZMTH, Σ_L the launch azimuth measured in a plane tangent to the surface of the launch planet at the launch site, positive east of true north.

LNCH TIME, T_L the launch time. For the range of launch azimuths given herein, launch time may cross 0 hours,

The quantities T_i , R, Φ , Θ , V, Γ , Σ form a consistent set of injection conditions; i.e., they are the time and the space-fixed spherical coordinates which can be used to initialize an integrating trajectory program.

C. Differential Corrections Group

The DIFFERENTIAL CORRECTIONS group is comprised of sixteen error coefficients relating variations in

injection energy C_3 , declination Φ_s , and right ascension Θ_s , of the outgoing asymptote of the escape hyperbola, the astronomical unit, and solar radiation pressure to variations in the miss components $\mathbf{B} \cdot \mathbf{T}$, $\mathbf{B} \cdot \mathbf{R}$, and the flight time. These coefficients are very useful in gaging the error sensitivity of an interplanetary trajectory. The printout array for this group is as follows:

DIFFERENTIAL CORRECTIONS

TDE	TRA	TC3	BAU
RDE	RRA	RC3	FAU
FDE	FRA	FC3	BSP
BDE	BRA	BC3	FSP

The symbols are defined as follows:

Line I

- TDE, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Phi_s}$ the partial derivative of the T component of the impact parameter **B**, with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- TRA, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial \Theta_s}$ the partial derivative of the T component of the impact parameter B, with respect to the right ascension of the launch escape asymptote Θ_s , in megakilometers/deg.
- TC3, $\frac{\partial \mathbf{B} \cdot \mathbf{T}}{\partial C_3}$ the partial derivative of the T component of the impact parameter \mathbf{B} , with respect to the injection energy C_3 , in megakilometers/km²/sec².
- BAU, $\frac{\partial \mathbf{B}}{\partial au}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the astronomical unit-to-kilometer conversion factor. This derivative is dimensionless and indicates the target miss caused by an uncertainty in the value of the astronomical unit.

Line 2

- RDE, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \Phi_s}$ the partial derivative of the R component of the impact parameter B, with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- RRA, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial \dot{\Theta}_{S}}$ the partial derivative of the R component of the impact parameter B, with respect to the right ascension of the launch

escape asymptote Θ_s , in megakilometers/deg.

- RC3, $\frac{\partial \mathbf{B} \cdot \mathbf{R}}{\partial C_3}$ the partial derivative of the R component of the impact parameter B, with respect to the injection energy C_3 , in megakilometers/km²/sec².
- FAU, $\frac{\partial T_F}{\partial au}$ the partial derivative of the flight time T_F , with respect to the astronomical unitto-kilometer conversion factor. This derivative has dimensions of sec/km and indicates the error in flight time caused by an uncertainty in the value of the astronomical unit.

Line 3

- FDE, $\frac{\partial I_F}{\partial \Phi_S}$ the partial derivative of flight time T_F , with respect to the declination of the launch escape asymptote Φ_S , in days/deg.
- FRA, $\frac{\partial T_F}{\partial \Theta_S}$ the partial derivative of flight time T_F , with respect to the right ascension of the launch escape asymptote Θ_S , in days/deg.
- FC3, $\frac{\partial T_F}{\partial C_3}$ the partial derivative of flight time T_F , with respect to the injection energy C_3 , in days/km²/sec².
- BSP, ΔB_{sp} the target miss (in km) caused by solar radiation pressure acting on a 300-kg spacecraft having an effective perfectly reflecting area of 3.6 square meters.

Line 4

- BDE, $\frac{\partial \mathbf{B}}{\partial \Phi_s}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the declination of the launch escape asymptote Φ_s , in megakilometers/deg.
- BRA, $\frac{\partial \mathbf{B}}{\partial \Theta_s}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the right ascension of the launch escape asymptote Θ_s , in megakilometers/deg.
- BC3, $\frac{\partial \mathbf{B}}{\partial C_3}$ the partial derivative of the magnitude of the impact parameter \mathbf{B} , with respect to the injection energy C_3 , in megakilometers/km²/sec².
- FSP, $\Delta T_{F_{sp}}$ the flight time error (in sec) caused by solar radiation pressure acting on a 300-kg spacecraft having an effective perfectly reflecting area of 3.6 square meters.

D. Mid-Course Execution Accuracy Group

The MID-COURSE EXECUTION ACCURACY group gives the parameters of the "one-sigma" three-dimensional ellipsoid of target errors, resulting from a spherically distributed mid-course guidance execution error with σ_v equal to 0.1 m/sec (see Eq. 49). It is assumed here that a single mid-course guidance maneuver is applied during the time the spacecraft is essentially traveling radially outward from the launch planet. This time is approximately from several hours to several days after launch and is a practical period in which to perform a mid-course maneuver. These quantities are quoted in the useful R, S, T coordinate system discussed above.

The print array for this group is:

MID-COURSE EXECUTION ACCURACY

SGT	SGR	SG3
RRT	RRF	RTF
SGB	R23	R13
SG1	SG2	THA

The quantities are defined as follows:

Line 1

SGT, σ_T	the standard	deviation	of	position	errors
	along the T a	ixis, in km.			

SGR, σ_R the standard deviation of position errors along the R axis, in km.

SG3, σ_3 the standard deviation of flight time errors, in sec.

Line 2

RRT, ρ_{RT} the linear correlation coefficient relating position errors in the R and T directions (dimensionless).

RRF, ρ_{RF} the linear correlation coefficient relating position errors in the R direction and flight-time errors (dimensionless).

RTF, ρ_{TF} the linear correlation coefficient relating position errors in the T direction and flight-time errors (dimensionless).

Line 3

SGB, σ_B the square root of the sum of the squares of σ_R and σ_T .

R23, ρ_{23} the linear correlation coefficient of σ_2 and σ_3 (= σ_F). The same remarks apply to this number as to ρ_{13} , except that the σ_2 direction replaces the σ_1 direction.

R13, ρ_{13} the linear correlation coefficient relating σ_1 and σ_3 (= σ_F). This number statistically relates position errors in the σ_1 direction to flight time errors. If $\rho_{13} = 1$, then a position error in the σ_1 direction will always be accompanied by a flight-time error which is linearly related to that position error; ρ_{13} is dimensionless.

Line 4

SG1, σ_1 the semimajor axis of the error ellipse formed by projecting the three-dimensional error ellipsoid onto the T-R plane (Fig. 8), in km.

SG2, σ_2 the semiminor axis of this error ellipse (Fig. 8), in km.

THA, θ the angle between the T axis and the direction of the σ_1 axis, measured in the T-R plane as shown in Fig. 8, in deg.

E. Orbit Determination Accuracy Group

The ORBIT DETERMINATION ACCURACY group is comprised of 12 numbers which describe the uncertainty in target coordinates due to tracking errors described in Section IIE. The printout array for this group is as follows:

ORBIT DETERMINATION ACCURACY

ST	SR	SS
CRT	CRS	CST
LSA	MSA	SSA
ELI	EL2	ALF

The first two lines describe the covariance of M_1 by the method described in Section IIE (Eq. 67):

Line 1

ST, σ_T the standard deviation of errors in the coordinate $\mathbf{B} \cdot \mathbf{T}$, in km.

SR, σ_R the standard deviation of errors in the coordinate $\mathbf{B} \cdot \mathbf{R}$, in km.

SS, σ_S the standard deviation of errors in S, in km.

Line 2

CRT, ρ_{RT} the linear correlation coefficient relating errors in $\mathbf{B} \cdot \mathbf{R}$ to errors in $\mathbf{B} \cdot \mathbf{T}$, dimensionless.

CRS, ρ_{RS} the linear correlation coefficient relating errors in $\mathbf{B} \cdot \mathbf{R}$ to errors in \mathbf{S} , dimensionless.

CST, ρ_{TS} the linear correlation coefficient relating errors in **B** · **T** to errors in S, dimensionless.

The third line contains the three semiaxes of the one-sigma position ellipsoid described by $\mathbf{M}_1 \Lambda^{-1} \mathbf{M}^T = 1$.

Line 3

LSA, $\sqrt{\varepsilon_{max}}$ the largest semiaxis of the position ellipsoid, in km. (ε_{max} is the largest eigenvalue of Λ_{M_1} , in km².)

MSA, $\sqrt{\epsilon_{mid}}$ the middle semiaxis of the position ellipsoid, in km. (ϵ_{mid} is the second-largest, or middle, eigenvalue of Λ_{M_1} , in km².)

SSA, $\sqrt{\varepsilon_{min}}$ the smallest semiaxis of the position ellipsoid, in km. (ε_{min} is the smallest eigenvalue of Λ_{M_1} , in km².)

The fourth line describes the projection of the above position ellipsoid on the T-R plane. This projection is an ellipse with major and minor semiaxes and orientation as described below:

Line 4

EL1 the major semiaxis of the target error ellipsoid projected onto the T-R plane, in km.

EL2 the minor semiaxis of the target error ellipsoid projected onto the T-R plane, in

ALF, α the angle measured counterclockwise from the **T**-axis to the major semiaxis direction, in deg $(0 \ge \alpha \ge 180 \text{ deg})$.

The $\Lambda_{\mathbf{X}}^{\star}$ matrix used in generating the results for this report is

$$\Lambda_{\mathbf{X}}^{\star} = \begin{pmatrix} 100 \times 10^{-10} & 0 & 0\\ 0 & 9 \times 10^{-10} & 0\\ 0 & 9 & .09 \times 10^{-10} \end{pmatrix} \left(\frac{\text{km}}{\text{sec}}\right)^{2}$$

In all cases LSA >> SSA, so that the information contained in lines 3 and 4 of the printout is very useful in visualizing the error ellipsoid. The general shape of the ellipsoid is a thin elliptical "pancake." When MSA << LSA, the "pancake" degenerates to approach a pencil shape. By inspecting the "shadow" of the pancake or pencil shape on the T-R plane, its orientation may be visualized.

If it is desired to estimate the flight time T_F , this can easily be done by the relation

$$\sigma_F = rac{1}{V_{hp}} \, \sigma_S$$

The correlation coefficients between T_F and $\mathbf{B} \cdot \mathbf{T}$ are those given by CST; those between T_F and $\mathbf{B} \cdot \mathbf{R}$ are given by CRS.

IV. CONSTANTS

Constants used in trajectory calculations at the Jet Propulsion Laboratory are given in Ref. 9. For purposes of ready reference those constants used in the calculations contained herein are given below.

Gravitational Constants

1. Sun

 $GM_{\rm x} = 2.959122083 \times 10^{-4} \, {\rm au^3/day^2}$

2. Earth

 $GM_E = 3.986032 \times 10^5 \,\mathrm{km}^3/\mathrm{sec}^2$

Astronomical Unit-to-Kilometer Conversion Factor

 $1 \text{ au} = 149.599 \times 10^6 \text{ km}$

Earth's Rotation Rate

 $\omega_E = 4.1780742 \times 10^{-3} \text{ deg/sec}$

REFERENCES

- Clarke, V. C., Jr., Roth, R. Y., Bollman, W. E., Hamilton, T. H., and Pfeiffer, C. G., *Earth—Mars Trajectories*, 1964–77, Vols. I–VII, Technical Memorandum No. 33-100, Jet Propulsion Laboratory, Pasadena, to be published.
- Pfeiffer, C. G., Simple Guidance for Deep-Space Booster Vehicles, Technical Report No. 32-128, Jet Propulsion Laboratory, Pasadena, November 1961.
- 3. Noton, A. R. M., The Statistical Analysis of Space Guidance Systems, Technical Memorandum No. 33-15, Jet Propulsion Laboratory, Pasadena, June 15, 1960.
- Noton, A. R. M., Cutting, E., and Barnes, F. L., Analysis of Radio-Command Mid-Course Guidance, Technical Report No. 32-28, Jet Propulsion Laboratory, Pasadena, September 8, 1960.
- Battin, R. H., "The Determination of Round-Trip Planetary Reconnaissance Trajectories," Journal of the Aero/Space Sciences, Volume 26, No. 9, September 1959.
- 6. Clarke, V. C., Jr., Design of Lunar and Interplanetary Ascent Trajectories, Technical Report No. 32-30, Rev. 1, Jet Propulsion Laboratory, Pasadena, March 15, 1962.
- Clarke, V. C., Jr., A Summary of the Characteristics of Ballistic Interplanetary Trajectories, 1962–1977, Technical Report No. 32-209, Jet Propulsion Laboratory, Pasadena, January 15, 1962.
- 8. Clarke, V. C., Jr., Roth, R. Y., Scholey, W. J., and Bollman, W. E., Design Parameters for Ballistic Interplanetary Trajectories—Part 1, One-Way Transfers to Mars and Venus, Technical Report No. 32-77, Jet Propulsion Laboratory, Pasadena (to be published).
- Clarke, V. C., Jr., Constants and Related Data Used in Trajectory Calculations at the Jet Propulsion Laboratory, Technical Report No. 32-273, Jet Propulsion Laboratory, Pasadena, May 1, 1962.

Erratum

On page 2116 (launch date, December 30, 1965), flight time 122 has been omitted. This orbit has a central angle of 180 deg and an indeterminate inclination.

Earth-Venus Trajectories, 1965-66

Launch date interval: November 29, 1965, to January 7, 1966

This data presentation has been photographically reproduced (enlarged 10½ times) from microfilm generated by computer magnetic tape.

Technical Memorandum No. 33-99 Volume 2, Part C

Earth-Venus Trajectories, 1965-66

V. C. Clarke, Jr.

R. Y. Roth

W. E. Bollman

T. W. Hamilton

C. G. Pfeiffer

C. R. Gates, Chief

Systems Analysis Section

JET PROPULSION LABORATORY
CALIFORNIA INSTITUTE OF TECHNOLOGY
PASADENA, CALIFORNIA

June 1, 1963

Copyright © 1963

Jet Propulsion Laboratory

California Institute of Technology

Prepared Under Contract No. NAS 7-100 National Aeronautics & Space Administration

	:	·			
					r
i i			:		ì
				-	
,					
		<u> </u>	. '		

		•	
			· · ·
~			

the succession of the successi		· · · · · · · · · · · · · · · ·

ARRIVAL CATE FEB 7 1966

LAUNCH DATE 'NOV 29 1965

HELIOCENTRIC CONIC DISTANCE 178.580 RL 147.56 LAL .00 LOL 66.57 VL 25.857 GAL -5.17 AZL 86.77 MCA 78.32 SMA 117.42 ECC .27098 INC 3.2253 V1 30.194
RP 107.50 LAP 3.16 LOP 144.87 VP 36.592 GAP -14.97 AZP 89.35 TAL 194.24 TAP 272.56 RCA 85.60 APO 149.24 V2 35.252
RC 43.538 GL 16.40 GP -2.19 ZAL 113.38 ZAP 2.27 ETS 74.10 ZAE 152.31 ETE 331.83 ZAC 60.64 ETC 161.04 CLP -.57 PLANETOCENTRIC CONIC C3 26.330 VML 5.131 DLA -1.37 RAL 310.07 RAD 6568.1 VEL 12.153 PTH 2.18 VMP 9.519 DPA -18.47 RAP 328.43 ECC 1.4333 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 41 21 2238.69 15 19 1 4967.90 110.33 1638.7 -17.20 35.58 -20.15 43.01 175.53 4 18 40 90.00 22.06 217.48 176.29 71.79 16 41 49 4367.9 19.37 209.84 15 19 1 4901.50 5 2 3 1978.36 16 41 0 4703.46 6 8 50 1769.33 17 50 42 4485.26 111.52 5 35 2 70.60 17 59 23 114.85 6 38 19 67.27 19 5 28 100.00 -21.27 23.41 175.07 1378.4 -18.16 16.00 100.00 23.20 197.61 175.87 4103.5 20.34 189.98 110.00 -24.27 6.15 173.68 1169.3 -20.71 358.81 110.00 26.24 179.76 174.58 3885.3 22.93 172.16 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 742.5 SGR 410.5 SG3 91.8 RRT -.0768 RRF .0783 RTF -.6890 SGB 848.4 R23 -.0024 R13 .6895 ST 330.2 SR 360.0 SS 329.8 CRT .8072 CRS .9839 CST .8899 TOE -.2530 TRA -.5089 TC3 .3754 BAU .1446 ROE -.3212 RRA .0928 RC3 -.1665 FAU .02906 FDE .3573 FRA .0838 FC3 -.9554 BSP 2108 BDE .4089 BRA .5173 BC3 .4107 FSP -223 LSA 568.5 MSA 154.4 SSA SG1 743.4 SG2 408.8 THA 176.51 EL1 464.6 EL2 151.0 ALF 48.06 FLIGHT TIME 72.00 LAUNCH DATE NOV 29 1965 ARRIVAL CATE FEB 9 1966 HELIOCENTRIC CONIC DISTANCE 185.379 RL 147.56 LAL .00 LOL 66.57 VL 26.102 GAL -5.20 AZL 86.74 HCA 81.57 SMA 118.76 ECC .25792 INC 3.2591 V1 30.194
RP 107.51 LAP 3.22 LOP 148.13 VP 36.762 GAP -13.94 AZP 89.52 TAL 195.37 TAP 276.95 RCA 88.13 APO 149.39 V2 35.249
RC 44.633 GL 17.38 GP -2.33 ZAL 114.80 ZAP 3.60 ETS 39.10 ZAE 150.74 ETE 333.24 ZAC 61.70 ETC 161.25 CLP -2.75 PLANETOCENTRIC CONIC C3 -24.465 VHL 4.946 DLA -.84 RAL 308.30 RAD 6568.0 VEL 12.077 PTH 2.16 VHP 8.946 DPA -18.26 RAP 329.54 ECC 1.4026 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG THE L-1 TIME 3 30 19 2237.24 15 15 57 4933.10 4 51 16 1976.11 16 37 41 4669.46 5 58 37 1765.27 17 46 49 4453.06 110.36 4 7 36 70.89 16 38 10 90.00 -20.11 42.92 172.66 1637.2 -17.16 35.49 90.00 21.30 215.21 173.11 4333.1 18.50 207.66 100.00 -21.21 23.27 172.22 111.57 5 24 12 1376.1 -18.09 15.86 69.68 17 55 30 100.00 22.41 195.39 172.68 4069.5 19.44 187.86 110.00 114.96 6 28 2 66.29 19 1 2 -24.15 5.90 170.85 1165.3 -20.58 358.57 25.38 21.95 110.00 177.66 171.37 3853.1 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE -.2581 TRA -.4855 TC3 .4356 BAU .1546 SCT 769.1 SGR 411.2 SG3 103.4 RRT -.084D RRF .0870 RTF -.7063 SGB 872.1 R23 -.0043 R13 .7069 ST 343.6 SR 357.2 SS 356.4 CRT .8264 CRS .9884 CST .8911 ROE -.3073 RRA .0843 RC3 -.1832 FAU .03151 FOE .3966 FRA .0573 FC3-1.1149 BSP 2211 BOE .4013 BRA .4927 BC3 .4726 FSP -256 LSA 590.8 MSA 152.1 SSA SG1 770.1 SG2 409.1 THA 176.42 EL1 473.6 EL2 145.9 ALF 46.35 LAUNCH DATE NOV 29 1965 FLIGHT TIME 74.00 ARRIVAL DATE FEB 11 1966 MELIOCENTRIC CONIC DISTANCE 192.180 RL 147.56 LAL .00 LOL 66.57 VL 26.325 GAL -5.25 AZL 86.71 HCA 84.82 SMA 120.01 ECC .24616 INC 3.2924 VI 30.194
RP 107.52 LAP 3.28 LOP 151.38 VP 36.916 GAP -12.96 AZP 89.70 TAL 196.56 TAP 281.37 RCA 90.47 APO 149.56 V2 35.244
RC 45.858 GL 18.33 GP -2.49 ZAL 116.23 ZAP 5.57 ETS 25.30 ZAE 149.36 ETE 334.38 ZAC 62.71 ETC 161.43 CLP -4.98 PLANE TOCENTRIC CONIC C3 22.915 VHL 4.787 OLA -.33 RAL 306.52 RAO 6567.9 VEL 12.012 PTH 2.14 VMP 8.402 DPA -18.07 RAP 330.60 ECC 1.3771 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 19 26 2237.06 15 12 38 4901.27 4 40 37 1975.16 16 34 8 4638.40 5 48 31 1762.63 17 42 43 4423.70 -20.11 110.37 3 56 43 -17.15 90.00 42.91 169.93 1637.1 35.48 16 34 20 90.00 20.58 213.16 170.09 70.11 4301.3 17.68 205.68 111.60 5 13 33 68.88 17 51 26 100.00 -21.19 23.21 169.48 1375.2 -18.07 15.80 100.00 21.66 193.39 169.66 4038.4 18.60 185.94 168.14 115.03 6 17 54 65.44 18 56 27 110.00 -24.07 5.73 1162.6 -20.50 358.41 110.00 24.56 175.77 168.33 3823.7 21.04 168.39 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 356.7 SR 353.2 SS 365.1 CRT .8450 CRS .9918 CST .8930 LSA 614.3 MSA 149.9 SSA 21.5 ELI 482.1 EL2 139.7 ALF 44.67 SGT 794.7 SGR 410.9 SG3 116.6 RRT -.0928 RRF .0973 RTF -.7221 SGB 894.6 R23 -.0062 R13 .7227 TDE -.2636 TRA -.4619 TC3 .4969 BAU .1641 ROE -.2942 RRA .D761 RC3 -.1999 FAU .D3430 FOE .4420 FRA .D258 FC3-1.2957 BSP 2310 BDE .3950 BRA .4681 BC3 .5356 FSP -295 SG1 795.9 SG2 408.5 THA 176.27 • LAUNCH DATE NOV 29 1965 FLIGHT TIME 76.00 ARRIVAL DATE FEB 13 1966 HELIOCENTRIC CONIC **DISTANCE 198.978** RL 147.56 LAL .00 LOL 66.57 VL 26.526 GAL -5.30 AZL 86.67 MCA 88.06 SMA 121.18 ECC .23561 INC 3.3252 V1 30.194
RP 107.54 LAP 3.32 LOP 154.63 VP 37.055 GAP -12.02 AZP 89.89 TAL 197.77 TAP 285.83 RCA 92.63 APO 149.73 V2 35.239
RC 47.202 GL 19.23 GP -2.66 ZAL 117.64 ZAP 7.77 ETS 18.81 ZAE 148.21 ETE 335.30 ZAC 63.65 ETC 161.58 CLP -7.30 PLANETOCENTRIC CONIC .16 RAL 304.76 RAO 6567.9 VEL 11.959 PTH 2.13 VHP 7.886 DPA -17.93 RAP 331.58 ECC 1.3560 C3 21.632 VHL 4.651 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 8 49 2238.07 -20.13 42.97 167.53 110.34 3 46 7 1638.1 -17.18 35.54 258.07 15 9 11 4872.34 4 30 14 1975.45 16 30 27 4610.19 5 38 38 1761.31 17 38 31 4397 90.00 19.90 211.31 167.25 69.43 16 30 23 4272.3 203.90 16.92 111.59 5 5 5 5 68.19 17 47 17 4010.2 17.15 115.07 6 8 0 1161.3 -20.46 358.64.70 18 51 48 3797.1 20.19 166.

ORBIT DETERMINATION ACCURACY

GREAT OF THE PROPERTY OF THE PROPERT 100.00 -21.19 23.23 166.90 111.59 15.82 100.00 16 30 27 20.96 191.59 166.82 184.21 -24.04 5.64 165.57 115.07 358.33 23.80 174.08 165.48 166.79 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY MID-COURSE EXECUTION ACCURACY
5GT 818.8 SGR 409.9 SG3 131.5
RRT -.1032 RRF .1096 RTF -.7365
SGB 915.6 R23 -.0086 R13 .7372
SG1 820.2 SG2 407.0 THA 176.07
CRBIT DETERMINATION ACCURACY
ORBIT DETERMINATION ACCURACY
CRT .8628 CRS .9942 CST .8955
LSA 638.9 MSA 147.9 SSA 22.3
SG1 820.2 SG2 407.0 THA 176.07
EL1 489.9 EL2 132.7 ALF 43.02 TDE -.2692 TRA -.4362 TC3 .5576 BAU .1730 ROE -.2817 RRA .0682 RC3 -.2164 FAU .03748 FOE .4943 FRA -.0114 FC3-1.5001 BSP 2407 BOE .3897 BRA .4434 BC3 .5981 FSP -339

FLIGHT TIME 70.00

ARRIVAL DATE FEB 15 1966

LAUNCH DATE NOV 29 1965 DISTANCE 205.769 HELIOCENTRIC CONIC RL 147.56 LAL .0D LOL 66.57 VL 26.707 GAL -5.35 AZL 86.64 HCA 91.31 SMA 122.25 ECC .22620 INC 3.3579 V1 30.194
RP 107.55 LAP 3.36 LOP 157.88 VP 37.179 GAP -11.13 AZP 90.08 TAL 199.00 TAP 290.31 RCA 94.60 APO 149.91 V2 35.234
RC 48.656 GL 20.08 GP -2.85 ZAL 119.02 ZAP 10.11 ETS 15.18 ZAE 147.29 ETE 336.00 ZAC 64.51 ETC 161.70 CLP -9.70 PLANETOCENTRIC CONIC C3 2U.574 VHL 4.536 DLA .61 RAL 3U3.U3 RAD 6567.8 VEL 11.914 PTH 2.12 VHP 7.398 OPA -17.83 RAP 332.48 ECC 1.5386 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 58 32 2240.17 -20.18 43.11 164.90 110.29 3 35 53 1640.2 -17.24 35.67 90.00 15 5 40 4846.14 19.26 209.65 164.61 68.84 16 26 27 4246.1 16.22 202.30 100.00 4 20 10 1976.87 -21.23 23.32 164.47 111.55 4 53 7 1376.9 -18.11 15.91 100.00 16 26 44 4584.67 20.31 189.98 164.16 67.58 17 43 9 3984.7 17.09 182.66 110.00 5 29 4 1761.21 -24.03 5.64 163.16 115.07 5 58 25 1161.2 -20.45 358.32 110.00 17 34 19 4573.10 23.09 172.57 162.82 64.07 18 47 12 3773.1 19.41 165.36 .61 RAL 303.03 RAD 6567.8 VEL 11.914 PTH 2.12 VHP 7.398 DPA -17.83 RAP 332.48 ECC 1.3386 HID-COURSE EXECUTION ACCURACY ORBIT OFTERMINATION ACCURACY DIFFERENTIAL CORRECTIONS 5T 382.0 SR 341.5 SS 449.4 CRT .8796 CRS .9956 CST .8986 LSA 665.3 MSA 146.4 BSA 22.9 SGT 840.8 SGR 408.1 SG3 148.6 RRT -.1150 RRF .1240 RTF -.7490 SGB 934.6 R23 -.0120 R13 .7499 TOE -.2753 TRA -.4148 TC3 .6153 BAU .1809 ROE - . 2697 RRA . 0606 RC3 - . 2327 FAU . 04111 FOE .5552 FRA -.0549 FC3-1.7300 BSP 2490 BOE .3854 BRA .4192 BC3 .6578 FSP -389 SG1 842.5 SG2 404.5 THA 175.85 EL1 496.9 EL2 124.9 ALF 41.37 ARRIVAL DATE FEB 17 1966 FLIGHT TIME 80.00 LAUNCH DATE NOV 29 1965 HELIOCENTRIC CONIC DISTANCE 212.549 RL 147.56 LAL .00 LOL 66.57 VL 26.870 GAL -5.41 AZL 86.61 MCA 94.55 SNA 123.25 ECC .21784 INC 3.3907 V1 30.194
RP 107.57 LAP 3.38 LOP 161.12 VP 37.291 GAP -10.27 AZP 90.27 TAL 200.24 TAP 294.78 RCA 96.40 APO 150.09 V2 35.227
RC 50.208 GL 20.88 GP -3.07 ZAL 120.34 ZAP 12.58 ETS 12.89 ZAE 146.62 ETE 336.50 ZAC 65.28 ETC 161.78 CLP -12.20 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC

C3 19.705 VHL 4.439 DLA 1.05 RAL 301.36 RAD 6567.8 VEL 11.878 PTH 2.11 VHP 6.935 DPA -17.78 RAP 333.29 ECC 1.3243
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 48 42 2243.27 -20.25 43.31 162.64 110.22 3 26.5 1643.3 -17.32 35.86
90.00 15 2 14 4822.47 18.68 208.16 162.16 68.32 16 22.36 4222.5 15.57 200.86
100.00 4 10 31 1979.33 -21.29 23.47 162.22 111.49 4 43.31 1379.3 -18.18 16.06
100.00 16 23 5 4561.65 19.70 188.53 161.71 67.05 17.39 7 3961.6 16.42 181.27
110.00 5 19 53 1762.22 -24.06 5.70 160.93 115.05 5 49.15 1162.2 -20.49 358.38
110.00 17 30 13 4351.52 22.44 171.23 160.36 63.51 18 42.44 3751.5 18.70 164.09 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 860.3 SGR 405.5 SG3 168.2 RRT -.1300 RRF .1417 RTF -.7602 SGB 951.1 R23 -.0156 R13 .7613 SG1 862.4 SG2 401.1 THA 175.52 ST 393.2 SR 333.7 SS 485.3 CRT .8948 CRS .9963 CST .9018 LSA 692.7 MSA 145.5 SSA 23.4 TOE -.2807 TRA -.3916 TC3 .6694 BAU .1881 ROE -.2580 RRA .0532 RC3 -.2488 FAU .04527 FOE .6254 FRA -.1058 FC3-1.9891 BSP 2572 BOE .3813 BRA .3952 BC3 .7142 FSP -448 EL1 502.4 EL2 116.6 ALF 39.78 ARRIVAL DATE FEB 19 1966 FLIGHT TIME 82.00 LAUNCH DATE NOV 29 1965 DISTANCE 219.317 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.016 GAL -5.47 AZL 86.58 HCA 97.79 SMA 124.15 ECC .21044 INC 3.4238 VI 30.194 RP T07.60 LAP 3.39 LOP 164.37 VP 37.389 GAP -9.45 AZP 90.46 TAL 201.45 TAP 299.24 RCA 98.03 APO 150.28 V2 35.220 RC 51.850 GL 21.62 GP -3.32 ZAL 121.58 ZAP 15.18 ETS 11.34 ZAE 146.19 ETE 336.80 ZAC 65.94 ETC 161.83 CLP -14.82 PLANETOCENTRIC CONIC C3 18.995 VHL 4.358 DLA 1.46 RAL 299.78 RAO 6567.8 VEL 11.848 PTH 2.10 VHP 6.499 DPA -17.80 RAP 333.99 ECC 1.3126 LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG OH AZNTH LNCH TIME L-I TIME INJ LAT 90.00 2 39 20 2247.28 -20.35 90.00 14 58 57 4801.08 18.13 100.00 4 1 21 1982.72 -21.37 100.00 16 19 37 4540.88 19.14 110.00 5 11 9 1764.25 -24.12 110.00 17 26 18 4332.11 21.85 110.13 1647.3 -17.42 160.57 3 16 47 43.56 16 18 58 4201.1 14.97 199.57 159.91 67.87 206.83 111.41 4 34 24 66.59 17 35 17 114.99 5 40 33 63.03 18 38 30 1382.7 -18.28 16.27 160.15 23.69 100.00 3940.9 15.81 180.03 187.24 159.46 100.00 -20.55 358.51 1164.3 158.88 110.00 5.83 3732.1 18.06 162.96 158.10 110.00 170.04 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCUMACY SGT 876.0 SGR 402.3 SG3 190.4 RRT -.1473 RRF .1626 RTF -.7690 SGB 964.0 R23 -.0204 R13 .7704 DIFFERENTIAL CORRECTIONS DIFFERENTIAL CORRECTIONS TOE -.2858 TRA -.3695 TC3 .7165 BAU .1940 ST 403.5 SR 324.5 SS 524.3 CRT .9084 CRS .9963 CST .9049 ROE - .2464 RRA .0461 RC3 - .2648 FAU .05000 LSA 722.0 MSA 145.4 SSA 23.6 EL1 506.3 EL2 108.1 ALF 38.20 FOE .7071 FRA -.1647 FC3-2.2788 BSP 2635 BDE .3773 BRA .3724 BC3 .7639 FSP -515 SG1 878.5 SG2 396.8 THA 175.14 ARRIVAL DATE FEB 21 1966 FLIGHT TIME 84.00 LAUNCH DATE NOV 29 1965 DISTANCE 226.067 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.147 GAL -5.52 AZL 86.54 HCA 101.03 SMA 124.98 ECC .20393 INC 3.4574 V1 30.194
RP 107.62 LAP 3.39 LOP 167.62 VP 37.477 GAP -8.67 AZP 90.66 TAL 202.63 TAP 303.66 RCA 99.49 APO 150.47 V2 35.212
RC 53.57Z GL 22.32 GF -3.59 ZAL 122.74 ZAP 17.93 ETS 10.22 ZAE 146.02 ETE 336.90 ZAC 66.49 ETC 161.83 CLP -17.57 PLANETOCENTRIC CONIC C3 18.417 VHL 4.291 DLA 1.85 RAL 298.29 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 6.087 DPA -17.89 RAP 334.57 ECC 1.3031 C3 18.417 VHL 4.291 OLA 1.85 RAL 298.29 RAD 6567.7 VEL 11.824 PTH 2.09 VHP 6.087 OPA -17.89 RAP 334.37 ECC 13.3031 INCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 30 30 2252.12 -20.46 43.87 158.68 110.01 3 8 2 1652.1 -17.55 36.41 100.00 14 55 54 4781.72 17.63 205.62 157.86 67.48 16 15 35 4181.7 14.43 198.41 100.00 3 52 42 1986.98 -21.48 23.96 158.27 111.30 4 25 49 1387.0 -18.39 16.53 100.00 16 16 23 4522.10 18.63 186.08 157.41 66.19 17 31 45 3922.1 15.26 178.92 110.00 5 2 55 1767.20 -24.21 6.02 157.01 114.91 5 32 22 1167.2 -20.64 358.68 110.00 17 22 39 4314.64 21.30 168.97 156.05 62.61 18 34 34 3714.6 17.47 161.95 2 30 30 2252.12 -20.46 14 55 54 4761.72 17.63 3 52 42 1986.98 -21.48 16 16 23 4522.10 18.63 5 2 55 1767.20 -24.21 17 22 39 4314.64 21.30 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 887.7 SGR 398.7 SG3 216.0 ST 409.7 SR 313.7 55 565.2

RRT -.1720 RRF .1893 RTF -.7776 CRT .9200 CRS .9956 CST .9074

SGB 973.2 R23 -.0237 R13 .7793 LSA 750.9 MSA 145.6 SSA 23.6

SG1 891.0 SG2 391.3 THA 174.52 EL1 506.3 EL2 99.5 ALF 36.82 ST 409.7 SR 313.7 SS 565.2 CRT .9200 CRS .9956 CST .9074 LSA 750.9 MSA 145.6 SSA 23.6 TOE -.2883 TRA -.3469 TC3 .7597 BAU .1994 RDE -.2346 RRA .0391 RC3 -.2810 FAU .05547 FOE .8003 FRA -.2343 FC3-2.6074 BSP 2727 BOE .3717 BRA .3491 BC3 .8100 FSP -596

FLIGHT TIME 78.00

```
LAUNCH DATE NOV 29 1965
                                                                       FLIGHT TIME 86.00
   JELIOCENTRIC CONIC
                                                                       OISTANCE 232.799
     RL 147.56 LAL .00 LOL 66.57 VL 27.263 GAL -5.57 AZL 86.51 HCA 104.27 SMA 125.73 ECC .19821 INC 3.4917 V1 30.194
RP 107.64 LAP 3.38 LOP 170.86 VP 37.553 GAP -7.92 AZP 90.86 TAL 203.76 TAP 308.03 RCA 100.81 APO 150.65 V2 35.204
RC 55.368 GL 22.96 GP -3.90 ZAL 123.79 ZAP 20.83 ETS 9.38 ZAE 146.11 ETE 336.77 ZAC 66.90 ETC 161.79 CLP -20.47
    PLANETOCENTRIC CONIC
     C3 17.949 WHL 4.237 DLA 2.22 RAL 296.91 RAD 6567.7 VEL 11.804 PTH 2.09 WHP 5.700 DPA -18.06 RAP 335.02 ECC 1.2954
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 22 12 2257.75
14 53 10 4764.07
3 44 35 1992.04
16 13 29 4505.01
4 55 12 1771.01
17 19 21 4298.81
         90.00
                                                                44.23
                                                                           156.99
                                                                                                                        1657.7
                                                  -20.59
                                                                                            109.88 2 59 50
                                                                                                                                                     36.76
         90.00
                                                   17.17
                                                                204.54
                                                                              156.02
                                                                                               67.13
                                                                                                        16 12 34
                                                                                                                          4164.1
                                                                                                                                         13.92
                                                                                                                                                       197.36
       100.00
                                                  -21.60
                                                                24.29
                                                                              156.58
                                                                                                        4 17 47
                                                                                              111.18
                                                                                                                          1392.0
                                                                                                                                         -18.53
                                                                                                                                                        16.84
                                                                                             65.84 17 28 34
114.80 5 24 43
62.25 18 31 0
       100.00
                                                  18.16
                                                                185.03
                                                                           155.57
155.33
                                                                                                                          3905.0
                                                                                                                                        14.74
                                                                                                                                                      177.91
       110.00
                                                 -24.31
                                                                  6.26
                                                                                                                          1171.0
                                                                                                                                        -20.76
                                                                                                                                                       358.91
       110.00
                                                 20.81
                                                                168.02
                                                                              154.20
                                                                                                                          3698.8
                                                                                                                                         16.93
                                                                                                                                                       151.04
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                      ST 415.8 SR 301.1 SS 610.3
CRT .9300 CRS .9945 CST .9097
     TOE -.2909 TRA -.3275 TC3 .7893 BAU .2024
                                                                    5GT 893.6 SGR 394.8 SG3 244.9
RRT -.1971 RRF .2201 RTF -.7819
     ROE -. 2224 RRA .0321 RC3 -. 2974 FAU .06162
    FOE .9099 FRA -.3127 FC3-2.9720 BSP 2754
BOE .3661 BRA .3291 BC3 .8435 FSP -685
                                                                                                                      LSA 783.5 MSA 146.9 SSA
                                                                    568 976.9 R23 -.0313 R13 .7842
                                                                                                                                                          23.4
                                                                   SG1 897.8 SG2 385.2 THA 173.90
                                                                                                                      ELI 505.2 ELZ 91.1 ALF 35.28
LAUNCH DATE NOV 29 1965
                                                                       FLIGHT TIME 88.00
                                                                                                                                 ARRIVAL CATE FEB 25 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 239.510
    RL 147.56 LAL .00 LOL 66.57 VL 27.366 GAL -5.62 AZL 86.47 MCA 107.50 SMA 126.40 ECC .19322 INC 3.5270 V1 30.194

RP 107.67 LAP 3.36 LOP 174.10 VP 37.619 GAP -7.20 AZP 91.06 TAL 204.83 TAP 312.33 RCA 101.98 APO 150.82 V2 35.195

RC 57.230 GL 23.56 GP -4.25 ZAL 124.73 ZAP 23.90 ETS 8.71 ZAE 146.47 ETE 336.39 ZAC 67.17 ETC 161.69 CLP -23.54
   PLANETOCENTRIC CONIC
    C3 17.572 VHL 4.192 DLA 2.59 RAL 295.64 RAD 6567.7 VEL 11.788 PTH 2.08 VHP 5.337 DPA -18.33 RAP 335.31 ECC 1.2892 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     2 14 27 2264.12
                                                                           155.48
                                                 -20.74
                                                                44.64
                                                                                            109.72
                                                                                                          2 52 11
                                                                                                                         1664.1
                                                                                                                                       -17.86
                                                                                                                                                       37.15
        90.00
                   14 50 50 4747.83
                                                  16.74
                                                                203.54
                                                                              154.37
                                                                                               66.82
                                                                                                        16 9 58
                                                                                                                          4147.8
                                                                                                                                         13.46
                  3 37 0 1997.86
16 10 59 4489.32
4 48 1 1775.61
17 16 27 4284.34
                                                                                                                                                       196.40
       100.00
                                                  -21.75
                                                                 24.66
                                                                             155.08
                                                                                             111.03
                                                                                                          4 10 18
                                                                                                                          1397.9
                                                                                                                                        -18.69
                                                                                                                                                        17.20
                                                                                               111.03 4 10 18
65.52 17 25 48
       100.00
                                                 17.72
                                                                184.08
                                                                            153.92
                                                                                                                          3889.3
                                                                                                                                         14.27
                                                                                                                                                      176.98
       110.00
                                                 -24.45
                                                                 6.55
                                                                            153.85
152.55
                                                                                             114.67
                                                                                                          5 17 36
                                                                                                                          1175.6
                                                                                               114.67 5 17 36
61.92 18 27 52
                                                                                                                                        -20.91
                                                                                                                                                       359.19
       110.00
                                                20.34
                                                                167.15
                                                                                                                          3684.3
                                                                                                                                         16.43
                                                                                                                                                       160.21
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TDE -.2917 TRA -.3106 TC3 .8073 BAU .2035
RDE -.2094 RRA .0252 RC3 -.3147 FAU .06860
                                                                                                                      ST 419.1 SR 286.5 SS 659.0

CRT .9381 CRS .9930 CST .9111

LSA 818.1 MSA 148.8 SSA 23.0
                                                                   SGT 893.1 SGR 390.8 SG3 277.8
                                                                   RRT -.2266 RRF .2570 RTF -.7831
SGB 974.9 R23 -.0418 R13 .7863
    FOE 1.0367 FRA -.4019 FC3-3.3797 BSP 2758
BOE .3591 BRA .3116 BC3 .8664 FSP -787
    BOE .3591 BRA .3116 BC3 .8664 FSP
                                                                    SG1 898.4 SG2 378.4 THA 173.11
                                                                                                                     EL1 500.8 EL2 83.1 ALF 33.73
LAUNCH DATE NOV 29 1965
                                                                       FLIGHT TIME 90.00
                                                                                                                               ARRIVAL DATE FEB 27 1966
   HELIOCENTRIC CONTC
                                                                       DISTANCE 246.197
    RL 147.56 LAL .00 LOL 66.57 VL 27.456 GAL -5.66 AZL 86.44 HEA 110.74 SMA 127.00 ECC .18887 INC 3.5636 VI 3D.194
RP 107.70 LAP 3.33 LOP 177.34 VP 37.677 GAP -6.52 AZP 91.26 TAL 205.82 TAP 316.56 RCA 103.01 APO 150.99 VZ 35.186
RC 59.152 GL 24.12 GP -4.64 ZAL 125.56 ZAP 27.16 ETS 8.16 ZAE 147.11 ETE 335.71 ZAC 67.27 ETC 161.53 CLP -26.79
   PLANETOCENTRIC CONIC
    C3 17.271 VML 4.156 DLA 2.94 RAL 294.50 RAD 6567.7 VEL 11.775 PTH 2.08 VMP 4.998 DPA -18.70 RAP 335.44 ECC 1.2842
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 7 14 2271.24
14 48 57 4732.69
3 29 57 2004.44
16 8 56 4474.73
4 41 21 1780.98
17 14 1 4270.95
        90.00
                                                 -20.90
                                                               45.10
                                                                           154.16
                                                                                                                      1671.2
                                                                                           109.55
                                                                                                                                      -18.05
                                                                                                         2 45 6
                                                                                                                                                       37.59
                                                                                             66.54 16 7 50
110.86 4 3 22
        90.00
                                                  16.33
                                                               202.62
                                                                             152.91
                                                                                                                         4132.7
                                                                                                                                        13.02
                                                                                                                                                      195.51
      100.00
                                                 -21.91
                                                                25.08
                                                                            153.77
                                                                                                                         1404.4
                                                                                                                                       -18.87
                                                                                                                                                       17.60
                                                                                            65.24 17 23 30
114.52 5 11 2
61.62 18 25 12
      100.00
                                                 17.31
                                                               183.19
                                                                            152.46
                                                                                                                                      13.82
                                                                                                                         3874.7
                                                                                                                                                      176.13
      110.00
                                                 -24.60
                                                                 6.90
                                                                           152.54
                                                                                                                                    -21.08
                                                                                                                        1181.0
                                                                                                                                                      359.51
      110.00
                                                 19.91
                                                               166.35
                                                                             151.08
                                                                                                                         3671.0
                                                                                                                                        15.97
                                                                                                                                                      159.45
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT CETERMINATION ACCURACY
    TDE -.2898 TRA -.2962 TC3 .8120 BAU .2026
                                                                   SGT 884.4 SGR 387.3 SG3 315.1
RRT -.2612 RRF .3012 RTF -.7608
SGB 965.5 R23 -.0556 R13 .7653
                                                                                                                     ST 418.4 SR 269.8 SS 711.2
CRT .9443 CRS .9912 CST .9113
LSA 854.6 MSA 151.1 SSA 22.4
    RDE -.1955 RRA .0182 RC3 -.3332 FAU .07648
    FDE 1.1830 FRA -.5033 FC3-3.8339 BSP 2734
BDE .3496 BRA .2967 BC3 .8777 FSP -904
                                                                   SG1 891.4 SG2 370.9 THA 172.10
                                                                                                                     EL1 492.1 EL2 75.5 ALF 32.19
LAUNCH DATE NOV 29 1965
                                                                       FLIGHT TIME 92.00
                                                                                                                                ARRIVAL DATE MAR 1 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 252.860
   RL 147.56 LAL .00 LOL 66.57 VL 27.535 GAL -5.69 AZL 86.40 HCA 113.97 SMA 127.53 ECC .18510 INC 3.6017 V1 30.194
RP 107.73 LAP 3.29 LOP 180.58 VP 37.725 GAP -5.86 AZP 91.47 TAL 206.72 TAP 320.70 RCA 103.93 APO 151.14 V2 35.176
         61.127 GL 24.65 GP -5.08 ZAL 126.26 ZAP 30.64 ETS 7.68 ZAE 148.01 ETE 334.68 ZAC 67.19 ETC 161.29 CLP -30.25
  PLANETOCENTRIC CONIC
   C3 17.031 VHL 4.127 DLA 3.30 RAL 293.49 RAD 6567.7 VEL 11.765 PTH 2.08 VHP 4.683 DPA -19.19 RAP 335.38 ECC 1.2803
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    2 0 32 2279.11
                                                 -21.08
                                                               45.61
                                                                            153.02
                                                                                           109.36
                                                                                                          2 38 31
                                                                                                                        1679.1
                                                                                                                                       -18.25
                                                                                                                                                       38.08
                   14 47 34
       90.00
                                4718.37
                                                 15.94
                                                               201.75
                                                                             151.64
                                                                                              66.28
                                                                                                                          4118.4
                                                                                                                                        12.60
                                                                                                                                                       194.66
      100.00
                    3 23 25 2011.77
                                                 -22.0A
                                                               25.56
                                                                             152.63
                                                                                             110.67
                                                                                                         3 56 57
                                                                                                                         1411.8
                                                                                                                                       -19.07
                                                                                                                                                       18.06
      100.00
                  16 7 22
                                4460.94
                                                 16.91
                                                               182.36
                                                                            151.18
                                                                                              64.98 17 21 43
                                                                                                                         3860.9
                                                                                                                                        13.40
                                                                                                                                                      175.33
                               1787.10
4258.38
                    4 35 12
                                                 -24.77
                                                                 7.29
                                                                             151.42
                                                                                             114.35 5 4 59
61.36 18 23 3
                                                                                                                         1187.1
                                                                                                                                       -21.27
                                                                                                                                                      359.89
      110.00
                  17 12
                                                19.50
                                                               165.60
                                                                             149.79
                                                                                                                                        15.53
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 410.7 SR 250.8 SS 765.8

CRT .9487 CRS .9887 CST .9092

LSA 891.1 MSA 153.2 SSA 21.7

EL1 476 4 500
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                  SCT 866.8 SCR 385.0 SC3 357.3

RRT -.3040 RRF .3545 RTF -.7748

SCB 948.5 R23 -.0722 R13 .7815

SCI 876.3 SC2 362.8 THA 170.70
    TDE -.2829 TRA -.2837 TC3 .8050 BAU .2002
    RDE -.1805 RRA .0109 RC3 -.3536 FAU .08545
   FDE 1.3481 FRA -.6196 FC3-4.3435 BSP 2715
BDE .3356 BRA .2839 BC3 .8792 FSP -1042
```

EL1 476.4 EL2 68.4 ALF 30.79

ARRIVAL DATE MAR 3 1966

```
LAUNCH DATE NOV 29 1965
                                                                            OISTANCE 259.498
    RL 147.56 LAL .0D LOL 66.57 VL 27.6D4 GAL -5.72 AZL 86.36 MCA 117.20 SMA 128.0D ECC .18184 INC 3.6418 VI 30.194
RP 107.76 LAP 3.24 LOP 183.82 VP 37.765 GAP -5.22 AZP 91.67 TAL 207.53 TAP 324.74 RCA 104.72 APO 151.27 V2 35.166
RC 63.151 GL 25.16 GP -5.58 ZAL 126.85 ZAP 34.34 ETS 7.24 ZAE 149.19 ETE 333.20 ZAC 66.91 ETC 160.96 CLP -33.94
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.842 VHL 4.104 DLA 3.66 RAL 292.60 RAD 6567.7 VEL 11.757 PTH 2.08 VHP 4.393 DPA -19.82 RAP 335.11 ECC 1.2772 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 54 18 2287.79
14 46 44 4704.54
3 17 21 2019.90
16 6 22 4447.67
4 29 31 1794.01
17 10 41 4246.32
                                                                                 152.06
                                                                                                                2 32 26
                                                                                                   109.14
                                                     -21.28
                                                                     46.17
                                                                                                    66.04 16 5 9
110.46 3 51 1
64.73 17 20 30
114.15 4 59 25
61.10 18 21 27
                                                                                                                                                    12.19
                                                                                                                                                                    193.85
                                                                                                                                    4104.5
                                                                    200.91
                                                                                    150.53
                                                     15.56
                                                                                                                                                    -19.29
                                                                                                                                                                    18.56
                                                                                                                                   1419.9
                                                                                   151.67
                                                                      26.08
                                                     -22.28
                                                                                                                                                    12.99
                                                                                                                                   3847.7
                                                                    181.56
                                                                                   150.07
                                                     16.53
                                                                                                                                   1194.0
                                                                                                                                                   -21.49
                                                                       7.73
                                                                                   150.47
                                                     -24.96
                                                                                                                                                    15.11
                                                                                                                                    3646.3
                                                                    164.89
                                                                                    148.68
                                                   19.11
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                51 399.9 SR 228.9 SS 825.7
CRT .9511 CRS .9859 CST .9051
LSA 932.4 MSA 155.9 SSA 20.9
                                                                        SGT 838.4 SGR 384.2 SG3 404.1
RRT -.3454 RRF .4143 RTF -.7603
SGB 922.3 R23 -.1002 R13 .7709
    TOE -.2737 TRA -.2770 TC3 .7770 BAU .1944
    ROE -.1638 RRA .0033 RC3 -.3761 FAU .09529
FOE 1.5397 FRA -.7453 FC3-4.0984 BSP 2612
BOE .3190 BRA .2771 BC3 .8632 FSP -1190
                                                                        SG1 851.1 SG2 355.2 THA 169.08
                                                                                                                                EL1 456.6 EL2 61.9 ALF 29.15
                                                                                                                                            ARRIVAL DATE MAR 5 1966
                                                                             FLIGHT TIME 96.00
LAUNCH DATE NOV 29 1965
                                                                             DISTANCE 266.109
    RL 147.56 LAL .00 LOL 66.57 VL 27.662 GAL -5.74 AZL 86.32 HCA 120.43 SMA 128.40 ECC .17904 INC 3.6843 VI 30.194
RP 107.80 LAP 3.18 LOP 187.05 VP 37.798 GAP -4.62 AZP 91.87 TAL 208.24 TAP 328.67 RCA 105.41 APO 151.39 V2 35.155
RC 65.219 GL 25.65 GP -6.14 ZAL 127.31 ZAP 38.29 ETS 6.81 ZAE 150.61 ETE 331.16 ZAC 66.43 ETC 160.53 CLP -37.87
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 16.693 VHL 4.086 DLA 4.03 RAL 291.84 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 4.127 DPA -20.58 RAP 334.62 ECC 1.2747

ENCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 4 86 29 2297.34 -21.49 46.79 151.26 108.90 2 26 46 1697.3 -18.71 39.22

90.00 14 46 29 4690.93 15.18 2000.09 149.59 65.81 16 4 40 4090.9 11.78 193.06

100.00 3 11 43 2028.88 -22.49 26.66 150.88 110.23 3 45 32 1428.9 -19.53 19.12

100.00 16 5 57 4434.63 16.15 180.78 149.13 64.50 17 19 51 3834.6 12.58 173.80

110.00 4 24 18 1801.73 -25.18 8.23 149.69 113.92 4 54 19 1201.7 -21.73 .78

110.00 17 9 51 4234.54 18.72 164.20 147.73 60.86 18 20 26 3634.5 14.69 157.40
   PLANETOCENTRIC CONIC
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 381.9 SR 204.1 SS 888.7
CRT .9511 CRS .9821 CST .8967
LSA 975.6 MSA 158.6 SSA 20.0
                                                                         SCT 798.5 SCR 386.3 SC3 455.9

RRT - 3864 RRF .4819 RTF - .7356

SCB 887.0 R23 - .1409 R13 .7531
     TOE -.2591 TRA -.2749 TC3 .7304 BAU .1860
     RDE -.1454 RRA -.0046 RC3 -.4015 FAU .10616
     FDE 1.7548 FRA -.8835 FC3-5.5055 BSP 2474
BDE .2971 BRA .2750 BC3 .8334 FSP -1357
                                                                          SG1 815.6 SG2 348.9 THA 166.99
                                                                                                                                EL1 429.3 EL2 56.1 ALF 27.46
                                                                                                                                            ARRIVAL DATE MAR 7 1966
                                                                             FLIGHT TIME 98.00
LAUNCH DATE NOV 29 1965
     DISTANCE 272.692
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 16.579 VHL 4.072 DLA 4.42 RAL 291.21 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 3.886 CPA -21.50 RAP 333.90 ECC 1.2729
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   1707.9
                                                                                                                                                   -18.97
                                                                                   150.63
                                                                     47.48
                       1 43 3 2307.86
                                                      -21.72
         90.00
                                                                                                                                                     11.38
                                                                                                                                                                    192.26
                                                                                                                                     4077.3
                                                                                    148.81
                    14 46 52 4677.26
                                                                     199.27
         90.00
                                                       14.80
                                                                                                                                                    -19.80
                                                                                                                                                                     19.74
                                                                                                                                     1438.8
                                                                                   150.25
                       3 6 28
                                   2038.80
                                                                      27.31
                                                      -22.72
        100.00
                                                                                                                                                    12.17
                                                                                                                                                                    173.05
                                                                                                                                    3821.6
                                                                                   148.34
                                                                     180.00
                    16 6 8 4421.55
                                                       15.76
        100.00
                                                                                                                                                                      1.30
                                                                                                                                                    -21.99
                     4 19 28 1810.33
17 9 37 4222.79
                                                                       8.79
                                                                                                                                     1210.3
                                                      -25.41
        110.00
                                                                                                                                                     14.28
                                                                                                                                     3622.8
                                                                                     146.94
                                                                     163.51
                                                     18.33
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 354.1 SR 176.3 S5 953.4
CRT .9480 CRS .9763 CST .8811
                                                                         SGT 747.2 SGR 392.6 SG3 512.5
RRT -.4231 RRF .5556 RTF -.6963
     TOE -.2371 TRA -.2770 TC3 .6659 BAU .1757
     ROE - .1250 RRA - .0132 RC3 - .4304 FAU .11805
                                                                                                                                LSA 1019.4 MSA 160.6 55A 19.1
                                                                          SGB 844.0 R23 -.1983 R13 .7270
     FOE 1.9910 FRA-1.0354 FC3-6.1645 BSP 2317
BOE .2681 BRA .2773 BC3 .7929 FSP -1546
                                                                                                                                 EL1 392.3 EL2 50.6 ALF 25.73
                                                                          561 770.3 SG2 345.1 THA 164.22
                                                                                                                                            APRIVAL DATE MAR 9 1966
                                                                              FLIGHT TIME 100.00
 LAUNCH DATE NOV 29 1965
                                                                              DISTANCE 279.247
     RL 147.56 LAL .00 LOL 66.57 VL 27.754 GAL -5.76 AZL 86.22 HCA 126.89 SMA 129.03 ECC .17457 INC 3.7785 VI 30.194
RP 107.87 LAP 3.02 LOP 193.52 VP 37.844 GAP -3.47 AZP 92.27 TAL 209.32 TAP 336.21 RCA 106.51 APO 151.56 V2 35.132
RC 69.470 GL 26.62 GP -7.46 ZAL 127.88 ZAP 46.97 ETS 5.88 ZAE 154.10 ETE 324.66 ZAC 64.80 ETC 159.25 CLP -46.51
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 16.493 VHL 4.061 DLA 4.83 RAL 290.69 RAD 6567.7 VEL 11.742 PTH 2.07 VMP 3.670 DPA -22.58 RAP 332.92 ECC 1.2714
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                  1719.5
                                                                                                                                                   -19.26
                                                                                    150.15
                                                                                                                    2 16 34
                       1 37 54 2319.49
14 47 54 4663.24
                                                                       48.24
                                                                                                     108.33
                                                       -21.97
          90.00
                                                                                                                                                                     191.45
                                                                                                                  16 5 37
                                                                                                                                      4063.2
                                                                                                                                                      10.96
                                                                                                        65.35
                                                       14.40
                                                                      198.43
                                                                                      148.17
                     14 47 54
          90.00
                                                                                                                                                                      20.43
                                                                                                                    3 35 41
                                                                                                                                     1449.8
                                                                                                                                                      -20.09
                      3 1 31 2049.80
16 6 58 4408.17
4 14 58 1819.92
17 10 0 4210.81
                                                                       28.03
                                                                                      149.77
                                                                                                      109.67
                                                       -22.98
         100.00
                                                                                                                                                                     172.28
                                                                                                        64.04 17 20 26
                                                                                                                                      3808.2
                                                                                                                                                       11.75
                                                                                      147.70
                                                       15.36
                                                                      179.20
         100.00
                                                                                                       113.38 4 45 18
60.40 18 20 11
                                                                                                                                     1219.9
                                                                                                                                                      -22.29
                                                                                                                                                                       1.89
                                                                                      148.60
                                                                                                      113.38
                                                                        9.41
                                                       -25.67
                                                                                                                                     3610.8
                                                                                                                                                      13.85
                                                                                      146.29
                                                       17.93
                                                                      162.81
         110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                          SGT 685.9 SGR 403.7 SG3 572.4
RRT -.4344 RRF .6299 RTF -.6283
                                                                                                                                 ST 319.9 SR 144.9 SS 1072.1
CRT .9402 CRS .9670 CST .8536
LSA 1068.3 MSA 163.0 SSA 18.1
      TOE -.2095 TRA -.2867 TC3 .5753 BAU .1628
      ROE -. 1022 RRA -. 0221 RC3 -. 4626 FAU . 13047
                                                                          SGB 795.8 R23 -.2868 R13 .6853
      FOE 2.2535 FRA-1.1898 FC3-6.8486 BSP 2081
                                                                           SG1 715.4 SG2 348.5 THA 160.98
                                                                                                                                 EL1 348.3 EL2 45.3 ALF 23.49
      BDE .2330 BRA .2875 BC3 .7382 FSP -1741
```

FLIGHT TIME 94.00

ARRIVAL CATE MAR 11 1966

LAUNCH DATE NOV 29 1965

HELIOCENTRIC CONIC DISTANCE 285.775 RL 147.56 LAL .00 LOL 66.57 VL 27.788 GAL -5.75 AZL 86.17 HCA 130.11 SMA 129.27 ECC .17282 INC 3.8316 V1 30.194
RP 107.90 LAP 2.93 LOP 196.74 VP 37.858 GAP -2.94 AZP 92.47 TAL 209.70 TAP 339.81 RCA 106.93 APO 151.61 V2 35.120
RC 71.643 GL 27.12 GP -8.24 ZAL 127.98 ZAP 51.70 ETS 5.33 ZAE 156.03 ETE 319.68 ZAC 63.68 ETC 158.36 CLP -51.23 PLANETOCENTRIC CONIC C3 16.430.VHL 4.053 DLA 5.27 RAL 290.29 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 3.480 DPA -23.81 RAP 331.69 ECC 1.2704 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 33 0 2332.40 14 49 37 4648.60 149.82 90.00 -22.24 49.09 107.99 2 11 52 1732.4 90.00 197.56 147.67 4048.6 13.98 65.12 16 7 6 10.51 190.60 2 56 49 2062.02 16 8 29 4394.21 4 10 45 1830.62 17 11 2 4198.37 109.33 3 31 11 100.00 -23.26 28.83 149.45 1462.0 -20.41 21.19 63.81 17 21 43 113.06 4 41 16 60.16 18 21 0 100.00 14.95 178.38 147.19 3794.2 11.31 110.00 -25.96 10.11 148.29 1230.6 110.00 17.51 162.09 145.77 3598.4 13.41 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 620.1 SGR 420.9 SG3 634.8 RRT -.4029 RRF .7020 RTF -.5147 TOE -.1735 TRA -.3027 TC3 .4611 BAU .1492 ST 277.3 SR 110.2 SS 1092.3 CRT .9247 CRS .9479 CST .8008 RDE -.0769 RRA -.0316 RC3 -.4986 FAU .14334 FOE 2.5343 FRA-1.3476 FC3-7.5526 BSP 1814 BOE .1898 BRA .3044 BC3 .6791 FSP -1946 SGB 749.5 R23 -.4094 R13 .6240 LSA 1120.1 MSA 165.0 SSA 17.1 SG1 654.6 SG2 365.0 THA 157.30 EL1 295.8 EL2 39.3 ALF 20.55 LAUNCH DATE NOV 29 1965 FLIGHT TIME 104.00 ARRIVAL DATE HAR 13 1966 DISTANCE 292.274 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.815 GAL -5.74 AZL 86.11 HCA 133.33 SMA 129.46 ECC .17133 INC 3.8900 V1 30.194 RP 107.94 LAP 2.83 LOP 199.97 VP 37.866 GAP -2.42 AZP 92.67 TAL 209.97 TAP 343.30 RCA 107.28 APO 151.64 V2 35.108 RC 73.845 GL 27.63 GP -9.10 ZAL 127.96 ZAP 56.69 ETS 4.71 ZAE 157.91 ETE 313.06 ZAC 62.37 ETC 157.26 CLP -56.21 PLANETOCENTRIC CONIC C3 16.389 VHL 4.048 DLA 5.74 RAL 290.01 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 3.317 DPA -25.21 RAP 330.21 ECC 1.2697 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.61 2 7 21 64.89 16 9 18 90.00 1 28 14 2346.81 -22.54 50.04 149.63 107.61 1746.8 42.34 -19.92 14 52 5 4633.05 2 52 17 2075.68 16 10 43 4379.41 4 6 46 1842.62 17 12 44 4185.23 90.00 13.53 196.63 147.30 4033.0 10.04 189.70 100.00 -23.56 29.73 149.27 108.95 3 26 53 1475.7 -20.76 22.06 108.95 3 26 53 63.57 17 23 42 100.00 14.50 177.50 146.82 3779.4 10.83 110,00 -26.28 10.90 148.13 112.69 4 37 28 1242.6 -22.97 112.69 4 37 28 59.92 18 22 29 110.00 17.06 161.34 145.39 3585.2 12.94 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 227.5 SR 73.2 SS 1159.9 CRT .8973 CRS .8927 CST .6864 LSA 1172.4 MSA 166.2 SSA 16.1 TOE -.1274 TRA -.3247 TC3 .3245 BAU .1378 SGT 561.1 SGR 445.6 SG3 697.8 RRT -.2984 RRF .7681 RTF -.3281 SGB 716.5 R23 -.5631 R13 .5326 ROE -.0493 RRA -.0417 RC3 -.5386 FAU .15634 FDE 2.8199 FRA-1.5063 FC3-8.2582 BSP 1573 BOE .1366 BRA .3273 BC3 .6288 FSP -2165 SG1 592.7 SG2 402.6 THA 153.97 EL1 237.0 EL2 31.0 ALF 16.40 LAUNCH DATE NOV 29 1965 FLIGHT TIME 106.00 ARRIVAL DATE MAR 15 1966 HELIOCENTRIC CONIC **DISTANCE 298.745** RL 147.56 LAL .00 LOL 66.57 VL 27.835 GAL -5.72 AZL 86.05 MCA 136.55 SMA 129.60 ECC .17008 INC 3.9548 V1 30.194
RP 107.98 LAP 2.72 LOP 203.19 VP 37.869 GAP -1.93 AZP 92.87 TAL 210.13 TAP 346.68 RCA 107.56 APO 151.64 V2 35.095
RC 76.070 GL 28.17 GP -10.06 ZAL 127.83 ZAP 61.89 ETS 3.98 ZAE 159.57 ETE 304.46 ZAC 60.91 ETC 155.95 CLP -61.41 PLANETOCENTRIC CONIC C3 16.369 VHL 4.046 DLA 6.27 RAL 289.83 RAO 6567.7 VEL 11.737 PTH 2.07 VHP 3.180 OPA -26.75 RAP 328.50 ECC 1.2694 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 23 31 2363.01 -22.87 51.11 149.59 107.17 2 2 54 1763.0 -20.31 43.38 90.00 14 55 21 4616.26 13.05 195.64 147.06 64.64 16 12 18 4016.3 9.53 148.73 64.64 16 12 18 108.51 3 22 42 2 47 51 2091.05 16 13 43 4363.46 4 2 54 1856.15 17 15 9 4171.12 -23.90 30.75 149.24 108.51 23.03 1491.0 -21.15 63.32 17 26 27 112.27 4 33 50 59.67 18 24 40 100.00 14.01 176.57 146.57 3763.5 169.72 10.32 -26.63 11.79 148.11 1256.2 -23.37 4.14 16.58 160.53 145.13 3571.1 12.43 153.88 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 532.2 SGR 476.7 SG3 757.8 RRT -.0833 RRF .8239 RTF -.0443 SGB 714.5 R23 -.7777 R13 .2733 ST 183.4 SR 37.5 SS 1228.3 CRT .8813 CRS .5939 CST .4247 LSA 1231.1 MSA 167.7 SSA 15.0 TDE -.0727 TRA -.3549 TC3 .1609 BAU .1320 ROE -.0189 RRA -.0518 RC3 -.5811 FAU .16848 FOE 3.1134 FRA-1.6470 FC3-8.9109 BSP 1387 BOE .0752 BRA .3587 BC3 .6030 FSP -2364 SG1 538.8 SG2 469.2 THA 161.46 EL1 186.4 EL2 17.5 ALF 10.32 LAUNCH DATE NOV 29 1965 FLIGHT TIME 108.00 ARRIVAL DATE MAR 17 1966 HELIOCENTRIC CONIC DISTANCE 305.187 RL 147.56 LAL .00 LOL 66.57 VL 27.850 GAL -5.68 AZL 85.97 HCA 139.77 SMA 129.70 ECC .16902 INC 4.0278 V1 30.194
RP 108.02 LAP 2.60 LOP 206.40 VP 37.868 GAP -1.45 AZP 93.08 TAL 210.19 TAP 349.95 RCA 107.78 APO 151.63 V2 35.082
RC 78.316 GL 28.76 GP -11.10 ZAL 127.57 ZAP 67.27 ETS 3.14 ZAE 160.73 ETE 293.77 ZAC 59.35 ETC 154.38 CLP -66.81 PLANETOCENTRIC CONIC C3 16.369 VHL 4.046 DLA 6.84 RAL 289.75 RAO 6567.7 VEL 11.737 PTH 2.07 VHP 3.071 DPA -28.42 RAP 326.59 ECC 1.2694 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 18 45 2381.38 14 59 29 4597.91 90.00 -23.24 52.33 149.70 106.66 1 58 27 1781.4 -20.73 44.55 90.00 14 59 29 12.51 194.56 146.93 64.39 16 16 7 3997.9 8.96 2108.48 100.00 2 43 22 -24.27 31.91 149.35 108.01 3 18 30 1508.5 -21.58 24.15 16 17 33 4346.04 3 59 5 1871.53 17 18 20 4155.76 100.00 13.48 63.07 17 29 59 175.55 146.44 3746.0 110.00 -27.02 12.81 148.24 111.78 4 30 16 1271.5 -23.82 59.41 18 27 35 110.00 144.98 3555.8 16.05 159.65 11.87 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE -.0068 TRA -.3908 TC3 -.0230 BAU .1373 ST 167.5 SR 36.2 SS 1290.1 SGT 557.7 SGR 515.3 SG3 813.0 ROE .0134 RRA -.0625 RC3 -.6268 FAU .17966 RRT .2049 RRF .8696 RTF .2874 CRT .7086 CR5 - .6549 CST - .0993 FOE 3.3871 FRA-1.7759 FC3-9.5020 BSP 1429 BOE .0151 BRA .3957 BC3 .6273 FSP -2563 LSA 1290.4 MSA 168.3 SSA 14.0 EL1 169.5 EL2 25.2 ALF 8.90 \$GB 759.4 R23 .5878 R13 .6505 SG1 592.8 SG2 474.5 THA 34.44

FLIGHT TIME 102.00

```
49.38
     -22.36
                183.74
       6.80
                 28.71
     -23.24
                165.05
      7.62
                  9.09
     -25.57
       9.77
                149.93
ARRIVAL DATE MAR 25 1966
```

ARRIVAL DATE MAR 19 1966 FLIGHT TIME 110.00 LAUNCH DATE NOV 29 1965 DISTANCE 311.602 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.859 GAL -5.64 AZL 85.89 HCA 142.98 SMA 129.77 ECC .16815 INC 4.1111 V1 30.194
RP 108.06 LAP 2.47 LOP 209.62 VP 37.863 GAP -.99 AZP 93.28 TAL 210.14 TAP 353.12 RCA 107.95 APO 151.59 V2 35.069
RC 80.581 GL 29.40 GP -12.25 ZAL 127.20 ZAP 72.75 ETS 2.15 ZAE 161.11 ETE 281.47 ZAC 57.78 ETC 152.56 CLP -72.34 PLANETOCENTRIC CONIC 7.49 RAL 289.76 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 2.989 DPA -30.22 RAP 324.53 ECC 1.2698 C3 16.394 VHL 4.049 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 13 47 2402.42 15 4 34 4577.56 2 38 44 2128.46 16 22 19 4326.76 3 55 12 1889.16 17 22 20 4138.82 106.06 1 53 50 -21.21 1802.4 45.91 53.74 149.95 90.00 -23.64 3977.6 8.33 186.52 64.12 16 20 52 193.37 146.93 90.00 11.91 -22.06 25.43 107.42 3 14 12 1528.5 33.25 149.61 100.00 -24.68 62.79 17 34 25 1111.20 4 26 41 59.13 18 31 19 3726.8 9.13 167.65 174.43 146.43 100.00 12.88 1289.2 -24.33 6.23 110.00 14.00 148.52 111.20 -27.46 152.12 144.96 3538.8 11.25 110.00 15.46 158.69 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 653,6 SGR 558.7 SG3 858.0 RRT .4706 RRF .9046 RTF .5616 SGB 859.8 R23 .4509 R13 .7992 SG1 742.2 SG2 434.1 THA 35.75 ST 209.5 SR 77.3 SS 1349.7 CRT .7736 CRS -.9507 CST -.5931 TOE .0684 TRA -.4338 TC3 -.2292 BAU .1557 RDE .0486 RRA -.0725 RC3 -.6726 FAU .18838 FDE 3.6453 FRA-1.8675 FC3-9.9481 BSP 1739 BDE .0840 BRA .4398 BC3 .7106 FSP -2717 LSA 1357.5 MSA 169.1 SSA 12.9 EL1 218.3 EL2 47.0 ALF 16.71 FLIGHT TIME 112.00 ARRIVAL DATE HAR 21 1966 ... LAUNCH DATE NOV 29 1965 DISTANCE 317.990 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.863 GAL -5.59 AZL 85.79 HCA 146.19 SMA 129.80 ECC .16743 INC 4.2078 VI 30.194
RP 108.10 LAP 2.34 LOP 212.83 VP 37.854 GAP -.55 AZP 93.50 TAL 209.99 TAP 356.19 RCA 108.07 APO 151.53 V2 35.056
RC 82.862 GL 30.11 GP -13.52 ZAL 126.70 ZAP 78.28 ETS 1.01 ZAE 160.54 ETE 268.80 ZAC 56.27 ETC 150.47 CLP -77.94 PLANETOCENTRIC CONIC 8.23 RAL 289.86 RAO 6567.7 VEL 11.740 PTH 2.07 VHP 2.935 DPA -32.14 RAP 322.39 ECC 1.2707 C3 16.449 VHL 4.056 DLA ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 8 27 2426.82 15 10 44 4554.70 2 33 46 2151.62 16 28 6 4305.13 3 51 6 1909.62 17 27 15 4119.89 -21.75 1826.8 150.36 105.35 1 48 53 47.50 90.00 -24.09 55.39 185.22 147.05 63.83 16 26 39 3954.7 7.62 11.22 192.04 90.00 -25.14 34.82 150.03 106.72 3 9 38 1551.6 -22.61 26.93 100.00 62.50 17 39 51 166.43 . 12.21 173.18 146.54 3705.1 8.43 100.00 148.97 110.52 4 22 55 1309.6 -24.91 7.54 -27.96 15.38 110.00 18.83 18 35 55 145.05 3519.9 10.56 151.09 14.79 157.63 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 300-2 SR 127.8 SS 1401.9 CRT .8847 CRS -.9871 CST -.8208 TOE .1542 TRA -.4818 TC3 -.4495 BAU .1864 SGT 808.3 SGR 607.0 SG3 890.9 RRT .6518 RRF .9311 RTF .7327 RDE .0861 RRA -.0823 RC3 -.7188 FAU .19451 LSA 1429.3 MSA 169.5 SSA 11.7 EL1 321.5 EL2 55.6 ALF 21.31 FOE 3.8653 FRA-1.9251 FC-10.2374 BSP 2279 BOE .1766 BRA .4888 BC3 .8477 FSP -2832 SG8 1010.9 R23 .3778 R13 .8670 SG1 928.0 SG2 401.0 THA 33.00 ARRIVAL DATE MAR 23 1966 FLIGHT TIME 114.00 LAUNCH DATE NOV 29 1965 DISTANCE 324.350 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL .66.57 VL 27.863 GAL -5.53 AZL 85.68 HCA 149.40 SMA 129.80 ECC .16685 INC 4.3220 VI 30.194 RP 108.14 LAP 2.20 LOP 216.04 VP 37.842 GAP -.12 AZP 93.72 TAL 209.76 TAP 359.16 RCA 108.14 APO 151.45 VZ 35.043 30.92 GP -14.94 ZAL 126.06 ZAP 83.75 ETS 359.69 ZAE 158.97 ETE 257.23 ZAC 54.92 ETC 148.13 CLP -83.53 RC 65.157 GL PLANETOCENTRIC CONIC 9.08 RAL 290.05 RAD 6567.7 VEL 11.744 PTH 2.07 VHP 2.908 DPA -34.18 RAP 320.24 ECC 1.2723 C3 16.544 VHL 4.067 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 2 29 2455.50 15 18 10 4528.66 2 28 16 2178.65 16 35 5 4280.55 3 46 37 1933.69 17 33 13 4098.47 1855.5 150.94 104.50 1 43 25 57.34 -24.59 90.00 16 33 39 147.30 63.53 3928.7 10.44 190.53 90.00 105.88 3 4 35 62.19 17 46 25 1578.9 -25.67 36.67 150.62 100.00 3680.5 146.78 11.43 171.77 100.00 4 18 50 18 41 32 1333.7 -28.52 17.03 149.59 109.69 110.00 3498.5 14.04 156.43 145.26 58.51 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTION'S ST 420.5 SR 182.3 SS 1443.5 CRT .9359 CRS -.9956 CST -.9098 SGT 1003.4 SGR 660.5 SG3 909.9 RRT .7625 RRF .9509 RTF .8289 SGB 1201.3 R23 .3274 R13 .9071 TOE .2504 TRA -.5335 TC3 -.6770 BAU .2260 ROE .1257 RRA -.0922 RC3 -.7653 FAU .19783 FDE 4.0309 FRA-1.9521 FC-10.3519 BSP 2963 BDE .2802 BRA .5414 BC3 1.0218 FSP -2921 LSA 1505.0 MSA 168.8 SSA 10.6 SGI 1141.0 SG2 375.8 THA 30.27 EL1 454.4 EL2 59.4 ALF 22.49 FLIGHT TIME 116.00 LAUNCH DATE NOV 29 1965 DISTANCE 330.684 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 27.858 GAL -5.46 AZL 85.54 HCA 152.61 SMA 129.77 ECC .16639 INC 4.4600 VI 30.194
RP 108.18 LAP 2.05 LOP 219.25 VP 37.826 GAP .29 AZP 93.96 TAL 209.43 TAP 2.03 RCA 108.17 APO 151.36 V2 35.030
RC 87.465 GL 31.86 GP -16.57 ZAL 125.28 ZAP 89.09 ETS 358.15 ZAE 156.56 ETE 247.69 ZAC 53.86 ETC 145.55 CLP -89.05 PLANETOCENTRIC CONIC C3 16.696 VHL 4.086 DLA 10.07 RAL 290.31 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 2.909 DPA -36.36 RAP 318.19 ECC 1.2748 C3 16.696 VHL 4.086 DLA 10.07 RAL 290.31 RAD 6567.7 VEL 11.751 PTH 2.07 VHP 2.909 DPA -36.36 RAP 318.19 ECC 1.2748

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 D 55 35 2489.86 -25.16 59.70 151.71 103.45 1 37 5 1889.9 -23.06 51.66

90.00 15 27 8 4498.49 9.52 188.79 147.68 63.21 16 42 7 3898.5 5.85 182.04

100.00 2 21 55 2211.45 -26.25 38.92 151.41 104.83 2 58 46 1611.5 -23.96 30.87 100.00 16 43 30 4252.09 10.52 170.15 147.15 61.86 17 54 22 3652.1 6.68 163.47 110.00 3 41 29 1962.49 -29.17 19.02 150.42 108.67 4 14 11 1362.5 -26.34 10.98 110.00 17 40 26 4073.86 13.16 15.16 15.00 58.16 18 48 20 3473.9 8.85 148.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1225.4 SGR 716.9 SG3 911.4 ST 560.0 SR 242.2 SS 1480.6 RRT .8297 RRF .9653 RTF .8821 CRT .9585 CRS -.9985 CST -.9474 SGB 1419.7 R23 .2939 R13 .9309 LSA 1592.4 MSA 168.5 SSA 9.5 SG1 1374.1 SG2 356.9 THA 27.94 EL1 606.8 EL2 63.7 ALF Z2.78 TDE .3564 TRA -.5888 TC3 -.9065 BAU .2712

ROE .1694 RRA -.1010 RC3 -.8088 FAU .19711 FOE 4.1564 FRA-1.9274 FC-10.2207 BSP 3728 BDE .3946 BRA .5974 BC3 1.2149 FSP -2934

```
LAUNCH DATE NOV 29 1965
                                                                    FLIGHT TIME 118.00
                                                                                                                           ARRIVAL DATE MAR 27 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 336.993
    RL 147.56 LAL .00 LOL 66.57 VL 27.850 GAL -5.38 AZL 85.37 HCA 155.81 SMA 129.71 ECC .16605, INC 4.6313 V1 30.194
RP 108.22 LAP 1.90 LOP 222.45 VP 37.808 GAP .69 AZP 94.23 TAL 209.01 TAP 4.82 RCA 108.17 APO 151.24 V2 35.016
    RC 89.783 GL 32.96 GP -18.47 ZAL 124.34 ZAP 94.20 ETS 356.33 ZAE 153.48 ETE 240.40 ZAC 53.19 ETC 142.74 CLP -94.43
   PLANETOCENTRIC CONIC
    C3 16.932 VHL 4.115 DLA 11.24 RAL 290.63 RAD 6567.7 VEL 11.761 PTH
                                                                                             2.08 VHP 2.938 OPA -38.76 RAP 316.34 ECC 1.2787
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   0 47 16 2531.95
                                                -25.79
                                                             62.62
                                                                         152.72
                                                                                         102.11
                                                                                                      1 29 28
                                                                                                                     1931.9
        90.00
                  15 38 3
                               4462.85
                                                 8.42
                                                             186.75
                                                                           148.23
                                                                                           62.86 16 52 26
      100.00
                    2 14 16 2251.36
                                                -26.92
                                                              41.69
                                                                          152.43
                                                                                          103.52
                                                                                                      2 51 47
                                                                                                                     1651.4
                                                                                                                                   -24.79
                                                                                                                                                  33.54
                  16 53 44 4218.67
3 35 20 1997.70
       100.00
                                                                                          61.51 18 4 3
                                                 9.44
                                                             168.25
                                                                          147.68
                                                                                                                     3618.7
                                                                                                                                     5.56
                                                                                                                                                 161.61
      110.00
                                               -29.91
                                                                                                     4 8 37
                                                              21.49
                                                                          151.49
                                                                                         107.38
                                                                                                                     1397.7
                                                                                                                                   -27.24
                                                                                                                                                 13.32
                                                                                          57.79 18 56 35
                  17 49 10 4045.09
      110.00
                                                                         146.09
                                                             153.49
                                                                                                                     3445.1
                                                                                                                                      7.78
   DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
    TDE .4739 TRA -.6460 TC3-1.1267 BAU .3198
RDE .2178 RRA -.1103 RC3 -.8521 FAU .19312
                                                                SGT 1461.6 SGR 779.9 SG3 896.6
RRT .0719 RRF .9759 RTF .9134
SGB 1656.7 R23 .2695 R13 .9466
                                                                                                                 ST 715.5 SR 307.6 SS 1507.5
CRT .9707 CRS -.9994 CST -.9664
    FOE 4.2235 FRA-1.8723 FC3-9.8741 BSP 4548
                                                                                                                 LSA 1688.5 MSA 167.2 SSA 8.3
    BOE .5216 BRA .6553 BC3 1.4126 FSP -2909
                                                                SG1 1620.5 SG2 344.4 THA 26.23
                                                                                                                 EL1 775.8 EL2 68.2 ALF 22.83
LAUNCH DATE NOV 29 1965
                                                                    FLIGHT TIME 120.00
                                                                                                                            ARRIVAL CATE HAR 29 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 343.276
    RL 147.56 LAL .00 LOL 66.57 VL 27.838 GAL -5.29 AZL 85.15 HCA 159.01 SMA 129.62 ECC .16580 INC 4.8512 VI 30.194
RP 108.26 LAP 1.74 LOP 225.65 VP 37.787 GAP 1.07 AZP 94.53 TAL 208.52 TAP 7.53 RCA 108.13 APO 151.12 V2 35.003
RC 92.112 GL 34.31 GP -20.79 ZAL 123.19 ZAP 98.98 ETS 354.17 ZAE 149.85 ETE 235.18 ZAC 53.07 ETC 139.71 CLP -99.61
   PLANETOCENTRIC CONIC
    C3 17.297 VHL 4.159 DLA 12.68 RAL 291.01 RAD 6567.7 VEL 11.776 PTH
                                                                                             2.08 VHP 2.997 OPA -41.50 RAP 314.80 ECC 1.2847
    LNCH AZMTH LNCH TIME L-I TIME
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 36 44 2585.05
15 51 35 4419.60
2 4 37 2301.63
.7 6 24 4178.25
3 27 35 2041.99
17 59 54 4010.66
       90.00
                                                -26.50
                                                             66.35
                                                                        154.03
                                                                                         100.37
                                                                                                      1 19 49
                                                                                                                     1985.0
                                                                                                                                  -24.79
                                                                                                                                                  58.09
       90.00
                                                 7.07
                                                             184.29
                                                                                                                                      3.33
                                                                          148.98
                                                                                           62.51
                                                                                                          5 15
                                                                                                                     3819.6
                                                                                                                                                 177.61
                                                                                          101.79 2 42 58
61.13 18 16 2
105.69 4 1 37
      100.00
                                                -27.67
                                                             45.24
                                                                          153.77
                                                                                          101.79
                                                                                                                     1701.6
                                                                                                                                    -25.76
                                                                                                                                                  36.96
      100.00
                                                 8.12
                                                             165.98
                                                                          148.41
                                                                                                                     3578.2
                                                                                                                                     4.21
                                                                                                                                                 159.38
      110.00
                                               -30.77
                                                              24.66
                                                                                                    4 1 37
                                                                         152.90
                                                                                         105.69
                                                                                                                     1442.0
                                                                                                                                   -28.31
                                                                                                                                                  16.32
                                                10.86
      110.00
                                                             151.61
                                                                           146.76
                                                                                           57.39 19 6 45
                                                                                                                     3410.7
                                                                                                                                      6.48
                                                                                                                                                 145.25
   DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SCT 1705.0 SCR 850.6 SG3 863.6
RRT .8993 RRF .9836 RTF .9322
    TOE .6058 TRA -.7052 TC3-1.3274 BAU .3699
                                                                                                                 ST 887.0 SR 383.3 SS 1530.5
CRT .9777 CRS -.9998 CST -.9768
    ROE .2753 RRA -.1195 RC3 -.8925 FAU .18501
                                                              SGB 1905.4 R23 .2526 R13 .9568
SG1 1875.2 SG2 338.2 THA 25.03
    FOE 4.2519 FRA-1.7750 FC3-9.2599 BSP 5392
                                                                                                                 LSA 1802.4 MSA 166.1 SSA
                                                                                                                                                     7.1
    BOE .6654 BRA .7153 BC3 1.5995 FSP -2813
                                                                                                                 EL1 963.5 EL2 74.2 ALF 23.05
LAUNCH DATE NOV 29 1965
                                                                    FLIGHT TIME 122.00
                                                                                                                           ARRIVAL DATE MAR 31 1966
                                                                    DISTANCE 349.534
                        .00 LOL 66.57 VL 27.824 GAL--5.20 AZL 84.85 MCA 162.21 SMA 129.52 ECC .16564 INC 5.1460 V1 30.194 1.57 LOP 228.84 VP 37.763 GAP 1.44 AZP 94.90 TAL 207.94 TAP 10.15 RCA 108.06 APO 150.97 V2 34.990
    RL 147.56 LAL
       108.31 LAP 1.57 LOP 228.84 VP 37.763 GAP 1.44 AZP 94.90 TAL 207.94 TAP 10.15 RCA 108.06 APO 150.97 V2 34.990 94.449 GL 36.00 GP -23.75 ZAL 121.80 ZAP 103.30 ETS 351.49 ZAE 145.70 ETE 231.71 ZAC 53.69 ETC 136.44 CLP-104.56
   PLANETOCENTRIC CONIC
    C3 17.877 VHL 4.228 DLA 14.47 RAL 291.42 RAD 6567.7 VEL 11.801 PTH 2.09 VHP 3.095 DPA -44.78 RAP 313.73 ECC 1.2942 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 22 40 2654.75
16 8 56 4365.20
1 51 45 2367.46
17 22 32 4127.72
                                                                        155.76
       90.00
                                                                                                                                -25.87
                                               -27.25
                                                             71.31
                                                                                          98.00
                                                                                                     1 6 55
                                                                                                                    2054.8
                                                                                                                                                 52.91
                                                                                          62.15 17 21 41
        90.00
                                                5.35
                                                            181.22
                                                                         150.03
                                                                                                                     3765.2
                                                                                                                                    1.58
                                                                                                                                                174.57
      100.00
                                               -28.49
                                                             49.96
                                                                         155.54
                                                                                          99.44
                                                                                                    2 31 12
                                                                                                                     1767.5
                                                                                                                                  -26.90
                                                                                                                                                 41.32
                                                                                          60.75 18 31 20
      100.00
                                                6.45
                                                            163.16
                                                                         149.42
                                                                                                                     3527.7
                                                                                                                                    2.50
                                                                                                                                               156.60
      110.00
                   3 17 19
                                2099.74
                                               -31.75
                                                                                                   3 52 18
19 19 36
                                                             28.87
                                                                         154.78
                                                                                         103.38
                                                                                                                     1499.7
                                                                                                                                   -29.59
                                                                                                                                                 20.33
      110.00
                  18 13 27
                                                                          147.69
                                3968.20
                                                9.29
                                                            149.32
                                                                                          56.96
                                                                                                                    3368.2
                                                                                                                                    4.88
                                                                                                                                                 143 02
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   TOE .7577 TRA -.7677 TC3-1.4953 8AU .4212
ROE .3465 RRA -.1312 RC3 -.9324 FAU .17337
FOE 4.2287 FRA-1.6566 FC3-8.3958 BSP 6284
                                                                SGT 1951.2 SCR 935.9 SG3 813.3
RRT .9180 RRF .9891 RTF .9447
SGB 2164.0 R23 .2388 R13 .9643
                                                                                                                 ST 1076.8 SR 473.3 SS 1544.6
CRT .9824 CRS -.9999 CST -.9833
                                                                                                                LSA 1934.5 MSA 164.2 SSA 5.9
    BOE .8331 BRA .7788 BC3 1.7622 FSP -2676
                                                                                                                 EL1 1173.4 EL2 81.1 ALF 23.48
                                                                SG1 2137.3 SG2 338.9 THA 24.42
LAUNCH DATE NOV 29 1965
                                                                    FLIGHT TIME 124.00
                                                                                                                           ARRIVAL DATE APR 2 1966
  MELIOCENTRIC CONIC
                                                                    DISTANCE 355.768
   RL 147.56 LAL .00 LOL 66.57 VL 27.806 GAL -5.09 AZL 84.44 MCA 165.40 SMA 129.39 ECC .16557 INC 5.5646 V1 30.194
RP 108.35 LAP 1.40 LOP 232.04 VP 37.738 GAP 1.80 AZP 95.39 TAL 207.30 TAP 12.70 RCA 107.97 APO 150.82 V2 34.977
RC 96.794 GL 38.22 GP -27.71 ZAL 120.06 ZAP 106.99 ETS 348.06 ZAE 140.85 ETE 229.75 ZAC 55.38 ETC 132.87 CLP-109.27
  PLANETOCENTRIC CONIC
   C3 18.843 VHL 4.341 DLA 16.80 RAL 291.84 RAD 6567.8 VEL 11.842 PTH 2.10 VHP 3.247 DPA -48.96 RAP 313.36 ECC 1:31D1
   UNCH AZMTH LNCH TIME L-I TIME
90.00 0 2 31 2751.65
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                               -27.98
                                                             78.30
                                                                         158.11
                                                                                          94.56
                                                                                                     0 48 23
                                                                                                                    2151.6
                                                                                                                                  -27.05
                                                                                                                                                  69.76
       90.00
                  16 32 24
                               4292.95
                                                 3.04
                                                            177.17
                                                                          151.56
                                                                                          61.83 17 43 57
                                                                                                                     3692.9
                                                                                                                                     - . 75
                                                                                                                                                 170.54
                             2458.52
      100.00
                   1 33 25
                                                -29.33
                                                              56.60
                                                                          157.96
                                                                                          96.04
                                                                                                     2 14 24
                                                                                                                     1858.5
                                                                                                                                   -28.18
                                                                                                                                                  47.98
      100.00
                  17 44 11
                               4061.31
                                                 4.23
                                                            159.48
                                                                          150.90
                                                                                          60.38 18 51 52
                                                                                                                     3461.3
                                                                                                                                     .25
                                                                                                                                                 152.95
                 3 2 45 2179.00
18 31 20 3913.59
                                               -32.85
      110.00
                                                              34.79
                                                                         157.38
                                                                                         100.03
                                                                                                     3 39 4
                                                                                                                     1579.0
                                                                                                                                   -31.12
                                                                                                                                                 26.00
                                                                                          56.50 19 36 34
      1147.00
                                                 7.25
                                                            146.41
                                                                          149.03
                                                                                                                     3313.6
                                                                                                                                    2.80
                                                                                                                                                140.15
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                ST 1294.4 SR 589.1 SS 1554.0
CRT .9859 CRS -.9999 CST -.9876
   TOE .9446 TRA -.8350 TC3-1.6071 BAU .4721
                                                                SGT 2196.9 SGR 1040.7 SG3 741.6
   ROE .4436 RRA -.1452 RC3 -.9638 FAU .15679
                                                               RRT .9307 RRF .9929 RTF .9530
5GB 2431.0 R23 .2270 R13 .9698
   FOE 4.1680 FRA-1.5021 FC3-7.2034 BSP 7174
BOE 1.0436 BRA .8475 BC3 1.8739 FSP -2451
                                                                                                                LSA 2100.3 MSA 162.3 SSA 4.7
ELI 1419.3 EL2 90.0 ALF 24.27
                                                               SG1 2406.0 SG2 347.6 THA 24.33
```

```
ARRIVAL DATE APR 4 1966
                                                                                             FLIGHT TIME 126.00
LAUNCH DATE NOV 29 1965
                                                                                            DISTANCE 361.977
    HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.785 GAL -4.97 AZL 83.79 HCA 168.60 SHA 129.25 ECC .16558 INC 6.2107 VI 30.194
RP 108.39 LAP 1.23 LOP 235.23 VP 37.711 GAP 2.14 AZP 96.09 TAL 206.58 TAP 15.18 RCA 107.85 APO 150.65 V2 34.964
RC 99.145 GL 41.29 GP -33.35 ZAL 117.79 ZAP 109.69 ETS 343.42 ZAE 134.84 ETE 229.08 ZAC 58.68 ETC 128.89 CLP-113.79
    PLANETOCENTRIC CONIC
     C3 20.600 VHL 4.539 DLA 20.00 RAL 292.21 RAD 6567.8 VEL 11.916 PTH 2.12 VHP 3.497 DPA -54.69 RAP 314.17 ECC 1.3390
     LNCH'AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT. INJ 2 LONG
                       23 26 33 2898.99
17 7 25 4187.92
1 4 38 2595.44
18 15 58 3966.70
2 40 18 2296.12
18 56 47 3838.78
                                                                                                                          89.19 24 14 52
                                                                                                                                                             2299.0
                                                                                                                                                                                 -28.12
          90.00
                                                                 -28.31
                                                                                   89.06
                                                                                                    161.45
                                                                                                                            61.69 18 17 13
90.74 1 47 53
                                                                                                                                                                                                      164.67
                                                                                                                                                                3587.9
                                                                                                                                                                                    -4.13
                                                                   -.35
                                                                                   171.31
                                                                                                      154.04
          90.00
                                                                                                                                                                1995.4
                                                                                                                                                                                   -29.46
                                                                                                                                                                                                       57.95
        100.00
                                                                -29.88
                                                                                     66.73
                                                                                                      161.45
                                                                                                                            60.12 19 22 5
94.82 3 18 34
56.07 20 0 46
                                                                                                                                                                3366.7
                                                                                                                                                                                   -2.96
                                                                                                                                                                                                     147.76
                                                                                   154.28
                                                                                                      153.27
        100.00
                                                                   1.03
                                                                                                                                                                1696.1
                                                                                                                                                                                   -32.85
                                                                                                                                                                                                       34.69
        110.00
                                                                -33.88
                                                                                     43.77
                                                                                                      161.22
                                                                                                                                                                                      - .06
                                                                                                                                                                                                      136.25
                                                                                                                                                                3238.8
                                                                                   142.46
                                                                                                     151.15
        110.00
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 2445.5 SGR 1175.1 SG3 643.1
RRT .9397 RRF .9952 RTF .9594
SGB 2713.2 R23 .2132 R13 .9747
SG1 2688.5 SG2 365.4 THA 24.79
                                                                                                                                                          ST 1556.1 SR 743.4 SS 1547.5
CRT .9888 GRS -.9999 CST -.9909
     TOE 1.1971 TRA -.9147 TC3-1.6291 BAU .5229
     ROE :5862 RRA -.1654 RC3 -.9755 FAU .13447
                                                                                                                                                           LSA 2311.7 MSA 158.9 SSA
     FOE 4.0338 FRA-1.3220 FC3-5.6513 BSP 8113
                                                                                                                                                           EL1 1721.7 EL2 100.1 ALF 25.38
     BOE 1.3329 BRA .9296 BC3 1.8988 FSP -2145
                                                                                                                                                                         ARRIVAL DATE APR 6 1966
                                                                                            FLIGHT TIME 128.00
LAUNCH DATE NOV 29 1965
                                                                                            DISTANCE 368.162
   HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.763 GAL -4.84 AZL 82.65 HCA 171.78 SHA 129.09 ECC .16567 INC 7.3499 V1 30.194
RP 108.43 LAP 1.05 LOP 238.42 VP 37.683 GAP 2.47 AZP 97.28 TAL 205.80 TAP 17.58 RCA 107.71 APO 150.48 V2 34.951
                               45.84 CP -41.95 ZAL 114.59 ZAP 110.63 ETS 336.80 ZAE 126.62 ETE 229.28 ZAC 64.64 ETC 124.23 CLP-118.27
     RC 101.502 GL
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 24.338 VHL 4.933 DLA 24.70 RAL 292.47 RAD 6568.0 VEL 12.071 PTH 2.16 VHP 3.974 DPA 463.16 RAP 317.66 ECC 1.4005
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 23 17 3168.84 -26.49 108.55 166.21 79.62 23 16 6 2568.8 -27.66 100.08
90.00 18 12 44 3998.95 -6.41 160.72 159.04 62.36 19 19 23 3398.9 -10.06 153.95
100.00 0 10 21 2836.32 -28.76 84.51 166.63 81.48 0 57 38 2236.3 -29.64 75.82
100.00 19 12 17 3806.70 -4.39 145.49 157.93 60.40 20 15 44 3206.7 -8.30 138.88
110.00 2 0 32 2491.62 -33.96 59.01 167.31 85.82 242 4 1891.6 -34.16 49.77
110.00 19 38 36 3724.16 .05 136.47 I55.17 55.82 20 40 40 3124.2 -4.43 130.26
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS TOE 1.5958 TRA-1.0291 TC3-1.4994 BAU .5721
                                                                                       SGT 2711.9 SGR 1336.0 SG3 504.2
RRT 9460 RRF 9962 RTF 9653
SGB 3023.1 R23 .1957 R13 .9793
SG1 2997.6 SG2 391.7 THA 25.45
                                                                                                                                                            ST 1895.4 SR 953.3 SS 1503.1
     ROE .8180 RRA -.1941 RC3 -.9182 FAU .10320
FOE 3.7503 FRA-1.0982 FC3-3.6709 BSP 9183
BOE 1.7932 BRA 1.0472 BC3 1.7582 FSP -1703
                                                                                                                                                           CRT .9913 CRS -.9998 CST -.9936
                                                                                                                                                          LSA 2595.5 MSA 154.5 SBA
                                                                                                                                                          EL1 2118.7 EL2 112.0 ALF 26.58
                                                                                                                                                                        ARRIVAL DATE APR 8 1966
                                                                                            FLIGHT TIME 130.00
LAUNCH DATE NOV 29 1965
                                                                                           DISTANCE 374.317
    HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.738 GAL -4.71 AZL 80.09 MCA 174.96 SNA 128.92 ECC .16581 INC 9.9116 V1 30.194
RP 108.46 LAP .87 LOP 241.60 VP 37.653 GAP 2.80 AZP 99.87 TAL 204.95 TAP 19.91 RCA 107.54 APO 150.29 V2 34.939
RC 103.862 GL 53.16 GP -56.02 ZAL 109.50 ZAP 108.06 ETS 326.24 ZAE 113.88 ETE 228.27 ZAC 75.33 ETC 117.73 CLP-123.70
    PLANETOCENTRIC CONIC
     C3 35.352 VHL 5.946 DLA 32.25 RAL 292.55 RAO 6568.4 VEL 12.519 PTH 2.27 VHP 5.207 DPA -76.28 RAP 333.88 ECC 1.5818
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
73.88 18 13 17 4077.52 -18.06 172.66 171.44 62.82 19 21 14 3477.5 -21.56 165.43
         73.88 18 13 17 4077.52
106.12 22 23 22 3276.82
73.88 18 13 17 4077.52
106.12 22 23 22 3276.82
110.00 0 18 25 2933.45
110.00 21 21 20 3468.88
                                                                 -18.06
                                                                                  172.66
                                                                                                                            62.81 23 17 59
62.82 19 21 14
                                                                                                                                                                2676.8
                                                                                                                                                                                   -21.55
                                                                                                                                                                                                      106.08
                                                                -18.05
                                                                                  113.31
                                                                                                      171.43
                                                                                                                                                                3477.5
                                                                                                                                                                                   -21.56
                                                                                                                                                                                                      165.43
                                                                -18.06
                                                                                   172.66
                                                                                                      171.44
                                                                                113.31
                                                                                                      171.43
                                                                                                                            62.81 23 17 59
                                                                                                                                                                2676.8
                                                                                                                                                                                  -21.55
                                                                                                                                                                                                      106.08
                                                                -18.05
                                                              -26.94
                                                                                                                                       1 7 19
22 19 9
                                                                                                                                                                2333.5
                                                                                                                                                                                   -29.66
                                                                                                                                                                                                       83.14
                                                                                     91.27
                                                                                                      175.82
                                                                                                                            68.11
                                                                                                                                                                2868.9
                                                                                                                                                                                  -13.89
                                                                                                                                                                                                      116.54
                                                                                                                            57.04
                                                                                  123.03
                                                                                                      166.40
                                                                -9.61
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SGT 3051.1 SGR 1416.4 SG3 309.0

RRT .9481 RRF .9944 RTF .9738

SGB 3363.8 R23 .1697 R13 .9847

SGI 3338.5 SGZ 411.7 THA 24.15
                                                                                                                                                          ST 2418.5 SR 1165.1 55 1357.4
     TOE 2.4705 TRA-1.2406 TC3-1.0779 BAU .5948
                                                                                                                                                          CRT .9934 CRS -.9996 CST -.9962
LSA 3004.7 MSA 143.9 SSA 1.9
      ROE 1.2065 RRA -.2103 RC3 -.6498 FAU .05904
     FOE 3.1182 FRA -. 7872 FC3-1.4458 BSP 10218
                                                                                                                                                          EL1 2681.8 EL2 120.1 ALF 25.63
      BOE 2.7494 BRA 1.2583 BC3 1.2586 FSP -1048
                                                                                                                                                                         ARRIVAL DATE APR 10 1966
                                                                                             FLIGHT TIME 132.00
LAUNCH DATE NOV 29 1965
    HELIOCENTRIC CONIC
                                                                                            DISTANCE 380.406
     RL 147.56 LAL .00 LOL 66.57 VL 27.711 GAL -4.55 AZL 69.03 HCA 178.09 SMA 128.73 ECC .16596 INC20.9663 VI 30.194
RP 108.50 LAP .68 LOP 244.79 VP 37.621 GAP 3.10 AZP 110.96 TAL 204.00 TAP 22.10 RCA 107.37 APO 150.10 V2 34.926
RC 106.225 GL 64.13 GP -79.96 ZAL 100.00 ZAP 99.04 ETS 276.37 ZAE 90.63 ETE 187.76 ZAC 94.22 ETC 75.24 CLP-154.22
    PLANETOCENTRIC CONIC
      C3 120.695 VHL 10.986 DLA 44.33 RAL 294.65 RAD 6570.3 VEL 15.557 PTH 2.77 VHP 11.556 DPA -75.47 RAP 102.69 ECC 2.9863
     C3 120.695 VHL 10.986 DLA 44.33 RAL 294.65 RAD 6570.3 VEL 15.557 PTH 2.77 VHP 11.556 DPA -75.47 RAP 102.69 ECC 2.9863 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 54.35 16 41 16 4659.69 -11.02 215.02 193.16 46.78 17 58 56 4059.7 -16.43 209.36 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13 125.65 0 16 4 3271.87 -11.01 107.78 193.15 46.78 1 10 36 2671.9 -16.42 102.13
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                       SGT 3488.5 SGR 1134.2 SG3 99.1 ST 3286.7 SR 875.1 SS 1103.1 RRT -.9206 RRF -.8861 RTF .9267 CRT -.9878 CRS .9833 CST -.9996 SGB 3668.3 R23 -.1158 R13 -.9932 LSA 3573.0 MSA 137.5 SSA .5 SG1 3643.7 SG2 424.0 THA 163.10 EL1 3398.7 EL2 131.9 ALF 165.24
       TOE 6.2668 TRA-1.5869 TC3 -.1758 BAU .2838
      RDE-1.6206 RRA 1.0373 RC3 .0064 FAU .00849
FOE 2.1118 FRA -.3989 FC3 -.0609 BSP 10184
                                                                                       SG1 3643.7 SG2 424.0 THA 163.10
      BOE 6.4730 BRA 1.8958 BC3 .1759 FSP -307
```

ARRIVAL DATE APR 12 1966

LAUNCH DATE NOV 29 1965

```
HELIOCENTRIC CONIC
                                                                                   DISTANCE 386.751
     RL 147.56 LAL .00 LOL 66.57 VL 27.682 GAL -4.44 AZL 109.56 MCA 181.48 SMA 128.53 ECC .16563 INC19.5581 V1 30.194
RP 108.54 LAP .50 LOP 247.97 VP 37.589 GAP 3.46 AZP 70.44 TAL 203.24 TAP 24.73 RCA 107.12 APO 149.95 V2 34.914
RC 108.588 GL -63.65 GP 81.86 ZAL 100.34 ZAP 98.02 ETS 75.26 ZAE 92.79 ETE 162.99 ZAC 68.57 ETC 273.83 CLP 170.28
    PLANETOCENTRIC CONIC
     C3 106.347 VHL 10.312 DLA -72.16 RAL 10.77 RAD 6570.0 VEL 15.089 PTH 2.71 VHP 14.757 DPA 58.83 RAP 268.06 ECC 2.7502
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         275.20
                                                                                                                                                               24.30
        20.37
                     8 13 7 2178.96
                                                          16.75
                                                                           74.81
                                                                                                            161.34
                                                                                                                            8 49 26
                                                                                                                                             1579.0
                                                                                                                                                                                   72.42
                    18 51 33 5700.95
8 13 7 2178.96
        159.63
                                                           16.75
                                                                           260.07
                                                                                           275.22
                                                                                                              161.34 20 26 34
                                                                                                                                                5101.0
                                                                                                                                                                  24.31
                                                                                                                                                                                  257.68
         20.37
                                                           16.75
                                                                            74.81
                                                                                           275.20
                                                                                                              161.34
                                                                                                                            8 49 26
                                                                                                                                                1579.0
                                                                                                                                                                  24.30
                                                                                                                                                                                   72.42
                                                                                                            161.34 8 49 26
161.34 20 26 34
161.34 8 49 26
161.34 20 26 34
                                                                                       275.22
275.20
                    18 51 33 5700.95
8 13 7 2178.96
18 51 33 5700.95
        159.63
                                                          16.75
                                                                           260.07
                                                                                                                                                            24.31
                                                                                                                                                5101.0
                                                                                                                                                                                 257.68
         20.37
                                                          16.75
                                                                            74.81
                                                                                                                                                1579.0
                                                                                                                                                                 24.30
                                                                                                                                                                                   72.42
                                                                                                                                                               24.31
        159.63
                                                          16.75
                                                                           260.07
                                                                                          275.22
                                                                                                                                               5101.0
                                                                                                                                                                                 257.68
   DIFFERENTIAL CORRECTIONS
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
     TOE-3.0722 TRA 1.8798 TC3 -.2198 BAU .3138
                                                                            SGT 3838.6 SGR 499.7 SG3 86.1

RRT .6189 RRF .5451 RTF .9959

SGB 3871.0 R23 -.0990 R13 .9951

SGI 3851.2 SG2 391.2 THA 4.65
                                                                                                                                          ST 1989.7 SR 486.6 SS 580.0
CRT .8909 CRS -.8352 CST -.9939
    ROE -.8737 RRA .0611 RC3 .0205 FAU .00837
FOE -.6515 FRA .5065 FC3 -.0681 BSP 9312
BDE 3.1940 BRA 1.8808 BC3 .2207 FSP -222
                                                                                                                                          LSA 2116.6 MSA 228.4 SSA .3
                                                                                                                                          EL1 2037.0 EL2 215.8 ALF 12.43
LAUNCH DATE NOV 29 1965
                                                                                    FLIGHT TIME 136.00
                                                                                                                                                        ARRIVAL DATE APR 14 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 392.774
    RL 147.56 LAL .00 LOL 66.57 VL 27.652 GAL -4.26 AZL 93.88 HCA 184.59 SMA 128.33 ECC .16688 INC 3.8753 VI 30.194
RP 108.58 LAP .31 LOP 251.15 VP 37.556 GAP 3.74 AZP 86.14 TAL 202.17 TAP 26.76 RCA 106.91 APO 149.74 V2 34.903
RC 110.951 GL -30.16 GP 55.93 ZAL 118.37 ZAP 113.17 ETS 34.88 ZAE 118.41 ETE 133.52 ZAC 48.05 ETC 223.27 CLP-134.62
   PLANETOCENTRIC CONIC
    C3 13.766 VML 3.710 DLA -48.48 RAL 315.63 RAD 6567.5 VEL 11.625 PTH 2.04 VMP 5.705 DPA 32.35 RAP 290.59 ECT 1.2266 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 46 58 1551.56
13 57 47 5350.24
5 46 58 1551.56
13 57 47 5350.24
5 46 58 1551.56
13 57 47 5350.24
                                                                                                           125.46 6 12 49
125.45 15 26 57
125.46 6 12 49
125.45 15 26 57
125.46 6 12 49
125.45 15 26 57
         48.85
                                                           35.53
                                                                           25.27
                                                                                         186.41
                                                                                                                                               951.6
                                                                                                                                                                  39.88
                                                                                                                                                                                   17.19
        131.15
                                                            35.54
                                                                           246.37
                                                                                           186.41
                                                                                                                                                4750.2
                                                                                                                                                                   39.89
                                                                                                                                                                                   238.29
         48.85
                                                           35.53
                                                                           25,27
                                                                                           186.41
                                                                                                                                                 951.6
                                                                                                                                                                   39.88
                                                                                                                                                                                   17.19
       131.15
                                                           35.54
                                                                          246.37
                                                                                           186.41
                                                                                                                                                4750.2
                                                                                                                                                                   39.89
                                                                                                                                                                                 238.29
                                                                                         186.41
         48.85
                                                           35.53
                                                                            25.27
                                                                                                                                                951.6
                                                                                                                                                                   39.88
                                                                                                                                                                                   17.19
        131.15
                                                          35.54
                                                                           246.37
                                                                                           186.41
                                                                                                                                                4750.2
                                                                                                                                                                   39.89
                                                                                                                                                                                  238.29
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            SGT 3244.3 SGR 1766.5 SG3 280.9

RRT -.9532 RRF -.9992 RTF .9620

SGB 3694.0 R23 .2056 R13 -.9784

SGI 3663.6 SG2 473.2 THA 152.07
     TOE-1.2646 TRA -.1269 TC3-3.4685 BAU .7341
                                                                                                                                         ST 1956.4 SR 932.4 SS 832.4
CRT -.9871 CRS .9998 CST -.9899
LSA 2316.0 MSA 160.9 SSA 1.5
    ROE .5991 RRA -.1538 RC3 1.9696 FAU .D5853
FDE-1.0871 FRA .2324 FC3-3.6806 BSP 11456
BDE 1.3993 BRA .1994 BC3 3.9887 FSP -913
                                                                                                                                         EL1 2163.0 EL2 135.3 ALF 154.70
LAUNCH DATE NOV 29 1965
                                                                                   FLIGHT TIME 134.00
                                                                                                                                                       ARRIVAL DATE APR 16 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 398.847
                              .DO LOL 66.57 VL 27.621 GAL -4.D8 AZL 90.90 HCA 187.75 SMA 128.11 ECC .16732 INC .9017 V1 30.194 .12 LOP 254.32 VP 37.523 GAP 4.D3 AZP 89.11 TAL 201.11 TAP 28.86 RCA 106.68 APO 149.55 V2 34.892
    RL 147.56 LAL
     RP 108.61 LAP
    RC 113.313 GL -7.89 GP 39.08 ZAL 122.01 ZAP 123.32 ETS 29.17 ZAE 129.09 ETE 142.92 ZAC 38.77 ETC 207.27 CLP-135.05
   PLANETOCENTRIC CONTC
    C3 9.998 VHL 3.162 DLA -26.86 RAL 308.63 RAD 6567.4 VEL 11.462 PTH
                                                                                                                  1.99 VHP 4.438 OPA 16.01 RAP 295.57 ECC 1.1645
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          113.07 8 21 37 400.0

98.86 12 20 7 5167.9

116.34 9 7 20 244.0

95.47 14 8 21 4799.2

122.71 9 20 45 199.5

88.69 16 4 17 4416.5
        90.00
                        8 4 57 1000.04
                                                           16.89
                                                                          330.98
                                                                                        164.41
                                                                                                                                                                 19.87
                     10 43 59 5767.93
         90.00
                                                           27.00
                                                                          274.31
                                                                                          167.52
                                                                                                                                                                  27.95
                                                                                                                                                                                 265.78
        100.00
                       8 53 16
                                         844.00
                                                           14.66
                                                                           318.46
                                                                                           163.34
                                                                                                                                                                  18.08
                                                                                                                                                                                 311.34
                                                                                       167.87
       100.00 12 38 22 5399.20
                                                           29.43
                                                                          247.53
                                                                                                                                                                              238.75
                                                                                                                                                                  29.88
                     9 7 26 799.50
14 40 40 5016.46
       110.00
                                                           10.55
                                                                           312.71
                                                                                          160.95
                                                                                                                                                                  14.78
                                                                                                                                                                                  306.17
       110.00
                                                                          218.67
                                                                                          168.07
                                                           34.16
                                                                                                                                                                 33.60
                                                                                                                                                                                209.47
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                            SGT 3403.8 SGR 1376.5 SG3 436.0
RRT -.9542 RRF -.9989 RTF ..9567
SGB 3671.6 R23 .2481 R13 -.9677
SG1 3651.4 SG2 384.0 THA 158.65
     TOE -.3997 TRA -.3869 TC3-5.1103 BAU .7406
                                                                                                                                           ST 767.8 SR 232.6 SS 247.2
CRT -.9081 CRS .9982 CST -.9075
    ROE .1255 RRA -.0448 RC3 2.1418 FAU .09134
    FOE -.3438 FRA .1154 FC3-7.9091 BSP 11450
BDE .4189 BRA .3894 BC3 5.5410 FSP -1427
                                                                                                                                          LSA 829.0 MSA 131.5 SSA 10.1
                                                                                                                                           EL1 796.7 EL2 93.8 ALF 164.40
LAUNCH DATE NOV 29 1965
                                                                                   FLIGHT TIME 140.00
                                                                                                                                                        ARRIVAL DATE APR 18 1966
  HELIOCENTRIC CONIC
                                                                                   DISTANCE 404.910
    RL 147.56 LAL .00 LOL 66.57 VL 27.588 GAL -3.90 AZL 89.65 MCA 190.93 SMA 127.89 ECC .16785 INC .3477 V1 30.194
RP 108.64 LAP -.07 LOP 257,50 VP 37.488 GAP 4.31 AZP 90.34 TAL 200.01 TAP 30.94 RCA 106.42 APO 149.35 V2 34.881
RC 115.673 GL 3.10 GP 28.97 ZAL 120.66 ZAP 129.80 ETS 24.74 ZAE 133.38 ETE 151.67 ZAC 35.60 ETC 194.17 CLP-137.03
   PLANETOCENTRIC CONIC
    C3 9.669 VML 3.110 DLA -15.80 RAL 307.43 RAD 6567.3 VEL 11.448 PTH 1.99 VMP 4.107 DPA 6.20 RAP 298.24 ECC 1.1591
   C3 9.669 VML 3.110 OLA -15.80 RAL 307.43 RAD 6567.3 VEL 11.448 PTH 1.99 VMP 4.107 OPA 6.20 RAP 298.24 ECC 1.1991
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 27 5 1540.62 .46 2.17 158.28 118.31 5 52.45 940.6 4.24 355.53
90.00 13 12 17 5214.09 26.31 234.24 162.32 79.13 14 39 11 4614.1 24.54 226.02
100.00 6 39 41 1306.36 -.47 344.43 157.76 119.89 7 1 27 706.4 3.51 337.91
100.00 14 42 22 4923.58 27.35 212.63 162.07 77.44 16 4 26 4323.6 25.35 204.40
110.00 7 28 30 1153.41 -2.85 331.35 156.27 124.08 7 47 44 553.4 1.64 325.14
110.00 16 10 2 4649.30 30.06 190.98 161.26 72.90 17 27 31 4049.3 27.43 182.78
                                                                                                            119.65
77.44 16 4 26
124.08 7 47 44
553.4
72.90 17 27 31
3N ACCURACY
6.3 363 504.1
968 RTF .9559
CRT .0321 CRS .4823 CST .0063
CRT .9623
LSA 293.9 RSA 184.5 SSA 30.4
511 293.9 EL2 34.9 ALF .22
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGE 3719.5 R23 .2604 R13 -.9623
SGE 3707.0 SGE 303.9 THA 163.94
    TDE -.0053 TRA -.4787 TC3-5.5368 BAU .7492
    RDE -.0029 RRA -.0227 RC3 1.7132 FAU .10439
FDE .2634 FRA .0778 FC3-9.3469 BSP 11616
```

FLIGHT TIME 134.00

BDE .0061 BRA .4792 BC3 5.7958 FSP -1649

```
ARRIVAL DATE APR 2D 1966
                                                                                                      FI IGHT TIME 142.00
LAUNCH DATE NOV 29 1965
                                                                                                      DISTANCE 410.957
   HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.554 GAL -3.71 AZL 88.96 HCA 194.10 SMA 127.66 ECC .16847 INC 1.0434 V1 30.194
RP 108.68 LAP -.25 LOP 260.67 VP 37.454 GAP 4.59 AZP 91.01 TAL 198.88 TAP 32.98 RCA 106.15 APO 149.17 V2 34.870
                                   9.22 GP 22.56 ZAL 118.50 ZAP 134.35 ETS 21.40 ZAE 134.83 ETE 158.25 ZAC 35.14 ETC 184.79 CLP-139.19
     RC 118.029 GL
    PLANETOCENTRIC CONIC
     C3 9.772 VHL 3.126 DLA -9.43 RAL 307.69 RAD 6567.4 VEL 11.453 PTH 1.99 VHP 4.029 DPA .02 RAP 300.21 ECC 1.1608 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 33 19 1760.53 -6.59 14.49 158.03 117.60 5 2 39 1160.5 -2.85 7.81 90.00 14 8 4 4998.36 22.70 219.49 160.64 72.60 15 31 22 4398.4 20.10 211.78 100.00 5 50 2 1513.04 -7.42 355.84 157.58 119.04 6 15 15 913.0 -3.49 349.26 100.00 15 34 2 4721.09 23.59 198.78 160.32 71.09 16 52 43 4121.1 20.79 191.10 110.00 6 47 45 1332.31 -9.60 340.81 156.26 122.97 7 9 57 732.3 -5.19 334.49 110.00 16 52 49 4474.58 25.96 179.06 159.32 66.94 18 7 23 3874.6 22.61 171.50
      C3 9.772 VHL 3.126 DLA -9.43 RAL 307.69 RAD 6567.4 VEL 11.453 PTH
                                                                                                                                           1.99 VHP 4.029 DPA
                                                                                                                                                                                        .02 RAP 300.21 FCC 1.1608
                                                                 -9.5u
25.96
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 523.5 SR 66.1 S5 410.1
CRT -.7309 CRS .9627 CST -.8074
                                                                                                SGT 3736.3 SGR 859.2 SG3 526.9
RRT -.9542 RRF -.9925 RTF .9569
SGB 3833.8 R23 .2516 R13 -.9606
      TOE .2301 TRA -.5219 TC3-5.7318 BAU .7699
                                                                                                                                                                 CRT -.7309 CRS .9627 CST -.8074
LSA 636.9 MSA 201.9 SSA 16.8
      RDE -.0328 RRA -.0174 RC3 1.3699 FAU .10806
     FOE .6348 FRA .0749 FC3-9.5732 BSP 12095
BOE .2325 BRA .5222 BC3 5.8932 FSP -1751
                                                                                                                                                                          EL1 525.8 EL2 44.9 ALF 174.69
                                                                                                SG1 3825.6 SG2 251.0 THA 167.57
                                                                                                                                                                                          ARRIVAL DATE APR 22 1966
                                                                                                       FLIGHT TIME 144.00
LAUNCH DATE NOV 29 1965
                                                                                                      DISTANCE 416.995
   HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.519 GAL -3.51 AZL 88.51 HCA 197.28 SMA 127.42 ECC .16917 INC 1.4861 VI 30.194
RP 108.71 LAP -.44 LOP 263.84 VP 37.419 GAP 4.87 AZP 91.42 TAL 197.69 TAP 34.97 RCA 105.87 APO 148.98 V2 34.860
RC 120.382 GL 13.07 GP 18.24 ZAL 116.23 ZAP 137.85 ETS 18.90 ZAE 135.07 ETE 162.94 ZAC 35.83 ETC 178.38 CLP-141.31
     PLANETOCENTRIC CONIC

C3 9.924 VHL 3.150 DLA -5.23 RAL 308.56 RAD 6567.4 VEL 11.459 PTH 1.99 VHP 4.047 DPA -4.06 RAP 301.94 ECC 1.1633

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 14 44 11 1897.69 -10.83 22.33 159.15 116.32 4 35 49 1297.7 -7.21 15.53

90.00 14 44 9 4867.30 19.78 210.99 160.64 69.31 16 5 17 4267.3 16.79 203.59

100.00 5 23 3 1643.25 -11.64 3.20 158.73 117.73 5 50 27 1043.2 -7.84 356.48

100.00 16 7 58 4596.98 20.62 190.75 160.29 67.87 17 24 35 3997.0 17.44 183.40

110.00 6 25 39 1447.29 -13.78 347.08 157.48 121.60 6 49 46 847.3 -9.50 340.60

110.00 17 21 52 4365.70 22.87 172.11 159.20 63.87 18 34 38 3765.7 19.17 164.93
    PLANETOCENTRIC CONIC
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 3765.1 SGR 678.0 SG3 501.1 ST 873.1 SR 94.4 SS 642.4

RRT -.9411 RRF -.9825 RTF .9465 CRT -.8659 CRS .9829 CST -.9272

SGB 3825.6 R23 .2619 R13 -.9492 LSA 1069.4 MSA 200.1 SSA 12.9

SGI 3818.9 SG2 226.1 THA 170.35 EL1 876.9 EL2 47.0 ALF 174.64
                                                                                                                                                                           5T 873.1 SR 94.4 55 642.4

CRT -.8659 CRS .9829 CST -.9272

LSA 1069.4 MSA 200.1 55A 12.9
      TDE .4538 TRA -.4813 TC3-5.6611 BAU .7642
      RDE -.0496 RRA -.0358 RC3 1.0615 FAU .09981
      FOE 1.0032 FRA .2520 FC3-8.7073 BSP 11271
BDE .4565 BRA .4826 BC3 5.7598 FSP -1468
                                                                                                                                                                                         ARRIVAL DATE APR 24 1966
                                                                                                      FLIGHT TIME 146.00
LAUNCH DATE NOV 29 1965
                                                                                                      DISTANCE 423.006
    HELIOCENTRIC CONIC
      RL 147.56 LAL .00 LOL 66.57 VL 27.483 GAL -3.30 AZL 88.21 MCA 200.45 SMA 127.18 ECC .16997 INC 1.7946 VI 30.194
RP 108.74 LAP -.63 LOP 267.01 VP 37.384 GAP 5.14 AZP 91.68 TAL 196.49 TAP 36.93 RCA 105.57 APO 148.80 V2 34.851
RC 122.731 GL 15.71 GP 15.16 ZAL 113.99 ZAP 140.75 ETS 17.02 ZAE 134.77 ETE 166.30 ZAC 36.99 ETC 174.01 CLP-143.35
     PLANETOCENTRIC CONIC
      C3 10.066 VHL 3.173 DLA -2.18 RAL 309.75 RAD 6567.4 VEL 11.465 PTH 1.99 VHP 4.110 DPA -6.88 RAP 303.57 ECC 1.1657
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             160.76 115.01
                                                                                                                                                                            1395.9
                                                                                                                                                                                                                           21.14
                           3 46 2 1995.89
15 11 48 4774.79
5 6 22 1736.77
16 34 9 4509.15
                                                                                                                                                        4 19 18
                                                                                                                                                                                                   -10.25
                                                                      -13.73
                                                                                             28.09
            90.00
                                                                                                                                                                                                                           198.00
                                                                                                                                                                                4174.8
                                                                                            203.20
                                                                                                                161.40
                                                                                                                                        67.34
                                                                                                                                                       16 31 23
                                                                                                                                                                                                      14.23
                                                                      17.45
            90.00
                                                                                                                                                                                                                             1.76
                                                                                                                                      116.41
                                                                                                                                                        5 35 18
                                                                                                                                                                                 1136.8
                                                                                                                                                                                                      -10.88
                                                                                              8.63
                                                                                                                160.36
                                                                      -14.54
          100.00
                                                                                                             161.02
                                                                                                                                      65.92 17 49 19
120.27 6 37 47
62.01 18 56 12
                                                                                                                                                                             3909.1
930.4
                                                                                                                                                                                                                           178.15
                                                                                                                                                                                                      14.87
                                                                      18.27
                                                                                            185.29
          100.00
                                                                                                                                                                                                    -12.55
                                                                                                             159.16
159.88
                                                                                                                                                                                                                           345.11
                                                                 -16.69
20.47
                                                                                            351.76
                           6 12 17 1530.41
17 44 44 4288.27
          110.00
                                                                                                                                                                                                    16.57
                                                                                                                                                                               3688.3
                                                                                                                                                                                                                           160.43
                                                                                           167.38
          110.00
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                SGT 3993.5 SGR 602.5 SG3 503.7

RRT -.9353 RRF -.9706 RTF .9536

SGB 4038.7 R23 .2154 R13 -.9552

SG1 4033.1 SG2 211.1 THA 171.95
                                                                                                                                                                         ST 1048.5 SR 59.8 SS 681.1
CRT -.8410 CRS .9528 CST -.9473
       TOE .5568 TRA -.5075 TC3-5.9166 BAU .8063
       ROE -.0303 RRA -.0293 RC3 .9418 FAU .10070
                                                                                                                                                                         LSA 1237.7 MSA 186.7 SSA 13.9
EL1 1049.7 EL2 32.3 ALF 177.25
       FDE 1.0564 FRA .2112 FC3-8.6601 BSP 12569
       BDE .5576 BRA .5084 BC3 5.9911 FSP -1632
                                                                                                                                                                                           ARRIVAL DATE APR 26 1966
                                                                                                        FLIGHT TIME 148.00
 LAUNCH DATE NOV 29 1965
    HELIOCENTRIC CONIC

RL 147.56 LAL .00 LOL 66.57 VL 27.447 GAL -3.08 AZL 87.98 HCA 203.62 SMA 126.94 ECC .17085 INC 2.0232 VI 30.194

RP 108.76 LAP -.81 LOP 270.17 VP 37.349 GAP 5.40 AZP 91.85 TAL 195.24 TAP 38.86 RCA 105.25 APO 148.63 V2 34.842

RC 125.075 GL 17.64 GP 12.89 ZAL 111.74 ZAP 143.25 ETS 15.57 ZAE 134.26 ETE 168.74 ZAC 38.39 ETC 170.99 CLP-145.28
     PLANETOCENTRIC CONIC
      C3 10.189 VHL 3.192 DLA .23 RAL 311.17 RAD 6567.4 VEL 11.471 PTH 1.99 VHP 4.196 DPA -8.89 RAP 305.20 ECC 1.1677
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 33 53 2072.80 -15.89 32.70 162.65 113.75 4 8 26 1472.8 -12.55 25.62
90.00 15 35 18 4702.73 15.51 200.80 162.59 66.01 16 53 40 4102.7 12.14 193.75
100.00 4 55 20 1810.08 -16.71 12.99 162.27 115.15 5 25 30 1210.1 -13.19 5.98
100.00 16 56 32 4440.68 16.32 181.14 162.20 64.61 18 10 33 3840.7 12.77 174.15
110.00 6 3 50 1595.70 -18.89 355.55 161.10 119.03 6 30 25 995.7 -14.88 348.73
110.00 18 4 32 4227.82 18.50 161.02 60.73 19 15 0 3627.8 14.46 157.02
                                                             .23 RAL 311.17 RAD 6567.4 VEL 11.471 PTH 1.99 VHP 4.196 DPA -8.89 RAP 305.20 ECC 1.1677
      C3 10.189 VHL 3.192 DLA
                                                                                              MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4132.5 SGR 552.6 SG3 486.4 ST 1242.6 SR 40.2 SS 747.8 RRT -.9179 RRF -.9512 RTF .9533 CRT -.7150 CRS .8543 CST -.9602 SGB 4166.7 R23 .1861 R13 -.9545 LSA 1439.3 MSA 181.7 SSA 14.3 SG1 4161.4 SG2 209.8 THA 173.24 EL1 1242.9 EL2 28.1 ALF 178.67
     DIFFERENTIAL CORRECTIONS
       TDE .6737 TRA -.4859 TC3-6.0371 BAU .8301
       RDE -.0178 RRA -.0343 RC3 .8271 FAU .09624
       FOE 1.1431 FRA .2692 FC3-8.1769 BSP 13025
BDE .6739 BRA .4871 BC3 6.0935 FSP -1587
```

ARRIVAL DATE APR 28 1966

LAUNCH DATE NOV Z9 1965

HELIOCENTRIC CONIC DISTANCE 434.986 RL 147.56 LAL .00 LOL 66.57 VL 27.410 GAL -2.85 AZL 87.80 MCA 206.79 SHA 126.69 ECC .17183 INC 2.2002 V1 30.194
RP 108.79 LAP -.99 LOP 273.34 VP 37.314 GAP 5.67 AZP 91.96 TAL 193.96 TAP 40.75 RCA 104.92 APO 148.46 V2 34.834 RC 127.413 GL 19.12 GP 11.16 ZAL 109.48 ZAP 145.47 ETS 14.45 ZAE 133.68 ETE 170.55 ZAC 39.93 ETC 168.89 CLP-147.11 PLANETOCENTRIC CONIC C3 10.300 VHL 3.209 OLA 2.23 RAL 312.77 RAD 6567.4 VEL 11.476 PTH 1.99 VHP 4.296 DPA -10.33 RAP 306.85 ECC 1.1695 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 25 26 2136.90 15 56 28 4642.97 164.73 112.54 4 1 3 65.04 17 13 51 -17.61 36.62 1536.9 -14.40 29.41 90.00 15 56 28 13.82 197.22 164.07 4043.0 10.34 190.27 113.95 5 19 0 63.64 18 29 51 117.86 6 25 57 59.79 19 32 16 4 47 49 1871.18 17 16 47 4383.92 100.00 164.35 1271.2 -15.05 -18.44 16.71 9.56 17 16 47 100.00 14.64 177.77 163.66 3783.9 10.98 170.89 5 58 26 1650.14 18 22 39 4177.73 110.00 -20.66 35A.7A 163.21 1050.1 -16.77 351.82 18 22 39 110.00 16.81 3577.7 160.91 162.45 12.67 154.24 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4259.Q SGR 482.D SG3 466.5 RRT -.8931 RRF -.9248 RTF .9526 SGB 4286.2 R23 .1597 R13 -.9534 SG1 4280.8 SG2 215.7 THA 174.21 ST 1419.3 SR 27.4 SS 799.3 CRT -.2260 CRS .4223 CST -.9677 LSA 1619.3 MSA 177.9 SSA 14.8 EL1 1419.3 EL2 26.7 ALF 179.75 TOE .7806 TRA -.4496 TC3-6.1439 BAU .8522 ROE -.0049 RRA -.0403 RC3 .7424 FAU .09121 FDE 1.1991 FRA .3359 FC3-7.6665 BSP .13410 BOE .7807 BRA .4514 BC3 6.1886 FSP -1525 LAUNCH DATE NOV 29 1965 FLIGHT TIME 152.00 ARRIVAL DATE APR 30 1966 HELIOCENTRIC CONIC DISTANCE 440.952 RL 147.56 LAL .00 LOL 66.57 VL 27.372 GAL -2.61 AZL 87.66 HCA 209.96 SMA 126.44 ECC .17291 INC 2.3421 VI 30.194
RP 108.81 LAP -1.17 LOP 276.51 VP 37.279 GAP 5.93 AZP 92.03 TAL 192.65 TAP 42.60 RCA 104.58 APO 148.31 V2 34.826
RC 129.747 GL 20.27 GP 9.79 ZAL 107.20 ZAP 147.49 ETS 13.57 ZAE 133.09 ETE 171.91 ZAC 41.55 ETC 167.42 CLP-148.84 PLANETOCENTRIC CONIC C3 10.407 VHL 3.226 DLA 3.96 RAL 314.50 RAD 6567.4 VEL 11.480 PTH 2.00 VHP 4.406 DPA -11.37 RAP 308.55 ECC 1.1713 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 19 27 2192.89 -19.04 40.11 166.95 111.37 3 55 59 1592.9 -15.97 32.78 90.00 16 16 19 4591.16 12.31 194.17 165.77 64.30 17 32 50 3991.2 8.75 187.30 1924.54 100.00 4 42 38 -19.88 20.01 112.79 166.58 5 14 43 1324... 3734.7 1324.5 -16.62 12.74 17 35 49 100.00 13.13 174.89 165.36 62.90 18 48 3 9.39 168.10 1697.64 4134.40 116.73 6 23 26 59.05 19 48 43 5 55 8 110.00 -22.14 1.67 165.47 1097.6 -18.38 354.56 110.00 18 39 48 15.30 158.44 164.11 3534.4 11.09 151.88 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE .8785 TRA -.4044 TC3-6.2477 BAU .8744 SGT 4382'.0 SGR 446.7 SG3 446.6 RRT -.8616 RRF -.8918 RTF .9520 ST 1579.8 SR 31.6 SS 836.6 CRT .5259 CRS -.3503 CST -.9726 RDE .0081 RRA -.0465 RC3 .6799 FAU .08628 FOE 1.2292 FRA .3988 FC3-7.1774 BSP 13817 BOE .8785 BRA .4071 BC3 6.2846 FSP -1467 SGB 4404.7 R23 .1367 R13 -.9526 SGI 4398.9 SG2 225.8 THA 174.97 LSA 1779.3 MSA 174.2 SSA 15.4 EL1 1579.9 EL2 26.8 ALF .60 LAUNCH DATE NOV 29 1965 FLIGHT TIME 154.00 ARRIVAL DATE MAY 2 1966 HELIOCENTRIC CONIC DISTANCE 446.902 PLANETOCENTRIC CONTC C3 10.519 VHL 3.243 DLA 5.51 RAL 316.36 RAD 6567.4 VEL 11.485 PTH 2.00 VHP 4.522 DPA -12.11 RAP 310.30 ECC 1.1731 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 15 11 2243.59 -20.26 43.33 169.30 110.21 3 52 34 1643.6 -17.33 35.88 63.71 17 51 10 90.00 16 35 26 4544.78 10.93 191.46 167.66 3944.8 7.31 184.65 100.00 4 39 7 1972.84 -21.13 23.06 168.95 111.65 5 12 0 1372.8 -18.00 15.66 62.32 19 5 41 115.63 6 22 20 58.47 20 4 43 167.24 100.00 17 54 10 4290.77 11.75 172.36 3690.8 7.96 165.63 110.00 5 53 20 1740.61 -23.43 4.34 167.86 1140.6 -19.79 357.09 110.00 18 56 27 4095.76 156.28 165.96 3495.8 9.67 13.94 149.79 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4497.9 SGR 421.8 SG3 426.8 RRT -.8237 RRF -.8528 RTF .9513 SGB 4517.6 R23 .1181 R13 -.9518 SGI 4511.3 SG2 238.4 THA 175.57 TOE .9724 TRA -.3483 TC3-6.3372 BAU .8956 ST 1732.3 SR 47.7 SS 866.8 ROE .0206 RRA -.0530 RC3 .6314 FAU .08140 FDE 1.2460 FRA .4627 FC3-6.6992 BSP 14190 BOE .9727 BRA .3524 BC3 6.3686 FSP -1406 CRT .8022 CRS -.6765 CST -.9761 LSA 1930.0 MSA 170.8 SSA 16.0 EL1 1732.7 EL2 28.5 ALF 1.27 LAUNCH DATE NOV 29 1965 FLIGHT TIME 156.00 ARRIVAL DATE MAY 4 1966 HELIOCENTRIC CONIC DISTANCE 452.836 RL 147.56 LAL .00 LOL 66.57 VL 27.295 GAL -2.10 AZL 87.44 MCA 216.29 SMA 125.94 ECC .17540 INC 2.5578 V1 30.194
RP 108.86 LAP -1.51 LOP 282.83 VP 37.210 GAP 6.44 AZP 92.06 TAL 189.94 TAP 46.23 RCA 103.85 APO 148.03 V2 34.812
RC 134.395 GL 21.91 GP 7.80 ZAL 102.51 ZAP 151.06 ETS 12.36 ZAE 132.00 ETE 173.79 ZAC 44.99 ETC 165.67 CLP-152.04 PLANETOCENTRIC CONIC C3 10.643 VHL 3.262 DLA 6.92 RAL 318.34 RAD 6567.4 VEL 11.490 PTH 2.00 VHP 4.644 DPA -12.61 RAP 312.10 ECC 1.1752 INJ LAT INJ LONG INJERT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -21.34 46.37 171.79 109.06 3 50 23 1690.8 -18.55 38.81 LNCH AZMTH LNCH TIME L-I TIME NJ AZMTH INJ TIME 109.06 3 50 23 63.24 18 9 11 110.52 5 10 29 61.84 19 23 1 114.53 6 22 20 57.99 20 20 32 90.00 3 12 12 2290.80 90.00 16 54 8 4502.33 9.64 189.01 169.73 3902.3 5.97 182.25 100.00 2017.77 -22.23 4 36 51 25.94 171.45 1417.8 -19.24 18.43 18 12 10 4250.57 100.00 10.47 169.29 170.06 3650.6 6.63 163.38 5 52 39 1780.53 110.00 -24.58 6.87 170.39 1180.5 -21.07 359.49 110.00 19 12 51 4060.59 12.58 154.34 167.98 3460.6 8.36 147.90 MID-COURSE EXECUTION ACCURACY
SCT 4609.6 SGR 405.0 SG3 407.7
RRT -.7810 RRF -.8091 RTF ..9506
SGB 4627.4 R23 .1032 R13 -.9510 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY TDE 1.0625 TRA -.2837 TC3-6.4142 BAU .9165 ST 1876.3 SR 66.7 SS 890.0 CRT .8841 CRS -.7850 CST -.9788 RDE .0327 RRA -.0597 RC3 .5927 FAU .07673 CRT .8841 CRS -.7850 LS1 -.9760 LSA 2070.9 MSA 167.6 SSA 16.7 ELI 1877.2 EL2 31.1 ALF 1.80 FOE 1.2511 FRA .5234 FC3-6.2418 BSP 14567 BOE 1.0630 BRA .2899 BC3 6.4415 FSP -1348

FLIGHT TIME 150.00

```
ARRIVAL DATE MAY 6 1966
                                                                                                  FLIGHT TIME 158.00
LAUNCH CATE NOV 29 1965
                                                                                                 DISTANCE 458.754
    HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.256 GAL -1.82 AZL 87.36 MCA 219.46 SMA 125.69 ECC .17682 INC 2.6426 V1 30.194
RP 108.87 LAP -1.68 LOP 285.99 VP 37.176 GAP 6.70 AZP 92.04 TAL 188.54 TAP 48.00 RCA 103.46 APO 147.91 V2 34.806
RC 136.709 GL 22.49 GP 7.06 ZAL 100.10 ZAP 152.66 ETS 11.97 ZAE 131.52 ETE 174.44 ZAC 46.78 ETC 165.19 CLP-153.52
    PLANETOCENTRIC CONIC
                                                      8.24 RAL 320.41 RAD 6567.4 VEL 11.497 PTH 2.00 VHP 4.770 DPA -12.93 RAP 313.94 ECC 1.1775
     C3 10.786 VHL 3.284 OLA 8.24 RAL 320.41 RAQ 6567.4 VEL 11.497 PTH 2.00 VHP 4.770 OPA -12.93 RAP 313.94 ECC 1.1775
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 10 13 2335.68 -22.31 49.30 174.42 107.90 3 49 8 1735.7 -19.66 41.64
90.00 17 12 40 4462.87 8.42 186.75 171.95 62.86 18 27 3 3862.9 4.71 180.03
100.00 4 35 33 2060.47 -23.22 28.73 174.09 109.37 5 9 53 1460.5 -20.37 21.10
100.00 18 30 2 4213.32 9.27 167.95 171.50 61.45 19 40 15 3613.3 5.38 161.32
110.00 5 52 53 1818.43 -25.63 9.31 173.05 113.43 6 23 11 1218.4 -22.24 1.80
110.00 19 29 11 4028.12 11.50 152.56 170.16 57.59 20 36 19 3428.1 7.14 146.18

NICHORITE FERENTIAL CORRECTIONS
      C3 10.786 VHL 3.284 OLA
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SCI 4713.7 SGR 393.8 SC3 389.4 ST 2019.9 SR 85.5 SS 911.7
RRT -.7345 RRF -.7615 RTF .9447 CRI .9126 CRS -.8269 CST -.9811
SCB 4730.1 R23 .0909 R13 -.9501 LSA 2211.5 MSA 164.7 SSA 17.3
SCI 4722.6 SG2 266.7 THA 176.48 EL1 2021.4 EL2 34.9 ALF 2.21
      TOE 1.1538 TRA -.2079 TC3-6.4651 BAU .9357
     RDE .0442 RRA -.0668 RC3 .5599 FAU .07213
FDE 1.2538 FRA .5845 FC3-5.7900 BSP 14868
BDE 1.1546 BRA .2184 BC3 6.4893 FSP -1284
                                                                                                                                                                                  ARRIVAL DATE MAY 8 1966
                                                                                                   FLIGHT TIME 160.00
LAUNCH DATE NOV 29 1965
                                                                                                  DISTANCE 464.656
   HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.217 GAL -1.54 AZL 87.28 HCA 222.62 SHA 125.43 ECC .17836 INC 2.7168 V1 30.194
RP 108.89 LAP -1.84 LOP 289.16 VP 37.142 GAP 6.96 AZP 92.00 TAL 187.12 TAP 49.74 RCA 103.06 APO 147.80 V2 34.801
                                22.93 GP 6.44 ZAL 97.64 ZAP 154.17 ETS 11.67 ZAE 131.08 ETE 174.97 ZAC 48.62 ETC 164.88 CLP-154.93
     RC 139.015 GL
    PLANE TOCENTRIC CONIC
      C3 10.954 VHL 3.310 DLA 9.49 RAL 322.58 RAD 6567.4 VEL 11.504 PTH 2.00 VHP 4.901 DPA -13.10 RAP 315.83 ECC 1.1803
     C3 10.954 VHL 3.310 DLA 9.49 RAL 322.58 RAD 6567.4 VEL 11.504 PTH 2.00 VHP 4.901 DPA -13.10 RAP 315.83 ECC 1.1803 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 9 1 2379.04 -23.19 52.18 177.17 106.72 3 48 40 1779.0 -20.68 44.40 90.00 17 31 10 4425.85 7.26 184.65 174.32 62.56 18 44 56 3825.8 3.53 177.96 100.00 4 35 1 2101.67 -24.12 31.46 176.85 108.21 5 10 3 1501.7 -21.41 23.71 100.00 18 47 51 4178.44 8.13 165.99 173.86 61.13 19 57 29 3578.4 4.21 159.39 110.00 5 53 51 1854.97 -26.60 11.71 175.84 112.31 6 28 46 1255.0 -23.34 4.07 110.00 19 45 30 3997.92 10.39 150.92 172.49 57.25 20 52 8 3397.9 6.00 144.58 DISSERBITIAL CORRECTIONS
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFÉRENTIAL CORRECTIONS
                                                                                             SGT 4814.2 SGR 387.2 SG3 371.9

RRI -.6861 RRF -.7124 RTF .9491

SGB 4829.8 R23 .0811 R13 -.9493

SGI 4821.6 SG2 281.3 THA 176.83

EL1 2157.2 EL2 39.5 ALF 2.56
      TOE 1.2421 TRA -.1245 TC3-6.4988 BAU .9549
      ROE .0555 RRA -.0739 RC3 .5317 FAU .06784
FDE 1.2478 FRA .6409 FC3-5.3619 BSP 15214
BDE 1.2433 BRA .1448 BC3 6.5205 FSP -1232
                                                                                                                                                                                 ARRIVAL DATE HAY 10 1966
LAUNCH DATE NOV 29 1965
                                                                                                 FI 16HT TIME 162.00
                                                                                                 DISTANCE 470.541
    HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.178 GAL -1.24 AZL 87.22 HCA 225.78 SMA 125.18 ECC .18005 INC 2.7825 V1 30.194
RP 108.90 LAP -1.99 LOP 292.32 VP 37.109 GAP 7.22 AZP 91.94 TAL 185.68 TAP 51.47 RCA 102.64 APO 147.72 V2 34.797
RC 141.312 GL 23.26 GP 5.91 ZAL 95.13 ZAP 155.60 ETS 11.48 ZAE 130.69 ETE 175.40 ZAC 50.49 ETC 164.70 CLP-156.28
    PLANETOCENTRIC CONIC
      C3 11.154 VML 3.340 DLA 10.66 RAL 324.83 RAD 6567.4 VEL 11.513 PTH 2.01 VMP 5.036 OPA -13.14 RAP 317.76 ECC 1.1836
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         3 8 29 2421.41
17 49 42 4390.92
4 35 9 2141.91
19 5 43 4145.65
5 55 27 1890.60
20 1 54 3969.72
                                                                                                                                                                                          -21.63
                                                                                                                             105.51
                                                                                                                                                                    1821.4
                                                                                                         180.06
                                                                                                                                                  3 48 50
                                                                    -23.99
                                                                                         55.02
          90.00
                                                                                                                                 62.31 19 2 52
107.02 5 10 50
                                                                                                                                                                         3790.9
                                                                                                                                                                                                2.41
                                                                       6.16
                                                                                       182.67
                                                                                                           176.85
           90.00
                                                                                                                                                                         1541.9
                                                                                                                                                                                             -22.39
                                                                                         34.16
                                                                                                           179.76
                                                                  -24.95
                                                                                                                               107.02 5 10 90
60.87 20 14 49
111.15 6 26 58
56.97 21 8 3
         100.00
                                                                                                                                                                      3545.7 3.11
1290.6 -24.37
                                                                                                    176.37
                                                                                                                                                                                               3.11
                                                                                                                                                                                                                157.58
                                                                      7.04
                                                                                       164.16
         100.00
                                                                                                        178.77
                                                                  -27.50
                                                                                         14.09
         110.00
                                                                                                                                                                         3369.7
                                                                                   149.40
                                                                                                          174.96
                                                                    9.35
         110.00
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 2282.9 SR 122.7 95 936.9

CRT .9311 CRS -.8583 CST -.9843

LSA 2465.5 MSA 159.2 SSA 18.3

EL1 2285.8 EL2 44.7 ALF 2.87
                                                                                          SGT 4913.3 SGR 384.3 SG3 355.6

RRT -.6374 RRF -.6655 RTF .9488

SGB 4928.3 R23 .0734 R13 -.9490

SGI 4919.4 SG2 295.7 THA 177.14
      TOE 1.3285 TRA -. 0338 TC3-6.5158 BAU .9746
      RDE .0668 RRA -.0810 RC3 .5067 FAU .06393
     FOE 1.2359 FRA .6922 FC3-4.9620 BSP 15576
BOE 1.3302 BRA .0877 BC3 6.5355 FSP -1185
                                                                                                                                                                                  ARRIVAL DATE MAY 12 1966
                                                                                                   FLIGHT TIME 164.00
LAUNCH DATE NOV 29 1965
                                                                                                  DISTANCE 476.410
    HELLOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 27.138 GAL -.94 AZL 87.16 MCA 228.95 SMA 124.93 ECC .18188 INC 2.8415 V1 30.194
RP 108.92 LAP -2.14 LOP 295.48 VP 37.076 GAP 7.48 AZP 91.87 TAL 184.22 TAP 53.17 RCA 102.20 APO 147.65 V2 34.793
RC 143.598 GL 23.49 GP 5.46 ZAL 92.59 ZAP 156.96 ETS 11.36 ZAE 130.34 ETE 175.76 ZAC 52.41 ETC 164.61 CLP-157.58
    PLANETOCENTRIC CONIC
      C3 11.392 VHL 3.375 DLA 11.79 RAL 327.17 RAD 6567.4 VEL 11.523 PTH 2.01 VHP 5.174 OPA -13.07 RAP 319.73 ECC 1.1875
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 8 30 2463.15 -24.72 57.86 183.08 104.27 3 49 34 1863.2 -22.52 49.89 90.00 18 8 18 4357.90 5.11 180.81 179.51 62.11 19 20 56 3757.9 1.34 174.16
                                                                                                                                                   5 12 11
                                                                                                                                                                        1581.5
                                                                                                                                                                                             -23.30
                                                                                                                                                                                                                   28.89
                                                                                                                                  105.79
                            4 35 50 2181.52
                                                                                                            182.79
                                                                    -25.71
                                                                                         36.85
          100.00
                                                                                                                                  60.66 20 32 14
109.97 6 29 42
56.74 21 24 6
                                                                                                                                                                       3514.8
                                                                                                                                                                                               2.06
                                                                                                                                                                                                                  155.88
                          19 23 39 4114.77
5 57 36 1925.64
20 18 22 3943.40
                                                                       6.02
                                                                                        162.44
                                                                                                           179.02
          100.00
                                                                                                                                                                        1325.6
3343.4
                                                                                                                                                                                           -25.35
                                                                                                                                                                                                                    8.57
                                                                    -28.34
                                                                                         16.48
                                                                                                           161.84
          110.00
                                                                    8.37
                                                                                        148.00
                                                                                                            177.57
         110.00
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5004.7 SGR 383.2 SG3 339.9 ST 2409.4 SR 140.3 55 946.1

RRT -.5882 RRF -.6137 RTF .9482 CRT .9324 CRS -.8630 CST -.9857

SGB 5019.4 R23 .0666 R13 -.9484 LSA 2587.5 MSA 156.9 SSA 18.7

SGI 5009.8 SG2 309.6 THA 177.41 ELI 2413.0 EL2 50.6 ALF 3.11
       TOE 1.4171 TRA .0674 TC3-6.4991 BAU .9925
      RDE .0779 RRA -.0882 RC3 .4823 FAU .06006
FOE 1.2245 FRA .7430 FC3-4.5640 BSP 15895
BDE 1.4192 BRA .1110 BC3 6.5170 FSP -1137
```

ARRIVAL DATE MAY 14 1966

LAUNCH DATE NOV 29 1965

GISTANCE 482.262 HELLOCENTRIC CONTC. RL 147.56 LAL .00 LOL 66.57 VL 27.098 GAL -.62 AZL 87.10 HCA 232.11 SMA 124.67 ECC .18387 INC 2.8950 V1 30.194
RP 108.93 LAP -2.28 LOP 298.64 VP 37.044 GAP 7.74 AZP 91.78 TAL 182.74 TAP 54.85 RCA 101.75 APO 147.60 V2 34.790 RC 145.874 GL 23.61 GP 5.07 ZAL 90.00 ZAP 158.25 ETS 11.32 ZAE 130.03 ETE 176.07 ZAC 54.36 ETC 164.60 CLP-158.82 PLANETOCENTRIC CONIC C3 11.674 VHL 3.417 CLA 12.86 RAL 329.58 RAC 6567.4 VEL 11.535 PTH 2.01 VHP 5.318 CPA -12.90 RAP 321.72 ECC 1.1921 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 186.24 102.99 3 9 1 2504.53 18 26 59 4326.71 3 50 46 1904.5 -23.35 52.64 90.00 -25.38 60.71 90.00 4.12 179.06 182.32 61.96 19 39 6 3726.7 . 34 172.42 104.53 5 14 2 60.50 20 49 46 108.75 6 32 55 56.54 21 40 15 4 37 1 2220.74 19 41 41 4085.73 -24.16 100.00 -26.41 39.56 185.96 1620.7 31.49 100.00 5.05 160.83 181.80 3485.7 1.08 154.29 110.00 6 0 15 1960.31 20 34 56 3918.93 10.83 -29.12 18.87 185.04 1360.3 -26.2A 3.00 110.00 7.45 146.69 180.32 3318.9 140.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CIFFERENTIAL CORRECTIONS SCT 5090.0 SCR 383.9 SC3 325.0 RRT -.5393 RRF -.5646 RTF .9478 ST 2533.8 SR 157.5 SS 953.1 CRT .9315 CRS -.8644 CST -.9869 TCE 1.5079 TRA .1796 TC3-6.4488 BAU 1.0090 RDE .0890 RRA -.0954 RC3 .4584 FAU .05636 SGB 5104.5 R23 .0611 R13 -.9479 SGI 5094.3 SGZ 323.0 THA 177.66 FOE 1.2117 FRA .7932 FC3-4.1794 BSP 16140 BCE 1.5105 BRA .2034 BC3 6.4650 FSP -1086 LSA 2707.2 MSA 155.2 SSA 19.0 EL1 2538.0 EL2 57.2 ALF 3.32 LAUNCH DATE NOV 29 1965 FLIGHT TIME 168.00 ARRIVAL CATE MAY 16 1966 HELIOCENTRIC CONIC DISTANCE 488.097 RL 147.56 LAL .00 LOL 66.57 VL 27.059 GAL -.28 AZL 87.06 MCA 235.27 SMA 124.42 ECC .18602 INC 2.9442 V1 30.194
RP 108.93 LAP -2.42 LOP 301.80 VP 37.013 GAP 8.01 AZP 91.68 TAL 181.24 TAP 56.51 RCA 101.28 APO 147.57 V2 34.787
RC 148.138 GL 23.65 GP 4.72 ZAL 87.39 ZAP 159.48 ETS 11.35 ZAE 129.76 ETE 176.32 ZAC 56.35 ETC 164.63 CLP-160.01 PLANETOCENTRIC CONIC C3 12.007 VHL 3.465 DLA 13.88 RAL 332.05 RAD 6567.5 VEL 11.550 PTH 2.02 VHP 5.465 DPA -12.65 RAP 323.75 ECC 1.1976 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 9 59 2545.67 101.67 -25.98 189.51 1945.7 3 52 25 -24.11 90.00 63.58 55.41 19 57 22 90.00 3697.4 170.79 18 45 45 4297.39 3.18 177.42 185.25 61.85 - . 61 1659.7 100.00 4 38 39 2259.70 -27.05 42.28 189.25 103.23 5 16 19 -24.96 34.10 60.37 21 7 24 107.49 6 36 35 56.38 21 56 30 100.00 19 59 46 3458.6 4058.59 4.13 159.33 184.72 .16 152.80 110.00 6 3 21 1994.71 -29.85 21.28 188.38 1394.7 -27.17 13.12 110.00 20 51 34 3896.34 6.61 145.50 183.20 3296.3 2.14 139.25 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2648.9 SR 174.3 SS 957.6 CRT .9299 CRS -.8650 CST - 9880 SGT 5177.9 SGR 386.1 SG3 311.6 RRT -.4930 RRF -.5179 RTF .9481 TOE 1.5973 TRA .2975 TC3-6.3847 BAU 1.0273 ROE .1004 RRA -.1024 RC3 .4355 FAU .05314 SGB 5192.3 R23 .0559 R13 -.9482 SG1 5181.5 SG2 335.7 THA 177.89 FOE 1.1979 FRA .8364 FC3-3.8317 BSP 16476 BOE 1.6005 BRA .3146 BC3 6.3995 FSP -1047 LSA 2817.8 MSA 153.3 SSA 19.3 EL1 2653.8 EL2 64.0 ALF 3.50 FLIGHT TIME 170.00 ARRIVAL CATE MAY 18 1966 LAUNCH DATE NOV 29 1965 HELIOCENTRIC CONIC DISTANCE 493.913 PLANE TOCENTRIC CONIC C3 12.399 VHL 3.521 DLA 14.85 RAL 334.58 RAD 6567.5 VEL 11.567 PTH 2.02 VHP 5.618 DPA -12.33 RAP 325.80 ECC 1.2040 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 192.91 -24.82 100.32 3 54 28 1986.7 58.20 90.00 3 11 21 2586.66 -26.52 66.46 61.77 20 15 43 101.90 5 19 1 60.27 21 25 6 106.19 6 40 41 56.26 22 12 49 2.30 4269.98 175.88 188.32 3670.0 -1.50 169.26 90.00 19 4 33 4 40 43 2298.48 100.00 -27.62 45,02 192.67 1698.5 -25.70 36.74 20 17 52 4033.39 3.28 157.94 187.77 3433.4 - .70 151.42 100.00 1428.9 110.00 6 6 52 2028.94 -30.52 23.72 191.84 -28.00 15.43 110.00 21 8 13 3875.70 5.83 144.41 186.19 3275.7 1.35 138.18 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5242.7 SGR 387.3 SG3 297.8 RRT - .4433 RRF - .4640 RTF .9444 SGB 5257.0 R23 .0485 R13 - .9445 SGI 5245.5 SG2 347.0 THA 178.12 ST 2775.1 SR 189.9 SS 972.4 CRT .9252 CRS -.8609 CST -.9888 TOE 1.6980 TRA .4399 TC3-6.2388 BAU 1.0363 ROE .1114 RRA -.1102 RC3 .4084 FAU .04885 LSA 2942.5 MSA 154.8 SSA 19.5 FOE 1.1981 FRA .9026 FC3-3.4112 BSP 16646 EL1 2780.6 EL2 71.9 ALF 3.62 BOE 1.7017 BRA .4535 BC3 6.2521 FSP -989 LAUNCH DATE NOV 29 1965 FLIGHT TIME 172.00 ARRIVAL DATE HAY 20 1966 HELLOCENTRIC CONTC DISTANCE 499.711 RL 147.56 LAL .00 LOL 66.57 VL 26.979 GAL .43 AZL 86.97 HCA 241.59 SMA 123.92 ECC .19087 INC 3.0322 V1 30.194
RP 108.94 LAP -2.67 LOP 308.13 VP 36.952 GAP 8.56 AZP 91.44 TAL 178.19 TAP 59.78 RCA 100.27 APO 147.57 V2 34.785
RC 152.629 GL 23.45 GP 4.16 ZAL 82.11 ZAP 161.81 ETS 11.61 ZAE 129.30 ETE 176.73 ZAC 60.41 ETC 164.81 CLP-162.27 PLANETOCENTRIC CONIC C3 12.856 VHL 3.586 DLA 15.77 RAL 337.15 RAD 6567.5 VEL 11.586 PTH 2.03 VHP 5.776 DPA -11.94 RAP 327.87 ECC 1.2116 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 196.42 3 56 54 2027.5 3 13 7 2627.50 -26.98 98.94 -25.47 61.02 90.00 69.36 -2.31 20 34 3 3644.6 167.84 4244.63 174.47 191.50 61.72 90.00 19 23 19 1.48 5 22 7 4 43 10 2337.08 -28.14 47.77 100.54 1737.1 -26.39 39.40 100.00 196.20 60.20 21 42 47 104.86 6 45 9 56.16 22 29 7 3410.3 -1.48 150.15 100.00 20 35 56 4010.28 2.50 156.67 190.93 110.00 6 10 46 2062.97 -31.14 26.18 195.42 1463.0 -28.79 17.77 137.21 110.00 21 24 50 3857.15 5.12 189.30 3257.2 .64 143.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5324.5 SGR 591.3 SG3 285.1 RRT -.4004 RRF -.4234 RTF .9467 TOE 1.7818 TRA .5690 TC3-6.1343 BAU 1.0564 ST 2864.4 SR 206.8 SS 960.8 CRT .9240 CR5 -.8619 CST -.9897 RCE .1242 RRA - .1162 RC3 .3858 FAU .04640 SGB 5338.9 R23 .0465 R13 -.9468 SG1 5326.8 SG2 358.4 THA 178.31 FOE 1.1688 FRA .9285 FC3-3.1244 BSP 16940 BCE 1.7861 BRA .5808 BC3 6.1464 FSP -955 LSA 3024.4 MSA 152.8 SSA 19.5 EL1 2870.8 EL2 78.9 ALF 3.82

FLIGHT TIME 166.00

```
ARRIVAL CATE MAY 22 1966
                                                                         FLIGHT TIME 174.00
LAUNCH TATE NOV 29 1965
                                                                        DISTANCE 505.488
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.939 GAL .80 AZL 86.93 HCA 244.75 SMA 123.67 ECC .19360 INC 3.0723 VI 30.194
RP 108.94 LAP -2.78 LOP 311.29 VP 36.923 GAP 8.84 AZP 91.31 TAL 176.65 TAP 61.40 RCA 99.73 APO 147.62 VZ 34.784
RC 154.855 GL 25.24 GP 3.93 ZAL 79.46 ZAP 162.90 ETS 11.84 ZAE 129.12 ETE 176.90 ZAC 62.48 ETC 164.93 CLP-165.35
   PLANETOCENTRIC CONIC
    C3 13.388 VHL 3.659 CLA 16.64 RAL 339.76 RAC 6567.5 VEL 11.609 PTH 2.03 VMP 5.939 CPA -11.49 RAP 329.95 ECC 1.2203
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                               200.04
                                                                                                97.53
                                                                                                             3 59 43
                                                                                                                             2068.2
                                                                                                                                           -26.05
                     3 15 15 2668.20
                                                                  72.27
        90.00
                                                  -27.38
                                                                                               61.69 20 52 22
99.15 5 25 36
60.16 22 0 25
103.49 6 50 1
56.08 22 45 22
                                                                                194.80
                                                                                                                              3621.5
                                                                                                                                               -3.06
        90.00
                   19 42 0 4221.45
                                                     .73
                                                                  173.18
                                                                                199.84
                                                                                                                              1775.5
                                                                                                                                             -27.02
                                                                                                                                                             42.09
                   4 46 0 2375.50
20 53 56 3989.38
                                                   -28.58
       100.00
                                                                  50.54
                                                                                                                              3389.4
                                                                                                                                              -2.19
                                                                 155.52
                                                                               194.21
      100.00
                                                   1.80
                                                                                                                              1496.9
                                                                                                                                             -29.53
                                                                                                                                                             20.13
      110.00
                   6 15 4 2096.85
21 41 21 3840.79
                                                                  28.66
                                                                                199.11
                                                  -31.71
                                                                                                                              3240.8
                                                                                                                                                .02
      110.00
                                                                 142.57
                                                                                192.52
                                                    4.50
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5392.7 SGR 394.3 SG3 273.2
RRT -.3559 RRF -.3774 RTF .9463
SGB 5407.1 R23 .0418 R13 -.9464
                                                                                                                         ST 2964.5 SR 222.5 SS 961.1
CRT .9207 CRS -.8602 CST -.9905
    TOE 1.8778 TRA .7204 TC3-5.9641 BAU 1.0694
    ROE .1367 RRA -.1225 RC3 .3602 FAU .04330
FOE 1.1561 FRA .9716 FC3-2.8003 BSP 17155
                                                                                                                         LSA 3120.5 MSA 153.2 SSA 19.4
EL1 2971.6 EL2 86.7 ALF 3.96
                                                                     SG1 5394.6 SG2 368.3 THA 178.50
    BOE 1.8828 BRA .7307 BC3 5.9750 FSP -916
                                                                                                                                     ARRIVAL CATE MAY 24 1966
                                                                         FLIGHT TIME 176.00
LAUNCH DATE NOV 29 1965
                                                                         DISTANCE 511.244
  HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.900 GAL 1.20 AZL 86.89 HCA 247.92 SMA 123.43 ECC .19655 INC 3.1103 VI 30.194
RP 108.94 LAP -2.88 LOP 314.45 VP 36.895 GAP 9.13 AZP 91.17 TAL 175.09 TAP 63.01 RCA 99.17 APO 147.69 VZ 34.785
RC 157.067 GL 22.95 GP 3.73 ZAL 76.81 ZAP 163.97 ETS 12.15 ZAE 128.96 ETE 177.05 ZAC 64.58 ETC 165.06 CLP-164.40
   PLANETOCENTRIC CONTC.
                                                                                                    2.04 VHP 6.109 DPA -10.99 RAP 332.06 ECC 1.2305
    C3 14.004 VHL 3.742 OLA 17.45 RAL 342.39 RAD 6567.6 VEL 11.636 PTH 2.04 VHP 6.109 DPA -10.99 RAP 332.06 ECC 1.2305 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 17 44 2708.67
                                                                             203.75
                                                                                                                          2108.7
        90.00
                                                  -27.70
                                                                   75.19
                                                                                               96.10
                                                                                                              4 2 53
                                                                                                  61.68 21 10 32
        90.00
                   20 0 32
                                   4200.65
                                                      .06
                                                                 172.02
                                                                                198.20
                                                                                                                               3600.6
                                                                                                                                               -3.73
                                                                                                                                                            165.38
                                                                                                  97.73 5 29 26
60.13 22 17 55
                                                                                                                                             -27.59
                    4 49 13 2413.69
                                                   -28.96
                                                                   53.32
                                                                                203.58
                                                                                                                              1813.7
                                                                                                                                                             44.78
      100.00
                  21 11 44
                                                                                                                              3370.9
                                                                                                                                                            147.99
       100.00
                                  3970.86
                                                     1.17
                                                                 154.51
                                                                                197.58
                                                                                                                                              -2.82
                                                                                                102.10 6 55 14
56.02 23 1 30
      110.00
                    6 19 43 2130.53
                                                   -32.22
                                                                  31.15
                                                                                202.92
                                                                                                                              1530.5
                                                                                                                                             -30.22
                                                                                                                                                             22.51
                                                                                                                              3226.8
       110.00
                   21 57 44
                                  3826.79
                                                   3.97
                                                                 141.83
                                                                                195.83
                                                                                                                                                            135.63
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                 SCT 5457.8 SCR 397.6 5C3 261.8

RRT -.3133 RRF -.3346 RTF ..9466

SCB 5472.2 R23 ..0385 R13 -.9466

SCI 5459.2 SC2 377.4 THA 178.69
                                                                                                                          ST 3048.4 SR 238.3 SS 955.0
CRT .9177 CRS -.8586 CST -.9911
    TOE 1.9699 TRA .8790 TC3-5.7779 BAU 1.0836
    RDE .1502 RRA -.1283 RC3 .3346 FAU .04055
                                                                                                                         LSA 3199.6 MSA 153.9 S5A 19.7
Fit 3056.2 EL2 94.4 ALF 4.11
    FDE 1.1377 FRA 1.0097 FC3-2.5068 BSP 17432
BDE 1.9756 BRA .8883 BC3 5.7876 FSP -885
                                                                                                                       EL1 3056.2 EL2 94.4 ALF
                                                                                                                                    ARRIVAL CATE MAY 26 1966
LAUNCH DATE NOV 29 1965
                                                                        FLIGHT TIME 178.00
                                                                        DISTANCE 516.978
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.860 GAL 1.61 AZL 86.85 HCA 251.08 SMA 123.19 ECC .19975 INC 3.1467 VI 30.194
RP 108.94 LAP -2.98 LOP 317.62 VP 36.867 GAP 9.44 AZP 91.02 TAL 173.52 TAP 64.60 RCA 98.58 APO 147.79 VZ 34.786
RC 159.265 GL 22.60 GP 3.54 ZAL 74.18 ZAP 165.00 ETS 12.52 ZAE 128.83 ETE 177.19 ZAC 66.70 ETC 165.20 CLP-165.41
   PLANETOCENTRIC CONIC
    C3 14.715 VHL 3.836 DLA 18.21 RAL 345.04 RAD 6567.6 VEL 11.666 PTH 2.05 VHP 6.286 DPA -10.43 RAP 334.17 ECC 1.2422
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               94.66 4 6 25
61.69 21 28 31
96.31 5 35 39
60.11 22 35 13
100.66 7 0 47
55.98 23 17 28
                                                                                                                                         -27.02
                   3 20 36 2748.85
20 18 49 4182.37
                                                                  78.10
                                                                              207.55
                                                                                                                            2148.9
                                                                                                                                                            69.56
        90.00
                                                  -27.96
                                                                                                                                             -4.31
                                                                                                                                                            164.36
                                                                 171.00
                                                                                201.68
                                                                                                                              3582.4
                                                     -.53
        90.00
                   4 52 47 2451.57
21 29 19 3954.88
                                                                                207.40
                                                                                                                             1851.6
                                                                                                                                             -28.10
                                                                                                                                                            47.48
                                                   -29.28
                                                                  56.09
       100.00
                                                                               201.04
                                                                                                                             3354.9
                                                                                                                                                           147.11
                                                                 153.63
      100.00
                                                   .63
                                                                                                                             1564.0
                                                                                                                                            -30.85
                                                                                                                                                             24.91
                                                  -32.67
                                                                                206.81
                   6 24 43 2163.96
22 13 52 3815.26
                                                                  33.65
       110.00
                                                   3.53
                                                                                199.23
                                                                                                                              3215.3
                                                                                                                                                            135.02
      110 00
                                  3815.26
                                                                 141.23
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                         ST 3124.9 SR 253.6 S5 948.2
                                                                     SGT 5518.5 SGR 400.6 SG3 251.0
    TOE 2.0639 TRA 1.0492 TC3-5.5651 BAU 1.0965
                                                                    SGT 5518.5 SUR -DUTIO 302 E.T. RRT -.2715 RRF -.2922 RTF .9467
SGB 5533.0 R23 .0352 R13 -.9468
    ROE .1644 RRA -.1336 RC3 .3086 FAU .03788
FOE 1.1206 FRA 1.0481 FC3-2.2289 BSP 17660
                                                                                                                        CRT .9147 CRS -.8569 CST -.9918
                                                                                                                       LSA 3271.7 MSA 155.3 SSA 19.0
EL1 3133.5 EL2 102.2 ALF 4.25
    BOE 2.0705 BRA 1.0577 BC3 5.5736 FSP .-851
                                                                     SG1 5519.6 SG2 385.5 THA 178.87
                                                                         FLIGHT TIME 180.00
                                                                                                                                     ARRIVAL DATE MAY 28 1966
LAUNCH DATE NOV 29 1965
                                                                        DISTANCE 522.686
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.821 GAL 2.04 AZL 86.82 MCA 254.24 SMA 122.95 ECC .20320 INC 3.1817 VI 30.194
RP 108.93 LAP -3.06 LOP 320.78 VP 36.840 GAP 9.75 AZP 90.86 TAL 171.95 TAP 66.19 RCA 97.96 APO 147.93 V2 34.788
RC 161.449 GL 22.18 GP 3.38 ZAL 71.57 ZAP 166.00 ETS 12.98 ZAE 128.71 ETE 177.31 ZAC 68.84 ETC 165.34 CLP-166.41
  PLANETOCENTRIC CONIC
    C3 15.532 VHL 3.941 DLA 18.91 RAL 347.70 RAD 6567.6 VEL 11.701 PTH 2.06 VMP 6.471 DPA -9.83 RAP 336.29 ECC 1.2556
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 23 50 2788.64 -28.15 81.00 211.42 93.22 4 10 18 2188.6 -27 40 72 41
                                                                                                 93.22 4 10 18
61.70 21 46 12
                                                                                205.25
                                                                                                                              3566.8
                                                                                                                                              -4 .81
                                                                                                                                                            163.48
                                   4166.81
                                                    -1.03
                                                                 170.13
        90.00
                   20 36 46
                                                                                                 94.88 5 38 13
60.11 22 52 14
99.25 7 6 40
55.95 23 33 9
                                                                                                                              1889.1
                                                                                                                                             -28.54
                                                                                                                                                             50.16
                    4 56 44
                                 2489.06
                                                   -29.53
                                                                  58.85
                                                                                211.31
       100.00
                                                                                204.58
                                                                                                                              3341.6
                                                                                                                                              -3.80
                                                                                                                                                            146.38
                  21 46 33
                                  3941.62
                                                      .18
                                                                 152.90
       100.00
                                                   -33.06
                                                                                210.79
                                                                                                                              1597.1
                                                                                                                                             -31.43
                                                                                                                                                             27.32
                    6 30 3 2197.09
       110.00
                                                                 140.76
                                                                                202.69
                                                                                                                              3206.4
                                                                                                                                             -1.30
                                                                                                                                                            134.56
                   22 29 43 3806.35
                                                  3.19
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.1583 TRA 1.2299 TC3-5.3295 BAU 1.1082
                                                                   SGT 5573.5 SGR 403.4 SG3 240.7 ST 3191.1 SR 268.6 SS 940.0 RRT -.2304 RRF -.2500 RTF .9470 CRT .9117 CRS -.8555 CST -.9923 SGB 5588.1 R23 .0316 R13 -.9470 LSA 3333.7 MSA 157.1 SSA 18.7
    ROE .1794 RRA -.1383 RC3 .2823 FAU .03532
    FOE 1.1037 FRA 1.0847 FC3-1.9689 BSP 17888
BCE 2.1657 BRA 1.2376 BC3 5.3370 FSP -820
                                                                  SG1 5574.3 SG2 392.5 THA 179 04
                                                                                                                       EL1 3200.4 EL2 110.0 ALF 4.39
```

ARRIVAL DATE MAY 30 1966 FLIGHT TIME 182.00 LAUNCH DATE NOV 29 1965 DISTANCE 528.369 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 26.782 GAL 2.49 AZL 86.78 MCA 257.40 SMA 122.71 ECC .20694 INC 3.2156 V1 30.194
RP 108.92 LAP -3.14 LOP 323.95 VP 36.814 GAP 10.07 AZP 90.70 TAL 170.37 TAP 67.77 RCA 97.31 APO 148.10 V2 34.791
RC 163.619 GL 21.71 GP 3.23 ZAL 68.99 ZAP 166.98 ETS 13.53 ZAE 128.61 ETE 177.42 ZAC 71.00 ETC 165.48 CLP-167.38 PLANETOCENTRIC CONIC C3 16.469 VHL 4.058 DLA 19.55 RAL 350.34 RAD 6567.7 VEL 11.741 PTH 2.07 VHP 6.664 DPA -9.19 RAP 338.41 ECC 1.2710 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 2227.9 215.35 91.79 4 14 33 -27.72 75.24 2827.93 -28.26 83.86 90.00 3 27 25 61.72 22 3 31 3554.1 -5.21 162.77 -1.44 169.42 208.88 90.00 20 54 17 4154.13 2526.09 3931.21 5 43 8 1926.1 -28.92 52.87 -29.71 61.58 215.27 93.45 100.00 5 1 1 22 3 22 208.18 60.11 23 8 53 3331.2 -4.15 145.80 152.33 -.18 100.00 -33.39 214.85 97.80 7 12 52 1629.9 -31.95 29.73 6 35 42 2229.89 22 45 11 3800.18 38.66 110.00 55.93 23 48 31 3200.2 -1.53 134.24 140.44 206.22 2.96 22 45 11 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5623.4 SGR 405.7 SG3 230.9 RRT -.1891 RRF -.2075 RTF .9471 SGB 5638.0 R23 .0280 R13 -.9471 ST 3251.7 SR 283.1 SS 931.7 TOE 2.2563 TRA 1.4256 TC3-5.0670 BAU 1.1170 CRT .9088 CRS -.8540 CST -.9929 RDE .1953 RRA -.1422 RC3 .2560 FAU .03275 FOE 1.0886 FRA 1.1227 FC3-1.7216 BSP 18023 LSA 3390.5 MSA 159.5 SSA 18.3 EL1 3261.8 EL2 117.8 ALF 4.53 EL1 3261.8 EL2 117.8 ALF BDE 2.2647 BRA 1.4327 BC3 5.0735 FSP -786 SG1 5624.0 SG2 398.3 THA 179.21 FLIGHT TIME 184.00 ARRIVAL DATE JUN 1 1966 LAUNCH DATE NOV 29 1965 DISTANCE 534.021 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 26.743 GAL 2.96 AZL 86.75 MCA 260.56 SMA 122.47 ECC .21099 INC 3.2487 V1 30.194
RP 108.91 LAP -3.20 LOP 327.12 VP 36.789 GAP 10.41 AZP 90.53 TAL 168.79 TAP 69.35 RCA 96.63 APO 148.31 V2 34.794
RC 165.775 GL 21.18 GP 3.09 ZAL 66.45 ZAP 167.93 ETS 14.19 ZAE 128.52 ETE 177.53 ZAC 73.18 ETC 165.62 CLP-168.33 PLANETOCENTRIC CONTC C3 17.541 VHL 4.188 DLA 20.13 RAL 352.97 RAD 6567.7 VEL 11.787 PTH 2.08 VHP 6.867 CPA -8.51 RAP 340.55 ECC 1.2887 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.96 2266.6 3 31 23 2866.61 -28.31 86.69 219.33 90.37 4 19 10 78.04 90.00 22 20 23 3544.5 -5.52 162.23 90.00 21 11 18 4144.52 -1.75 168.89 212.57 61.73 1962.5 5 5 41 2562.55 -29.83 219.30 92.03 5 48 23 -29.23 55.54 100.00 64.29 23 25 5 3323.8 -4.40 145.40 22 19 41 3923.82 -.43 151.93 211.84 60.11 100.00 -33.66 7 19 21 -32.41 32.14 6 41 39 218.97 1662.3 2262.29 41.15 110.00 140.27 209.80 55.92 24 3 29 3196.8 -1.56 134.06 110.00 23 0 13 3796.84 2.83 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3297.3 SR 297.1 SS 920.9 TOE 2.3517 TRA 1.6300 TC3-4.7978 BAU 1.1265 SGT 5669.4 SGR 407.6 SG3 221.6 ROE .2121 RRA -.1452 RC3 .2302 FAU .03041 RRT -.1489 RRF -.1662 RTF .9475 CRT .9061 CRS -.8529 CST -.9934 FDE 1.0723 FRA 1.1579 FC3-1.5008 BSP 18216 BDE 2.3613 BRA 1.6364 BC3 4.8034 FSP -756 SGB 5684.0 R23 .0247 R13 -.9476 LSA 3432.5 MSA 162.1 5SA 17.9 SG1 5669.7 SG2 4D3.1 THA 179.38 EL1 3308.3 EL2 125.3 ALF ARRIVAL DATE JUN 3 1966 LAUNCH DATE NOV 29 1965 FLIGHT TIME 186.00 DISTANCE 539.641 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 26.704 GAL 3.46 AZL 86.72 HCA 263.73 SMA 122.24 ECC .21538 INC 3.2813 VI 30.194
RP 108.90 LAP -3.26 LOP 330.28 VP 36.765 GAP 10.77 AZP 90.36 TAL 167.20 TAP 70.92 RCA 95.91 APO 148.56 VZ 34.798
RC 167.915 GL 20.62 GP Z.97 ZAL 63.96 ZAP 168.86 ETS 14.97 ZAE 128.45 ETE 177.62 ZAC 75.37 ETC 165.75 CLP-169.26 PLANETOCENTRIC CONIC C3 18.767 VHL 4.332 CLA 20.64 RAL 355.58 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 7.080 DPA -7.80 RAP 342.68 ECC 1.3089 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.81 3 35 44 2904.57 21 27 43 4138.13 223.36 88.98 4 24 8 2304.6 -28.14 90.00 -28.30 89.47 61.75 22 36 41 3538.1 161.87 216.30 90.00 -1.95 168.53 5 10 41 2598.36 22 35 26 3919.57 6 47 53 2294.27 23 14 44 3796.42 5 54 O 1998.4 -29.48 58.17 90.63 223.36 100.00 -29.89 66.95 60.11 23 40 46 3319.6 145.16 215.53 100.00 -.57 151.69 7 26 7 1694.3 -32.82 34.55 94.90 110.00 -33.87 43,63 223.14 55.92 24 18 0 3196.4 134.04 110.00 140.25 213.42 2.81 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5710.9 SGR 409.1 SG3 212.7 RRT -.1092 RRF -.1257 RTF .9482 SGB 5725.5 R23 .0217 R13 -.9482 ST 3331.6 SR 310.5 SS 908.7 CRT .9035 CRS -.8518 CST -.9939 TOE 2.4469 TRA 1.8466 TC3-4.5190 BAU 1.1350 RGE .2299 RRA -.1472 RC3 .2052 FAU .02820 FOE 1.0558 FRA 1.1926 FC3-1.3011 BSP 18412 LSA 3463.3 MSA 165.D SSA 17.5 Fil 3343.5 EL2 132.6 ALF 4.82 BOE 2.4577 BRA 1.8524 BC3 4.5237 FSP -729 SG1 5711.1 SG2 406.7 THA 179.55 FLIGHT TIME 188.00 LAUNCH CATE NOV 29 1965 DISTANCE 545.226 HELTOCENTRIC CONTC. RL 147.56 LAL .00 LOL 66.57 VL 26.666 GAL 3.98 AZL 86.69 MCA 266.89 SMA 122.01 ECC .22013 INC 3.3134 VI 30.194
RP 108.89 LAP -3.31 LOP 333.45 VP 36.741 GAP 11.14 AZP 90.18 TAL 165.61 TAP 72.50 RCA 95.15 APO 148.86 V2 34.803
RC 170.040 GL 20.02 GP 2.86 ZAL 61.53 ZAP 169.77 ETS 15.90 ZAE 128.39 ETE 177.72 ZAC 77.57 ETC 165.88 CLP-170.18 PLANETOCENTRIC CONIC C3 20.167 VHL 4.491 DLA 21.10 RAL 358.14 RAD 6567.8 VEL 11.897 PTH 2.11 VHP 7.305 CPA -7.05 RAP 344.81 ECC 1.3319 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 MAT INJ 2 LONG 3 40 27 2941.69 21 43 27 4135.07 87.62 4 29 29 2341.7 -28.26 83.52 -28.23 92.18 227.41 90.00 3535.1 -5.82 161.70 -2.06 168.36 220.06 61.75 22 52 22 21 43 27 90.00 -29.88 2033.4 -29.67 60.76 69.56 227.46 89.26 5 59 56 100.00 5 16 3 2633.44 23 55 50 3318.5 -4.58 145.10 22 50 32 3918.55 151.64 219.26 60.11 100.00 -.61 7 33 9 6 54 23 -33.18 36.94 2325.78 -34.03 46.07 227.35 1725.8 110.00 55.93 24 32 D 3199.0 -1.58 134.17 23 28 41 3798.97 2.91 217.06 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5747.4 SGR 410.1 SG3 204.2 TOE 2.5433 TRA 2.0769 TC3-4.2303 BAU 1.1416 ST 3356.8 SR 323.1 SS 896.0 CRT .9010 CRS -.8509 CST -.9943 RDE .2487 RRA -.1482 RC3 .1811 FAU .02606 RRT -. 0696 RRF -. 0850 RTF . 9489 LSA 3485.2 MSA 168.1 SSA 17.0 EL1 3369.4 EL2 139.6 ALF 4.97 568 5762.0 R23 .0187 R13 -.9489 FDE 1.0401 FRA 1.2272 FC3-1.1186 BSP 18576 BOE 2.5554 BRA 2.0822 BC3 4.2342 FSP -702 5G1 5747.5 SG2 409.1 THA 179.71

```
FLIGHT TIME 190.00
                                                                                                                                                     ARRIVAL DATE JUN 7 1966
LAUNCH CATE NOV 29 1965
                                                                                  015TANCE 550.770
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.627 GAL 4.53 AZL 86.65 MCA 270.05 SMA 121.78 ECC .22529 INC 3.3453 V1 30.194
RP 108.87 LAP -3.35 LOP 336.62 VP 36.719 GAP 11.53 AZP 90.00 TAL 164.03 TAP 74.08 RCA 94.34 APO 149.21 V2 34.808
     RC 172.148 GL 19.39 GP 2.76 ZAL 59.15 ZAP 170.67 ETS 17.02 ZAE 128.33 ETE 177.80 ZAC 79.78 ETC 165.99 CLP-171.09
    PLANETOCENTRIC CONTC
     C3 21.764 VHL 4.665 DLA 21.50 RAL .66 RAD 6567.9 VEL 11.964 PTH 2.13 VHP 7.543 DPA -6.28 RAP 346.95 ECC 1.3582 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-1 TIME
3 45 34 2977.90
21 58 25 4135.44
5 21 45 2667.75
23 4 55 3920.82
7 1 8 2356.82
23 42 1 3804.52
                                                                                        231.48
                                                                                                            86.31
                                                        -28.09
                                                                          94.82
                                                                                                                          4 35 12 2377.9
                                                                                                                                                             -28.31
                                                                                                                                                                               86.16
         90.00
         90.00
                                                          -2.04
                                                                          168.38
                                                                                          223.84
                                                                                                              61.75
                                                                                                                         23 7 21
                                                                                                                                              3535.4
                                                                                                                                                               -5.81
                                                                                                                                                                               161.72
                                                                                                              87.91 6 6 13
60.11 24 10 16
                                                                                          231.58
                                                                                                                                              2067.7
       100.00
                                                        -29.83
                                                                          72.11
                                                                                                                                                              -29.80
                                                                                                                                                                               63.30
                                                                        151.76
       100.00
                                                           -.53
                                                                                         223.00
                                                                                                                                             3320.8
                                                                                                                                                               -4.50
                                                                                                                                                                               145.23
                                                                                                             92.03 7 40 25 1756.8 -33.47
55.94 24 45 26 3204.5 -1.37
                                                        -34.13
                                                                                     231.59
       110.00
                                                                          48.49
                                                                                                                                                                                39.31
       110.00
                                                         3.12
                                                                         140.67
                                                                                         220.72
                                                                                                                                                                               134.46
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                       SGT 5779.8 SGC 410.6 SG3 196.2 ST 3375.8 SR 334.9 SS 884.2

RRT -.0295 RRF -.0438 RTF .9496 CRT .8985 CRS -.8502 CST -.9948

SGB 5794.4 R23 .0156 R13 -.9496 LSA 3501.5 MSA 171.3 SSA 16.5

SG1 5779.8 SG2 410.4 THA 179.88 EL1 3389.3 EL2 146.4 ALF 5.10
     TOE 2.6431 TRA 2.3243 TC3-3.9314 BAU 1.1448
    ROE .2684 RRA -.1479 RC3 .1581 FAU .02391
FOE 1.0266 FRA 1.2633 FC3 -.9513 BSP 18653
BOE 2.6567 BRA 2.3290 BC3 3.9346 FSP -672
                                                                                  FLIGHT TIME 192.00
                                                                                                                                                     ARRIVAL CATE JUN 9 1966
LAUNCH DATE NOV 29 1965
                                                                                  DISTANCE 556.269
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.590 GAL 5.10 AZL 86.62 MCA 273.22 SMA 121.55 ECC .23090 INC 3.3773 VI 30.194
RP 108.85 LAP -3.37 LOP 339.79 VP 36.697 GAP 11.95 AZP 89.81 TAL 162.45 TAP 75.67 RCA 93.49 APO 149.62 VZ 34.814
RC 174.239 GL 18.74 GP 2.67 ZAL 56.84 ZAP 171.55 ETS 18.39 ZAE 128.28 ETE 177.89 ZAC 82.00 ETC 166.09 CLP-171.98
   PLANETOCENTRIC CONTC
    PLANETOCENTRIC CONIC

(3 23.587 VHL 4.857 DLA 21.84 RAL 3.12 RAD 6568.0 VEL 12.040 PTH 2.15 VHP 7.796 DPA -5.48 RAP 349.08 ECC 1.3882

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 51 3 3013.09 -27.91 97.38 235.57 85.03 4 41 16 2413.1 -28.31 88.74

90.00 22 12 35 4139.34 -1.92 168.60 227.62 61.74 23 21 34 3539.3 -5.68 161.94

100.00 5 27 47 2701.22 -29.72 74.59 235.72 86.61 6 12 48 2101.2 -29.87 65.79

100.00 23 18 32 3926.45 -.34 152.07 226.74 60.11 24 23 59 3326.4 -4.31 145.54

110.00 7 8 6 2387.37 -34.18 50.88 235.84 90.62 7 47 53 1787.4 -33.71 41.67

110.00 23 54 43 3813.06 3.45 141.12 224.38 55.97 24 58 16 3213.1 -1.04 134.91
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5806.9 SGR 410.5 SG3 188.5
RRT .0100 RRF -.0034 RTF .9505
                                                                                                                                        ST 3381.3 SR 345.7 SS 870.9
CRT .8962 CRS -.8496 CST -.9952
     TOE 2.7404 TRA$2.5829 TC3-3.6385 BAU 1.1482
    ROE .2892 RRA -.1462 RC3 .1366 FAU .02195
FOE 1.0122 FRA 1.2980 FC3 -.8057 BSP 18801
BOE 2.7556 BRA 2.5870 BC3 3.6411 FSP -648
                                                                         SGB 5821.4 R23 -.0129 R13 .9505
SGI 5806.9 SG2 410.5 THA .04
                                                                                                                                        LSA 3504.4 MSA 174.5 SSA 16.0
EL1 3395.5 EL2 152.7 ALF 5.25
                                                                                 FLIGHT TIME 194.00
                                                                                                                                                     ARRIVAL CATE JUN 11 1966
LAUNCH DATE NOV 29 1965
                                                                                 DISTANCE 561.716
   HELIOCENTRIC CONIC
    RL 147.56 LAL .00 LOL 66.57 VL 26.352 GAL 5.71 AZL 86.59 MCA 276.39 SMA 121.33 ECC .23700 INC 3.4095 VI 30.194
RP 108.83 LAP -3.39 LOP 342.97 VP 36.676 GAP 12.39 AZP 89.62 TAL 160.88 TAP 77.26 RCA 92.58 APO 150.09 V2 34.821
    RC 176.312 GL 18.07 GP 2.59 ZAL 54.61 ZAP 172.42 ETS 20.07 ZAE 128.23 ETE 177.97 ZAC 84.23 ETC 166.17 CLP-172.88
   PLANETOCENTRIC CONIC
    C3 25.669 VHL 5.066 CLA 22.13 RAL 5.52 RAD 6568.0 VEL 12.126 PTH 2.17 VHP 8.066 CPA -4.66 RAP 351.21 ECC 1.4224
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         83.81 4 47 43
61.73 23 34 59
85.35 6 19 41
60.11 24 36 57
89.23 7 55 32
56.01 1 14 23
                    22 25 52 4146.78
5 34 7 2733.82
23 31 21 3935.42
7 15 15 2417.44
0 10 39 3824.57
                                                                                                                                          2447.2
      90.00
                                                                         99.85
                                                                                       239.65
                                                        27.69
                                                                                                                                                            -28.26
                                                                                                                                                                               91.23
                                                                                                                                             3546.8
                                                                                                                                                              -5.45
                                                                                                                                                                               162.36
         90.00
                                                          -1.68
                                                                         169.01
                                                                                         231.40
                                                        -29.56
-.03
                                                                          77.00
                                                                                                                                             2133.8
                                                                                                                                                              -29.89
                                                                                                                                                                               68.21
       100.00
                                                                                         239.85
                                                                                                                                             3335.4
                                                                                                                                                              -4.01
       100.00
                                                                        152.56
                                                                                        230.49
                                                                                                                                                                              146.03
                                                        -34.18
3.89
                                                                                                                                             1817.4
                                                                                                                                                            -33.90
                                                                                                                                                                                43.99
       110.00
                                                                           53.23
                                                                                         240.11
                                                                                                                          1 14 23
       110.00
                                                                         141.72
                                                                                         228.04
                                                                                                                                            3224.6
                                                                                                                                                                -.60
                                                                                                                                                                               135.51
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 3378.1 SR 355.4 SS 857.5
CRT .8939 CRS -.8491 CST -.9956
                                                                        SGT 5829.2 SGR 409.9 SG3 181.1
RRT .0496 RRF .0369 RTF .9517
SGB 5843.6 R23 -.0105 R13 .9517
    TOE 2.8387 TRA 2.8573 TC3-3.3476 BAU 1.1495
    RCE .3108 RRA -.1430 RC3 .1166 FAU .02008
FDE .9986 FRA 1.3330 FC3 -.6771 BSP 18941
                                                                                                                                       LSA 3498.8 MSA 177.6 SSA 15.5
                                                                         SG1 5829.2 SG2 409.4 THA .20
                                                                                                                                        EL1 3393.0 EL2 158.6 ALF 5.39
    BOE 2.8557 BRA 2.8608 BC3 3.3496 FSP -624
                                                                                  FLIGHT TIME 196.00
                                                                                                                                                     ARRIVAL CATE JUN 13 1966
LAUNCH CATE NOV 29 1965
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 567.103
    RL 147.56 LAL .00 LOL 66.57 VL 26.515 GAL 6.36 AZL 86.56 HCA 279.56 SMA 121.11 ECC .24364 INC 3.4421 V1 30.194
RP 108.81 LAP -3.39 LOP 346.14 VP 36.656 GAP 12.86 AZP 89.43 TAL 159.32 TAP 78.87 RCA 91.60 APO 150.62 VZ .34.828
RC 178.366 GL 17.38 GP 2.51 ZAL 52.44 ZAP 173.28 ETS 22.20 ZAE 128.18 ETE 178.05 ZAC 86.46 ETC 166.25 CLP-173.76
   PLANETOCENTRIC CONIC
    C3 28.048 VHL 5.296 DLA 22.36 RAL 7.86 RAD 6568.1 VEL 12.224 PTH 2.20 VHP 8.353 DPA -3.82 RAP 353.34 ECC 1.4616
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                      243.73
                                                                                                         82.65
                                                                                                                                          2480.2
                                                                                                                                                           -28.16
                                                                                                                           4 54 30
                                                        -27.42
                                                                         102.23
                                                                                                                                                                                93.64
        90.00
                       4 3 9 3080.25
                   22 38 15 4157.78
5 40 46 2765.54
23 43 20 3947.72
7 22 34 2447.03
0 21 57 3839.00
                                                                                                             61.71
84.14
                                                                                                                         23 47 33
                                                                                         235.16
                                                                                                                                              3557.8
                                                                                                                                                               -5.10
                                                                                                                                                                               162.98
         90.00
                                                          -1.32
                                                                         169.63
                                                         -29.36
                                                                           79.34
                                                                                         243.99
                                                                                                                           6 26 51
                                                                                                                                             2165.5
                                                                                                                                                              -29.87
                                                                                                                                                                                70.57
       100.00
                                                                                                             60.11 24 49 8
87.86 8 3 21
56.07 1 25 56
                                                       .38
-34.12
                                                                                                                                              3347.7
                                                                                                                                                               -3.60
                                                                                                                                                                               146.71
       100.00
                                                                         153.24
                                                                                         234.21
       110.00
                                                                           55.54
                                                                                         244.38
                                                                                                                                             1847.0
                                                                                                                                                          -34.04
                                                                                                                                                                                46.29
                                                     4.43
                                                                                                                          1 25 56
                                                                                                                                                                 -.05
                                                                         142.48
                                                                                         231.69
                                                                                                                                             3239.0
                                                                                                                                                                               136.26
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5847.1 SGR 408.8 SG3 174.1 ST 3367.5 SR 364.0 SS 844.7
RRT .0893 RRF .0773 RTF .9550 CRT .8917 CRS -.8487 CST -.9960
SGB 5861.4 R23 -.0083 R13 .9530 LSA 3486.1 MSA 180.6 SSA 15.0
SGI 5847.2 SG2 407.2 THA .36 ELI 3383.1 ELZ 164.0 ALF 5.52
     TOE 2.9389 TRA 3.1490 TC3-3.0606 BAU 1.1482
    RDE .3334 RRA -.1383 RC3 .0983 FAU .01826
FDE .9863 FRA 1.3692 FC3 -.5637 BSP 19054
BDE 2.9578 BRA 3.1520 BC3 3.0622 FSP -601
```

JPL TM 33-99

LAUNCH DATE NOV 29 1965

```
ARRIVAL DATE JUN 15 1966
    HELIOCENTRIC CONIC
                                                                                                          DISTANCE 572,424
      RL 147.56 LAL .00 LOL 66.57 VL 26.478 GAL 7.05 AZL 86.52 HCA 282.72 SMA 120.90 ECC .25089 INC 3.4753 V1 30.194
RP 108.78 LAP -3.39 LOP 349.32 VP 36.637 GAP 13.37 AZP 89.23 TAL 157.77 TAP 80.50 RCA 90.57 APO 151.23 V2 34.836
RC 180.400 GL 16.69 GP 2.44 ZAL 50.35 ZAP 174.12 ETS 24.95 ZAE 128.13 ETE 178.12 ZAC 88.69 ETC 166.30 CLP-174.65
    PLANETOCENTRIC CONIC
       C3 30.772 VHL 5.547 DLA 22.54 RAL 10.11 RAO 6568.2 VEL 12.335 PTH 2.22 VHP 8.662 DPA -2.97 RAP 355.46 ECC 1.5D64
      CS 30.772 WIL 5.547 DLA 22.54 RAL 10.11 RAD 6568.2 VEL 12.355 PTH 2.22 WAP 8.662 DPA -2.97 RAP 355.46 ECC 1.5064

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 9 44 3112.13 -27.12 104.52 247.80 81.54 5 1 37 2512.1 -28.02 95.97

90.00 22 49 42 4172.29 -.86 170.44 238.90 61.69 23 59 14 3572.3 -4.63 163.79

100.00 5 47 40 2796.37 -29.13 81.60 248.11 82.97 6 34 17 2196.4 -29.80 72.86

100.00 23 54 27 3963.29 .91 154.09 237.92 60.12 25 0 30 3363.3 -3.07 147.57

110.00 7 30 1 2476.15 -34.03 57.81 248.64 86.52 8 11 18 1876.2 -34.13 48.56

110.00 0 32 31 3856.27 5.09 143.38 235.32 56.15 1 36 47 3256.3 .61 137.16
                                                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                    SGT 5862.1 SGR 407.2 SG3 167.5
RRT .1297 RRF .1183 RTF .9544
       TOE 3.0446 TRA 3.4624 TC3-2.7756 BAU 1.1424
                                                                                                                                                                              ST 3353.6 SR 371.3 SS 833.7
CRT .8896 CRS -.8485 EST -.9964
      ROE .3569 RRA -.1317 RC3 .0818 FAU .01644
FOE .9767 FRA 1.4079 FC3 -.4626 BSP 19073
BOE 3.0654 BRA 3.4649 BC3 2.7768 FSP -575
                                                                                                 SGB 5876.2 R23 -.0061 R13 .9544
SG1 5862.3 SG2 403.7 THA .52
                                                                                                                                                                              LSA 3470.7 MSA 183.2 SSA 14.5
EL1 3369.9 EL2 168.8 ALF 5.64
LAUNCH DATE NOV 29 1965
                                                                                                          FLIGHT TIME 200.00
                                                                                                                                                                                                 ARRIVAL DATE JUN 17 1966
    HELIOCENTRIC CONIC
                                                                                                          DISTANCE 577.664
     RL 147.36 LAL .00 LOL 66.57 VL 26.441 GAL 7.78 AZL 86.49 HCA 285.90 SMA 120.69 ECC .25881 INC 3.5093 V1 30.194
RF 108.76 LAP -3.37 LOP 352.49 VP 36.619 GAP 13.91 AZP 89.04 TAL 156.25 TAP 82.15 RCA 89.45 APO 151.92 V2 34.845
RC 182.414 GL 15.99 GP 2.38 ZAL 48.35 ZAP 174.95 ETS 28.63 ZAE 128.08 ETE 178.20 ZAC 90.91 ETC 166.34 CLP-175.54
    PLANETOCENTRIC CONIC
     PLANFOCENTRIC CONIC
C3 33.896 VML 5.822 DLA 22.67 RAL 12.30 RAD 6568.3 VEL 12.461 PTH 2.25 VMP 8.994 DPA -2.10 RAP 357.57 ECC 1.5579
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 16 39 3142.85 -26.80 106.71 251.85 80.49 5 9 2 2542.9 -27.84 98.20
90.00 23 0 11 4190.26 -.28 171.44 242.61 61.68 24 10 1 3590.3 -4.06 164.80
100.00 5 54 50 2826.30 -28.86 83.78 252.21 81.85 6 41 56 2226.3 -29.69 75.08
100.00 0 8 37 3982.04 1.55 155.12 241.60 60.14 1 14 59 3382.0 -2.44 148.60
110.00 7 37 35 2504.82 -33.89 60.03 252.88 85.21 8 19 20 1904.8 -34.18 50.80
110.00 0 42 21 3876.29 5.85 144.44 238.92 56.26 1 46 58 3276.3 1.38 138.21
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
ST 3328.8 SR 377.2 SS 822.0
    DIFFERENTIAL CORRECTIONS
                                                                                                 SGT 5870.7 SGR 485.1 SG3 161.1
RRT .1696 RRF .1586 RTF .9562
SGB 5884.6 R23 -.0044 R13 .9562
SGI 5871.1 SG2 399.2 THA .67
      TDE 3.1487 TRA 3.7914 TC3-2.5056 BAU 1.1358
      RDE .3812 RRA -.1232 RC3 .0670 FAU .01479
FDE .9665 FRA 1.4463 FC3 -.3776 BSP 19178
                                                                                                                                                                                CRT .8875 CRS -.8484 CST -.9967
                                                                                                                                                                               LSA 3444.5 MSA 185.5 SSA 14.0
      BOE 3.1717 BRA 3.7934 BC3 2.5065 FSP -555
                                                                                                                                                                               EL1 3345.7 EL2 172.9 ALF
                                                                                                                                                                                                                                      5.76
                                                                                                         FLIGHT TIME 202.00
                                                                                                                                                                                                ARRIVAL DATE JUN 19 1966
LAUNCH DATE NOV 29 1965
                                                                                                         DISTANCE 582.813
    HELIOCENTRIC CONIC
     RL 147.56 LAL .00 LOL 66.57 VL 26.405 GAL 8.56 AZL 86.46 MCA 289.07 SMA 120.48 ECC .26749 INC 3.5446 V1 30.194
RP 108.73 LAP -3.35 LOP 355.67 VP 36.601 GAP 14.49 AZP 88.84 TAL 154.76 TAP 83.82 RCA 88.25 APO 152.70 VZ 34.854
RC 184.407 GL 15.29 GP 2.32 ZAL 46.42 ZAP 175.75 ETS 33.76 ZAE 128.01 ETE 178.27 ZAC 93.13 ETC 166.36 CLP-176.43
    PLANETOCENTRIC CONTC
      C3 37.489 VHL 6.123 OLA 22.75 RAL 14.39 RAO 6568.5 VEL 12.604 PTH 2.29 VHP 9.353 DPA -1.22 RAP 359.67 ECC 1.6170
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          4 23 52 3172.42 -26.45
23 9 42 4211.58 .41
6 2 12 2855.35 -28.56
0 17 59 4003.88 2.29
7 45 13 2533.05 -33.70
0 51 27 3898.95 6.70
                                                                                                               255.88
                                                                                                                                       79.50
           90.00
                                                                                                                                                                                  2572.4
                                                                                                                                                                                                        -27.63
                                                                                              108.80
                                                                                                                                                              5 16 44
                                                                                                                                                                                                                              100.34
                                                                                                                                             61.69 24 19 54
80.78 6 49 47
60.19 1 24 43
83.93 8 27 26
                                                                                                                                                                                                                                  165.99
           90.00
                                                                                              172.63
                                                                                                                   246.28
                                                                                                                                                                                      3611.6
                                                                                                                                                                                                             -3.38
                                                                                                                   256.29
                                                                                                                                                                                      2255.4
                                                                                                                                                                                                           -29.54
                                                                                                                                                                                                                                   77.22
         100.00
                                                                                               85.89
                                                                                                              245.23
257.10
                                                                                                                                                                                      3403.9
                                                                                                                                                                                                           -1.70
                                                                                                                                                                                                                              149.80
         100.00
                                                                                              156.32
                                                                                                                                                                                     1933.1
                                                                                                                                                                                                           -34.1A
                                                                                                                                                                                                                                  53.01
         110.00
                                                                                               62.22
                                                                                                                                                            1 56 26
         110.00
                                                                                              145.63
                                                                                                                   242.50
                                                                                                                                            56.40
                                                                                                                                                                                     3298.9
                                                                                                                                                                                                              2.24
                                                                                                                                                                                                                                  139.39
                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 5874.6 SGR 402.4 SG3 155.0
RRT .2098 RRF .1991 RTF .9581
SGB 5888.4 R23 -.0030 R13 .9581
      TOE 3.2562 TRA 4.1420 TC3-2.2455 BAU 1.1257
                                                                                                                                                                               ST 3298.7 SR 381.7 SS 811.5
CRT .8855 CR5 -.8485 CST -.9971
     ROE .4062 RRA -.1126 RC3 .0340 FAU .01318
FOE .9580 FRA 1.4866 FC3 -.3044 BSP 19271
BOE 3.2814 BRA 4.1435 BC3 2.2461 FSP -535
                                                                                                                                                                               LSA 3413.3 MSA 187.3 SSA 13.5
EL1 3316.0 EL2 176.4 ALF 5.87
                                                                                                 FLIGHT TIME 204.00
                                                                                                                                                                                                ARRIVAL DATE JUN 21 1966
LAUNCH DATE NOV 29 1965
    HELIOCENTRIC CONIC
                                                                                                         DISTANCE 587.854
     RL 147.56 LAL .00 LOL 66.57 VL 26.370 GAL 9.39 AZL 86.42 MCA 292.24 SMA 120.27 ECC .27702 INC 3.5811 V1 30.194
RP 108.70 LAP -3.31 LOP 358.85 VP 36.585 GAP 15.13 AZP 88.64 TAL 153.29 TAP 85.55 RCA 86.96 APO 153.59 V2 34.863
RC 186.379 GL 14.59 GP 2.27 ZAL 44.58 ZAP 176.50 ETS 41.26 ZAE 127.94 ETE 178.34 ZAC 95.34 ETC 166.36 CLP-177.34
    PLANETOCENTRIC CONIC
     C3 41.631 VHL 6.452 DLA 22.79 RAL 16.40 RAD 6568.6 VEL 12.767 PTH 2.32 VHP 9.742 DPA
                                                                                                                                                                                            -.34 RAP
                                                                                                                                                                                                                 1.76 ECC 1.6851
     C3 41.631 VHL 6.452 DLA 22.79 RAL 16.40 RAD 6568.6 VEL 12.767 PTM 2.32 VHP 9.742 DPA -.34 RAP 1.76 ECC 1.6851 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 31 20 3200.83 -26.08 110.80 259.87 78.56 5 24 41 2600.8 -27.40 102.38 90.00 23 18 16 4236.12 1.20 173.99 249.89 61.71 24 28 52 3636.1 -2.59 167.37 100.00 6 9 45 2883.52 -28.24 87.92 260.33 79.76 6 57 48 2283.5 -29.36 79.30 100.00 0 26 29 4028.66 3.12 157.68 248.83 60.26 1 33 37 3428.7 -.86 151.16 110.00 7 52 53 2560.83 -33.48 64.36 261.28 82.69 8 35 34 1960.8 -34.13 55.17 110.00 0 59 49 3924.12 7.65 146.97 246.03 56.58 2 5 14 3324.1 3.20 140.70
                                                                                               MID-COURSE EXECUTION ACCURACY
SCT 5874.4 SGR 399.4 SG3 149.2
RRT .2503 RRF .2398 RTF .9602
SGB 5887.9 R23 -.0017 R13 .9602
SGI 5875.2 SG2 386.6 THA .98
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
      TOE 3.3685 TRA 4.5167 TC3-1.9959 BAU 1.1111
                                                                                                                                                                              ST 3264.5 SR 384.8 SS 802.6
     RCE .4321 RRA -.0998 RC3 .0428 FAU .01161
FOE .9514 FRA 1.5294 FC3 -.2415 BSP 19336
                                                                                                                                                                             CRT .8836 CRS -.8488 CST -.9974
LSA 3378.3 MSA 188.6 SSA 13.0
```

FLIGHT TIME 198.00

ELI 3282.2 EL2 179.2 ALF 5.96

BOE 3.3961 BRA 4.5178 BC3 1.9964 FSP -515

ARRIVAL CATE JUN 23 1966

.55 RAP 3.84 ECC 1.7640

ORBIT CETERMINATION ACCURACY

LAUNCH DATE NOV 29 1965

HELIOCENTRIC CONIC

PLANETOCENTRIC COMIC

DIFFERENTIAL CORRECTIONS

DIFFERENTIAL CORRECTIONS

TOE 3.8886 TRA 6.3105 TC3-1.1240 BAU .9937 RDE .5427 RRA -.0217 RC3 .0137 FAU .00557 FDE .9480 FRA 1.7375 FC3 -.0729 BSP 19421 BDE 3.9263 BRA 6.3106 BC3 1.1241 FSP -442

```
78.78 7 5 58

78.78 7 5 58

252.37 60.36 1 41 42

66.45 265.41 81.47 8 43 43

48.44 249.53 56.81 2 13 19

MID-COURSE EXECUTION ACCURACY

SGT 5872.5 SGR 395.9 SG3

RRT .2915 RRF

SGR 500.50
                                                                                                                                                 SGT 5872.5 SGR 395.9 SG3 143.8

RRT .2915 RRF .2811 RTF .9625

SGB 5885.9 R23 -.0006 R13 .9625

SGI 5873.7 SG2 378.7 THA 1.13
                                                                                                                                                                                                                                                                  ST 3229.9 SR 386.4 SS 796.2
CRT .8820 CRS -.8494 CST -.9977
         TOE 3.4902 TRA 4.9214 TC3-1.7555 BAU 1.0898
        ROE .4587 RRA -.0845 RC3 .0332 FAU .01002
FOE .9482 FRA 1.5766 FC3 -.1869 BSP 19299
BOE 3.5202 BRA 4.9222 BC3 1.7558 FSP -494
                                                                                                                                                                                                                                                                    LSA 3343.6 MSA 189.2 SSA 12.6
                                                                                                                                                                                                                                                                   EL1 3247.9 EL2 181.1 ALF 6.04
                                                                                                                                                             FLIGHT TIME 208.00
                                                                                                                                                                                                                                                                                            ARRIVAL CATE JUN 25 '1966
LAUNCH DATE NOV 29 1965
                                                                                                                                                            DISTANCE 597.525
     HELIOCENTRIC CONIC
        RL 147.56 LAL .00 LOL 66.57 VL 26.301 GAL 11.26 AZL 86.34 HCA 298.60 SMA 119.88 ECC .29907 INC 3.6598 V1 30.194
RP 108.63 LAP -3.21 LOP 5.21 VP 36.555 GAP 16.57 AZP 88.25 TAL 150.49 TAP 89.08 RCA 84.03 APO 155.73 V2 34.884
RC 190.259 GL 13.20 GP 2.17 ZAL 41.16 ZAP 177.68 ETS 70.65 ZAE 127.74 ETE 178.47 ZAC 99.72 ETC 166.31 CLP-179.19
      PLANETOCENTRIC CONIC
       PLANETOCENTRIC CONIC
C3 51.995 VHL 7.211 DLA 22.75 RAL 20.15 RAO 6568.9 VEL 13.166 PTH 2.40 VHP 10.628 DPA 1.44 RAP 5.90 ECC 1.8557
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 46 57 3254.18 -25.31 114.52 267.72 76.85 5 41 11 2654.2 -26.87 106.20
90.00 23 32 33 34 4294.19 3.08 177.24 256.96 61.84 24 44 7 3694.2 -.71 170.61
100.00 6 25 16 2937.17 -27.53 91.75 268.28 77.86 7 14 13 2337.2 -28.92 85.23
100.00 0 40 51 4086.44 5.07 160.87 255.86 60.50 1 48 57 3486.4 1.10 154.33
110.00 8 8 15 2614.95 -32.94 68.49 269.48 80.30 8 51 50 2015.0 -33.93 59.39
110.00 1 14 21 3981.42 9.78 150.03 252.98 57.08 2 20 42 3381.4 5.38 143.71
                                                                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                SCT 5863.2 SGR 392.1 SG3 138.5 ST 3187.8 SR 386.5 SS 790.5 RRT .3323 RRF .3220 RTF .9650 CRT .8805 CRS -.8501 CST -.9980 SGB 5876.3 R23 .0000 R13 .9650 LSA 3301.6 MSA 189.2 SSA 12.1 SG1 5864.6 SG2 369.7 THA 1.28 EL1 3206.0 EL2 182.2 ALF 6.11
        TOE 3.6138 TRA 5.3503 TC3-1.5321 BAU 1.0651
        ROE .4860 RRA -.0666 RC3 .0253 FAU .00854
FDE .9455 FRA 1.6256 FC3 -.1422 BSP 19361
         BDE 3.6463 BRA 5.3507 BC3 1.5323 FSP -476
                                                                                                                                                                                                                                                                                           ARRIVAL CATE JUN 27 1966
                                                                                                                                                             FLIGHT TIME 210.00
LAUNCH DATE NOV 29 1965
                                                                                                                                                            DISTANCE 602.100
      HELIOCENTRIC CONIC
         RL 147.56 LAL .00 LOL 66.57 VL 26.267 GAL 12.32 AZL 86.30 HCA 301.78 SMA 119.69 ECC .31187 INC 3.7028 V1 30.194
RP 108.60 LAP -3.15 LOP 8.40 VP 36.541 GAP 17.40 AZP 88.05 TAL 149.16 TAP 90.94 RCA 82.36 APO 157.01 V2 34.895
RC 192.167 GL 12.51 GP 2.13 ZAL 39.59 ZAP 177.86 ETS 95.17 ZAE 127.61 ETE 178.54 ZAC 101.88 ETC 166.24 CLP 179.85
       PLANETOCENTRIC CONIC
          C3 58.497 VHL 7.648 DLA 22.66 RAL 21.88 RAD 6569.1 VEL 13.411 PTH 2.45 VHP 11.136 DPA 2.32 RAP 7.94 ECC 1.9627
         C3 58.497 VHL 7.648 OLA 22.66 RAL 21.88 RAD 5559.1 VEL 13.411 PH 2.49 VHP 11.105 PA 2.12 RAT 1.94 ECC 13.20 PA 1.11.105 PA 2.12 RAT 1.95 PA 2.12 RAT 1
                                        4 55 0 3279.09 -24.91
23 38 17 4327.36 4.14
6 33 9 2962.59 -27.15
0 46 44 4119.09 6.16
8 15 53 2641.20 -32.62
1 20 30 4013.25 10.96
                                                                                                                                                                                                                                   1 55 23
8 59 54
                                                                                                                                                                           259.28
                                                                                                                                                                                                                 60.69
                                                                                                                                                                                                                                                                            3519.1
                                                                                                                                                                                                                                                                                                                2.21
                                                                                                                                                                                                                                                                                                                                            156.12
                                                                                                                                          162.68
                100.00
                                                                                                                                                                                                                 79.17
                                                                                                                                                                                                                                                                            2041.2
                                                                                                                                                                                                                                                                                                             -33.77
                                                                                                                                                                                                                                                                                                                                                61.42
                                                                                                                                                                           273.49
                110.00
                                                                                                                                               70.47
                                                                                                                                                                                                                  57.42
                                                                                                                                                                                                                                          2 27 23
                                                                                                                                                                                                                                                                            3413.2
                                                                                                                                                                                                                                                                                                                                              145.39
                                                                                                                                                                            256.37
                                                                                                                                           151.75
               110.00
                                                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                                MID-COURSE EXECUTION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                  RRT .3735 RRF .3632 RTF .9676
SGB 5864.8 R23 .0005 R13 .9676
SGB 5853.8 SG2 359.7 THA 1.42
                                                                                                                                                                                                                                                            ST 3144.4 SR 385.2 SS 786.8
CRT .8792 CRS -.8512 CST -.9983
          TOE 3.7467 TRA 5.8146 TC3-1.3215 BAU 1.0336
         RCE .5140 RRA -.0456 RC3 .0188 FAU .00706
FOE .9453 FRA 1.6789 FC3 -.1045 BSP 19392
BOE 3.7818 BRA 5.8147 BC3 1.3216 FSP -459
                                                                                                                                                                                                                                                                   LSA 3258.6 MSA 188.5 SSA 11.6
                                                                                                                                                                                                                                                                   EL1 3162.6 EL2 182.5 ALF 6.17
                                                                                                                                                              FLIGHT TIME 212.00
                                                                                                                                                                                                                                                                                             ARRIVAL DATE JUN 29 1966
 LAUNCH DATE NOV 29 1965
                                                                                                                                                            DISTANCE 606.451
       HELIOCENTRIC CONIC
         RL 147.56 LAL .00 LOL 66.57 VL 26.234 GAL 13.46 AZL 86.25 HCA 304.96 SMA 119.50 ECC .32608 INC 3.7488 V1 30.194
RP 108.57 LAP -3.07 LOP 11.59 VP 36.528 GAP 18.32 AZP 87.85 TAL 147.91 TAP 92.87 RCA 80.53 APO 158.47 V2 34.906
RC 194.054 GL 11.84 GP 2.09 ZAL 38.11 ZAP 177.62 ETS 119.82 ZAE 127.44 ETE 178.61 ZAC 104.01 ETC 166.16 CLP 178.87
       PLANETOCENTRIC CONIC
         LIGH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 3 9 3302.75 -24.51 117.85 275.32 75.36 5 58 12 2702.8 -26.29 109.63 90.00 23 43 5 4363.02 5.28 181.10 263.74 62.14 24 55 48 3763.0 1.51 174.45 100.00 6 41 5 2987.00 -26.76 95.26 275.96 76.17 7 30 52 2387.0 -28.40 86.84 100.00 0 51 46 4154.00 7.32 164.62 262.63 60.94 2 1 0 3554.0 3.39 158.04 110.00 8 23 26 2666.79 -32.28 72.39 277.40 78.08 9 7 53 2066.8 -33.58 63.40 110.00 1 25 54 4046.98 12.19 153.59 259.71 57.81 2 33 21 3447.0 7.85 147.18
```

FLIGHT TIME 206.00

CISTANCE 592.766

RL 147.56 LAL .00 LOL 66.57 VL 26.335 GAL 10.29 AZL 86.38 MCA 295.42 SMA 120.07 ECC .28750 INC 3.6194 VL 30.194
RP 108.67 LAP -3.27 LOP 2.03 VP 36.569 GAP 15.82 AZP 88.44 TAL 151.86 TAP 87.28 RCA 85.55 APO 154.59 V2 34.873
RC 188.330 GL 13.89 GP 2.22 ZAL 42.83 ZAP 177.18 ETS 52.78 ZAE 127.85 ETE 178.41 ZAC 97.54 ETC 166.35 CLP-178.25

C3 46.425 VHL 6.814 DLA 22.79 RAL 18.32 RAO 6568.7 VEL 12.953 PTH 2.36 VHP 10.165 DPA .55 RAP 3.84 ECC 1.7640 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 39 3 3228.09 -25.70 112.71 263.82 77.68 5 32.51 2628.1 -27.14 104.34 90.00 23 25 53 4263.71 2.09 175.53 253.46 61.75 24 36.57 3663.7 -1.70 168.91 100.00 617 27 2910.80 -27.89 89.87 264.33 78.78 7 5 58 2310.8 -29.15 81.30 100.00 0 34 6 4056.24 4.05 159.20 252.37 60.36 1 41 42 3456.2 .08 152.67 110.00 8 0 35 2588.14 -33.23 66.45 265.41 81.47 8 43 43 1988.1 -34.05 57.30 110.00 1 7 27 3951.66 8.68 148.44 249.53 56.81 2 13.19 3351.7 4.25 142.15

C3 46.425 VHL 6.814 DLA 22.79 RAL 18.32 RAD 6568.7 VEL 12.953 PTH 2.36 VHP 10.165 DPA

MID-COURSE EXECUTION ACCURACY
SCT 5832.9 SGR 383.4 SG3 128.6 ST 3097.7 SR 382.4 SS 785.7
RRT .4145 RRF .4D43 RTF .9704 CRT .8783 CRS -.8525 CST -.9986
SGB 5845.5 R23 .0006 R13 .9704 LSA 3213.1 MSA 187.0 SSA 11.1
SG1 5835.1 SG2 348.7 THA 1.57 EL1 3115.9 EL2 181.7 ALF 6.21

ARRIVAL DATE JUL 1 1966

LAUNCH DATE NOV 29 1965

DISTANCE 610.530 HELIOCENTRIC CONIC RL 147.56 LAL .00 LOL 66.57 VL 26.202 GAL 14.71 AZL 86.20 HCA 308.14 SMA 119.32 ECC .34191 INC 3.7986 V1 30.194
RP 108.53 LAP -2.99 LOP 14.77 VP 36.516 GAP 19.34 AZP 87.65 TAL 146.74 TAP 94.88 RCA 78.52 APO 160.12 VZ 34.918 RC 195.918 GL 11.17 GP 2.06 ZAL 36.74 ZAP 177.02 ETS 137.87 TAE 127.24 ETE 178.67 ZAC 106.10 ETC 166.05 CLP 177.84 PLANETOCENTRIC CONIC C3 75.133 VHL 8.668 OLA 22.38 RAL 25.02 RAD 6569.5 VEL 14.017 PTH 2.56 VHP 12.320 OPA 4.05 RAP 11.94 ECC 2.2365 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 11 23 3325.09 -24.12 119.37 279.00 74.70 6 6 48 2725.1 -25.99 111.20 90.00 23 46 57 4400.96 6.48 183.24 267.01 62.37 25 0 18 3801.0 2.73 176.56 6 49 1 3010.28 0 55 56 4190.99 8 30 53 2691.60 1 30 33 4082.44 7 39 11 2410.3 88.51 -26.38 96.88 279.66 75.40 -28.12 100.00 8.54 166.69 265.90 61.24 2 5 47 3591.0 4.63 160.08 9 15 45 -33.37 -31.91 74.23 77.05 2091.6 65.30 110.00 13.46 155.54 262.97 58.28 2 38 36 3482.4 9.17 149.07 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5814.6 SGR 378.7 SG3 124.2 RRT .4561 RRF .4460 RTF .9732 ST 3053.2 SR 378.3 SS 788.1 CRT .8779 CRS -.8544 CST -.9988 TOE 4.0478 TRA 6.8546 TC3 -.9374 BAU .9417 RDE .5723 RRA .0058 RC3 .0100 FAU .00399 .9551 FRA 1.8034 FC3 -.0460 BSP 19323 SGB 5826.9 R23 .0007 R13 .9732 LSA 3170.5 MSA 184.6 SSA 10.6 BOE 4.0880 BRA 6.8546 BC3 .9375 FSP -424 SG1 5817.2 SG2 336.9 THA 1.71 ELI 3071.3 EL2 180.1 ALF 6.23 FLIGHT TIME 216.00 ARRIVAL CATE JUL 3 1966 HELIOCENTRIC CONIC DISTANCE 614.271 RL 147.56 LAL .00 LOL 66.57 VL 26.171 GAL 16.09 AZL 86.15 MCA 311.33 SMA 119.14 ECC .35962 INC 3.8530 V1 30.194
RP 108.49 LAP -2.89 LOP 17.96 VP 36.506 GAP 20.47 AZP 87.45 TAL 145.67 TAP 97.00 RCA 76.30 APO 161.99 V2 34.930 RC 197.761 GL 10.51 GP 2.02 ZAL 35.47 ZAP 176.19 ETS 149.53 ZAE 126.99 ETE 178.74 ZAC 108.14 ETC 165.92 CLP 176.77 PLANETOCENTRIC CONIC C3 85.834 VHL 9.265 OLA 22.18 RAL 26.42 RAO 6569.7 VEL 14.394 PTH 2.62 VHP 13.014 OPA 4.90 RAP 13.89 ECC 2.4126 C3 85.834 VML 9.265 OLA 22.18 RAL 26.42 RAD 6569.7 VEL 14.394 PTH 2.62 VMP 13.014 OPA 4.90 RAP 13.89 ECC 2.4126
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 19 39 3345.95 -23.74 120.78 282.57 74.09 6 15 25 2746.0 -25.69 112.66
90.00 23 49 52 4440.97 7.74 185.51 270.18 62.68 25 3 53 3841.0 4.01 178.80
100.00 6 56 56 3032.28 -25.99 98.40 283.26 74.69 7 47 28 2432.3 -27.84 90.09
100.00 0 59 12 4229.87 9.80 168.89 269.07 61.62 2 9 42 3629.9 5.94 162.23
110.00 8 38 12 2715.46 -31.54 75.99 284.91 76.07 9 23 27 2115.5 -33.13 67.12
110.00 1 34 25 4119.46 14.78 157.61 266.16 58.82 2 43 5 3519.5 10.54 151.07 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TDE 4.2163 TRA 7.4397 TC3 -.7672 BAU .8804 SGT 5788.4 SGR 373.7 SG3 119.9 ST 3003.8 SR 372.7 SS 792.5 RRT .4970 RRF .4871 RTF .9762 SCB 5800.5 R23 .0005 R13 .9762 SCI 5791.4 SC2 324.1 THA 1.84 ROE .6026 RRA .0371 RC3 .0074 FAU .00243 CRT .8778 CRS -.8566 CST -.9990 FOE .9644 FRA 1.8750 FC3 -.0245 BSP 19343 LSA 3123.5 MSA 181.4 SSA 10.1 BOE 4.2591 BRA 7.4398 BC3 .7672 FSP -410 EL1 3021.6 EL2 177.5 ALF 6.24 FLIGHT TIME 218.00 ARRIVAL DATE JUL 5 1966 LAUNCH CATE NOV 29 1965 HELIOCENTRIC CONIC DISTANCE 617.592 RL 147.56 LAL .00 LOL 66.57 VL 26.141 GAL 17.62 AZL 86.09 HCA 314.52 SMA 118.98 ECC .37949 INC 3.9130 V1 30.194
RP 108.45 LAP -2.79 LOP 21.15 VP 36.496 GAP 21.75 AZP 87.25 TAL 144.72 TAP 99.24 RCA 73.83 APO 164.13 VZ 34.942 RC 199.580 GL 9.86 GP 1.99 ZAL 34.32 ZAP 175.21 ETS 157.15 ZAE 126.68 ETE 178.81 ZAC 110.14 ETC 165.77 CLP 175.65 PLANETOCENTRIC CONIC C3 98.645 WHL 9.932 CLA 21.94 RAL 27.70 RAD 6569.9 VEL 14.832 PTH 2.68 VHP 13.793 CPA 5.72 RAP 15.79 ECC 2.6234 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 27 54 3365.17 -23.37 122.07 286.01 73.54 6 23 59 2765.2 -25.41 113.99 273.23 63.05 25 6 31 3882.9 5.35 181.15 23 51 48 4482.87 9.04 187.90 3052.81 7 55 39 2 12 43 7 4 47 -25.61 99.81 286.72 74.04 2452.8 -27.55 91.54 1 1 33 4270.47 272.14 62.07 3670.5 7.29 164.49 100.00 11.11 171.19 8 45 21 2738.16 1 37 27 4157.89 9 30 59 2 46 45 -31.15 77.64 288.46 75.16 2138.2 -32.87 68.84 159.77 269.25 59.44 3557.9 11.95 153.16 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5758.5 SGR 368.6 SG3 115.8 RRT .5377 RRF .5281 RTF .9791 SGB 5770.3 R23 .0001 R13 .9791 ST 2953.7 SR 365.9 SS 800.6 CRT .8782 CRS -.8592 CST -.9992 TDE 4.4030 TRA 8.0787 TC3 -.6098 BAU .8042 RDE .6338 RRA .0725 RC3 .0058 FAU .00075 .9779 FRA 1.9555 FC3 -.0066 BSP 19337 LSA 3077.0 MSA 177.4 55A 9.6 SG1 5762.0 SG2 310.6 THA 1.98 EL1 2971.2 EL2 174.0 ALF 6.23 BOE 4.4484 BRA 8.0790 BC3 .6098 FSP -396 FLIGHT TIME 220.00 ARRIVAL DATE JUL 7 1966 LAUNCH DATE NOV 29 1965 HELIOCENTRIC CONIC DISTANCE 620.385 RL 147.56 LAL .00 LOL 66.57 VL 26.113 GAL 19.32 AZL 86.02 HCA 317.71 SMA 118.82 ECC .40187 INC 3.9801 V1 30.194
RP 108.41 LAP -2.68 LOP 24.35 VP 36.488 GAP 23.19 AZP 87.05 TAL 143.92 TAP 101.63 RCA 71.07 APO 166.57 V2 34.955 9.21 GP 1.97 ZAL 33.30 ZAP 174.12 ETS 162.37 ZAE 126.30 ETE 178.87 ZAC 112.06 ETC 165.60 CLP 174.45 RC 201.376 GL PLANETOCENTRIC CONIC C3 114.107 VHL 10.682 DLA 21.65 RAL 28.84 RAO 6570.2 VEL 15.344 PTH 2.75 VHP 14.671 CPA 6.51 RAP 17.63 ECC 2.8779 ENCH AZHTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEZHTH INJ TIME PO CST TIM INJ 2 EAT INJ 2 EONG 5 36 6 3382.49 23 52 43 4526.48 7 12 31 3071.60 1 2 55 4312.60 8 52 18 2759.42 1 39 37 4197.55 6 32 29 2782.5 115.19 on ne -23.03 123.23 289.29 73.06 -25.14 25 8 9 8 3 43 276.15 3926.5 6.73 183.62 90.00 10.37 190.40 63.50 2471.6 -27.28 92.87 100.00 -25.25 101.09 290.02 73.45 2 14 48 3712.6 100.00 12.44 173.61 275.08 62.60 8.67 166.85 110.00 -30.77 79.18 291.83 74.32 9 38 18 2159.4 -32.61 70.45 110.00 2 49 35 3597.5 155.34 17.48 162.05 272.23 60.15 13.38 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CIFFERENTIAL CORRECTIONS SCT 5724.8 SGR 363.4 SC3 112.0 RRT .5781 RRF .5688 RTF .9819 SCB 5736.4 R23 -.0004 R13 .9819 SCI 5728.7 SC2 296.3 THA 2.11 ST 2903.6 SR 357.9 SS 812.9 CRT .8792 CRS -.8624 CST -.9993 TOE 4.6122 TRA 8.7791 TC3 -.4649 BAU .7093 RCE .6663 RRA .1126 RC3 .0051 FAU-.00109 FCE .9966 FRA 2.0465 FC3 .0083 BSP 19305 BCE 4.6601 BRA 8.7798 BC3 .4649 FSP -382 LSA 3031.5 MSA 172.5 SSA 9.1 EL1 2920.7 EL2 169.5 ALF 6.21

FLIGHT TIME 214.00

```
FLIGHT TIME 70.00
                                                                                                                                                                                    ARRIVAL CATE FEB 8 1966
LAUNCH DATE NOV 3D 1965
                                                                                                   01STANCE 179.497
    HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 25.994 GAL -5.50 AZL 86.75 HCA 78.94 SMA 118.13 ECC .26567 INC 3.2530 V1 30.199
RP 107.50 LAP 3.19 LOP 146.50 VP 36.682 GAP -14.54 AZP 89.38 TAL 195.66 TAP 274.60 RCA 86.75 APO 149.51 V2 35.250
                                16.70 GP -2.03 ZAL 115.62 ZAP 2.57 ETS 50.75 ZAE 151.54 ETE 335.02 ZAC 61.17 ETC 161.29 CLP -1.58
     RC 44.068 GL
    PLANETOCENTRIC CONIC
     C3 26.098 VHL 5.109 DLA -1.44 RAL 308.70 RAD 6568.1 VEL 12.144 PTH 2.18 VHP 9.280 DPA -18.11 RAP 328.98 ECC 1.4295
     C3 26.098 VHL 5.109 DLA -1.44 RAL 308.70 RAO 6568.1 VEL 12.144 PTH 2.18 VHP 9.280 DPA -18.11 RAP 328.98 ECC 1.4295
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 32 26 2234.64 -20.05 42.76 174.01 110.42 4 9 40 1634.6 -17.09 35.33
90.00 15 9 12 4967.57 22.06 217.46 174.80 71.78 16 32 0 4367.6 19.36 209.82
100.00 4 53 6 1974.40 -21.17 23.16 173.55 111.61 5 26 1 1374.4 -18.05 15.76
100.00 16 31 13 4703.05 23.19 197.59 174.38 70.59 17 49 36 4103.0 20.33 189.96
110.00 5 59 49 1765.57 -24.16 5.91 172.15 114.95 6 29 15 1165.6 -20.59 358.59
110.00 17 40 59 4484.65 26.23 179.72 173.09 67.25 18 55 44 3884.6 22.91 172.13
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 736.8 SGR 409.3 SG3 94.9

RRT -.0708 RRF .0739 RTF -.6861

SGB 842.8 R23 -.0039 R13 .6866

SG1 737.6 SG2 407.8 THA 176.75
     TOE - ,2511 TRA - .4905 TC3 .3923 BAU .1487
                                                                                                                                                                     ST 326.7 SR 360.1 SS 328.1
CRT .8172 CRS .9882 CST .8834
LSA 566.4 MSA 150.9 SSA 20.3
     RDE -.3200 RRA .0876 RC3 -.1669 FAU .03006
     FOE .3635 FRA .0524 FC3 -.9972 BSP 2057
BOE .4067 BRA .4983 BC3 .4263 FSP -231
                                                                                                                                                                      EL1 463.7 EL2 146.2 ALF 48.41
                                                                                                    FLIGHT TIME 72.00
                                                                                                                                                                                      ARRIVAL DATE FEB 10 1966
LAUNCH DATE NOV 30 1965
                                                                                                   DISTANCE 186.301
    HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 26.230 GAL -5.53 AZL 86.72 MCA 82.18 SMA 119.44 ECC .25314 INC 3.2832 VI 30.199
RP 107.51 LAP 3.25 LOP 149.75 VP 36.847 GAP -13.52 AZP 88.55 TAL 196.85 TAP 279.04 RCA 89.21 APO 149.68 VZ 35.247
RC 45.230 GL 17.64 GP -2.16 ZAL 117.06 ZAP 4.37 ETS 28.31 ZAE 150.08 ETE 334.28 ZAC 62.19 ETC 161.48 CLP -3.80
    PLANETOCENTRIC CONIC
     C3 24.355 VHL 4.935 DLA
                                                        -.94 RAL 306.92 RAD 6568.0 VEL 12.072 PTH 2.16 VMP 8.715 DPA -17.90 RAP 330.04 ECC 1.4008
     C3 24.355 VML 4.935 DLA -.94 RAL 306.92 RAD 6568.0 VEL 12.072 PTH 2.16 VMP 8.715 DPA -17.90 RAP 330.04 ECC 1.4008 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 21 39 2233.00 -20.01 42.65 171.19 110.46 3 58 52 1633.0 -17.05 35.23 90.00 15 5 47 4933.13 21.35 215.34 171.69 70.94 16 28 2 4335.1 18.55 207.78 100.00 4 42 33 1972.01 -21.11 23.01 170.74 111.67 5 15 25 1372.0 -17.98 15.61 100.00 16 27 34 4671.34 22.45 195.52 171.26 69.73 17 45 25 4071.3 19.49 187.97 110.00 5 49 48 1761.52 -24.04 5.66 169.37 115.06 6 19 9 1161.5 -20.46 358.34 110.00 17 36 48 4454.60 25.42 177.6 169.95 66.34 18 51 3 3854.6 22.00 170.27
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ST 339.1 SR 357.4 SS 354.4

CRT .8361 CRS .9917 CST .8848

LSA 588.0 MSA 148.8 SSA 21.2

EL1 472.1 EL2 140.8 ALF 46.81
     TDE -.2560 TRA -.4670 TC3 .4514 BAU .1586
RDE -.3069 RRA .0793 RC3 -.1826 FAU .03268
                                                                                              SGT 762.2 SGR 409.8 SG3 107.1
RRT -.0779 RRF .0823 RTF -.7033
SGB 865.4 R23 -.0055 R13 .7039
     FOE .4043 FRA .0221 FC3-1.1617 BSP 2157
BOE .3997 BRA .4737 BC3 .4870 FSP -266
                                                                                              5G1 763.1 SG2 408.1 THA 176.64
                                                                                                                                                                                    ARRIVAL DATE FEB 12 1966
                                                                                                   FLIGHT TIME 74.00
LAUNCH DATE NOV 3D 1965
                                                                                                  DISTANCE 193.104
    HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 26.444 GAL -5.57 AZL 86.69 HCA 85.43 SMA 120.67 ECC .24190 INC 3.3130 V1 30.199
RP 107.55 LAP 3.30 LOP 153.00 VP 36.995 GAP -12.55 AZP 89.74 TAL 198.09 TAP 283.51 RCA 91.48 APO 149.86 VZ 35.242
RC 46.516 GL 18.53 GP -2.30 ZAL 118.48 ZAP 6.51 ETS 19.47 ZAE 148.84 ETE 335.31 ZAC 63.14 ETC 161.65 CLP -6.09
    PLANETOCENTRIC CONIC
                                                       -.47 RAL 305.15 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 8.180 DPA -17.73 RAP 331.04 ECC 1.3770
     C3 22.910 VHL 4.786 DLA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                         3 11 5 2232.56
15 2 10 4905.66
4 32 13 1970.88
16 23 44 4642.58
5 39 58 1758.82
17 32 29 4427.40
                                                                                                                                                                       1632.6
                                                                                                           168.51
                                                                                                                                110.47
                                                                                                                                                 3 48 18
                                                                                                                                                                                              -17.04
                                                                                                                                                                                                                     35.20
                                                                     -20.00
                                                                                         42.62
           90.00
                                                                                                                                                                                                                    205.95
                                                                                                             168.75
                                                                                                                                    70.22
                                                                                                                                                  16 23 56
                                                                                                                                                                           4305.7
                                                                                                                                                                                                17.80
                                                                      20.68
                                                                                        213.44
           90.00
                                                                                                                                   111.70 5 5 4
68.99 17 41 6
115.14 6 9 16
65.55 18 46 16
                                                                                                                                                                                                                     15.54
                                                                      -21.08
                                                                                         22.94
                                                                                                             168.07
                                                                                                                                                                           1370.9
                                                                                                                                                                                               -17.95
         100.00
                                                                                                                                                                           4042.6
                                                                                                                                                                                               18.71
                                                                                                                                                                                                                    186.19
                                                                    21.76
                                                                                        193.66
                                                                                                             168.32
         100.00
                                                                   -23.96
                                                                                             5.49
                                                                                                             166.72
                                                                                                                                                                           1158.8
                                                                                                                                                                                               -20.38
                                                                                                                                                                                                                    358.18
         110.00
                                                                   24.67
                                                                                         176.00
                                                                                                             167.00
                                                                                                                                                                           3827.4
                                                                                                                                                                                                21.16
                                                                                                                                                                                                                    168.61
         110.00
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                    ST 349.0 SR 353.7 SS 382.1

CRT .8537 CRS .9942 CST .8861

LSA 609.0 MSA 146.6 SSA 22.1

EL1 478.4 EL2 134.4 ALF 45.45
                                                                                              SGT 785.7 SGR 409.5 SG3 120.9
RRT -.0896 RRF .0930 RTF -.7209
      TOE -. 2594 TRA -. 4417 TC3 .5132 BAU .1685
      ROE - .2946 RRA .0713 RC3 - .1982 FAU .03570
     FOE .4505 FRA -.0145 FC3-1.3489 BSP 2294
BOE .3926 BRA .4474 BC3 .5501 FSP -308
                                                                                              SGB 886.0 R23 -.0048 R13 .7214
                                                                                              SG1 786.9 SG2 407.2 THA 176.35
                                                                                                    FLIGHT TIME 76.00
                                                                                                                                                                                     ARRIVAL CATE FER 14 1966
LAUNCH DATE NOV 30 1965
    HELIOCENTRIC CONIC
                                                                                                   01STANCE 199.902
     RL 147.53 LAL .00 LOL 67.58 VL 26.638 GAL -5.61 AZL 86.66 MCA 88.67 SMA 121.80 ECC .23185 INC 3.3424 VI 30.199
RP 107.55 LAP 3.34 LOP 156.25 VP 37.128 GAP -11.63 AZP 89.92 TAL 199.34 TAP 288.02 RCA 93.56 APO 150.05 VZ 35.236
RC 47.916 GL 19.37 GP -2.46 ZAL 119.88 ZAP 8.81 ETS 15.02 ZAE 147.82 ETE 336.12 ZAC 64.02 ETC 161.78 CLP -8.47
    PLANETOCENTRIC CONIC
                                                       -.03 RAL 303.40 RAD 6567.9 VEL 11.962 PTH 2.13 VHP 7.674 DPA -17.59 RAP 331.96 ECC 1.3574
     C3 21.717 VHL 4.660 DLA
     C3 21.717 VHL 4.660 DLA -.03 RAL 303.40 RAD 6567.9 VEL 11.962 PTH 2.13 VHP 7.674 DPA -17.59 RAP 331.96 ECC 1.3574 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 58 28 4879.05 20.06 211.73 166.00 110.46 3 38 5 1633.2 -17.05 35.25 100.00 4 22 12 1970.90 -21.08 22.94 165.56 111.70 4 55 3 1370.9 -17.95 15.54 100.00 16 19 50 4616.62 21.12 192.00 165.58 68.34 17 36 46 4016.6 17.99 184.60 110.00 5 30 24 1757.38 -23.92 5.40 164.23 115.18 5 59 42 1157.4 -20.33 358.09 110.00 17 28 6 4402.91 23.97 174.44 164.24 64.86 18 41 29 3802.9 20.38 167.14
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCUMANTS
SGT 808.2 SGR 408.3 SG3 136.6 ST 360.6 SR 348.7 SS 412.7
RRT -.0994 RRF .1048 RTF -.7346 CRT .8711 CRS .9956 CST .8888
SGB 905.5 R23 -.0072 R13 .7352 LSA 632.8 MSA 145.1 SSA 22.9
EL1 485.2 EL2 127.3 ALF 43.90
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE -.2648 TRA -.4182 TC3 .5706 BAU .1769
      RDE -. 2829 RRA . 0637 RC3 -. 2134 FAU . 03911
     FOE .5048 FRA -.0567 FC3-1.5590 BSP 2383
BDF .3875 BRA .4230 BC3 .6092 FSP -354
      BDE .3875 BRA .4230 BC3 .6092 FSP
```

ARRIVAL DATE FEB 16 1966

LAUNCH DATE NOV 3D 1965

```
DISTANCE 206.692
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.812 GAL -5.66 AZL 86.63 MCA 91.91 SMA 122.85 ECC .22292 INC 3.3718 VI 30.199 RP 107.56 LAP 3.37 LOP 159.50 VP 37.248 GAP -10.74 AZP 90.11 TAL 200.61 TAP 292.52 RCA 95.47 APO 150.24 VZ 35.230 RC 49.420 GL 20.16 GP -2.64 ZAL 121.23 ZAP 11.24 ETS 12.39 ZAE 147.04 ETE 336.73 ZAC 64.82 ETC 161.89 CLP -10.93
   PLANETOCENTRIC CONIC
                                                .39 RAL 301.71 RAD 6567.8 VEL 11.921 PTH 2.12 VHP 7.194 DPA -17.50 RAP 332.79 ECC 1.3412
    C3 20.735 VHL 4.554 OLA .39 RAL 301.71 RAD 6567.8 VEL 11.921 PTH 2.12 VHP 7.194 OPA -17.50 RAP 332.79 ECC 1.3412 LNCH AZNTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 251 3 2234.95 -20.06 42.78 163.65 110.42 3 28 18 1635.0 -17.10 35.35 90.00 14 54 48 4855.08 19.48 210.21 163.47 69.04 16 15 43 4255.1 16.46 202.84 100.00 4 12 34 1971.99 -21.11 23.01 163.22 111.67 4 45 26 1372.0 -17.98 15.61 100.00 16 15 57 4593.27 20.53 190.52 163.03 67.78 17 32 31 3993.3 17.34 183.18 110.00 5 21 14 1757.09 -23.91 5.38 161.90 115.19 5 50 31 1157.1 -20.32 358.08 110.00 17 23 47 4380.94 23.32 173.06 161.69 64.27 18 36 48 3780.9 19.67 165.83
    C3 20.735 VHL 4.554 OLA
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 828.4 SGR 406.3 SG3 154.6

RRT -.1105 RRF .1186 RTF -.7464

SGB 922.7 R23 -.0106 R13 .7472
                                                                                                                                        5T 371.8 SR 342.5 SS 445.8
CRT .8872 CRS .9962 CST .892D
    TOE -.2703 TRA -.3952 TC3 .6243 BAU .1843
    RDE -.2716 RRA .0563 RC3 -.2283 FAU .04299
                                                                                                                                        LSA 658.0 MSA 144.1 SSA 23.5
                                                                                                                                        EL1 491.1 EL2 119.6 ALF 42.35
                                                                             SG1 830.0 SG2 403.0 THA 175.94
    BDE .3832 BRA .3992 BC3 .6647 FSP
                                                                                                                                                     ARRIVAL CATE FEB 18 1966
LAUNCH DATE NOV 30 1965
                                                                                  FLIGHT TIME 80.00
                                                                                  DISTANCE 213.470
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.968 GAL -5.71 AZL 86.60 MCA 95.16 SMA 123.82 ECC .21501 INC 3.4013 V1 30.199
RP 107.58 LAP 3.39 LOP 162.75 VP 37.354 GAP -9.90 AZP 90.31 TAL 201.86 TAP 297.02 RCA 97.19 APO 150.44 VZ 35.224
RC 51.018 GL 20.89 GP -2.85 ZAL 122.52 ZAP 13.80 ETS 10.68 ZAE 146.51 ETE 337.15 ZAC 65.51 ETC 161.96 CLP -13.51
   PLANETOCENTRIC CONIC
    C3 19.930 VHL 4.464 DLA .78 RAL 300.09 RAD 6567.8 VEL 11.887 PTH 2.11 VHP 6.741 DPA -17.46 RAP 333.52 ECC 1.3280 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 41 42 2237.59
14 51 14 4833.54
4 3 24 1974.04
16 12 13 4572.32
5 12 29 1757.84
17 19 38 4361.28
                                                                                                          110.36 3 19 0
68.56 16 11 47
                                                                                       161.49
                                                                          42.94
                                                                                                                           3 19 0
                                                                                                                                           1637.6
                                                                                                                                                             -17.17
                                                                                                                                                                                 35.51
         90.00
                                                         -20.12
                                                                                                                                              4233.5
                                                                                                                                                               15.87
         90.00
                                                          18.95
                                                                          208.85
                                                                                          161.13
                                                                                                            111.62 4 36 18
67.29 17 28 25
                                                                                      161.06
160.68
                                                                                                                                              1374.0
                                                                                                                                                              -18.03
                                                                                                                                                                                 15.74
       100.00
                                                        -21.16
                                                                          23.14
                                                                                                                                              3972.3
                                                                                                                                                              16.73
                                                                                                                                                                               181.91
       100.00
                                                        19.98
                                                                          189.20
                                                                                                            115.17 5 41 47
63.76 18 32 19
                                                                                                                                              1157.8
                                                                                                                                                              -20.34
                                                                                                                                                                               358.12
       110.00
                                                       -23.94
                                                                            5.42
                                                                                      159.76
                                                                                                                                                                19.03
                                                       22.74
                                                                                                                                              3761.3
       110.00
                                                                          171.84
                                                                                          159.34
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 845.5 SGR 403.5 SG3 175.0
RRT -.1246 RRF .1354 RTF -.7566
SGB 936.9 R23 -.0142 R13 .7576
                                                                                                                                        ST 381.6 SR 334.9 SS 481.4
CRT .9015 CRS .9961 CST .8952
LSA 684.3 MSA 143.8 SSA 23.8
    TOE -.2751 TRA -.3728 TC3 .6732 BAU .1907
    ROE -.2605 RRA .D492 RC3 -.2429 FAU .D4743
FOE .6408 FRA -.1631 FC3-2.0604 BSP 2532
BDE .3789 BRA .3760 BC3 .7157 FSP -469
                                                                            SGB 936.9 R23 -.0142 R13 .7576
SGB 847.5 SG2 399.4 THA 175.62
                                                                                                                                        EL1 495.3 EL2 111.7 ALF 40.87
                                                                                                                                                    ARRIVAL DATE FEB 20 1966
                                                                                  FLIGHT TIME 82.00
LAUNCH DATE NOV 30 1965
                                                                                 DISTANCE 220.232
    RL 147.53 LAL .00 LOL 67.58 VL 27.108 GAL -5.76 AZL 86.57 HCA 98.40 SMA 124.69 ECC .20803 INC 3.4310 VL 30.199 RP 107.61 LAP 3.39 LOP 165.99 VP 37.448 GAP -9.09 AZP 90.50 TAL 203.09 TAP 301.48 RCA 98.75 APO 150.64 VZ 35.216 RC 52.701 GL 21.57 GP -3.08 ZAL 123.71 ZAP 16.49 ETS 9.48 ZAE 146.24 ETE 337.37 ZAC 66.09 ETC 161.99 CLP -16.21
   PLANETOCENTRIC CONIC
                                              1.15 RAL 298.57 RAC 6567.8 VEL 11.860 PTH 2.10 VHP 6.313 DPA -17.49 RAP 334.13 ECC 1.3172
    C3 19.272 VHL 4.390 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 32 53 2241.07 -20.20

14 47 52 4814.15 18.47

3 54 45 1976.97 -21.23

16 8 41 4553.48 19.48

5 4 13 1759.54 -23.98

17 15 42 4343.68 22.20
                                                                                      159.51
                                                                                                         110.27
                                                                                                                                          1641.1
                                                                                                                                                           -17.26
                                                                          43.17
                                                                                                                          3 10 14
                                                                                                                                                                                 35.73
         90.00
                                                                                                             68.14 16 8 7
111.55 4 27 42
                                                                                                                                             4214.2
                                                                                                                                                              15.34
                                                                                                                                                                               200.36
                                                                          207.64
                                                                                         158.99
                                                                                                                                             1377.0
                                                                                                                                                              -18.12
                                                                                                                                                                                15.91
                                                                          23.32
                                                                                         159.09
                                                                                                            111.55
        100.00
                                                                                                           66.87 17 24 35
115.12 5 33 33
63.32 18 28 6
                                                                                                                                                             16.19
                                                                                                                                                                              180.78
                                                                                                                                             3953.5
                                                                          188.03
                                                                                      158.54
        100.00
                                                                                                                                                          -20.40
                                                                                                                                                                               358.22
                                                                           5.53
                                                                                         157.81
                                                                                                                                            1159.5
        110.00
                                                                                       157.19
                                                                                                                                                                               163.63
                                                                                                                                                               18.44
                                                                          170.75
                                                                                                                                             3743.7
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                             SGT 859.0 SGR 400.0 SG3 198.4

RRT -.1410 RRF .1556 RTF -.7645

SGB 947.6 R23 -.0191 R13 .7658

SG1 861.4 SG2 395.0 THA 175.24
                                                                                                                                        ST 390.4 SR 326.0 SS 520.0

CRT .9141 CRS .9954 CST .8983

LSA 712.5 MSA 144.4 55A 24.0
     TOE -.2795 TRA -.3516 TC3 .7150 BAU .1958
     RDE - .2494 RRA .0423 RC3 - .2573 FAU .05250
    FDE .7257 FRA -.2292 FC3-2.3585 BSP 2585
BDE .3746 BRA .3542 BC3 .7599 FSP -540
                                                                                                                                        EL1 497.9 EL2 103.6 ALF 39.39
                                                                                                                                                     ARRIVAL CATE FEB 22 1966
                                                                                  FLIGHT TIME 84.00
LAUNCH DATE NOV 30 1965
                                                                                  DISTANCE 226.977
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.232 GAL -5.81 AZL 86.54 HCA 101.64 SMA 125.49 ECC .20191 INC 3.4613 V1 30.199
RP 107.63 LAP 3.39 LOP 169.24 VP 37.530 GAP -8.32 AZP 90.70 TAL 204.27 TAP 305.90 RCA 100.15 APO 150.83 V2 35.208
RC 54.462 GL 22.20 GP -3.33 ZAL 124.81 ZAP 19.33 ETS 8.60 ZAE 146.23 ETE 337.39 ZAC 66.55 ETC 161.97 CLP -19.05
   PLANETOCENTRIC CONIC
     C3 18.738 VHL 4.329 DLA 1.50 RAL 297.15 RAD 6567.8 VEL 11.837 PTH .2.10 VHP 5.910 DPA -17.60 RAP 334.62 ECC 1.3084
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         110.17 3 2 1
67.78 16 4 45
111.46 4 19 39
66.50 17 21 4
                                                                                        157.73
                                                                                                                                                              -17.37
                     2 24 36 2245.32
14 44 48 4796.63
                                                                                                                                              1645.3
         90.00
                                                                          43.44
                                                         -20.30
                                                                                                                                              4196.6
                                                                                                                                                               14.85
                                                          18.02
                                                                          206.55
                                                                                          157.06
         90 00
                    3 46 38 1980.70 -21.32
16 5 27 4536.48 19.03
4 56 29 1762.10 -24.06
17 12 6 4327.85 21.72
                                                                                                                                              1380.7
                                                                                                                                                               -18.22
                                                                           23.56
                                                                                         157.31
        100.00
                                                                                       156.61
                                                                                                                                              3936.5
                                                                                                                                                               15.68
        100.00
                                                                          186.97
                                                                                                            115.05 5 25 51
62.93 18 24 14
                                                                                                                                              1162.1
                                                                                         156.04
                                                                            5.69
        110.00
                                                                             3727.9
                                                                                                                                                              17.91
                                                                          169.78
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TDE -.2825 TRA -.3318 TC3 .7482 BAU .1994
RDE -.2380 RRA .0356 RC3 -.2717 FAU .05827
                                                                                                                                       ST 397.0 SR 315.5 SS 561.5
CRT .9248 CRS .9941 CST .9009
                                                                                                                                       LSA 742.1 MSA 145.6 SSA 23.9
    FOE .8240 FRA -.3051 FC3-2.6923 BSP 2625
BOE .3694 BRA .3338 BC3 .7960 FSP -622
                                                                            SG1 870.4 SG2 389.6 THA 174.74
                                                                                                                                        EL1 498.0 EL2 95.7 ALF 37.96
```

FLIGHT TIME 78.00

```
FLIGHT TIME 86.00
                                                                                                                                                                        ARRIVAL CATE FEB 24 1966
LAUNCH DATE NOV 30 1965
    HELIOCENTRIC CONIC
                                                                                             01STANCE 233.702
     RL 147.53 LAL .00 LOL 67.58 VL 27.342 GAL -5.85 AZL 86.51 HCA 104.87 SMA 126.21 ECC .19655 INC 3.4922 V1 30.199
RP 107.66 LAP 3.38 LOP 172.48 VP 37.603 GAP -7.58 AZP 90.90 TAL 205.39 TAP 310.26 RCA 101.40 APO 151.02 VZ 35.200
RC 56.291 GL 22.78 GP -3.62 ZAL 125.81 ZAP 22.33 ETS 7.93 ZAE 146.49 ETE 337.19 ZAC 66.86 ETC 161.91 CLP -22.05
    PLANETOCENTRIC CONIC
      C3 18.305 VHL 4.278 CLA 1.83 RAL 295.84 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 5.532 OPA -17.79 RAP 334.96 ECC 1.3012
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 16 53 2250.30 -20.42

14 42 6 4780.68 17.60

3 39 5 1985.18 -21.44

16 2 35 4521.04 18.60

4 49 17 1765.44 -24.15

17 8 52 4313.54 21.27
                                                                                                                                                            1650.3
                                                                                                                                                                               -17.50
                                                                                                    156.13
                                                                                                                       110.06 2 54 23
          90.00
                                                                                   43.76
                                                                                                                         67.46 16 1 46 4180.7
111.35 4 12 10 1385.2
66.17 17 17 56 3921.0
114.96 5 18 42 1165.4
62.59 18 20 46 3713.5
                                                                                   205.56
                                                                                                     155.32
                                                                                                                                                                                   14.40
           90.00
                                                                                                                                                                                                      198.35
         100.00
                                                                                    23.85
                                                                                                      155.72
                                                                                                                                                                                   -18.34
                                                                                                                                                                                                       15.42
                                                                                   186.02 154.87
         100.00
                                                                                                                                                                              15.23
                                                                                                                                                                                                      178.85
                                                                                                    154.46
                                                                                                                                                                                 -20.59
17.43
                                                                                      5.91
                                                                                                                                                                                                      358.58
         110.00
                                                                                                   153.51
                                                                                   168.91
        110.00
                                                                                                                                                                                                     161.88
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                        SGT 870.3 SGR 391.8 SG3 255.6

RRT -.1882 RRF .2108 RTF -.7744

SGB 954.4 R23 -.0305 R13 .7767

SGI 874.2 SG2 383.1 THA 174.00
     TCE -. 2823 TRA -. 3126 TC3 .7744 BAU .2021
ROE -. 2263 RRA .0289 RC3 -. 2867 FAU .06492
                                                                                                                                                         ST 398.8 SR 303.4 SS 605.0
CRT .9336 CRS .9924 CST .9022
     FOE .9358 FRA -.3937 FC3-3.0705 BSP 2677
BOE .3618 BRA .3139 BC3 .8258 FSP -719
                                                                                                                                                         LSA 771.3 MSA 147.1 SSA 23.6
                                                                                                                                                           EL1 493.3 EL2 87.9 ALF 36.74
LAUNCH DATE NOV 30 1965
                                                                                              FLIGHT TIME 88.00
                                                                                                                                                                         ARRIVAL DATE FEB 26 1966
                                                                                             DISTANCE 240.404
    HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 27.440 GAL -5.89 AZL 86.48 HCA 108.11 SMA 126.85 ECC .19189 INC 3.5241 V1 30.199
RP 107.69 LAP 3.35 LOP 175.72 VP 37.665 GAP -6.87 AZP 91.10 TAL 206.44 TAP 314.55 RCA 102.51 APO 151.20 VZ 35.191
RC 58.184 GL 23.33 GP -3.95 ZAL 126.69 ZAP 25.51 ETS 7.38 ZAE 147.02 ETE 336.72 ZAC 67.02 ETC 161.80 CLP -25.23
    PLANETOCENTRIC CONIC
     C3 17.955 VHL 4.237 DLA 2.16 RAL 294.65 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 5.179 DPA -18.07 RAP 335.13 ECC 1.2955 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       LNCH TIME L-1 11Mt L-1 2 9 43 2255.99 -20.55
14 39 48 4765.98 17.22
3 32 4 1990.37 -21.56
16 0 8 4506.83 18.21
4 42 37 1769.54 -24.27
17 6 5 4300.43 20.86
                                                                                                                         109.92 2 47 19 1656.0
67.17 15 59 14 4166.0
111.22 4 5 14 1390.4
65.88 17 15 15 3906.8
114.84 5 12 6 1169.5
62.28 18 17 45 3700.4
                                                                                                   154.72
                                                                                    44.12
                                                                                                                                                                                  -17.65
          90.00
                                                                                                                                                                                                       36.65
                                                                                    204.65
                                                                                                      153.78
          90.00
                                                                                                                                                                                    13.98
                                                                                                                                                                                                       197.48
         100.00
                                                                                     24.18
                                                                                                  154.32
153.33
                                                                                                                                                                                  -18.49
                                                                                                                                                                                                       16.74
         100.00
                                                                                  185.15
                                                                                                                                                                                  14.80
                                                                                                                                                                                                       178.01
                                                                                                 153.07
                                                                                                                                                                               -20.72
         110.00
                                                                                      6.17
                                                                                                                                                                                                       358.82
         110.00
                                                                                   168.11
                                                                                                     151.96
                                                                                                                                                                                    16.98
                                                                                                                                                                                                      161.13
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
ST 399.7 SR 289.3 SS 652.8
CRT .9404 CRS .9905 CST .9028
LSA 804.2 MSA 149.5 SSA 23.2
                                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SCT 865.7 SCR 387.4 SCG 290.1 ST 399.7 SR 289.3 SS 652.8 RRT -.2161 RRF .2464 RTF -.7735 CRT .9404 CRS .9905 CST .9028 SCB 948.4 R23 -.0413 R13 .7766 LSA 804.2 MSA 149.5 SSA 23.2 SCI 870.7 SC2 376.1 THA 173.20 EL1 486.8 EL2 80.8 ALF 35.36
     TOE -.2814 TRA -.2975 TC3 .7850 BAU .2019
     ROE -.2138 RRA ..0222 RC3 -.3022 FAU .07237
FOE 1.0666 FRA -.4928 FC3-3.4895 BSP 2665
BOE .3534 BRA .2983 BC3 .8412 FSP -827
LAUNCH DATE NOV 30 1965
                                                                                            FLIGHT TIME 90.00
                                                                                                                                                                       ARRIVAL CATE FEB 28 1966
                                                                                            DISTANCE 247.083
   HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 27.525 GAL -5.92 AZL 86.44 HCA 111.35 SMA 127.42 ECC .18784 INC 3.5572 V1 30.199
RP 107.72 LAP 3.31 LOP 178.96 VP 37.718 GAP -6.19 AZP 91.30 TAL 207.40 TAP 318.74 RCA 103.49 APO 151.36 V2 35.181
RC 60.133 GL 23.83 GP -4.31 ZAL 127.45 ZAP 28.90 ETS 6.91 ZAE 147.84 ETE 335.94 ZAC 66.99 ETC 161.61 CLP -28.60
    PLANETOCENTRIC CONIC
     C3 17.673 VHL 4.204 DLA 2.49 RAL 293.59 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 4.850 DPA -18.46 RAP 335.13 ECC 1.2909
    CS 17.673 VHL 4.204 DLA 2.49 RAL 293.59 RAD 6567,7 VEL 11.792 PH 2.08 VHP 4.890 DFA 18.46 RAP 353.13 ECC 11.2999
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM_IN_2 LAT INJ 2 LONG
90.00 2 3 4 2262.38 -20.70 44.53 153.50 109.77 2 40 47 1662.4 -17.82 37.04
90.00 14 37 59 4752.23 16.85 203.81 152.42 66.90 15 57 12 4152.2 13.58 196.66
100.00 3 25 34 1996.28 -21.71 24.56 153.09 111.07 3 58 51 1396.3 -18.65 17.10
100.00 15 58 10 4493.57 17.84 184.34 151.97 65.61 17 13 4 3893.6 14.40 177.23
110.00 4 36 29 1774.35 -24.41 6.47 151.85 114.71 5 6 3 1174.4 -20.87 359.11
110.00 17 3 46 4288.26 20.47 167.38 150.60 62.01 18 15 14 3688.3 16.57 160.43
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                      SCT 852.7 SCR 383.3 SC3 329.0 ST 396.6 SR 273.2 SS 704.2 RRT -.2483 RRF .2890 RTF -.7680 CRT .9454 CRS .9883 CST .9018 SCB 934.9 R23 -.0562 R13 .7726 LSA 839.2 MSA 152.2 SSA 22.5 SC1 859.2 SC2 368.5 THA 172.19 EL1 475.8 EL2 74.2 ALF 34.02
     TOE -.2777 TRA -.2855 TC3 .7818 BAU .1995
     ROE -.2003 RRA .0154 RC3 -.3190 FAU .08076
     FDE 1.2174 FRA -.6044 FC3-3.9562 BSP 2623
EDE 3424 BRA .2859 BC3 .8444 FSP -950
                                                                                             FLIGHT TIME 92.00
                                                                                                                                                                        ARRIVAL DATE MAR 2 1966
LAUNCH DATE NOV 3D 1965
                                                                                            DISTANCE 253.736
   HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 27.599 GAL -5.95 AZL 86.41 HCA 114.58 SMA 127.93 ECC .18435 INC 3.5917 VI 30.199
RP 107.75 LAP 3.27 LOP 182.20 VP 37.763 GAP -5.54 AZP 91.50 TAL 208.27 TAP 322.84 RCA 104.34 APO 151.51 VZ 35.171
RC 62.133 GL 24.31 GP -4.73 ZAL 128.09 ZAP 32.50 ETS 6.49 ZAE 148.93 ETE 334.79 ZAC 66.77 ETC 161.35 CLP -32.19
    PLANETOCENTRIC CONIC
     C3 17.447 VHL 4.177 OLA 2.81 RAL 292.66 RAD 6567.7 VEL 11.783 PTH 2.08 VHP 4.546 DPA -18.97 RAP 334.93 ECC 1.2871
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 56 56 2269.49
14 36 41 4739.15
3 19 35 2002.89
15 56 43 4480.98
4 30 50 1779.87
17 1 57 4276.76
                                                                                                                                                            1669.5
                                                                                                  152.45
                                                                                                                         109.59
                                                                                                                                           2 34 46
          90.00
                                                                                                                                                                                 -18.00
                                                                                                                                                                                                       37.48
                                                                 -20.86
                                                                                    44.99
                                                                                                                         66.66 15 55 40
110.90 3 52 58
65.36 17 11 24
                                                                                   203.01
                                                                                                                                                                4139.2
                                                                                                                                                                                   13.20
                                                                                                                                                                                                      195.89
          90.00
                                                                 16.50
                                                                                                     151.24
                                                                                                                                                           3881.0
                                                                                                    152.05
         100.00
                                                               -21.87
                                                                                   24.98
                                                                                                                                                                                  -18.83
                                                                                                                                                                                                      17.51
         100.00
                                                                17.48
                                                                                  183.57
                                                                                                    150.79
                                                                                                                                                                                  14.01
                                                                                                                                                                                                     176.50
                                                                                                                                       5 0 30
18 13 14
         110.00
                                                              -24.57
                                                                                     6.83
                                                                                                  150.82
                                                                                                                         114.55
                                                                                                                                                             1179.9
                                                                                                                                                                                -21.05
                                                                                                                                                                                                     359.45
         110.00
                                                               20.10
                                                                                   166.69
                                                                                                     149.41
                                                                                                                           61.75
                                                                                                                                                               3676.8
                                                                                                                                                                                   16.17
                                                                                                                                                                                                      159.78
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
SCT 830.4 SGR 380.2 SG3 373.0 ST 386.1 SR 255.0 SS 757.5
RRT -.2883 RRF .3407 RTF -.7581 CRT .9482 CRS .9855 CST .8979
SGB 913.3 R23 -.0745 R13 .7651 LSA 873.8 MSA 154.6 SSA 21.8
SG1 839.3 SG2 360.2 THA 170.76 EL1 457.6 EL2 68.3 ALF 32.88
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE -.2686 TRA -.2758 TC3 .7668 BAU .1954
     ROE -.1858 RRA .0083 RC3 -.3375 FAU .09028
FDE 1.3864 FRA -.7320 FC3-4.4800 BSP 2581
BDE .3266 BRA .2759 BC3 .8378 FSP -1094
```

ARRIVAL DATE MAR 4 1966

LAUNCH DATE NOV 30 1965

DISTANCE 260.362 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.663 GAL -5.97 AZL 86.37 HCA 117.81 SMA 128.36 ECC .18133 INC 3.6280 VI 30.199
RP 107.78 LAP 3.21 LOP 185.44 VP 37.799 GAP -4.92 AZP 91.69 TAL 209.03 TAP 326.84 RCA 105.09 APO 151.64 V2 35.160
RC 64.180 GL 24.77 GP -5.19 ZAL 128.61 ZAP 36.34 ETS 6.09 ZAE 150.29 ETE 333.15 ZAC 66.35 ETC 160.99 CLP -36.02 PLANETOCENTRIC CONIC C3 17.266 VHL 4.155 DLA 3.14 RAL 291.85 RAC 6567.7 VEL 11.775 PTH 2.08 VHP 4.266 DPA -19.61 RAP 334.51 ECC 1.2841 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 51 15 2277.35 -21.04 45.50 151.56 109.40 2 29 13 1677.4 -18.20 37.97 90.00 14 35 56 4726.44 16.16 202.24 150.23 66.43 15 54 43 4126.4 12.83 195.14 110.71 3 47 34 3 14 4 2010.25 15 55 49 4468.78 1410.3 -19.03 100.00 -22.05 25.46 151.17 3868.8 65.13 17 10 18 114.37 4 55 27 61.51 18 11 47 149.77 13.64 182.83 17.14 -24.74 19.74 359.83 1186.1 -21.24 110.00 4 25 41 1786.12 17 0 42 4265.67 7.23 149.95 148.39 159.15 3665.7 15.78 166.03 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 372.1 SR 234.1 SS 815.8 CRT .9485 CRS .9824 CST .8908 SGT 797.0 SGR 378.4 SG3 421.5 RRT -.3257 RRF .3989 RTF -.7373 SGB 882.3 R23 -.1057 R13 .7488 TCE - .2568 TRA - .2724 TC3 .7303 BAU .1877 RDE -.1696 RRA .0010 RC3 -.3580 FAU .10070 LSA 913.0 MSA 157.5 SSA 21.0 FOE 1.5812 FRA -.8693 FC3-5.0493 BSP 2456 EL1 435.0 EL2 63.4 ALF 31.57 SG1 808.8 SG2 352.6 THA 169.12 BCE .3078 BRA .2724 BC3 .8133 FSP -1250 ARRIVAL DATE MAR 6 1966 FLIGHT TIME 96.00 LAUNCH DATE NOV 3D 1965 DISTANCE 266.961 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.717 GAL -5.98 AZL 86.33 HCA 121.04 SMA 128.74 ECC .17874 INC 3.6666 V1 30.199
RP 107.81 LAP 3.14 LOP 188.67 VP 37.829 GAP -4.32 AZP 91.89 TAL 209.69 TAP 330.73 RCA 105.73 APO 151.75 VZ 35.149
RC 66.268 GL 25.22 GP -5.71 ZAL 129.02 ZAP 40.43 ETS 5.68 ZAE 151.91 ETE 330.90 ZAC 65.71 ETC 160.52 CLP -40.10 PLANETOCENTRIC CONIC C3 17.120 VHL 4.138 OLA 3.48 RAL 291.17 RAD 6567.7 VEL 11.769 PTH 2.08 VHP 4.011 DPA -20.39 RAP 333.85 ECC 1.2818 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 45 59 2286.05 14 35 47 4713.84 3 8 58 2018.43 15 55 30 4456.69 4 20 56 1793.14 17 0 0 4254.77 150.84 109.18 2 24 5 1686.0 -18.43 38.51 90.00 -21.24 46.06 15 54 21 4113.8 12.46 90.00 15.81 201.47 149.37 66.20 150.45 110.50 3 42 36 64.90 17 9 46 1418.4 -19.25 18.47 -22.24 25.99 100.00 13.27 175.08 3856.7 100.00 16.79 182.10 148.91 114.17 4 50 50 61.28 18 10 55 -21.46 1193.1 -24.94 7.68 149.24 110.00 15.40 3654.8 110.00 19.39 165.39 147.52 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 752.4 SGR 378.9 SG3 474.7 RRT -.3596 RRF .4641 RTF -.7028 SGB 842.4 R23 -.1528 R13 .7224 ST 351.4 SR 210.5 SS 877.5 CRT .9456 CRS .9786 CST .8781 LSA 954.8 MSA 160.2 SSA 20.1 TDE -.2397 TRA -.2743 TC3 .6740 BAU .1772 ROE -.1518 RRA -.0065 RC3 -.3808 FAU .11203 FOE 1.8001 FRA-1.0172 FC3-5.6650 BSP 2283 BDE .2837 BRA .2744 BC3 .7741 FSP -1419 SG1 767.9 SG2 346.5 THA 167.06 EL1 405.3 EL2 59.4 ALF 30.24 ARRIVAL DATE MAR 8 1966 FLIGHT TIME 98.00 LAUNCH DATE NOV 30 1965 DISTANCE 273.533 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.763 GAL -5.99 AZL 86.29 HCA 124.26 SMA 129.05 ECC .17652 INC 3.7078 V1 30.199
RP 107.85 LAP 3.06 LOP 191.90 VP 37.832 GAP -3.75 AZP 92.09 TAL 210.24 TAP 334.50 RCA 106.27 APO 151.83 V2 35.138
RC 68.394 GL 25.66 GP -6.29 ZAL 129.30 ZAP 44.79 ETS 5.25 ZAE 153.75 ETE 327.83 ZAC 64.85 ETC 159.93 CLP -44.44 PLANETOCENTRIC CONIC 3.84 RAL 290.62 RAC 6567.7 VEL 11.764 PTH 2.08 VHP 3.781 CPA -21.32 RAP 332.95 ECC 1.2798 C3 17.004 VHL 4.124 DLA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -18.67 108.94 1 41 4 2295.66 14 36 14 4701.08 3 4 13 2027.49 15 55 47 4444.49 150.27 148.66 1695.7 2 19 20 39.11 -21.45 46.68 90.00 15.46 65.98 15 54 35 4101.1 193.65 200.70 12.09 90.00 19.03 149.89 110.26 3 38 0 1427.5 -19.50 -22.46 26.57 100.00 64.67 17 9 51 113.95 4 46 36 61.05 18 10 38 148.20 174.37 181.37 3844.5 12.89 100.00 16.43 -21.71 4 16 35 1800.99 -25.16 19.03 113.95 1201.0 . 73 8.18 148.69 110.00 146.80 157.91 15.02 16 59 54 3643.8 110.00 4243.76 164.74 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 320.7 SR 184.3 55 939.2 CRT .9374 CRS .9730 CST .8544 LSA 996.1 MSA 162.4 SSA 19.2 EL1 365.6 EL2 56.3 ALF 29.06 SGT 697.8 SGR 383.3 SG3 532.6 RRT -.3865 RRF .5364 RTF -.6484 SGB 796.1 R23 -.2211 R13 .6838 TOE -.2146 TRA -.2807 TC3 .6005 BAU .1649 RDE -.1323 RRA -.0147 RC3 -.4070 FAU .12444 FOE 2.0355 FRA-1.1792 FC3-6.3356 BSP 2099 SG1 718.3 SG2 343.4 THA 164.35 BOE .2521 BRA .2811 BC3 .7254 FSP -1615 ARRIVAL CATE HAR 10 1966 FLIGHT TIME 100.00 LAUNCH CATE NOV 30 1965 DISTANCE 280.076 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.800 GAL -5.98 AZL 86.25 MCA 127.49 SMA 129.32 ECC .17462 INC 3.7523 VI 30.199
RP 107.89 LAP 2.98 LOP 195.13 VP 37.868 GAP -3.20 AZP 92.29 TAL 210.67 TAP 338.16 RCA 106.73 APO 151.90 V2 35.126
RC 70.553 GL 26.10 GP -6.93 ZAL 129.47 ZAP 49.41 ETS 4.78 ZAE 155.76 ETE 323.67 ZAC 63.76 ETC 159.18 CLP -49.04 PLANETOCENTRIC CONIC C3 16.911 VHL 4.112 DLA 4.22 RAL 290.17 RAC 6567.7 VEL 11.760 PTH 2.08 VHP 3.577 DPA -22.39 RAP 331.80 ECC 1.2783 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 36 27 2306.33 14 37 21 4687.90 2 59 47 2037.57 15 56 42 4431.89 4 12 34 1809.76 17 0 24 4232.46 -18.93 149.85 108.67 2 14 53 1706.3 90.00 -21.68 47.38 65,75 15 55 29 4087.9 11.69 15.09 199.91 148.09 90.00 109.99 3 33 44 64.45 17 10 34 1437.6 -19.77 149.47 100.00 -22.69 27.23 12.50 173.64 3831.9 100.00 16.07 180.61 148.28 113.69 4 42 44 60.82 18 10 57 -21.98 1209.8 -25.40 8.75 110.00 3632.5 18.65 110.00 164.08 146.22 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 284.6 SR 154.9 SS 1004.8 DIFFERENTIAL CORRECTIONS SGT 636.3 SGR 391.5 SG3 593.1 TOE -.1838 TRA -.2950 TC3 .5005 BAU .1500 CRT .9199 CRS .9646 CST .8119 LSA 1042.7 MSA 164.7 SSA 18.2 RRT -.3803 RRF .6096 RTF -.5550 ROE -.1107 RRA -.0232 RC3 -.4358 FAU .13722 FOE 2.2952 FRA-1.3419 FC3-7.0248 BSP 1831 BOE .2145 BRA .2959 BC3 .6636 FSP -1813 6096 RTF -.5550 508 747.1 R23 -.3279 R13 .6215 501 660.7 S02 348.7 THA 161.51 EL1 319.5 EL2 54.1 ALF 27.44

FLIGHT TIME 94.00

```
FLIGHT TIME 102.00
                                                                                                                                       ARRIVAL CATE MAR 12 1966
LAUNCH DATE NOV 30 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 286.590
    RL 147.53 LAL .00 LOL 67.58 VL 27.831 GAL -5.97 AZL 86.20 MCA 130.71 SMA 129.53 ECC .17301 INC 3.8008 V1 30.199
RP 107.92 LAP 2.88 LOP 198.35 VP 37.879 GAP -2.67 AZP 92.48 TAL 210.99 TAP 341.70 RCA 107.12 APO 151.94 V2 35.114
RC 72.741 GL 26.56 GP -7.64 ZAL 129.52 ZAP 54.28 ETS 4.25 ZAE 157.82 ETE 318.04 ZAC 62.48 ETC 158.25 CLP -53.91
   PLANETOCENTRIC CONIC
    C3 16.838 VHL 4.103 CLA 4.64 RAL 289.85 RAD 6567.7 VEL 11.757 PTH 2.08 VHP 3.399 CPA -23.60 RAP 330.39 ECC 1.2771
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 32 3 2318.20 -21.94 48.15 149.58 108.36 2 10 41 1718.2 -19.23 40.53
                   1 32 3 2318.20
14 39 8 4674.04
2 55 34 2048.81
15 58 18 4418.67
4 8 49 1819.59
17 1 33 4220.65
                                                                                                                              1718.2
                                                                                                             15 57 2
                                                                                  147.65
                                                                                                   65.53
                                                                                                                                4074.0
        90.00
                                                    14.71
                                                                   199.08
                                                                                                                                                11.28
                                                                                                                                                                192.07
                                                                                                                                1448.8
       100.00
                                                    -22.95
                                                                    27.96
                                                                                  149.20
                                                                                                  109.69
                                                                                                                                                -20.06
                                                                                                                                                                20.36
                                                                                                   64.22 17 11 56
113.39 4 39 8
                                                                                                                              1219.6
                                                                                                                                3818.7
                                                                                                                                                               172.88
       100.00
                                                    15.68
                                                                   179.83
                                                                                  147.18
                                                                                                                                                12.08
       110.00
                                                   -25.67
                                                                     9.39
                                                                                  148.02
                                                                                                  113.39
                                                                                                                                                -22.28
                                                                                                                                                                 1.87
                                                                                                   60.59 18 11 53
                                                   18.26
                                                                                  145.77
       110.00
                                                                   163.39
                                                                                                                                3620.7
                                                                                                                                                14.20
                                                                                                                                                               156.62
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 576.8 SGR 405.0 SG3 655.1
RRT -.3583 RRF .6813 RTF -.4005
SCB 704.8 R23 -.4786 R13 .5221
SGI 600.6 SG2 368.7 THA 159.30
                                                                                                                           ST 242.0 SR 122.6 SS 1071.0
CRT .8825 CRS .9493 CST .7277
LSA 1092.1 MSA 166.7 SSA 17.2
EL1 266.1 EL2 52.4 ALF 25.14
    TOE -.1446 TRA -.3163 TC3 .3768 BAU .1352
    RCE -.0869 RRA -.0319 RC3 -.4676 FAU .15023
    FOE 2.5688 FRA-1.5039 FC3-7.7240 BSP 1541
BCE .1687 BRA .3179 BC3 .6005 FSP -2018
LAUNCH DATE NOV 30 1965
                                                                           FLIGHT TIME 104.00
                                                                                                                                        ARRIVAL DATE MAR 14 1966
                                                                          DISTANCE 293.076
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.854 GAL -5.95 AZL 86.15 MCA 133.93 SMA 129.69 ECC .17164 INC 3.8542 VI 30.199
RP 107.96 LAP 2.77 LOP 201.58 VP 37.885 GAP -2.16 AZP 92.68 TAL 211.20 TAP 345.13 RCA 107.43 APO 151.95 VZ 35.101
RC 74.954 GL 27.04 GP -8.43 ZAL 129.46 ZAP 59.39 ETS 3.63 ZAE 159.80 ETE 310.50 ZAC 61.01 ETC 157.12 CLP -59.02
   PLANETOCENTRIC CONIC
    C3 16.783 VHL 4.097 DLA 5.08 RAL 289.63 RAD 6567.7 VEL 11.754 PTH 2.07 VHP 3.248 DPA -24.96 RAP 328.73 ECC 1.2762
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 27 47 2331.50
14 41 38 4659.24
                                                                                                                               1731.5
        90.00
                                                    -22.72
                                                                    49.03
                                                                                 149.44
                                                                                                  108.01
                                                                                                                2 6 39
                                                                                                                                                -19.55
                                                                                                                                                                 41.37
                                                                                                            2 6 39
15 59 18
3 25 53
17 14 0
                                                                   198.19
                                                                                  147.33
                                                                                                    65.29
                                                                                                                                 4059.2
        90.00
                                                     14.29
                                                                                                                                                 10.83
                                                                                                                                                                191.21
                   2 51 32 2061.40
16 0 35 4404.57
4 5 16 1830.64
17 3 20 4208.09
       100.00
                                                    -23.24
                                                                    28.79
                                                                                  149.06
                                                                                                   109.35
                                                                                                                                 1461.4
                                                                                                                                                -20.39
                                                                                                                                                                 21.15
                                                   15.26
       100.00
                                                                  178.99
                                                                                  146.85
                                                                                                   63.98
                                                                                                                                 3804.6
                                                                                                                                                               172.07
                                                                                                                                                11.54
                                                    -25.96
                                                                    10.11
                                                                                  147.90
                                                                                                  113.06
                                                                                                            4 25 -
18 13 29
                                                                                                               4 35 46
                                                                                                                                 1230.6
       110.00
                                                                                                                                               -22.61
                                                                                                                                                                 2.55
                                                                                                                                                 13.76.
                                                                                                   60.34
       110.00
                                                   17.84
                                                                   162.66
                                                                                  145.43
                                                                                                                                 3608.1
                                                                                                                                                                155.92
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 535.2 SGR 424.7 SG3 716.8
RRT -.1706 RRF .7480 RTF -.1606
SGB 683.2 R23 -.6723 R13 .3297
                                                                                                                            ST 197.1 SR 88.4 SS 1133.9
CRT .7986 CRS .9132 CST .5413
LSA 1141.9 MSA 167.8 SSA 16.2
    TOE -.0956 TRA -.3435 TC3 .2316 BAU .1242
    ROE -.0613 RRA -.0412 RC3 -.5027 FAU .16320
    FOE 2.8415 FRA-1.6642 FC3-8.4184 BSP 1298
BDE .1136 BRA .3459 BC3 .5535 FSP -2233
                                                                       SG1 546.9 SG2 409.5 THA 161.92
                                                                                                                            EL1 210.1 EL2 49.9 ALF 20.94
                                                                          FLIGHT TIME 106.00
                                                                                                                                       ARRIVAL CATE MAR 16 1966
LAUNCH DATE NOV 30 1965
                                                                          DISTANC# 299.533
   HELLOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.871 GAL -5.92 AZL 86.09 MCA 137.15 SMA 129.81 ECC .17049 INC 3.9136 VI 30.199
RP 108.00 LAP 2.66 LOP 204.80 VP 37.886 GAP -1.67 AZP 92.87 TAL 211.31 TAP 348.46 RCA 107.68 APO 151.95 V2 35.089
RC 77.191 GL 27.54 GP -9.29 ZAL 129.28 ZAP 64.69 ETS 2.92 ZAE 161.44 ETE 300.65 ZAC 59.42 ETC 155.78 CLP -64.33
   PLANETOCENTRIC CONTC
    C3 16.745 VHL 4.092 DLA 5.58 RAL 289.51 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 3.124 DPA - 26.44 RAP 326.86 ECC 1.2756
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 23 35 2346.43.19
14 44 55 4643.19
2 47 34 2075.62
16 3 37 4389.29
4 1 61 1843.14
17 5 30 4194.54
                                                                                                             2 2 42
16 2 18
                                                                                                 107.61
                                                                                                                             1746.5
        90.00
                                                   -22.54
                                                                   50.01
                                                                                149.43
                                                                                                                                             -19.92
                                                                                                                                                               42.32
                                                                  197.24
                                                                                 147.13
                                                                                                   65.04
                                                                                                                                4043.2
                                                                                                                                                               190.28
        90.00
                                                    13.83
                                                                                                                                                10.35
                                                                                                             3 22 9
                                                                                                  108.95
                                                                                                                                1475.6
                                                                                                                                                -20.75
                                                                                                                                                               22.05
       100.00
                                                   -23.56
                                                                   29.73
                                                                                 149.06
                                                                                                             17 16 47
                                                                                                                                3789.3
                                                                  178.09
                                                                                 146.65
                                                                                                   63.73
                                                                                                                                                              171.20
       100.00
                                                   14.80
                                                                                                                                                11.15
                                                                                                 112.68
                                                                                                              4 32 34
                                                                                                                               1243.1
       110.00
                                                  -26.29
                                                                   10.93
                                                                                 147.92
                                                                                                                                               -22.99
                                                                                                                                                                3.33
                                                                                                   60.09 18 15 44
                                                                                 145.22
                                                                                                                                                13.27
       110.00
                                                17.38
                                                                  161.87
                                                                                                                                3594.5
                                                                                                                                                               155.17
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT OFTERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                     SGT 537.9 SGR 449.5 SG3 774.1
RRT .0767 RRF .8052 RTF .1563
SGB 701.0 R23 .7589 R13 .2855
SG1 541.4 SG2 445.3 THA 11.51
                                                                                                                           ST 168.6 SR 53.2 SS 1196.4
CRT .6572 CRS .7869 CST .1505
LSA 1197.4 MSA 169.2 SSA 15.2
    TOE -.0383 TRA -.3788 TC3 .0602 BAU .1215
    ROE -.0335 RRA -.0504 RC3 -.5393 FAU .17497
    FOE 3.1152 FRA-1.8028 FC3-9.0464 BSP 1180
BOE .0509 BRA .3822 BC3 .5427 FSP -2426
                                                                                                                           EL1 172.4 EL2 39.2 ALF 12.36
                                                                          FLIGHT TIME 108.00
                                                                                                                                       ARRIVAL DATE MAR 18 1966
LAUNCH DATE NOV 30 1965
                                                                          DISTANCE 305.962
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.883 GAL -5.88 AZL 86.02 MCA 140.36 SNA 129.90 ECC .16953 INC 3.9806 VI 30.199
RP 108.04 LAP 2.54 LOP 208.01 VP 37.882 GAP -1.20 AZP 93.07 TAL 211.31 TAP 351.67 RCA 107.88 APO 151.92 V2 35.076
RC 79.446 GL 28.09 GP -10.23 ZAL 128.99 ZAP 70.14 ETS 2.09 ZAE 162.46 ETE 288.48 ZAC 57.75 ETC 154.20 CLP -69.81
   PLANETOCENTRIC CONIC
    C3 16.724 VHL 4.089 DLA 6.13 RAL 289.49 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 3.026 DPA -28.03 RAP 324.81 ECC 1.2752
    ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 19 19 2363.53
14 49 1 4625.58
2 43 34 2091.79
16 7 28 4372.56
                                                                                 149.56
                                                                                                 107.15
                                                                                                               1 58 43
                                                                                                                               1763.5
                                                                                                                                                -20.32
                                                                                                                                                                43.41
                                                    -22.88
                                                                    51.14
        90.00
                                                                                                              16 6 7
                                                                                                                                 4025.6
                                                    13.32
                                                                   196.19
                                                                                  147.04
                                                                                                   64.78
                                                                                                                                                  9.81
                                                                                                                                                               189.27
        90.00
                                                                                                             3 18 26
17 20 20
                                                                                 149.20
                                                                                                  108.49
                                                                                                                                1491.8
                                                                                                                                                                23.08
                                                   -23.91
                                                                    30.80
                                                                                                                                                -21.16
       100.00
                                                                                                                                3772.6
                                                   14.29
                                                                  177.10
                                                                                 146.56
                                                                                                   63.46
                                                                                                                                                               170.24
       100.00
                                                                                                                                                10.61
                   3 58 28 1857.38
17 9 3 4179.72
                                                                                 148.07
                                                                                                  112.23
                                                                                                               4 29 26
                                                                                                                                1257.4
                                                   -26.66
                                                                    11.87
                                                                                                                                               -23.41
                                                                                                                                                                 4.22
       110.00
                                                                                                    59.82 18 18 43
                                                                   161.02
                                                                                                                                                 12.74
                                                   16.87
                                                                                  145.11
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                            ST 182.2 SR 29.5 55 1252.1
CRT .7955 CRS .0281 CST -.3877
                                                                       SGT 602.5 SGR 480.3 SG3 825.2
    TOE .0293 TRA - .4199 TC3 - .1304 BAU .1325
                                                                      RRT .3453 RRF .8530 RTF .4576
SGB 770.5 R23 .5478 R13 .6766
    RDE -.0042 RRA -.0597 RC3 -.5781 FAU .18546
    FOE 3.3642 FRA-1.9227 FC3-9.6006 BSP 1358
BDE .0296 BRA .4241 BC3 .5926 FSP -2611
                                                                                                                           LSA 1254.2 MSA 169.7 SSA 14.1
ELI 183.7 EL2 17.7 ALF 7.42
                                                                      SGI
                                                                              545.5 SG2 420.7 THA 28.24
```

ARRIVAL DATE HAR 20 1966

EL1 630.1 EL2 46.5 ALF 17.08

LAUNCH DATE NOV 3D 1965

DISTANCE 312.364 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.889 GAL -5.83 AZL 85.94 HCA 143.58 SMA 129.94 ECC .16872 INC 4.0574 V1 30.199 RP 108.08 LAP Z.41 LOP 211.23 VP 37.875 GAP -.75 AZP 93.27 TAL 211.20 TAP 354.78 RCA 108.02 APO 151.86 VZ 35.063 RC 81.719 GL 28.69 GP -11.27 ZAL 128.58 ZAP 75.67 ETS 1.14 ZAE 162.57 ETE 274.89 ZAC 56.09 ETC 152.38 CLP -75.38 PLANETOCENTRIC CONIC C3 16.724 VHL 4.089 OLA 6.74 RAL 289.56 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 2.956 DPA -29.71 RAP 322.64 ECC 1.2752 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -20.77 1 54 35 1783.1 1 14 52 2383.10 14 54 3 4606.00 106.61 -23.27 52.45 149.83 4006.0 9.21 12.75 195.04 147.07 64.50 16 10 49 90.00 2 39 26 2110.37 16 12 11 4353.97 3 55 2 1873.77 17 13 4 4163.33 107.96 3 14 36 63.18 17 24 45 1510.4 -21.62 24.27 32.04 149.48 -24.31 169.19 10.02 3754.0 100.00 13.72 176.01 146.58 111.70 4 26 16 59.53 18 22 27 1273.8 -23.89 -27.08 12.96 148.37 110.00 12.14 3563.3 110.00 16.31 160.08 145.11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 247.0 SR 50.0 S\$ 1304.3 CRT .9262 CRS -.8572 CST -.7234 TOE .1054 TRA -.4673 TC3 -.3406 BAU .1575 ROE .0271 RRA -.0683 RC3 -.6166 FAU .19337 SGT 730.8 SGR 514.8 SG3 865.4 RRT .5572 RRF .8905 RTF .6676 SGB 893.9 R23 .4340 R13 .8046 LSA 1317.4 MSA 170.3 SSA 13.0 FDE 3.5900 FRA-2.0029 FC-10.0102 BSP 1809 BDE .1088 BRA .4723 BC3 .7044 FSP -2752 5G1 805.4 SG2 387.9 THA 28.66 EL1 251.3 EL2 18.5 ALF 10.69 ARRIVAL DATE MAR 22 1966 LAUNCH DATE NOV 3D 1965 FLIGHT TIME 112.00 HELIOCENTRIC CONIC DISTANCE 318.738 RL 147.53 LAL .00 LOL 67.58 VL 27.890 GAL -5.78 AZL 85.85 MCA 146.79 SMA 129.95 ECC .16807 INC 4.1467 VI 30.199
RP 108.12 LAP 2.27 LOP 214.44 VP 37.864 GAP -.32 AZP 93.47 TAL 211.00 TAP 357.79 RCA 108.11 APO 151.79 V2 35.050
RC 84.008 GL 29.36 GP -12.41 ZAL 128.05 ZAP 81.19 ETS .04 ZAE 161.64 ETE 261.57 ZAC 54.52 ETC 150.32 CLP -80.98 PLANETOCENTRIC CONIC C3 16.750 VHL 4.093 OLA 7.45 RAL 289.72 RAD 6567.7 VEL 11.753 PTH 2.07 VMP 2.912 DPA -31.48 RAP 320.43 ECC 1.2757 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 10 4 2405.85 -23.70 53.97 150.25 105.96 1 50 10 1805.8 -21.29 46.13 1 10 4 2405.86 15 0 7 4583.97 2 34 59 2131.96 16 17 53 4333.09 3 51 24 1892.84 17 17 58 4144.98 -21.29 150.25 -23.70 53.97 90.00 3984.0 8.53 186.88 64.20 16 16 31 12.10 193.75 147.20 90.00 1532.0 _-22.15 25.66 3 10 31 100.00 -24.75 33.49 149.91 107.32 62.88 17 30 7 111.08 4 22 57 3733.1 168.00 9.34 100.00 13.08 174.80 146.70 -24.44 1292.8 -27.55 14.24 148.82 111.08 110.00 15.67 159.04 145.22 59.23 18 27 3 3545.0 11.48 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE .1906 TRA -.5192 TC3 -.5630 BAU .1934
RDE .0602 RRA -.0765 RC3 -.6548 FAU .19844 ST 346.0 SR 91.7 SS 1350.0 CRT .9401 CRS -.9711 CST -.8645 SGT 906.0 SGR 553.2 SG3 892.8 RRT .6956 RRF .9196 RTF .7899 .0602 RRA -.0765 RC3 -.6548 FAU .19844 LSA 1386.1 MSA 170.5 SSA 11.9 FOE 3.7776 FRA-2.0444 FC-10.2567 BSP 2435 BDE .1998 BRA .5248 BC3 .8636 FSP -2850 SGB 1061.6 R23 .3652 R13 .8695 EL1 356.7 EL2 30.3 ALF 14.09 SG1 998.4 SG2 360.7 THA 26.78 ARRIVAL DATE HAR 24 1966 FLIGHT TIME 114.00 LAUNCH DATE NOV 30 1965 DISTANCE 325.085 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.887 GAL -5.71 AZL 85.75 HCA 149.99 SMA 129.93 ECC .16753 INC 4.2526 V1 30.199
RP 108.16 LAP Z.13 LOP 217.64 VP 37.849 GAP .10 AZP 93.68 TAL 210.71 TAP .70 RCA 108.16 APO 151.70 V2 35.036 86.309 GL 30.12 GP -13.69 ZAL 127.39 ZAP 86.63 ETS 358.78 ZAE 159.74 ETE 250.09 ZAC 53.13 ETC 148.03 CLP -86.53 PLANETOCENTRIC CONIC C3 16.811 VHL 4.100 DLA 8.26 RAL 289.96 RAD 6567.7 VEL 11.756 PTH 2.07 VHP 2.895 DPA -33.36 RAP 318.26 ECC 1.2767 INJ LAT INJ LONG INJ. RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 47.88 1 4 41 2432.68 15 7 24 4558.83 150.83 105,18 1 45 14 1832.7 -21.88 -24.19 55.79 90.00 63.88 16 23 23 106.54 3 5 59 62.56 17 36 34 110.32 4 19 19 58.89 18 32 37 185.45 147.46 3958.8 7.75 11.35 192.28 90.00 27.31 -22.75 2 30 2 2157.43 -25.26 35.21 150.49 1557.4 100.00 166.67 146.95 37/19.3 8.56 16 24 45 4309.31 12.34 173.42 100.00 7.90 -25.07 3 47 23 1915.34 -28.10 15.77 149.44 1315.3 110.00 17 23 52 14.95 157.87 145.44 3524.2 10.71 151.32 4124.17 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE .2847 TRA -.5740 TC3 -.7906 BAU .2363
RDE .0951 RRA -.0844 RC3 -.6927 FAU .20043 SGT 1111.6 SGR 595.4 SG3 905.9 ST 466.7 SR 138.6 SS 1386.5 CRT .9565 CRS -.9915 CST -.9246 RRT .7823 RRF .9418 RTF .8588 SGB 1261.0 R23 .3198 R13 .9073 LSA 1459.6 MSA 169.9 SSA 10.7 FOE 3.9139 FRA-2.0494 FC-10.3216 BSP 3156 EL1 485.3 EL2 38.9 ALF 15.97 BOE .3001 BRA .5802 BC3 1.0512 FSP -2910 SG1 1214.4 SG2 339.5 THA 24.80 ARRIVAL DATE MAR 26 1966 FLIGHT TIME 116.00 LAUNCH DATE NOV 30 1965 HELIOCENTRIC -CONIC DISTANCE 331.405 RL 147.53 LAL .00 LOL 67.58 VL 27.880 GAL -5.63 AZL 85.62 HCA 153.20 SMA 129.88 ECC .16712 INC 4.3813 V1 30.199
RP 108.20 LAP 1.97 LOP 220.85 VP 37.832 GAP .51 AZP 93.91 TAL 210.33 TAP 3.53 RCA 108.17 APO 151.58 V2 35.023 88.623 GL 31.01 GP -15.17 ZAL 126.59 ZAP 91.89 ETS 357.31 ZAE 157.09 ETE 241.12 ZAC 52.05 ETC 145.53 CLP -91.96 PLANETOCENTRIC CONIC C3 16.925 VHL 4.114 DLA 9.21 RAL 290.27 RAD 6567.7 VEL 11.760 PTH 2.08 VHP 2.903 CPA -35.36 RAP 316.23 ECC 1.2785 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG ENCH AZMTH LNCH TIME L-I TIME 1864.9 1 39 30 50.00 151.59 104.21 0 58 25 2464.90 -24.75 57.98 3929.7 6.83 183.80 63.54 16 31 38 90.00 15 16 9 4529.69 10.47 190.59 147.84 3 0 44 1588.D -23.45 29.32 151.27 105.59 100.00 2 24 16 2188.02 -25.83 37.30 17 44 21 7.66 3681.8 100.00 16 32 59 4281.80 11.47 171.84 147.32 62.21 4 15 8 1342.4 -25.81 3 42 46 1942.37 17 30 58 4100.22 -28.72 17.63 150.24 109.39 110.00 18 39 19 3500.2 9.83 150.03 110.00 145.78 58.53 14.10 156.53 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 602.4 SR 190.3 SS 1417.3 CRT .9668 CRS -.9972 CST -.9520 TOE .3872 TRA -.6314 TC3-1.0180 BAU .2834 SGT 1336.4 SGR 641.6 SG3 903.3 RRT .8377 RRF .9585 RTF .8982 RDE .1331 RRA -.0918 RC3 -.7297 FAU .19894 LSA 1542.4 MSA 169.3 SSA FDE 4.0067 FRA-2.0105 FC-10.1765 BSP 3940 BDE .4095 BRA .6380 BC3 1.2525 FSP -2917 SGR 1482.4 R23 .2901 R13 .9301

FLIGHT TIME 110.00

SG1 1446.6 SG2 323.7 THA 23.13

```
FLIGHT TIME 118.00
 LAUNCH DATE NOV 30 1965
                                                                                                                                                                   ARRIVAL DATE MAR 28 1966
    HELIOCENTRIC CONIC
                                                                                          DISTANCE 337.700
     RL 147.53 LAL .00 LOL 67.58 VL 27.869 GAL -5.55 AZL 85.46 HCA 156.40 SMA 129.80 ECC .16680 INC 4.5418 V1 30.199
RP 108.24 LAP 1.82 LOP 224.05 VP 37.812 GAP .89 AZP 94.16 TAL 209.87 TAP 6.27 RCA 108.15 APO 151.45 V2 35.010
      RC 90.946 GL 32.07 GP -16.92 ZAL 125.62 ZAP 96.91 ETS 355.59 ZAE 153.90 ETE 234.55 ZAC 51.37 ETC 142.82 CLP -97.22
    PLANETOCENTRIC CONIC
     C3 17.115 VHL 4.137 DLA 10.34 RAL 290.64 RAD 6567.7 VEL 11.769 PTH 2.08 VHP 2.938 DPA -37.57 RAP 314.43 ECC 1.2817
     17.113 VML 4.137 OLA 1U.34 RAL 29U.64 RAD 6567.7 VEL 11.769 PTH 2.08 VMP 2.938 DPA -37.57 RAP 314.43 ECC 1.2817 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 50 47 2504.52 -25.38 60.71 152.57 102.99 1 32 31 1904.5 -23.34 52.64 90.00 15 26 45 4495.22 9.42 188.60 148.37 63.17 16 41 40 3895.2 5.74 181.85 100.00 2 17 15 2225.61 -26.50 39.90 152.26 104.37 2 54 21 1625.6 -24.26 31.81 100.00 16 42 57 4249.35 10.43 169.99 147.83 61.83 17 53 47 3649.3 6.59 163.32 110.00 3 37 10 1975.58 -29.45 19.94 151.29 108.20 4 10 5 1375.6 -26.68 11.84 110.00 17 39 33 4072.16 13.10 154.97 146.26 58.14 18 47 25 3472.2 8.79 148.52
    DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     TOE .4997 TRA -.6901 TC3-1.2349 BAU .3327
RDE .1755 RRA -.0997 RC3 -.7674 FAU .19426
FDE 4.0496 FRA-1.9423 FC3-9.8264 BSP .4757
BDE .5296 BRA .6973 BC3 1.4539 FSP -2883
                                                                                    SGT 1570.6 SGR 694.2 SG3 885.5
RRT .8744 RRF .9711 RTF .9222
SGB 1717.2 R23 .2699 R13 .9450
                                                                                                                                                      ST 751.6 SR 247.4 SS 1440.1
CRT .9738 CRS -.9991 CST -.9681
                                                                                                                                                     LSA 1634.5 MSA 167.9 SSA
                                                                                                                                                                                                     8.3
                                                                                    SG1 1688.4 SG2 313.4 THA 21.92
                                                                                                                                                      EL1 789.4 EL2 53.6 ALF 17.86
EAUNCH DATE NOV 30 1965
                                                                                          FLIGHT TIME 120.00
                                                                                                                                                                   ARRIVAL DATE MAR 30 1966
    HELIOCENTRIC CONIC
                                                                                          DISTANCE 343,970
     RL 147.53 LAL .00 LOL 67.58 VL 27.855 GAL -5.45 AZL 85.25 MCA 159.60 SMA 129.70 ECC .16658 INC 4.7494 VI 30.199
RP 108.29 LAP 1.65 LOP 227.25 VP 37.789 GAP 1.27 AZP 94.45 TAL 209.32 TAP 8.92 RCA 108.10 APO 151.31 VZ 34.996
                              33.37 GP -19.09 ZAL 124.47 ZAP 101.57 ETS 353.52 ZAE 150.27 ETE 230.04 ZAC 51.25 ETC 139.91 CLP-102.26
           93.279 GL
    PLANETOCENTRIC CONIC
     C3 17.426 VHL 4.174 DLA 11.73 RAL 291.07 RAD 6567.7 VEL 11.782 PTH
                                                                                                                          2.08 VHP 3.001 DPA -40.11 RAP 312.97 ECC 1.2868
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 0 41 2 2554.75

90.00 15 39 52 4453.32

100.00 2 8 19 2273.22

100.00 16 55 16 4210.07

110.00 3 30 1 2017.39

110.00 17 50 3 4038.47
                                                                                                                    101.38
                                                                                                                                       1 23 37
                                                                                                 153.83
                                                               -26.11
                                                                                 64.21
                                                                                                                                                        1954.7
                                                                                                                                                                            -24.27
                                                                                                                                                                                                 56.D2
                                                                 8.12
                                                                                 186.21
                                                                                                  149.08
                                                                                                                        62.78
                                                                                                                                                           3853.3
                                                                                                                                                                                4.41
                                                                                                                                                                                                179.50
                                                                                                                     -27.26
                                                                                  43.23
                                                                                                  153.56
                                                                                                                                                           1673.2
                                                                                                                                                                             -25.22
                                                                                                                                                                                                 35.02
                                                                 9.16
                                                                               167.77
                                                                                                  148.53
                                                                                                                                                        3610.1
                                                                                                                                                                                                161.14
                                                                                                                                                                                5.27
                                                               -30.30
                                                                                  22.91
                                                                                    140.90 57.71 57 22 3438.5
MIO-COURSE EXECUTION ACCURACY ORBIT DEFENSE
SGT 1808.4 SGR 745 3 777
                                                                                                  152.65
                                                                                                                                                          1417.6
                                                                                                                                                                                                 14.66
                                                            11.88
                                                                                153.13
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                    SGT 1808.4 SGR 755.3 SG3 851.5
RRT .8993 RRF .9805 RTF .9371
SGB 1959.8 R23 .2567 R13 .9547
     TOE .6253 TRA -.7500 TC3-1.4316 BAU .3825
                                                                                                                                                      ST 915.1 SR 314.9 SS 1461.8
CRT .9783 CRS -.9997 CST -.9770
     RDE .2265 RRA -.1077 RC3 -.8044 FAU .18574
     FOE 4.0656 FRA-1.8322 FC3-9.2278 BSP 5582
BOE .6651 BRA .7577 BC3 1.6421 FSP -2779
                                                                                                                                                     LSA 1745.1 MSA 166.9 SSA
                                                                                     SGI 1935.4 SG2 308.7 THA 21.15
                                                                                                                                                     EL1 965.8 EL2 61.8 ALF 18.68
LAUNCH DATE NOV 30 1965
                                                                                         FLIGHT TIME 122.00
                                                                                                                                                                  ARRIVAL DATE APR 1 1966
    HELIOCENTRIC CONIC
                                                                                         DISTANCE 350.216
     RL 147.53 LAL .00 LOL 67.58 VL 27.838 GAL -5.35 AZL 94.97 MCA 162.80 SMA 129.58 ECC .16644 INC 5.0301 VI 30.199
RP 108.33 LAP 1.49 LOP 230.44 VP 37.764 GAP 1.63 AZP 94.81 TAL 208.70 TAP 11.50 RCA 108.02 APO 151.15 VZ 34.983
     RC 95.621 GL 35.01 GP -21.90 ZAL 123.06 ZAP 105.78 ETS 350.94 ZAE 146.20 ETE 227.25 ZAC 51.87 ETC 136.75 CLP-107.05
    PLANETOCENTRIC CONIC
     C3 17.940 VHL 4.236 OLA 13.48 RAL 291.52 RAO 6567.7 VEL 11.803 PTH 2.09 VHP 3.098 DPA -43.20 RAP 311.98 ECC 1.2952
    17.94U VHL 4.256 DLA 13.48 RAL 291.52 RAD 6567.7 VEL 11.8U3 PTH 2.09 VHP 3.098 DPA -43.20 RAP 311.98 ECC 1.2952
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 27 53 2621.11 -26.91 68.90 155.50 99.16 1 11 34 2021.1 -25.37 60.58
90.00 15 56 39 4400.46 6.46 183.21 150.07 62.37 17 9 59 3800.5 2.71 176.54
100.00 1 56 17 2336.01 -28.12 47.70 155.27 100.58 2 35 13 1736.0 -26.37 39.33
100.00 17 10 56 4160.80 7.54 165.00 149.48 60.99 18 20 16 3560.8 3.62 158.42
110.00 3 20 24 2072.83 -31.31 26.90 154.45 104.47 3 54 56 1472.8 -29.01 18.45
110.00 18 3 18 3996.74 10.35 150.86 147.79 57.24 19 9 55 3396.7 5.96 144.52
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
     TOE .7698 TRA -.8125 TC3-1.5956 BAU .4330
ROE .2904 RRA -.1184 RC3 - RAJE EAU .4330
                                                                                   SGT 2046.6 SGR 832.6 SG3 802.0
RRT .9167 RRF .9872 RTF .9471
SGB 2209.5 R23 .2460 R13 .9619
                                                                                                                                                    ST 1095.9 SR 396.5 SS 1476.4
CRT .9820 CRS -.9999 CST -.9829
     ROE .2904 RRA -.1184 RC3 -.8446 FAU .17413
FOE 4.0398 FRA-1.7049 FC3-8.4031 BSP 6442
BOE .8227 BRA .8211 BC3 1.8053 FSP -2643
                                                                                                                                                     LSA 1873.7 MSA 164.9 55A
                                                                                                                                                                                                    5.9
                                                                                    SG1 2187.5 SG2 311.2 THA 20.90
                                                                                                                                                    EL1 1163.2 EL2 70.6 ALF 19.63
LAUNCH DATE NOV 3D 1965
                                                                                         FLIGHT TIME 124.00
                                                                                                                                                                  ARRIVAL DATE APR 3 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 356.437
    RL 147.53 LAL .00 LOL 67.58 VL 27.819 GAL -5.23 AZL 84.57 HCA 165.99 SMA 129.44 ECC .16639 INC 5.4341 V1 30.199 RP 108.37 LAP 1.31 LOP 233.63 VP 37.738 GAP 1.99 AZP 95.27 TAL 208.01 TAP 14.01 RCA 107.91 APO 150.98 V2 34.970
     RC 97.969 GL 37.20 GP -25.75 ZAL 121.29 ZAP 109.35 ETS 347.55 ZAE 141.49 ETE 225.95 ZAC 53.56 ETC 133.25 CLP-111.59
    PLANETOCENTRIC CONIC
     C3 18.826 VHL 4,339 DLA 15.79 RAL 291.98 RAD 6567.8 VEL 11.841 PTH 2.10 VHP 3.246 DPA -47.24 RAP 311.67 ECC 1.3D98
    18.826 WL 4,339 DLA 15.79 RAZ 291.98 RAD 6567.8 VEL 11.841 PTH 2.10 VPP 3.246 DPA -47.24 RAP 311.67 ECC 1.3098 LNCH AZMTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 8 49 2714.19 -27.74 75.59 157.80 95.91 0 54 3 2114.2 -26.64 67.10 90.00 16 19 22 4329.97 4.22 179.24 151.50 61.97 17 31 32 3730.0 .44 172.60 100.00 1 38 53 2423.72 -29.05 54.05 157.62 97.36 2 19 17 1823.7 -27.73 45.49 100.00 17 31 58 4095.67 5.38 161.38 150.87 60.55 18 40 14 3495.7 1.42 154.84 110.00 3 6 31 2149.52 -32.48 32.57 156.97 101.30 3 42 21 1549.5 -30.58 23.87 110.00 18 20 50 3942.63 8.34 147.95 149.05 56.73 19 26 32 3342.6 3.91 141.67
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
     TOE .9482 TRA -.8799 TC3-1.7039 BAU .4829
ROE .3792 RRA -.1321 RC3 -.8822 FAU .15797
                                                                                                                                                    ST 1304.2 SR 504.2 SS 1489.7
CRT .9850 CRS -.9999 CST -.9870
                                                                                     SGT 2283.0 SGR 932.6 SG3 733.2
                                                                                    FDE 3.9903 FRA-1.5462 FC3-7.2646 BSP 7308
BDE 1.0212 BRA .8897 BC3 1.9187 FSP -2429
                                                                                   SGB 2466.1 R23
```

ARRIVAL DATE APR 5 1966

JPL TM 33-99

LAUNCH DATE NOV 30 1965

```
HELIOCENTRIC CONIC
                                                                                             DISTANCE 362.634
    RL 147.53 LAL .00 LOL 67.58 VL 27.796 CAL -5.11 AZL 83.93 HCA 169.18 SMA 129.29 ECC .16641 INC 6.0703 VI 30.199
RP 108.41 LAP 1.14 LOP 236.82 VP 37.709 CAP 2.33 AZP 95.96 TAL 207.26 TAP 16.44 RCA 107.77 APO 150.80 V2 34.957
    RC 100.323 GL 40.30 GP -31.40 ZAL 118.96 ZAP 111.91 ETS 342.87 ZAE 135.61 ETE 226.00 ZAC 56.92 ETC 129.25 CLP-115.92
   PLANETOCENTRIC CONIC
    C3 20.493 VHL 4.527 DLA 19.02 RAL 292.38 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 3.488 DPA -52.96 RAP 312.49 ECC 1.3373
    C3 20.493 VHL 4.527 OLA 19.02 RAL 292.38 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 3.488 DPA -52.96 RAP 312.49 ECC 1.3373 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 53 21 4226.93 .91 173.48 153.83 61.70 18 3 48 3626.9 -2.88 166.85 100.00 111 6 2557.54 -29.82 63.92 161.08 92.22 1 53 43 1957.5 -29.19 55.17 100.00 18 3 1 4002.12 2.23 156.22 153.10 60.18 19 9 43 3402.1 -1.76 149.70 110.00 2 44 39 2264.87 -33.68 41.35 160.75 96.23 3 22 23 1664.9 -32.45 32.33 110.00 18 45 58 3867.55 5.52 143.98 151.06 56.21 19 50 25 3267.6 1.04 137.75
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 2522.0 SGR 1058.4 SG3 638.9

RRT .9378 RRF .9947 RTF .9595

SGB 2739.0 R23 .2238 R13 .9723

SGI 2717.3 SG2 344.2 THA 22.04
                                                                                                                                                            ST 1557.1 SR 652.8 SS 1490.6
CRT .9878 CRS -.9998 CST -.9903
     TOE 1.1913 TRA -.9613 TC3-1.7221 BAU .5335
     RDE .5131 RRA -.1535 RC3 -.9091 FAU .13633
    FOE 3.8819 FRA-1.3680 FC3-5.7593 BSP 8250
BDE 1.2971 BRA .9735 BC3 1.9474 FSP -2143
                                                                                                                                                             LSA 2246.6 MSA 159.9 55A
                                                                                                                                                            EL1 1685.8 EL2 93.8 ALF 22.57
                                                                                                                                                                           ARRIVAL DATE APR 7 1966
                                                                                              FLIGHT TIME 128.00
LAUNCH DATE NOV 30 1965
                                                                                             DISTANCE 368.807
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.772 GAL -4.98 AZL 82.77 MCA 172.37 SMA 129.12 ECC .16650 INC 7.2293 V1 30.199
RP 108.44 LAP .96 LOP 240.01 VP 37.679 GAP 2.65 AZP 97.17 TAL 206.44 TAP 18.80 RCA 107.62 APO 150.61 V2 34.945
RC 102.682 GL 45.04 GP -40.37 ZAL 115.60 ZAP 112.57 ETS 335.95 ZAE 127.30 ETE 227.06 ZAC 63.22 ETC 124.42 CLP-120.25
   PLANETOCENTRIC CONIC
    C3 24.209 VHL 4.920 DLA 23.92 RAL 292.65 RAD 6568.0 VEL 12.066 PTH 2.16 VHP 3.961 DPA -61.78 RAP 315.93 ECC 1.3984 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 32 51 3123.22 -27.01 105.31 166.16 81.16 23 24 54 2523.2 -27.96 98.77 90.00 17 56 47 4041.96 -5.04 163.14 158.63 62.10 19 4 9 3442.0 -8.74 156.41 100.00 0 17 42 2797.86 -29.12 81.71 166.49 82.91 1 4 20 2197.9 -29.79 72.97 100.00 18 58 34 3842.55 -3.18 147.47 157.60 60.26 20 2 36 3242.6 -7.11 140.89
                       22 32 51 3123.22
27 36 47 4041.96
0 17 42 2797.86
18 58 34 3842.55
2 4 43 2463.03
19 28 2 3750.15
                                                                                                                                                                  -7.11
1863.0 -34.10
3150.2
                                                                                                                              87.13 2 45 46
55.83 20 30 32
                                                                                                                                             2 45 46
                                                                                      56.78
                                                                                                      167.00
                                                                                                                                                                                                           47.54
                                                                -34.08
        110.00
                                                                  1.05
                                                                                     137.83
                                                                                                       154.96
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
     TOE 1.5897 TRA-1.0786 TC3-1.5733 BAU .5824
                                                                                         SGT 2777.0 SGR 1241.4 SG3 501.4
                                                                                                                                                            ST 1897.1 SR 867.4 SS 1459.7
                                                                                       RRT .9439 RRF .9960 RTF .9649
568 3041.9 R23 .2059 R13 .9773
                                                                                                                                                            CRT .9905 CRS -.9998 CST -.9932
     ROE .7421 RRA - .1848 RC3 - .8736 FAU .10478
     FDE 3.6422 FRA-1.1376 FC3-3.7470 BSP 9296
BDE 1.7544 BRA 1.0944 BC3 1.7996 FSP -1701
                                                                                                                                                            LSA 2541.3 MSA 155.4 55A
                                                                                        SG1 3018.4 SG2 377.2 THA 23.26
                                                                                                                                                            EL1 2083.2 EL2 108.3 ALF 24.44
                                                                                              FLIGHT TIME 130.00
                                                                                                                                                                          ARRIVAL DATE APR 9 1966
LAUNCH CATE NOV 30 1965
                                                                                             DISTANCE 374.951
   HELLOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 27.745 GAL -4.83 AZL 79.97 HCA 175.55 SMA 128.93 ECC .16665 INCID.D278 V1 30.199
RP 108.48 LAP .77 LOP 243.20 VP 37.648 GAP 2.97 AZP 100.00 TAL 205.55 TAP 21.09 RCA 107.44 APO 150.42 VZ 34.932
     RC 105.043 GL 53.10 GP -55.90 ZAL 109.95 ZAP 109.09 ETS 324.41 ZAE 113.58 ETE 226.76 ZAC 75.11 ETC 117.35 CLP-125.70
   PLANETOCENTRIC CONIC
     C3 36.243 VHL 6.020 DLA 32.22 RAL 292.70 RAD 6568.4 VEL 12.554 PTH 2.28 VHP 5.293 DPA -76.32 RAP 332.82 ECC 1.5965
    C3 36.243 VHL 6.020 0LA 32.22 RAL 292.70 RAO 6568.4 VEL 12.554 PTH 2.28 VMP 5.293 DPA -76.32 RAP 332.82 ECC 1.5965 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.94 18 10 27 4082.36 -17.86 172.91 171.99 62.72 19 18 29 3482.4 -21.37 165.70 106.06 22 19 36 3284.56 -17.84 113.78 171.98 62.71 23 14 20 2684.6 -21.35 106.57 106.06 22 19 36 3284.56 -17.84 113.78 171.99 62.72 19 18 29 3482.4 -21.37 165.70 106.06 22 19 36 3284.56 -17.84 113.78 171.98 62.71 23 14 20 2684.6 -21.35 106.57 110.00 0 15 48 2937.61 -26.83 91.54 176.44 67.98 1 4 45 2337.6 -29.57 83.43 110.00 21 17 21 3477.31 -9.30 123.48 166.88 56.96 22 15 19 2877.3 -13.59 117.00
                      18 10 27 4082.36 -17.86

18 10 27 4082.36 -17.86

18 10 27 4082.36 -17.86

18 10 27 4082.36 -17.86

22 19 36 3284.56 -17.84

0 15 48 2937.61 -26.83

21 17 21 3477.31 -9.30
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   GIFFERENTIAL CORRECTIONS
                                                                                       SGT 3111.1 SGR 1335.0 SG3 296.8

RRT .9448 RRF .9935 RTF .9737

SGB 3385.4 R23 .1760 R13 .9836

SGI 3361.1 SG2 405.1 THA 22.41
                                                                                                                                                             ST 2450.4 SR 1096.0 SS 1319.8
     TOE 2.5322 TRA-1.3089 TC3-1.0837 BAU .6020
                                                                                                                                                             CRT .9929 CRS -.9995 CST -.9961
     ROE 1.1491 RRA -.2016 RC3 -.6074 FAU .05756
     FOE 3.0189 FRA -.7981 FC3-1.3749 BSP 10276
BOE 2.7807 BRA 1.3243 BC3 1.2423 FSP -1006
                                                                                                                                                             LSA 2987.8 MSA 143.8 SSA
                                                                                                                                                            EL1 2681.7 EL2 119.1 ALF 24.00
                                                                                              FLIGHT TIME 132.00
LAUNCH DATE NOV 30 1965
                                                                                              DISTANCE 381.009
   HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 27.717 GAL -4.67 AZL 63.90 MCA 178.66 SMA 128.73 ECC .16676 INC26.1015 V1 30.199
RP 108.52 LAP .59 LOP 246.38 VP 37.616 GAP 3.26 AZP 116.10 TAL 204.55 TAP 23.21 RCA 107.27 APO 150.20 V2 34.920
RC 107.406 GL 64.72 GP -82.37 ZAL 98.44 ZAP 97.55 ETS 241.07 ZAE 85.27 ETE 153.79 ZAC 97.43 ETC 42.78 CLP 171.52
   PLANETOCENTRIC CONIC
     C3 180.665 VHL 13.441 DLA 45.62 RAL 296.75 RAD 6570.9 VEL 17.378 PTH 2.96 VHP 14.654 DPA -70.86 RAP 112.89 ECC 3.9733
    C3 180.665 VHL 13.441 DLA 45.62

LNCH AZMTH LNCH TIME L-I TIME

52.60 16 39 7 4750.16

127.40 0 27 8 3327.91

52.60 16 39 7 4750.16

127.40 0 27 8 3327.91

52.60 16 39 7 4750.16

127.40 0 27 8 3327.91
                                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                    -7.76
                                                                                     220.13
                                                                                                      199.10
                                                                                                                           44.90 17 58 18
                                                                                                                                                                  4150.2
                                                                                                                                                                                    -13.38
                                                                    -7.74
                                                                                     109.72
                                                                                                       199.09
                                                                                                                               44.89
                                                                                                                                             1 22 36
                                                                                                                                                                   2727.9
                                                                                                                                                                                      -13.36
                                                                                                                                                                                                         104.35
                                                                   -7.76
                                                                                     220.13
                                                                                                       199.10
                                                                                                                               44.90
                                                                                                                                           17 58 18
                                                                                                                                                                   4150.2
                                                                                                                                                                                     -13.38
                                                                                                                                                                                                         214.75
                                                                                                    199.09
                                                                                                                               44.89
                                                                                                                                                                   2727.9
                                                                                                                                                                                     -13.36
                                                                                                                                                                                                        104.35
                                                                   -7.74
                                                                                     109.72
                                                                                                                                             1 22 36
                                                                                     109.72 199.09 44.89 1 22 36
220.13 199.10 44.89 1 22 36
109.72 199.09 44.89 1 22 36
MID-COURSE EXECUTION ACCURACY ORE
SCT 2516.4 SGR 2660.3 SG3 78.8 ST
RRT -.9474 RRF -.9706 RTF ..9966 CR1
SGB 3661.8 R23 -.0894 R13 -.9960 L54
SGI 3613.5 SG2 593.0 THA 133.32 EL1
                                                                   -7.76
                                                                                                                                                                   4150.2
                                                                                                                                                                                     -13.38
                                                                                                                                                                                                         214.75
                                                                                                                                                                                 -13.36
                                                                                                                                                                   2727.9
                                                                                                                                                                                                        104.35
                                                                                     109.72
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
      TOE 5.8035 TRA -.7326 TC3 -.0421 BAU .1016
                                                                                                                                                           ST 2477.5 SR 2364.0 SS 1118.6
      RDE-5.4723 RRA 2.0983 RC3 .0007 FAU .00226
                                                                                                                                                             CRT -.9941 CRS .9965 CST -.9997
                                                                                                                                                           LSA 3597.5 MSA 188.3 SSA .4
ELI 3419.3 ELZ 186.2 ALF 136.35
     FDE 2.0660 FRA -.3850 FC3 -.0108 8SP 11312
      BOE 7.9766 BRA 2.2225 BC3 .0421 FSP -268
```

FLIGHT TIME 126.00

```
FLIGHT TIME 134.00
LAUNCH DATE NOV 30 1965
                                                                                                                                                   ARRIVAL DATE APR 13 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 387.306
    RL 147.53 LAL .00 LOL 67.58 VL 27.687 GAL -4.55 AZL 101.55 MCA 182.02 SMA 128.53 ECC .16738 INC11.5506 V1 30.199
RP 108.56 LAP .40 LOP 249.56 VP 37.583 GAP 3.61 AZP 78.46 TAL 203.72 TAP 25.74 RCA 107.01 APO 150.04 V2 34.909
     RC 109.770 GL -56.26 GP 75.26 ZAL 106.71 ZAP 102.50 ETS 46.46 ZAE 102.04 ETE 135.81 ZAC 61.65 ETC 241.51 CLP-148.25
   PLANETOCENTRIC CONIC
     C3 44.162 VHL 6.645 DLA -70.18 RAL 346.48 RAD 6568.7 VEL 12.866 PTH 2.34 VHP 9.982 DPA 50.83 RAP 279.60 ECC 1.7268
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        22.65
                       6 37 7 1966.63
                                                         29.61
                                                                        68.23
                                                                                      244.65
                                                                                                         157.05
                                                                                                                         7 9 53
                                                                                                                                        1366.6
                                                                                                                                                          36.92
                                                                                                         157.05 18 37 35
157.05 7 9 53
157.05 16 37 35
157.05 7 9 53
157.05 7 9 53
157.05 18 37 35
                     17 5 55
                                      5500.06
                                                                        255.85
                                                                                         244.67
                                                                                                                                           4900.1
                                                                                                                                                                            252.38
       157.35
                                                          29.62
                                                                                                                                                             36.93
                      6 37 7
                                                                                         244.65
                                                                                                                                           1366.6
        22.65
                                      1966.63
                                                         29.61
                                                                         68.23
                                                                                                                                                             36.92
                                                                                                                                                                             64.75
                    17 5 55 5500.06
6 37 7 1966.63
17 5 55 5500.06
                                                                       255.85
                                                                                        244.67
                                                                                                                                           4900.1
                                                                                                                                                       36.92
       157.35
                                                         29.62
                                                                                                                                        4900.1
1366.6
                                                                                                                                                                            252.38
                                                                          68.23 244.65
                                                         29.61
                                                                                                                                                                             64.75
        22.65
       157.35
                                                    29.62
                                                                        255.85
                                                                                        244.67
                                                                                                                                           4900.1
                                                                                                                                                             36.93
                                                                                                                                                                            252.38
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                           SGT 3379.8 SGR 1615.9 SG3 124.9

RRT -.9622 RRF -.9950 RTF .9844

SGB 3746.2 R23 .1263 R13 -.9919

SGI 3724.9 SG2 399.5 THA 154.99

ELI 2895.4 EL2 141.2 ALF 159.35
     TOE-3.0896 TRA 1.6491 TC3 -.9522 BAU .6317
    ROE 1.1294 RRA .4382 RC3 .4880 FAU .02256
FOE-1.1279 FRA .3515 FC3 -4423 BSP 11739
BOE 3.2896 BRA .7832 BC3 1.0699 FSP -405
                                                                                 FLIGHT TIME 136.00
                                                                                                                                                   ARRIVAL DATE APR 15 1966
LAUNCH DATE NOV 30 1965
   HELIOCENTRIC CONIC
                                                                                DISTANCE 393.358
    RL 147.53 LAL .00 LOL 67.58 VL 27.655 GAL -4.37 AZL 92.40 MCA 185.16 SMA 128.31 ECC .16769 INC 2.4020 V1 30.199
RP 108.59 LAP .22 LOP 252.73 VP 37.549 GAP 3.90 AZP 87.61 TAL 202.65 TAP 27.81 RCA 106.79 APO 149.82 V2 34.897
    RC 112.133 GL -19.78 GP 48.48 ZAL 122.25 ZAP 117.79 ETS 32.87 ZAE 123.42 ETE 137.08 ZAC 43.52 ETC 216.95 CLP-134.69
   PLANETOCENTRIC CONIC
    C3 11.670 VHL 3.416 DLA -38.63 RAL 311.05 RAD 6567.4 VEL 11.535 PTH 2.01 VMP 5.040 DPA 25.14 RAP 293.01 ECC 1.1921
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   6 20 11 1367.44 30.04
12 40 9 5463.65 30.05
6 20 11 1367.44 30.04
12 40 9 5463.65 30.05
6 20 11 1367.44 30.04
12 40 9 5463.65 30.05
6 20 11 1367.44 30.04
12 40 9 5463.65 30.05
                                                                                                      115.53 6 42 59 767.4

115.53 6 42 59 767.4

115.53 6 42 59 767.4

115.53 6 42 59 767.4

115.51 14 11 13 4863.7

115.53 6 42 59 767.4

115.51 14 11 13 4863.7
                                                                                     174.68
                                                                          5.00
        62.54
                                                                        252.64
                                                                                         174.69
       117.46
        62.54
                                                                          5.00
                                                                                        174.68
                                                                                                                                                              33.21
                                                                                                                                                                             356.79
       117.46
                                                                       252.64
                                                                                      174.69
                                                                                                                                                             33.22
                                                                                                                                                                             244.42
                                                                                   174.68
         62.54
                                                                          5.00
                                                                                                                                                             33.21
                                                                                                                                                                             356.79
                                                                       252.64
                                                                                        174.59
       117.46
                                                                                                                                                             33.22
                                                                                                                                ORBIT DETERMINATION ACCURACY
5T 1444.4 SR 586.6 55 608.4
CRT -.9760 CRS .9998 CST -.9800
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                          SGT 3300.6 SGR 1585.5 SG3 343.2 ST 1444.4 SR 586.6 55 608.4 RRT -.9519 RRF -.9994 RTF ..9581 CRT -.9760 CRS ..9998 CST -.9800 SG8 3661.6 R23 .2308 R13 -.9727 L5A 1666.5 MSA 152.6 SSA 2.6 SG1 3635.0 SG2 441.0 THA 155.03 EL1 1554.5 EL2 118.7 ALF 158.25
    TOE -.8517 TRA -.3028 TC3-4.2497 BAU .7427
    ROE. .3475 RRA -.0760 RC3 2.1448 FAU .07318
    FDE -.8287 FRA .1388 FC3-5.4290 BSP 11434
BDE .9199 BRA .3122 BC3 4.7603 FSP -1128
                                                                                FLIGHT TIME 138.00
                                                                                                                                                  ARRIVAL CATE APR 17 1966
LAUNCH DATE NOV 30 1965
   HELIOCENTRIC CONIC
                                                                                DISTANCE 399.426
    RL 147.53 LAL .00 LOL 67.58 VL 27.622 GAL -4.19 AZL 90.19 HCA 188.33 SMA 128.08 ECC .16814 TNC .1871 V1 30.199
RP 108.63 LAP .03 LOP 255.91 VP 37.515 GAP 4.18 AZP 89.81 TAL 201.56 TAP 29.89 RCA 106.55 APO 149.62 V2 34.886
    RC 114.493 GL -1.67 GP 33.50 ZAL 123.18 ZAP 126.84 ETS 26.86 ZAE 131.72 ETE 147.48 ZAC 36.72 ETC 200.35 CLP-135.98
   PLANETOCENTRIC CONIC
    C3 10.037 VHL 3.168 CLA -20.79 RAL 307.14 RAD 6567.4 VEL 11.464 PTH 1.99 VHP 4.238 DPA 10.59 RAP 297.04 ECC 1.1652
    ENCH AZHTH ENCH TIME L-I TIME INJEAT INJEONG INJERT ASC INJEZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    6 14 13 1351.42
12 14 57 5418.11
7 21 45 1133.47
13 50 7 5111.29
8 0 42 1011.40
15 27 39 4806.12
                                                                                    159.68
                                                         6.52
                                                                                                       117.62 6 36 44
        90.00
                                                                       351.57
                                                                                                                                       751.4
                                                                                                                                                         40.17
                                                                                                         86.25 13 45 16
119.45 7 40 38
84.29 15 15 18
124.10 8 17 33
79.24 16 47 45
         90.00
                                                         28.09
                                                                        248.89
                                                                                        164.43
                                                                                                                                           4818.1
                                                                                                                                                            27.27
                                                                                                                                                                           240.32
                                                          5.37
                                                                        334.92
                                                                                       159.06
                                                                                                                                           533.5
                                                                                                                                                             9.25
                                                                                                                                                                            328.29
       100.00
       100.00
                                                        29.39
                                                                        226.19
                                                                                       164.31
                                                                                                                                          4511.3
                                                                                                                                                           28.29
                                                                                                                                                                           217.56
                                                   2.58
32.64
       110.00
                                                                        323.93
                                                                                       157.32
                                                                                                        124.10
                                                                                                                                          411.4
                                                                                                                                                             7.03
                                                                                                                                                                           317.68
       110.00
                                                                        202.47
                                                                                        163.76
                                                                                                                                          4206.1
                                                                                                                                                             30.81
                                                                         MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 3452.7 SGR 1189.1 SG3 468.5 ST 457.1 SR 87.5 S5 65.4

RRT -.9536 RRF -.9984 RTF .9948 CRT -.7058 CRS .7446 CST -.4391

SGB 3651.8 R23 .2622 R13 -.9634 LSA 462.3 MSA 77.6 SSA 33.9

SGI 3635.9 SG2 339.9 THA 161.65 EL1 461.3 EL2 61.4 ALF 172.16
    TOE -.1905 TRA -.4887 TC3-5.2127 BAU .7432
    RDE .0439 RRA -.0161 RC3 1.8719 FAU .09921
    FOE -.0396 FRA .0301 FC3-8.5570 BSP 11392
BOE .1955 BRA .4889 BC3 5.5386 FSP -1533
                                                                                                                                                  ARRIVAL DATE APR 19 1966
LAUNCH DATE NOV 30 1965
                                                                                FLIGHT TIME 140.00
  HELIOCENTRIC CONIC
                                                                                01STANCE 405.480
    RL 147.53 LAL .00 LOL 67.58 VL 27.588 GAL -4.00 AZL 89.20 MCA 191.50 SMA 127.85 ECC .16867 INC .8034 V1 30.199
RP 108.66 LAP -.16 LOP 259.08 VP 37.480 GAP 4.46 AZP 90.79 TAL 200.44 TAP 31.94 RCA 106.29 APO 149.42 V2 34.875
RC 116.852 GL 7.01 GP 24.81 ZAL 121.22 ZAP 132.47 ETS 22.43 ZAE 134.60 ETE 155.76 ZAC 35.09 ETC 188.18 CLP-138.06
   PLANETOCENTRIC CONIC
    C3 10.025 VHL 3.166 DLA -11.95 RAL 306.71 RAD 6567.4 VEL 11.464 PTH 1.99 VHP 4.043 BPA 2.18 RAP 299.42 ECC 1.1650
   CS 10.029 VHL 3.166 DLA -11.95 RAL 306.71 RAD 6567.4 VEL 11.464 PTH 1.99 VHP 4.043 GPA 2.18 RAP 299.42 ECC 11.1650 LNCH AZMITH LNCH TIME L-1 TIME INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 46 7 1682.27 -4.10 10.08 157.49 118.04 5 14 9 1082.3 -.32 3.44 90.00 13 39 35 5086.79 24.37 225.43 160.80 75.12 15 4 22 4486.8 22.09 217.50 100.00 6 1 22 1439.46 -4.97 351.75 157.02 119.51 6 25 22 839.5 -1.00 345.21 100.00 15 7 1 4804.83 25.32 204.39 160.50 73.56 16 27 6 4204.8 22.83 196.48 110.00 6 55 52 1268.80 -7.23 337.42 155.63 123.50 7 17 1 668.8 -2.77 331.16 110.00 16 29 1 4548.26 27.83 183.97 159.56 69.30 17 44 49 3948.3 24.76 176.14
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                          SGT 3615.7 SGR 918.6 SG3 513.9 ST 404.5 SR 55.4 55 310.3 RRT -.9544 RRF -.9955 RTF .9550 CRT -.5891 CRS .9475 CST -.6243 SGB 3730.6 R23 .2648 R13 -.9597 LSA 466.0 M5A 213.5 SSA 17.5 SG1 3721.0 SG2 266.5 TMA 166.30 EL1 405.9 EL2 44.6 ALF 175.33
    TOE .1308 TRA -.5609 TC3-5.4568 BAU .7567
    RDE -.0265 RRA -.0058 RC3 1.4484 FAU .10759
    FOE .4812 FRA .0003 FC3-9.2907 BSP 11689
BDE .1335 BRA .5609 BC3 5.6458 FSP -1691
```

ARRIVAL DATE APR 21 1966

FLIGHT TIME 142.00 LAUNCH DATE NOV 3D 1965 DISTANCE 411.518 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.553 GAL -3.80 AZL 88.63 HCA 194.68 SMA 127.61 ECC .16929 INC 1.3738 VI 30.199
RP 108.69 LAP -.35 LOP 262.25 VP 37.444 GAP 4.74 AZP 91.33 TAL 199.27 TAP 33.95 RCA 106.01 APO 149.22 V2 34.865
RC 119.206 GL 11.92 GP 19.37 ZAL 118.94 ZAP 136.46 ETS 19.24 ZAE 135.32 ETE 161.58 ZAC 35.40 ETC 180.10 CLP-140.21 PLANETOCENTRIC CONIC C3 10.184 VHL 3.191 DLA -6.75 RAL 307.28 RAD 6567.4 VEL 11.471 PTH 1.99 VHP 4.021 DPA -3.02 RAP 301.29 ECC 1.1676 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 4 6 46 1854.88 14 23 33 4920.45 5 24 53 1602.85 15 48 6 4647.70 6 25 46 1412.25 17 3 43 4411.08 -5.86 4 37 40 1254.9 158.13 116.79 19.86 -9.53 90.00 18.18 70.58 15 45 33 4320.4 214.39 160.08 21.02 90.00 354.22 186.51 118.20 5 51 36 69.12 17 5 34 122.07 6 49 18 65.09 18 17 14 1002.9 -6.50 157.70 .90 -10.35 100.00 18.85 4047.7 193.99 159.74 21.89 100.00 156.41 -8.20 812.2 -12.52 345.15 110.00 20.64 24.20 174.96 158.68 3811.1 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 686.6 SR 70.6 SS 493.5 CRT -.8491 CRS .9799 CST -.8797 LSA 825.1 MSA 197.4 SSA 13.8 SGT 3779.8 SGR 742.1 SG3 522.1 RRT -.9515 RRF -.9894 RTF ..9553 TOE .3327 TRA -.5919 TC3-5.6022 BAU .7789 RCE -.0373 RRA -.0069 RC3 1.1579 FAU .10830 FOE .7851 FRA .0167 FC3-9.2062 BSP 12179 BOE .3348 BRA .5920 BC3 5.7206 FSP -1741 SGB 3852.0 R23 .2510 R13 -.9581 EL1 689.2 EL2 37.1 ALF 175.00 SG1 3845.4 SG2 224.4 THA 169.38 ARRIVAL DATE APR 23 1966 FLIGHT TIME 144.00 LAUNCH DATE NOV 30 1965 DISTANCE 417.547 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.517 GAL -3.60 AZL 88.26 HCA 197.85 SMA 127.37 ECC .16998 INC 1.7434 V1 30.199
RP 108.72 LAP -.53 LOP 265.42 VP 37.409 GAP 5.01 AZP 91.66 TAL 198.06 TAP 35.91 RCA 105.72 APO 149.02 V2 34.856 RC 121.557 GL 15.07 GP 15.71 ZAL 116.66 ZAP 139.59 ETS 16.91 ZAE 135.21 ETE 165.59 ZAC 36.46 ETC 174.81 CLP-142.28 PLANETOCENTRIC CONIC C3 10.330 VHL 3.214 OLA -3.23 RAL 308.33 RAD 6567.4 VEL 11.477 PTH 1.99 VHP 4.066 DPA -6.44 RAP 302.98 ECC 1.1700 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 44 16 1968.45 -12.94 26.47 159.57 115.41 4 17 5 1368.5 -9.41 19.56 3 44 16 1968.45 14 54 24 4812.61 5 4 7 1710.92 16 17 15 4545.38 6 8 54 1508.09 17 28 57 4320.97 16 14 37 4212.6 15.29 200.27 160.53 68.11 18.43 207.54 90.00 5 32 37 -10.05 1110.9 -13.75 7.12 159.16 116.80 100.00 66.69 17 33 1 120.66 6 34 2 62.76 18 40 58 15.95 3945.4 19.27 187.52 160.16 100.00 -11.74 343.89 908.1 350.49 157.93 -15.92 110.00 17.68 169.36 159.03 3721.0 21.50 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1018.0 SR 84.8 SS 703.5 CRT -.8915 CRS .9851 CST -.9407 SGT 3790.1 SGR 588.2 SG3 488.3 RRT -.9354 RRF -.9756 RTF .9435 SGB 3835.5 R23 .2559 R13 -.9455 TOE .5446 TRA -.5366 TC3-5.5011 BAU .7699 ROE -.0458 RRA -.0273 RC3 .9030 FAU .09790 LSA 1223.8 MSA 201.0 SSA 11.5 EL1 1020.8 EL2 38.3 ALF 175.75 FOE 1.1180 FRA .2195 FC3-8.2048 BSP 11172 5G1 3830.0 SG2 205.8 THA 171.72 BDE .5465 BRA .5373 BC3 5.5747 FSP -1399 ARRIVAL CATE APR 25 1966 FLIGHT TIME 146.00 LAUNCH CATE NOV 3D 1965 **DISTANCE 423.547** RL 147.53 LAL .00 LOL 67.58 VL 27.480 GAL -3.38 AZL 88.00 HCA 201.02 SMA 127.12 ECC .17078 INC 2.0046 VI 30.199
RP 108.75 LAP -.72 LOP 268.59 VP 37.373 GAP 5.28 AZP 91.87 TAL 196.83 TAP 37.85 RCA 105.41 APO 148.83 V2 34.846 HELIOCENTRIC CONIC RC 123.903 GL 17.27 GP 13.10 ZAL 114.43 ZAP 142.24 ETS 15.18 ZAE 134.73 ETE 168.42 ZAC 37.82 ETC 171.28 CLP-144.27 PLANETOCENTRIC CONIC -.60 RAL 309.64 RAD 6567.4 VEL 11.482 PTH 2.00 VHP 4.144 OPA -8.79 RAP 304.61 ECC 1.1720 C3 10.453 VHL 3.233 OLA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -11.95 4 4 9 1452.4 161.33. 114.10 3 29 57 2052.39 15 19 8 4733.41 4 51 1 1790.90 -15.33 31.47 66.55 16 38 1 115.50 5 20 52 65.15 17 55 15 119.36 6 24 56 61.27 19 0 33 13.04 4133.4 161.51 202.66 90.00 16.35 4.86 -12.59 160.94 1190.9 11.84 -16.15 175.86 161.12 159.75 13.68 3870.1 16 40 45 4470.14 5 58 37 1579.27 17 49 38 4254.54 182.91 17.17 -14.30 979.3 -18.35 354.59 15.40 159.95 3654.5 165.37 19.38 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS CREAT DETERMINATION ACCURATE

T 1154.8 SR 45.3 SS 712.7

CRT -.8335 CRS .9368 CST -.9527

LSA 1344.8 MSA 186.9 SSA 13.1

EL1 1155.4 EL2 25.0 ALF 178.15 SGT 4027.2 SGR 552.3 SG3 489.7 RRT -.9265 RRF -.9607 RTF ..9519 SGB 4062.3 R23 ..2037 R13 -.9531 TOE .6259 TRA -.5657 TC3-5.7831 BAU .8162 ROE -.0230 RRA -.0217 RC3 .8186 FAU .09898 FOE 1.1186 FRA .1666 FC3-8.1982 BSP 12649 BOE .6264 BRA .5661 BC3 5.8407 FSP -1589 SG1 4057.4 SG2 198.8 THA 173.00 ARRIVAL DATE APR 27 1966 FLIGHT TIME 148.00 LAUNCH DATE NOV 3D 1965 DISTANCE 429.536 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.442 GAL -3.16 AZL 87.80 HCA 204.19 SMA 126.87 ECC .17166 INC 2.1998 V1 30.199
RP 108.78 LAP -.90 LOP 271.76 VP 37.337 GAP 5.54 AZP 92.01 TAL 195.56 TAP 39.75 RCA 105.09 APO 148.65 V2 34.838 RC 126.245 GL 18.89 GP 11.17 ZAL 112.20 ZAP 144.56 ETS 13.87 ZAE 134.15 ETE 170.46 ZAC 39.33 ETC 168.89 CLP-146.14 PLANETOCENTRIC CONIC 1.52 RAL 311.14 RAO 6567.4 VEL 11.486 PTH 2.00 VHP 4.238 OPA -10.43 RAP 306.25 ECC 1.1736 C3 10.550 VHL 3.248 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 20 17 2119.82 -17.16 35.57 163.29 112.87 3 55 37 1519.8 -13.92 28.40 90.00 15 40 49 4669.76 14.58 198.82 162.84 65.46 16 58 39 4069.8 11.15 191.82 1255.2 8.61 4 42 20 1855.16 17 1 27 4409.65 5 13 15 -18.00 15.72 162.91 114.28 100.00 3009.6 11.80 172.36 64.06 18 14 57 162.44 17 1 27 15.41 179.29 100.00 351.04 1036.5 -16.30 5 52 12 1636.48 18 8 5 4201.09 161.75 118.17 6 19 28 60.21 19 18 6 6 19 28 -20.22 357.96 110.00 3601.1 13.51 155.53 162.25 161.23 17.60 18 8 5 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1329.6 SR 26.3 SS 766.3 CRT -.5400 CRS .6987 CST -.9623 SGT 4161.0 SGR 476.8 SG3 471.1 TOE .7333 TRA -.5395 TC3-5.9090 BAU .8398 RRT -.9045 RRF -.9366 RTF .9515 SGB 4188.3 R23 .1735 R13 -.9523 RCE -.0094 RRA -.0277 RC3 .7296 FAU .09422 FDE 1.1812 FRA .2303 FC3-7.7318 BSP 13091 BDE .7333 BRA .5402 BC3 5.9538 FSP -1539 LSA 1523.9 MSA 182.5 SSA 13.7 EL1 1329.7 EL2 22.1 ALF 179.39 5G1 4183.4 5G2 202.3 THA 174.07

```
LAUNCH DATE NOV 30 1965
                                                                                      FLIGHT TIME 150.00
                                                                                                                                                          ARRIVAL DATE APR 29 1966
    HELIOCENTRIC CONIC
                                                                                    DISTANCE 435.509
     RL 147.53 LAL .00 LOL 67.58 VL 27.404 GAL -2.92 AZL 87.65 HCA 207.36 SMA 126.62 ECC .17264 INC 2.3520 V1 30.199
RP 108.80 LAP -1.08 LOP 274.92 VP 37.302 GAP 5.80 AZP 92.09 TAL 194.25 TAP 41.61 RCA 104.76 APO 148.48 V2 34.830
     RC 128.581 GL 20.15 GP 9.69 ZAL 109.95 ZAP 146.64 ETS 12.86 ZAE 133.53 ETE 171.96 ZAC 40.93 ETC 167.25 CLP-147.92
     PLANETOCENTRIC CONIC
     C3 10.636 VML 3.261 DLA 3.31 RAL 312.81 RAC 6567.4 VEL 11.490 PTH 2.00 VMP 4.344 DPA -11.60 RAP 307.93 ECC 1.1750
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 13 34 2177.19 -18.64

16 0 47 4615.67 13.03

4 36 27 1909.83 -19.49

17 20 35 4358.27 13.86

5 48 15 1685.12 -21.76

18 25 17 4155.74 16.05
          90.00
                                                                                                                                              1577.2
                                                                            39.13
                                                                                          165.41
                                                                                                             111.71 3 49 51
                                                                                                                                                                -15.53
                                                                                                                                                                                      31.83
          90.00
                                                                            195.61
                                                                                             164.41
                                                                                                                 54.64
                                                                                                                             17 17 43
                                                                                                                                                  4015.7
                                                                                                                                                                     9.51
                                                                                                                                                                                     188.70
                                                                                                          113.12 5 8 17 1309.8
63.25 18 33 13 3758.3
117.04 6 16 20 1085.1
59.41 19 34 32 3555.7
        100.00
                                                                             19.09
                                                                                             165.04
                                                                                                                                                                    -16.20
                                                                                                                                                                                      11.85
        100.00
                                                                            176.26
                                                                                            163.99
                                                                                                                                                                   10.16
                                                                              .90 163.90
        110.00
                                                                                                                                                                  -17.96
        110.00
                                                                            159.65
                                                                                            162.75
                                                                                                                                                                  11.87
    DIFFERENTIAL CORRECTIONS
     UIFFERENTIAL CORRECTIONS
TOE .8328 TRA -.5003 TC3-6.0241 BAU .8618
RDE .0039 RRA -.0342 RC3 .6646 FAU .08915
FDE 1.2200 FRA .2986 FC3-7.2569 BSP 13477
RDF .8328 RB4 .5017 .7617 .7617
                                                                             MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                               SGT 4284.3 SGR 437.7 SG3 451.2 ST 1491.3 SR 23.3 55 808.4 RRT -.8747 RRF -.9051 RTF ..9507 CRT ..3806 CRS -.1978 CST -.9685 SG8 4306.6 R23 .1474 R13 -.9514 L5A 1687.0 MSA 178.7 SSA 14.4 SG1 4301.4 SG2 211.3 THA 174.88 ELI 1491.4 EL2 21.5 ALF .34
     BDE .8328 BRA .5014 BC3 6.0607 FSP -1477
LAUNCH DATE NOV 30 1965
                                                                                     FLIGHT TIME 152.00
                                                                                                                                                          ARRIVAL DATE MAY 1 1966
                                                                                   DISTANCE 441.466
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 27.366 GAL -2.68 AZL 87.53 MCA 210.53 SMA 126.96 ECC .17372 INC 2.4749 VI 30.199
RP 108.82 LAP -1.26 LOP 278.09 VP 37.267 GAP 6.06 AZP 92.13 TAL 192.92 TAP 43.45 RCA 104.41 APO 148.32 VZ 34.822
RC 130.911 GL 21.13 GP 8.52 ZAL 107.67 ZAP 148.54 ETS 12.09 ZAE 132.94 ETE 173.10 ZAC 42.60 ETC 166.13 CLP-149.60
    C3 10.720 VHL 3.274 DLA 4.89 RAL 314.60 RAD 6567.4 VEL 11.494 PTH 2.00 VHP 4.457 DPA -12.43 RAP 309.65 ECC 1.1764 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 8 50 2228.21 -19.90 42.35 167.65 110.57 3 45 58 1628.2 -16.92 34.94 90.00 16 19 49 4567.84 11.62 192.80 166.17 63.99 17 35 57 3967.8 8.03 185.96 100.00 4 32 28 1958.41 -20.76 22.15 167.29 112.00 5 5 7 1358.4 -17.60 14.78 100.00 17 38 51 4312.86 12.45 173.63 165.75 62.60 18 50 44 3712.9 8.68 166.87 110.00 5 46 0 1728.30 -23.07 3.57 166.19 115.95 6 14 48 ...
   PLANETOCENTRIC CONIC
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 4402.9 SGR 410.9 SG3 431.5 ST 1641.6 SR 38.3 SS 840.8 RRT -.8381 RRF -.8669 RTF .9499 CRT .83119 CRS -.6903 CST -.9727 SGB 4422.0 R23 .1259 R13 -.9504 LSA 1836.4 MSA 175.3 SSA 15.1 SG1 4416.3 SG2 223.5 THA 175.52 EL1 1641.9 EL2 22.4 ALF 1.09
     TDE .9256 TRA -.4516 TC3-6.1338 BAU .8835
     RDE .0167 RRA -.0409 RC3 .6162 FAU .08418
     FDE 1.2403 FRA .3653 FC3-6.7982 BSP 13856
BDE .9258 BRA .4535 BC3 6.1646 FSP -1415
LAUNCH DATE NOV 30 1965
                                                                                    FLIGHT TIME 154.00
                                                                                                                                                        ARRIVAL DATE MAY 3 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 447.407
    RL 147.53 LAL .00 LOL 67.58 VL 27.327 GAL -2.42 AZL 87.42 HCA 213.70 SMA 126.11 ECC .17491 INC 2.5766 V1 30.199
RP 108.85 LAP -1.43 LOP 281.25 VP 37.232 GAP 6.31 AZP 92.14 TAL 191.55 TAP 45.25 RCA 104.05 APO 148.17 V2 34.816
                           21.92 GP 7.59 ZAL 105.35 ZAP 150.29 ETS 11.49 ZAE 132.38 ETE 173.97 ZAC 44.32 ETC 165.37 CLP-151.19
     RC 133.236 GL
   PLANETOCENTRIC CONIC
     C3 10.810 VML 3.288 DLA 6.33 RAL 316.51 RAD 6567.4 VEL 11.498 PTH 2.00 VMP 4.576 DPA -12.99 RAP 311.42 ECC 1.1779
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 5 32 2275.13
16 38 20 4524.32
4 29 53 2003.07
17 56 40 4271.62
5 45 0 1767.94
18 58 2 4079.51
                                                                                          170.03
                                                                                                         109.45
         90.00
                                                                                                                                             1675.1
                                                                                                                                                                -18.15
                                                         -20.99
                                                                           45.35
                                                                                                                            3 43 27
                                                                                                                                                                                   37.83
         90.00
                                                                           190.28
                                                                                            166.11
                                                          10.31
                                                                                                               63.48
                                                                                                                            17 53 45
                                                                                                                                                 3924.3
                                                                                                                                                                    6.66
                                                                                                                                                                                    183.49
                                                                           25.00
       100.00
                                                                                                             110.90 5 3 16
62.08 19 7 52
                                                                                                                                                1403.1
3671.6
                                                         -21.87
                                                                      171.26
                                                                                            169.68
                                                                                                                                                                  -18.84
                                                                                                                                                                                    17.52
       100.00
                                                         11.14
                                                                                            167.67
                                                                                                                                                                   7.32
                                                                                                                                                                                   164.56
                                                                                                          114.89 6 14 28 1167.9 -20.67
58.24 20 6 2 3479.5 9.06
       110.00
                                                         -24.23
                                                                             6.06
                                                                                            168.60
                                                                                                                                                                                   358.73
                                                        13.36
       110.00
                                                                           155.38
                                                                                                                                                                                   148.92
                                                                                            166.37
                                                                             MID-COURSE EXECUTION ACCURACY
SCT 4518.1 SGR 393.4 SG3 412.6
RRT -.796D RRF -.8238 RTF .9493
SG8 4535.2 R23 .1090 R13 -.9497
SG1 4528.9 SG2 237.5 THA 176.02

SG1 4528.9 SG2 237.5 THA 176.02
                                                                           MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
     TOE 1.0131 TRA -.3944 TC3-6.2366 BAU .9052
    RGE .0292 RRA -.0477 RC3 .5794 FAU .07949
FGE 1.2460 FRA .4283 FC3-6.3660 BSP 14260
BOE 1.0136 BRA .3972 BC3 6.2634 FSP -1361
LAUNCH DATE NOV 30 1965
                                                                                    FLIGHT TIME 156.00
                                                                                                                                                         ARRIVAL DATE MAY 5 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 453.333
    RL 147.53 LAL .00 LOL 67.58 VL 27.287 GAL -2.15 AZL 87.34 MCA 216.86 SMA 125.85 ECC .17621 INC 2.6627 V1 30.199
RP 108.87 LAP -1.60 LOP 284.41 VP 37.197 GAP 6.57 AZP 92.13 TAL 190.16 TAP 47.03 RCA 103.67 APO 148.03 V2 34.809
RC 135.553 GL 22.55 GP 6.82 ZAL 102.97 ZAP 151.93 ETS 11.03 ZAE 131.87 ETE 174.65 ZAC 46.09 ETC 164.86 CLP-152.71
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 3 18 2319.41 -21.97 48.23 172.53 108.33 3 41 57 1719.4 -19.26 40.61 90.00 16 56 39 4483.96 9.07 187.96 170.21 63.06 18 11 23 3884.0 5.39 181.22 100.00 4 28 20 2045.17 -22.87 27.73 172.20 109.79 5 2 25 1445.2 -19.97 20.14
    C3 10.914 VHL 3.304 OLA 7.66 RAL 318.52 RAD 6567.4 VEL 11.502 PTH 2.00 VHP 4.699 DPA -13.35 RAP 313.24 ECC 1.1796
                     18 14 19 4233.43
5 44 59 1805.27
19 14 9 4046.09
                                                                                                              61.66 19 24 52
113.82 6 15 4
                                                                           169.09
       100.00
                                                             9.92
                                                                                            169.76
                                                                                                                                                 3633.4
                                                                                                                                                                    6.06
                                                                                                                                                                                   162.43
                                                                                                                                                1205.3 -21.84
3446.1 7.82
                                                          -25.27
                                                                              8.46
                                                                                            171.14
       110.00
                                                                                                                                                                                        .99
                                                                                                                57.80 20 21 35
       110.00
                                                       12.15
                                                                          153.54
                                                                                                                                                                                   147.13
                                                                                            168.43
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 4623.4 SG2 252.2 THA 176.45

CREIT DETERMINATION ALCORACY

ST 1923.7 SR 77.0 SS 888.3

CRT -.7494 RRF -.7758 RTF ..9482

CRT ..9345 CRS -.8559 CST -.9784

LSA 2113.5 MSA 168.9 SSA 16.5

EL1 1925.1 EL2 27.4 ALF 2.14
     TDE 1.1025 TRA -.3244 TC3-6.3131 BAU .9246
     RDE .0407 RRA -.0551 RC3 .5485 FAU .07472
    FDE 1.2507 FRA .4953 FC3-5.9275 BSP 14566
BDE 1.1032 BRA .3290 BC3 6.3369 FSP -1297
```

ARRIVAL DATE MAY 7 1966 FLIGHT TIME 158.00 LAUNCH DATE NOV 30 1965 DISTANCE 459.242 MELIOCENTRIC CONIC RL 147.53 LAL ..00 LOL 67.58 VL 27.248 GAL -1.88 AZL 87.26 HCA 220.03 SMA 125.59 ECC .17764 INC 2.7369 VI 30.199
RP 108.88 LAP -1.76 LOP 287.58 VP 37.163 GAP 6.82 AZP 92.10 TAL 188.75 TAP 48.78 RCA 103.28 APO 147.90 V2 34.804
RC 137.863 GL 23.04 GP 6.18 ZAL 100.55 ZAP 153.47 ETS 10.68 ZAE 131.41 ETE 175.20 ZAC 47.90 ETC 164.54 CLP-154.15 PLANETOCENTRIC CONIC C3 11.038 VML 3.322 CLA 8.91 RAL 320.64 RAD 6567.4 VEL 11.508 PTH 2.00 VMP 4.827 CPA -13.55 RAP 315.11 ECC 1.1817 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -20.28 90.00 3 1 55 2361.99 90.00 17 14 55 4446.04 100.00 4 27 36 2085.63 100.00 18 31 55 4197.63 110.00 5 45 45 1841.10 110.00 19 30 16 4014.93 175.17 107.19 3 41 17 1762.0 43.31 51.04 -22.85 172.47 62.72 18 29 2 3846.0 4.18 179.09 185.79 7.49 -21.01 22.69 5 2 22 1485.6 174.85 108.67 -23.78 30.39 61.30 19 41 53 3597.6 4.86 160.45 172.01 167.07 8.75 112.74 -22.93 3.20 6 16 26 1241.1 -26.24 10.80 173.82 57.44 20 37 11 145.48 3414.9 6.65 11.02 151.84 170.65 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2056.4 SR 96.1 55 904.4 CRT .9454 CR5 -.8737 CST -.9805 SGT 4727.0 SGR 375.1 SG3 376.5 RRT -.7006 RRF -.7264 RTF .9475 TOE 1.1878 TRA -.2480 TC3-6.3780 BAU .9444 .0520 RRA -.0623 RC3 .5232 FAU .07036 SGB 4741.8 RZ3 .0846 R13 -.9478 LSA 2242.4 MSA 165.7 SSA 17.1 FOE 1.2445 FRA .5546 FC3-5.5183 BSP 14904 EL1 2058.4 EL2 31.3 ALF 2.53 SG1 4734.3 SG2 267.3 THA 176.81 BCE 1.1889 BRA .2557 BC3 6.3994 FSP -1241 ARRIVAL DATE MAY 9 1966 FLIGHT TIME 160.00 LAUNCH DATE NOV 3D 1965 HELIOCENTRIC CONIC DISTANCE 465.136 RL 147.53 LAL .00 LOL 67.58 VL 27.208 GAL -1.59 AZL 87.20 HCA 223.19 SMA 125.33 ECC .17919 INC 2.8019 VI 30.199 RP 108.90 LAP -1.92 LOP 290.74 VP 37.129 GAP 7.08 AZP 92.04 TAL 187.31 TAP 50.50 RCA 102.88 APO 147.79 V2 34.799 RC 140.164 GL 23.42 GP 5.64 ZAL 98.08 ZAP 154.93 ETS 10.44 ZAE 130.99 ETE 175.64 ZAC 49.76 ETC 164.37 CLP-155.53 PLANETOCENTRIC CONIC C3 11.190 VHL 3.345 DLA 10.10 RAL 322.85 RAD 6567.4 VEL 11.514 PTH 2.01 VHP 4.958 DPA -13.61 RAP 317.02 ECC 1.1842 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 1 13 2403.52 17 33 15 4410.14 177.95 106.03 3 41 16 1803.5 -21.24 45.98 -23.66 53.82 an .nn 3.02 3810.1 177.08 18 46 45 174.88 62.44 90.00 6.77 183.76 -21.98 25.21 33.02 177.63 107.52 5 2 58 1525.1 100 00 4 27 33 2125.05 -24.61 19 59 D 3.72 158.58 61.01 3563.8 7.64 165.17 174.40 100.00 18 49 36 4163.84 -23.95 6 18 25 1276.0 5.39 5 47 9 1875.97 -27.14 13.11 176.63 111.63 110.00 57.13 20 52 55 19 46 29 3985.69 3385.7 5.54 143.94 173.01 150.26 110.00 9.94 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4826.7 SGR 372.2 SG3 360.0 RRT -.6509 RRF -.6761 RTF .9470 ST 2186.7 SR 114.4 SS 917.8 TOE 1.2735 TRA -.1632 TC3-6.4218 BAU .9636 ROE .0631 RRA -.0695 RC3 .5008 FAU .06624 FOE 1.2355 FRA .6100 FC3-5.1247 BSP 15254 CRT .9491 CRS -.8813 CST -.9823 LSA 2368.6 MSA 162.5 S\$A 17.7 EL1 2189.4 EL2 36.0 ALF 2.84 SGB 4841.1 R23 .0757 R13 -.9472 5G1 4832.8 SG2 282.2 THA 177.12 BOF 1.2750 BRA .1774 BC3 6.4413 FSP -1193 FLIGHT TIME 162.00 ARRIVAL CATE MAY 11 1966 LAUNCH DATE NOV 30 1965 DISTANCE 471.013 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 11.375 VHL 3.373 DLA 11.23 RAL 325.14 RAD 6567.4 VEL 11.522 PTH 2.01 VHP 5.094 DPA -13.56 RAP 318.96 ECC 1.1872 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 1 5 2444.43 17 51 42 4376.01 4 28 5 2163.87 19 7 23 4131.82 5 49 7 1910.26 20 2 50 3958.19 -22.13 48.65 1844.4 104.83 3 41 49 -24.40 56.59 180.85 90.00 3776.0 1.93 175.17 181.83 177.43 62.21 19 4 38 5.69 5 4 8 -22.90 27.73 1563.9 -25.38 35.65 180.55 106.34 20 16 15 2.64 156.82 3531.8 6.58 163.39 176.94 60.78 110.50 6 20 58 56.86 21 8 48 1310.3 -24.93 -27.97 15.42 179.59 110.50 110.00 4.50 8.92 3358.2 148.79 175.51 MID-COURSE EXECUTION ACCURACY ORBIT CETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2311.5 SR 132.3 SS 927.4 CRT .9494 CRS -.8840 CST -.9838 SGT 4923.6 SGR 372.1 SG3 344.6 RRT -.6016 RRF -.6267 RTF .9467 TOE 1.3583 TRA -. 0694 TC3-6.4453 BAU .9829 .0740 RRA -.0769 RC3 .4802 FAU .06243 SGB 4937.6 R23 .0690 R13 -.9469 SGI 4928.7 SG2 296.9 THA 177.39 LSA 2488.9 MSA 159.7 SSA FOE 1.2225 FRA .6631 FC3-4.7512 BSP 15592 BOE 1.3604 BRA .1036 BC3 6.4632 FSP -1147 EL1 2314.9 EL2 41.5 ALF 3.11 FLIGHT TIME 164.00 LAUNCH DATE NOV 30 1965 DISTANCE 476.874 HELIOCENTRIC CONIC RL 147.53 LAL .00 LOL 67.58 VL 27.127 GAL -.98 AZL 87.09 HCA 229.52 SMA 124.82 ECC .18273 INC 2.9117 V1 30.199
RP 108.92 LAP -2.21 LOP 297.06 VP 37.063 GAP 7.59 AZP 91.89 TAL 184.37 TAP 53.89 RCA 102.01 APO 147.63 V2 34.791
RC 144.737 GL 23.86 GP 4.80 ZAL 92.99 ZAP 157.62 ETS 10.20 ZAE 130.29 ETE 176.30 ZAC 53.58 ETC 164.28 CLP-158.11 PLANETOCENTRIC CONIC C3 11.600 VHL 3.406 DLA 12.32 RAL 327.52 RAD 6567.4 VEL 11.532 PTH 2.01 VHP 5.233 DPA -13.41 RAP 320.95 ECC 1.1909 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 183.89 103.60 3 42 52 1885.0 -22.96 51.34 90.00 3 1 27 2485.05 18 10 18 4343.55 -25.08 59.37 173.36 180.13 62.04 19 22 41 3743.6 .88 90.00 18 10 18 4.66 180.00 -23.76 30.26 5 1602.3 4 29 6 2202.35 19 25 19 4101.48 -26.09 38.29 183.61 105.13 100.00 155.15 5.57 179.63 60.58 3501.5 1.61 100.00 19 25 19 161.70 9.78 -28.76 17.75 182.68 109.32 6 24 D 1344.2 -25.86 110.00 5 51 36 1944.22 56.65 21 24 51 3332.4 3.52 141.14 147.41 178.16 110.00 20 19 19 3932.38 7.96 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY OJEFFRENTIAL CORRECTIONS ST 2432.9 SR 149.5 SS 934.9 CRT .9478 CRS -.8838 CST -.9852 SGT 5014.8 SGR 373.6 SG3 329.8 RRT -.5529 RRF -.5778 RTF .9463 SG8 5028.7 R23 .0631 R13 -.9465 TOE 1.4441 TRA .0334 TC3-6.4399 BAU 1.0013 RCE .0849 RRA -.0842 RC3 .4599 FAU .05876 FOE 1.2084 FRA .7140 FC3-4.3853 BSP 15925 LSA 2605.8 MSA 157.2 SSA 18.7 EL1 2437.0 EL2 47.6 ALF 3.34 EL1 2437.0 EL2 47.6 ALF BOE 1.4466 BRA .0906 BC3 6.4563 ESP -1103 SG1 5019.1 SG2 311.0 THA 177.63

```
LAUNCH DATE NOV 30 1965
                                                                 FLIGHT TIME 166.00
                                                                                                                     ARRIVAL DATE MAY 15 1966
   HELIOCENTRIC CONIC
                                                                 DISTANCE 482.718
    RL 147.53 LAL .00 LOL 67.58 VL 27.087 GAL -.65 AZL 87.04 HCA 232.68 SMA 124.56 ECC .18472 INC 2.9590 V1 30.199
RP. 108.93 LAP -2.35 LOP 300.22 VP 37.031 GAP 7.85 AZP 91.79 TAL 182.87 TAP 55.55 RCA 101.55 APO 147.57 V2 34.788
RC 147.008 GL 23.94 GP 4.46 ZAL 90.39 ZAP 158.87 ETS 10.18 ZAE 130.00 ETE 176.55 ZAC 55.55 ETC 164.34 CLP-159.32
   PLANETOCENTRIC CONIC
    C3 11.871 VHL 3.445 OLA 13.37 RAL 329.97 RAO 6567.5 VEL 11.544 PTH 2.01 VHP 5.376 DPA -13.17 RAP 322.96 ECC 1.1954
    LNCH AZMTH LNCH TIME L-I TIME
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   3 2 15 2525.53
                                             -25.70
                                                          62.17
                                                                      187.07
                                                                                     102.32
                                                                                                 3 44 20
                                                                                                               1925.5
                                                                                                                            -23.74
                                                                                                                                          54.05
                 18 29 2 4312.73
4 30 34 2240.67
19 43 23 4072.83
5 54 31 1978.00
20 35 56 3908.26
        90.00
                                               3.67
                                                          178.28
                                                                       182.97
                                                                                             19 40 54
                                                                                                               3712.7
                                                                                                                               -.12
                                                                                                                                          171.64
      100.00
                                             -26.75
                                                           40.95
                                                                       186.80
                                                                                     103.87
                                                                                                5 7 55
                                                                                                               1640.7
                                                                                                                             -24.57
                                                                                                                                           32.82
                                                                                             20 51 16
      100.00
                                               4.61
                                                          160.12
                                                                       182.45
                                                                                      60.43
                                                                                                               3472.8
                                                                                                                                          153.58
                                                                                                                               . 54
      110.00
                                             -29.50
                                                           20.11
                                                                       185.90
                                                                                     108.11
                                                                                                 6 27 29
                                                                                                               1378.0
                                                                                                                             -26.74
                                                                                                                                           12.01
      110.00
                                              7.05
                                                                                      56.47 21 41 4
                                                          146.13
                                                                       180.94
                                                                                                               3308.3
                                                                                                                              2.60
                                                                                                                                          139.88
   DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                             SGT 5098.6 SGR 376.0 SG3 315.6
RRT -.5046 RRF -.5293 RTF .9459
SGB 5112.4 R23 .0580 R13 -.9460
    TOE 1.5327 TRA .1477 TC3-6.3976 BAU 1.0177
                                                                                                            ST 2553.4 SR 166.2 55 941.7
    ROE .0957 RRA -.0916 RC3 .4390 FAU .05517
                                                                                                            CRT
                                                                                                                 .9447 CRS -.8818 CST -.9864
    FOE 1.1951 FRA .7650 FC3-4.0232 BSP 16189
BDE 1.5357 BRA .1738 BC3 6.4126 FSP -1056
                                                                                                            LSA 2722.0 MSA 155.3 SSA 19.1
                                                             SG1 5102.1 SG2 324.4 THA 177.86
                                                                                                            EL1 2558.2 EL2 54.4 ALF
                                                                                                                                            3.52
LAUNCH DATE NOV 30 1965
                                                                 FLIGHT TIME 168.00
                                                                                                                     ARRIVAL DATE MAY 17 1966
  HELIOCENTRIC CONIC
                                                                 DISTANCE 488.545
   RL 147.53 LAL .00 LOL 67.58 VL 27.047 GAL -.31 AZL 87.00 MCA 235.84 SMA 124.31 ECC .18689 INC 3.0025 V1 30.199
RP 108.94 LAP -2.48 LOP 303.38 VP 36.999 GAP 8.12 AZP 91.69 TAL 181.35 TAP 37.19 RCA 101.08 APO 147.54 V2 34.786
RC 149.266 GL 23.93 GP 4.16 ZAL 87.75 ZAP 160.07 ETS 10.23 ZAE 129.75 ETE 176.77 ZAC 57.55 ETC 164.43 CLP-160.49
  PLANETOCENTRIC CONIC
    C3 12.195 VHL 3.492 OLA 14.36 RAL 332.48 RAD 6567.5 VEL 11.558 PTH 2.02 VHP 5.524 OPA -12.86 RAP 324.99 ECC 1.2007
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 3 27 2565.99
18 47 53 4283.63
       90.00
                                                                     190.37
                                             -26.26
                                                          65.00
                                                                                   101.01
                                                                                                3 46 13
                                                                                                             1966.0
       90.00
                                              2.74
                                                          176.65
                                                                       185.95
                                                                                      61.80
                                                                                               19 59 16
                                                                                                               3683.6
                                                                                                                              -1.06
                                                                                                                                          170.02
      100.00
                   4 32 28
                              227A.93
                                             -27.34
                                                           43.63
                                                                       190.12
                                                                                     102.58
                                                                                                5 10 27
                                                                                                               1678.9
                             4045.92
      100.00
                 20 1 33
                                               3.71
                                                                                              21 8 59
                                                          158.63
                                                                       185.41
                                                                                      60.32
                                                                                                               3445.9
                                                                                                                               -.27
      110.00
                   5 57 52
                              2011.69
                                             -30.19
                                                           22.49
                                                                       189.26
                                                                                     106.85
                                                                                                6 31 24
                                                                                                               1411.7
                                                                                                                             -27.59
      110.00
                 20 52 38
                                                                                     56.32 21 57 24
                              3885.92
                                              6.21
                                                          144.94
                                                                       183.86
                                                                                                               3285.9
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
    TDE 1.6216 TRA .2693 TC3-6.3296 BAU 1.0342
                                                             S&T 5179.7 SGR 379.3 SG3 302.1
RRT -.4579 RRF -.4819.RTF .9457
                                                                                                            ST 2667.4 SR 182.6 SS 945.8
    RDE .1069 RRA -.0988 RC3 .4178 FAU .05179
                                                                                                            CRT .9413 CRS -.8796 CST -.9875
    FDE 1.1805 FRA .8104 FC3-3,6765 8SP 16506
                                                             568 5193.6 R23 .0529 R13 -.9459
                                                                                                            LSA 2831.8 MSA 153.5 SSA 19.3
    BOE 1.6251 BRA .2868 BC3 6.3433 FSP -1021
                                                             SG1 5182.7 SG2 337.0 THA 178.07
                                                                                                            EL1 2673.0 EL2 61.5 ALF 3.69
LAUNCH DATE NOV 30 1965
                                                                FILIGHT TIME 170.00
                                                                                                                     ARRIVAL DATE MAY 19 1966
  HELIOCENTRIC CONIC
                                                                DISTANCE 494.353
   RL 147.53 LAL .00 LOL 67.58 VL 27.006 GAL .04 AZL 86.96 HCA 239.00 SMA 124.06 ECC .18924 INC 3.0428 V1 30.199

RP 108.94 LAP -2.61 LOP 306.55 VP 36.968 GAP 8.39 AZP 91.57 TAL 179.82 TAP 58.82 RCA 100.58 APO 147.53 V2 34.785

RC 151.511 GL 23.84 GP 3.91 ZAL 85.09 ZAP 161.22 ETS 10.35 ZAE 129.52 ETE 176.95 ZAC 59.58 ETC 164.55 CLP-161.62
   PLANETOCENTRIC CONIC
    C3 12.579 VHL 3.547 DLA 15.32 RAL 335.05 RAO 6567.5 VEL 11.574 PTH 2.02 VHP 5.677 DPA -12.48 RAP 327.05 ECC 1.2070
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
       90.00
                   3 5 2 2606.45
                                             -26.75
                                                          67.86
                                                                     193.80
                                                                                     99.65
                                                                                                3 48 28
                                                                                                             2006.5
                                                                                                                           -25.14
                                                                                                                                          59.56
                 19 6 48
       90.00
                            4256.35
                                              1.86
                                                          175.12
                                                                       189.05
                                                                                               20 17 44
                                                                                      61.74
                                                                                                               3656.4
      100.00
                  4 34 44
                              2317.15
                                             -27.88
                                                          46.35
                                                                      193.56
                                                                                     101.25
                                                                                               5 13 22
                                                                                                               1717.2
                                                                                                                            -26.04
                                                                                                                                          38.03
      100.00
                 20 19 46 4020.88
                                              2.86
                                                         157.26
                                                                      188.49
                                                                                      60.23
                                                                                              21 26 47
                                                                                                               3420.9
                                                                                                                            -1.12
                                                                                                                                         150.73
      110.00
                  6 1 37
                              2045.33
                                             -30.83
                                                                      192.76
                                                                                                                                          16.55
                                                          24.90
                                                                                     105.56
                                                                                                6 35 42
                                                                                                               1445.3
                                                                                                                            -28.39
                                                                                      56.20 22 13 49
      110.00
                21 9 23 3865.47
                                              5.44
                                                          143.87
                                                                      186.89
                                                                                                               3265.5
                                                                                                                               .96
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
    TOE 1.7208 TRA .4034 TC3-6.2039 BAU 1.0454
                                                             SGT 5248.8 SGR 381.3 SG3 287.9
                                                                                                           ST 2790.3 SR 197.6 $$ 962.9
    ROE .1177 RRA -.1061 RC3 .3928 FAU .04734
                                                             RRT -.4086 RRF -.4233 RTF .9417
                                                                                                           CRT .9367 CRS -.8763 CST -.9886
   FDE 1.1843 FRA .8649 FC3-3.2584 BSP 16406
BDE 1.7248 BRA .4171 BC3 6.2163 FSP -895
                                                             SGB 5262.6 R23 .0403 R13 -.9418
SGI 5251.1 SGZ 347.8 THA 178.29
                                                                                                           LSA 2954.4 MSA 153.4 SSA 19.8
                                                                                                           EL1 2796.5 EL2 69.0 ALF
LAUNCH DATE NOV 30 1965
                                                                 FLIGHT TIME 172.00
  HELIOCENTRIC CONIC
                                                               DISTANCE 500.143
   RL 147.53 LAL .00 LOL 67.58 VL 26.966 GAL .41 AZL 86.92 MCA 242.16 SMA 123.80 ECC .19178 INC 3.0806 V1 30.199
RP 108.94 LAP -2.72 LOP 309.71 VP 36.938 GAP 8.66 AZP 91.44 TAL 178.28 TAP 60.44 RCA 100.06 APO 147.55 V2 34.784
RC 153.743 GL 23.67 GP 3.68 ZAL 82.41 ZAP 162.33 ETS 10.52 ZAE 129.33 ETE 177.12 ZAC 61.63 ETC 164.69 CLP-162.71
  PLANETOCENTRIC CONIC
   C3 13.031 VHL 3.610 OLA 16.22 RAL 337.67 RAO 6567.5 VEL 11.594 PTH 2.03 VHP 5.835 OPA -12.04 RAP 329.13 ECC 1.2145
                                          INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                 3 6 59 2646.93
19 25 44 4231.00
                                                                                                             2046.9
       90.00
                                            -27.18
                                                          70.75
                                                                      197.34
                                                                                   98.27
                                                                                                3 51 5
                                                                                                                            -25.75
                                                                                                                                          62.37
       90.00
                                             1.04
                                                         173.71
                                                                      192.28
                                                                                      61.70
                                                                                               20 36 15
                                                                                                               3631.0
                                                                                                                            -2.75
                                                                                                                                         167.08
      100.00
                  4 37 24
                              2355.35
                                            -28.36
                                                          49.09
                                                                      197.13
                                                                                      99,88
                                                                                               5 16 39
                                                                                                               1755.4
                                                                                                                            -26.70
                                                                                                                                          40.68
      100.00
                 20 38 0
                              3997.82
                                              2.08
                                                         155.99
                                                                      191.70
                                                                                      60.17
                                                                                               21 44 38
                                                                                                               3397.8
                                                                                                                            -1.90
                                                                                                                                         149.47
                 6 5 45
21 26 8
      110.00
                              2078.91
                                            -31.42
                                                          27.34
                                                                      196.37
                                                                                     104.22
                                                                                               6 40 24
                                                                                                               1478.9
      110.00
                              3847.02
                                              4.74
                                                         142.90
                                                                      190.04
                                                                                     56.11
                                                                                              22 30 15
                                                                                                               3247.0
                                                                                                                              .26
  DIFFERENTIAL CORRECTIONS
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                            SGT 5325.7 SGR 387.0 SG3 277.3
RRT -.3678 RRF -.3905 RTF .9448
SGB 5339.7 R23 .0446 R13 -.9449
   TOE 1.8048 TRA .5464 TC3-6.0915 BAU 1.0632
                                                                                                           ST 2880.4 SR 214.4 55 949.0
   RDE .1303 RRA -.1127 RC3 .3723 FAU .04535
                                                                                                           CRT .9332 CRS -.8730 CST -.9893
   FOE 1.1512 FRA .9036 FC3-3.0131 BSP 16938
                                                                                                           LSA 3036.4 MSA 152.6 SSA 19.5
   BOE 1.8095 BRA .5579 BC3 6.1029 FSP -931
                                                             SG1 5327.6 SG2 359.7 THA 178.46
                                                                                                           ELI 2887.3 EL2 76.9 ALF
```

```
LAUNCH DATE NOV 30 1965
                                                                                                  FLIGHT TIME 174.00
                                                                                                                                                                                 ARRIVAL DATE MAY 23 1966
     HELIOCENTRIC CONIC
                                                                                                  DISTANCE 505.913
      RL 147.53 LAL .0D LOL 67.58 VL 26.926 GAL .79 AZL 86.88 HCA 245.32 SMA 123.55 ECC .19453 INC 3.1162 V1 30.199
RP 108.94 LAP -2.83 LOP 312.87 VP 36.909 GAP 8.95 AZP 91.30 TAL 176.72 TAP 62.04 RCA 99.52 APO 147.59 V2 34.784
RC 155.962 GL 23.42 GP 3.48 ZAL 79.73 ZAP 163.41 ETS 10.76 ZAE 129.16 ETE 177.26 ZAC 63.72 ETC 164.84 CLP-163.77
     PLANETOCENTRIC CONIC
       C3 13.559 VHL 3.682 DLA 17.08 RAL 340.32 RAD 6567.5 VEL 11.617 PTH
      C3 13.559 VHL 3.682 DLA 17.08 RAL 340.32 RAD 6567.5 VEL 11.617 PTH 2.04 VHP 5.998 DPA -11.54 RAP 331.23 ECC 1.2231

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 9 16 2687.36 -27.54 73.65 200.99 96.86 3 54 4 2087.4 -26.31 65.20
90.00 19 44 36 4207.81 .29 172.42 195.62 61.68 20 54 44 3607.8 -3.50 165.78
100.00 4 40 25 2393.46 -28.77 51.84 200.80 98.49 5 20 18 1793.5 -27.30 43.35
100.00 20 56 9 3976.95 1.37 154.84 195.01 60.14 22 2 26 3376.9 -2.61 148.32
110.00 6 10 14 2112.41 -31.95 29.81 200.10 102.85 6 45 27 1512.4 -29.85 21.22
110.00 21 42 49 3830.76 4.12 142.04 193.30 56.04 22 46 39 320.8 -37 135.83
                                                                                                                                     2.04 VHP 5.998 DPA -11.54 RAP 331.23 ECC 1.2231
     DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5394.3 SGR 391.0 SG3 266.0

RRT -.3251 RRF -.3469 RTF .9448

SGB 5408.4 R23 .0405 R13 -.9449

SGI 5393.8 SG2 369.6 THA 178.64
       TOE 1.8965 TRA .6973 TC3-5.9347 BAU 1.0777
                                                                                                                                                                 ST 2973.3 SR 230.0 SS 947.2
CRT .9293 CRS -.8703 CST -.9901
       RDE .1429 RRA -.1190 RC3 .3486 FAU .04248
       FOE 1.1359 FRA .9447 FC3-2.7121 BSP 17193
                                                                                                                                                                 LSA 3125.2 MSA 152.7 SSA 19.5
      BOE 1.9018 BRA .7074 BC3 5.9449 FSP -895
                                                                                                                                                                  EL1 2981.0 EL2 84.7 ALF 4.11
 LAUNCH DATE NOV 30 1965
                                                                                                  FLIGHT TIME 176.00
                                                                                                                                                                                 ARRIVAL DATE MAY 25 1966
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 511.661
     RL 147.53 LAL .00 LOL 67.58 VL 26.886 GAL 1.19 AZL 86.85 HCA 248.48 SMA 123.31 ECC .19751 INC 3.1500 V1 30.199
RP 108.94 LAP -2.93 LOP 316.04 VP 36.881 GAP 9.24 AZP 91.16 TAL 175.15 TAP 63.63 RCA 98.95 APO 147.66 V2 34.785
RC 158.168 GL 23.10 GP 3.30 ZAL 77.05 ZAP 164.45 ETS 11.06 ZAE 129.01 ETE 177.39 ZAC 65.83 ETC 165.00 CLP-164.80
     PLANETOCENTRIC CONIC
     C3 14.174 VHL 3.765 DLA 17.88 RAL 343.00 RAD 6567.6 VEL 11.643 PTH 2.D4 VHP 6.169 DPA -10.99 RAP 333.33 ECC 1.2333 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 11 55 2727.67 -27.83 76.56 204.73 95.43 3 57 23 2127.7 -26.79 68.05 90.00 20 3 19 4186.95 -.38 171.25 199.06 61.69 21 13 6 3586.9 -4.16 164.61
                                                                                                                                61.69 21 13 6
97.07 5 24 19
60.12 22 20 7
101.46 6 50 51
55.98 23 2 57
         -29.12
                                                                                                      204...
198.43
                                                                                         54.61
                                                                                                                                                                        1831.4
                                                                                                                                                                                            -27.84
                                                                                                                                                                                                                 46.04
                                                                   .75
                                                                                       153.83
                                                                                                                                                                        3358.4
                                                                                                                                                                                              -3.23
                                                                                                                                                                                                             147.30
                                                                                                       203.94
                                                                  -32.43
                                                                                         32.29
                                                                                                                                                                       1545.8
                                                                                                                                                                                          -30.51
                                                                                                                                                                                                                23.60
                                                                    3.59
                                                                                       141.31
                                                                                                          196.66
                                                                                                                                                                       3216.8
                                                                                                                                                                                                -.90
                                                                                                                                                                                                                135.11
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
      TDE 1.9894 TRA .8603 TC3-5.7474 BAU 1.0908
                                                                                            SGT 5457.7 SGR 394.9 SG3 255.2
RRT -.2833 RRF -.3044 RTF .9448
                                                                                                                                                                  ST 3058.3 SR 245.3 SS 942.9
CRT .9253 CRS -.8673 CST -.9908
      ROE .1563 RRA -.1248 RC3 .3240 FAU .03970
FOE 1.1196 FRA .9860 FC3-2.4247 BSP 17421
BOE 1.9955 BRA .8693 BC3 5.7565 FSP -861
                                                                                         308 5472.0 R23 .0370 R13 -.9448
501 5458.9 SG2 378.6 THA 178.82
                                                                                                                                                              LSA 3206.0 MSA 153.6 SSA 19.4
EL1 3066.8 EL2 92.8 ALF. 4.25
 LAUNCH DATE NOV 30 1965
                                                                                                FLIGHT TIME 178.00
                                                                                                                                                                                ARRIVAL DATE MAY 27 1966
    MELIOCENTRIC CONIC
                                                                                                DISTANCE 517.386
     RL 147.53 LAL .00 LOL 67.58 VL 26.846 GAL 1.61 AZL 86.82 HCA 251.65 SMA 123.06 ECC .20074 INC 3.1824 VI 30.199
RP 108.94 LAP -3.02 LOP 319.20 VP 36.853 GAP 9.54 AZP 91.00 TAL 173.57 TAP 65.21 RCA 98.36 APO 147.77 V2 34.787
RC 160.359 GL 22.71 GP 3.14 ZAL 74.39 ZAP 165.46 ETS 11.44 ZAE 128.89 ETE 177.50 ZAC 67.96 ETC 165.16 CLP-165.80
    PLANETOCENTRIC CONIC
      C3 14.885 VHL 3.858 DLA 18.62 RAL 345.69 RAD 6567.6 VEL 11.673 PTH
     C3 14.885 VHL 3.858 DLA 18.62 RAL 345.69 RAD 6567.6 VEL 11.673 PTH 2.05 VHP 6.346 DPA -10.40 RAP 335.45 ECC 1.2450 LNCH AZHTH LNCH THE L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 14 56 2767.75 -28.06 79.47 208.56 93.98 4 1 4 2167.7 -27.21 70.91 90.00 20 21 49 4168.61 -.98 170.23 202.60 61.70 21 31 17 3568.6 -4.75 163.59 100.00 4 47 32 2469.12 -29.40 57.38 208.43 95.64 5 28 41 1869.1 -28.31 48.74 100.00 21 31 54 3942.46 .20 152.95 201.94 60.11 22 37 36 3342.5 -3.77 146.42 110.00 6 20 17 2178.96 -32.85 34.79 207.88 100.03 6 56 36 1579.0 -31.12 25.99 110.00 22 15 38 3805.39 3.16 140.71 200.10 55.95 23 19 4 3205.4 -1.34 134.51 OIFFERENTIAL CORRECTIONS
                                                                                                                                    2.05 VHP 6.346 OPA -10.40 RAP 335.45 ECC 1.2450
                                                                                                       207.00
200.10
    DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5516.4 SGR 398.5 SG3 244.8

RRT -.2426 RRF -.2651 RTF .9450

SGB 5530.8 R23 .0338 R13 -.9451

SGI 5517.3 SG2 386.5 THA 178.99
      TOE 2.0813 TRA 1.0323 TC3-5.5379 BAU 1.1037
                                                                                                                                                                 ST 3131.4 SR 260.5 55 935.7
      RDE .1704 RRA -.1301 RC3 .2989 FAU .03710
                                                                                                                                                                 CRT .9216 CRS -.8648 CST -.9915
     FOE 1.1019 FRA 1.0242 FC3-2.1578 BSP 17661
BDE 2.0883 BRA 1.0405 BC3 5.5460 FSP -830
                                                                                                                                                                 LSA 3274.9 MSA 154.9 SSA 19.1
                                                                                                                                                                 EL1 3140.6 EL2 100.8 ALF 4.39
LAUNCH DATE NOV 30 1965
                                                                                                 FLIGHT TIME 180.00
                                                                                                                                                                                ARRIVAL DATE HAY 29 1966
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 523.086
     RL 147.53 LAL .00 LOL 67.58 VL 26.806 GAL 2.05 AZL 86.79 MCA 254.81 SMA 122.82 ECC .20423 INC 3.2136 V1 30.199
RP 108.93 LAP -3.10 LOP 322.37 VP 36.826 GAP 9.85 AZP 90.84 TAL 171.98 TAP 66.79 RCA 97.74 APO 147.90 V2 34.789
RC 162.536 GL 22.27 GP 2.99 ZAL 71.75 ZAP 166.45 ETS 11.89 ZAE 128.78 ETE 177.61 ZAC 70.11 ETC 165.32 CLP-166.77
   PLANETOCENTRIC CONIC
     C3 15.706 VHL 3.963 OLA 19.31 RAL 348.39 RAD 6567.6 VEL 11.709 PTH 2.06 VHP 6.531 OPA -9.76 RAP 337.57 ECC 1.2585
     LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 18 18 2807.48 -28.21 82.37 212.47 92.54 4 5 5 2207.5 -27.56 73.76
                                                                                                       212.47
                                                                                                                             92.54
                                                                                                                                                                  2207.5
                                                                                                                                                4 5 5
                                           4152.99
          90.00
                          20 39 58
                                                                     -1.48
                                                                                                                                 61.72 21 49 11
94.20 5 33 24
60.11 22 54 48
                                                                                      169.36
                                                                                                         206.21
                                                                                                                                                                       3553.0
                                                                                                                                                                                            -5.25
                                                                                                                                                                                                               162.71
                      4 51 38 2506.49
21 49 19 3929.22
6 25 48 2211.88
22 31 38 3796.59
        100.00
                                                                   -29.62
                                                                                     60.13 212.37
152.22 205.53
                                                                                                                                                                       1906.5
                                                                                                                                                                                                                51.45
        100.00
                                                                     - .24
                                                                                                                                 98.60 7 2 40 1611.9
55.92 23 34 55 3196.6
                                                                                                                                                                       3329.2
                                                                                                                                                                                            -4.22
                                                                                                                                                                                                              145.69
        110.00
                                                                   -33.21
                                                                                        37.29
                                                                                                         211.90
        110.00
                                                                   2.82
                                                                                  140.25
                                                                                                         203.61
                                                                                                                                                                      3196.6
                                                                                                                                                                                          -1.67
                                                                                         MIO-COURSE EXECUTION ACCURACY
SCT 5570.8 SGR 401.7 SG3 234.9
RRT -.2025 RRF -.2223 RTF .9454
SGB 5585.3 R23 .0306 R13 -.9455
SGB 5585.3 R23 .0306 R13 -.9455
SGI 5571.4 SG2 393.4 THA 179.16
SGB 5571.4 SG2 393.4 THA 179.16
SGB 5571.4 SG2 393.4 THA 179.16
SGB 5571.4 SG2 393.4 THA 179.16
   DIFFERENTIAL CORRECTIONS
     TOE 2.1745 TRA 1.2160 TC3-5.3050 BAU 1.1154
     RDE .1854 RRA -.1346 RC3 .2736 FAU .03462
     FOE 1.0850 FRA 1.0618 FC3-1.9083 BSP 17877
```

BDE 2.1824 BRA 1.2235 BC3 5.3120 FSP -799

ARRIVAL CATE MAY 31 1966

En.

```
FLIGHT TIME 182.00
LAUNCH CATE NOV 30 1965
                                                                               DISTANCE 528.760
   HELIOCENTRIC CONIC
   RL 147.53 LAL .00 LOL 67.58 VL 26.767 GAL 2.50 AZL 86.76 MCA 257.97 SMA 122.58 ECC .20801 INC 3.2439 V1 30.199
RP 108.92 LAP -3.17 LOP 325.53 VP 36.800 GAP 10.18 AZP 90.68 TAL 170.39 TAP 68.36 RCA 97.08 APO 148.08 V2 34.792
RC 164.699 GL 21.77 GP 2.86 ZAL 69.14 ZAP 167.41 ETS 12.42 ZAE 128.70 ETE 177.71 ZAC 72.28 ETC 165.47 CLP-167.73
   PLANETOCENTRIC CONIC
    C3 16.649 VHL 4.080 CLA 19.94 RAL 351.08 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 6.725 DPA -9.09 RAP 339.70 ECC 1.2740
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      2246.7
                    3 22 1 2846.75 -28.30

20 57 42 4140.30 -1.89

4 56 6 2543.41 -29.78

22 6 19 3918.87 -.60

6 31 38 2244.48 -33.52

22 47 16 3790.56 2.59
                                                                                     216.44
                                                                                                       91.10 4 9 28
                                                                       85.24
        90.00
                                                                                                                     22 6 43
                                                                                                                                                                           161.99
                                                                                                                                          3540.3
                                                                                                                                                           -5.65
                                                                                        209.90
                                                                                                           61.74
                                                                       168.65
         90.00
                                                                                                           92.77 5 38 29
60.11 23 11 38
97.15 7 9 3
55.90 23 50 26
                                                                                                                                                                            54.13
                                                                                                                                                          -29.07
                                                                         62.87
                                                                                                                                          1943.4
                                                                                        216.38
       100.00
                                                                                                                                                                          145.12
                                                                      151.66
                                                                                       209.18
                                                                                                                                         3318.9
                                                                                                                                                           -4.57
       100.00
                                                                                                                                      1644.5
                                                                                                                                                         -32.17
                                                                                                                                                                            30.81
                                                                        39.78
                                                                                       216.00
       110.00
                                                                                                                                                                           133.74
                                                                      139.94
                                                                                        207.19
                                                                                                                                          3190.6
                                                                                                                                                           -1.90
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5619.7 SGR 404.5 SG3 225.6 ST 3254.1 SR 289.4 SS 919.5 RRT -.1622 RRF -.1808 RTF .9456 CRT .9146 CRS -.8602 CST -.9926 SGB 5634.2 R23 .0270 R13 -.9457 LSA 3390.1 MSA 159.1 SSA 18.4 SG1 5620.1 SG2 399.1 THA 179.33 EL1 3264.9 EL2 116.7 ALF 4.66
    TOE 2.2713 TRA 1.4146 TC3-5.0441 BAU 1.1241
     RDE .2013 RRA -.1384 RC3 .2480 FAU .03211
    FDE 1.0704 FRA 1.1006 FC3-1.6700 BSP 18007
    BDE 2.2802 BRA 1.4213 BC3 5.0502 FSP -766
                                                                                                                                                  ARRIVAL DATE JUN 2 1966
                                                                                 FLIGHT TIME 184.00
LAUNCH DATE NOV 30 1965
    RL 147.53 LAL .00 LOL 67.58 VL 26.727 GAL 2.98 AZL 86.73 MCA 261.13 SMA 122.34 ECC .21210 INC 3.2735 V1 30.199
RP 108.91 LAP -3.23 LOP 328.70 VP 36.775 GAP 10.52 AZP 90.50 TAL 168.79 TAP 69.92 RCA 96.39 APO 148.29 V2 34.796
RC 166.847 GL 21.22 GP 2.74 ZAL 66.58 ZAP 168.34 ETS 13.06 ZAE 128.62 ETE 177.80 ZAC 74.46 ETC 165.62 CLP-168.67
                                                                                DISTANCE 534.404
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.731 VHL 4.211 DLA 20.51 RAL 353.75 RAD 6567.7 VEL 11.795 PTH 2.09 VHP 6.929 DPA -8.38 RAP 341.84 ECC 1.2918
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      89.68 4 14 13
61.76 22 23 45
91.55 5 43 55
60.12 23 28 0
95.70 7 15 44
55.90 24 5 33
                    3 26 8 2885.40
21 14 55 4130.72
5 0 55 2579.77
22 22 49 3911.58
6 37 47 2276.71
23 2 26 3787.41
                                                                                                                                       2285.4
                                                                                                                                                        -28.06
                                                                        88.07
                                                                                      220.46
                                                        -28.32
         90.00
                                                                                                                                           3530.7
                                                                                                                                                             -5.96
                                                                                                                                                                           161.45
                                                         -2.20
                                                                        168.12
                                                                                        213.64
         90.00
                                                                                                                                                           -29.36
                                                                                                                                          1979.8
                                                        -29.86
                                                                          65.57
                                                                                        220.44
        100.00
                                                                                                                                                                           144.72
                                                                                                                                          3311.6
                                                                                                                                                            -4.81
                                                          -.84
                                                                       151.26
                                                                                        212.88
        100.00
                                                                                                                                                           -32.61
                                                                                        220.16
                                                                                                                                          1676.7
                                                      -33.76
                                                                          42.27
       110.00
                                                                       139.77
                                                                                                                                          3187.4
                                                                                                                                                             -2.02
                                                        2.47
                                                                                        210.81
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5664.6 SGR 406.8 SG3 216.6 ST 3297.1 SR 303.2 SS 908.5 RRT -.1230 RRF -.1406 RTF .9462 CRT .9114 CRS -.8584 CST -.9932 SG8 5679.1 R23 .0238 R13 -.9462 LSA 3429.6 MSA 161.7 SSA 18.0 SG1 5664.8 SG2 403.7 THA 179.49 EL1 3308.7 EL2 124.4 ALF 4.80
     TOE 2.3652 TRA 1.6216 TC3-4.7764 BAU 1.1334
     RDE .2181 RRA -.1412 RC3 .2229 FAU .02984
     FOE 1.0539 FRA 1.1363 FC3-1.4570 BSP 18209
     BOE 2.3752 BRA 1.6278 BC3 4.7816 FSP -739
                                                                                                                                                 ARRIVAL CATE JUN 4 1966
                                                                                FLIGHT TIME 186.00
LAUNCH DATE NOV 30 1965
                                                                                DISTANCE 540.015
     RL 147.53 LAL .00 LOL 67.58 VL 26.688 CAL 3.48 AZL 86.70 HCA 264.30 SMA 122.11 ECC .21654 INC 3.3027 V1 30.199
RP .108.89 LAP -3.29 LOP 331.87 VP 36.751 CAP 10.88 AZP 90.33 TAL 167.19 TAP 71.49 RCA 95.67 APO 148.55 V2 34.800
RC 168.980 GL 20.63 CP 2.64 ZAL 64.06 ZAP 169.26 ETS 13.83 ZAE 128.56 ETE 177.89 ZAC 76.66 ETC 165.76 CLP-169.59
   HELIOCENTRIC CONTC
    PLANETOCENTRIC CONIC
     C3 18.970 VHL 4.355 DLA 21.02 RAL 356,40 RAD 6567.8 VEL 11.84T PTH 2.10 VMP 7.143 DPA -7.64 RAP 343.97 ECC 1.3122
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 30 37 2923.33 -28.27
21 31 30 4124.41 -2.40
5 6 6 2615.48 -29.89
22 38 43 3907.49 -.98
6 44 13 2308.51 -33.95
23 17 5 3787.23 2.46
                                                                                                       88.29 4 19 21 2323.3
61.78 22 40 14 3524.4
89.96 5 49 41 2015.5
                                                                                                                                                        -28.21
                                                                                       224.51
                                                                        90.84
         90.00
                                                                                                                                                            -6.16
                                                                                                                                                                           161.10
                                                                        167.76
                                                                                        217.41
          90.00
                                                                                                                                                           -29.58
                                                                                                                                                                            59.43
                                                                         68.22
                                                                                        224.54
        100.00
                                                                     151.03 216.63
44.73 224.37
                                                                                                           60.12 23 43 50
94.25 7 22 41
55.89 24 20 12
                                                                                                                                                                           144.49
                                                                                                                                           3307.5
                                                                                                                                                            -4.95
        100.00
                                                                                                                                          1708.5
                                                                                                                                                                            35.63
        110.00
                                                                                                                                          3187.2
                                                                                                                                                          -2.03
                                                                                                                                                                           133.56
                                                                     139.77
                                                                                       214.48
                                                                                                                               ORBIT DETERMINATION ACCURACY
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5704.4 SGR 408.6 SG3 208.0

RRT - .0840 RRF - .1007 RTF .9469

SGB 5719.0 R23 .0208 R13 - .9469

SGI 5704.5 SG2 407.1 THA 179.65
                                                                                                                                    ST 3329.5 SR 316.4 SS 896.3
CRT .9083 CRS -.8568 CST -.9937
     TOE 2.4592 TRA 1.8414 TC3-4.4964 BAU 1.1414
      ROE .2360 RRA -.1430 RC3 .1985 FAU .02765
                                                                                                                                     LSA 3458.6 MSA 164.7 SSA 17.5
     FOE 1.0375 FRA 1.1715 FC3-1.2618 BSP 18395
                                                                                                                                    EL1 3341.9 EL2 131.8 ALF 4.94
      BOE 2.4705 BRA 1.8469 BC3 4.5008 FSP -713
                                                                                                                                                  ARRIVAL DATE JUN 6 1966
                                                                                 F: IGHT TIME 188.00
 LAUNCH DATE NOV 30 1965
                                                                                 DISTANCE 545.590
    HELIOCENTRIC CONIC
     RL 147.53 LAL .00 LOL 67.58 VL 26.649 GAL 4.01 AZL 86.67 HCA 267.46 SMA 121.87 ECC .22135 INC 3.3315 VI 30.199
RP 108.88 LAP -3.33 LOP 335.04 VP 36.728 GAP 11.25 AZP 90.15 TAL 165.59 TAP 73.05 RCA 94.90 APO 148.85 V2 34.805
RC 171.096 GL 20.01 GP 2.54 ZAL 61.60 ZAP 170.17 ETS 14.74 ZAE 128.50 ETE 177.97 ZAC 78.87 ETC 165.89 CLP-170.50
    PLANETOCENTRIC CONIC
     C3 20.386 VHL 4.515 DLA 21.46 RAL 359.00 RAD 6567.8 VEL 11.907 PTH 2.12 VHP 7.370 DPA -6.86 RAP 346.11 ECC 1.3355
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         1 AZMIN IN 1 1 1 2 2 3 6 . 4 2 5 1 2 3 6 0 . 4 3 5 2 1 . 5 8 6 . 5 9 5 5 5 4 9 2 0 5 0 . 4 6 0 . 1 2 2 3 5 9 3 3 3 0 6 . 7 9 2 . 8 1 7 2 9 5 5 17 3 9 . 8 5 5 . 9 0 2 4 3 4 1 9 3 1 9 0 . 1
                                                                                                                                                         -28.29
                                                                                       228.60
                        3 35 31 2960.40
                                                         -28.16
                                                                         93.55
          90.00
                                                                                                                                                                            160.93
                                                                                                                                                             -6.25
                                                                                         221.22
                     21 47 23
                                                          -2.49
                                                                         167.60
                                       4121.52
          90.00
                                                                          70.82 220.40
                                                                                                                                                            -29.74
                                                                                                                                                                             62.02
                                                         -29.86
         100.00
                         5 11 38 2650.45
                                                                                                                                                            -4.98
                                                                                                                                                                            144.45
                      22 53 57 3906.71 -1.01
6 50 55 2339.85 -34.08
23 31 9 3790.07 2.57
                                                                        150.99
         100.00
                                                                                                                                                          -33.32
-1.92
                                                                                                                                                                             38.01
                                                                                         228.62
                                                                          47.17
        110.00
                                                                                                                                                                            133.71
                                                                        139.91
                                                                                         218.16
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
SGT 5739,8 SGR 409.8 SG3 199.9
RRT -.D453 RRF -.0611 RTF .9477
SGB 5754.4 R23 .0180 R13 -.9477
SGI 5739.8 SG2 409.4 THA 179.81
SGI 5739.8 SG2 409.4 THA 179.81
SGI 5754.0 RECOURACY
ORBIT DETERMINATION ACCURACY
ORBIT DETERMINATION ACCURACY
ST 3351.8 SR 328.8 SS 883.7
CRT .9054 CRS -.8552 CST -.9941
SGI 5739.8 SG2 409.4 THA 179.81
ELI 3365.0 EL2 139.1 ALF 5.08
     DIFFERENTIAL CORRECTIONS
      TDE 2.5536 TRA 2.0748 TC3-4.2082 BAU 1.1479
      ROE .2549 RRA - .1437 RC3 .1749 FAU .02556
      FOE 1.0218 FRA 1.2071 FC3-1.0852 BSP 18557
      BDE 2.5663 BRA 2.0798 BC3 4.2119 FSP -686
```

```
LAUNCH DATE NOV 30 1965
                                                                        FLIGHT TIME 190.00
                                                                                                                                  ARRIVAL CATE JUN 8 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 551.123
     RL 147.53 LAL .00 LOL 67.58 VL 26.611 GAL 4.57 AZL 86.64 HCA 270.63 SMA 121.64 ECC .22657 INC 3.3601 V1 30.199
RP 108.86 LAP -3.36 LOP 338.21 VP 36.705 GAP 11.64 AZP 89.96 TAL 164.00 TAP 74.62 RCA 94.08 APO 149.21 V2 34.811
RC 173.196 GL 19.36 GP 2.46 ZAL 59.20 ZAP 171.06 ETS 15.83 ZAE 128.45 ETE 178.05 ZAC 81.09 ETC 166.01 CLP-171.40
    PLANETOCENTRIC CONIC
     C3 22.006 VHL 4.691 CLA 21.85 RAL
                                                      1.55 RAD 6567.9 VEL 11.974 PTH 2.13 VHP 7.609 DPA -6.07 RAP 348.25 ECC 1.3622
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 40 47 2996.52
22 2 29 4122.15
5 17 31 2684.61
23 8 26 3909.30
6 57 52 2370.70
23 44 35 3795.97
                                                                                            85.63 4 30 44
61.78 23 11 11
        90.00
                                                   -28.01
                                                                            232.71
                                                                 96.18
                                                                                                                       2396.5
                                                                                                                                      -28.32
                                                                                                                                                         87.53
         90.00
                                                   -2.47
                                                                 167.64
                                                                              225.05
                                                                                                                           3522.2
                                                                                                                                          -6.23
                                                                                                                                                        160.97
       100.00
                                                   -29.78
                                                                  73.36
                                                                              232.83
                                                                                               87.26 6 2 16
60.12 24 13 35
                                                                                                                           2084.6
                                                                                                                                          -29.84
       100.00
                                                    - .92
                                                                151.13
                                                                              224.18
                                                                                                                           3309.3
                                                                                                                                           -4.89
                                                                           232.89
                                                                                               91.39 7 37 22
55.92 24 47 51
       110.00
                                                  -34.16
                                                                 49.58
                                                                                                                           1770.7
                                                                                                                                         -33.59
       110.00
                                                  2.80
                                                                140.22
                                                                              221.86
                                                                                                                           3196.0
                                                                                                                                         -1.70
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                   RID-COURSE EXECUTION ACCURACT
SGT 5771.3 SGR 410.5 SG3 192.2
RRT -.0060 RRF -.0207 RTF .9485
SGB 5785.9 R23 .0150 R13 -.9485
SGI 5771.3 SG2 410.5 THA 179.98
     TOE 2.6519 TRA 2.3256 TC3-3.9092 BAU 1.1509
                                                                                                                     ST 3368.4 SR 340.3 SS 872.1
CRT .9025 CRS -.8540 CST -.9946
    RDE .2747 RRA -.1431 RC3 .1524 FAU .02346
FDE 1.0086 FRA 1.2443 FC3 -.9228 BSP 18630
                                                                                                                       LSA 3491.9 MSA 171.2 SSA 16.5
    BOE 2.6661 BRA 2.3300 BC3 3.9121 FSP -658
                                                                                                                      ELI 3382.4 EL2 146.0 ALF 5.22
LAUNCH DATE NOV 30 1965
                                                                        FLIGHT TIME 192.00
                                                                                                                                  ARRIVAL DATE JUN 10 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 556.610
    RL 147.53 LAL .00 LOL 67.58 VL 26.573 GAL 5.15 AZL 86.61 HCA 273.79 SMA 121.42 ECC .23225 INC 3.3888 VI 30.199
RP 108.84 LAP -3.38 LOP 341.38 VP 36.683 GAP 12.06 AZP 89.78 TAL 162.41 TAP 76.20 RCA 93.22 APO 149.62 V2 34.817
RC 175.278 GL 18.68 GP 2.38 ZAL 56.87 ZAP 171.93 ETS 17.17 ZAE 128.41 ETE 178.13 ZAC 83.32 ETC 166.11 CLP-172.29
   PLANETOCENTRIC CONIC
    C3 23.856 VHL 4.884 DLA 22.18 RAL
                                                      4.05 RAD 6568.0 VEL 12.051 PTH
                                                                                                 2.15 VHP 7.864 DPA -5.25 RAP 350.38 ECC 1.3926
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    3 46 28 3031.58
22 16 44 4126.39
                                                  -27.80
                                                                98.72
                                                                             236.82
                                                                                             84.37
                                                                                                          4 37 0
                                                                                                                         2431.6
                                                                                                                                        -28.29
        90.00
                   22 16 44
                                                   -2.34
                                                                167.87
                                                                              228.87
                                                                                                61.77 23 25 31
                                                                                                                           3526.4
                                                                                                                                          -6.09
                  5 23 45 2717.90
23 22 8 3915.31
7 5 2 2401.06
0 1 17 3804.92
       100.00
                                                  -29.64
                                                                 75.82
                                                                              237.00
                                                                                               85.97
                                                                                                                                          -29.89
                                                                                                           6 9 3
                                                                                                                           2117.9
       100.00
                                                                                               60.12 24 27 24
                                                   -.72
                                                                151.46
                                                                              227.97
                                                                                                                           3315.3
                                                                                                                                          -4.69
       110.00
                                                  -34.18
                                                                 51.95
                                                                              237.19
                                                                                                         7 45 3
                                                                                               89.99
                                                                                                                          .1801.1
                                                                                                                                         -33.81
                                                                                                                                                         42.72
      110.00
                                                  3.14
                                                                140.69
                                                                              225.57
                                                                                                          1 4 42
                                                                                               55.94
                                                                                                                          3204.9
                                                                                                                                         -1.35
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 5797.4 SGR 410.6 SG3 184.7
RRT .0327 RRF .0188 RTF .9496
    TDE 2.7473 TRA 2.5877 TC3-3.6162 BAU 1.1541
                                                                                                                      ST 3371.1 SR 350.8 SS 858.8
CRT .8997 CRS -.8529 CST -.9950
    RDE .2955 RRA -.1411 RC3 .1314 FAU .D2154
FDE .9943 FRA 1.2796 FC3 -.7816 BSP 18781
                                                                  SGB 5812.0 R23 -.0124 R13 .9496
SG1 5797.4 SG2 410.4 THA .13
                                                                                                                      LSA 3492.1 HSA 174.4 SSA 16.0
    BOE 2.7631 BRA 2.5915 BC3 3.6185 FSP -634
                                                                                                                      EL1 3385.9 EL2 152.4 ALF
LAUNCH DATE NOV 30 1965
                                                                       FLIGHT TIME 194.00
                                                                                                                                 ARRIVAL DATE JUN 12 1966
   HELIOCENTRIC CONTC
                                                                       DISTANCE 562.045
   RL 147.53 LAL .00 LOL 67.58 VL 26.535 GAL 5.77 AZL 86.58 HCA 276.96 SMA 121.20 ECC .23843 INC 3.4178 VI 30.199
RP 108.82 LAP -3.39 LOP 344.55 VP 36.663 GAP 12.51 AZP 89.59 TAL 160.83 TAP 77.79 RCA 92.30 APO 150.09 V2 34.824
RC 177.341 GL 17.99 GP 2.30 ZAL 54.60 ZAP 172.79 ETS 18.84 ZAE 128.37 ETE 178.20 ZAC 85.55 ETC 166.20 CLP-173.17
   PLANETOCENTRIC CONIC
    C3 25.972 VHL 5.096 DLA 22.45 RAL 6.49 RAD 6568.1 VEL 12.139 PTH 2.18 VHP 8.136 DPA -4.41 RAP 352.51 ECC 1.4274
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                  3 52 32 3065.52
22 30 5 4134.29
                                                                           240.94
                                                                                           83.17 4 43 38
61.75 23 38 59
                                                 -27.55
                                                                                                                      2465.5 1 -28.21
                                                               101.17
       90.00
                                                 -2.08
                                                               168.32
                                                                             232.69
                                                                                                                          3534.3
                                                                                                                                         -5.84
                                                                                                                                                       161.65
      100.00
                  5 30 18 2750.29
23 35 0 3924.75
                                                                                              84.72 6 16 9
60.11 24 40 25
                                                 -29.47
                                                                78.21
                                                                             241.17
                                                                                                                          2150.3
                                                                                                                                        -29.88
                                                                                                                                                       69.43
      100.00
                                                   - .40
                                                               151.98
                                                                             231.76
                                                                                                                          3324.8
                                                                                                                                          -4.37
                                                                                                                                                       145.45
      110.00
                  7 12 23 2430.92
0 13 20 3816.89
                                                -34.16
                                                                54.28
                                                                                                       7 52 54 1830.9
1 16 57 3216.9
                                                                             241.49
                                                                                               88.61
                                                                                                                                        -33.97
                                                                                                                                                        45.04
      110.00
                                                  3.59
                                                               141.32
                                                                             229.27
                                                                                               55.9A
                                                                                                                         3216.9
                                                                                                                                          -.90
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 5818.8 SGR 410.2 SG3 177.6
RRT .0714 RRF .0583 RTF .9508
SG8 5833.2 R23 -.0100 R13 .9508
   TOE 2.8439 TRA 2.8658 TC3-3.3246 BAU 1.1550
                                                                                                                      ST 3365.5 SR 360.2 SS 845.6
   ROE .3172 RRA -.1376 RC3 .1119 FAU .01969
FOE .9809 FRA 1.3156 FC3 -.6565 85P 18912
                                                                                                                      CRT .8971 CRS -.8519 CST -.9954
                                                                                                                      LSA 3484.2 MSA 177.6 SSA 15.5
EL1 3381.0 EL2 138.4 ALF 5.50
                                                                   SG1 5818.9 SG2 409.1 THA .29
   BDE 2.8615 BRA 2.8691 BC3 3.3265 FSP -612
LAUNCH DATE NOV 30 1965
                                                                       FLIGHT TIME 196.00
                                                                                                                                 ARRIVAL DATE JUN 14 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 567.419
   RL 147.53 LAL .00 LOL 67.58 VL 26.497 GAL 6.43 AZL 86.55 HCA 280.13 SMA 120.98 ECC .24517 INC 3.4471 V1 30.199
RP 108.79 LAP -3.39 LOP 347.73 VP 36.643 GAP 12.98 AZP 89.39 TAL 159.26 TAP 79.39 RCA 91.32 APO 150.64 V2 34.832
RC 179.385 GL 17.28 GP 2.24 ZAL 52.42 ZAP 173.65 ETS 20.96 ZAE 128.32 ETE 178.27 ZAC 87.78 ETC 166.27 CLP-174.05
  PLANETOCENTRIC CONIC
   C3 28.393 VHL 5.328 OLA 22.67 RAL 8.85 RAD 6568.1 VEL 12.238 PTH
                                                                                                2.20 VHP 8.426 OPA -3.55 RAP 354.64 ECC 1.4673
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 58 59 3098.29
22 42 29 4145.83
       90.00
                                                 -27.26
                                                              103.53
                                                                            245.05
                                                                                            82.02
                                                                                                         4 50 38
                                                                                                                       2498.3
                                                                                                                                      -28.08
       90.00
                  22 42 29
                                                  -1.71
                                                               168.96
                                                                             236.49
                                                                                              61.73
                                                                                                         23 51 35
                                                                                                                          3545.A
                                                                                                                                         -5.48
                                                                                                                                                       162.30
                  5 37 10 2781.75
23 47 0 3937.60
7 19 55 2460.28
0 24 40 3831.83
     100.00
                                                 -29.25
                                                                80.53
                                                                             245.33
                                                                                              83.52
                                                                                                         6 23 32
                                                                                                                          2181.7
                                                                                                                                        -29.83
                                                                                                                                                        71.71
     100.00
                                                  .04
                                                              152.68
                                                                             235.52
                                                                                              60.11
                                                                                                       24 52 37
                                                                                                                          3337.6
                                                                                                                                         -3.94
                                                                                                                                                       146.16
     110.00
                                                 -34.09
                                                                56.57
                                                                                              87.25
                                                                                                        8 0 55
                                                                                                                         1860.3
                                                                                                                                        -34.09
                                                                                                                                                       47.32
                    0 24 40
     110.00
                                3831.83
                                                  4.16
                                                              142.10
                                                                             232495
                                                                                              56.04
                                                                                                          1 28 32
                                                                                                                         3231.8
                                                                                                                                          -.32
                                                                                                                                                      135.89
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   TOE 2.9416 TRA 3.1611 TC3-3.0373 BAU 1.1535
                                                                   SGT 5835.3 SGR 409.2 SG3 170.8
RRT .1103 RRF .0978 RTF .9523
                                                                                                                     ST 3351.9 SR 368.4 SS 832.8
CRT .8945 CRS -.8511 CST -.9959
                                                                                                               CRT .8945 CRS -.8511 CS1 -....
LSA 3468.7 MSA 180.6 SSA 15.0
EL1 3368.1 EL2 163.9 ALF. 5.63
   RDE .3399 RRA -.1324 RC3 .0940 FAU .01792
FDE .9665 FRA 1.3526 FC3 -.5463 BSP 19028
BDE 2.9612 BRA 3.1639 BC3 3.0388 FSP -589
                                                                  SGB 5849.7 R23 -.0078 R13 .9522
SGI 5835.5 SG2 406.7 THA .45
```

```
ARRIVAL DATE JUN 16 1966
                                                                                              FLIGHT TIME 198.00
LAUNCH CATE NOV 30 1965
                                                                                             OISTANCE 572.723
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 31.168 VHL 5.583 OLA 22.84 RAL 11.14 RAD 6568.2 VEL 12.351 PTH 2.23 VHP 8.738 OPA -2.68 RAP 356.76 ECC 1.5129

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 4 548 3129.86 -26.94 105.78 249.14 80.93 4 57 58 2529.9 -27.92 97.25

90.00 22 53 55 4160.98 -1.22 169.81 240.27 61.71 24 3 16 3561.0 -4.99 163.16

100.00 5 44 18 2812.28 -28.99 82.76 249.48 82.37 6 31 10 2212.3 -29.74 74.04

100.00 0 2 2 3953.79 .59 153.57 239.26 60.11 1 7 56 3353.8 -3.39 147.05

110.00 7 27 35 2489.17 -33.97 58.82 250.08 85.93 8 9 4 1889.2 -34.16 49.58

110.00 0 35 15 3849.66 4.84 143.04 236.62 56.12 139.25 3249.7 .36 136.82
   PLANETOCENTRIC CONIC
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    DIFFERENTIAL CORRECTIONS
TDE 3.0452 TRA 3.4785 TC3-2.7523 BAU 1.1473
RDE .3634 RRA -.1254 RC3 .0779 FAU .01613
RDE .3654 RRA -.1254 RC3 .0779 FAU .01613
RDE .3666 BRA 3.4808 BC3 2.7534 FSP -565
RDE 3.0668 BRA 3.4808 BC3 2.7534 FSP -565
RDE 3.0668 BRA 3.4808 BC3 2.7534 FSP -565
RDE 3.0668 RA 3.4808 BC3 2.7534 FSP -565
RDE 3.0668 RA 3.4808 BC3 2.7534 FSP -565
                                                                                                                                                             ST 3335.6 SR 375.3 SS 822.0
CRT .8920 CRS -.8506 CST -.9963
                                                                                                                                                     BDE 3.0668 BRA 3.4808 BC3 2.7534 FSP -565
                                                                                                                                                                            ARRIVAL DATE JUN 18 1966
                                                                                               FLIGHT TIME 200.00
LAUNCH DATE NOV 3D 1965
                                                                                              DISTANCE 577.947
    RL 147.53 LAL .DO LOL 67.58 VL 26.424 GAL 7.86 AZL 86.49 MCA 286.47 SMA 120.55 ECC .26056 INC 3.5078 VI 30.199
RP 108.74 LAP -3.36 LOP 354.08 VP 36.606 GAP 14.04 AZP 89.00 TAL 156.19 TAP 82.66 RCA 89.14 APO 151.96 V2 34.849
RC 183.413 GL 15.86 GP 2.12 ZAL 48.29 ZAP 175.31 ETS 27.52 ZAE 128.23 ETE 178.41 ZAC 92.25 ETC 166.37 CLP-175.81
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 34.354 VHL 5.861 DLA 22.95 RAL 13.34 RAD 6568.4 VEL 12.479 PTH 2.26 VHP 9.074 DPA -1.80 RAP 358.87 ECC 1.5654
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 12 58 3160.20 -26.60 107.94 253.22 79.91 5 5 38 2560.2 -27.72 99.45
90.00 23 4 21 4179.68 -.62 170.85 244.01 61.69 24 14 1 3579.7 -4.40 164.21
100.00 5 51 41 2841.87 -28.70 84.91 253.61 81.27 6 39 3 2241.9 -29.61 76.23
100.00 0 12 15 3973.24 1.25 154.64 242.97 60.13 1 18 28 3373.2 -2.73 148.12
110.00 7 35 21 2517.59 -33.81 61.02 254.35 84.63 8 17 18 1917.6 -34.18 51.80
110.00 0 45 5 3870.28 5.62 144.12 240.25 56.23 1 49 35 3270.3 1.15 137.89

DIEFERBITIAL CORRECTIONS
   PLANETOCENTRIC CONIC
                                                                                     170.85 244.01 61.69 24 14 1
84.91 253.61 81.27 6 39 3
154.64 242.97 60.13 1 18 28
61.02 254.35 84.63 8 17 18
144.12 240.25 56.23 1 49 35
MID-COURSE EXECUTION ACCURACY
5GT 5856.8 SGR 405.6 263 170 6
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    RRT .1890 RRF .1774 RTF .9557 CRT .8895 CRS -.8501 CST -.9966 S68 5870.9 R23 -.0041 R13 .9556 LSA 3422.1 MSA 185.7 SSA 14.0 SG1 5857.3 SG2 398.3 THA .75 ELI 3325.4 EL2 173.1 ALF 5.86
     TOE 3.1467 TRA 3.8118 TC3-2.4821 BAU 1.1403
      ROE .3878 RRA -.1165 RC3 .0636 FAU .01451
FOE .9489 FRA 1.4316 FC3 -.3656 BSP 19153
BOE 3.1705 BRA 3.8136 BC3 2.4829 FSP -545
                                                                                                                                                                            ARRIVAL DATE JUN 20 1966
                                                                                               FLIGHT TIME 202.00
LAUNCH DATE NOV 30 1965
                                                                                               DISTANCE 583.075
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 38.022 VHL 6.166 CLA 23.02 RAL 15.46 RAD 6568.5 VEL 12.625 PTH 2.29 VHP 9.437 DPA
                                                                                                                                                                        -.91 RAP
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         78.94 5 13 35 2589.3
61.68 24 23 50 3601.8
80.23 6 47 8 2270.5
60.17 1 28 8 3395.8
63.37 8 25 36 1945.6
56.37 1 59 3 3293.6
                         4 20 26 3189.33 -26.23
23 13 48 4201.80 .10
5 59 18 2870.55 -28.39
0 21 33 3995.82 2.01
7 43 11 2545.56 -33.61
0 54 9 3893.57 6.50
                                                                                                                                                                                   -27.49
                                                                                   109.99 257.26
           90.00
                                                                                                                                                                                        -3.69
                                                                                                                                                                                                          165.45
                                                                                                        247.70
                                                                                    172.08
           90.00
                                                                                                                                                                                                            78.34
                                                                                                                                                                                       -29.45
                                                                                                        257.71
                                                                                      86.99
          100.00
                                                                                                                                                                                                          149.36
                                                                                                                                                                                      -1.97
                                                                                   155.88
                                                                                                       246.63
          100.00
                                                                                63.10
145.35
MIO-
                                                                                                    258.59
                                                                                                                                                                                     -34.16
2.04
                                                                                                                                                                                                           55.98
          110.00
                                                                                                                                                                                                          139.11
                                                                                                       243.85
          110.00
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                        SGT 5860.1 SGR 403.1 SG3 152.3 ST 3276.2 SR 385.0 SS 800.3 RRT .2284 RRF .2172 RTF .9576 CRT .8872 CRS -.8498 CST -.9970 SGB 5874.0 R23 -.0026 R13 .9576 LSA 3389.3 MSA 187.6 SSA 13.5 SG1 5860.9 SG2 392.4 THA .90 EL1 3294.0 EL2 176.7 ALF 5.97
       TOE 3.2525 TRA 4.1675 TC3-2.2213 BAU 1.1294
      ROE .4129 RRA -.1054 RC3 .0510 FAU .01291
FOE .9408 FRA 1.4732 FC3 -.2940 BSP 19231
BOE 3.2786 BRA 4.1688 BC3 2.2219 FSP -525
                                                                                                                                                                             ARRIVAL DATE JUN 22 1966
                                                                                                FLIGHT TIME 204.00
 LAUNCH DATE NOV 30 1965
                                                                                               DISTANCE 588.093
      RL 147.53 LAL .00-LOL 67.58 VL 26.352 GAL 9.51 AZL 86.43 HCA 292.82 SMA 120.13 ECC .27905 INC 3.5727 V1 30.199
RP 108.68 LAP -3.29 LOP .44 VP 36.572 GAP 15.28 AZP 88.61 TAL 153.22 TAP 86.04 RCA 86.61 APO 153.66 VZ 34.868
RC 187.357 GL 14.43 GP 2.02 ZAL 44.50 ZAP 176.87 ETS 41.11 ZAE 128.10 ETE 178.54 ZAC 96.68 ETC 166.38 CLP-177.60
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
       C3 42.256 VHL 6.500 DLA 23.05 RAL 17.49 RAD 6568.6 VEL 12.791 PTH 2.33 VHP 9.831 DPA
                                                                                                                                                                         -.02 RAP 3.06 ECC 1.6954
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       2617.3
                                                                                                                                                                                     -27.25
                             4 28 10 3217.26
                                                                    -25.85
                                                                                     111.95
            90.00
                                                                                                                                                                                                           166.87
                                                                                                                                                                     3627.2
                                                                                                                                                                                         -2.87
                          23 22 15 4227.20
                                                                                      173.50
                                                                       .92
            90.00
                                                                                                                                                                                                             80.38
                           6 7 5 2898.31 -28.05 88.98
0 29 57 4021.38 2.88 157.28
7 51 3 2573.06 -33.37 65.29
1 2 28 3919.40 7.47 146.72
                                                                                                                                                                     2298.3
                                                                                                                                                                                      -29.25
           100.00
                                                                                                                                                                     3421.4
                                                                                                                                                                                        -1.10
                                                                                                                                                                                                           150.76
           100.00
                                                                                                                                                                 1973.1 -34.10
                                                                                                                                                                                                             56.13
           110.00
                                                                                                                                                                    3319.4
                                                                                                                                                                                          3.02
                                                                                    MID-COURSE EXECUTION ACCURACY

SGT 5858.9 SGR 400.0 SG3 146.7

RRT 72680 RRF .2570 RTF .9599

SGB 5872.5 R23 -.0015 R13 .9599

SGI 5859.8 SG2 385.3 THA 1.05

EL1 3257.9 EL2 179.5 ALF 6.06
          110.00
      DIFFERENTIAL CORRECTIONS
       TOE 3.3622 TRA 4.5471 TC3-1.9720 BAU 1.1143
       ROE .4367 RRA -.0921 RC3 .0401 FAU .01138
FOE .9343 FRA 1.5171 FC3 -.2331 BSP 19299
        BOE 3.3907 BRA 4.5480 BC3 1.9724 FSP -506
```

ARRIVAL DATE JUN 24 1966

LAUNCH DATE NOV 30 1965

FLIGHT TIME 206.00

BOE 3.9114 BRA 6.3675 BC3 1.1017 FSP -436

```
ARRIVAL DATE JUL 2 1966
                                                                                     FLIGHT TIME 214.00
LAUNCH DATE NOV 30 1965
                                                                                    DISTANCE 610.570
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.183 GAL 14.92 AZL 86.23 HCA 308.73 SMA 119.18 ECC .34514 INC 3.7704 V1 30.199
RP 108.51 LAP -2.94 LOP 16.37 VP 36.504 GAP 19.55 AZP 87.64 TAL 146.68 TAP 95.40 RCA 78.05 APO 160.31 V2 34.924
RC 196.842 GL 10.96 GP 1.84 ZAL 36.64 ZAP 176.96 ETS 144.40 ZAE 127.39 ETE 178.86 ZAC 107.43 ETC 166.04 CLP 177.58
   PLANETOCENTRIC CONIC
     C3 76.643 VHL 8.755 DLA 22.56 RAL 26.15 RAD 6569.5 VEL 14.071 PTH
                                                                                                                   2.57 VHP 12.450 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT-ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              74.30
                                                                                                                               6 5 9
                                                                                                                                                 2738.5
                                                                                           280.48
         90.00
                        5 9 31 3338.54
                                                           -23.87
                                                                           120.28
                      23 50 1 4396.74
6 47 29 3022.66
0 58 40 4187.85
8 29 54 2702.25
1 32 44 4081.03
                                                                                                                 62.35
                                                                                                                             25 3 18
                                                                                                                                                  3796.7
                                                                                                                                                                                     176.33
                                                                                             268.51
         90.00
                                                             6.35
                                                                            183.00
                                                                                                                             7 37 52
                                                                                                                 75.00
                                                                                                                                                  2422.7
                                                                             97.73
                                                                                             281.17
       100.00
                                                           -26.16
                                                                                                                 61.22 2 8 28
76.61 9 14 56
                                                                                                                                                  3587.9
                                                                                                                                                                     4.53
                                                                                                                                                                                     159.91
                                                                           166.52
                                                                                             267.38
       100.00
                                                            8.43
                                                                                                                                                 2102.2
                                                                                            282.79
                                                          -31.75
                                                                             75.01
       110.00
                                                                                                                 58.26
                                                                                                                               2 40 45
                                                                                                                                                  3481.0
                                                                                                                                                                      9.12
                                                                                             264.42
                                                         13.41
                                                                           155.46
       110.00
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 5794.6 SGR 379.1 SG3 122.5
RRT .4690 RRF .4587 RTF .9734
SGB 5807.0 R23 .0007 R13 .9734
SGI 5797.3 SG2 334.7 THA 1.76
                                                                                                                                     ST 3020.1 SR 378.6 SS 778.7

CRT .8776 CRS -.8559 CST -.9988

LSA 3136.3 MSA 184.9 SSA 10.5

EL1 3038.4 EL2 180.4 ALF 6.30
     TOE 4.0293 TRA 6.9200 TC3 -.9160 BAU .9386
    ROE .5785 RRA .0165 RC3 .0091 FAU .00382
FOE .9392 FRA 1.7988 FC3 -.0431 BSP 19277
BOE 4.0706 BRA 6.9200 BC3 .9161 FSP -418
                                                                                                                                                          ARRIVAL DATE JUL 4 1966
                                                                                     FLIGHT TIME 216.00
LAUNCH DATE NOV 30 1965
                                                                                     DISTANCE 614.242
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.152 GAL 16.32 AZL 86.18 MCA 311.91 SMA 119.01 ECC .36321 INC 3.8200 VI 30.199
RP 108_47 LAP -2.84 LOP 19.56 VP 36.494 GAP 20.71 AZP 87.45 TAL 145.62 TAP 97.53 RCA 75.78 APO 162.23 V2 34.936
RC 198.673 GL 10.29 GP 1.81 ZAL 35.37 ZAR 176.06 ETS 154.35 ZAE 127.14 ETE 178.92 ZAC 109.47 ETC 165.90 CLP 176.50
   PLANETOCENTRIC CONIC
    C3 87.670 VHL 9.363 DLA 22.35 RAL 27.55 RAD 6569.7 VEL 14.457 PTH 2.63 VHP 13.158 DPA 5.24 RAP 15.18 ECC 2.4428 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
20
                      5 18 0 3358.73
23 52 42 4437.67
6 55 35 3044.11
1 1 45 4227.52
                                                                                                               73.72
                                                                                                                                6 13 59
                                                                                                                                              2758.7
                                                                                                                                                                 -25.50
                                                                                                                                                                                    113.55
                                                           -23.50
                                                                            121.64
                                                                                            284.05
                                                                                                                              25 6 40
                                                                                                                                                   3637.7
                                                                                                                                                                       3.91
                                                                                                                                                                                      178.62
                                                             7.63
                                                                            185.32
                                                                                             271.67
                                                                                                                  62.65
                                                           -25.77
                                                                             99.21
                                                                                             284.77
                                                                                                                  74.31
                                                                                                                               7 46 19
                                                                                                                                                  2444.1
                                                                                                                                                                    -27.68
                                                                                                                                                                                       90.93
       100.00
                                                                                                                             7 46 19
2 12 12
9 22 46
2 45 7
                                                            9.73
                                                                           168.75
                                                                                             270.55
                                                                                                                  61.60
                                                                                                                                                  3627.5
                                                                                                                                                                      5.86
                                                                                                                                                                                      162.10
       100.00
                       8 37 21 2725.73
1 36 28 4118.67
                                                                                                                                                  2125.7 -33.02
3518.7 10.51
                                                                              76.74
                                                                                                                  75.65
                                                                                                                                                                                       67.90
                                                           -31.36
                                                                                             286.48
       110.00
                                                                                                                                                                                     151.02
                                                          14.75
                                                                            157.56
                                                                                             267.61
                                                                                                                  58.81
       110.00
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                RRT .5089 RRF .4988 RTF .9764
SGB 5779.8 R23 .0004 R13 .9764
SGI 5770.8 SG2 321.8 THA 1.90
                                                                                                                                             ST 2969.6 SR 372.5 SS 783.7
CRT .8772 CRS -.8558 CST -.9990
     TOE 4.1958 TRA 7.5147 TC3 -.7468 BAU .8753
    ROE .6086 RRA .0484 RC3 .0067 FAU .00225
FOE .9487 FRA 1.8726 FC3 -.0222 8SP 19291
                                                                                                                                       LSA 3088.4 MSA 181.7 SSA 10.0
EL1 2987.6 EL2 177.8 ALF 6.30
     BOE 4.2397 BRA 7.5148 BC3 .7468 FSP -404
                                                                                                                                                          ARRIVAL DATE JUL 6 1966
                                                                                     FLIGHT TIME 218.00
LAUNCH DATE NOV 30 1965
                                                                                    DISTANCE 617.476
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.123 GAL 17.88 AZL 86.12 MCA 315.10 SMA 118.84 ECC .38350 INC 3.8750 VI 30.199
RP 108.43 LAP -2.73 LOP 22.75 VP 36.484 GAP 22.01 AZP 87.25 TAL 144.69 TAP 99.79 RCA 73.27 APO 164.42 V2 34.948
RC 200.481 GL 9.63 GP 1.78 ZAL 34.23 ZAP 175.04 ETS 160.77 ZAE 126.82 ETE 178.98 ZAC 111.46 ETC 165.74 CLP 175.37
   PLANETOCENTRIC CONIC
     C3 100.894 VHL 10.045 DLA 22.09 RAL 28.83 RAC 6570.0 VEL 14.908 PTH 2.69 VHP 13.952 DPA 6.06 RAP 17.08 ECC 2.6605
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     5 26 28 3377.25 -23.14
23 54 24 4480.44 8.96
7 3 36 3064.05 -25.40
1 3 53 4268.87 11.06
8 44 37 2748.02 -30.98
1 39 21 4157.67 16.11
                                                                                                                                              2777.2
                                                                                                                                                                 -25.22
                                                                                                                                                                                 114.63
                                                                                         287.49
                                                                                                             73.20
                                                                                                                             6 22 45
                                                                           122.88
         90.00
                                                                                                                                                                                     161.02
                                                                                             274.72
                                                                                                                 63.03
                                                                                                                             25 9 4
                                                                                                                                                  3880.4
                                                                                                                                                                     5.27
                                                                            187.76
         90.00
                                                                                                                 73.68 7 54 40
62.05 2 15 2
74.77 9 30 25
                                                                            100.58
                                                                                             288.23
                                                                                                                                                  2464.1
                                                                                                                                                                   -27.39
                                                                                                                                                                                     92.34
       100.00
                                                                                                                                                  3668.9
                                                                                                                                                                     7.23
                                                                                                                                                                                    164.40
                                                                           171.10
                                                                                           273.61
       100.00
                                                                                                                                                  2148.0 -32.75
                                                                             78.36
                                                                                          290.01
                                                                                                                                                                                     69.59
       110.00
                                                                            159.76
                                                                                             270.70
                                                                                                                  59.44
                                                                                                                               2 48 39
                                                                                                                                                 3557.7
                                                                                                                                                                    11.94
                                                                                                                                                                                     153.14
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                                       ST 2919.0 SR 365.2 SS 792.4
CRT .8774 CRS -.8582 CST -.9992
   DIFFFRENTIAL CORRECTIONS
                                                                                SGT 5737.2 SGR 368.7 SG3 114.3
RRT .5486 RRF .5388 RTF .9793
SGB 5749.1 R23 .0000 R13 .9793
SGI 5740.8 SG2 308.1 THA 2.03
     TOE 4.3811 TRA 8.1650 TC3 -.5902 BAU .7962
    ROE .6397 RRA .0845 RC3 .0054 FAU .00056
FDE .9628 FRA 1.9556 FC3 -.0048 BSP 19278
BDE 4.4276 BRA 8.1654 BC3 .5902 FSP -391
                                                                                                                                            LSA 3041.4 MSA 177.5 SSA 9.5
                                                                                                                                          EL1 2936.6 EL2 174.1 ALF
                                                                                                                                                                                       6.29
                                                                                     FLIGHT TIME 220.00
                                                                                                                                                          ARRIVAL DATE JUL # 1966 ......
LAUNCH DATE NOV 30 1965
                                                                                    DISTANCE 620.158
   HELIOCENTRIC CONIC
    RL 147.53 LAL .00 LOL 67.58 VL 26.094 GAL 19.62 AZL 86.06 MCA 318.29 SMA 118.68 ECC .40639 INC 3.9365 VI 30.199
RP 108.39 LAP -2.62 LOP 25.94 VP 36.476 GAP 23.49 AZP 87.06 TAL 143.91 TAP 102.20 RCA 70.45 APO 166.91 VZ 34.961
RC 202.264 GL 8.98 GP 1.76 ZAL 33.21 ZAP 173.91 ETS 165.18 ZAE 126.43 ETE 179.04 ZAC 113.37 ETC 165.56 CLP 174.16
   PLANETOCENTRIC CONIC
     C3 116.884 VHL 10.811 DLA 21.79 RAL 29.96 RAD 6570.2 VEL 15.434 PTH 2.76 VHP 14.850 DPA 6.85 RAP 18.91 ECC 2.9236
    C3 116.884 VHL 10.811 DLA 21.79 RAL 29.96 RAD 6570.2 VEL 15.434 PTH 2.76 VHP 14.850 DPA 6.85 RAP 18.91 ECC 2.9236 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 55 4 4524.88 10.32 190.31 277.62 63.49 25 10 28 3924.9 6.68 183.53 100.00 7 11 30 3082.22 -25.05 101.81 291.52 73.13 8 2 53 2482.2 -27.12 93.62 110.00 8 51 41 2768.83 -30.60 79.86 293.37 73.95 9 37 49 2168.8 -32.49 71.15 110.00 8 51 41 2768.83 -30.60 79.86 293.37 73.95 9 37 49 2168.8 -32.49 71.15 110.00 1 41 21 4197.88 17.49 162.06 273.67 60.15 2 51 19 3597.9 13.39 155.35 OLICEPERATAL CORRECTIONS
                                                                              162.06 273.67 60.15 2 51 19
MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SCT 5702.4 SGR 363.3 SG3 110.6 ST 2868.0 SR 356.7 SS 805.3 RRT .5879 RRF .5785 RTF .9822 CRT .8783 CRS -.8612 CST -.9993 SGB 5714.0 R23 -.0005 R13 .9822 LSA 2995.2 MSA 172.5 SSA 9.0 SG1 5706.4 SG2 293.7 THA 2.15 EL1 2885.1 EL2 169.6 ALF 6.26
     TOE 4.5888 TRA 8.8772 TC3 -.4465 BAU .6978
     RDE .6719 RRA .1253 RC3 .0049 FAU-.00131
FDE .9820 FRA 2.0493 FC3 .0097 BSP 19247
     BDE 4.6377 BRA 8.8781 BC3 .4466 FSP -378
```

```
LAUNCH DATE DEC 1 1965
                                                                                         FLIGHT TIME 70.00
                                                                                                                                                                  ARRIVAL DATE FEB 9 1966
    HELIOCENTRIC CONIC
                                                                                         01STANCE 180.420
     RL 147.51 LAL .00 LOL 68.60 VL 26.129 CAL -5.84 AZL 88.72 MCA 79.55 SMA 118.85 ECC .26060 INC 3.2783 V1 30.204
RP 107.51 LAP 3.22 LOP 148.13 VP 36.773 GAP -14.10 AZP 89.40 TAL 197.15 TAP 276.69 RCA 87.87 APO 149.82 V2 35.249
RC 44.633 GL 16.96 GP -1.84 ZAL 117.88 ZAP 3.21 ETS 33.80 ZAE 150.84 ETE 334.13 ZAC 61.66 ETC 161.53 CLP -2.63
    PLANETOCENTRIC CONIC
      C3 25.966 VHL 5.096 DLA -1.53 RAL 307.33 RAD 6568.0 VEL 12.138 PTH 2.18 VHP 9.043 DPA -17.76 RAP 329.49 ECC 1.4273
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00
                        3 23 44 2230.42
14 59 6 4969.27
                                                                                              172.52
                                                                                42.49
                                                                                                                   110.52
                                                                                                                                      4 0 55
                                                                                                                                                        1630.4
                                                                                                                                                                          -16.98
                                                              -19.95
                                                                                                                    71.82 16 21 55
111.71 5 17 12
70.63 17 39 33
115.06 6 20 21
67.29 18 45 47
          90.00
                                                                22.09
                                                                                217.57
                                                                                                  173.37
                                                                                                                                                          4369.3
                                                                                                                                                                             19.40
                                                                                                                                                                                              209.93
                        4 44 22 1970.33
16 21 9 4704.60
         100.00
                                                               -21.06
                                                                                  22.90
                                                                                                  172.07
                                                                                                                                                          1370.3
                                                                                                                                                                             -17.93
                                                                                                                                                                                               15.51
         100.00
                                                               23.22
                                                                                197.69
                                                                                                 172.95
                                                                                                                                                          4104.6
                                                                                                                                                                            20.37
                                                                                                                                                                                             190.06
                                                                                                                                                                            -20.47 358.36
         110.00
                                                                                               170.67
                        5 50 59 1761.81
                                                              -24.05
                                                                                  5.68
                                                                                                                                                          1161.8
         110.00
                        17 31 1 4485.88
                                                              26.26
                                                                                179.80
                                                                                                  171.66
                                                                                                                                                          3885.9
                                                                                                                                                                              22.95
                                                                                                                                                                                               172.20
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                  SGT 729.5 SGR 408.1 SG3 98.3
RRT -.0680 RRF .0701 RTF -.6854
      TDE -.2472 TRA -.4707 TC3 .4100 BAU .1536
                                                                                                                                                   ST 320.4 SR 360.4 SS 325.4
CRT .8260 CRS .9917 CST .8754
     RDE -.3196 RRA .0826 RC3 -.1666 FAU .03118
     FOE .3693 FRA .0184 FC3-1.0395 BSP 2045
BOE .4040 BRA .4779 BC3 .4425 FSP -241
                                                                                   SGB 835.9 R23 -. 0025 R13 .6858
                                                                                                                                                    LSA 562.4 MSA 147.3 SSA
                                                                                                                                                                                                  20.9
                                                                                  SG1 730.2 SG2 406.8 THA 176.84
                                                                                                                                                    EL1 461.1 EL2 141.2 ALF 49.07
LAUNCH DATE DEC 1 1965
                                                                                          FLIGHT TIME 72.00
                                                                                                                                                                   ARRIVAL DATE FEB 11 1966
    HELIOCENTRIC CONIC
                                                                                         DISTANCE 187.228
     RL 147.51 LAL .00 LOL 68.60 VL 26.357 GAL -5.86 AZL 86.69 HCA 82.79 SMA 120.13 ECC .24861 INC 3.3050 VI 30.204
RP 107.52 LAP 3.28 LOP 151.38 VP 36.931 GAP -13.10 AZP 89.59 TAL 198.39 TAP 281.19 RCA 90.27 APO 150.00 V2 35.244
RC 45.858 GL 17.84 GP -1.97 ZAL 119.31 ZAP 5.28 ETS 20.64 ZAE 149.50 ETE 335.26 ZAC 62.63 ETC 161.71 CLP -4.90
    PLANETOCENTRIC CONIC

C3 24.336 VHL 4.933 OLA -1.08 RAL 305.55 RAD 6568.0 VEL 12.071 PTH 2.16 VHP 8.488 OPA -17.55 RAP 330.50 ECC 1.4005
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ R ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 13 15 2228.57 -19.91 42.37 169.77 110.57 3 50 24 1628.6 -16.93 34.96

90.00 14 55 22 4939.19 21.44 215.60 170.34 71.05 16 17 41 4339.2 18.66 208.04

100.00 4 34 6 1967.79 -21.00 22.74 169.32 111.78 5 6 54 1367.8 -17.86 15.35

100.00 16 17 12 4675.20 22.55 195.77 169.92 69.83 17 35 8 4075.2 19.60 188.21

110.00 5 41 12 1757.75 -23.93 5.42 167.94 115.17 6 10.29 1157.8 -20.34 358.12

110.00 17 26 36 4458.00 25.51 177.98 168.61 66.44 18 40 54

ORBIT DETERMINATION ACCURACY
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                   SGT 753.7 SGR 408.5 SG3 111.0
RRT -.0741 RRF .0777 RTF -.7018
SGB 857.2 R23 -.0043 R13 .7023
     TOE -.2522 TRA -.4474 TC3 .4668 BAU .1629
                                                                                                                                                   ST 332.1 SR 357.9 SS 351.6
CRT .8448 CRS .9941 CST .8771
LSA 583.4 MSA 145.5 SSA 21.8
     ROE -.3073 RRA .0746 RC3 -.1811 FAU .03396
     FOE .4116 FRA -.0160 FC3-1.2082 BSP 2140

BOE .3074 BRA .4536 BC3 .5007 FSP -277
                                                                                    SG1 754.5 SG2 406.9 THA 176.75
                                                                                                                                                   EL1 469.0 EL2 135.6 ALF 47.54
LAUNCH DATE DEC 1 1965
                                                                                         FLIGHT TIME 74.00
                                                                                                                                                                 ARRIVAL DATE FEB 13 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 194.032
    RL 147.51 LAL .00 LOL 68.60 VL 26.564 GAL -5.89 AZL 86.67 MCA 86.04 SMA 121.33 ECC .23789 INC 3.3313 VI 30.204
RP 107.54 LAP 3.32 LOP 154.63 VP 37.073 GAP -12.14 AZP 89.77 TAL 199.67 TAP 285.71 RCA 92.47 APO 150.19 V2 35.239
RC 47.202 GL 18.68 GP -2.10 ZAL 120.73 ZAP 7.54 ETS 14.96 ZAE 148.39 ETE 336.17 ZAC 63.53 ETC 161.86 CLP -7.25
    PLANETOCENTRIC CONIC
     C3 22.990 VHL 4.795 DLA
                                                 -.65 RAL 303.79 RAD 6567.9 VEL 12.015 PTH 2.14 VMP 7.962 DPA -17.38 RAP 331.43 ECC 1.3784
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   110.58 3 40 12
70.37 16 13 22
111.81 4 56 53
                      3 3 4 2227.86
14 51 30 4912.05
4 24 7 1966.45
16 13 9 4648.70
5 31 40 1754.99
17 22 5 4432.92
                                                                                              167.17
                                                                                                                                                     1627.9
                                                                                                                                                                        -16.91
                                                              -19.89
                                                                               42.32
                                                                                                                                                                                               34.92
                                                               20.83
                                                                               213.85
                                                                                                 167.50
                                                                                                                                                         4312.1
                                                                                                                                                                           17.96
                                                                                                                                                                                             206.35
                                                              -20.97
                                                                                 22.65
                                                                                                166.73
                                                                                                                                                         1366.4
                                                                                                                                                                           -17.82
                                                                                                                                                                                              15.27
                                                                                              167.07
165.37
                                                                                                                    69.14 17 30 38
115.24 6 0 55
65.70 18 35 58
        100.00
                                                             21.91
                                                                               194.05
                                                                                                                                                         4048.7
                                                                                                                                                                          18.88
                                                                                                                                                                                             186.57
        110.00
                                                              -23.85
                                                                                  5.24
                                                                                                                                                        1155.0
                                                                                                                                                                           -20.25
                                                                                                                                                                                             357.95
        110.00
                                                            24.82
                                                                               176.36
                                                                                                 165.76
                                                                                                                                                                          21.33
                                                                                                                                                         3832.9
                                                                                                                                                                                             168.95
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                                   ST 343.1 SR 354.3 SS 379.7

CRT .8625 CRS .9956 CST .8793

LSA 605.1 MSA 144.0 SSA 22.7

EL1 475.9 EL2 129.2 ALF 46.07
     TOE -.2571 TRA -.4240 TC3 .5231 BAU .1716
                                                                                    SGT 776.4 SGR 407.9 SG3 125.4
RRT -. 0820 RRF . 0871 RTF -. 7167
    ROE -.2958 RRA .0669 RC3 -.1954 FAU .03716
FDE .4604 FRA -.0565 FC3-1.3992 BSP 2232
BDE .3919 BRA .4293 BC3 .5584 FSP -320
                                                                                    SGB 877.1 R23 -.0063 R13 .7173
                                                                                    SG1 777.4 SG2 406.1 THA 176.61
LAUNCH DATE DEC 1 1965
                                                                                         FLIGHT TIME 76.00
                                                                                                                                                                 ARRIVAL DATE FEB 15 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 200.831
    RL 147.51 LAL .00 LOL 68.60 VL 26.749 GAL -5.93 AZL 86.64 HCA 89.28 SMA 122.44 ECC .22834 INC 3.3573 VI 30.204
RP 107.55 LAP 3.36 LOP 157.88 VP 37.201 GAP -11.23 AZP 89.96 TAL 200.97 TAP 290.25 RCA 94.48 APO 150.40 V2 35.234
RC 48.656 GL 19.46 GP -2.25 ZAL 122.11 ZAP 9.94 ETS 11.89 ZAE 147.51 ETE 336.89 ZAC 64.35 ETC 161.98 CLP -9.68
   PLANETOCENTRIC CONIC
    C3 21.880 VML 4.678 DLA -.25 RAL 302.08 RAD 6567.9 VEL 11.969 PTH 2.13 VMP 7.464 DPA -17.25 RAP 332.28 ECC 1.3601
    27 28 30 VIL 4.678 DLA -.25 RAL 302.D8 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 7.464 DPA -17.25 RAP 332.28 ECC 1.3601

LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 53 17 2228.21 -19.90 42.35 164.74 110.57 3 30 25 1628.2 -16.92 34.94

90.00 14 47 37 4887.69 20.26 212.29 164.86 69.79 16 9 5 4287.7 17.33 204.84

100.00 4 14 30 1966.20 -20.96 22.64 164.30 111.81 4 47 17 1366.2 -17.81 15.26

100.00 16 9 5 4624.93 21.33 192.53 164.43 68.55 17 26 10 4024.9 18.23 185.11

110.00 5 22 29 1753.41 -23.81 5.14 162.96 115.29 5 51 43 1153.4 -20.20 357.86

110.00 17 17 35 4410.48 24.18 174.92 163.10 65.07 18 31 6 3810.5 20.62 167.59
                                                                                                                    115.29 5 51 43
65.07 18 31 6
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    TDE -.2621 TRA -.4009 TC3 .5767 BAU .1794
                                                                                                                                                  ST 353.6 SR 349.5 SS 410.0
CRT .8791 CRS .9961 CST .8822
LSA 627.9 MSA 143.0 SSA 23.4
                                                                                    SGT 797.1 SGR 406.6 SG3 141.9
    ROE -.2847 RRA .0596 RC3 -.2092 FAU .04080
                                                                                   RRT -.0910 RRF .0981 RTF -.7298
                                                                                  RRT -.0910 RRF .0981 RTF -.7298
SGB 894.8 R23 -.0087 R13 .7305
SG1 798.2 SG2 404.3 THA 176.42
    FOE .5168 FRA -.1039 FC3-1.6142 BSP 2315
BOE .3870 BRA .4054 BC3 .6135 FSP -369
                                                                                                                                                   EL1 481.9 EL2 122.2 ALF 44.63
```

```
ARRIVAL DATE FEB 17 1966
                                                                                         FLIGHT TIME 78.00
LAUNCH DATE DEC 1 1965
                                                                                       DISTANCE 207.618
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 26.916 GAL -5.97 AZL 86.62 HCA 92.52 SMA 123.46 ECC .21988 INC 3.3833 V1 30.204 RP 107.57 LAP 3.38 LOP 161.12 VP 37.315 GAP -10.36 AZP 90.15 TAL 202.26 TAP 294.78 RCA 96.31 APO 150.60 V2 35.227 RC 50.208 GL 20.18 GP -2.42 ZAL 123.43 ZAP 12.45 ETS 10.00 ZAE 146.88 ETE 337.42 ZAC 65.07 ETC 162.07 CLP -12.22
   PLANETOCENTRIC CONIC
                                                   .12 RAL 300.43 RAD 6567.9 VEL 11.931 PTH 2.12 VHP 6.993 OPA -17.17 RAP 333.04 ECC 1.3451
    C3 20.968 VHL 4.579 OLA .12 RAL 300.43 RAD 6567.9 VEL 11.931 PTH 2.12 VHP 6.993 OPA -17.17 RAP 333.04 ECC 1.3451
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PÓ CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 43 57 2229.51 -19.93 42.43 162.49 110.54 3 21 6 1629.5 -16.95 35.02
90.00 14 45 48 4865.89 19.74 210.90 162.43 69.28 16 4 54 4265.9 16.75 203.50
100.00 4 5 21 1965.94 -20.98 22.69 162.05 111.80 4 38 8 1366.9 -17.84 15.30
100.00 16 5 6 4603.69 20.79 191.18 161.99 68.03 17 21 49 4003.7 17.63 183.81
110.00 5 13 43 1792.91 -23.79 5.11 160.73 115.30 5 42 56 1152.9 -20.19 357.83
110.00 17 13 12 4390.48 23.60 173.66 160.66 64.53 18 26 23 3790.5 19.98 166.40
    C3 20.968 VHL 4.379 DLA
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 361.0 SR 343.6 SS 441.9
CRT .8939 CRS .9958 CST .8846
LSA 650.3 MSA 142.3 SSA 24.0
                                                                                    SCT 815.1 SGR 404.4 SG3 160.8
RRT -.1053 RRF .1123 RTF -.7431
SGB 909.9 R23 -.0090 R13 .7439
    TOE -.2651 TRA -.3768 TC3 .6293 BAU .1871
    RDE - .2741 RRA .0525 RC3 - .2227 FAU .04501
    FDE .5812 FRA -.1601 FC3-1.8583 BSP 2426
BDE .3814 BRA .3804 BC3 .6675 FSP -427
                                                                                    SG1 816.6 SG2 4D1.4 THA 176.05
                                                                                                                                                  EL1 485.0 EL2 114.7 ALF 43.42
                                                                                                                                                                 ARRIVAL DATE FEB 19 1966
LAUNCH DATE DEC 1 1965
                                                                                         FLIGHT TIME 80.00
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.065 GAL -6.01 AZL 86.59 MCA 95.77 SMA 124.39 ECC .21242 INC 3.4095 V1 30.204
RP 107.60 LAP 3.39 LOP 164.37 VP 37.417 GAP -9.53 AZP 90.34 TAL 203.53 TAP 299.29 RCA 97.97 APO 150.81 V2 35.220
RC 51.850 GL 20.85 GP -2.61 ZAL 124.66 ZAP 15.10 ETS 8.72 ZAE 146.50 ETE 337.76 ZAC 65.68 ETC 162.12 CLP -14.88
                                                                                         DISTANCE 214-393
   PLANE TOCENTRIC CONIC
    C3 20.221 VHL 4.497 DLA .47 RAL 298.87 RAD 6567.8 VEL 11.900 PTH 2.11 VHP 6.549 DPA -17.15 RAP 333.68 ECC 1.3328 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   110.49 3 12 19
68.84 16 0 57
4 29 30
                     2 35 8 2231.67 -19.98

14 40 10 4846.37 19.27

3 56 41 1968.58 -21.02

16 1 18 4584.70 20.31

5 5 26 1753.39 -23.81

17 9 2 4372.65 23.08
                                                                                              160.42
                                                                                                                                                      1631.7
                                                                                42.57
                                                                                                                                                         4246.4
                                                                                                                                                                            16.22
                                                                                                                                                                                              202.31
                                                                               209.66
                                                                                                 160.20
                                                                                                                    111.76 4 29 30
67.58 17 17 42
115.29 5 34 40
64.05 18 21 55
                                                                                                                                                         1368.6
        100.00
                                                                                22.79
                                                                                                159.99
                                                                                                 159.76
158.68
                                                                                                                                                         3984.7
                                                                                                                                                                            17.09
                                                                                                                                                                                              182.66
                                                               20.31
        100.00
                                                                               189.98
                                                                                                                                                                                              357.86
                                                                                                                                                         1153.4
                                                                                                                                                                           -20.20
                                                                                   5.14
        110.00
                                                                                                                                                         3772.7
                                                                                                                                                                            19.40
                                                                                                                                                                                              165.34
                                                                               172.54
                                                                                                  158.42
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 369.7 SR 336.4 SS 477.4
CRT .9073 CRS .9950 CST .8879
LSA 675.8 MSA 142.7 SSA 24.2
                                                                                    SGT 830.0 SGR 401.4 SG3 182.3
RRT -.1179 RRF .1279 RTF -.7521
     TDE -.2695 TRA -.3554 TC3 .6725 BAU .1927
     RDE -.2636 RRA .0457 RC3 -.2357 FAU .04975
                                                                                    SGB 921.9 R23 -.0129 R13 .7530
     FOE .6572 FRA -.2238 FC3-2.1297 BSP 2483
BDE .3770 BRA .3584 BC3 .7126 FSP -492
                                                                                                                                                   EL1 488.2 EL2 107.1 ALF 42.02
                                                                                    SG1 831.7 SG2 397.8 THA 175.77
                                                                                                                                                                ARRIVAL DATE FEB 21 1966
                                                                                        FLIGHT TIME 82.00
LAUNCH DATE DEC 1 1965
                                                                                        DISTANCE 221.151
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.198 GAL -6.05 AZL 86.56 HCA 99.01 SMA 125.24 ECC .20586 INC 3.4359 VI 30.204 RP 107.62 LAP 3.39 LOP 167.62 VP 37.506 GAP -8.73 AZP 90.54 TAL 204.76 TAP 303.76 RCA 99.46 APO 151.02 V2 35.212 RC 53.572 GL 21.47 GP -2.82 ZAL 125.81 ZAP 17.88 ETS 7.81 ZAE 146.39 ETE 337.91 ZAC 66.18 ETC 162.14 CLP -17.66
    PLANFTOCENTRIC CONIC
     C3 19.612 VHL 4.429 DLA .80 RAL 297.41 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 6.131 DPA -17.19 RAP 334.20 ECC 1.3228
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 110.42 3 4 6
68.46 15 57 16
111.70 4 21 25
67.19 17 13 53
115.25 5 26 55
63.64 18 17 45
                                                                                                                                                     1634.6
                      2 26 51 2234.62
14 36 47 4828.87
3 48 34 1971.04
15 57 45 4567.68
4 57 40 1754.75
17 5 9 4556.74
                                                                                              158.55
                                                              -20.05
                                                                               42.75
         90.00
                                                                                                                                                                           15.74
                                                                                                                                                         4228.9
                                                                                                 158.18
                                                               18.84
                                                                               208.56
          90.00
                                                                                                                                                                          -17.95
                                                                                                                                                                                              15.55
                                                                                                                                                        1371.0
                                                              -21.08
                                                                                 22.95
                                                                                                158.13
        100.00
                                                                                                                                                                                             181.64
                                                                                                                                                                           16.60
                                                                                                157.74
                                                                                                                                                        3967.7
                                                               19.86
                                                                               188.91
        100.00
                                                                                                                                                                                             357.94
                                                                                                                                                                          -20.25
                                                                                                                                                        1154.7
                                                              -23.85
                                                                                  5.23
                                                                                                156.83
        110.00
                                                                                                                                                        3756.7
                                                                                                                                                                            18.88
                                                          22.60
                                                                               171.56
                                                                                                 156.39
                       17 5 9
                                          4356.74
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ST 376.4 SR 327.7 SS 515.2
CRT .9188 CRS .9936 CST .8905
LSA 702.3 MSA 143.9 SSA 24.3
                                                                                    SGT 840.6 SGR 397.7 SG3 206.9
RRT -.1337 RRF .1473 RTF -.7589
SGB 930.0 R23 -.0176 R13 .7601
     TOE -.2726 TRA -.3352 TC3 .7088 BAU .1969
     RDE - .2530 RRA .0390 RC3 - .2486 FAU .05519
     FOE .7447 FRA -.2978 FC3-2.4361 BSP 2532
BOE .3719 BRA .3375 BC3 .7512 FSP -567
                                                                                    SG1 842.8 SG2 393.1 THA 175.37
                                                                                                                                                    ELI 489.1 ELZ 99.5 ALF 40.70
                                                                                                                                                                 ARRIVAL DATE FER 23 1966
                                                                                         FLIGHT TIME 84.00
LAUNCH DATE DEC 1 1965
                                                                                         OISTANCE 227.889
    HELIOCENTRIC CONIC
     RL 147.51 LAL .00 LOL 68.60 VL 27.317 GAL -6.09 AZL 86.54 MCA 102.24 SMA 126.01 ECC .20012 INC 3.4628 VI 30.204 RP 107.64 LAP 3.38 LOP 170.86 VP 37.584 GAP -7.97 AZP 90.74 TAL 205.93 TAP 308.18 RCA 100.79 APO 151.22 V2 35.204 RC 55.368 GL 22.04 GP -3.05 ZAL 126.85 ZAP 20.82 ETS 7.12 ZAE 146.54 ETE 337.86 ZAC 66.54 ETC 162.11 CLP -20.60
    PLANETOCENTRIC CONIC
     ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 845.9 SGR 393.4 SG3 234.8 ST 381.4 SR 317.6 SS 556.2

RRT -.1518 RRF .1702 RTF -.7627 CRT .9285 CRS .9918 CST .8928

SGB 932.9 R23 -.0239 R13 .7644 L5A 730.7 MSA 145.8 SSA 24.1

SG1 848.6 SG2 387.6 THA Î74.89 EL1 487.7 EL2 92.3 ALF 39.39
                                                                                                                                                  ST 381.4 SR 317.6 SS 556.2
CRT .9285 CRS .9918 CST .8928
      TOE -.2747 TRA -.3170 TC3 .7353 BAU .1994
      ROE - . 2421 RRA . 0326 RC3 - . 2614 FAU . 06135
     FOE .8467 FRA -.3820 FC3-2.7785 BSP 2552
BDF .3662 BRA .3187 BC3 .7804 FSP -653
      BDE .3662 BRA .3187 BC3 .7804 FSP
```

ARRIVAL DATE FEB 25 1966

LAUNCH DATE DEC 1 1965 FLIGHT TIME 86.00 DISTANCE 234.606 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 27.421 GAL -6.13 AZL 86.51 HCA 105.48 SMA 126.69 ECC .19512 INC 3.4903 VI 30.204
RP 107.67 LAP 3.36 LOP 174.10 VP 37.652 GAP -7.24 AZP 90.93 TAL 207.04 TAP 312.52 RCA 101.97 APO 151.41 VZ 35.195
RC 57.230 GL 22.56 GP -3.32 ZAL 127.78 ZAP 23.92 ETS 6.58 ZAE 146.98 ETE 337.58 ZAC 66.74 ETC 162.03 CLP -23.71 PLANETOCENTRIC CONIC C3 18.713 VHL 4.326 DLA 1.42 RAL 294.83 RAD 6567.8 VEL 11.836 PTH 2.10 VHP 5.369 DPA -17.52 RAP 334.81 ECC 1.3D8D UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH TIME L-I TIME 2 12 0 2242.65 14 31 4 4798.68 3 34 0 1978.15 15 51 45 4538.42 4 43 45 1759.80 16 58 29 4329.54 -17.30 155.37 -20.24 110.24 2 49 22 1642.7 35.82 43.27 15 51 3 4198.7 199.43 90.00 18.07 206.68 154.73 67.82 14.91 111.52 4 6 58 66.54 17 7 23 115.11 5 13 5 62.97 18 10 38 -21.26 23.40 154.95 1378.1 15.99 100.00 19.08 187.09 154.29 3938.4 15.74 179.89 153.68 -23.99 5.55 1159.8 110.00 21.77 169.88 152.93 3729.5 17.97 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 845.1 SCR 368.8 SC3 266.8 RRT -.1777 RRF .1996 RTF -.7651 SCB 930.3 R23 -.0293 R13 .7673 ST 381.0 SR 306.0 SS 598.9 CRT .9359 CRS .9897 CST .8933 TOE -.2729 TRA -.2995 TC3 .7546 BAU .2009 RDE -.2308 RRA .0261 RC3 -.2747 FAU .06845 FOE .9620 FRA -.4802 FC3-3.1668 BSP 2592 BOE .3574 BRA .3006 BC3 .8030 FSP -755 LSA 758.3 MSA 147.8 SSA 23.8 SG1 848.7 SG2 381.0 THA 174.14 EL1 481.2 EL2 85.3 ALF 38.35 LAUNCH DATE DEC 1 1965 FLIGHT TIME 88.00 ARRIVAL DATE FEB 27 1966 HELIOCENTRIC CONIC DISTANCE 241.300 RL 147.51 LAL .00 LOL 68.60 VL 27.513 GAL -6.16 AZL 86.48 HCA 108.72 SHA 127.31 ECC .19078 INC 3.5187 V1 30.204 RP 107.70 LAP 3.33 LOP 177.34 VP 37.710 GAP -6.54 AZP 91.13 TAL 208.06 TAP 316.77 RCA 103.02 APO 151.59 V2 35.186 59.152 GL 23.05 GP -3.62 ZAL 128.59 ZAP 27.22 ETS 6.12 ZAE 147.69 ETE 337.03 ZAC 66.77 ETC 161.89 CLP -27.00 PLANE TOCENTRIC CONIC C3 18.386 VHL 4.288 DLA 1.72 RAL 293.72 RAD 6567.7 VEL 11.822 PTH 2.09, VHP 5.026 DPA -17.82 RAP 334.86 ECC 1.3026 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 5 24 2247.67 14 28 51 4785.39 3 27 32 1982.72 15 49 24 4523.57 4 37 37 1763.38 16 55 49 4317.67 154.06 90.00 -20.36 43.59 110.12 2 42 51 1647.7 -17.43 36.13 90.00 17.73 205.85 153.30 67.55 15 48 36 4185.4 14.53 100.00 -21.37 23.69 153.65 111.41 4 0 35 1382.7 -18.28 111.41 4 0 35 66.27 17 4 49 100.00 18.73 186.30 152.85 3925.6 15.36 115.01 5 7 0 62.69 18 7 46 110.00 -24.10 5.78 152.38 1163.4 -20.52 110.00 21.40 169.16 151.49 3717.7 17.57 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 379.5 SR 292.5 SS 646.0 CRT .9415 CRS .9874 CST .8928 TDE -.2703 TRA -.2866 TC3 .7582 BAU .1994 SGT 836.6 SGR 383.9 SG3 302.9 RDE -.2187 RRA .0197 RC3 -.2865 FAU .07640 RRT -.2037 RRF .2335 RTF -.7616 FOE 1.0969 FRA -.5893 FC3-3.5975 BSF 2565 BDE .3477 BRA .2872 BC3 .8112 FSP -869 SGB 920.5 R23 -. 0404 R13 .7647 LSA 789.7 MSA 150.6 SSA 23.3 SG1 841.2 SG2 373.8 THA 173.34 EL1 472.6 EL2 79.2 ALF 37.18 LAUNCH DATE DEC 1 1965 FLIGHT TIME 90.00 ARRIVAL DATE - HAR 1 1966 HELIOCENTRIC CONIC DISTANCE 247.968 RL 147.51 LAL .00 LOL 68.80 VL 27.593 GAL -6.18 AZL 86.45 MCA 111.95 SMA 127.85 ECC .18702 INC 3.5482 V1 30.204
RP 107.73 LAP 3.29 LOP 180.58 VP 37.759 GAP -5.88 AZP 91.33 TAL 208.99 TAP 320.94 RCA 103.94 APO 151.76 V2 35.176
RC 61.127 GL 23.51 GP -3.96 ZAL 129.29 ZAP 30.73 ETS 5.72 ZAE 148.69 ETE 336.15 ZAC 66.62 ETC 161.68 CLP -30.50 PLANETOCENTRIC CONIC C3 18.120 VHL 4.257 CLA 2.01 RAL 292.75 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 4.707 CPA -18.23 RAP 334.72 ECC 1.2982 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 L'ONG 1 59 19 2253.34 14 27 7 4772.90 3 21 36 1987.96 15 47 32 4513.53 4 31 59 1767.64 16 53 38 4306.61 152.92 -20.49 43.95 109.98 2 36 53 1653.3 67.30 15 46 40 111.28 3 54 44 66.01 17 2 45 17.40 205.08 152.04 4172.9 197.89 -21.50 24.03 152.52 1388.0 -18.42 16.59 100.00 18.40 185.56 151.59 3913.5 15.00 178.41 151.26 114.90 5 1 27 62.43 18 5 25 110.00 -24.22 6.05 358.71 110.00 21.05 168.49 150.23 3706.6 17.19 161.49 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 374.0 SR 277.0 SS 696.5 CRT .9449 CRS .9849 CST .8902 SGT 819.1 SGR 379.1 SG3 343.4 RRT -.2328 RRF .2739 RTF -.7522 SGB 902.6 R23 -.0565 R13 .7569 TOE -.2647 TRA -.2775 TC3 .7469 BAU .1953 ROE -.2057 RRA .0133 RC3 -.3034 FAU .08531 FOE 1.2519 FRA -.7113 FC3-4.0758 BSP 2499 BOE .3352 BRA .2778 BC3 .8062 FSP -997 LSA 823.2 MSA 153.6 SSA 22.6 SG1 825.0 SG2 366.0 THA 172.33 EL1 459.5 EL2 73.8 ALF 36.06 LAUNCH DATE DEC 1 1965 FLIGHT TIME 92.00 ARRIVAL DATE MAR 3 1966 HELIOCENTRIC CONIC DISTANCE 254.611 RL 147.51 LAL .DO LOL 68.60 VL 27.662 GAL -6.20 AZL 86.42 HCA 115.18 SMA 128.32 ECC .18378 INC 3.5790 V1 30.204
RP 107.76 LAP 3.24 LOP 183.82 VP 37.800 GAP -5.24 AZP 91.52 TAL 209.81 TAP 324.99 RCA 104.74 APO 151.90 V2 35.166 63.151 GL 23.94 GP. -4.34 ZAL 129.87 ZAP 34.47 ETS 5.35 ZAE 149.97 ETE 334.87 ZAC 66.26 ETC 161.40 CLP -34.23 PLANETOCENTRIC CONIC C3 17.904 VHL 4.231 DLA 2.30 RAL 291.90 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 4.413 DPA -18.75 RAP 334.37 ECC 1.2947 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 109.83 2 31 24 67.07 15 45 16 1 53 44 2259.69 14 25 55 4760.95 3 16 9 1993.86 90.00 -20.64 44.36 151.96 1659.7 -17.75 36.88 90.00 17.09 204.35 150.96 4161.0 13.83 197.18 100.00 -21.65 24.40 151.55 111.13 3 49 23 1393.9 -1A.5A 16.95 65.78 17 1 14 15 46 12 4502.02 4 26 52 1772.56 16 51 59 4296.09 100.00 18.08 184.85 150.50 3902.0 14.65 177.73 110.00 -24.36 6.36 150.31 114.76 4 56 24 62.18 18 3 35 1172.6 -20.81 359.01 110.00 160.88 20.72 167.85 149.13 3696.1 16.83 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE -.2549 TRA -.2725 TC3 .7201 BAU .1886 SGT 791.8 SGR 374.9 SG3 388.8 RRT -.2651 RRF .3219 RTF -.7351 ST 363.0 SR 259.5 SS 750.0 CRT .9457 CRS .9822 CST .8842 ROE -.1915 RRA .0066 RC3 -.3197 FAU .09525 FOE 1.4275 FRA -.8469 FC3-4.6057 BSP 2397 BDE .3189 BRA .2725 BC3 .7879 FSP -1141 SGB 876.0 R23 -.0796 R13 .7426 SG1 799.6 SG2 357.9 THA 171.04 LSA '858.2 MSA 156.7 SSA 21.9 EL1 440.8 EL2 69.5 ALF 35.05

```
ARRIVAL DATE MAR 5 1966
LAUNCH DATE DEC 1 1965
                                                                                FLIGHT TIME 94.00
                                                                                DISTANCE 261.226
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.721 GAL -6.22 AZL 86.39 MCA 118.41 SMA 128.73 ECC .18099 INC 3.6116 V1 30.204
RP 107.80 LAP 3.18 LOP 187.05 VP 37.833 GAP -4.62 AZP 91.72 TAL 210.53 TAP 328.94 RCA 105.43 APO 152.03 V2 35.155
RC 65.219 GL 24.35 GP -4.76 ZAL 130.33 ZAP 38.45 ETS 4.99 ZAE 151.53 ETE 333.06 ZAC 65.68 ETC 161.01 CLP -38.20
   PLANETOCENTRIC CONIC
                                                                                                            2.09 VHP 4.144 DPA -19.41 RAP 333.79 ECC 1.2917
    C3 17.727 VHL 4.210 DLA 2.60 RAL 291.17 RAD 6567.7 VEL 11.794 PTH
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 48 36 2266.75
14 25 16 4749.26
3 11 9 2000.47
15 45 24 4490.78
4 22 11 1778.15
16 50 52 4285.87
                                                                                                                                       1666.8
                                                                                                                                                        -17.93
        90.00
                                                        -20.80
                                                                         44.81
                                                                                      151.15
                                                                                                        109.66
                                                                                                                      2 26 23
                                                                                                                                                                           37.31
                                                                                                                     15 44 26
                                                                                                                                         4149.3
                                                                                                                                                          13.50
                                                                                                                                                                           196.48
                                                       16.77
                                                                       203.63
                                                                                       150.03
                                                                                                           66.85
        90.00
                                                                         24.83
                                                                                       150.75
                                                                                                         110.96
                                                                                                                       3 44 30
                                                                                                                                         1400.5
                                                                                                                                                          -18.77
                                                                                                                                                                            17.36
                                                       -21.81
       100.00
                                                                                                        65.55 17 0 15
114.60 4 51 49
61.95 18 2 18
                                                                                                                                       3890.8
                                                                                                                                                          14.31
                                                                                                                                                                          177.07
                                                                                       149.57
                                                       17.76
                                                                       184.17
       100.00
                                                                                       149.52
                                                                                                                                        1178.1
                                                                                                                                                          -20.99
                                                                                                                                                                          359.34
                                                      -24.52
                                                                          6.71
       110.00
                                                                                                                                       3685.9
                                                                       167.24
                                                                                       148.20
                                                                                                                                                         16.48
                                                                                                                                                                          160.30
                                                       20.39
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCB 840.9 R23 -.1120 R13 .7203
                                                                                                                                     ST 344.1 SR 239.8 SS 805.0
CRT .9432 CRS .9788 CST .8725
    TDE -.2391 TRA -.2711 TC3 .6785 BAU .1797
    RDE -.1761 RRA -.0003 RC3 -.3381 FAU .10634
    FOE 1.6217 FRA -. 9985 FC5-5.1936 BSP 2283
                                                                                                                                    LSA 893.3 MSA 159.3 SSA 21.1
                                                                            5G1 764.7 5G2 349.9 THA 169.27
                                                                                                                                     EL1 414.2 EL2 66.2 ALF 34.31
    BDE .2969 BRA .2711 BC3 .7581 FSP -1309
                                                                                                                                                 ARRIVAL DATE MAR 7 1966
                                                                                FLIGHT TIME 96.00
LAUNCH DATE DEC 1 1965
                                                                                DISTANCE 267.813
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.771 GAL -6.22 AZL 86.35 MCA 121.64 SMA 129.07 ECC .17860 INC 3.6461 VI 30.204
RP 107.83 LAP 3.10 LOP 190.29 VP 37.859 GAP -4.03 AZP 91.91 TAL 211.14 TAP 332.77 RCA 106.02 APO 152.13 V2 35.143
RC 67.327 GL 24.75 GP -5.23 ZAL 130.67 ZAP 42.69 ETS 4.61 ZAE 153.34 ETE 330.57 ZAC 64.88 ETC 160.52 CLP -42.43
   C5 17.581 VHL 4,193 DLA 2.92 RAL 290.57 RAD 6567.7 VEL 11.788 PTH 2.08 VHP 3.901 DPA -20.19 RAP 332.96 ECC 1.2893 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 25 13 4737.57 16.46 202.91 149.25 66.63 15 44 10 4137.6 13.16 195.79 100.00 3 6 34 2007.84 -21.99 25.30 150.11 110.77 3 40 2 1407.8 -18.97 17.81 100.00 15 45 12 4479.57 17.44 183.48 148.79 65.33 16 59 51 3879.6 13.97 176.41 110.00 4 17 56 1784.46 -24.70 7.12 148.88 114.42 4 47 40 1184.5 -21.19 359.73 IIFFERENTIAL CORRECTIONS
   PLANETOCENTRIC CONIC
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 320.7 SR 217.5 SS 864.2
CRT .9358 CRS .9751 CST .8530
LSA 932.9 MSA 162.2 SSA 20.2
     TOE -.2191 TRA -.2772 TC3 .6137 BAU .1670
                                                                            SGT 705.9 SGR 371.0 SG3 493.8
                                                                           SGB 797.5 R23 -.1664 R13 .6823
SG1 719.5 SG2 343.9 THA 167.29
    ROE -.1590 RRA -.0075 RC3 -.3583 FAU .11821
FOE 1.8409 FRA-1.1570 FC3-5.8209 BSP 2081
BOE .2707 BRA .2773 BC3 .7107 FSP -1485
                                                                                                                                     EL1 382.1 EL2 64.3 ALF 33.48
                                                                                FLIGHT TIME 98.00
                                                                                                                                                ARRIVAL DATE MAR 9 1966
LAUNCH DATE DEC 1 1965
                                                                                DISTANCE 274.372
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.813 GAL -6.22 AZL 86.32 HCA 124.86 SMA 129.36 ECC .17656 INC 3.6831 VI 30.204
RP 107.87 LAP 3.02 LOP 193.52 VP 37.879 GAP -3.47 AZP 92.11 TAL 211.63 TAP 336.49 RCA 106.52 APO 152.20 VZ 35.13Z
RC 69.470 GL 25.15 GP -5.76 ZAL 130.90 ZAP 47.20 ETS 4.20 ZAE 155.37 ETE 327.15 ZAC 63.85 ETC 159.89 CLP -46.93
   PLANETOCENTRIC CONIC
    C3 17,459 VML 4.178 DLA 3.25 RAL 290.09 RAD 6567.7 VEL 11.783 PTH 2.08 VHP 3.683 DPA -21.12 RAP 331.88 ECC 1.2873 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
                                                                                                      109.25
                                                                                                                                                                           38.34
                                                                                                                       2 17 31
                                                                                                                                        1683.3
                                                                                                                                                        -18.36
                     1 39 28 2283.31
14 25 46 4725.65
3 2 19 2016.04
                                                                                       150.00
                                                       -21.17
                                                                        45.88
                                                                                                                     15 44 31
                                                                                                                                         4125.7
                                                                                                                                                                          195.09
                                                                                                          66.41
                                                        16.14
                                                                       202.19
                                                                                       148.61
                                                                                                                                                                           18.32
                                                                                                         110.56
                                                                                                                       3 35 55
                                                                                                                                         1416.0
                                                                                                                                                          -19.19
                                                      -22.19
                                                                        25.83
                                                                                       149.61
                                                                                                        65.11 17 0 3
114.22 4 43 54
61.51 18 1 26
                                                                                                                                                                         175.75
                     15 45 35 4468,15
                                                        17.12
                                                                       182.79
                                                                                       148.15
                                                                                                                                        1191.5
                                                                                                                                                                             .16
                     4 14 3 1791.54
16 50 21 4265.42
                                                                                       148.39
                                                      -24.89
                                                                         7.57
                                                                                                                                                                         159.13
                                                                                                                                                         15.78
                                                                                       146.76
                                                       19.73
                                                                       166.02
        110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 288.0 SR 193.0 SS 923.2

CRT .9193 CRS .9699 CST .8169

LSA 972.1 MSA 164.3 SSA 19.3

EL1 340.7 EL2 64.2 ALF 32.95
                                                                           SGT 649.6 SGR 372.9 SG3 552.5

RRI - 3412 RRF - 5115 RTF - 5653

SGB 749.0 R23 - 2481 R13 .6253

SG1 666.6 SG2 341.6 THA 164.85
     TOE -.1911 TRA -.2881 TC3 .5307 BAU .1525
     ROE -.1405 RRA -.0151 RC3 -.3813 FAU .13101
    FOE 2.0746 FRA-1.3282 FC3-6.4961 BSP 1863
BOE .2372 BRA .2885 BC3 .6535 FSP -1685
                                                                                                                                                 ARRIVAL DATE MAR 11 1966
                                                                                FLIGHT TIME 100.00
LAUNCH DATE DEC 1 1965
                                                                               DISTANCE 280.902
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.846 GAL -6.21 AZL 86.28 HCA 128.09 SMA 129.60 ECC .17481 INC 3.7231 V1 30.204
RP 107.90 LAP 2.93 LOP 196.74 VP 37.892 GAP -2.93 AZP 92.30 TAL 212.01 TAP. 340.09 RCA 106.95 APO 152.26 V2 35.120
RC 71.643 GL 25.56 GP -6.34 ZAL 131.02 ZAP 51.96 ETS 3.74 ZAE 157.54 ETE 322.46 ZAC 62.61 ETC 159.11 CLP -51.68
   PLANETOCENTRIC CONIC
     C3 17.357 VML 4.166 DLA 3.60 RAL 289.72 RAD 6567.7 VEL 11.779 PTH 2.08 VMP 3.491 DPA -22.17 RAP 330.55 ECC 1.2857
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       1693.0
                     1 35 20 2293.00
14 26 57 4713.24
2 58 22 2025.19
15 46 36 4456.28
4 10 29 1799.50
                                                                                                                       2 13 33
                                                                                                                                                         -18.60
                                                                                                                                                                            34.95
                                                                        46.51
                                                                                       149.64
                                                                                                        109.01
         90.00
                                                        -21.39
                                                                                                           66.19 15 45 30
110.32 3 32 7
64.89 17 0 52
113.99 4 40 28
61.28 18 1 53
                                                                                                                                          4113.2
                                                                                                                                                           12.45
                                                                                                                                                                           194.36
                                                                        201.44
                                                                                        148.10
                                                        15.80
         90.00
                                                                                                                                          1425.2
                                                                                                                                                          -19.44
                                                                                                                                                                            18.89
                                                       -22.40
                                                                         26.43
                                                                                        149.25
                                                                                                          110.32
        100.00
                                                                                        147.64
                                                                                                                                          3856.3
                                                                                                                                                           13.25
                                                                                                                                                                          175.06
                                                       16.78
                                                                       182.08
        100.00
                                                                                                                                                                              .64
                                                       -25.12
                                                                          8.09
                                                                                        148.04
                                                                                                         113.99
                                                                                                                                          1199.5
                                                                                                                                                          -21.66
        110.00
                                                                        165.39
                                                                                        146.25
                                                                                                                                          3654.8
                                                                                                                                                          15.40
                                                                                                                                                                          158.53
                                                       19.39
        110.00
                      16 50 59
                                     4254.76
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 591.3 SGR 378.0 SG3 613.0
RRT -.3128 RRF .5827 RTF -.4579
SGB 701.8 R23 -.3767 R13 .5309
                                                                                                                                    ST 251.0 SR 165.7 SS 985.2
CRT .8846 CRS .9627 CST .7508
LSA 1016.4 MSA 166.6 SSA 18.3
     TDE -.1572 TRA -.3075 TC3 .4216 BAU .1359
     RDE -.1201 RRA -.0228 RC3 -.4063 FAU .14402
FDE 2.3287 FRA-1.4969 FC3-7.1835 BSP 1568
BDE .1978 BRA .3083 BC3 .5855 FSP -1884
```

```
LAUNCH DATE DEC 1 1965
                                                                          FLIGHT TIME 102.00
                                                                                                                                     ARRIVAL DATE MAR 13 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 287.403
    RL 147.51 LAL .00 LOL 68.60 VL 27.873 GAL -6.19 AZL 86.23 HCA 131.31 SMA 129.79 ECC .17333 INC 3.7668 V1 30.204
RP 107.94 LAP 2.83 LOP 199.97 VP 37.900 GAP -2.41 AZP 92.49 TAL 212.27 TAP 343.58 RCA 107.29 APO 152.28 V2 35.108
RC 73.845 GL 25.98 GP -6.99 ZAL 131.02 ZAP 56.97 ETS 3.22 ZAE 159.73 ETE 316.05 ZAC 61.16 ETC 158.15 CLP -56.69
   PLANETOCENTRIC CONIC
    C3 17.271 VHL 4.156 DLA
                                        3.99 RAL 289.46 RAD 6567.7 VEL 11.775 PTH 2.08 VHP 3.325 OPA -23.36 RAP 328.96 ECC 1.2842
    LNCH AZMTH LNCH TIME L-I TIME
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-21.63 47.22 149.41 108.73 2 9 50 1703.8 -18.87 39.63
                                                                              149.41
                                                                  47.22
                     1 31 26 2303.83
                                                                                               65.96 15 47 7
110.05 3 28 34
64.66 17 2 19
113.73 4 37 19
61.05 18 2 57
        90.00
                   14 28 47
                                   4700.12
                                                    15.43
                                                                  200.64
                                                                                147.72
                                                                                                                               4100.1
                                                                                                                                              12.06
                                                                                                                                                             193.59
                     2 54 38 2035.44
                                                   -22.65
                                                                   27.09
                                                                                149.02
                                                                                                                               1435.4
                                                                                                                                              -19.71
                                                                                                                                                              19.53
                                                                              147.25
147.83
       100.00
                   15 48 16 4443.74
                                                   16.41
                                                                  181.32
                                                                                                                               3843.7
                                                                                                                                             12.87
                                                                                                                                                            174.33
                   4 7 10 1808.43
16 52 13 4243.51
                                                   -25.36
                                                                   8.66
                                                                                                                              1208.4
                                                                                                                                             -21.94
                                                                                                                                                              1.19
      110.00
                                   4243.51
                                                   19.02
                                                                  164.72
                                                                                145.85
                                                                                                                              3643.5
                                                                                                                                              15.01
                                                                                                                                                            157.90
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    TDE -.1152 TRA -.3340 TC3 .2891 BAU .1203
                                                                     SGT 544.1 SGR 387.2 SG3 674.0
RRT -.2162 RRF .6533 RTF -.2546
                                                                                                                        ST 210.9 SR 136.0 SS 1047.0

CRT .8065 CRS .9511 CST .6164

LSA 1063.3 MSA 168.5 SSA 17.3

EL1 240.8 EL2 70.4 ALF 30.35
    RDE -.0979 RRA -.0308 RC3 -.4336 FAU .15704
FDE 2.5920 FRA-1.6612 FC3-7.8716 BSP 1259
BOE .1512 BRA .3354 BC3 .5212 FSP -2087
                                                                      SGB 667.8 R23 -.5543 R13 .3647
                                                                     SG1 555.9 SG2 370.0 THA 164.03
LAUNCH DATE DEC 1 1965
                                                                         FLIGHT TIME 104.00
                                                                                                                                     ARRIVAL DATE MAR 15 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 293.876
   RL 147.51 LAL .00 LOL 68.60 VL 27.893 GAL -6.16 AZL 86.19 MCA 134.53 SMA 129.93 ECC .17207 INC 3.8149 V1 30.204
RP 107.98 LAP 2.72 LOP 203.19 VP 37.903 GAP -1.91 AZP 92.68 TAL 212.42 TAP 346.95 RCA 107.57 APO 152.29 V2 35.095
RC 76.070 GL 26.42 GP -7.69 ZAL 130.92 ZAP 62.19 ETS 2.62 ZAE 161.75 ETE 307.34 ZAC 59.56 ETC 157.00 CLP -61.91
   PLANETOCENTRIC CONIC
    C3 17.199 VML 4.147 DLA 4.41 RAL 289.30 RAD 6567.7 VEL 11.772 PTH 2.08 VMP 3.186 DPA -24.66 RAP 327.14 ECC 1.2831 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               90.00
                     1 27 40 2316.00
                                                   -21.89
                                                                  48.01
                                                                              149.31
                                                                                                                              1716.0
                                                                                                                                            -19.17
                                                                                                                                                             40.39
        90.00
                   14 31 20
                                  4686.03
                                                    15.04
                                                                  199.79
                                                                                147.45
                                                                                                                               4086.0
                                                                                                                                              11.64
                                                                                                                                                             192.77
                  2 51 4 2046.95
15 50 36 4430.30
4 4 4 1818.51
16 54 6 4231.50
      100.00
                                                   -22.91
                                                                   27.84
                                                                                148.93
                                                                                                                               1447.0
                                                                                                                                              -20.01
                                                                                                                                                              20.25
      100.00
                                                   16.02
                                                                  180.52
                                                                               146.98
                                                                                                                               3830.3
                                                                                                                                             12.45
                                                                                                                                                             173.55
      110.00
                                                   -25.64
                                                                    9.32
                                                                               147.74
                                                                                                                               1218.5
                                                                                                                                            -22.24
                                                                                                                                                               1.81
      110.00
                                                   18.62
                                                                  164.02
                                                                                145.56
                                                                                                                               3631.5
                                                                                                                                               14.59
                                                                                                                                                             157.23
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 527.6 SGR 401.3 SG3 733.5
RRT -.0319 RRF .7203 RTF .0306
SGB 662.9 R23 -.7223 R13 .0009
                                                                                                                         ST 176.0 SR 104.7 SS 1105.0
CRT .6225 CRS .9279 CST .3280
LSA 1110.8 MSA 169.6 SSA 16.3
    TOE -. 0637 TRA -. 3666 TC3 .1356 BAU .1110
    ROE -.0744 RRA -.0389 RC3 -.4632 FAU .16974
    FDE 2.8491 FRA-1.8190 FC3-8.5439 BSP 1041
BDE .0979 BRA .3687 BC3 .4826 FSP -2295
                                                                      SG1 528.0 SG2 400.9 THA 176.71
                                                                                                                        EL1 190.2 EL2 75.8 ALF 24.44
LAUNCH DATE DEC 1 1965
                                                                         FLIGHT TIME 106.00
                                                                                                                                     ARRIVAL DATE HAR 17 1966
  MELIOCENTRIC CONIC
                                                                         DISTANCE 300.319
    RL 147.51 LAL .00 LOL 68.60 VL 27.907 GAL -6.12 AZL 86.13 HCA 137.74 SMA 130.03 ECC .17101 INC 3.8687 V1 30.204 RP 108.02 LAP 2.60 LOP 206.40 VP 37.902 GAP -1.43 AZP 92.87 TAL 212.47 TAP 350.21 RCA 107.79 APO 152.26 V2 35.082 RC 78.316 GL 26.88 GP -8.45 ZAL 130.70 ZAP 67.58 ETS 1.92 ZAE 163.32 ETE 295.91 ZAC 57.83 ETC 155.65 CLP -67.32
   PLANE TOCENTRI'C CONIC
    C3 17.140 VHL 4.140 DLA
                                        4.87 RAL 289.25 RAD 6567.7 VEL 11.770 PTH 2.08 VMP 3.075 DPA -26.06 RAP 325.12 ECC 1.2821
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 23 56 2329.75
14 34 37 4670.69
                                                                                                                              1729.7
                                                   -22.19
                                                                  48.91
                                                                              149.33
                                                                                                108.06
                                                                                                              2 2 46
                                                                                                                                           -19.51
                                                                                                                                                             41.26
        90.00
                                                    14.61
                                                                 198.87
                                                                                147.29
                                                                                                  65.47
                                                                                                           15 52 27
                                                                                                                              4070.7
                                                                                                                                              11.18
                                                                                                                                                            191.88
                  2 47 35 2059.99
15 53 40 4415.68
4 1 5 1829.95
16 56 39 4218.48
       100.00
                                                   -23.21
                                                                  28.70
                                                                                148.96
                                                                                                109.39 3 21 55
                                                                                                                              1460.0
                                                                                                                                             -20.35
                                                                                                                                                             21.07
                                                                                                                                                            172.71
      100.00
                                                   15.59
                                                                  179.65
                                                                                146.81
                                                                                                 64.17 17 7 15
                                                                                                                              3815.7
                                                                                                                                             11.99
                                                                                                 113.08 4 31 35
60.54 18 6 57
      110.00
                                                   -25.94
                                                                  10.06
                                                                                147.79
                                                                                                113.08
                                                                                                                              1229.9
                                                                                                                                             -22.59
                                                                                                                                                              2.51
      110.00
                                                   18.19
                                                                  163.26
                                                                                145.39
                                                                                                                              3618.5
                                                                                                                                               14.13
                                                                                                                                                            156.50
  DIFFÉRENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   SGT 566.5 SGR 419.4 SG3 787.3
RRT .2168 RRF .7792 RTF .3432
    TDE -.0044 TRA -.4070 TC3 -.0424 BAU .1135
                                                                                                                          ST 169.7 SR 71.9 SS 1161.3
CRT .3061 CRS .8701 CST -.1511
    RDE -.0492 RRA -.0468 RC3 -.4936 FAU .18099
    FDE 3.0994 FRA-1.9507 FC3-9.1415 BSP 1049
BDE .0494 BRA .4097 BC3 .4954 FSP -2477
                                                                     SGB 704.8 R23 .6316 R13 .4900
                                                                                                                          LSA 1163.2 MSA 170.8 SSA 15.3
                                                                                                                          EL1 171.4 EL2 67.7 ALF 8.77
                                                                     SG1 580.8 SG2 399.4 THA 17.70
LAUNCH DATE DEC 1 1965
                                                                          FLIGHT TIME 108.00
                                                                                                                                     ARRIVAL DATE MAR 19 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 306.735
   RL 147.51 LAL .00 LOL 68.60 VL 27.915 GAL -6.08 AZL 86.07 HCA 140.96 SMA 130.09 ECC .17012 INC 3.9295 V1 30.204
RP 108.06 LAP 2.47 LOP 209.62 VP 37.896 GAP -.96 AZP 93.05 TAL 212.41 TAP 353.37 RCA 107.96 APO 152.22 V2 35.069
RC 80.581 GL 27.39 GP -9.29 ZAL 130.38 ZAP 73.08 ETS 1.13 ZAE 164.11 ETE 282.01 ZAC 56.07 ETC 154.07 CLP -72.85
  PLANETOCENTRIC CONIC
   C3 17.096 VML 4.135 DLA 5.39 RAL 289.29 RAD 6567.7 VEL 11.768 PTH 2.08 VMP 2.989 DPA -27.55 RAP 322.96 ECC 1.2814
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 20 11 2345.42
14 38 41 4653.81
2 44 4 2074.85
15 57 29 4399.61
3 58 8 1843.02
16 59 54 4204.21
       90.00
                                                   -22.51
                                                                 49.94
                                                                               149.49
                                                                                                107.64
                                                                                                              1 59 16
                                                                                                                              1745.4
                                                                                                                                             -19.89
                                                                                                                                                              42.25
       90.00
                                                   14.13
                                                                 197.87
                                                                                147.23
                                                                                                  65.20
                                                                                                             15 56 15
                                                                                                                               4053.8
                                                                                                                                               10.67
                                                                                                                                                             190.90
      100.00
                                                   -23.54
                                                                  29.68
                                                                                149.12
                                                                                                108.97
                                                                                                            3 18 39
                                                                                                                              1474.9
                                                                                                                                             -20.73
                                                                                                                                                             22.00
                                                                                                 63.90 17 10 49
                                                                                                                                              11.48"
      100.00
                                                   15.11
                                                                 178.70
                                                                                146.75
                                                                                                                              3799.6
                                                                                                                                                             171.79
      110.00
                                                   -26,29
                                                                  10.92
                                                                                147.97
                                                                                                112.68
                                                                                                            4 28 51
                                                                                                                              1243.0
                                                                                                                                             -22.98
                                                                                                                                                              3.32
                                                                                                 112.68 4 28 51
60.27 18 9 58
      110.00
                                                   17.71
                                                                 162.43
                                                                                145.32
                                                                                                                              3601.2
                                                                                                                                            13.62
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SGT 667.5 SGR 441.5 SG3 833.0

RRT .4446 RRF .8291 RTF .5889

SGB 800.3 R23 .4887 R13 .7135

SGI 708.2 SG2 372.7 THA 23.14
    TOE .0635 TRA -.4535 TC3 -.2398 BAU .1318
                                                                                                                        ST 208.9 SR 40.9 SS 1212.8
CRT .1881 CRS .6373 CST -.5806
    ROE -. 0227 RRA -. 0544 RC3 -. 5246 FAU . 19034
   FOE 3.3272 FRA-2.0520 FC3-9.6391 BSP 1397
BOE .0675 BRA .4568 BC3 .5768 FSP -2633
                                                                                                                        LSA 1219.3 MSA 171.6 SSA 14.2
EL1 209.1 EL2 40.1 ALF 2.19
```

```
ARRIVAL DATE MAR 21 1966
                                                                                 FLIGHT TIME 110.00
LAUNCH DATE DEC 1 1965
                                                                                 DISTANCE 313.123
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.918 GAL -6.02 AZL 86.00 MCA 144.17 SMA 130.11 ECC .16938 INC 3.9992 V1 30.204
RP 108.10 LAP 2.34 LOP 212.83 VP 37.886 GAP -.52 AZP 93.24 TAL 212.25 TAP 356.42 RCA 108.07 APO 152.15 V2 55.056
RC 82.862 GL 27.95 GP -10.20 ZAL 129.94 ZAP 78.63 ETS .23 ZAE 163.86 ETE 267.14 ZAC 54.33 ETC 152.27 CLP -78.44
   PLANETOCENTRIC CONIC
                                             5.98 RAL 289.42 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 2.931 DPA -29.11 RAP 320.71 ECC 1.2809
    CS 17-068 VHL 4-131 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 2 LONG
                    1 16 14 2363.47
14 43 39 4635.02
2 40 25 2091.97
16 2 9 4381.75
3 55 9 1858.09
17 3 55 4188.39
                                                                                                         107.15
                                                                                                                                         1763.5
                                                                                                                                                          -20.32
                                                                         51.14
                                                                                       149.77
                                                                                                                       1 55 38
                                                                                                                                                                             43.40
                                                        -22.88
         90.00
                                                                                                                       16 0 54
                                                                                                                                            4035.0
                                                                                                                                                             10.10
                                                                                                                                                                             189.81
                                                         13.59
                                                                        196.75
                                                                                         147.28
                                                                                                            64.92
         90.00
                                                                                                                      3 15 17
                                                                                                                                            1492.0
                                                                                                                                                            -21.17
                                                                                                                                                                              23.09
                                                                          30.61
                                                                                         149.41
                                                                                                           108.49
                                                        -23.92
       100.00
                                                                                        146.79
                                                                                                            63.61
                                                                                                                       17 15 11
                                                                                                                                           3781.7
                                                                                                                                                             10.91
                                                                                                                                                                             170.77
                                                        14.57
                                                                        177.64
       100.00
                                                                                                            112.21 4 26 7
59.98 18 13 43
                                                                                                                                           1258.1
                                                                                                                                                            -23.43
                                                                                                                                                                               4.26
                                                                          11.92
                                                                                        148.28
                                                                                                           112.21
                                                        -26.68
       110.00
                                                                        161.52
                                                                                         145.34
                                                                                                                                            3588.4
                                                                                                                                                             13.05
                                                                                                                                                                             154.83
                                                        17.17
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1401 TRA -.5045 TC3 -.4515 BAU .1635

ROE .0047 RRA -.0617 RC3 -.5561 FAU .19750

FOE 3.5144 FRA-2.1235 FC-10.0177 BSP 1963

BOE .1402 BRA .5083 BC3 .7163 FSP -2768
                                                                             SGT 819.6 SGR 467.5 SG3 868.5
RRT .6086 RRF .8703 RTF .7426
SGB 943.6 R23 .3979 R13 .8192
                                                                                                                                       ST 287.1 SR 30.0 55 1256.0 CRT .7980 CRS -.3908 CST -.7986
                                                                                                                                        LSA 1277.2 MSA 171.6 SSA 13.1
                                                                             SG1 877.7 SG2 346.4 THA 22.91
                                                                                                                                       EL1 288.1 EL2 18.0 ALF 4.78
                                                                                  FLIGHT TIME 112.00
                                                                                                                                                   ARRIVAL DATE MAR 23 1966
LAUNCH DATE DEC 1 1965
                                                                                 DISTANCE 319.483
   HELIOCENTRIC CONIC
    RL 147.5] LAL .00 LOL 68.60 VL 27.917 GAL -5.96 AZL 85.92 HCA 147.38 SMA 130.10 ECC .16878 INC 4.0807 V1 30.204
RP 108.14 LAP 2.20 LOP 216.04 VP 37.873 GAP -.09 AZP 93.44 TAL 211.99 TAP 359.37 RCA 108.14 APO 152.06 V2 35.043
                          28.58 GP -11.21 ZAL 129.38 ZAP 84.13 ETS 359.19 ZAE 162.51 ETE 253.49 ZAC 52.72 ETC 150.26 CLP -84.01
    RC 85.157 GL
   PLANETOCENTRIC CONIC
    C3 17.062 VHL 4.131 OLA 6.64 RAL 289.63 RAD 6567.7 VEL 11.766 PTH 2.08 VHP 2.897 OPA -30.73 RAP 318.47 ECC 1.2808 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 11 59 2384.49 -23.30 52.54 150.19 106.57 1 51 43 1784.5 -20.80 44.75
                                                                                                                                                                              188.59
                                                                                                                       16 6 30
                                                                                                                                            4013.8
                                                                                                                                                               9.45
                     14 49 36 4613.84
                                                                         195.50
                                                                                         147.43
                                                                                                            64.61
         90.00
                                                         12.98
                                                                                                                         3 11 41
                                                                                                                                                             -21.66
                                                                                                                                                                               24.37
       100.00
                       2 36 29 2111.92
                                                        -24.34
                                                                          32.14
                                                                                         149.84
                                                                                                           107.91
                                                                                                                                            1511.9
                                                                                                            63.30 17 20 28
111.64 4 23 14
59.66 18 18 17
                  16 7 46 4361.65
3 51 58 1875.68
17 8 47 4170.64
                                                                                                                                                                             169.62
       100.00
                                                         13.96
                                                                        176.46
                                                                                         146.94
                                                                                                                                            3761.6
                                                                                                                                                             10.26
                                                         -27.13
                                                                          13.09
                                                                                         148.73
                                                                                                           111.64
                                                                                                                                            1275.7
                                                                                                                                                             -23.95
                                                                                                                                                                                5.37
       110.00
                                                                         160.50
                                                                                         145.47
                                                                                                                                            3570.6
                                                                                                                                                              12.41
                                                                                                                                                                              153.85
       110.00
                                                         16.56
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 1008.8 SGR 496.1 SG3 890.2
RRT .7173 RRF .9029 RTF .8301
SGB 1124.1 R23 ".3406 R13 .8762
SG1 1076.5 SG2 323.9 THA 21.47
                                                                                                                                       ST 389.5 SR 56.6 SS 1294.4
CRT .9721 CRS -.9107 CST -.8911
     TOE .2239 TRA -.5596 TC3 -.6744 BAU .2039
           .0336 RRA -.0682 RC3 -.5866 FAU .20145
                                                                                                                                       LSA 1341.9 MSA 171.6 SSA 12.0
EL1 393.4 EL2 13.1 ALF 8.04
    FDE 3.6663 FRA-2.1479 FC-10.2216 BSP 2647
BDE .2264 BRA .5637 BC3 .8939 FSP -2851
                                                                                                                                                   ARRIVAL DATE MAR 25 1966
                                                                                 FLIGHT TIME 114.00
LAUNCH DATE DEC 1 1965
                                                                                 DISTANCE 325.816
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.911 GAL -5.88 AZL 85.82 HCA 150.59 SMA 130.06 ECC .16829 INC 4.1777 VI 30.204 RP 108.18 LAP 2.05 LOP 219.25 VP 37.856 GAP .32 AZP 93.64 TAL 211.65 TAP 2.23 RCA 108.17 APO 151.95 V2 35.030 RC 87.465 GL 29.29 GP -12.35 ZAL 128.70 ZAP 89.51 ETS 358.01 ZAE 160.28 ETE 242.48 ZAC 51.31 ETC 148.06 CLP -89.49
   PLANETOCENTRIC CONIC
    C3 17.088 VHL 4.134 DLA 7.41 RAL 289.92 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 2.889 DPA -32.42 RAP 316.31 ECC 1.2812
    LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 7 11 2409.34
14 56 42 4589.68
2 32 5 2135.51
16 14 29 4338.74
3 48 27 1896.51
17 14 36 4150.51
                                                        -23.77
                                                                                                                        1 47 20
                                                                                                                                          1809.3
                                                                                                                                                            -21.37
                                                                                      150.76
                                                                                                        105.86
                                                                         54.21
         90.00
                                                                                                                                           3989.7
                                                                                                                                                              8.71
                                                                                                                                                                             187.21
                                                                                         147.69
                                                                                                            64.28
                                                                                                                       16 13 11
                                                         12.27
                                                                        194.08
         90.00
                                                                                                                                           1535.5
                                                                                                                                                                              25.89
                                                                                                                       3 7 40
                                                                                                                                                            -22.23
                                                        -24.82
                                                                         33.73
                                                                                         150.42
                                                                                                           107.21
       100.00
                                                                                                                                                                             168.32
                                                                                                                                           373A.7
                                                                                                                                                              9.52
                                                                                        147.19
                                                                                                           62.96
                                                                                                                       17 26 48
                                                        13.25
                                                                        175.13
       100.00
                                                                                                                                                                                6.70
                                                                                                           110.96 4 20 4
59.32 18 23 47
                                                                                                                                                            -24.54
                                                        -27.64
                                                                          14.49
                                                                                        149.33
                                                                                                                                          1296.5
       110.00
                                                                                                                                                              11.68
                                                        15.87
                                                                        159.36
                                                                                         145.70
                                                                                                                                            3550.5
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 508.0 SR 95.1 SS 1324.4
CRT .9743 CRS -.9794 CST -.9342
                                                                            SGT 1220.3 SGR 528.1 SG3 898.3
RRT .7890 RRF .9286 RTF .8805
SGB 1329.7 R23 .3036 R13 .9100
SGI 1294.0 SG2 306.0 THA 20.02
     TOE .3150 TRA -.6170 TC3 -.9010 BAU .2495
           .0639 RRA -.0746 RC3 -.6170 FAU .20242
     ROE
                                                                                                                                       LSA 1411.3 MSA 170.8 SSA 10.8
EL1 516.3 EL2 21.1 ALF 10.36
     FOE 3.7687 FRA-2.1367 FC-10.2553 BSP 3394
     BOE .3214 BRA .6215 BC3 1.0921 FSP -2898
                                                                                                                                                   ARRIVAL DATE MAR 27 1966
                                                                                  FLIGHT TIME 116.00
LAUNCH DATE DEC 1 1965
                                                                                DISTANCE 332.123
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.901 GAL -5.80 AZL 85.70 HCA 153.79 SHA 129.99 ECC .16790 INC 4.2961 V1 30.204
RP 108.22 LAP 1.90 LOP 222.45 VP 37.837 GAP .72 AZP 93.86 TAL 211.22 TAP 5.01 RCA 108.16 APO 151.82 V2 35.016
RC 89.783 GL 30.13 GP -13.68 ZAL 127.89 ZAP 94.69 ETS 356.64 ZAE 157.43 ETE 234.31 ZAC 50.22 ETC 145.66 CLP -94.82
   PLANETOCENTRIC CONIC
    C3 17.159 VHL 4.142 DLA 8.32 RAL 290.28 RAO 6567.7 VEL 11.770 PTH 2.08 VHP 2.905 DPA -34.24 RAP 314.32 ECC 1.2824 LPCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 3 3 2459.28 -24.31 56.24 151.50 104.98 1 42 12 1839.3 -22.02 48.31 90.00 15 5 11 4561.65 11.43 192.44 148.06 63.92 16 21 13 3961.7 7.84 185.61 100.00 2 26 55 2163.94 -25.38 35.65 151.17 106.34 3 2 59 1563.9 -22.90 27.74 100.00 16 22 30 4312.23 12.43 173.59 147.55 62.59 17 34 22 3712.2 8.66 166.83 110.00 3 44 21 1921.63 -28.24 16.20 150.12 110.11 4 16 23 1321.6 -25.24 8.31 10.00 17 21 34 4127.31 15.06 158.05 146.04 58.94 18 30 21 3527.3 10.83 151.49
     C3 17.159 VHL 4.142 DLA 8.32 RAL 290.28 RAO 6567.7 VEL 11.770 PTH 2.08 VHP 2.905 DPA -34.24 RAP 314.32 ECC 1.2824
                                                                            NID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 1445.0 SGR 563.6 SG3 891.1
RRT .8376 RRF .9485 RTF .9101
SGB 1551.0 R23 .2809 R13 .9304
SG1 1523.3 SG2 292.1 THA 18.81
                                                                                                                                       ST 638.8 SR 139.4 55 1351.1
CRT .9747 CRS -.9942 CST -.9562
     TDE .4134 TRA -.6758 TC3-1.1250 BAU .2977
     ROE .0971 RRA -.0803 RC3 -.6467 FAU .19984
     FOE 3.8367 FRA-2.0783 FC-10.0825 BSP 4172
BDE .4247 BRA .6805 BC3 1.2976 FSP -2882
                                                                                                                                       LSA 1491.3 MSA 170.2 55A 9.6
                                                                                                                                        EL1 653.1 EL2 30.5 ALF 12.03
```

ARRIVAL DATE HAR 29 1966

FLIGHT TIME 118.00 LAUNCH DATE DEC 1 1965 DISTANCE 338.405 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 27.888 GAL -5.71 AZL 85.56 MCA 156.99 SHA 129.90 ECC .16761 INC 4.4447 V1 30.204 RP 108.26 LAP 1.74 LOP 225.65 VP, 37.815 GAP 1.10 AZP 94.09 TAL 210.70 TAP 7.69 RCA 108.12 APO 151.67 V2 35.003 RC 92.112 GL 31.13 GP -15.27 ZAL 126.91 ZAP 99.59 ETS 355.03 ZAE 154.16 ETE 228.57 ZAC 49.54 ETC 143.09 CLP -99.95 PLANETOCENTRIC CONIC C3 17.300 VHL 4.159 DLA 9.40 RAL 290.69 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 2.945 DPA -36.24 RAP 312.60 ECC 1.2847 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO COT TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 1 35 54 1876.2 -22.79 50:75 152.45 103.87 0 54 38 2476.23 -24.94 58.76 90.00 16 30 55 3928.5 6.80 183.73 15 15 27 4528.49 10.43 190.52 148.57 63.53 90.00 1599.0 -23.69 30.04 2 57 14 2 20 35 2199.01 -26.03 38.06 152.13 105.24 100.00 62.19 17 43 31 165.08 7.63 3680.9 100.00 16 32 11 4280.94 11.44 171.79 148.05 -26.08 3 39 19 1952.62 17 29 56 4100.09 4 11 52 1352.6 -28.95 18.34 151.12 109.02 18 38 16 9.83 3500.1 110.00 14.09 156.52 146.50 58.53 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 780.6 SR 189.1 S5 1370.7 CRT .9766 CRS -.9983 CST -.9689 TOE .5201 TRA -.7353 TC3-1.3386 BAU .3471 SGT 1675.5 SGR 606.3 SG3 870.9 RRT .8716 RRF .9641 RTF .9288 SGB 1781.8 R23 .2664 R13 .9440 ROE .1341 RRA -. 0867 RC3 -. 6787 FAU .19452 LSA 1579.6 MSA 168.8 SSA FOE 3.8596 FRA-1.9943 FC3-9.7343 BSP 4978 BOE .5371 BRA .7404 BC3 1.5008 FSP -2839 EL1 802.2 EL2 39.5 ALF 13.34 SGI 1759.2 SG2 283.1 THA 17.99 ARRIVAL DATE MAR 31 1966 LAUNCH DATE DEC 1 1965 FLIGHT TIME 120.00 HELIOCENTRIC CONIC DISTANCE 344.662 RL 147.51 LAL .00 LOL 68.60 VL 27.872 GAL -5.61 AZL 85.36 MCA 160.19 SMA 129.78 ECC .16741 INC 4.6382 V1 30.204
RP 108.31 LAP 1.57 LOP 228.84 VP 37.791 GAP 1.47 AZP 94.36 TAL 210.11 TAP 10.30 RCA 108.06 APO 151.51 V2 34.990
RC 94.449 GL 32.37 GP -17.27 ZAL 125.75 ZAP 104.14 ETS 353.08 ZAE 150.57 ETE 224.81 ZAC 49.41 ETC 140.32 CLP-104.83 PLANETOCENTRIC CONIC C3 17.552 VHL 4.189 DLA 10.73 RAL 291.16 RAD 6567.7 VEL 11.787 PTH 2.08 VHP 3.010 DPA -38.57 RAP 311.24 ECC 1.2889 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 102.39 1 27 46 1923.3 153.66 -25.67 62.02 90.00 0 45 43 2523.30 63.10 16 42 54 3888.1 5.52 181.45 188.20 149.25 90.00 15 28 6 4488.11 9.20 103.77 2 49 49 -24.63 33.02 -26.79 153.37 100.00 2 12 25 2243.67 41.16 61.76 17 54 47 3643.0 6.37 162.96 4242.97 10.23 169.63 148.71 100.00 16 44 4 3 32 49 1992.07 17 40 10 4067.33 107.59 1392.1 -27.10 12.94 110.00 -29.79 21.10 152.42 58.07 18 47 57 3467.3 8.61 110.00 12.92 154.71 147.11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1906.6 SGR 658.1 SG3 836.0 RRT .8957 RRF .9758 RTF .9405 ST 935.1 SR 248.4 SS 1390.1 CRT .9786 CRS -.9995 CST -.9767 TDE .6386 TRA -.7952 TC3-1.5318 BAU .3964 RDE .1789 RRA -.0935 RC3 -.7123 FAU .18574 SGB 2017.0 R23 .2562 R13 .9529 SG1 1997.5 SG2 279.3 THA 17.53 FOE 3.8624 FRA-1.8732 FC3-9.1614 BSP 5782 BOE .6632 BRA .8007 BC3 1.6893 FSP -2733 LSA 1685.3 MSA 167.8 SSA 7.1 EL1 966.3 EL2 49.4 ALF 14.61 FLIGHT TIME 122.00 ARRIVAL DATE APR . 2 1966 LAUNCH DATE DEC 1 1965 DISTANCE 350.894 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 27.853 GAL -5.50 AZL 85.10 HCA 163.39 SMA 129.65 ECC .16729 INC 4.9026 V1 30.204
RP 108.35 LAP 1.40 LOP 232.04 VP 37.765 GAP 1.83 AZP 94.70 TAL 209.45 TAP 12.83 RCA 107.96 APO 151.34 V2 34.977 RC 96.794 GL 33.96 GP -19.91 ZAL 124.33 ZAP 108.24 ETS 350.60 ZAE 146.63 ETE 222.68 ZAC 50.01 ETC 137.29 CLP-109.45 PLANE TOCENTRIC CONIC C3 17.993 VML 4.242 DLA 12.43 RAL 291.66 RAD 6567.7 VEL 11.806 PTH 2.09 VMP 3.107 OPA -41.46 RAP 310.34 ECC 1.2961 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.15 0 33 33 2585.90 15 44 14 4437.06 155.27 100.35 1 16 39 1985.9 -24.81 90.00 -26.51 66.41 178.58 3837.1 3.89 15 44 14 4437.06 7.61 185.28 150.17 62.64 16 5A 11 37.05 2 1 16 2302.98 16 59 12 4195.21 1703.0 -25.79 -27.69 45.34 155.01 101.74 2 39 39 160.31 4.78 8.68 166.93 149.60 61.28 18 9 7 3595.2 100.00 3 23 55 2044.39 3 57 59 -28.37 16.49 -30.81 24.83 154.14 105.59 1444.4 57.57 19 0 9 146.10 7.08 17 53 3 4026.57 11.44 152.48 147.94 3426.6 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1106.6 SR 322.0 SS 1406.1 TDE .7752 TRA -.8568 TC3-1.6922 BAU .4455 SGT 2135.9 SGR 727.3 SG3 788.3 CRT .9811 CRS -.9998 CST -.9822 RRT .9132 RRF .9845 RTF .9487 SGB 2256.3 R23 .2517 R13 .9596 RDE .2358 RRA -.1030 RC3 -.7521 FAU .17424 FOE 3.8377 FRA-1.7378 FC3-8.3836 8SP 6601 BOE .8103 BRA .8630 BC3 1.8518 FSP -2598 LSA 1810.5 MSA 165.8 55A 5.9 SG1 2238.5 SG2 282.8 THA 17.56 EL1 1151.0 EL2 59.9 ALF 15.98 ARRIVAL DATE APR 4 1966 LAUNCH DATE DEC J 1965 FLIGHT TIME 124.00 HELIOCENTRIC CONIC **DISTANCE 357.103** RL 147.51 LAL .OP LOL 68.60 VL 27.831 GAL -5.38 AZL 84.71 MCA 166.58 SMA 129.49 ECC .16724 INC 5.2884 V1 30.204
RP 108.39 LAP 1.23 LOP 235.23 VP 37.737 GAP 2.18 AZP 95.14 TAL 208.71 TAP 15.29 RCA 107.84 APO 151.15 V2 34.964
RC 99.145 GL 36.10 GP -23.63 ZAL 122.55 ZAP 111.71 ETS 347.30 ZAE 142.12 ETE 222.02 ZAC 51.68 ETC 133.88 CLP-113.81 PLANETOCENTRIC CONIC C3 18.788 VHL 4.335 DLA 14.70 RAL 292.16 RAO 6567.8 VEL 11.839 PTH 2.10 VHP ,3.250 DPA -45.32 RAP 310.11 ECC 1.3092 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 15 39 2674.57 -27.43 72.73 157.47 97.31 1 0 14 2074.6 -26.14 64.30 D 15 39 2674.57 17 18 54 151.50 62.17 3768.6 174.76 4368.65 5.46 181.41 90.00 16 6 6 1 44 54 2386.74 98.73 2 24 41 1786.7 -27.20 42.88 -28.70 51.36 157.27 100.00 17 19 32 4131.71 3 10 49 2117.92 18 10 6 3973.29 60.78 18 28 23 3531.7 2.64 156.81 163.38 100.00 6.58 150.88 102.63 3 46 1517.9 110.00 -32.03 30.21 156.54 57.00 19 16 20 3373.3 5.07 110.00 9.48 149.60 149.11 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TDE .9442 TRA -.9236 TC3-1.7990 BAU .4941 SGT 2362.9 SGR 821.9 SG3 723.4 ST 1305.1 SR 421.3 SS 1423.2 CRT .9836 CRS -.9998 CST -.9862 RDE .3163 RRA -.1164 RC3 -.7954 FAU .15872 RRT .9258 RRF .9904 RTF .9544 FOE 3.8008 FRA-1.5782 FC3-7.3138 BSP 7436 BOE .9958 BRA .9309 BC3 1.9670 FSP -2397 SGB 2501.7 R23 .2453 R13 .9647 LSA 1969.6 MSA 164.1 SSA 4.6 SG1 2484.2 SG2 295.6 THA 18.11 ELI 1369.5 ELZ 72.4 ALF 17.67

```
ARRIVAL CATE APR 6 1966
LAUNCH DATE DEC 1 1965
                                                               FLIGHT TIME 126.00
                                                               DISTANCE 363.288
  HELIOCENTRIC CONIC
   RL 147.51 LAL .00 LOL 68.60 VL 27.807 GAL -5.25 AZL 84.09 HCA 169.77 SMA 129.32 ECC .16727 INC 5.9089 VI 30.204
RP 108.43 LAP 1.05 LOP 238.42 VP 37.707 GAP 2.51 AZP 95.82 TAL 207.92 TAP 17.69 RCA 107.69 APO 150.95 V2 34.951
   RC 101.502 CL 39.20 GP -29.24 7AL 120.18 ZAP 114.16 ETS 342.59 ZAE 136.43 ETE 222.79 ZAC 55.07 ETC 129.86 CLP-117.97
   C3 20.346 VHL 4.511 DLA 17.94 RAL 292.60 RAD 6567.8 VEL 11.905 PTH 2.12 VHP 3.480 OPA -50.98 RAP 310.95 ECC 1.3348
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 42 25 2813.09 -28.23 82.78 160.75 92.33 24 29 18 2213.1 -27.61 74.17
                                                        175.77
                                                                     153.66
                                                                                    61.76 17 50 3
                                                                                                             3667.9
                                                                                                                           -1.56
                                                                                                                                       169.14
                             4267.88
                                             2.23
                            2516.66
4039.54
                                            -29.67
                                                                     160.67
                                                                                    93.81
                                                                                              2 0 12
                                                                                                             1916.7
                                                                                                                          -28.83
                                                                                                                                       52.18
                  1 18 16
                                                          60.89
                                                                                    60.29 18 57 1
               17 49 41
                                              3.49
                                                        158.28
                                                                     152.96
                                                                                                             3439.5
                                                                                                                            - .49
                                                                                                                                       151.76
               2 49 40 2230.69
18 34 46 3898.28
     110.00
                                            -33.39
                                                          38.73
                                                                     160.22
                                                                                    97.76
                                                                                              3 26 51
                                                                                                             1630.7
                                                                                                                          -31.96
                                                                                                                                        29.79
                                                                                    56.40 19 39 45
                                                                                                             3298.3
                                                                                                                          2.22
                                                                                                                                       139.35
     110.00
                                             6.68
                                                        145.60
                                                                     150.99
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 2590.5 SGR 957.6 SG3 634.1
RRT .9349 RRF .9941 RTF .9592
SGB 2761.8 R23 .2346 R13 .9697
   TOE 1.1791 TRA-1.0037 TC3-1.8118 BAU .5427
                                                                                                          ST 1551.6 SR 564.1 SS 1434.0
                                                                                                         CRT .9865 CRS -.9998 CST -.9896
         .4416 RRA -.1379 RC3 -.8358 FAU .13777
                                                                                                         LSA 2180.8 MSA 160.9 SSA 3.4
EL1 1648.6 EL2 86.8 ALF 19.79
   FOE 3.7261 FRA-1.3990 FC3-5.8622 BSP 8317
                                                            SG1 2743.1 SG2 320.9 THA 19.34
   BOE 1.2591 BRA 1.0131 BC3 1.9953 FSP -2124
                                                                FLIGHT TIME 128.00
                                                                                                                   ARRIVAL DATE APR 8 1966
  HELIOCENTRIC CONIC
                                                               DISTANCE 369.449
   RL 147.51 LAL .00 LOL 68.60 VL 27.780 GAL -5.11 AZL 82.92 HCA 172.96 SMA 129.14 ECC .16736 INC 7.0824 V1 30.204
RP 108.46 LAP .87 LOP 241.60 VP 37.676 GAP 2.83 AZP 97.03 TAL 207.06 TAP 20.01 RCA 107.53 APO 150.75 V2 34.939
RC 103.862 GL 44.13 GP -38.58 ZAL 116.66 ZAP 114.56 ETS 335.34 ZAE 128.10 ETE 224.78 ZAC 61.67 ETC 124.80 CLP-122.12
  PLANETOCENTRIC CONIC
   C3 24.005 VHL 4.899 OLA 23.04 RAL 292.88 RAO 6568.0 VEL 12.057 PTH 2.16 VHP 3.944 DPA -60.15 RAP 314.31 ECC 1.3951
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          2474.9
                                                                                  82.84 23 34 12
61.90 18 48 42
      90.00
                                                                                                                        -28.18
                 22 42 57 3074.91
17 40 36 4086.11
                                                                    166.01
                                            -27.47
                                                        101.85
                                                                                                                                       93.26
      90.00
                                            -3.63
                                                        165.62
                                                                     158.22
                                                                                                             3486.1
                                                                                                                           -7.36
                                                                                                                                       158.93
     100.00
                 0 25 46
                             2756.04
                                            -29.43
                                                         78.64
                                                                     166.26
                                                                                    84.50
                                                                                              1 11 42
                                                                                                             2156.0
                                                                                                                          -29.AB
                                                                                                                                        69.86
                            3880.21
                                                                                    60.16 19 49 4
     100.00
                 18 44 24
                                            -1.91
                                                        149.54
                                                                     157.26
                                                                                                             3280.2
                                                                                                                           -5.86
                                                                                                                                       142.98
                                                                                    88.61
55.87
                                                                                              2 50 13
     110.00
                 2 9 42 2430.92
                                            -34.16
                                                          54.28
                                                                     166.59
                                                                                                             1830.9
                                                                                                                          -33.97
                                                                                                                                        45.04
     110.00
                 19 16 58
                             3778.10
                                            2.11
                                                        139.29
                                                                     154.75
                                                                                              20 19 56
                                                                                                             3178.1
                                                                                                                           -2.38
                                                                                                                                       133.08
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                                                         ST 1893.7 SR 782.8 SS 1418.3
CRT .9896 CRS -.9997 CST -.9927
   TOE 1.5769 TRA-1.1219 TC3-1.6443 BAU .5904
                                                            SGT 2833.6 SGR 1144.0 SG3 499.3
   ROE .6667 RRA -.1713 RC3 -.8249 FAU .10624
                                                            RRT .9411 RRF .9956 RTF .9641
SGB 3055.8 R23 .2166 R13 .9751
                                                                                                         LSA 2487.1 HSA 156.3 SSA 2.4
   FOE 3.5372 FRA-1.1652 FC3-3.8316 BSP 9293
   BDE 1.7121 BRA 1.1349 BC3 1.8396 FSP -1686
                                                            SG1 3034.4 SG2 361.3 THA 21.12
                                                                                                         EL1 2046.4 EL2 104.2 ALF 22.31
                                                               FLIGHT TIME 130.00
                                                                                                                  ARRIVAL CATE APR 10 1966
LAUNCH DATE DEC 1 1965
  HELIOCENTRIC CONIC
                                                              DISTANCE 375,581
                      .00 LOL 68.60 VL 27.752 GAL -4.96 AZL 79.83 HCA 176.13 SMA 128.94 ECC .16751 INC10.1704 V1 30.204
.68 LOP 244.79 VP 37.644 GAP 3.14 AZP 100.15 TAL 206.13 TAP 22.26 RCA 107.34 APO 150.54 V2 34.926
   RL 147.51 LAL
                      53.09 CP -55.88 ZAL 110.36 ZAP 110.03 ETS 322.58 ZAE 113.20 ETE 225.32 ZAC 74.99 ETC 116.99 CLP-127.65
   RC 106.225 GL
  PLANETOCENTRIC CONIC
   C3 37.283 VHL 6.106 DLA 32.25 RAL 292.88 RAD 6568.5 VEL 12.596 PTH 2.28 VHP 5.393 DPA -76.43 RAP 332.10 ECC 1.6136
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    62.56 19 15 1
62.55 23 11 38
62.56 19 15 1
62.55 23 11 38
                                                                                                            3490.8
                                                                                                                                    166.25
      73.88
                 18 6 50
                             4090.76
                                           -17.64
                                                        173.44
                                                                    172.63
                                                                                                                        -21.18
      106.12
                 22 16 47
                             3290.46
                                            -17.63
                                                        114.12
                                                                     172.62
                                                                                                             2690.5
                                                                                                                          -21.17
                                                                                                                                       106.92
                18 6 50
                             4090.76
                                           -17.64
                                                        173.44
                                                                     172.63
                                                                                                             3490.8
                                                                                                                         -21.18
                                                                                                                                       166.25
      73.88
               22 16 47
                            3290.46
                                           -17.63
                                                                    172.62
                                                                                                             2690.5
     106.12
                                                        114.12
                  0 12 0 2946.58
21 14 43 3482.63
                                                         92.14
                                                                     177.11
                                                                                                             2346.6
                                                                                                                         -29.38
                                                                                                                                       84.06
     110.00
                                           -26.60
                                                                                    56.91 22 12 46
     110.00
                                            -9.10
                                                        123.77
                                                                     167.51
                                                                                                             2882.6
                                                                                                                        -13.39
                                                                                                                                      117.30
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 3170.5 SGR 1257.5 SG3 284.2
                                                                                                         ST 2471.4 SR 1028.1 55 1278.8
   TOE 2.5868 TRA-1.3895 TC3-1.0934 BAU .6143
                                                           RRT .9407 RRF .9924 RTF .9735
SGB 3410.7 R23 .1820 R13 .9826
                                                                                                         CRT .9922 CRS -.9994 CST -.9960
   RDE 1.0932 RRA -.1948 RC3 -.5687 FAU .05630
   FOE 2.9097 FRA -.8148 FC3-1.3072 BSP 10592
                                                                                                         LSA 2963.0 MSA 144.1 -SSA
   BOE 2.8083 BRA 1.4031 BC3 1.2324 FSP
                                              -983
                                                            SG1 3387.3 SG2 399.2 THA 20.76
                                                                                                         EL1 2674.1 EL2 118.6 ALF 22.47
LAUNCH DATE DEC 1 1965
                                                               FLIGHT TIME 132.00
                                                                                                                   ARRIVAL DATE APR 12 1966
  HELIOCENTRIC CONIC
                                                               DISTANCE 381.582
   RL 147.51 LAL .00 LOL 68.60 VL 27.722 GAL -4.78 AZL 51.64 HCA 179.20 SMA 128.73 ECC .16755 INC38.3531 V1 30.204

RP- 408.54 LAP .50 LOP 247.97 VP 37.610 GAP 3.42 AZP 128.36 TAL 205.06 TAP 24.26 RCA 107.16 APO 150.30 V2 34.914

RC 108.588 GL 62.89 GP -77.88 ZAL 96.06 ZAP 95.29 ETS 201.65 ZAE 75.57 ETE 115.75 ZAC 102.12 ETC 7.52 CLP 116.03
  PLANETOCENTRIC CONIC
   C3 B70.993 VHL 19.261 DLA 45.49 RAL 302.26 RAD 6572.0 VEL 22.188 PTH 3.24 VHP 22.025 DPA -62.24 RAP 124.75 ECC 7.1056
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      52.78 16 57 51 4843.70
                                            -3.14
                                                        224.15
                                                                     209.19
                                                                                 44.59 18 18 35
                                                                                                            4243.7
                                                                                                                        -8.81 218.89
                  0 44 31
                             3424.94
                                             -3.12
                                                        114.06
                                                                     209.17
                                                                                    44.59
                                                                                              1 41 36
                                                                                                             2824.9
                                                                                                                           -8.79
                                                                                                                                       108.80
                                                                                            18 18 35
                16 57 51
                                                                     209.19
                                                                                    44.59
                                                                                                             4243.7
                                                                                                                           -8.81
                                                                                                                                       218.89
                             4843.70
                                             -3.14
                                                        224.15
                             3424.94
                                                                     209.17
                                                                                    44.59
                                                                                              1 41 36
                                                                                                             2824.9
                                                                                                                           -8.79
                                                                                                                                       108.80
      127.22
                  0 44 31
                                             -3.12
                                                        114.06
                                                                                            18 18 35
                            4843.70
                                             -3.14
                 16 57 51
                                                                                    44.59
                                                                                                             4243.7
                                                                                                                           -8.81
                                                                                                                                       218.89
                                                        224.15
                                                                     209.19
                                                           HID-COURSE EXECUTION ACCURACY
                  0 44 31
                              3424.94
                                                        114.D6
                                                                                                             2824.9
                                                                                                                           -8.79
                                                                                                                                       108.80
                                             -3.12
                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                           SGT 767.5 SGR 3583.2 SG3 62.4

RRT -.5620 RRF -.9965 RTF .6288

SGB 3664.5 R23 -.0616 R13 -.9981
                                                                                                        ST 606.0 SR 3428.2 SS 1338.0

CRT -.9496 CRS .9997 CST -.9575

LSA 3724.9 M5A 188.5 SSA .5
   TOE 1.9768 TRA 1.1493 TC3 -.0191 BAU .8422
   RO-11.4923 RRA 2.0143 RC3 -.1687 FAU-.01354
   FOE 2.3608 FRA -.2688 FC3 .0316 BSP 4611
BDE11.6610 BRA 2.3191 BC3 .1698 FSP -91
                                                            SG1 3609.9 SG2 630.1 THA 97.08
                                                                                                         EL1 3476.3 EL2 187.3 ALF 99.56
```

ARRIVAL DATE APR 14 1966

EL1 582.5 EL2 40.8 ALF 174.07

LAUNCH DATE DEC 1 1965

HELIOCENTRIC CONIC DISTANCE 387.881 RL 147.51 LAL .00 LOL 68.60 VL 27.690 GAL -4.66 AZL 96.93 MCA 182.57 SMA 128.51 ECC .16819 INC 6.9300 V1 30.204
RP 108.58 LAP .31 LOP 251.15 VP 37.576 GAP 3.77 AZP 83.08 TAL 204.21 TAP 26.78 RCA 106.90 APO 150.13 V2 34.903
RC 110.951 GL -44.16 GP 65.80 ZAL 114.36 ZAP 107.94 ETS 39.90 ZAE 110.35 ETE 132.55 ZAC 54.68 ETC 231.14 CLP-138.72 PLANETOCENTRIC CONIC C3 22.846 VHL 4.780 OLA -61.30 RAL 325.54 RAD 6567.9 VEL 12.009 PTH 2.14 VHP 7.352 OPA 41.80 RAP 286.23 ECC 1.3760 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 211.48 1165.6 44.75 33.06 5 33 27 1765.60 36.67 50.86 143.22 6 2 52 42.91 143.21 16 44 11 243.99 146.94 15 14 40 5371.26 36.68 250.11 211.49 4771.3 42.91 33.06 5 33 27 1765.60 36.67 50.86 211.48 143.22 6 2 52 1165.6 42.91 44.75 143.21 16 44 11 243.99 146.94 15 14 40 5371.26 36.68 250.11 211.49 4771.3 42.91 33.06 5 33 27 1765.60 36.67 50.86 211.48 143.22 6 2 52 1165.6 42.91 44.75 143.21 16 44 11 15 14 40 5371.26 36.68 250.11 211.49 4771.3 42.91 243.99 146.94 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 3264.1 SGR 1788.6 SG3 186.8 RRT -.9530 RRF -.9979 RTF ..9699 SGB 3722.0 R23 ..1756 R13 -.9843 TDE-2.1647 TRA .0865 TC3-2.0590 BAU .7255 ST 2596.4 SR 1247.8 55 979.4 CRT -.9919 CRS .9996 CST -.9952 ROE 1.0285 RRA -.2525 RC3 1.1844 FAU .03843 FOE-1.2760 FRA .2528 FC3-1.4563 BSP 11855 LSA 3038.5 MSA 158.7 SSA .8 EL1 2877.1 EL2 142.9 ALF 154.45 BOE 2.3966 BRA .2669 BC3 2.3753 FSP SG1 3691.0 SG2 479.3 THA 151.91 -617 LAUNCH DATE DEC 1 1965 FLIGHT TIME 136.00 ARRIVAL DATE APR 16 1966 DISTANCE 393.942 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 27.657 GAL -4.88 AZL 91.22 MCA 185.73 SMA 128.29 ECC .16854 INC 1.2162 V1 30.204
RP 108.61 LAP .12 LOP 254.32 VP 37.542 GAP 4.05 AZP 88.78 TAL 203.12 TAP 28.85 RCA 106.67 APO 149.91 V2 34.892
RC 113.313 GL -10.28 GP 41.02 ZAL 124.88 ZAP 122.38 ETS 30.29 ZAE 127.88 ETE 141.73 ZAC 39.67 ETC 209.40 CLP-135.22 PLANETOCENTRIC CONIC C3 10.841 VHL 3.293 DLA -29.46 RAL 308.06 RAD 6567.4 VEL 11.499 PTH 2.00 VMP 4.583 DPA 17.90 RAP 295.11 ECC 1.1784 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 108.23 8 20 58 108.21 12 1 1 324.27 167.53 81.52 8 4 36 981.48 23.55 332.30 381.5 25.82 98.48 10 24 2 5819.16 23.56 277.14 167.53 5219.2 25.83 269.11 112.10 10 3 28 104.30 12 52 28 100 00 9 52 57 630.67 20.65 305.46 166.38 30.7 23.47 297.79 100.00 11 18 23 5645.20 26.53 265.20 168.49 5045.2 28.23 256.41 121.52 9 41 6 94.55 15 24 11 110.00 9 29 21 705.00 13.97 307.53 162.85 105.0 18.04 300 78 110.00 13 58 27 5143.63 33.92 228.58 169.91 4543.6 34.17 219.35 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 921.9 SR 289.7 SS 334.1 CRT -.9400 CRS .9994 CST -.9472 TOE -.5045 TRA -.4430 TC3-4.6846 BAU .7401 SGT 3327.3 SGR 1369.5 SG3 399.0 RRT -.9509 RRF -.9994 RTF ..9546 SGB 3598.1 R23 ..2540 R13 -.9666 SGI 3576.5 SGZ 394.2 THA 158.35 RDE .1646 RRA -.0262 RC3 2.0322 FAU .08636 LSA 1013.8 MSA 132.5 SSA 5.7 FOE -.4782 FRA .0412 FC3-6.8965 BSP 11138 BDE .5307 BRA .4438 BC3 5.1064 FSP -1302 EL1 961.6 EL2 94.7 ALF 163.38 LAUNCH DATE DEC 1 1965 FLIGHT TIME 138.00 ARRIVAL DATE APR 18 1966 HELIOCENTRIC CONIC DISTANCE 400.002 RL 147.51 LAL .00 LOL 68.60 VL 27.623 GAL -4.29 AZL 89.57 HCA 188.90 SMA 128.05 ECC .16899 INC .4241 V1 30.204 RP 108.64 LAP -.07 LOP 257.50 VP 37.506 GAP 4.34 AZP 90.42 TAL 202.01 TAP 30.91.RCA 106.41 APO 149.69 V2 34.881 3.68 GP 28.18 ZAL 123.90 ZAP 130.11 ETS 24.12 ZAE 133.77 ETE 152.32 ZAC 35.43 ETC 193.08 CLP-136.96 RC 115.673 GL C3 10.318 VHL 3.212 DLA -15.54 RAL 306.05 RAD 6567.4 VEL 11.476 PTH 1.99 VHP 4.104 DPA 5143 RAP 298.43 ECC 1.1698 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 37 13 90.00 5 11 10 1563.33 .28 3,44 157.62 118.32 963.3 234.47 90.00 13 1 24 5217.26 26.35 161.80 79.23 14 28 22 4617.3 226.24 100.00 6 23 58 1328.40 -1.22 345.64 157.09 119.87 6 46 7 728.4 2.76 339.12 100.00 14 31 17 4927.43 27.41 212.90 161.55 77.58 15 53 24 4327.4 25.42 204.67 7 13 14 1174.08 15 58 30 4654.51 110.00 -3.64 332.43 155.58 124.01 7 32 48 326.22 73.10 17 16 5 27.56 191.35 30.17 160.73 4054.5 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 338.6 SR 33.2 SS 174.7 CRT -.3208 CRS .7023 CST -.1413 SGT 3494.2 SGR 1006.8 SG3 490.3 TOE -.0037 TRA -.5825 TC3-5.1733 BAU .7457 RRT -.9532 RRF -.9976 RTF .9532 ROE -.0077 RRA .0038 RC3 1.5669 FAU .10491 FOE .2588 FRA -.0541 FC3-8.8026 BSP 11312 BOE .0085 BRA .5825 BC3 5.4054 FSP -1600 SG8 3636.3 R23 .2732 R13 -.9595 LSA 340.0 MSA 173.7 SSA 22.3 SG1 3624.4 SG2 293.4 THA 164.54 EL1 338.8 EL2 31.4 ALF 178.18 LAUNCH DATE DEC 1 1965 FLIGHT TIME 140.00 ARRIVAL DATE APR 20 1966 HELIOCENTRIC CONIC DISTANCE 406.047 RL 147.51 LAL .00 LOL 68.60 VL 27.588 GAL -4.10 AZL 88.78 MCA 192.08 SMA 127.81 ECC .16952 INC 1.2149 V1 30.204 RP- 108.68 LAP -.25 LOP 260.67 VP 37.471 GAP 4.61 AZP 91.19 TAL 200.85 TAP 32.93 RCA 106.15 APO 149.48 V2 34.870 RC 118.029 GL 10.40 GP 20.92 ZAL 121.62 ZAP 134.90 ETS 19.88 ZAE 135.44 ETE 159.77 ZAC 35.06 ETC 182.45 CLP-139.09 PLANETOCENTRIC CONIC C3 10.466 VHL 3.235 OLA -8.60 RAL 306.16 RAD 6567.4 VEL 11.483 PTH 2.00 VHP 4.009 OPA -1.57 RAP 300.59 ECC 1.1722 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -4.15 157.33 90.00 4 12 44 1801.33 -7.87 16.80 117.29 4 42 45 1201.3 10.10 90.00 14 0 46 4984.98 22.42 218.60 159.84 15 23 51 4385.0 19.78 210.92 72.24 100.00 5 29 54 1552.38 -B.71 358.04 156.88 118.71 5 55 46 952.4 -4.82 351.43 100.00 15 26 17 4709.16 23.33 197.99 159.51 70.76 16 44 46 4109.2 20.49 190.34 6 31 p. 17 58 28 110.00 6 28 37 1368.49 -10.93 342.76 155.54 122.59 768.5 -6.55 336.40 110.00 16 44 3 4465.81 25.72 178.48 158.49 66.67 3865.8 22.34 170.96 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 579.4 SR 72.5 SS 422.1 CRT -.8251 CRS .9832 CST -.8203 TDE .2571 TRA -.6383 TC3-5.3257 BAU .7638 SGT 3659.0 SGR 779.9 SG3 515.0 RRT -.9529 RRF -.9933 RTF .9535 RDE -.0387 RRA .0055 RC3 1.2007 FAU .10905 FDE .6808 FRA -.0660 FC3-9.0210 BSP 11720 BDE .2600 BRA .6383 BC3 5.4593 FSP -1697 SGB 3741.2 R23 .2674 R13 -.9569 LSA 690.6 MSA 205.2 SSA 12.9 SG1 3734.0 SG2 231.8 THA 168.47

FLIGHT TIME 134.00

ARRIVAL CATE APR 22 1966

LAUNCH DATE DEC 1 1965

HELIOCENTRIC CONIC

```
RL 147.51 LAL .00 LOL 68.60 VL 27.551 GAL -3.90 AZL 88.32 HCA 195.25 SMA 127.57 ECC .17013 INC 1.6778 V1 30.204
RP 108.71 LAP -.44 LOP 263.84 VP 37.435 GAP 4.88 AZP 91.62 TAL 199.66 TAP 34.91 RCA 105.86 APO 149.27 V2 34.860
   RC 120.382 GL 14.29 GP 16.39 ZAL 119.31 ZAP 138.39 ETS 16.93 ZAE 135.60 ETE 164.72 ZAC 35.94 ETC 175.83 CLP-141.21
   PLANETOCENTRIC CONIC
    C3 10.635 VHL 3.261 DLA -4.38 RAL 306.99 RAC 6567.4 VEL 11.490 PTH 2.00 VHP 4.029 CPA -5.86 RAP 302.37 ECC 1.1750
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      115.82
                                                                                                  4 15 55
                                                                                                                1338.4
                                                                                                                                -8.48
                 3 43 36 1938.39
14 36 29 4854.43
                                                                       158.50
                                             -12.05
                                                           24.70
                                                                                                 15 57 23
                                                                                                                  4254.4
                                                                                                                                16.44
                                               19.47
                                                           210.17
                                                                        159.82
                                                                                        69.02
       90.00
                                                                                                5 30 56
17 16 18
                 5 2 54 1682.61
15 59 53 4585.44
                                                                                                                  1082.6
                                                                                                                                -9.13
                                                                                                                                            358.69
                                             -12.88
                                                           5.47
                                                                        158.08
                                                                                       117.21
                                                                                                                                17.11
                                                                                                                                            182.71
                                                                                                                  3985.4
      100.00
                                              20.33
                                                           190.03
                                                                        159.46
                                                                                        67.60
                                                                                      121.05 6 31 10
63.65 18 25 27
                                                                                                                  883.7
                                                                                                                              -10.85
                                                                                                                                            342.56
                 6 6 26 1483.71
17 12 50 4357.11
                                             -15.07
                                                           349.12
                                                                       156.82
                                                                                                                  3757.1
                                                                                                                                18.89
                                             22.61
                                                           171.58
                                                                        158.34
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 3811.7 SGR 635.4 SG3 512.1
RRT -.9476 RRF -.9848 RTF ..9535
SGB 3864.3 R23 ..2466 R13 -.9555
SGI 3859.1 SG2 200.5 THA 171.00
                                                                                                              ST 840.7 SR 67.0 SS 565.0

CRT -.9029 CRS .9836 CST -.9142

LSA 996.2 MSA 194.5 SSA 12.0
    TOE .4314 TRA -.6576 TC3-5.4449 BAU .7863
    RCE - .0366 RRA .0007 RC3 .9692 FAU .10742
    FOE .9187 FRA -.0318 FC3-8.7441 BSP 12173
                                                                                                              EL1 842.9 EL2 28.7 ALF 175.88
   BOE .4330 BRA .6576 BC3 5.5305 FSP -1701
                                                                                                                        ARRIVAL CATE APR 24 1966
LAUNCH DATE DEC 1 1965
                                                                  FLIGHT TIME 144.00
  HELIOCENTRIC CONIC
                                                                  DISTANCE 418.092
   RL 147.51 LAL .00 LOL 68.60 VL 27.514 GAL -3.69 AZL 88.02 HCA 198.42 SMA 127.32 ECC .17082 INC 1.9839 VI 30.204
RP 108.74 LAP -.63 LOP 267.01 VP 37.398 GAP 5.15 AZP 91.88 TAL 198.42 TAP 36.85 RCA 105.57 APO 149.06 VZ 34.851
RC 122.731 GL 16.84 GP 13.34 ZAL 117.06 ZAP 141.21 ETS 14.83 ZAE 135.22 ETE 168.06 ZAC 37.26 ETC 171.61 CLP-143.23
  PLANETOCENTRIC CONIC
   C3 10.761 VHL 3.280 DLA -1.43 RAL 308.18 RAD 6567.4 VEL 11.496 PTH 2.00 VHP 4.095 DPA -8.65 RAP 304.03 ECC 1.1771 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     114.43 4 0 14
67.15 16 22 39
115.82 5 16 34
65.75 17 40 15
119.67 6 19 49
61.87 18 46 23
                                                                                                               1432.6
                                                                                                                              -11.36 23.27
                 3 26 21 2032.57
15 3 14 4765.03
4 47 2 1772.32
                                                                       160.14
                                                            30.28
                                             -14.78
       90.00
                                                                        160.58
                                                                                                                  4165.0
                                                                                                                                             197.42
                                                           204.60
                                              17.19
       90.00
                                                                                                                  1172.3
                                                                                                                                              3.79
                                                            10.73
                                                                        159.74
      100.00
                                             -15.61
                 16 25 15 4500.51
5 53 45 1563.46
17 35 1 4282.14
                                                                                                                  3900.5
                                                                                                                                             177.64
                                              14.03
                                                           184.76
                                                                        160.19
      100.00
                                                                                                                                             346.93
                                                                                                                   963.5
                                                                                                                               -13.73
                                                            353.67
                                                                        158.53
      110.00
                                             -17.82
                                                                                                                                             160.08
                                                                                                                  3682.1
                                                                        159.03
                                                                                                                               16.35
      110.00
                 17 35 1
                                             20.27
                                                           167.02
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                              ST 1104.0 SR 59.9 SS 708.9
CRT -.9010 CRS .9788 CST -.9461
    TOE .6010 TRA .-.6193 TC3-5.4413 BAU .7910
                                                               SGT 3875.1 SGR 522.5 SG3 484.1
    RDE -.0329 RRA -.0137 RC3 .7907 FAU .09912
                                                              RRT -.9316 RRF -.9678 RTF .9464
   FCE 1.1431 FRA .1169 FC3-7.9743 BSP 11769
BDE .6019 BRA .6195 BC3 5.4984 FSP -1479
                                                                                                              LSA 1298.5 MSA 196.2 55A 11.3
                                                              SGB 3910.2 R23 .2312 R13 -.9479
                                                               SG1 3905.7 SG2 188.4 THA 172.82
                                                                                                              ELI 1105.3 EL2 26.0 ALF 177.20
                                                                                                                       ARRIVAL DATE APR 26 1966
                                                                  FLIGHT TIME 146.00
LAUNCH DATE DEC 1 1965
                                                                  CISTANCE 424.086
  HELTOCENTRIC CONIC
   RL 147.51 LAL .00 LOL 68.60 VL 27.476 CAL -3.47 AZL 87.80 HCA 201.59 SMA 127.06 ECC .17162 INC 2.2025 V1 30.204
RP 108.76 LAP -.81 LOP 270.17 VP 37.362 GAP 5.41 AZP 92.05 TAL 197.16 TAP 38.76 RCA 105.26 APO 148.87 V2 34.842
                      18.66 CP 11.17 ZAL 114.85 ZAP 143.63 ETS 13.28 ZAE 134.63 ETE 170.39 ZAC 38.75 ETC 168.86 CLP-145.16
   RC 125.075 GL
  PLANETOCENTRIC CONIC
                                       .84 RAL 309.59 RAC 6567.4 VEL 11.500 PTH 2.00 VHP 4.184 CPA -10.55 RAP 305.66 ECC 1.1786
    C3 10.853 VHL 3.294 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 15 12 2104.42
15 25 37 4696.66
4 36 55 1840.79
16 46 34 4435.53
5 46 4 1624.39
17 53 55 4224.69
                                                                                     113.17
                                                                                                               1504.4
                                                                      162.00
                                                                                                 3 50 16
                                                                                                                              -13.47
                                                                                                                                             27.48
                                                           34.63
                                             -16.75
       90.00
                                                                                                                                             193.39
                                                                                        65.90
                                                                                                 16 43 53
                                                                                                                  4096.7
                                                                                                                                11.96
                                                           200.43
                                                                        161.74
                                              15.34
       90.00
                                                                                                                                               7.77
                                                            14.85
                                                                        161.61
                                                                                       114.56 5 7 36
                                                                                                                  1240.8
                                                                                                                               -14.13
                                             -17.59
      100.00
                                                                                                 18 0 29
                                                                                                                                             173.85
                                                                                        64.51
                                                                                                                  3835.5
                                                                                                                               12.61
                                                           180.83
                                                                        161.34
                                             16.17
      100.00
                                                                                        118.43 6 13 8
60.67 19 4 20
                                                                                                                                             350.35
                                                           357.24
                                                                       160.43
                                                                                       118.43
                                                                                                                  1024.4
                                                                                                                              -15.88
                                             -19.83
      110.00
                                                                        160.13
                                                                                                                  3624.7
                                                                                                                               14.35
                                                                                                                                            156.85
                                             18.39
                                                           163.62
     110.00
                                                                                                              ORBIT CETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                              ST 1252.2 SR 30.1 SS 738.5

CRT -.7822 CRS .8836 CST -.9567

LSA 1441.9 MSA 187.2 SSA 12.5
    TCE .6924 TRA -.6214 TC3-5.6435 BAU .8253
                                                               SGT 4055.2 SGR 469.7 SG3 474.3
                                                              RRT -.9147 RRF -.9473 RTF .9499
SGB 4082.3 R23 .1892 R13 -.9509
    RCE -.0146 RRA -.0156 RC3 .7107 FAU .09689
    FOE 1.1707 FRA .1292 FC3-7.7292 BSP 12690
BOE .6926 BRA .6216 BC3 5.6881 FSP -1537
                                                               SG1 4078.0 SG2 188.7 THA 173.94
                                                                                                              EL1 1252.4 EL2 18.8 ALF 178.92
                                                                                                                        ARRIVAL CATE APR 28 1966
                                                                  FLIGHT TIME 148.00
LAUNCH CATE DEC 1 1965
                                                                  DISTANCE 430.065
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 27.438 GAL -3.24 AZL 87.63 HCA 204.76 SHA 126.80 ECC .17250 INC 2.3673 VI 30.204
RP 108.79 LAP -.99 LOP 273.34 VP 37.326 GAP 5.67 AZP 92.15 TAL 195.87 TAP 40.63 RCA 104.93 APO 148.68 VZ 34.834
                      20.02 GP 9.55 ZAL 112.64 ZAP 145.78 ETS 12.12 ZAE 133.99 ETE 172.05 ZAC 40.33 ETC 167.03 CLP-146.98
    RC 127.413 GL
   PLANETOCENTRIC CONIC
    C3 10.921 VHL 3.305 DLA 2.70 RAL 311.17 RAD 6567.4 VEL 11.503 PTH 2.00 VHP 4.286 DPA -11.87 RAP 307.32 ECC 1.1797
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1563.6
                                                                                                                              -15.15
                                                                        164.00
                                                                                      111.99
                                                                                                   3 43 42
                                              -18.30
                                                            38.28
       90.00
                                                                                                                                             190.11
                                                                                                                                10.25
                                              13.74
                                                            197.05
                                                                         163.17
                                                                                        64.99
                                                                                                17 3 5
                                                                                                                  4040.1
        90.00
                                                                                                  5 1 52
                                                                                                                  1297.1
                                                                                                                               -15.82
                                                                                                                                              11.10
                                             -19.15
                                                             18.31
                                                                         163.62
                                                                                       113.40
      100.00
                                                                                                                                             170.77
                                                                        162.76
                                                                                        63.61 18 18 52
                                                                                                                  3781.7
                                                                                                                                10.91
                                              14.57
                                                           177.64
      100.00
                                                                         162.48
                                                                                       117.29
                                                                                                   6 9 17
                                                                                                                  1074.5
                                                                                                                               -17.60
                                                                                                                                             353.22
                                              -21.43
                                                               .26
      110.00
                                                                                        59.78 19 20 49
                                                                                                                  3577.2
                                                                                                                                12.65
                                                                                                                                             154.21
                                                            160.87
                                                                         161.52
                               4177.16
                                             16.79
      110.00
                  18 11 12
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SCT 4204.0 SCZ 196.3 THA 174.81
    TOE .7898 TRA -.5926 TC3-5.7803 BAU .8492
RDE -.0003 RRA -.0219 RC3 .6446 FAU .09209
FDE 1.2104 FRA .1936 FC3-7.2999 BSP 13152
                                                                                                              ST 1408.4 SR 17.2 SS 779.8
CRT .0520 CRS .1173 CST -.9640
                                                                                                             LSA 1599.5 MSA 182.9 SSA 13.3
ELI 1408.4 EL2 17.1 ALF .04
    BOE .7898 BRA .5931 BC3 5.8161 FSP -1490
```

FLIGHT TIME 142.00

DISTANCE 412.076

ARRIVAL DATE APR 30 1966

LAUNCH DATE DEC 1 1965

MELIOCENTRIC CONIC DISTANCE 436.029 PLANETOCENTRIC CONIC C3 10.979 VHL 3.313 DLA 4.32 RAL 312.88 RAD 6567.4 VEL 11.505 PTH 2.00 VHP 4.396 DPA -12.79 RAP 309.02 ECC 1.1807 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 110.88 3 39 20 64.29 17 21 12 112.29 4 58 13 62.91 18 36 15 116.22 6 7 19 59.08 19 36 32 90.00 -16,57 3 2 25 2214.99 -19.58 41.51 166.14 1615.0 34.13 90.00 16 4 41 4590.84 12.30 194.15 164.81 3990.8 8.74 187.28 100.00 4 25 47 1946.09 21.37 1346.1 14.04 -20.45 165.77 -17.24 100.00 17 24 0 4334.97 13.14 174.91 164.38 3735.0 9.40 168.11 -19.05 5 38 41 1717.97 18 27 37 4135.85 164.65 -22.76 2.93 110.00 1118.0 355.75 151.96 110.00 15.36 158.53 163.11 3535.9 11.14 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4307.3 SGR 398.8 SG3 435.8 RRT -.8522 RRF -.8806 RTF ..9487 SGB 4325.7 R23 .1343 R13 -.9492 ST 1555.8 SR 29.5 SS 813.9 CRT .8083 CRS -.6983 CST -.9689 TOE .8817 TRA -.5507 TC3-5.9057 BAU .8712 RDE .0130 RRA -.0289 RC3 .5960 FAU .08701 FDE 1.2343 FRA .2648 FC3-6.8609 BSP 13543 LSA 1746.8 MSA 179.6 5SA 14.1 BOE .8818 BRA .5514 BC3 5.9357 FSP -1429 SG1 4320.7 SG2 208.0 THA 175.48 EL1 1555.9 EL2 17.3 ALF LAUNCH DATE DEC 1 1965 FLIGHT TIME 152.00 ARRIVAL DATE MAY 2 1966 HELIOCENTRIC CONIC DISTANCE 441.977 RL 147.51 LTL .00 LOL 68.60 VL 27.359 GAL -2.74 AZL 87.40 HCA 211.10 SHA 126.28 ECC .17455 INC 2.6016 V1 30.204
RP 108.84 LAP -1.34 LOP 279.67 VP 37.254 GAP 6.18 AZP 92.23 TAL 193.18 TAP 44.28 RCA 104.24 APO 148.33 V2 34.819
RC 132.074 GL 21.92 GP 7.32 ZAL 108.12 ZAP 149.53 ETS 10.57 ZAE 132.78 ETE 174.20 ZAC 43.68 ETC 165.00 CLP-150.34 PLANETOCENTRIC CONIC C3 11.037 VHL 3.322 OLA 5.76 RAL 314.73 RAO 6567.4 VEL 11.508 PTH 2.00 VHP 4.512 DPA -13.41 RAP 310.76 ECC 1.1816 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 58 48 2261.56 16 23 0 4546.43 4 22 53 1990.40 36.99 90.00 -20.68 44.48 168.40 109.79 3 36 30 1661.6 -17.80 63.73 17 38 46 111.22 4 56 3 62.34 18 53 9 115.18 6 6 40 58.51 19 51 55 184.75 90.00 10.98 191.56 166.62 3946.4 7.36 100.00 -21.56 24.18 168.04 1390.4 -18.49 16.74 100.00 17 41 37 4292.83 11.82 172.47 166.18 3692.8 8.02 165.74 5 37 22 1757.26 18 43 36 4098.72 110.00 -23.92 5.39 166.95 1157.3 -20.33 358.09 110.00 14.05 156.45 164.89 3498.7 9.78 149.95 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE .9687 TRA -.4993 TG3-6.0257 BAU .8930 ROE .0256 RRA -.0360 RC3 .5604 FAU .08216 SGT 4423.8 SGR 380.1 SG3 416.8 RRT -.8106 RRF -.8376 RTF .9480 ST 1695.0 SR 49.2 SS 840.3 CRT .9259 CRS -.8481 CST -.9727 FOE 1.2437 FRA .3326 FC3-6.4448 BSP 13916 BOE .9691 BRA .5006 BC3 6.0517 FSP -1369 LSA 1884.3 MSA 176.1 SSA 14.9 EL1 1695.7 EL2 18.6 ALF 1.54 SGB 4440.1 R23 .1148 R13 -.9484 SG1 4434.6 SG2 222.0 THA 176.01 LAUNCH DATE DEC 1 1965 FLIGHT TIME 154.00 ARRIVAL CATE MAY 4 1966 HELIOCENTRIC CONIC DISTANCE 447.909 RL 147.51 LAL .00 LOL 68.60 VL 27.319 GAL -2.48 AZL 87.31 MCA 214.27 SMA 126.02 ECC .17574 INC 2.6889 V1 30.204
RP 108.86 LAP -1.51 LOP 282.83 VP 37.219 GAP 6.44 AZP 92.22 TAL 191.79 TAP 46.06 RCA 103.88 APO 148.17 V2 34.812
RC 134.395 GL 22.60 GP 6.53 ZAL 105.80 ZAP 151.20 ETS 10.05 ZAE 132.23 ETE 174.92 ZAC 45.42 ETC 164.47 CLP-151.89 PLANETOCENTRIC CONIC C3 11.104 VHL 3.332 DLA 7.10 RAL 316.68 RAD 6567.4 VEL 11.511 PTH 2.00 VHP 4.632 DPA -13.81 RAP 312.56 ECC 1.1827 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM JNJ 2 LAT INJ 2 LONG 2 56 22 2305.07 16 41 1 4505.40 170.78 -21.66 47.30 108.70 3 34 47 1705.1 -18.90 63.28 17 56 7 110.15 4 54 58 61.88 19 9 52 114.15 6 7 1 58.04 20 7 12 90.00 9.73 189.19 168.60 3905.4 6.07 4 21 6 2031.76 17 58 58 4254.01 5 37 7 1793.89 18 59 27 4064.58 -22.56 26.85 170.44 1431.8 -19.61 100.00 10.58 170.25 168.15 3654.D 6.74 169.37 -24.96 7.72 1193.9 -21.48 12.82 154.56 166.83 3464.6 8.51 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4536.4 SGR 368.7 SG3 398.6 RRT -.7646 RRF -.7905 RTF .9473 SGB 4551.4 R23 .D996 R13 -.9476 ST 1828.0 SR 69.2 SS 861.2 TDE 1.0524 TRA -.4393 TC3-6.1365 BAU .9144 CRT .9542 CRS -.8880 CST -.9755 ROE: .0376 RRA -.0431 RC3 .5330 FAU .07755 FDE 1.2437 FRA .3974 FC3-6.0460 BSP 14307 LSA 2014.5 MSA 172.7 SSA 15.6 ELI 1829.2 ELZ 20.7 ALF 2.07 BOE 1.0531 BRA .4414 BC3 6.1596 FSP -1315 SG1 4545.2 SG2 237.1 THA 176.43 LAUNCH DATE DEC 1 1965 FLIGHT TIME 156.00 ARRIVAL DATE MAY 5 1966 HELIOCENTRIC CONIC DISTANCE 453.826 RL 147.51 LAL .00 LOL 68.60 VL 27.279 GAL -2.21 AZL 87.24 MCA 217.43 SMA 125.76 ECC .17705 INC 2.7630 V1 30.204 RP 108.87 LAP -1.68 LOP 286.00 VP 37.184 GAP 6.69 AZP 92.19 TAL 190.38 TAP 47.82 RCA 103.50 APO 148.03 V2 34.806 RC 136,709 GL 23.13 GP 5.88 ZAL 103.42 ZAP 152.77 ETS 9.66 ZAE 131.74 ETE 175.47 ZAC 47.21 ETC 164.15 CLP-153.36 PLANETOCENTRIC CONIC C3 11.187 VHL 3.345 DLA 8.35 RAL 318.74 RAD 6567.4 VEL 11.514 PTH 2.01 VHP 4.757 DPA -14.03 RAP 314.40 ECC 1.1841 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 54 49 2346.69 16 59 0 4466.84 4 20 12 2071.29 18 16 17 4217.48 5 37 40 1828.85 19 15 18 4032.68 -19.92 90.00 -22.54 50.03 173.30 107.61 3 33 55 1746.7 42.33 62.90 90.00 8.54 186.98 170.73 18 13 26 3866.8 4.84 180.25 100.00 -23.46 29.44 172.97 109.07 4 54 43-1471.3 -20.64 21.78 61.49 19 26 35 113.11 6 8 9 57.64 20 22 31 100.00 9.40 168.19 170.27 3617.5 5.52 161.55 110.00 -25.91 9.99 171.93 1228.8 -22.56 2.44 146.42 110.00 11.67 152.81 168.92 3432.7 7.31 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1961.5 SR 88.3 SS 881.0 CRT .9627 CRS -.9004 CST -.9779 DIFFERENTIAL CORRECTIONS SCT 4639.0 SGR 361.9 SC3 380.7 RRT -.7151 RRF -.7398 RTF .9461 SGB 4653.1 R23 .0876 R13 -.9464 SG1 4646.3 SG2 252.6 THA 176.80 TDE 1.1372 TRA -.3674 TC3-6.2216 BAU .9336 RDE .0488 RRA -.0507 RC3 .5098 FAU .07292 FOE 1.2416 FRA .4644 FC3-5.6429 BSP 14612 BDE 1.1383 BRA .3709 BC3 6.2424 FSP -1254 LSA 2145.3 MSA 169.7 SSA 16.3 EL1 1963.3 EL2 23.9 ALF 2.48

FLIGHT TIME 150.00

Ē

```
ARRIVAL DATE MAY 8 1966
                                                                                                                           FLIGHT TIME 158.00
LAUNCH DATE DEC 1.1965
                                                                                                                         DISTANCE 459.727
     HELIOCENTRIC CONIC
      RL 147.51 LAL .00 LOL 68.60 VL 27.239 GAL -1.93 AZL 87.17 HCA 220.60 SMA 125.50 ECC .17848 INC 2.8272 V1 30.204
RP 108.89 LAP -1.84 LOP 289.16 VP 37.149 GAP 6.94 AZP 92.15 TAL 188.95 TAP 49.54 RCA 103.10 APO 147.90 V2 34.801
RC 139.015 GL 23.55 GP 5.34 ZAL 100.99 ZAP 154.24 ETS 9.37 ZAE 131.30 ETE 175.92 ZAC 49.04 ETC 163.98 CLP-154.77
     PLANETOCENTRIC CONIC
       C3 11.293 VHL 3.360 DLA 9.54 RAL 320.89 RAD 6567.4 VEL 11.519 PTH 2.01 VHP 4.885 DPA -14.12 RAP 316.29 ECC 1.1858
       ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                1787.2
                                                                                                                                  175.95
                                                                                                                                                              106.49
                                                                                                                                                                                       3 33 45
                                                                                                                                                                                                                                                                        44.93
                                2 53 58 2387.17
17 17 2 4430.25
                                                                                                                                                                                                                                            -20.87
                                                                                     -23.35
                                                                                                              52.72
                                                                                                                                                                                    18 30 52
                                                                                                                                                                                                                   3830.3
                                                                                                                                                                                                                                                                      178.20
                                                                                         7.40
                                                                                                              184.90
                                                                                                                                       173.02
                                                                                                                                                                   62.59
                                                                                                                                                                                                                                                3.67
              90.00
                                                                                                                                                                 107.97 4 55 10
61.17 19 43 24
                                                                                                                                                                                                                   1509.7
                                                                                                                                                                                                                                             -21.61
                                                                                                                                                                                                                                                                        24.22
                                  4 20 0 2109.71
                                                                                      -24.29
                                                                                                              31.99
                                                                                                                                      175.63
           100.00
                                18 33 41 4182.95
5 38 55 1862.78
19 31 16 4002.64
                                                                                                                                                                                                                                                                     159.64
                                                                                                                                                                                                                   3582.9
           100.00
                                                                                        8.27
                                                                                                             166.24
                                                                                                                                      172.55
                                                                                                                                                                                                                                                4.36
                                                                                                                                                                 112.06 6 9 57
57.30 20 37 59
                                                                                                                                                                                                                                           -23.57
                                                                                                                                                                                                                                                                         4.56
                                                                                                                                                                                                                   1262.8
                                                                                     -26.80
                                                                                                               12.23
                                                                                                                                     174.62
           110.00
                                                                                                                                                                                                                                                                       144.83
                                                                                      10.57
                                                                                                                                                                                                                   3402.6
                                                                                                                                                                                                                                                6.18
           110.00
                                                                                                             151.18
                                                                                                                                      171.17
                                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    SCT 4742.3 SCR 359.4 SC3 364.3

RRT - .6649 RRF - .6891 RTF .9456

SCB 4755.9 R23 .0781 R13 -.9458

SCI 4748.4 SC2 268.1 THA 177.11
                                                                                                                                                                                                            ST 2089.2 SR 106.7 SS 895.8
CRT .9653 CRS -.9051 CST -.9800
       TOE 1.2199 TRA -.2893 TC3-6.2974 BAU .9536
       RDE .0598 RRA -.0581 RC3 .4906 FAU .06874
                                                                                                                                                                                                             LSA 2269.5 MSA 166.3 SSA 17.0
       FOE 1.2330 FRA .5235 FC3-5.2699 BSP 14962
                                                                                                                                                                                                            EL1 2091.8 EL2 27.8 ALF 2.82
       BOE 1.2214 BRA .2950 BC3 6.3165 FSP -1204
                                                                                                                                                                                                                               ARRIVAL DATE MAY 10 1966
LAUNCH DATE DEC 1 1965
                                                                                                                           FLIGHT TIME 160.00
    HELIOCENTRIC CONIC
                                                                                                                         DISTANCE 465.612
      RL 147.51 LAL .00 LOL 68.60 VL 27.198 GAL -1.64 AZL 87.12 HCA 223.76 SMA 125.24 ECC .18004 INC 2.8835 V1 30.204 RP 108.90 LAP -1.99 LOP 292.32 VP 37.115 GAP 7.19 AZP 92.08 TAL 187.49 TAP 51.25 RCA 102.69 APO 147.78 VZ 34.797 RC 141.312 GL 23.86 GP 4.88 ZAL 98.50 ZAP 155.65 ETS 9.18 ZAE 130.91 ETE 176.28 ZAC 50.91 ETC 163.92 CLP-156.11
     PLANE TOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 11,427 VHL 3.380 DLA 10.68 RAL 323.14 RAO 6567.4 VEL 11.525 PTH 2.01 VHP 5.017 OPA -14.08 RAP 318.21 ECC 1.1881
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 53 43 2427.05 -24.09 55.40 178.74 105.35 3 34 10 1827.0 -21.75 47.51
90.00 17 35 14 4395.30 6.30 182.92 175.46 62.34 18 48 29 3795.3 2.55 176.25
100.00 4 20 23 2147.51 -25.06 34.54 178.43 106.85 4 56 11 1547.5 -22.52 26.66
100.00 18 51 15 4150.07 7.19 164.40 174.97 60.91 20 0 25 3550.1 3.26 157.82
110.00 5 40 43 1896.13 -27.63 14.47 177.45 110.97 6 12 19 1296.1 -24.53 6.67
110.00 19 47 24 3974.22 9.52 149.65 173.56 57.01 20 53 38 3374.2 5.11 14.33
                               18 51 15 4150.07 7.19
5 40 43 1896.13 -27.63
19 47 24 3974.22 9.52
                                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                             ST 2213.4 SR 124.6 SS 907.1
CRT .9648 CRS -.9054 CST -.9817
                                                                                                                    SGT 4839.2 SGR 359.6 SG3 348.5
RRT -.6145 RRF -.6384 RTF .9450
       TOE 1.3023 TRA -.2019 TC3-6.3488 BAU .9726
       RDE .0705 RRA -.0656 RC3 .4730 FAU .06473
      FOE 1.2204 FRA .5804 FC3-4.9039 BSP 15301
BOE 1.3042 BRA .2123 BC3 6.3664 FSP -1156
                                                                                                                    SGB 4852.5 R23 .0706 R13 -.9452
                                                                                                                                                                                                            LSA 2389.7 MSA 163.0 SSA 17.7
                                                                                                                    SG1 4844.2 SG2 283.4 THA 177.38
                                                                                                                                                                                                           EL1 2216.7 EL2 32.7 ALF 3.11
                                                                                                                                                                                                                              ARRIVAL DATE MAY 12 1966
                                                                                                                         FILIGHT TIME 162.00
LAUNCH DATE DEC 1 1965
     HELIOCENTRIC CONIC
                                                                                                                         DISTANCE 471.482
      RL 147.51 LAL .00 LOL 68.60 VL 27.157 GAL -1.33 AZL 87.07 MCA 226.92 SMA 124.97 ECC .18174 INC 2.9336 VI 30.204
RP 108.92 LAP -2.14 LOP 295.48 VP 37.082 GAP 7.45 AZP 92.00 TAL 186.01 TAP 52.93 RCA 102.26 APO 147.69 VZ 34.793
RC 143.598 GL 24.08 GP 4.50 ZAL 95.97 ZAP 156.98 ETS 9.06 ZAE 130.56 ETE 176.57 ZAC 52.82 ETC 163.93 CLP-157.40
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 11.590 VML 3.406 DLA 11.78 RAL 325.48 RAD 6567.4 VEL 11.532 PTH 2.01 VMP 5.152 DPA -13.94 RAP 320.18 ECC 1.1909
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 53 57 2466.66 -24.78 58.10 181.66 104.16 3 35 3 1866.7 -22.59 50.12
90.00 17 53 38 4561.85 5.24 181.03 178.04 62.13 19 6 19 3761.8 1.47 174.38
100.00 4 21 16 2185.03 -25.78 37.10 181.37 105.68 4 57 41 1585.0 -23.38 29.12
100.00 19 8 39 4118.70 6.15 162.66 177.55 60.69 20 17 38 3518.7 2.20 156.10
110.00 5 43 2 1929.19 -28.42 16.72 180.42 109.85 6 15 11 1329.2 -25.45 8.80
110.00 20 3 43 3947.31 8.52 148.20 176.09 56.77 21 9 30 3347.3 4.08 141.92

DIFFFRENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                            ST 2335.6 SR 141.8 SS 916.6
CRT .9625 CRS -.9032 CST -.9833
                                                                                                                    SCT 4932.3 SGR 361.7 SG3 333.7

RRT -.5649 RRF -.5887 RTF .9445

SCB 4945.5 R23 .0645 R13 -.9447
       TOE 1.3857 TRA -.1049 TC3-6.3761 BAU .9911
       RDE .0811 RRA -.0732 RC3 .4559 FAU .06094
       FOE 1.2069 FRA .6356 FC3-4.5488 BSP 15624
BDE 1.3881 BRA .1279 BC3 6.3923 FSP -1111
                                                                                                                                                                                                            LSA 2507.8 MSA 160.2 SSA 18.2
                                                                                                                    SG1 4936.5 SG2 298.2 THA 177.62
                                                                                                                                                                                                           EL1 2339.6 EL2 38.4 ALF 3.35
                                                                                                                            FLIGHT TIME 164.00
                                                                                                                                                                                                                               ARRIVAL DATE MAY 14 1966
LAUNCH DATE DEC 1 1965
     HELIOCENTRIC CONIC
                                                                                                                          DISTANCE 477.335
      RL 147.51 LAL .00 LOL 68.60 VL 27.116 GAL -1.01 AZL 87.02 HCA 230.09 SMA 124.71 ECC .18358 INC 2.9788 V1 30.204
RP 108.93 LAP -2.28 LOP 298.64 VP 37.049 GAP 7.70 AZP 91.91 TAL 184.51 TAP 54.60 RCA 101.82 APO 147.61 V2 34.790
RC 145.874 GL 24.20 GP 4.16 ZAL 93.38 ZAP 158.25 ETS 9.01 ZAE 130.25 ETE 178.82 ZAC 54.76 ETC 164.00 CLP-158.63
     PLANETOCENTRIC CONIC
       C3 11.809 VHL 3.436 DLA 12.84 RAL 327.89 RAD 6567.5 VEL 11.541 PTH 2.01 VHP 5.292 DPA -13.71 RAP 322.17 ECC 1.1944
      C3 11.809 VHL 3.436 DLA 12.84 RAL 327.89 RAD 6567.5 VEL 11.541 PTH 2.01 VHP 5.292 DPA -13.71 RAP 322.17 ECC 1.1944 LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 54 37 2506.24 -25.41 60.83 184.72 102.93 3 36 23 1906.2 -23.38 52.75 100.00 4 22 36 2222.49 -26.44 39.68 184.44 104.47 4 59 38 1622.5 -24.19 31.60 100.00 19 26 56 4088.81 5.15 161.00 180.26 60.51 20 35 5 3488.8 1.18 154.46 110.00 5 45 48 1962.15 -29.16 19.00 183.53 108.68 6 18 30 1362.1 -26.33 10.96 110.00 20 20 13 3921.92 7.57 146.85 178.77 56.57 21 25 35 3321.9 3.12 140.59 100.00 ACCURACY NORTH DESCRIPTION ACCURACY NORTH DESCRIPTIO
                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                 HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
       TOE 1.4701 TRA .0004 TC3-6.3766 BAU 1.0091 SGT 5021.4 SGR 365.2 SG3 319.7 ST 2454.6 SR 158.6 SS 923.9 RDE .0916 RRA -.0807 RC3 .4388 FAU .05738 RRT -.5166 RRF -.5405 RRF -.5405 RRF -.5405 RRF -.5902 CRT .9592 CRS -.9000 CST -.9846 BOE 1.4729 BRA .0807 BC3 6.3917 FSP -1067 SG1 5025.0 SG2 312.4 THA 177.84 EL1 2459.3 EL2 44.8 ALF 3.55
```

```
LAUNCH DATE DEC 1 1965
                                                                                                    FLIGHT TIME 166.00
                                                                                                                                                                                      ARRIVAL DATE MAY 16 1966
    HELIOCENTRIC CONIC
                                                                                                   DISTANCE 483.171
      RL 147.51 LAL .00 LOL 68.60 VL 27.075 GAL -.68 AZL 86.98 MCA 233.25 SMA 124.45 ECC .18559 INC 3.0201 V1 30.204
RP 108.93 LAP -2.42 LOP 301.80 VP 37.017 GAP 7.96 AZP 91.81 TAL 183.00 TAP 56.24 RCA 101.36 APO 147.55 V2 34.787
RC 148.138 GL 24.24 GP 3.87 ZAL 90.75 ZAP 159.47 ETS 9.02 ZAE 129.98 ETE 177.02 ZAC 56.74 ETC 164.11 CLP-159.82
    PLANETOCENTRIC CONIC
      C3 12.069 VHL 3.474 OLA 13.85 RAL 330.38 RAD 6567.5 VEL 11.552 PTH 2.02 VHP 5.435 OPA -13.41 RAP 324.20 ECC 1.1986
      LNCH AZMTH LNCH TIME L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 41 2545.92 -25.99 63.59 187.92 101.66 3 38 7 1945.9 -24.12 55.42 90.00 18 31 1 4299.30 3.24 177.52 183.65 61.85 19 42 41 3699.3 -.55 170.89 100.00 4 24 20 2260.00 -27.05 42.30 187.65 103.22 5 2 0 1660.0 -24.96 34.12 100.00 19 45 3 4060.44 4.20 159.43 183.12 60.38 20 52 43 3460.4 .22 152.90 110.00 5 48 59 1995.13 -29.86 21.31 186.78 107.48 6 22 14 1395.1 -27.18 13.15 110.00 20 36 53 3898.09 6.67 145.59 181.59 56.40 21 41 51 3298.1 2.21 139.34
    DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                              SGT 5103.3 SGR 369.1 SG3 306.1

RRT -.4691 RRF -.4923 RTF .9437

SGB 5116.7 R23 .0541 R13 -.9438

SG1 5106.3 SG2 325.8 THA 178.05
                                                                                                                                                                      ST 2573.1 SR 174.7 SS 931.2
CRT .9549 CRS -.8958 CST -.9859
      TOE 1.5577 TRA .1171 TC3-6.3400 BAU 1.0252
      ROE .1022 RRA -.0882 RC3 .4205 FAU .05383
      FDE 1.1794 FRA .7388 FC3-3.8611 BSP 16202
BDE 1.5610 BRA .1466 BC3 6.3539 FSP -1024
                                                                                                                                                                      LSA 2737.5 MSA 155.4 SSA 19.1
EL1 2578.5 EL2 51.8 ALF 3.71
LAUNCH DATE DEC 1 1965
                                                                                                    FLIGHT TIME 168.00
                                                                                                                                                                                      ARRIVAL DATE MAY 18 1966
    HELIOCENTRIC CONIC
                                                                                                   DISTANCE 488.990
     RL 147.51 LAL .00 LOL 68.60 VL 27.034 GAL -.34 AZL 86.94 HCA 236.41 SMA 124.20 ECC .18777 INC 3.0580 V1 30.204
RP 108.94 LAP -2.55 LOP 304.97 VP 36.985 GAP 8.23 AZP 91.69 TAL 181.46 TAP 57.87 RCA 100.88 APO 147.52 V2 34.786
RC 150.390 GL 24.19 GP 3.62 ZAL 88.09 ZAP 160.63 ETS 9.09 ZAE 129.74 ETE 177.20 ZAC 58.75 ETC 164.26 CLP-160.96
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 12.383 VML 3.519 DLA 14.83 RAL 332.93 RAD 6567.5 VEL 11.566 PTH 2.02 VMP 5.583 DPA -13.04 RAP 326.25 ECC 1.2038
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 57 6 2585.77 -26.50 66.40 191.24 100.35 3 40 12 1985.8 -24.81 58.14
90.00 18 49 58 4270.34 2.31 175.90 186.66 61.77 20 1 9 3670.3 -1.48 169.28
100.00 4 26 27 2297.63 -27.61 44.96 191.00 101.93 5 4 45 1697.6 -25.69 36.69
100.00 20 3 19 4033.71 3.30 157.96 186.11 60.27 21 10 32 3433.7 -.69 151.44
110.00 5 52 34 2028.17 -30.51 23.66 190.17 106.22 6 26 22 1428.2 -27.98 15.38
110.00 20 53 41 3875.93 5.83 144.42 184.54 56.26 21 58 17 3275.99 1.36 138.19
                                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                              SGT 5183.6 SGR 374.1 SG3 293.3
RRT -.4240 RRF -.4481 RTF .9436
SGB 5197.1 R23 .0511 R13 -.9437
      TOE 1.6420 TRA .2401 TC3-6.2837 BAU 1.0424
                                                                                                                                                                      ST 2679.6 SR 191.0 SS 931.0
CRT .9507 CRS -.8916 CST -.9869
     ROE .1134 RRA -.0955 RC3 .4018 FAU .05065
     FDE 1.1591 FRA .7848 FC3-3.5412 BSP 16512
BDE 1.6459 BRA .2584 BC3 6.2966 FSP -988
                                                                                                                                                                      LSA 2838.9 MSA 153.7 SSA 19.4
                                                                                              SG1 5186.0 SG2 338.6 THA 178.24
                                                                                                                                                                      EL1 2685.8 EL2 59.1 ALF
                                                                                                                                                                                                                        3.88
LAUNCH DATE DEC 1 1965
                                                                                                   FLIGHT TIME 170.00
                                                                                                                                                                                     ARRIVAL DATE HAY 20 1966
   HELIOCENTRIC CONIC
                                                                                                   DISTANCE 494.791
     RL 147.51 LAL .00 LOL 68.60 VL 26.994 GAL .02 AZL 86.91 MCA 239.57 SMA 123.94 ECC .19013 INC 3.0933 VI 30.204 RP 108.94 LAP -2.67 LOP 308.13 VP 36.955 GAP 8.50 AZP 91.57 TAL 179.92 TAP 59.49 RCA 100.38 APO 147.51 V2 34.785 RC 152.629 GL 24.07 GP 3.40 ZAL 85.41 ZAP 161.76 ETS 9.21 ZAE 129.53 ETE 177.35 ZAC 60.79 ETC 164.42 CLP-162.07
    PLANETOCENTRIC CONIC
     C3 12.759 VHL 3.572 OLA 15.77 RAL 335.54 RAD 6567.5 VEL 11.582 PTH 2.03 VHP 5.736 DPA -12.60 RAP 328.32 ECC 1.2100
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         2 58 52 2625.75
19 9 1 4243.11
4 28 55 2335.34
20 21 39 4008.76
5 65 31 2061.25
21 10 32 3855.61
                                                                                                          194.69
                                                                                                                               99.00
                                                                                                                                                                                             -25.44
           90.00
                                                                     -26.96
                                                                                         69.23
                                                                                                                                                    3 42 38
                                                                                                                                                                       2025.8
                                                                                                                                                                                                                   60.90
           90.00
                                                                        1.43
                                                                                         174.38
                                                                                                             189.80
                                                                                                                                     61.72 20 19 44
                                                                                                                                                                            3643.1
                                                                                                                                                                                                 -2.36
                                                                                                                                                                                                                     167.76
                                                                                         47.65
         100.00
                                                                     -28.11
                                                                                                            194.47
                                                                                                                                   100.60
                                                                                                                                                   5 7 51
                                                                                                                                                                            1735.3
                                                                                                                                                                                                -26.36
                                                                                                                                                                                                                      39.28
         100.00
                                                                                                                                   60.20 21 28 27
104.93 6 30 53
56.15 22 14 48
                                                                      2.45
                                                                                        156.59
                                                                                                         189.23
                                                                                                                                                                           3408.8
                                                                                                                                                                                                 -1.53
                                                                                                                                                                                                                     150.07
                                              2061.25 -31.11
3855.61 5.07
         110.00
                                                                                         26.05
                                                                                                            193.69
                                                                                                                                                                           1461.3
                                                                                                                                                                                                -28.75
                                                                                                                                                                                                                     17.65
                          21 10 32
         110.00
                                                                                        143.39
                                                                                                                                                                                                                    137.13
                                                                                                            187.61
                                                                                                                                                                          3255.6
                                                                                                                                                                                                   .58
                                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                            SGT 5208.9 SGR 374.0 SG3 275.5

RRT -.3626 RRF -.3673 RTF .9376

SGB 5222.3 R23 .0277 R13 -.9377

SGI 5210.7 SG2 348.4 THA 178.50
     TRE 1.7668 TRA .3888 TC3-6.0501 BAU 1.0340
                                                                                                                                                                      ST 2843.7 SR 204.3 SS 964.3 CRT .9447 CRS -.8885 CST -.9890
     RDE .1232 RRA -.1029 RC3 .3741 FAU .04433
FDE 1.1840 FRA .8361 FC3-3.0077 BSP 16371
BDE 1.7711 BRA .4022 BC3 6.0617 FSP -936
                                                                                                                                                                     LSA 3005.8 MSA 150.9 SSA 19.7
                                                                                                                                                                                                                        3.89
                                                                                                                                                                     EL1 2850.2 EL2 66.8 ALF
LAUNCH DATE DEC 1 1965
                                                                                                   FLIGHT TIME 172.00
                                                                                                                                                                                     ARRIVAL DATE MAY 22 1966
   HELIOCENTRIC CONIC
                                                                                                  DISTANCE 500.572
    RL 147.51 LAL .00 LOL 68.60 VL 26.953 GAL .39 AZL 86.87 HCA 242.73 SMA 123.69 ECC .19270 INC 3.1263 V1 30.204
RP 108.94 LAP -2.78 LOP 311.29 VP 36.924 GAP 8.77 AZP 91.43 TAL 178.35 TAP 61.09 RCA 99.85 APO 147.52 V2 34.784
RC 154.855 GL 23.86 GP 3.21 ZAL 82.70 ZAP 162.85 ETS 9.39 ZAE 129.35 ETE 177.49 ZAC 62.86 ETC 164.59 CLP-163.14
   PLANETOCENTRIC CONIC
     C3 13.205 VHL 3.634 DLA 16.66 RAL 338.20 RAD 6567.5 VEL 11.601 PTH 2.03 VHP 5.894 DPA -12.11 RAP 330.40 ECC 1.2173
    C3 13.205 VML 3.634 DLA 16.66 RAL 338.20 RAD 6567.5 VEL 11.601 PTH 2.03 VMP 5.894 DPA -12.11 RAP 330.40 ECC 1.2173 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 0 59 2665.95 -27.36 72.11 198.27 97.61 3 45 25 2065.9 -26.02 63.70 90.00 19 28 8 4217.74 .61 172.97 193.07 61.69 20 38 26 3617.7 -3.18 166.34 100.00 4 31 46 2373.20 -28.56 50.38 198.06 99.23 5 11 19 1773.2 -26.99 41.93 100.00 20 40 2 3985.72 1.67 155.32 192.48 60.15 21 46 28 3385.7 -2.31 148.80 110.00 6 0 52 2094.44 -31.67 28.48 197.34 103.59 6 35 46 1494.4 -29.48 19.96 110.00 21 27 26 3837.24 4.37 142.38 190.80 56.06 22 31 23 3237.2 -.12 136.17
                                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                            SGT 5330.4 SGR 383.7 SG3 270.0

RRT -.3371 RRF -.3594 RTF .9431

SGB 5344.2 R23 .0424 R13 -.9432

SGI 5331.9 SG2 361.1 THA 178.60
     TDE 1.8218 TRA .5192 TC3-6.0653 BAU 1.0727
                                                                                                                                                                      ST 2886.9 SR 222.0 SS 935.5
     ROE .1365 TRA -.1093 RC3 .3601 FAU .04452
                                                                                                                                                                       CRT .9413 CRS -.8830 CST -.9889
     FOE 1.1316 FRA .8765 FC3-2.9186 BSP 17007
BDE 1.8269 BRA .5306 BC3 6.0760 FSP -908
                                                                                                                                                                   LSA 3038.9 MSA 152.2 SSA 19.6
EL1 2894.4 EL2 74.8 ALF 4.14
```

ARRIVAL DATE MAY 24 1966

LAUNCH DATE DEC 1 1965

FLIGHT TIME 174.00

LAUNCH DATE DEC 1 1965 FLIGHT TIME 182.00 ARRIVAL DATE JUN 1 1966 HELIOCENTRIC CONIC DISTANCE 529.149 RL 147.51 LAL .00 LOL 68.60 VL 26.751 GAL 2.32 AZL 86.73 MCA 258.54 SMA 122.45 ECC .20908 INC 3.2700 V1 30.204
RP 108.91 LAP -3.20 LOP 327.12 VP 36.787 GAP 10.29 AZP 90.65 TAL 170.40 TAP 68.94 RCA 96.85 APO 148.05 V2 34.794
RC 165.775 GL 21.81 GP 2.50 ZAL 69.29 ZAP 167.82 ETS 11.26 ZAE 128.79 ETE 177.99 ZAC 73.56 ETC 165.47 CLP-168.08 PLANETOCENTRIC CONIC C3 16.829 VML 4.102 OLA 20.32 RAL 351.84 RAD 6567.7 VEL 11.756 PTH 2.08 VMP 6.787 OPA -8.97 RAP 340.99 ECC 1.2770 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 16 43 2865.37 21 1 10 4126.62 4 51 16 2560.51 22 9 18 3906.71 6 27 41 2258.83 22 49 22 3781.16 90.42 4 4 29 61.77 22 9 56 92.11 5 33 56 60.12 23 14 25 96.50 7 5 20 55.88 23 52 23 217.53 2265.4 -27.96 90.00 -28.31 86.60 77.95 161.22 90.00 -2.33 167.89 210.93 3526.6 -6.09 64.14 100.00 -29.82 217.50 1960.5 -29.21 55.39 -4.98 100.00 -1.01 150.99 210.19 3306.7 144.45 -32.37 110.00 -33.63 40.89 217.16 1658.8 31.88 110.00 2.23 139.45 208.17 3181.2 -2.26 133.24 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5615.4 SGR 403.6 SG3 220.4 RRT -.1360 RRF -.1548 RTF .9442 SGB 5629.9 R23 .0260 R13 -.9443 SGI 5615.7 SG2 399.8 THA 179.44 ST 3254.9 SR 295.7 SS 906.8 CRT .9198 CRS -.8658 CST -.9924 TOE 2.2851 TRA 1.4040 TC3-5.0215 BAU 1.1311 RDE .2072 RRA -.1347 RC3 .2403 FAU .03150 FDE 1.0516 FRA 1.0787 FC3-1.6203 BSP 17999 LSA 3388.0 MSA 158.7 SSA 18.5 BDE 2.2945 BRA 1.4105 BC3 5.0273 FSP -748 EL1 3266.3 EL2 115.6 ALF 4.78 LAUNCH DATE DEC 1 1965 FLIGHT TIME 184.00 ARRIVAL DATE JUN 3 1966 HELIOCENTRIC CONIC DISTANCE 534.784 RL 147.51 LAL .00 LOL 68.60 VL 26.711 GAL 3.00 AZL 86.70 HCA 261.70 SHA 122.21 ECC .21322 INC 3.2961 V1 30.204 RP 108.90 LAP -3.26 LOP 330.28 VP 36.762 GAP 10.63 AZP 90.48 TAL 168.79 TAP 70.49 RCA 96.15 APO 148.27 V2 34.798 RC 167.915 GL 21.24 GP 2.40 ZAL 66.69 ZAP 168.75 ETS 11.88 ZAE 128.72 ETE 178.07 ZAC 75.75 ETC 165.63 CLP-169.01 PLANETOCENTRIC CONIC C3 17.921 VHL 4.233 OLA 20.88 RAL 354.55 RAD 6567.7 VEL 11.803 PTH 2.09 VHP 6.992 OPA -8.23 RAP 343.13 ECC 1.2949 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 20 58 2904.03 -28.30 89.43 221.59 89.00 4 9 22 2304.0 -28.14 80.77 A 20 58 2904.03 21 18 34 4117.05 4 56 15 2596.79 22 25 58 3899.52 6 34 1 2290.89 23 4 41 3778.19 221.59 89.00 4 9 22 61.80 22 27 11 -28.14 90.00 -2.64 167.35 214.72 3517.0 -6.39 160.68 100.00 -29.89 90.69 5 39 31 60.13 23 30 58 66.83 221.59 1996.8 -29.47 58.05 100.00 -1.25 150.59 213.95 3299.5 -5.22 144.05 110.00 -33.85 43.37 221.36 95.05 7 12 12 1690.9 -32.78 34.29 55.87 24 7 39 110.00 2.12 139.29 211.84 3178-2 -2.37 133.09 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY . SGT 5659.1 SGR 406.2 SG3 211.8 RRT -.0978 RRF -.1159 RTF .9448 SGB 5673.7 R23 .0231 R13 -.9449 SGI 5659.2 SG2 404.3 THA 179.60 TOE 2.3771 TRA 1.6141 TC3-4.7550 BAU 1.1404 ST 3295.0 SR 309.2 SS 895.7 CRT .9161 CRS -.8632 CST -.9929 ROE .2241 RRA -.1374 RC3 .2158 FAU .02927 FOE 1.0350 FRA 1.1156 FC3-1.4141 83P 18204 BDE 2.3876 BRA 1.6199 BC3 4.7599 FSP -722 LSA 3424.7 MSA 161.4 SSA 18.0 EL1 3307.2 EL2 123.5 ALF 4.92 LAUNCH DATE DEC 1 1965 FLIGHT TIME 186.00 ARRIVAL DATE JUN 5 1966 MELIOCENTRIC CONIC DISTANCE 540.386 RL 147.51 LAL .00 LOL 68.60 VL 26.672 GAL 3.51 AZL 88.68 MCA 264.87 SMA 121.97 ECC .21771 INC 3.3218 V1 30.204
RP 108.89 LAP -3.31 LOP 333.45 VP 36.737 GAP 10.98 AZP 90.30 TAL 167.18 TAP 72.05 RCA 95.42 APO 148.53 V2 34.803
RC 170.040 GL 20.63 GP 2.31 ZAL 64.15 ZAP 169.66 ETS 12.62 ZAE 128.66 ETE 178.15 ZAC 77.96 ETC 165.78 CLP-169.92 PLANETOCENTRIC CONIC C3 19.173 VHL 4.379 DLA 21.38 RAL 357.23 RAD 6567.8 VEL 11.856 PTH 2.10 VHP, 7.207 DPA -7.46 RAP 345.27 ECC 1.3155 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ IIME PO CST TIM INJ 2 LAT INJ 2 LONG 87.61 4 14 38 61.81 22 43 51 89.30 5 45 28 60.14 23 46 57 93.61 7 19 21 55.87 24 22 26 3 25 36 2941.96 21 35 20 4110.82 90.00 225.68 -28.22 92.20 2342.0 -28.26 83.54 90.00 -2.84 167.00 218.55 3510.8 -6.58 5 1 36 2632.42 22 42 1 3895.59 6 40 39 2322.53 23 19 28 3778.24 100.00 -29.88 69.48 225.73 2032.4 -29.66 60.68 100.00 -1.38 150.38 217.74 3295.6 -5.35 143.83 217.74 225.61 110.00 -34.02 45.82 1722.5 110.00 139.30 215.55 3178.2 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5697.9 SGR 408.3 SC3 203.5 RRT -.0598 RRF -.0769 RTF .9456 SGB 5712.5 R23 .0202 R13 -.9456 TDE 2.4697 TRA 1.8372 TC3-4.4749 BAU 1.1481 ST 3325.3 SR 322.1 SS 883.8 ROE .2421 RRA -.1390 RC3 .1919 FAU .02713 FOE 1.0189 FRA 1.1518 FC3-1.2249 BSP 18380 BDE 2.4816 BRA 1.8424 BC3 4.4790 FSP -697 CRT .9126 CRS -.8611 CST -.9934 LSA 3451.8 MSA 164.4 SSA 17.5 SG1 5697.9 SG2 407.5 THA 179.75 EL1 3338.3 EL2 131.2 ALF 5.06 LAUNCH DATE DEC 1' 1965 FLIGHT TIME 188.00 ARRIVAL DATE JUN 7 1966 HELIOCENTRIC CONIC DISTANCE 545.951 RL 147.51 LAL .00 LOL 68.60 VL 26.633 GAL 4.04 AZL 86.65 MCA 268.03 SMA 121.74 ECC .22258 INC 3.3473 V1 30.204
RP 108.87 LAP -3.35 LOP 336.62 VP 36.714 GAP 11.36 AZP 90.11 TAL 165.57 TAP 73.60 RCA 94.64 APO 148.84 V2 34.808
RC 172.148 GL 19.98 GP 2.23 ZAL 61.66 ZAP 170.55 ETS 13.49 ZAE 128.62 ETE 178.22 ZAC 80.18 ETC 165.91 CLP-170.82 PLANETOCENTRIC CONIC C3 20.607 VML 4.540 DLA 21.81 RAL 359.88 RAD 6567.8 VEL 11.916 PTH 2.12 VMP 7.435 DPA -6.66 RAP 347.41 ECC 1.3391 LNCM AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 30 38 2979.00 -28.09 94.90 229.80 86.27 4 20 17 2379.0 -28.31 86.24 90.00 21 51 22 4108.00 -2.93 166.85 222.40 61.82 22 59 51 3508.1 -6.67 160.17 100.00 5 7 19 2667.28 -29.83 72.07 229.90 87.93 5 51 46 2067.3 -29.80 63.27 100.00 22 57 23 3895.03 -1.40 150.35 221.56 60.14 24 218 3295.0 -5.37 143.80 110.00 6 47 33 2353.70 -34.12 48.25 229.89 92.18 7 26 46 1753.7 -33.44 39.07 110.00 23 33 39 3781.38 2.24 139.46 219.28 55.88 24 36 40 3181.4 -2.25 133.26 60.14 24 2 18 92.18 7 26 46 55.88 24 36 40 110.00 23 33 39 3781.38 2.24 139.46 219.28 3181.4 -2.25 133.26 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5732.9 SGR 409.7 SG3 195.8 RRT -.0211 RRF -.0371 RTF .9464 SGB 5747.5 R23 .0170 R13 -.9464 SG1 5732.9 SG2 409.6 TMA 179.91 TOE. 2.5666 TRA 2.0774 TC3-4.1791 BAU 1.1523 ST 3350.3 SR 334.3 SS 873.0 CRT .9093 CRS -.8592 CST -.9939 RDE .261D RRA -.1394 RC3 .1688 FAU .02497 FDE 1.0055 FRA 1.1897 FC3-1.0491 83P 18450 80E 2.5798 BRA 2.0821 BC3 4.1825 FSP -667 LSA 3474.2 MSA 167.7 SSA 17.0 EL1 3364.1 EL2 138.6 ALF 5.19

```
ARRIVAL DATE JUN 9 1966
                                                                               FLIGHT TIME 190.00
LAUNCH DATE DEC 1 1965
                                                                              DISTANCE 551.473
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 22.249 VHL 4.717 OLA 22.19 RAL 2.47 RAD 6567.9 VEL 11.985 PTH
                                                                                                           2.14 VMP 7.676 DPA -5.85 RAP 349.54 ECC 1.3662
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 36 5 3015.03 -27.90

22 6 36 4108.97 -2.90

5 13 23 2701.30 -29.72

23 11 59 3897.94 -1.31

6 54 41 2384.37 -34.18

23 47 10 3787.65 2.48
                                                                                                                                                                         88.88
                                                                                                      84.96 4 26 20
                                                                                                                                    2415.0
                                                                                                                                                      -28.31
                                                                      97.52
                                                                                    233.94
       90.00
                                                                                                                                                                         160.22
                                                                                       226.27
                                                                                                          61.82
                                                                                                                    23 15 5
                                                                                                                                        3509.0
                                                                                                                                                         -6.64
         90.00
                                                                      166.90
                                                                                                                      5 58 25
                                                                                                                                        2101.3
                                                                                                                                                         -29.87
                                                                                                                                                                          65.79
                                                                                       234.09
                                                                                                          86.61
       100.00
                                                                        74.59
                                                                                                         60.13 24 16 57
90.76 7 34 26
55.90 24 50 18
                                                                                                                                      3297.9
1784.4
                                                                                                                                                         -5.27
                                                                                                                                                                         143.96
                                                                                       225.39
                                                                      150.51
       100.00
                                                                                      234.21
                                                                                                                                                                         41.43
                                                                       50.64
       110.00
                                                                                       223.03
                                                                                                                                        3187.6
                                                                                                                                                        -2.01
                                                                                                                                                                         133.58
       110.00
                                                                      139.79
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 3359.3 SR 345.5 SS 859.8
CRT .9061 CRS -.8574 CST -.9944
                                                                         SGT 5762.7 SGR 410.6 SG3 188.2
RRT .0166 RRF .0015 RTF .9475
    TOE 2.6592 TRA 2.3276 TC3-3.8877 BAU 1.1572
    ROE .2809 RRA -.1384 RC3 .1469 FAU .02303
FOE .9904 FRA 1.2255 FC3 -.8960 BSP 18617
                                                                          RRT .0166 RRF .0015 RTF .9475 CRT .9061 CRS -.8574 CST -.9944 SGB 5777.3 R23 -.0143 R13 .9475 LSA 3480.5 MSA 171.0 SSA 16.5 SGI 5762.7 SG2 410.5 THA .07 ELI 3373.8 EL2 145.6 ALF 5.33
    BOE 2.6740 BRA 2.3317 BC3 3.8905 FSP -644
                                                                                                                                                ARRIVAL DATE JUN 11 1966
                                                                               FLIGHT TIME 192.00
LAUNCH DATE DEC 1 1965
                                                                               DISTANCE 556.949
   HELIOCENTRIC CONIC
    RL 147.51 LAL .00 LOL 68.60 VL 26.556 GAL 5.20 AZL 86.60 HCA 274.36 SMA 121.28 ECC .23362 INC 3.3981 VI 30.204
RP 108.83 LAP -3.39 LOP 342.97 VP 36.670 GAP 12.18 AZP 89.74 TAL 162.37 TAP 76.73 RCA 92.95 APO 149.62 VZ 34.821
RC 176.312 GL 18.61 GP 2.09 ZAL 56.88 ZAP 172.30 ETS 15.86 ZAE 128.54 ETE 178.36 ZAC 84.63 ETC 166.14 CLP-172.58
   PLANETOCENTRIC CONIC
    C3 24.128 VHL 4.912 DLA 22.50 RAL 5.00 RAD 6568.0 VEL 12.063 PTH 2.16 VHP 7.933 DPA -5.01 RAP 351.68 ECC 1.3971 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    LNCH TIME L-1 TIME
3 41 57 3049.96
22 20 56 4113.57
5 19 49 2734.41
23 25 46 3904.35
7 2 4 2414.54
0 3 56 3797.00
                                                                                                      83.72
                                                                                                                      4 32 47 2450.0
                                                                                                                                                      -28.25
        90.00
                                                      -27.67
                                                                      100.05
                                                                                      238.08
                                                                                                                    23 29 30
                                                                                                                                         3513.6
                                                                                                                                                          -6.50
                                                                                                                                                                         160.48
                                                       -2.75
                                                                       167.16
                                                                                       230.14
         90.00
                                                      -29.56
                                                                         77.04
                                                                                       238.29
                                                                                                          85.33
                                                                                                                     6 5 23
                                                                                                                                         2134.4
                                                                                                                                                         -29.89
                                                                                                                                                                           68.25
       100.00
                                                                                                          60.13 24 50 50
       100.00
                                                       -1.09
                                                                      150.86
                                                                                       229.22
                                                                                                                                        3304.4
                                                                                                                                                          -5.05
                                                                                                                                                                         144.32
                                                                                                         89.36 7 42 18
55.92 1 7 13
                                                                                                                                        1814.5
                                                                                                                                                        -33.89
                                                                                                                                                                           43.77
                                                      -34.18
                                                                         53.00
                                                                                       238.54
       110.00
                                                                                                                                                       -1.66
                                                                                                                                        3197.0
                                                                                                                                                                         134.07
                                                       2.84
                                                                      140.28
                                                                                       226.77
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5787.3 SGR 410.9 SG3 181.0
RRT .0549 RRF .0402 RTF .9486
SGB 5801.9 R23 -.0118 R13 .9486
SGI 5787.3 SG2 410.3 THA .22
                                                                                                                                   ST 3359.4 SR 355.8 SS 846.5
CRT .9029 CRS -.8559 CST -.9949
    TOE 2.7527 TRA 2.5931 TC3-3.5938 BAU 1.1599
    ROE .3018 RRA -.1361 RC3 .1263 FAU .02114
FDE .9761 FRA 1.2617 FC3 -.7586 BSP 18763
                                                                                                                                   LSA 3478.2 MSA 174.4 SSA 16.0
EL1 3374.7 EL2 152.2 ALF 5.47
    BOE 2.7692 BRA 2.5966 BC3 3.5960 FSP -622
                                                                               FLIGHT TIME 194.00
                                                                                                                                               ARRIVAL DATE JUN 13 1966
LAUNCH DATE DEC 1 1965
                                                                               DISTANCE 562.370
    RL 147.51 LAL .00 LOL 68.60 VL 26.517 GAL 5.83 AZL 86.58 HCA 277.53 SMA 121.06 ECC .23989 INC 3.4238 V1 30.204 RP 108.81 LAP -3.39 LOP 346.14 VP 36.650 GAP 12.63 AZP 89.55 TAL 160.78 TAP 78.31 RCA 92.02 APO 150.10 VZ 34.828 RC 178.366 GL 17.90 GP 2.02 ZAL 54.60 ZAP 173.16 ETS 17.49 ZAE 128.50 ETE 178.43 ZAC 86.87 ETC 166.23 CLP-173.46
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     G3 26.279 VHL 5.126 DLA 22.76 RAL 7.47 RAD 6568.1 VEL 12.151 PTH 2.18 VHP 8.207 DPA -4.15 RAP 353.81 ECC 1.4325
    C3 26.279 VHL 5.126 DLA 22.76 RAL 7.47 RAD 6568.1 VEL 12.151 PTH 2.18 VHP 8.207 DPA -4.15 RAP 353.81 ECC 1.4325
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 48 14 3083.71 -27.39 102.48 242.23 82.53 4 39 37 2483.7 -28.14 93.90
90.00 22 34 20 4121.92 -2.48 167.62 234.00 61.78 23 43 2 3521.9 -6.23 160.96
100.00 5 26 35 2766.58 -29.36 79.41 242.49 84.10 6 12 42 2166.6 -29.86 70.65
100.00 23 38 40 3914.28 -.75 151.40 233.04 60.12 24 43 55 3314.3 -4.72 144.87
110.00 7 9 38 2444.18 -34.13 55.32 242.87 88.00 7 50 22 1844.2 -34.05 46.07
110.00 D 16 3 380.44 3.31 140.93 230.51 55.96 1 19 32 320.94 -1.18 134.72
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 3351.4 SR 364.9 SS 833.5
CRT .8999 CRS -.8545 CST -.9953
                                                                          SGT 5807.7 SGR 410.6 SG3 174.1
RRT .0925 RRF .0789 RTF .9500
     TOE 2.8474 TRA 2.8752 TC3-3.3012 BAU 1.1604
                                                                          SCB 5822.2 R23 -.0095 R13 .9500
SCB 5807.8 SC2 408.8 THA .38
     ROE .3236 RRA -.1322 RC3 .1072 FAU .01932
FDE .9629 FRA 1.2987 FC3 -.6366 BSP 18881
                                                                                                                                    LSA 3468.1 MSA 177.7 SSA 15.5
                                                                                                                                   EL1 3367.4 EL2 158.3 ALF 5.61
     BDF 2.8657 BRA 2.8783 BC3 3.3029 FSP -599
                                                                                                                                                ARRIVAL DATE JUN 15 1966
                                                                               FLIGHT TIME 196.00
 LAUNCH DATE DEC 1 1965
                                                                               DISTANCE 567.730
    RL 147.51 LAL .00 LOL 68.60 VL 26.480 GAL 6.49 AZL 86.55 MCA 280.70 SMA 120.84 ECC .24672 INC 3.4499 V1 30.204
RP 108.78 LAP -3.39 LOP 349.32 VP 36.630 GAP 13.11 AZP 89.36 TAL 159.21 TAP 79.91 RCA 91.03 APO 150.65 V2 34.836
RC 180.400 GL 17.18 GP 1.97 ZAL 52.39 ZAP 174.00 ETS 19.58 ZAE 128.47 ETE 178.49 ZAC 89.11 ETC 166.30 CLP-174.33
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 28.743 VHL 5.361 DLA 22.97 RAL 9.86 RAD 6568.2 VEL 12.252 PTH 2.20 VHP 8.500 OPA -3.27 RAP 355.94 ECC 1.4730
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 54 54 31 3116.21
22 46 45 4134.03
5 33 40 2797.77
23 50 41 3927.70
7 17 22 2473.32
0 27 24 3824.91
                                                                                                                                      2516.2
                                                                                      246.36
                                                                                                        81.40
                                                                                                                       4 46 50
                                                        -27.08
                                                                       104.81
         90.00
                                                                                                                                                                         161.64
                                                                       168.30
                                                                                       237.84
                                                                                                           61.75 23 55 39
                                                                                                                                         3534.0
                                                                                                                                                          -5.85
                                                         -2.09
         90.00
                                                                         81.70
                                                                                       246.68
                                                                                                           82.92
                                                                                                                      6 20 17
                                                                                                                                         2197.8
                                                                                                                                                         -29.79
                                                                                                                                                                           72.95
                                                       -29.12
        100.00
                                                                                                           60.11 24 56 9
                                                                                                                                         3327.7
                                                                                                                                                          -4.27
                                                                                                                                                                         145.61
                                                                       152.14
                                                                                       236.85
                                                         - .30
        100.00
                                                                                                           86,65 7 58 35
56.01 1 31 9
                                                                                                                                        1873.3
                                                                                                                                                         -34.13
                                                                                                                                                                           48.34
                                                       -34.04
                                                                         57.59
                                                                                       247.21
        110.00
                                      3824.91
                                                                                                                                                                         135.53
                                                                       141.74
                                                                                                                                        3224.9
                                                                                                                                                           - . 59
                                                                                       234.23
                                                        3.90
        110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 5823.5 SGR 409.7 SG3 167.6 ST 3335.4 SR 372.7 SS 821.0

RRT .1306 RRF .1176 RTF .9515 CRT .8970 CRS -.8553 CST -.9957

SGB 5837.9 R23 -.0073 R13 .9515 LSA 3450.4 MSA 180.7 SSA 15.0

SG1 5823.8 SG2 406.1 THA .53 EL1 3352.2 EL2 164.0 ALF 5.74
      TOE 2.9432 TRA 3.1746 TC3-3.0136 BAU 1.1585
     ROE .3463 RRA -.1266 RC3 .0898 FAU .01758
FDE .9509 FRA 1.3366 FC3 -.5295 B3P 18997
      BDE 2.9635 BRA 3.1771 BC3 3.0150 FSP -578
```

ARRIVAL DATE JUN 17 1966

LAUNCH DATE DEC 1 1965

DISTANCE 573.019 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 26.442 GAL 7.20 AZL 86.52 HCA 283.87 SMA 120.62 ECC .25418 INC 3.4765 V1 30.204
RP 108.76 LAP -3.37 LOP 352.49 VP 36.611 GAP 13.62 AZP 89.17 TAL 157.65 TAP 81.53 RCA 89.96 APO 151.28 V2 34.845
RC 182.414 GL 16.45 GP 1.91 ZAL 50.27 ZAP 174.84 ETS 22.36 ZAE 128.43 ETE 178.56 ZAC 91.35 ETC 166.36 CLP-175.21 PLANETOCENTRIC CONIC C3 31.570 VHL 5.619 DLA 23.12 RAL 12.17 RAD 6568.3 VEL 12.367 PTH 2.23 VMP 8.815 DPA -2.39 RAP 358.06 FCC 1.5196 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCM TIME L-1 TIME INJ LAI 4 1 57 3147.44 -26.75 22 58 10 4149.85 -1.58 5 41 2 2827.99 -28.84 0 5 42 3944.53 .28 7 25 14 2501.97 -33.90 0 37 59 3843.32 4.60 80.34 4 54 25 2547.4 107.03 -27.81 98.53 250.48 90.00 61.72 24 7 20 81.79 6 28 10 60.11 1 11 27 85.34 8 6 56 169.18 -5.35 90.00 241.65 3549.9 162.53 100.00 83.91 250.86 2228.0 -29.68 75.20 240.62 100.00 153.06 3344.5 -3.70 146.54 251.53 110.00 59.81 1902.0 -34.18 50.58 1 42 2 110.00 142.70 237.93 56.09 3243.3 . 1.1 136.49 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5836.5 SGR 408.2 SG3 161.4 RRT .1693 RRF .1570 RTF .9532 SGB 5850.8 R23 -.0052 R13 .9532 SGI 5836.9 SG2 402.3 THA .68 TDE 3.0443 TRA 3.4963 TC3-2.7282 BAU 1.1519 ST 3316.4 SR 379.3 SS 810.2 CRT .8941 CRS -.8524 CST -.9961 RDE .3699 RRA -.1191 RC3 .0741 FAU .01582 FDE .9414 FRA 1.3773 FC3 -.4338 BSP 19013 BDE 3.0667 BRA 3.4984 BC3 2.7292 FSP -554 LSA 3430.0 MSA 183.5 SSA 14.4 EL1 3333.7 EL2 169.0 ALF 5.85 LAUNCH DATE DEC 1 1965 FLIGHT TIME 200.00 ARRIVAL DATE JUN 19 1966 HELIOCENTRIC CONIC DISTANCE 578.225 RL 147.51 LAL .00 LOL 68.60 VL 26.406 GAL 7.95 AZL 86.50 MCA 287.05 SMA 120.41 ECC .26234 INC 3.5039 V1 30.204
RP 108.73 LAP -3.35 LOP 355.67 VP 36.593 GAP 14.18 AZP 88.97 TAL 156.12 TAP 83.16 RCA 88.82 APO 152.00 V2 34.854
RC 184.407 GL 15.72 GP 1.87 ZAL 48.23 ZAP 175.67 ETS 26.23 ZAE 128.38 ETE 178.62 ZAC 93.58 ETC 166.39 CLP-176.09 PLANETOCENTRIC CONIC PLANETOCENTRIC CONTC
C3 34.820 VHL 5.901 0LA 23.22 RAL 14.40 RAD 6568.4 VEL 12.498 PTH 2.26 VHP 9.154 0PA -1.49 RAP .17 ECC 1.5731
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 9 22 3177.38 -26.39 109.15 254.59 79.33 5 2 19 2577.4 -27.59 100.69
90.00 23 8 32 4169.31 -.95 170.27 245.42 61.70 24 18 2 3569.3 -4.73 163.62
100.00 5 48 39 2857.23 -28.54 86.03 255.01 80.71 6 36 17 2257.2 -29.53 77.36
100.00 0 15 52 3964.69 .96 154.17 244.36 60.12 1 21 56 3364.7 -3.02 147.65
110.00 7 33 13 2530.14 -33.73 61.99 255.82 84.06 8 15 23 1930.1 -34.18 52.78
110.00 0 47 48 3864.55 5.40 143.82 241.99 56.20 1 52 12 3264.66 .93 137.59 TNJ AZMTH
79.33 5 2 19
61.70 24 18 2
80.71 6 36 17
60.12 1 21 56
84.06 8 15 23
46.20 1 52 12

OR MID-COURSE EXECUTION ACCURACY
SGT 5843.2 SGR 406.2 SG3 155.4
RRT .2077 RRF .1957 RTF .9551
SGB 5857.3 R23 -.0037 R13 .9551
SGI 5843.8 SG2 397.4 THA .83 ORBIT DETERMINATION ACCURACY ST 3286.9 SR 384.4 SS 799.0 CRT .8913 CRS -.8515 CST -.9965 DIFFERENTIAL CORRECTIONS TOE 3.1439 TRA 3.8342 TC3-2.4575 BAU 1.1444 ROE .3943 RRA -.1097 RC3 .0602 FAU .01422 FOE .9317 FRA 1.4177 FC3 -.3535 BSP 19115 BDE 3.1686 BRA 3.8358 BC3 2.4583 FSP -535 LSA 3399.2 MSA 186.0 SSA 13.9 EL1 3304.7 EL2 173.3 ALF 5.97 LAUNCH DATE DEC 1 1965 FLIGHT TIME 202.00 ARRIVAL DATE JUN 21 1966 DISTANCE 583.333 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 38.566 VHL 6.210 DLA 23.28 RAL 16.54 RAD 6568.5 VEL 12.647 PTH 2.30 VHP 9.522 DPA -.59 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 17 6 3206.05 23 17 53 4192.26 5 56 30 2865.52 0 25 5 3988.03 7 41 15 2557.83 0 56 50 3888.49 78.39 -27.35 258.66 5 10 32 2606.1 102.76 90.00 -26.01 111.17 61.68 24 27 45 -3.99 -.21 171.55 249.14 3592.3 164.91 79.69 6 44 36 2285.5 60.15 1 31 33 3388.0 82.82 8 23 53 1957.8 56.33 2 1 39 3288.5 259.14 -29.35 79.44 100.00 -28.21 88.06 259.14 248.05 3388.0 100.00 1.75 155,45 -2.23 148.93 -34.14 -33.51 260.09 245.22 54.94 110.00 64.13 110.00 145.08 1.84 138.84 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5845.5 SGR 403.7 SG3 149.7 RRT .2462 RRF .2345 RTF .9573 SGB 5859.4 R23 -.0023 R13 .9573 SGI 5846.3 SG2 391.2 THA .98 TDE 3.2470 TRA 4.1948 TC3-2.1967 BAU 1.1329 5T 3252.5 SR 388.1 55 789.0 RDE .4194 RRA -.0982 RC3 .0480 FAU .01266 FDE .9235 FRA 1.4604 FC3 -.2841 BSP 19191 CRT .8886 CRS -.8508 CST -.9969 LSA 3364.0 MSA 187.9 SSA 13.4 BDE 3.2740 BRA 4.1959 BC3 2.1972 FSP -516 EL1 3270.8 EL2 177.0 ALF 6.07 LAUNCH DATE DEC 1 1965 FLIGHT TIME 204.00 ARRIVAL DATE JUN 23 1966 HELIOCENTRIC CONIC DISTANCE 588.326 RL 147.51 LAL .00 LOL 68.60 VL 26.333 GAL 9.62 AZL 86.44 HCA 293.40 SMA 120.00 ECC .28113 INC 3.5618 V1 30.204
RP 108.67 LAP -3.27 LOP 2.03 VP 36.560 GAP 15.43 AZP 88.58 TAL 153.14 TAP 86.54 RCA 86.26 APO 153.73 V2 34.873
RC 188.330 GL 14.26 GP 1.78 ZAL 44.42 ZAP 177.22 ETS 40.92 ZAE 128.25 ETE 178.74 ZAC 98.02 ETC 166.40 CLP-177.87 PLANETOCENTRIC CONIC C3 42.895 VHL 6.549 DLA 23.29 RAL 18.59 RAD 6568.6 VEL 12.816 PTH 2.33 VHP 9.921 DPA .31 RAP 4.37 ECC 1.7059
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 25 6 3233.46 -25.62 113.08 262.69 77.51 5 19 D 2633.5 -27.09 104.72
90.00 23 26 13 4218.56 .64 173.02 252.80 61.69 24 36 31 3618.6 -3.15 166.38
100.00 6 4 32 2912.85 -27.86 90.02 263.22 78.71 6 53 5 2312.9 -29.14 81.45
100.00 D 33 23 4014.41 2.64 156.90 251.69 60.21 1 40 18 3414.4 -1.34 150.38
110.00 7 49 19 2585.05 -33.26 66.21 264.31 81.61 8 32 24 1985.0 -34.06 57.06
110.00 1 5 6 3914.97 7.31 146.48 248.81 56.51 2 10 21 3315.0 2.85 140.23 C3 42.895 VHL 6.549 DLA 23.29 RAL 18.59 RAO 6568.6 VEL 12.816 PTH 2.33 VHP 9.921 OPA .31 RAP 77.51 5 19 D 61.69 24 36 31 78.71 6 53 5 60.21 1 40 18 81.61 8 32 24 56.51 2 10 21 ORBIT DETERMINATION ACCURACY
ST 3214.1 SR 390.2 SS 780.5
CRT .8861 CRS -.8504 CST -.9973
LSA 3325.0 MSA 189.3 SSA 12.9 MID-COURSE EXECUTION ACCURACY

SGT 5643.3 SGR 400.7 SG3 144.2

SGT 5643.3 SGR 400.7 SG3 144.2

RRT .2850 RRF .2735 RTF .9596

SGB 5857.0 R23 -.0012 R13 .9596

SGI 5844.4 SG2 384.0 THA 1.12

EL1 3232.7 EL2 179.8 ALF 6.16 DIFFERENTIAL CORRECTIONS TDE 3.3545 TRA 4.5797 TC3-1.9472 BAU 1.1169 ROE .4452 RRA -.0843 RC3 .0375 FAU .01113 FOE .9174 FRA 1.5055 FC3 -.2247 BSP 19255 BOE 3.3840 BRA 4.5804 BC3 1.9476 FSP -498

FLIGHT TIME 198.00

```
ARRIVAL DATE JUN 25 1966
                                                                                                    FLIGHT TIME 206.00
LAUNCH DATE DEC 1 1965
                                                                                                    DISTANCE 593.184
    HELIOCENTRIC CONIC
     RL 147.51 LAL .00 LOL 68.60 VL 26.298 GAL 10.55 AZL 86.41 HCA 296.57 SMA 119.79 ECC .29197 INC 3.5928 VI 30.204
RP 108.63 LAP -3.21 LOP 5.21 VP 36.544 GAP 16.14 AZP 88.39 TAL 151.71 TAP 88.29 RCA 84.82 APO 154.77 VZ 34.884
RC 190.259 GL 13.54 GP 1.74 ZAL 42.64 ZAP 177.87 ETS 56.22 ZAE 128.17 ETE 178.80 ZAC 100.22 ETC 166.37 CLP-178.78
    PLANETOCENTRIC CONIC
      C3 47.917 VHL 6.922 DLA 23.26 RAL 20.54 RAD 6568.8 VEL 13.011 PTH 2.37 VHP 10.356 DPA
      LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  76.68 5 27 41
                                                                                                                                                                         2659.6
                           4 33 21 3259.64
23 33 32 4248.01
6 12 43 2939.25
                                                                                                            266.68
           90.00
                                                                     -25.22
                                                                                        114.89
                                                                                                                                                   24 44 20
                                                                                                                                                                            3648.0
                                                                                                                                                                                                                     168.03
                                                                                                              256.40
                                                                                                                                      61.72
                                                                        1.59
                                                                                          174.66
           90.00
                                                                                             7 1 42

60.31 1 48 10

80.44 8 40 55

60.31 2 18 20

60.31 2 1 48 10

60.31 3 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 1 48 10

60.31 3 55

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20

60.74 2 18 20
                                                                                                                                                    7 1 42
                                                                                                                                                                            2339.2
                                                                                                                                                                                                 -28.90
                                                                                                                                                                                                                       83.38
          100.00
                                                                     -27.50
                                                                                           91.90
                                                                                                                                                                            3443.6
                                                                                                                                                                                                   -.35
                                                                                                                                                                                                                     151.98
                            0 40 47 4043.63
7 57 23 2611.78
                                                                        3.63
                                                                                          158.51
         100.00
                                                                  - 32 . 98
                                                                                                                                                                            2011.8
                                                                                                                                                                                                                      59.14
         110.00
                                                                                            68.25
                                                                                                                                                                            3343.9
                                                                                                                                                                                                   3.95
                                                                                         148.02
                            1 12 36 3943.86
                                                                       8.39
         110.00
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5839.7 SGR 597.3 SG3 139.1

RRT .3244 RRF .3132 RTF .9621

SGB 5853.2 R23 -.0003 R13 .9621

SGI 5841.1 SG2 375.7 THA 1.27
                                                                                                                                                                      ST 3175.3 SR 391.0 SS 774.6
CRT .8838 CRS -.8504 CST -.9976
      TOE 3.4710 TRA 4.9960 TC3-1.7075 BAU 1.0940
     RDE .4718 RRA -.0678 RC3 .0288 FAU .00959
FDE .9143 FRA 1.5552 FC3 -.1732 BSP 19214
                                                                                                                                                                       LSA 3286.2 MSA 190.0 SSA 12.4
                                                                                                                                                                      EL1 3194.1 EL2 181.9 ALF 6.23
      BDE 3.5030 BRA 4.9965 BC3 1.7077 FSP -477
                                                                                                                                                                                      ARRIVAL DATE JUN 27 1966
                                                                                                    FLIGHT TIME 208.00
LAUNCH DATE DEC. 1 1965
                                                                                                    DISTANCE 597.878
    HELIOCENTRIC CONIC
     RL 147.51 LML .00 LOL 68.60 VL 26.263 GAL 11.55 AZL 86.37 MCA 299.75 SMA 119.60 ECC .30395 INC 3.6256 VI 30.204
RP 108.60 LAP -3.15 LOP 8.40 VP 36.530 GAP 16.91 AZP 88.20 TAL 150.33 TAP 90.09 RCA 83.25 APO 155.95 VZ 34.895
RC 192.167 GL 12.82 GP 1.71 ZAL 40.96 ZAP 178.27 ETS 81.80 ZAE 128.06 ETE 178.86 ZAC 102.40 ETC 166.32 CLP-179.71
    PLANETOCENTRIC CONIC
     C3 53.766 VHL 7.333 OLA 23.19 RAL 22.39 RAD 6568.9 VEL 13.234 PTH 2.42 VHP 10.833 OPA 2.11 RAP 8.51 ECC 1.8848 LNCH AZMTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          LNCH TIME L-I TIME
4 41 47 3284.57
23 39 51 4280.40
6 21 0 2964.68
0 47 16 4075.52
8 5 26 2637.98
1 19 20 3974.98
                                                                                                                                    75.91
                                                                                                                                                      5 36 32
                                                                                                                                                                         2684.6
                                                                                                                                                                                               -26.51
                                                                                                                                                                                                                    108.35
                                                                     -24.82
                                                                                          116.61
                                                                                                            270.62
           on an
                                                                                                                                                    24 51 12
                                                                                                                                                                             3680.4
                                                                                                                                                                                                                      169.84
                                                                                          176.47
                                                                                                              259.93
                                                                                                                                      61.80
                                                                                                                                                                                                   -1.16
                                                                         2.63
           90.00
                                                                                                                                      76.92 7 10 25
60.45 1 55 11
79.30 8 49 24
57.02 2 25 35
                                                                                            93.69
                                                                                                              271.24
                                                                                                                                                                             2364.7
                                                                                                                                                                                                  -28.65
                                                                                                                                                                                                                       85.22
                                                                    -27.12
         100.00
                                                                                                                                                                                                     .73
                                                                        4.70
                                                                                          160.27
                                                                                                              258.79
                                                                                                                                                                             3475.5
                                                                                                                                                                                                                      153.73
         100.00
                                                                                                                                                                            2038.0
                                                                                                                                                                                                -33.79
                                                                                                                                                                                                                       61.17
                                                                      -32.66
                                                                                            70.23
                                                                                                              272.58
         110.00
                                                                                                                                                                                               5.14
                                                                                                                                                                             3375.0
                                                                                                                                                                                                                      143.37
                                                                       9.55
                                                                                          149.69
                                                                                                              255.83
         110.00
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SCT 5828.5 SGR 393.4 SG3 134.1
RRT .3635 RRF .3522 RTF .9648
SGB 5841.8 R23 .0002 R13 .9648
SGI 5830.3 SG2 366.4 THA 1.41
                                                                                                                                                                    ST 3130.0 SR 390.1 SS 769.4
CRT .8816 CRS -.8505 CST -.9979
      TOE 3.5903 TRA 5.4372 TC3-1.4845 BAU 1.0671
      ROE .4990 RRA -.0488 RC3 .0216 FAU .00814
FOE .9120 FRA 1.6069 FC3 -.1310 BSP 19248
                                                                                                                                                                     LSA 3241.2 MSA 190.0 SSA 11.9
EL1 3149.0 EL2 183.0 ALF 6.29
      BOE 3.6248 BRA 5.4374 BC3 1.4846 FSP -461
                                                                                                                                                                                     ARRIVAL DATE JUN 29 1966
                                                                                                    FLIGHT TIME 210.00
LAUNCH DATE DEC 1 1965
                                                                                                    DISTANCE 602.375
    HELIOCENTRIC CONIC
     RL 147.51 LAL .00 LOL 68.60 VL 26.230 GAL 12.64 AZL 86.34 HCA 302.94 SMA 119.41 ECC .31722 INC 3.6606 VI 30.204

RP 108.57 LAP -3.07 LOP 11.59 VP 36.516 GAP 17.77 AZP 88.01 TAL 149.02 TAP 91.95 RCA 81.53 APO 157.28 V2 34.906

RC 194.054 GL $2.12 GP 1.68 ZAL 39.38 ZAP 178.19 ETS 113.22 ZAE 127.92 ETE 178.92 ZAC 104.56 ETC 166.24 CLP 178.33
    PLANETOCENTRIC CONTC
      C3 60.611 VHL 7.785 DLA 23.07 RAL 24.14 RAO 6569.1 VEL 13.490 PTH 2.47 VHP 11.357 DPA
                                                                                                                                                                                3.01 RAP 10.55 ECC 1.9975
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          4 50 22 3308.25
23 45 12 4315.51
6 29 21 2989.12
0 52 51 4109.87
8 13 24 2663.60
1 25 17 4008.16
                                                                                                                                                                       2708.2
                                                                                                           274.49
                                                                                                                                 75.20 5 45 31
                                                                                        118.23
           90.00
                                                                     -24.42
                                                                                                                                                                                                                     171.80
                                                                                                             263.38
                                                                                                                                     61.91
                                                                                                                                                   24 57 8
                                                                                                                                                                            3715.5
                                                                                                                                                                                                  - .03
                                                                         3.76
                                                                                         178.43
           90.00
                                                                                                                                     76.10 7 19 10
60.63 2 1 21
78.21 8 57 47
57.36 2 32 6
                                                                                                                                                                                                                      86.99
                                                                                           95.41
                                                                                                             275.14
                                                                                                                                                                           2389.1
                                                                                                                                                                                                -28.38
                                                                      -26.73
         100.00
                                                                                                                                                                           3509.9
                                                                                                                                                                                                 1.90
                                                                                                                                                                                                                     155.61
                                                                        5.85
                                                                                         162.17
                                                                                                             262.23
         100.00
                                                                                          72.15
                                                                                                             276.61
                                                                                                                                                                           2063.6
                                                                                                                                                                                               -33.61
                                                                                                                                                                                                                      63.15
                                                                   -32.32
         110.00
                                                                 10.77
                                                                                                             259.25
                                                                                                                                                                           3408.2
                                                                                                                                                                                                 6.39
                                                                                                                                                                                                                     145.12
         110.00
                                                                                         151.48
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5813.7 SGR 389.0 SG3 129.4
RRT .4025 RRF .3915 RTF .9676
SGB 5826.7 R23 .0006 R13 .9676
                                                                                                                                                                      ST 3082.3 SR 387.7 SS 766.5
CRT .8797 CRS -.8509 CST -.9982
      TDE 3.7171 TRA 5.9128 TC3-1.2753 BAU 1.0334
     RDE .5268 RRA -.0268 RC3 .0158 FAU .00668
FDE .9123 FRA 1.6634 FC3 -.0955 BSP 19303
BDE 3.7542 BRA 5.9129 BC3 1.2754 FSP -445
                                                                                                                                                                      LSA 3194.1 MSA 189.3 SSA 11.4
EL1 3101.2 EL2 183.2 ALF 6.34
                                                                                               SG1 5815.8 SG2 356.0 THA 1.55
                                                                                                                                                                                      ARRIVAL DATE JUL 1 1966
                                                                                                     FLIGHT TIME 212.00
LAUNCH DATE DEC 1 1965
                                                                                                    DISTANCE 606.633
    HELIOCENTRIC CONIC
     RL 147.51 LAL .00 LOL 68.60 VL 26.197 GAL 13.83 AZL 86.30 HCA 306.12 SHA 119.22 ECC .33198 INC 3.6983 V1 30.204
RP 108.53 LAP -2.99 LOP 14.77 VP 36.504 GAP 18.72 AZP 87.82 TAL 147.77 TAP 93.89 RCA 79.64 APO 158.80 V2 34.918
RC 195.918 GL 11.42 GP 1.65 ZAL 37.90 ZAP 177.66 ETS 136.75 ZAE 127.75 ETE 178.98 ZAC 106.68 ETC 166.14 CLP 178.34
    PLANETOCENTRIC CONIC
      C3 68.666 VHL 8.286 DLA 22.92 RAL 25.77 RAD 6569.3 VEL 13.785 PTH 2.52 VHP 11.938 OPA
                                                                                                                                                                                 3.89 RAP 12.56 ECC 2.1301
      LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                          4 59 3 3330.64
23 49 36 4353.10
6 37 43 3012.50
0 57 33 4146.46
                                                                                                                                                                         2730.6
                                                                                                                                                      5 54 33
                                                                      -24.02
                                                                                                             278.27
                                                                                                                                     74.53
                                                                                                                                                                                                -25.91
                                                                                          119.75
           90.00
                                                                                                                                                                                                                      173.89
                                                                                                                                                                             3753.1
                                                                                                                                                                                                    1.19
                                                                         4.96
                                                                                          180.54
                                                                                                              266.75
                                                                                                                                      62.09
                                                                                                                                                    25 2 9
           90.00
                                                                                                                                                     7 27 55
                                                                                                                                                                                                                       88.67
                                                                      -26.34
                                                                                            97.03
                                                                                                              278.96
                                                                                                                                      75.32
                                                                                                                                                                            2412.5
                                                                                                                                                                                                 -28.09
          100.00
                                                                                                                                                                                                                      157.63
                                                                                                              265.60
                                                                                                                                      60.88
                                                                                                                                                    2 6 39
                                                                                                                                                                             3546.5
                                                                                                                                                                                                    3.13
                                                                         7.07
                                                                                          164.20
          100.00
                           8 21 16 2688.52
1 30 29 4043.21
                                                                                            74.00
                                                                                                              280.54
                                                                                                                                      77.17
                                                                                                                                                      9 6 5
                                                                                                                                                                             2088.5
                                                                                                                                                                                                 -33,39
                                                                                                                                                                                                                       65.06
                                                                      -31.96
          110.00
                                                                                                                                                     2 37 52
                                                                                                                                                                             3443.2
                                                                                                                                                                                                    7.71
                                                                                                                                                                                                                      146.98
                                                                                          153.38
                                                                                                              262.60
                                                                                                                                      57.77
                                                                     12.05
          110.00
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5795.1 SGR 384.4 SG3 124.9
RRT .4418 RRF .4309 RTF .9705
SGB 5807.8 R23 .0007 R13 .9705
SGI 5797.6 SG2 344.7 THA 1.68
                                                                                                                                                                       ST 3033.7 SR 383.9 SS 766.2
CRT .8782 CRS -.8518 CST -.9985
      TOE 3.8550 TRA 6.4272 TC3-1.0789 BAU .9905
      RDE .5552 RRA -.0016 RC3 .0114 FAU .00521
FDE .9156 FRA 1.7254 FC3 -.0657 BSP 19313
                                                                                                                                                                     LSA 3146.8 HSA 187.7 SSA 10.9
EL1 3052.4 EL2 182.5 ALF 6.36
      BOE 3,8948 BRA 6.4272 BC3 1.0790 FSP -429
```

LAUNCH DATE DEC 1 1965 FLIGHT TIME 214.00 APRIVAL CATE JUL 3 1966 HELIOCENTRIC CONIC DISTANCE 610.597 RL 147.51 LAL .00 LOL 68.60 VL 26.164 GAL 15.13 AZL 86.26 HCA 309.31 SMA 119.04 ECC .34844 INC 3.7391 V1 30.204 RP 108.49 LAP -2.89 LOP 17.96 VP 36.492 GAP 19.77 AZP 87.63 TAL 146.62 TAP 95.93 RCA 77.56 APO 160.52 VZ 34.930 RC 197.761 GL 10.73 GP 1.62 ZAL 36.53 ZAP 176.86 ETS 150.58 ZAE 127.54 ETE 179.04 ZAC 108.77 ETC 166.02 CLP 177.31 C3 78.202 VHL 8.843 OLA 22.73 RAL 27.30 RAO 6569.5 VEL 14.126 PTH 2.57 VHP 12.583 OPA 4.75 RAP 14.54 ECC 2.2870 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 7 46 3351.65 23 53 1 4392.93 281.97 73.93 6 3 38 2751.6 -23.63 121.16 -25.61 113.05 6.23 182.78 270.02 3792.9 2.47 176.12 6 46 4 3034.71 1 1 21 4185.09 8 29 1 2712.62 1 34 53 4079.95 90.26 100.00 -25.94 98.57 282.68 74.61 7 36 38 2434.7 -27.81 8.34 166.36 268.87 61.19 2 11 6 3585.1 159.75 110.00 -31.58 75.78 284.36 9 14 13 2112.6 -33.16 66.91 13.38 155.40 265.88 3479.9 9.08 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .4813 RRF .4707 RTF .9736 SGB 5787.0 R23 .0007 R13 .9736 SGB 5787.0 R23 .32.5 THA 1.82 TOE 4.0089 TRA 6.9876 TC3 -.8946 BAU .9353 ST 2986.2 SR 378.7 SS 769.4 ROE .5845 RRA .0272 RC3 .0082 FAU .00365 FOE .9231 FRA 1.7950 FC3 -.0404 BSP 19226 CRT .8772 CRS -.8531 CST -.9988 LSA 3101.3 MSA 185.3 SSA 10.5 BOE 4.0512 BRA 6.9877 BC3 .8946 FSP EL1 3004.6 EL2 180.8 ALF LAUNCH DATE DEC 1 1965 FLIGHT TIME 216.00 DISTANCE 614.196 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 26.133 GAL 16.56 AZL 86.22 MCA 312.50 SMA 118.87 ECC .36688 INC 3.7839 V1 30.204
RP 108.45 LAP -2.79 LOP 21.15 VP 36.482 GAP 20.96 AZP 87.44 TAL 145.57 TAP 98.07 RCA 75.26 APO 162.48 V2 34.942
RC 199.580 GL 10.06 GP 1.60 ZAL 35.27 ZAP 175.91 ETS 158.82 ZAE 127.28 ETE 179.10 ZAC 110.80 ETC 165.87 CLP 176.23 PLANETOCENTRIC CONIC C3 89.370 VHL 9.464 DLA 22.50 RAL 28.70 RAD 6569.8 VEL 14.523 PTH 2.64 VHP 13.305 CPA 5.59 RAP 16.48 ECC 2.4741 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 16 29 3371.15 23 55 28 4434.78 90.00 285.54 2771.1 -23.26 122.47 73.37 6 12 40 -25.31 114.41 90.00 23 55 28 7.54 273.18 25 9 23 3834.8 185.15 62.63 3.82 178.46 6 54 21 3055.60 1 4 13 4224 = 1 100.00 6 54 21 -25.56 100.00 7 45 17 2455.6 286.28 73.95 -27.51 91.74 2 14 39 100.00 9.66 168.64 272.04 3625.6 5.79 161.99 61.58 8 36 36 2735.73 1 38 28 4118.20 110.00 -31.19 288.04 9 22 11 2135.7 -32.90 77.47 75.25 68.66 110.00 157.53 269.07 2 47 6 3518.2 10.50 14.74 58.80 151.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 4.1736 TRA 7.5927 TC3 -.7261 BAU .8695 SGT 5747.0 SGR 374.2 SG3 116.7 ST 2935.0 SR 372.2 SS 774.9 RRT .5202 RRF .5099 RTF .9766 RDE .6144 RRA .0597 RC3 .0061 FAU .00207 CRT .8765 CRS -.8548 CST -.9990 FOE .9331 FRA 1.8710 FC3 -.0200 8SP 19232 BDE 4.2186 BRA 7.5929 BC3 .7261 FSP -398 SGB 5759.2 R23 .0004 R13 .9766 LSA 3052.8 MSA 181.9 SSA 9.9 SG1 5750.3 SG2 319.4 THA 1.95 EL1 2953.1 EL2 178.1 ALF LAUNCH DATE DEC 1 1965 FLIGHT TIME 218.00 ARRIVAL DATE JUL 7 1966 DISTANCE 617.340 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 26.104 GAL 18.15 AZL 86.17 HEA 315.69 SMA 118.70 ECC .38761 INC 3.8335 V1 30.204
RP 108.41 LAP -2.68 LOP 24.35 VP 36.473 GAP 22.29 AZP 87.25 TAL 144.66 TAP 100.34 RCA 72.69 APO 164.71 V2 34.955
RC 201.376 GL 9.39 GP 1.57 ZAL 34.13 ZAP 174.84 ETS 164.13 ZAE 126.96 ETE 179.15 ZAC 112.78 ETC 165.70 CLP 175.09 PLANETOCENTRIC CONIC C3 103.224 VHL 10.160 CLA 22.24 RAL 29.97 RAD 6570.0 VEL 14.985 PTH 2.70 VHP 14.116 CPA 5.41 RAP 18.37 ECC 2.5988 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 25 10 3388.95 0 0 51 4478.43 7 2 33 3074.95 1 6 9 4267.66 90.00 288.98 72.88 6 21 39 2788.9 -25.03 115.63 -22.90 123.66 276.21 63.D1 1 15 29 3878.4 5.21 180.91 90.00 8.90 187.64 2475.0 93.11 100.00 101.32 289.73 73.35 -27.23 -25.19 7 53 48 2 17 17 164.33 275.09 62.04 3667.7 7.19 100.00 11.02 171.03 2757.60 70.31 8 43 59 291.57 74.39 9 29 57 2157.6 110.00 -30.80 79.05 -32.63 1 41 12 16.12 159.77 59.44 2 50 30 3557.8 11.94 110.00 4157.78 272.16 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY RRT .5588 RRF .5490 RTF .9796 SGB 5727.4 R23 -.0001 R13 .9796 SG1 5719.2 SG2 305.6 TMA 2.07 TDE 4.3569 TRA 8.2536 TC3 -.5708 BAU .7878 ST 2883.3 SR 364.3 SS 784.1 RDE .6453 RRA .0964 RC3 .0050 FAU .D0037 FDE .9475 FRA 1.9563 FC3 -.0031 BSP 19222 CRT .8764 CRS -.8570 CST -.9992 LSA 3004.9 MSA 177.7 SSA BDE 4.4044 BRA 8.2541 BC3 .5708 FSP -385 EL1 2901.0 EL2 174.4 ALF LAUNCH DATE DEC 1 1965 FLIGHT TIME 220.00 ARRIVAL DATE JUL 9 1966 DISTANCE 619.909 HELIOCENTRIC CONIC RL 147.51 LAL .00 LOL 68.60 VL 26.075 GAL 19.93 AZL 86.11 MCA 318.88 SMA 118.55 ECC .41100 INC 3.8892 V1 30.204
RP 108.37 LAP -2.56 LOP 27.54 VP 36.465 GAP 23.79 AZP 87.07 TAL 143.90 TAP 102.78 RCA 69.82 APO 167.27 V2 34.968
RC 203.147 GL 8.74 GP 1.55 ZAL 33.13 ZAP 173.68 ETS 167.79 ZAE 126.56 ETE 179.21 ZAC 114.68 ETC 165.51 CLP 173.87 PLANETOCENTRIC CONIC C3 119.766 VHL 10.944 OLA 21.92 RAL 31.09 RAD 6570.2 VEL 15.527 PTH 2.77 VHP 15.033 OPA 7.19 RAP 20.20 ECC 2.9710 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3404.79 6 30 30 90.00 5 33 45 -22.58 124.71 292.24 72.45 2804.8 -24.77 116.72 90.00 0 1 15 4523.69 10.29 190.24 279.10 63.47 1 16 38 3923.7 183.46 6.64 100.00 7 10 36 3092.49 102.50 293.02 -24.84 72.82 2492.5 -26.96 94.34 1 7 5 100.00 4811.22 12.40 173.53 278.01 3711.2 62.58 2 18 56 8.63 166.77 1 43 2 110.00 2777.95 9 37 26 -30.42 80.51 294.92 73.60 2178.0 -32.37 110.00 4198.52 162.10 275.12 2 53 0 3598.5 17.51 60.16 13.41 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 2832.0 SR 355.3 SS 797.8 CRT .8771 CRS -.8599 CST -.9993 TOE 4.5635 TRA 8.9793 TC3 -.4282 BAU .6856 SGT 5680.3 SGR 363.1 SG3 109.3 ROE .6772 RRA .1378 RC3 .0047 FAU-.00153 FOE .9672 FRA 2.0530 FC3 .0111 89P 19177 BOE 4.6135 BRA 8.9804 BC3 .4282 FSP -373 RRT .5971 RRF .5877 RTF .9826 SG8 5691.9 R23 -.0006 R13 .9826 LSA 2958.6 MSA 172.6 SSA 8.9 SG1 5684.5 SG2 291.1 THA 2.19 EL1 2849.2 EL2 169.7 ALF 6.30

```
ARRIVAL DATE FEB 10 1966
                                                                                                               FLIGHT TIME 70.00
LAUNCH DATE DEC 2 1965
                                                                                                             DISTANCE 181.350
    HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 26.265 GAL -6.18 AZL 86.70 MCA 80.16 SMA 119.57 ECC .25579 INC 3.3013 V1 30.209 RP 107.51 LAP 3.25 LOP 149.75 VP 36.863 GAP -13.67 AZP 89.44 TAL 198.70 TAP 278.86 RCA 88.99 APO 150.16 V2 35.247 RC 45.230 GL 17.18 GP -1.65 ZAL 120.13 ZAP 4.07 ETS 22.72 ZAE 150.21 ETE 335.15 ZAC 62.12 ETC 161.76 CLP -3.72
     C3 25.931 VHL 5.092 DLA -1.66 RAL 305.96 RAO 6568.0 VEL 12.137 PTH - 2.18 VHP 8.808 DPA -17.40 RAP 329.95 ECC 1.4268 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 15 18 2226.06 -19.85 42.21 171.10 110.62 3 52 24 1626.1 -16.86 34.81 90.00 14 48 44 4972.97 22.17 217.81 172.01 71.92 16 11 37 4373.0 19.49 210.16 100.00 4 35 52 1966.16 -20.96 22.64 170.64 111.81 5 8 39 1366.2 -17.81 15.25 100.00 16 10 51 4708.11 23.30 197.92 171.60 70.73 17 29 19 4108.1 20.46 190.28 110.00 5 42 21 1758.08 -23.94 5.44 169.24 115.16 6 11 39 1158.1 -20.35 358.14 110.00 17 20 52 4488.95 26.34 180.00 170.32 67.38 18 35 41 3889.0 23.04 172.30
    PLANETOCENTRIC CONIC
                                                   4488.95 26.34
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                      SGT 722.1 SGR 406.9 SG3 101.9 ST 313.9 SR 360.9 S5 322.5 RRT -.0644 RRF .0657 RTF -.6841 CRT .8345 CRS .9940 CST .8666 SGB 828.9 R23 -.0013 R13 .6844 LSA 558.2 MSA 144.0 SSA 21.5 SG1 722.8 SG2 405.7 THA 176.96 EL1 458.6 EL2 136.2 ALF 49.76
                                                                                                                                                                                      ST 313.9 SR 360.9 SS 322.5
CRT .8345 CRS .9940 CST .8666
LSA 558.2 MSA 144.0 SSA 21.5
      TOE -. 2436 TRA -. 4519 TC3 .4253 BAU .1582
     RDE -.3199 RRA .0780 RC3 -.1653 FAU .03237
     FOE .3754 FRA -.0178 FC3-1.0808 BSP 2028
BDE .4021 BRA .4586 BC3 .4563 FSP -251
                                                                                                               FLIGHT TIME 72.00
                                                                                                                                                                                                          ARRIVAL DATE FEB 12 1966
LAUNCH DATE DEC 2 1965
                                                                                                              DISTANCE 188.161
   HELIOCENTRIC CONIC
     TO STANCE 100-101

RL 147.48 LAL .00 LOL 69.61 VL 26.484 GAL -6.19 AZL 86.68 MCA 83.40 SMA 120.83 ECC .24435 INC 3.3244 VI 30.209

RP 107.53 LAP 3.30 LOP 153.00 VP 37.015 GAP -12.68 AZP 89.62 TAL 200.00 TAP 283.40 RCA 91.31 APO 150.36 VZ 35.242

RC 46.516 GL 18.00 GP -1.76 ZAL 121.57 ZAP 6.30 ETS 15.05 ZAE 149.00 ETE 336.16 ZAC 63.03 ETC 161.92 CLP -6.05
     PLANETOCENTRIC CONIC

C3 24.409 VHL 4.941 DLA -1.25 RAL 304.19 RAD 6568.0 VEL 12.074 PTH 2.16 VHP 8.262 DPA -17.20 RAP 330.90 ECC 1.4017

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 5 10 2223.99 -19.80 42.08 168.42 110.67 3 42 14 1624.0 -16.81 34.68

90.00 14 44 44 4945.23 21.57 216.00 169.08 71.20 16 7 10 4345.2 18.81 208.42

100.00 4 25 56 1963.47 -20.89 22.47 167.97 111.88 4 58 40 1363.5 -17.74 15.09

100.00 16 6 40 4680.98 22.68 196.14 168.66 69.99 17 24 41 4081.0 19.75 168.57

110.00 5 32 51 1754.01 -23.82 5.18 166.58 115.27 6 2 5 1154.0 -20.22 357.89

110.00 17 16 14 4463.21 25.65 178.31 167.36 66.59 18 30 37 3863.2 22.26 170.80

NID-COURSE EXECUTION ACCURACY

NID-COURSE EXECUTION ACCURACY

NID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
    PLANETOCENTRIC CONIC
                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                        SGT 744.8 SGR 407.1 SG3 115.2 ST 324.3 SR 358.6 S5 348.2 RRT -.0705 RRF .0730 RTF -.7001 CRT .8528 CRS .9955 CST .8684 SGB 848.8 R23 -.0029 R13 .7005 LSA 578.1 M5A 142.5 SSA 22.4 SG1 745.6 SG2 405.7 THA 176.86 EL1 465.5 EL2 130.5 ALF 48.36
      TOE -.2480 TRA -.4285 TC3 .4800 BAU .1671
      ROE -.3084 RRA .0703 RC3 -.4787 FAU .03536
FDE .4191 FRA -.0566 FC3-1.2542 BSP 2119
BOE .3958 BRA .4342 BC3 .5122 FSP -290
                                                                                                       SGB 848.8 R23 -. 0029 R13 .7005
                                                                                                                                                                                                         ARRIVAL DATE FEB 14 1966
                                                                                                               FLIGHT TIME 74.00
LAUNCH DATE DEC 2 1965
                                                                                                              DISTANCE 194.966
    HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
      C3 23.154 VHL 4.812 DLA -.86 RAL 302.46 RAD 6567.9 VEL 12.022 PTH 2.15 VHP 7.746 DPA -17.04 RAP 331.77 ECC 1.3810
     C3 23.154 VHL 4.812 DLA -.86 RAL 302.46 RAD 6567.9 VEL 12.022 PTH 2.15 VMP 7.746 DPA -17.04 RAP 351.77 ECC 1.3810 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 24 2223.00 -19.77 42.02 165.91 110.69 3 32 27 1623.0 -16.78 34.62 90.00 14 40 41 4920.37 21.02 214.39 166.35 70.58 16 2 41 4320.4 18.18 206.86 100.00 4 16 21 1961.91 -20.85 22.37 165.46 111.92 4 49 3 1361.9 -17.69 15.00 100.00 16 2 25 4656.70 22.11 194.57 165.92 69.35 17 20 2 4056.7 19.10 187.06 110.00 5 23 40 1751.16 -23.74 5.00 164.09 115.35 5 52 51 1151.2 -20.13 357.72 110.00 17 11 35 4440.22 25.02 176.83 164.61 65.92 18 25 35 3840.2 21.56 169.39
                                                                                                     MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 766.1 SGR 406.4 SG3 130.2 ST 334.4 SR 355.1 SS 3 RRT -.0774 RRF .0815 RTF -.7142 CRT .8700 CRS .9959 CST . SGB 867.2 R23 -.0048 R13 .7146 LSA 599.1 MSA 141.5 SSA SG1 767.0 SG2 404.8 THA 176.74 ELI 471.7 EL2 124.1 ALF 4
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                      CRT .8700 CRS .9959 CST .8709
LSA 599.1 MSA 141.5 SSA 23.3
EL1 471.7 EL2 124.1 ALF 46.98
      TOE -.2528 TRA -.4056 TC3 .5329 BAU .1753
      ROE -. 2976 RRA . 0629 RC3 -. 1916 FAU . 03877
      FOE .4698 FRA -.1021 FC3-1.4497 BSP 2205
BDE .3905 BRA .4105 BC3 .5663 FSP -335
      BOE .3905 BRA .4105 BC3 .5663 FSP
                                                                                                                                                                                                          ARRIVAL DATE FEB 16 1966
                                                                                                               FLIGHT TIME 76.00
LAUNCH DATE DEC 2 1965
    HELIOCENTRIC CONIC
                                                                                                              DISTANCE 201.764
      RL 147.48 LAL .00 LOL 69.61 VL 26.860 GAL -6.24 AZL 86.63 HCA 89.89 SMA 123.08 ECC .22510 INC 3.3699 VI 30.209
RP 107.56 LAP 3.37 LOP 159.50 VP 37.274 GAP -10.84 AZP 89.99 TAL 202.64 TAP 292.53 RCA 95.37 APO 150.78 V2 35.230
RC 49.420 GL 19.49 GP -2.02 ZAL 124.31 ZAP 11.14 ETS 9.28 ZAE 147.29 ETE 337.61 ZAC 64.61 ETC 162.16 CLP -10.96
     PLANETOCENTRIC CONIC
      C3 22.121 VHL 4.703 DLA -.50 RAL 300.79 RAD 6567.9 VEL 11.979 PTH 2.13 VHP 7.257 DPA -16.92 RAP 332.55 ECC 1.3640
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                INJ AZMTH INJ TIME
110.69 3 23 8
70.04 15 58 18
111.93 4 39 53
68.80 17 15 29
115.39 5 44 3
65.33 18 20 41
                                                                                                                      163.57
                                                                                                                                                                                              1623.0
                                                                                                                                                                                                                    -16.78
            90.00
                                2 46 5 2223.00
                                                                             -19.77
                                                                                                    42.02
                                                                                                                                                                                                4298.2
                             14 36 39
                                                                                                                          163.82
                                                    4898.19
                                                                               20.51
                                                                                                   212.96
                                                                                                                                                                                                1361.4
                                                                                                                                                                                                                     -17.68
                                                                                                                                                                                                                                              14.96
                             4 7 11 1961.37
15 58 14 4635.06
                                                                                                                          163.12
                                                                             -20.84
                                                                                                     22.33
                                                                                                                                                                                                4035.1
                                                                                                                                                                                                                     18.51
                                                                             21.58
                                                                                                   193.18
                                                                                                                          163.39
                             5 14 54 1749.43
17 7 1 4419.77
                                                                                                                                                                                                                   -20.07
                                                                                                                                                                                               1149.4
                                                                                                                                                                                                                                             357.62
                                                                                                                          161.77
                                                                                                       4.89
                                                                             -23.69
                                                                                                                                                                                                3819.8
                                                                                                                                                                                                                     20.91
                                                                                                                          162.07
          110.00
                                                                             24.45
                                                                                                   175.51
                                                                                                     MID-COURSE EXECUTION ACCURACY
SGT 784.9 SGR 404.9 SG3 147.6
RRT -.0857 RRF .0917 RTF -.7266
CRT .8859 CRS .9956 CST .8739
SGB 883.2 R23 -.0071 R13 .7272
SG1 786.0 SG2 402.9 THA 176.56
EL1 476.7 EL2 117.2 ALF 45.65
     DIFFERENTIAL CORRECTIONS
       TOE -.2572 TRA -.3830 TC3 .5825 BAU .1825
       RDE -. 2873 RRA .0558 RC3 -. 2041 FAU .04267
      FOE .5284 FRA -.1553 FC3-1.6700 BSP 2281
BDE .3856 BRA .3870 BC3 .6172 FSP -386
```

JPL TM 33-99

FLIGHT TIME 78.00 ARRIVAL DATE FEB 18 1966 LAUNCH DATE DEC 2 1965 DISTANCE 208.549 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.019 GAL -6.27 AZL 86.61 MCA 93.13 SMA 124.07 ECC .21711 INC 3.3925 V1 30.209
RP 107.58 LAP 3.39 LOP 162.75 VP 37.383 GAP -9.98 AZP 90.19 TAL 203.95 TAP 297.09 RCA 97.13 APO 151.00 V2 35.224
RC 51.018 GL 20.16 GP -2.17 ZAL 125.58 ZAP 13.74 ETS 7.92 ZAE 146.81 ETE 338.07 ZAC 65.26 ETC 162.24 CLP -13.57 PLANETOCENTRIC CONIC C3 21.273 VHL 4.612 DLA -.17 RAL 299.19 RAD 6567.9 VEC 11.944 PTH 2.13 VHP 6.796 DPA -16.85 RAP 333.22 ECC 1.35D1 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 37 15 2223.89 14 32 46 4878.44 3 58 31 1961.76 15 54 11 4615.81 5 6 35 1748.71 17 2 37 4401.62 161.42 110.67 1623.9 -16.80 90.00 3 14 19 -19.79 42.07 34.67 90.00 20.05 211.70 161.50 69.57 15 54 5 4276.4 17.08 204.27 160.98 111.92 4 31 13 68.32 17 11 7 100.00 -20.85 22.36 1361.8 -17.69 14.99 100.00 21.10 191.95 161.06 4015.8 17.97 184.55 115.41 5 35 43 1148.7 64.83 18 15 59 3801.6 -20.05 110.00 -23.67 4.85 159.64 357.5A 110.00 23.93 174.36 159.74 20.34 167.06 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 800.9 SGR 402.5 SG3 167.3 RRT -.0956 RRF .1038 RTF -.7369 SGB 896.3 R23 -.0100 R13 .7376 ST 351.9 SR 344.9 SS 438.5 CRT .9000 CRS .9946 CST .8770 TOE -.2613 TRA -.3613 TC3 .6270 BAU .1886 ROE -.2772 RRA .0491 RC3 -.2160 FAU .04711 FOE .5962 FRA -.2167 FC3-1.9174 BSP 2347 LSA 643.8 MSA 141.4 SSA 24.3 BOE .3810 BRA .3646 BC3 .6632 FSP -445 SG1 802.1 SG2 400.0 THA 176.34 EL1 480.2 EL2 110.2 ALF 44.36 LAUNCH DATE DEC 2 1965 FLIGHT TIME 80.00 ARRIVAL DATE FEB 20 1966 HELIOCENTRIC CONIC DISTANCE 215.319 RL 147.48 LAL .00 LOL 69.61 VL 27.162 GAL -6.31 AZL 86.58 MCA 96.37 SMA 124.97 ECC .21008 INC 3.4153 VI 30.209 RP 107.61 LAP 3.39 LOP 165.99 VP 37.479 GAP -9.16 AZP 90.38 TAL 205.23 TAP 301.60 RCA 98.72 APO 151.22 V2 35.216 RC 52.701 GL 20.76 GP -2.34 ZAL 126.77 ZAP 16.47 ETS 6.98 ZAE 146.59 ETE 338.34 ZAC 65.79 ETC 162.28 CLP -16.31 PLANETOCENTRIC CONTC C3 20.580 VML 4.536 OLA .14 RAL 297.69 RAO 6567.8 VEL 11.915 PTH 2.12 VMP 6.361 DPA -16.84 RAP 333.77 ECC 1.3387
LNCH AZMTH LNCH TIME L-I TIME IN) LAT INJ LONG IN, RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 28 58 2225.59 -19.83 42.18 159.45 110.63 3 6 4 1625.6 -16.85 34.78
90.00 14 29 6 4860.85 19.62 210.58 159.39 69.17 15 50 7 4260.8 16.61 203.19
100.00 3 50 23 1962.99 -20.88 22.44 159.02 111.89 4 23 6 1363.0 -17.72 15.06
100.00 15 50 22 4598.68 20.67 190.86 158.95 67.91 17 7 1 3998.7 17.49 183.51
110.00 4 58 46 1748.90 -23.68 4.86 157.70 115.41 5 27 55 1148.9 -20.06 357.59
110.00 16 58 28 4385.53 23.46 173.35 157.62 64.39 18 11 34 3785.5 19.82 166.10 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 813.4 SGR 399.3 SG3 190.0 RRT -.1111 RRF .1197 RTF -.7468 SGB 906.1 R23 -.0110 R13 .7476 TOE -.2630 TRA -.3391 TC3 .6684 BAU .1943 ST 356.6 SR 338.0 SS 472.4 CRT .9121 CRS .9929 CST .8792 RDE -.2673 RRA .0425 RC3 -.2275 FAU .05227 FOE .6734 FRA -.2893 FC3-2.1987 BSP 2437 BDE .3750 BRA .3418 BC3 .7061 FSP -517 LSA 666.2 MSA 142.1 SSA 24.6 SG1 815.0 SG2 396.1 THA 175.91 EL1 480.5 EL2 102.9 ALF 43.31 FLIGHT TIME 82.00 ARRIVAL DATE FEB 22 1966 - LAUNCH DATE DEC 2 1965 DISTANCE 222.071 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.289 CAL -6.34 AZL 86.56 MCA 99.61 SMA 125.79 ECC .20393 INC 3.4384 V1 30.209
RP 107.63 LAP 3.39 LOP 169.24 VP 37.563 CAP -8.37 AZP 90.58 TAL 206.46 TAP 306.07 RCA 100.13 APO 151.44 V2 35.208
RC 54.462 GL 21.32 GP -2.54 ZAL 127.85 ZAP 19.35 ETS 6.29 ZAE 146.64 ETE 338.43 ZAC 66.19 ETC 162.28 CLP -19.19 PLANETOCENTRIC CONIC C3 20.013 VHL 4.474 DLA .43 RAL 296.31 RAD 6567.8 VEL 11.891 PTH 2.11 VHP 5.952 DPA -16.90 RAP 334.19 ECC 1.3294 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 21 15 2228.02 14 25 44 4845.10 3 42 48 1964.98 15 46 52 4583.36 4 51 30 1749.92 16 54 39 4371.19 90.00 157.68 1628.D -16.91 -19.89 42.33 110.58 2 58 23 34.92 68.81 15 46 29
111.84 4 15 33
67.55 17 3 15
115.38 5 20 40
64.02 18 7 30 90.00 19.24 209.58 157.48 4245.1 16.19 202.23 157.25 100.00 -20.93 22.56 1365.0 -17.78 15.18 700.00 20.27 189.89 157.04 3983.4 17.05 182.58 -20.09 110.00 -23.71 4.92 155.94 1149.9 357.65 110.00 23.03 172.45 155.70 3771.2 19.35 165.25 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 821.0 SGR 395.3 SG3 215.7 RRT -.1249 RRF .1372 RTF -.7518 SGB 911.2 R23 -.0159 R13 .7529 ST 362.0 SR 329.7 SS 510.0 CRT .9225 CRS .9910 CST .8816 LSA 691.8 MSA 144.0 SSA 24.6 TOE -.2654 TRA -.3206 TC3 .6979 BAU .1974 ROE -.2572 RRA .0363 RC3 -.2388 FAU .05806 FOE .7645 FRA -.3707 FC3-2.5114 BSP 2467 BOE .3695 BRA .3226 BC3 .7376 FSP -595 SG1 822.9 SG2 391.3 THA 175.55 EL1 480.1 EL2 95.9 ALF 42.11 LAUNCH DATE DEC 2 1965 ARRIVAL DATE FER 24 1966 FLIGHT TIME 84.00 HELIOCENTRIC CONTC DISTANCE 228.803 RL 147.48 LAL .00 LOL 69.61 VL 27.401 GAL -6.37 AZL 86.54 MCA 102.85 SMA 126.52 ECC .19857 INC 3.4619 V1 30.209 RP 107.66 LAP 3.38 LOP 172.48 VP 37.637 GAP -7.82 AZP 90.77 TAL 207.62 TAP 310.47 RCA 101.40 APO 151.65 V2 35.200 RC 56.291 GL 21.83 GP -2.75 ZAL 128.83 ZAP 22.39 ETS 5.75 ZAE 146.97 ETE 338.31 ZAC 66.44 ETC 162.23 CLP -22.23 PLANETOCENTRIC CONIC C3 19.551 VHL 4.422 DLA .71 RAL 295.03 RAO 6567.8 VEL 11.871 PTH 2.11 VMP 5.569 DPA -17.03 RAP 334.47 ECC 1.3218 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 14 7 2231.12 -19.97 42.53 156.10 110.51 2 51 18 1631.1 -17.00 35.11 90.00 14 22 43 4830.89 18.89 208.69 155.77 68.50 15 43 14 4230.9 15.80 201.37 100.00 3 35 47 1967.67 -21.00 22.73 155.68 111.78 4 8 35 1367.7 -17.86 15.35 100.00 15 43 44 4569.58 19.91 189.03 155.33 67.23 16 59 54 3969.6 16.65 181.75 4 44 47 1751.67 16 51 13 4358.34 -23.76 5.03 5 13 59 -20.15 154.38 115.33 1151.7 357.75 63.68 18 3 51 22.65 171.65 153.99 3758.3 18.93 164.49 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 364.8 SR 320.0 SS 550.2 CRT .9309 CRS .9887 CST .8830 LSA 718.5 MSA 146.4 SSA 24.3 ELI 477.0 EL2 89.4 ALF 40.98 SGT 823.1 SGR 390.7 SG3 245.1 RRT -.1418 RRF .1590 RTF -.7539 SGB 911.1 R23 -.0222 R13 .7554 TOE -.2660 TRA -.3039 TC3 .7183 BAU .1988 RDE -.2467 RRA .0301 RC3 -.2500 FAU .06467 FDE .8694 FRA -.4643 FC3-2.8637 BSP 2477 BDE .3628 BRA .3054 BC3 .7606 FSP -686 SG1 825.5 SG2 385.6 THA 175.07

ARRIVAL DATE FEB 26 1966

FLIGHT TIME 86.00 LAUNCH DATE DEC 2 1965 DISTANCE 235.512 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.499 GAL -6.40 AZL 86.51 HCA 106.09 SMA 127.18 ECC .19391 INC 3.4860 V1 30.209 RP 107.69 LAP 3.35 LOP 175.72 VP 37.700 GAP -6.90 AZP 90.97 TAL 208.70 TAP 314.79 RCA 102.52 APO 151.84 V2 35.191 RC 58.184 GL 22.30 GP -2.99 ZAL 129.70 ZAP 25.61 ETS 5.32 ZAE 147.58 ETE 337.95 ZAC 66.53 ETC 162.14 CLP -25.45 PLANETOCENTRIC CONIC C3 19.174 VHL 4,379 DLA .98 RAL 293.88 RAD 6567.8 VEL 11.856 PTH 2.10 VHP 5.211 DPA -17.25 RAP 334.57 ECC 1.3155 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 110.42 2 44 47 68.22 15 40 26 111.70 4 2 11 66.95 16 56 58 115.27 5 7 51 63.39 18 0 40 154.71 1634.9 -17.10 35.34 2 7 32 2234.86 -20.06 42.77 14 20 8 4817.93 18.56 207.88 154.26 4217.9 15.44 200.59 90.00 -17.95 15.55 3 29 20 1971.00 -21.08 22.94 154.29 1371.0 15 41 1 4557.02 4 38 37 1754.11 16 48 13 4346.68 100.00 19.58 188.25 153.82 3957.0 16.29 181.00 153.00 1154.1 357.90 -23.83 5.19 -20.23 3746.7 110.00 22.29 170.93 152.47 18,54 163.81 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 364.7 SR 308.8 SS 593.5 CRT .9371 CRS .9864 CST .8831 LSA 746.8 MSA 149.3 SSA 23.9 SGT 818.2 SGR 385.5 SG3 278.3 RRT -.1618 RRF .1850 RTF -.7521 SGB 904.5 R23 -.0304 R13 .7542 TDE -.2644 TRA -.2901 TC3 .7273 BAU .1981 ROE -.2358 RRA .0241 RC3 -.2614 FAU .07215 FDE .9907 FRA -.5703 FC3-3.2577 BSP 2462 SG1 821.2 SG2 379.0 THA 174.46 BDE .3545 BRA .2911 BC3 .7728 FSP -789 EL1 470.5 EL2 83.5 ALF 39.94 ARRIVAL DATE FEB 28 1966 LAUNCH DATE DEC 2 1965 FLIGHT TIME 88.00 HELIOCENTRIC CONIC DISTANCE 242.196 RL 147.48 LAL .00 LOL 69.61 VL 27.586 GAL -6.43 AZL 86.49 HCA 109.32 SMA 127.76 ECC .18988 INC 3.5108 V1 30.209
RP 107.72 LAP 3.31 LOP 178.96 VP 37.754 GAP -6.22 AZP 91.16 TAL 209.69 TAP 319.01 RCA 103.50 APO 152.02 V2 35.181
RC 60.133 GL 22.74 GP -3.27 ZAL 130.45 ZAP 29.03 ETS 4.94 ZAE 148.48 ETE 337.31 ZAC 66.43 ETC 161.98 CLP -28.86 PLANETOCENTRIC CONIC C3 18.865 VHL 4.343 OLA 1.25 RAL 292.86 RAD 6567.8 VEL 11.843 PTH 2.10 VHP 4.878 OPA -17.57 RAP 334.49 ECC 1.3105 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 1 30 2239.21 -20.16 43.05 153.49 110.32 2 38 49 1639.2 -17.21 35.61 2 1 30 2239.21 15 38 7 207.13 152.93 67.97 4205.9 15.11 199.87 4805.93 18.26 90.00 14 18 1 3 23 25 3 56 20 153.07 111.60 1375.0 15.79 23.20 1974.95 -21.18 100.00 66.69 16 54 32 115.18 5 2 17 63.13 17 57 57 4545.41 187.52 3945.4 15.95 100.00 15 38 46 19.27 152.48 151.79 4 32 59 1757.18 5.38 1157.2 -23.92 110.00 170.27 3736.0 18.18 110.00 16 45 41 4335.95 21.97 151.13 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 805.8 SGR 380.2 SG3 316.2 RRT -.1888 RRF .2179 RTF -.7468 ST 358.9 SR 295.9 S5 638.4 CRT .9411 CRS .9837 CST .8806 LSA 774.7 MSA 152.1 SSA 23.4 TOE -.2585 TRA -.2782 TC3 .7265 BAU .1958 ROE - .2242 RRA .0180 RC3 - .2736 FAU .08070 FOE 1.1271 FRA -.6918 FC3-3.7035 BSP 2454 BDE .3422 BRA .2788 BC3 .7763 FSP -913 SGB 891.0 R23 -.0395 R13 .7498 SG1 809.9 SG2 371.4 THA 173.55 EL1 458.5 EL2 78.3 ALF 39.18 ARRIVAL DATE MAR 2 1966 FLIGHT TIME 90.00 LAUNCH DATE DEC 2 1965 DISTANCE 248.855 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.660 GAL -6.44 AZL 86.46 HCA 112.55 SMA 128.27 ECC .18640 INC 3.5367 VI 30.209 RP 107.75 LAP 3.27 LOP 182.20 VP 37.800 GAP -5.56 AZP 91.36 TAL 210.58 TAP 323.13 RCA 104.36 APO 152.18 V2 35.171 RC 62.133 GL 23.14 GP -3.57 ZAL 131.08 ZAP 32.67 ETS 4.60 ZAE 149.67 ETE 336.33 ZAC 66.14 ETC 161.75 CLP -32.50 PLANETOCENTRIC CONIC C3 18.611 VML 4.314 DLA 1.51 RAL 291.97 RAD 6567.8 VEL 11.832 PTH 2.10 VMP 4.569 DPA -18.00 RAP 334.20 ECC 1.3063 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 110.20 2 33 23 67.74 15 36 18 111.49 3 51 1 66.46 16 52 36 115.08 4 57 13 62.88 17 55 46 -17.34 2 33 23 1644.2 35.92 -20.28 43.36 152.44 90.00 1 55 58 2244.17 4194.6 14.79 199.18 14 16 23 4794.59 17.97 206.42 151.77 90.00 3 18 1 1979.53 15 37 2 4534.47 -21.30 23.49 152.03 1379.5 -18.19 16.07 100.00 186.85 151.32 3934.5 15.63 179.65 18.97 100.00 4 27 52 1760.88 1160.9 -20.44 354.30 -24.02 5.62 150.76 110.00 169.66 3725.9 17.85 162.60 16 43 40 21.66 149.97 4325.89 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 783.9 SGR 374.7 SG3 358.4 RRT -.2150 RRF .2559 RTF -.7327 ST 350.6 SR 281.2 SS 687.4 CRT .9425 CRS .9811 CST .8755 TOE -.2507 TRA -.2719 TC3 .7080 BAU .1900 ROE - .2116 RRA .0119 RC3 - .2865 FAU .09017 SGB 868.8 R23 -.0564 R13 .7375 SGI 789.1 SGZ 363.5 THA 172.54 FDE 1.2849 FRA -.8250 FC3-4.1945 BSP 2369 BDE .3281 BRA .2722 BC3 .7637 FSP -1047 LSA 806.2 MSA 155.4 SSA 22.7 EL1 443.3 EL2 74.3 ALF 38.36 ARRIVAL DATE MAR 4 1966 FLIGHT TIME 92.00 LAUNCH DATE DEC 2 1965 DISTANCE 255.486 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.725 GAL -6.46 AZL 86.44 HCA 115.79 SMA 128.71 ECC .18340 INC 3.5638 VI 30.209
RP 107.78 LAP 3.21 LOP 185.44 VP 37.837 GAP -4.93 AZP 91.55 TAL 211.36 TAP 327.14 RCA 105.11 APO 152.32 VZ 35.160
RC 64.180 GL 23.53 GP -3.91 ZAL 131.60 ZAP 36.55 ETS 4.27 ZAE 151.15 ETE 334.91 ZAC 65.63 ETC 161.44 CLP -36.37 PLANETOCENTRIC CONIC 1.78 RAL 291.20 RAO 6567.7 VEL 11.823 PTH 2.09 VHP 4.286 DPA -18.54 RAP 333.69 ECC 1.3028 C3 18.401 VHL 4.290 OLA INU LAT INU LONG INU RT ASC INU AZMTH INU TIME PO CST TIM INU 2 L'AT INU 2 LONG LNCH AZHTH LNCH TIME L-I TIME 110.07 2 28 25 67.52 15 35 2 -17,49 151.56 1649.8 1 50 56 2249.77 -20.41 43.72 2 28 25 36.26 4783.66 17.68 205.74 150.77 4183.7 14.48 198.53 14 15 18 3 46 11 1384.7 -18.33 16.39 -21.42 23.82 151.15 111.36 100.00 3 13 6 1984.73 66.23 16 51 13 114.96 4 52 40 62.65 17 54 6 3923.9 186.20 150.32 15.31 179.03 100.00 15 35 49 4523.93 18.68 358.56 4 23 14 1765.19 16 42 10 4316.24 -24.15 5.89 149.89 1165.2 -20.58 110.00 21.35 169.07 148.96 3716.2 17.52 162.04 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 337.3 SR 264.5 SS 739.7 CRT .9408 CRS .9784 CST .8660 LSA 839.8 MSA 158.7 SSA 21.9 SGT 751.9 SGR 369.4 SG3 405.3 RRT - 2421 RRF .3004 RTF - .7082 SGB 837.7 R23 - .0820 R13 .7159 TOE -.2388 TRA -.2705 TC3 .6725 BAU .1812 ROE - .1979 RRA .0057 RC3 - .3006 FAU .10062 FOE 1.4639 FRA -.9713 FC3-4.7340 B5P 2238 BDE .3102 BRA .2706 BC3 .7366 FSP -1196 SG1 758.7 SG2 355.2 THA 171.29 EL1 422.7 EL2 71.6 ALF 37.69

ARRIVAL DATE MAR 6 1966

LAUNCH DATE DEC 2 1965

```
HELIOCENTRIC CONIC
                                                                             DISTANCE 262.089
    RL 147.48 LAL .00 LOL 69.61 VL 27.779 GAL -6.46 AZL 86.41 MCA 119.01 SMA 129.09 ECC .18083 INC 3.5924 VI 30.209 RP 107.81 LAP 3.14 LOP 188.67 VP 37.866 GAP -4.32 AZP 91.74 TAL 212.02 TAP 331.04 RCA 105.75 APO 152.44 V2 35.149 RC 66.268 GL 23.90 GP -4.29 ZAL 132.00 ZAP 40.68 ETS 3.94 ZAE 152.91 ETE 332.92 ZAC 64.89 ETC 161.03 CLP -40.49
   PLANETOCENTRIC CONIC
    C3 18.225 VHL 4.269 DLA 2.05 RAL 290.55 RAD 6567.7 VEL 11.816 PTH 2.09 VHP 4.029 DPA -19.20 RAP 332.95 ECC 1.2999
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   109.92 2 23 55
                                                                                                                                                  -17.65
                                                                                  150.83
                                                                                                                                  1656.0
                                                                                                                                                                   36.65
        90.00
                     1 46 19 2256.04
                                                     -20.55
                                                                     44.12
                   14 14 46 4772.89
3 8 37 1990.59
15 35 9 4513.58
4 19 3 1770.12
16 41 12 4306.81
                                                                     205.08
                                                                                                                 15 34 19
                                                                                                                                     4172.9
                                                                                                                                                                    197.89
        90.00
                                                      17.40
                                                                                    149.93
                                                                                                      67.30
                                                                                                                                                     14.18
                                                                                                                   3 41 47
                                                                                                                                                                     16.75
       100.00
                                                     -21.57
                                                                      24.19
                                                                                    150.42
                                                                                                      111.21
                                                                                                                                     1390.6
                                                                                                                                                    -18.49
                                                                                                     66.02 16 50 23
114.83 4 48 33
62.43 17 52 59
                                                                                                                                 3913.6 15.00
1170.1 -20.74
       100.00
                                                                                 149.48
149.17
                                                                                                                                                                    178.41
                                                     18.40
                                                                     185.56
                                                                                                                                                                    358.86
       110.00
                                                    -24.29
                                                                      6.20
                                                                                                                                                     17.20
       110.00
                                                 21.06
                                                                                                                                    3706.8
                                                                                                                                                                    161.50
                                                                    168.50
                                                                                    148.11
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 710.3 SGR 365.3 SG3 457.2

RRT -2719 RRF .3541 RTF -.6702

SGB 798.8 R23 -.1187 R13..6834

SG1 719.4 SG2 347.1 THA 169.59
                                                                                                                                 ST 316.0 SR 245.9 SS 792.7
CRT .9342 CRS .9751 CST .8484
    TOE -.2204 TRA -.2732 TC3 .6224 BAU .1701
    ROE -.1832 RRA -.0007 RC3 -.3165 FAU .11225
                                                                                                                                LSA 873.0 MSA 161.4 SSA 21.2
EL1 394.2 EL2 70.3 ALF 37.42
    FOE 1.6591 FRA-1.1337 FC3-5.3325 BSP 2096
BOE .2865 BRA .2732 BC3 .6983 FSP -1370
LAUNCH DATE DEC 2 1965
                                                                              FLIGHT TIME 96.00
                                                                                                                                            ARRIVAL DATE MAR 8 1966
  HELIOCENTRIC CONIC
                                                                             DISTANCE 268.664
    RL 147.48 LAL .00 LOL 69.61 VL 27.825 GAL -6.46 AZL 86.38 MCA 122.24 SMA 129.41 ECC .17862 INC 3.6228 V1 30.209
RP 107.85 LAP 3.06 LOP 191.90 VP 37.889 GAP -3.74 AZP 91.93 TAL 212.57 TAP 334.81 RCA 106.30 APO 152.53 V2 35.138
RC 68.394 GL 24.26 GP -4.72 ZAL 132.29 ZAP 45.07 ETS 3.58 ZAE 154.91 ETE 330.15 ZAC 63.93 ETC 160.51 CLP -44.88
   PLANETOCENTRIC CONIC
    C3 18.074 VHL 4.251 OLA 2.34 RAL 290.03 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 3.797 DPA -19.99 RAP 331.95 ECC 1.2975 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 42 5 2263.04
14 14 48 4762.03
                                                                                  150.25
                                                                      44,57
        90.00
                                                      -20.71
                                                                                                     109.75
                                                                                                                   2 19 48
                                                                                                                                    1663.0
                                                                                                                                                   -17.83
                                                                                                                                                                       37.08
                                                                                                                                                                     197.24
                                                                     204.41
                                                                                                       67.09 15 34 10
                                                                                                                                     4162.0
                                                                                                                                                     13.86
        90.00
                                                      17.11
                                                                                     149.23
                                                                                                     111.05 3 37 48
65.80 16 50 7
                   3 4 51 1997.15
15 35 4 4503.15
4 15 15 1775.72
16 40 48 4297.34
       100.00
                                                     -21.73
                                                                      24.62
                                                                                 149.65
148.77
                                                                                                                                     1397.1
                                                                                                                                                    -18.68
                                                                                                                                                                      17.15
                                                                                                                                                                  177.80
                                                                                                                                     3903.2
                                                                                                                                                    14.69
       100.00
                                                     18.11
                                                                     184.92
                                                                                 148.60
                                                                                                     114.67 4 44 51
62.21 17 52 26
                                                                                                                                                                     359.20
                                                                                                                                     1175.7
                                                                                                                                                  -20.91
       110.00
                                                     -24.45
                                                                       6.56
                                                                                                                                     3697.3
                                                     20.76
                                                                     167.93
                                                                                     147.40
                                                                                                                                                      16.88
                                                                                                                                                                     160.95
       110.00
  DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SGT 659.6 SGR 362.3 SG3 512.6

RRT -.2877 RRF .4129 RTF -.6049

SGB 752.5 R23 -.1819 R13 .6286

SG1 670.7 SG2 341.2 THA 167.82
                                                                                                                                ST 290.4 SR 225.1 SS 849.4
CRT .9198 CRS .9717 CST .8188
LSA 910.5 MSA 164.4 SSA 20.3
    TOE -.1976 TRA -.2838 TC3 .5486 BAU .1552
    ROE -.1669 RRA -.0073 RC3 -.3339 FAU .12451
    FOE 1.8776 FRA-1.3013 FC5-5.9640 BSP 1863
BDE .2586 BRA .2839 BC3 ,6422 FSP -1550
                                                                                                                                EL1 360.4 EL2 71.2 ALF 37.18
                                                                                                                                           ARRIVAL CATE MAR 10 1966
LAUNCH CATE CEC 2 1965
                                                                            FLIGHT TIME 98.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 275.210
    RU 147.48 LAL .00 LOL 69.61 VL 27.862 GAL -6.45 AZL 86.34 MCA 125.46 SMA 129.67 ECC .17674 JNC 3.6554 V1 30.209
RP 107.89 LAP 2.98 LOP 193.13 VP 37.906 GAP -3.19 AZP 92.12 TAL 213.01 TAP 338.47 RCA 106.76 APO 152.59 VZ 35.126
RC 70.553 GL 24.63 GP -5.18 ZAL 132.46 ZAP 49.72 ETS 3.19 ZAE 157.12 ETE 326.32 ZAC 62.74 ETC 159.86 CLP -49.52
   PLANETOCENTRIC CONIC
    C3 17.945 VHL 4.236 DLA 2.64 RAL 289.62 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 3.591 DPA -20.90 RAP 330.69 ECC 1.2953
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 138 11 2270.84 -20.89 45.08 149.81 109.56 2 16 1 1670.8 -18.04 37.57 90.00 14 15 27 4750.86 16.82 203.73 148.65 66.88 15 34 38 4150.9 13.54 196.58 100.00 3 0 45 2004.49 -21.91 25.09 149.41 110.86 3 34 10 1404.5 -18.88 17.61 100.00 15 35 33 4492.45 17.81 184.27 148.20 65.59 16 50 26 3892.4 14.36 177.17
                                                                                                                                   1404.5
3892.4 14.36
1182.0 -21.11
16.55
                                                                                                    65.59 16 50 26
114.49 4 41 32
61.99 17 52 26
                   4 11 49 1782.04
16 40 58 4287.66
                                               -24.63
20.45
                                                                      6.96
                                                                                    148.17
                                                                                                                                                                    359.56
       110.00
                                                                    167.35
                                                                                    146.82
                                                                                                                                                                    160.40
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                        SGT 604.7 SGR 361.3 SG3 571.2
RRT -.2812 RRF .4778 RTF -.4994
SG8 704.5 R23 -.2815 R13 .5420
SG1 617.1 SG2 339.8 THA 166.21
                                                                                                                                ST 258.4 SR 202.1 SS 907.3
CRT .8900 CRS .9674 CST .7654
    TOE -.1681 TRA -.3010 TC3 .4540 BAU .1380
    RDE -.1492 RRA -.0140 RC3 -.3530 FAU .13742
    FDE 2.1126 FRA-1.4743 FC3-6.6298 BSP 1582
BDE .2248 BRA .3013 BC3 .5751 FSP -1742
                                                                                                                                LSA 950.1 MSA 166.9 SSA
                                                                                                                                                                        19.3
                                                                                                                                FL1 319.5 EL2 74.5 ALF 37.21
                                                                                                                                            ARRIVAL CATE MAR 12 1966
LAUNCH CATE DEC 2 1965
                                                                             FLIGHT TIME 100.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 281.727
    RL 147.48 LAL .00 LOL 69.61 VL 27.892 GAL -6.43 AZL 86.31 HCA 128.69 SMA 129.88 ECC .17513 INC 3.6908 V1 30.209
RP 107.92 LAP 2.88 LOP 198.35 VP 37.916 GAP -2.65 AZP 92.31 TAL 213.33 TAP 342.01 RCA 107.14 APO 152.63 V2 35.114
RC 72.741 GL 24.99 GP -5.70 ZAL 132.53 ZAP 54.63 ETS 2.75 ZAE 159.45 ETE 320.99 ZAC 61.33 ETC 159.05 CLP -54.42
  PLANETOCENTRIC CONIC
    C3 17.831 VHL 4.223 DLA 2.97 RAL 289.32 RAD 6567.7 VEL 11.799 PTH 2.09 VHP 3.412 DPA -21.93 RAP 329.17 ECC 1:2934
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    109.34
                                                                                  149.49
                    1 34 32 2279.56
14 16 42 4739.18
                                                                      45.64
                                                                                                                   2 12 32
                                                                                                                                     1679.6
                                                                                                                                                    -18.26
                                                                                                                                                                      38.11
        90.00
                                                      -21.09
                                                                                                                 15 35 41
                                                                                                                                     4139.2
                                                                                                                                                     13.20
                                                                                                                                                                     195.89
        90.00
                                                      16.50
                                                                     203.01
                                                                                    148.21
                                                                                                       66.66
       100.00 2 57 16 2012.71
100.00 15 36 39 4481.26
                                                                                                       110.65 3 30 49
65.37 16 51 21
                                                                                                                                     1412.7
                                                                                                                                                    -19.10
                                                                                                                                                                      18.11
                                                                      25.62
                                                                                   149.10
                                                                                                     110.65
                                                      -22.11
                                                                                                                                                                  176.51
                                                                                  147.75
                                                                                                                                     3881.3
                                                                                                                                                    14.02
                                                                     183.59
                                                     17.49
                     4 8 42 1789.15
16 41 43 4277.58
                                                                                                     114.29 4 38 31
61.77 17 53 1
                                                                                   147.87
                                                                                                                                     1189.2
                                                                                                                                                   -21.34
                                                                                                                                                                         .01
                                                     -24.83
                                                                       7.42
       110.00
                    16 41 43
                                                                                                                                     3677.6
                                                                                                                                                      16.20
                                                                     166.74
                                                                                     146.36
       118.00
                                                     20.13
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SGT 554.3 SGR 363.3 SG3 631.7
RRT -.2319 RRF .5474 RTF -.3320
                                                                                                                                ST 220.8 SR 177.3 SS 963.3
CRT .8248 CRS .9614 CST .6604
LSA 989.6 MSA 168.7 SSA 18.4
    TCE -.1302 TRA -.3242 TC3 .3391 BAU .1204
    ROE -.1303 RRA -.0210 RC3 -.3743 FAU .15079
                                                                        RRT -.2319 RRF .5474 RTF -.3320
SGB 662.8 R23 -.4276 R13 .4015
SG1 564.8 SG2 346.9 THA 165.97
    FOE 2.3530 FRA-1.6522 FC3-7.3211 BSP 1288
                                                                                                                               EL1 271.1 EL2 81.6 ALF 37.49
    BOE .1842 BRA .3249 BC3 .5050 FSP -1952
                                                                        5G1 564.8 SG2 346.9 THA 165.97
```

FLIGHT TIME 94.00

ARRIVAL DATE MAR 14 1966

LAUNCH DATE DEC 2 1965

```
HELIOCENTRIC CONIC
                                                                                DISTANCE 288.215
    RL 147.48 LAL .00 LOL 69.61 VL 27.915 GAL -6.40 AZL 86.27 HCA 131.91 SNA 130.05 ECC .17377 INC 3.7294 V1 30.209
RP 107.96 LAP 2.77 LOP 201.58 VP 37.921 GAP -2.14 AZP 92.49 TAL 213.53 TAP 345.44 RCA 107.45 APO 152.64 V2 35.101
RC 74.954 GL 25.37 GP -6.26 ZAL 132.49 ZAP 59.76 ETS 2.25 ZAE 161.74 ETE 313.57 ZAC 59.74 ETC 158.08 CLP -59.56
   PLANETOCENTRIC CONIC
    C3 17.729 VHL 4.211 DLA 3.33 RAL 289.13 RAD 6567.7 VEL 11.795 PTH 2.09 VHP 3.259 DPA -23.08 RAP 327.42 ECC 1.2918
    UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 31 7 2289.33 -21.31 46.27 149.31 109.10 2 9 16 1689.3 -18.51 38.72
                   1 31 7 2289.33
14 18 36 4726.74
2 54 1 2021.95
15 38 23 4469.56
4 5 49 1797.18
16 43 4 4266.89
                                                                                                      66.43 15 37 23
110.41 3 27 42
65.14 16 52 52
-114.06 4 35 47
61.54 17 54 11
                                                                                                                                          4126.7
                                                                                                                                                          12.84
                                                                                                                                                                           195.15
         90.00
                                                        16.17
                                                                       202.25
                                                                                       147.87
                                                                                                                                          1421.9
                                                                                                                                                          -19.35
                                                                                                                                                                            18.69
       100.00
                                                        -22.33
                                                                        26.21
                                                                                       148.92
                                                                                     147.41
                                                                                                                                         3869.4
                                                                                                                                                          13.66
                                                                                                                                                                           175.82
                                                        17.15
                                                                       182.87
       100.00
                                                                                                                                         1197.2
                                                                                       147.70
                                                                                                                                                         -21.59
                                                                                                                                                                              . 50
                                                      -25.05
                                                                         7.94
       110.00
                                                  19.78
                                                                                                                                                           15.83
                                                                                                                                         3666.9
                                                                       166.11
                                                                                        146.02
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 526.4 SGR 368.0 SG3 691.0
RRT -.1035 RRF .6161 RTF -.0800
SGB 642.2 R23 -.6007 R13 .1378
SGI 529.0 SG2 364.2 THA 172.10
                                                                                                                                     ST 186.5 SR 150.3 SS 1020.4
CRT .6785 CRS .9529 CST .4515
LSA 1034.0 HSA 170.5 SSA 17.4
    TOE -.0856 TRA -.3561 TC3 .1987 BAU .1052
    RDE -.1099 RRA -.0279 RC3 -.3967 FAU .16367
    FOE 2.6025 FRA-1.8160 FC3-7.9926 BSP 975
                                                                                                                                     EL1 220.6 EL2 93.3 ALF 36.11
    BOE .1392 BRA .3571 BC3 .4437 FSP -2149
                                                                                FLIGHT TIME 104.00
                                                                                                                                                 ARRIVAL DATE MAR 16 1966
LAUNCH DATE DEC 2 1965
                                                                                DISTANCE 294.673
  HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.931 GAL -6.37 AZL 86.23 HCA 135.12 SMA 130.16 ECC .17261 INC 3.7722 V1 30.209
RP 108.00 LAP 2.66 LOP 204.80 VP 37.922 GAP -1.65 AZP 92.68 TAL 213.62 TAP 348.75 RCA 107.70 APO 152.63 V2 35.089
RC 77.191 GL 25.78 GP -6.88 ZAL 132.35 ZAP 65.08 ETS $.67 ZAE 163.76 ETE 303.35 ZAC 58.00 ETC 156.92 CLP -64.89
   PLANETOCENTRIC CONIC
    C3 17.637 VHL 4.200 DLA 3.72 RAL 289.04 RAD 6567.7 VEL 11.791 PTH 2.08 VHP 3.133 OPA -24.31 RAP 325.45 ECC 1.2903 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        108.82 2 6 9
66.19 15 39 43
110.13 3 24 46
64.90 16 55 2
113.79 4 33 15
61.29 17 55 56
                    1 27 49 2300.34
14 21 10 4713.33
                                                                                      149.24
                                                        -21.55
                                                                        46.99
                                                                                                                                         1700.3
                                                                                                                                                         -18.79
                                                                                                                                                                            39.41
        90.00
                                                                        201.44
                                                                                        147.65
                                                                                                                                          4113.3
                                                                                                                                                           12.45
                                                        15.80
        90.00
                   2 50 54 2032.36
15 40 46 4456.55
4 3 8 1006.26
16 45 1 4255.41
                                                                                                                                          1432.4
                                                                                                                                                          -19.63
                                                                                                                                                                             19.33
                                                        -22.57
                                                                         26.89
                                                                                       148.86
       100.00
                                                        16.78
                                                                        182.09
                                                                                       147.18
                                                                                                                                          3856.5
                                                                                                                                                           13.26
       100.00
                                                        -25.30
                                                                          8.52
                                                                                       147.65
                                                                                                                                          1206.3
                                                                                                                                                         -21.87
       110.00
                                     4255.41
                                                                        165.43
                                                                                        145.78
                                                                                                                                          3655.4
                                                      19.41
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                          SGT 541.3 SGR 376.4 SG3 747.7
RRT .0965 RRF .6830 RTF .2243
SGB 659.3 R23 .6423 R13 .2814
SG1 543.7 SG2 373.0 THA 7.28
                                                                                                                                     ST 167.4 SR 122.0 SS 1072.1
CRT .3704 CRS .9383 CST .0581
    TOE -.0320 TRA -.3940 TC3 .0379 BAU .0996
    ROE -.0865 RRA -.0348 RC3 -.4206 FAU .17600
    FOE 2.8376 FRA-1.9698 FC3-8.6387 BSP 835
                                                                                                                                     LSA 1078.2 MSA 171.4 SSA 16.5
    BOE .0941 BRA .3955 BC3 .4223 FSP -2352
                                                                                                                                     EL1 177.4 EL2 106.9 ALF 24.53
                                                                                                                                                 ARRIVAL DATE HAR 18 1966
                                                                                FLIGHT TIME 106.00
LAUNCH DATE DEC 2 1965
                                                                                01STANCE 501.103
   HELIOCENTRIC CONIC
   RL 147.48 LAL .00 LOL 59.61 YL 27.941 GAL -6.33 AZL 86.18 MCA 138.34 SMA 130.24 ECC .17163 INC 3.8200 VI 30.209 RP 108.04 LAP 2.54 LOP 208.01 VP 37.918 GAP -1.18 AZP 92.86 TAL 213.61 TAP-351.95 RCA 107.88 APO 152.59 V2 35.076 RC 79.446 GL 26.20 GP -7.54 ZAL 132.10 ZAP 70.54 ETS 1.02 ZAE 165.17 ETE 289.90 ZAC 56.17 ETC 155.56 CLP -70.37
   PLANETOCENTRIC CONIC
    C3 17.556 VHL 4.190 DLA 4.16 RAL 289.04 RAD 6567.7 VEL 11.787 PTH 2.08 VHP 3.034 DPA -25.63 RAP 323.31 ECC 1.2889
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       | CH AZMTH | LNCH TIME | L-| TIME | INJ LAT | 90.00 | 1 24 35 | 2$12.82 | -21.83 | 90.00 | 14 24 26 | 4698.69 | 15.39 | 100.00 | 2 47 52 | 2044.17 | -22.85 | 100.00 | 15 43 50 | 4442.58 | 16.38 | 110.00 | 4 0 35 | 1816.60 | -25.58 | 110.00 | 16 47 37 | 4242.91 | 19.00 |
                                                                                                                                      1712.8
                                                                                     149.30
                                                                                                        108.50 2 3 8
                                                                                                                                                        -19.10
                                                                                                                                                                           40.19
                                                                        47.80
                                                                                                         65.94 15 42 45
109.82 3 21 57
64.64 16 57 53
113.48 4 30 52
61.03 17 58 20
                                                                                                                                          4098.7
                                                                                                                                                          12.02
                                                                                                                                                                         193.51
                                                                       200.56
                                                                                       147.52
                                                                        27.66
                                                                                      148.92
                                                                                                                                         1444.2
                                                                                                                                                         -19.94
                                                                                                                                                                           20.07
       100.00
                                                                                                                                          3842.6
                                                                                                                                                          12.83
                                                                                                                                                                          174.26
                                                                       181.25
                                                                                       147.05
       100.00
                                                                                       147,73
                                                                                                                                         1216.6
                                                                                                                                                         -22.19
                                                                                                                                                                            1.69
                                                                         9.19
       110.00
                                                                                       145.64
                                                                                                                                         3642.9
                                                                                                                                                          14.99
                                                                                                                                                                           157.87
                                                                       164.69
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 615.9 SGR 387.4 SG3 797.2
RRT .3189 RRF .7429 RTF .4983
SGB 727.6 R23 .5242 R13 .5943
                                                                                                                                    ST 184.9 SR 92.3 SS 1122.5
CRT -. D241 CRS .. 9107 CST -. 4040
    TOE .0286 TRA -.4394 TC3 -.1458 BAU .1098
    RDE -.0658 RRA -.0413 RC3 -.4445 FAU .18647
FDE 3.0653 FRA-2.0905 FC3-9.1953 BSP 1042
BDE .0718 BRA .4413 BC3 .4679 FSP -2520
                                                                                                                                     LSA 1128.1 MSA 172.5 SSA 15.4
                                                                           SG1 634.3 SG2 356.5 THA 16.79
                                                                                                                                   ELI 185.0 EL2 92.2 ALF 179.08
                                                                                                                                                 ARRIVAL DATE MAR 20 1966
LAUNCH DATE DEC 2 1965
                                                                                FLIGHT TIME 108.00
                                                                                DISTANCE 307.505
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.947 GAL -6.27 AZL 86.13 MCA 141.55 SMA 130.27 ECC .17081 INC 3.8742 V1 30.209
RP 108.08 LAP 2.41 LOP 211.23 VP 37.909 GAP -.72 AZP 93.04 TAL 213.49 TAP 355.04 RCA 108.02 APO 152.53 V2 35.063
RC 81.719 GL 26.67 GP -8.26 ZAL 131.74 ZAP 76.08 ETS .27 ZAE 165.62 ETE 274.03 ZAC 54.32 ETC 154.01 CLP -75.93
   PLANETOCENTRIC CONIC
    C3 17.85 VHL 4.181 DLA 4.64 RAL 289.14 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 2.961 DPA -27.00 RAP 321.06 ECC 1.2878
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 21 19 2327.08 -22.13 48.74 149.47 108.13 2 0 6 1727.1 -19.45 41.09
                                                                                                        108.13 2 0 6
65.67 15 46 31
109.45 3 19 8
64.37 17 1 26
113.13 4 28 33
60.76 18 1 22
                     14 28 29 4682.55
                                                                                                                                                                           192.57
                                                        14.94
                                                                        199.59
                                                                                        147.50
                                                                                                                                          4082.5
                                                                                                                                                           11.53
         90.00
                   2 44 50 2057.68
15 47 39 4427.18
                                                        -23.16
                                                                         28.55
                                                                                       149.10
                                                                                                                                          1457.7
                                                                                                                                                         -20.29
                                                                                                                                                                            20.92
       100.00
                                                                                       147.02
                                                                                                                                          3827.2
                                                                                                                                                          12.35
                                                                                                                                                                           173.37
                                                       15.93
                                                                       180.33
       100.00
                    3 58 5 1828.44
16 50 53 4229.18
                                                                          9.97
                                                                                        147.92
                                                                                                                                          1228.4
                                                                                                                                                         -22.55
                                                                                                                                                                             2.42
                                                        -25.90
       110.00
                                                                                                                                          3629.2
                                                                        163.88
                                                                                        145.60
                                                                                                                                                           14.50
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 745.7 SGR 401.1 SG3 837.4 ST 242.0 SR 62.2 SS 1167.7 RRT .5003 RRF .7954 RTF .6846 CRT -.2423 CRS .8401 CST -.7027 SGB 846.8 R23 .4205 R13 .7520 LSA 1181.4 MSA 173.2 SSA 14.3 SG1 778.7 SG2 332.6 THA 18.57 EL1 242.5 EL2 60.3 ALF 176.20
     TOE .0968 TRA -.4903 TC3 -.3470 BAU .1362
     ROE -. 0423 RRA -. 0472 RC3 -. 4682 FAU . 19472
     FDE 3.2616 FRA-2.1749 FC3-9.6416 BSP 1545
     BOE .1056 BRA .4925 BC3 .5828 FSP -2656
```

FLIGHT TIME 102.00

ARRIVAL DATE MAR 22 1966

FLIGHT TIME 110.00 LAUNCH DATE DEC 2 1965 DISTANCE 313.878 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.947 GAL -6.21 AZL 86.06 MCA 144.76 SMA 130.28 ECC .17013 INC 3.9366 VI 30.209 RP 108.12 LAP 2.27 LOP 214.44 VP 37.897 GAP -.29 AZP 93.22 TAL 213.27 TAP 358.04 RCA 108.11 APO 152.44 VZ 35.050 27.19 CP -9.05 ZAL 131.28 ZAP 81.62 ETS 359.43 ZAE 164.89 ETE 258.14 ZAC 52.53 ETC 152.26 CLP -81.51 RC 84.008 GL PLANETOCENTRIC CONIC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 17 53 2343.53 -22.47 49.82 149.77 107.69 1 56 57 1743.5 -19.84 42.13 90.00 14 33 21 4664.57 14.44 198.51 147.57 65.37 15 51 6 4064.6 11.00 191.52 C3 17.427 VHL 4.175 DLA 5.19 RAL 289.32 RAD 6567.7 VEL 11.782 PTH 2.08 VHP 2.913 DPA -28.41 RAP 318.77 ECC 1.2868 2 41 41 2073.27 15 52 15 4410.06 3 55 32 1842.14 16 54 53 4213.96 100.00 -23.51 29.57 149.40 109.02 3 16 14 1473.3 -20.69 21.90 147.08 64.07 17 5 45 3810.1 11.81 172.39 179.31 100.00 15.42 148.24 112.71 4 26 14 1242.1 -22.96 -26.27 10.86 110.00 60.46 18 5 7 3614.0 163.00 110.00 145.65 18.03 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 915.9 SGR 418.2 SG3 867.3 RRT .6295 RRF .8407 RTF .7954 SGB 1006.9 R23 .3518 R13 .8369 ST 326.9 SR 35.5 SS 1203.6 CRT -.0731 CRS .5570 CST -.8438 TOE .1722 TRA -.5449 TC3 -.5605 BAU .1738 ROE -. 0183 RRA -. 0529 RC3 -. 4923 FAU . 20080 LSA 1235.5 MSA 173.0 SSA 13.3 FOE 3.4137 FRA-2.2301 FC3-9.9754 BSP 2188 EL1 326.9 EL2 35.4 ALF 179.54 BOE .1732 BRA .5475 BC3 .7460 FSP -2776 SG1 957.7 SG2 310.8 THA 17.99 LAUNCH DATE DEC 2 1965 FLIGHT TIME 112.00 DISTANCE 320.225 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.942 GAL -6.14 AZL 85.99 MCA 147.97 SNA 130.25 ECC .16957 INC 4.0097 V1 30.209
RP 108.16 LAP 2.13 LOP 217.64 VP 37.882 GAP .14 AZP 93.40 TAL 212.96 TAP .94 RCA 108.16 APO 152.33 V2 35.036
RC 86.309 GL 27.77 GP -9.93 ZAL 130.70 ZAP 87.07 ETS 358.48 ZAE 163.10 ETE 244.69 ZAC 50.89 ETC 150.33 CLP -87.03 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 17.387 VHL 4.170 DLA 5.82 RAL 289.58 RAD 6567.7 VEL 11.780 PTH 2.08 VHP 2.890 DPA -29.87 RAP 316.52 ECC 1.2861
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 14 10 2362.74 -22.87 51.09 150.19 107.17 1 53 33 1762.7 -20.30 43.36
90.00 14 39 10 4644.30 13.86 197.30 147.73 65.06 15 56 34 4044.3 10.38 190.35
100.00 2 38 16 2091.49 -23.91 30.78 149.82 108.50 3 13 8 1491.5 -21.16 23.06
100.00 15 57 45 4390.78 14.84 178.17 147.24 63.75 17 10 56 3790.8 11.20 171.28 -390.78 - 32 49 1858.17 16 59 41 410* 112.20 4 23 48 60.13 18 9 38 -26.68 148.68 1258.2 -23.43 162.01 145.79 3596.9 13.35 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 429.3 SR 28.8 SS 1236.5 CRT .7731 CRS -.5038 CST -.9077 TOE .2537 TRA -.6028 TC3 -.7829 BAU .2178
RDE .0070 RRA -.0576 RC3 -.5148 FAU .20337 SGT 1114.0 SGR 436.7 SG3 882.9 RRT .7191 RRF .8777 RTF .8586 SGB 1196.5 R23 .3085 R13 .8845 FOE 3,5355 FRA-2.2320 FC-10.1260 BSP 2903 LSA 1297.7 MSA 173.0 SSA 12.1 BDE .2538 BRA .6055 BC3 .9370 FSP -2831 SG1 1160.5 SG2 291.3 THA 16.84 EL1 429.9 EL2 18.2 ALF 2.97 ARRIVAL DATE MAR 26 1966 LAUNCH DATE DEC 2 1965 FLIGHT TIME 114.00 DISTANCE 326.544 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.934 GAL -6.06 AZL 85.90 HCA 151.18 SMA 130.19 ECC .16911 INC 4.0972 V1 30.209
RP 108.20 LAP 1.97 LOP 220.85 VP 37.864 GAP .54 AZP 93.59 TAL 212.57 TAP 3.74 RCA 108.17 APO 152.20 V2 35.023 RC 88.623 GL 28.43 GP -10.93 ZAL 130.00 ZAP 92.38 ETS 357.39 ZAE 160.55 ETE 234.56 ZAC 49.48 ETC 148.23 CLP -92.42 PLANETOCENTRIC CONIC C3 17.374 VHL 4.168 CLA 6.54 RAL 289.92 RAD 6567.7 VEL 11.780 PTH 2.08 VHP 2.891 CPA -31.38 RAP 314.40 ECC 1.2859 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 9 58 2385.50 14 46 3 4621.19 2 34 26 2113.09 16 4 17 4368.83 3 49 48 1877.21 17 5 24 4177.47 150.75 106.54 -20.83 1 49 44 1785.5 44.82 90.00 -23.32 52.61 16 3 4 4021.2 9.68 64.71 90.00 13.19 195.93 147.99 3 9 39 -21.69 150.39 107.88 1513.1 32.22 100.00 -24.36 147.50 63.41 17 17 6 3768.8 10.50 170.03 100.00 14.18 176.88 4 21 5 1277.2 -23.99 111.59 149.28 110.00 -27.17 13.19 59.78 18 15 1 3577.5 12.66 160.89 110.00 16.80 146.03 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 543.8 SR 54.0 SS 1259.7 CRT .9789 CRS -.9257 CST -.9402 SGT 1328.3 SGR 459.2 SG3 886.4 RRT .7826 RRF .9085 RTF .8963 SGB 1405.5 R23 .2816 R13 .9136 TOE .3408 TRA -.6621 TC3-1.0077 BAU .2653 .0330 RRA -.0624 RC3 -.5382 FAU .20341 LSA 1362.2 MSA 172.0 SSA 11.0 EL1 546.3 EL2 11.0 ALF 5.55 FDE 3.6036 FRA-2.2049 FC-10.1359 BSP 3662 BDE .3424 BRA .6651 BC3 1.1424 FSP -2867 SG1 1378.2 SG2 275.5 THA 15.78 EL1 546.3 EL2 11.0 ALF FLIGHT TIME 116.00 LAUNCH DATE DEC 2 1965 DISTANCE 332.838 HELIOCENTRIC CONTC RL 147.48 LAL .00 LOL 69.61 VL 27.922 GAL -5.97 AZL 85.80 MCA 154.38 SMA 130.10 ECC .16875 INC 4.2043 V1 30.209
RP 108.24 LAP 1.82 LOP 224.05 VP 37.842 GAP .93 AZP 93.79 TAL 212.08 TAP 6.46 RCA 108.14 APO 152.05 V2 35.010
RC 90.946 GL 29.21 GP -12.10 ZAL 129.18 ZAP 97.46 ETS 356.14 ZAE 157.53 ETE 227.39 ZAC 48.39 ETC 145.98 CLP -97.63 PLANETOCENTRIC CONIC C3 17.400 VHL 4.171 DLA 7.40 RAL 290.32 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 2.913 DPA -32.99 RAP 312.49 ECC 1.2864 C3 17.400 WHL 4.171 DLA 7.40 LNCH AZMTH LNCH TIME L-I TIME 90.00 1 5 0 2412.99 90.00 14 54 15 4594.39 100.00 2 29 54 2139.19 100.00 16 12 3 4343.43 110.00 3 46 15 1900.25 110.00 17 12 11 4155.13 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 151.46 105.76 1 45 13 1813.0 -21.45 -23.84 54.45 3994.4 187.48 12.41 194.36 148.36 64.34 16 10 50 8.85 -24.90 33.97 151.12 107.10 1539.2 -22.32 26.12 17 24 26 3743.4 13.40 175.40 147.86 63.03 9.68 168.59 110.83 4 17 55 59.40 18 21 27 -24.65 -27.73 1300.2 14.75 150.03 110.83 6.94 3555.1 11.85 16.03 159.62 146.36 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 668.1 SR 90.4 SS 1281.6 CRT .9827 CRS -.9846 CST -.9580 TOE .4341 TRA -.7220 TC3-1.2285 BAU .3142 SGT 1551.1 SGR 484.7 SG3 875.4 ROE .0618 RRA -.0666 RC3 -.5612 FAU .19993 RRT .8284 RRF .9332 RTF .9189 FOE 3.6459 FRA-2.1297 FC3-9.9476 BSP SGB 1625.1 R23 .2667 R13 .9314 LSA 1438.0 MSA 171.3 SSA 9.7 4436 BOE .4384 BRA .7250 BC3 1.3506 FSP -2838 SG1 1603.7 SG2 262.6 THA 14.92 EL1 674.0 EL2 16.6 ALF 7.58

ARRIVAL DATE MAR 30 1966 FLIGHT TIME 118.00 LAUNCH CATE DEC 2 1965 DISTANCE 339.106 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.907 GAL -5.87 AZL 85.66 HCA 157.58 SMA 129.99 ECC .16848 INC 4.3396 V1 30.209 RP 108.29 LAP 1.65 LOP 227.25 VP 37.819 GAP 1.31 AZP 94.01 TAL 211.52 TAP 9.10 RCA 108.09 APO 151.89 V2 34.996 RC 93.279 GL 30.15 GP -13.52 ZAL 128.20 ZAP 102.25 ETS 354.66 ZAE 154.24 ETE 222.54 ZAC 47.71 ETC 143.56 CLP-102.60 PLANETOCENTRIC CONIC C3 17.488 VHL 4.182 DLA 8.42 RAL 290.79 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 2.958 DPA -34.79 RAP 310.87 ECC 1.2878 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 39 38 1847.0 48.82 0 58 51 2447.03 15 4 7 4562.69 56.76 152.37 104.75 -22.18 90.00 -24.45 16 20 10 3962.7 185.67 90.00 11.46 192.50 148.85 63.93 7.87 2 24 16 2171.51 16 21 23 4313.45 3 0 28 1571.5 -23.07 28.23 106.11 100.00 -25.53 36.17 152.04 17 33 16 166.90 8.70 100.00 62.61 3713-4 12.47 173.66 148.33 3 41 49 1928.81 17 20 19 4128.91 4 13 58 -25.44 8.78 109.86 1328.8 110.00 150.99 -28.41 16.69 18 29 8 10.89 58.97 3528.9 110.00 15.11 158.14 146.81 HID-COURSE EXECUTION ACCURACY ORBIT CETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RGT 1776.4 SGR 517.6 SG3 853.0 RRT .8624 RRF .9532 RTF .9336 SGB 1850.2 R23 .2591 R13 .9434 SG1 1832.7 SG2 254.0 THA 14.39 ST 801.6 SR 133.0 SS 1298.0 CRT .9799 CRS -.9962 CST -.9689 TOE .5343 TRA -.7817 TC3-1,4385 BAU .3633 ROE .0940 RRA -.0716 RC3 -.5876 FAU .19401 FOE 3.6508 FRA-2.0320 FC3-9.6046 BSP 5222 BOE .5425 BRA .7850 BC3 1.5538 FSP -2786 LSA 1521.9 MSA 169.9 SSA 8.5 EL1 812.2 EL2 26.2 ALF ARRIVAL DATE APR 1 1966 FLIGHT TIME 120.00 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC **DISTANCE 345.349** RL 147.48 LAL .00 LOL 69.61 VL 27.888 GAL -5.77 AZL 85.48 HCA 160.78 SMA 129.86 ECC .16830 INC 4.5173 VI 30.209 RP 108.33 LAP 1.49 LOP 230.44 VP 37.793 GAP 1.67 AZP 94.27 TAL 210.88 TAP 11.66 RCA 108.00 APO 151.71 VZ 34.983 RC 95.621 GL 31.32 GP -15.34 ZAL 127.03 ZAP 106.68 ETS 352.84 ZAE 150.74 ETE 219.50 ZAC 47.57 ETC 140.97 CLP-107.32 PLANETOCENTRIC CONIC 9:69 RAL 291.30 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 3.026 DPA -36.89 RAP 309.62 ECC 1.2909 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG C3 17.676 VHL 4.204 OLA LNCH AZMTH LNCH TIME L-I TIME 0 50 49 2490.59 -25.17 59.75 153.52 103.42 1 32 19 1890.6 90.00 16 31 38 90.00 15 16 14 4524.09 10.30 190.27 149.49 63.48 3924.1 183.48 2212.86 -26.28 39.01 153.22 104.79 2 53 48 1612.9 30.96 100.00 2 16 56 17 44 6 3677.1 100.00 16 32 49 4277.05 11.32 171.57 148.95 62.15 7.50 164.86 1965.37 4 8 46 3 36 1 -29.23 19.22 152.22 1365.4 -26.42 11.17 110.00 58.49 18 38 30 17 30 13 3497.3 4097.31 14.00 156.37 147.39 9.72 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE .6453 TRA -.8408 TC3-1.6282 BAU .4115
RDE .1331 RRA -.0773 RC3 - 4174 FM ST 946.9 SR 184.9 55 1315.8 CRT .9788 CRS -.9991 CST -.9759 SGT 1999.7 SGR 560.3 SG3 818.2 RRT .8877 RRF .9687 RTF .9430 RDE .1331 RRA -.0773 RC3 -.6175 FAU .18509 FDE 3.6438 FRA-1.9009 FC3-9.0655 BSP 5995 SGB 2076.8 R23 .2567 R13 .9514 LSA 1622.9 MSA 168.9 SSA 7.1 BDE .6589 BRA .8443 BC3 1.7414 FSP -2678 SG1 2061.6 SG2 250.2 THA 14.18 EL1 964.1 EL2 37.2 ALF 10.83 FLIGHT TIME 122.00 ARRIVAL DATE APR 3 1966 LAUNCH DATE DEC 2 1965 **DISTANCE 351.569** HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.867 GAL -5.65 AZL 85.24 HCA 163.97 SMA 129.71 ECC .16818 INC 4.7624 VI 30.209 RP 108.37 LAP 1.31 LOP 233.63 VP 37.765 GAP 2.02 AZP 94.58 TAL 210.17 TAP 14.15 RCA 107.89 APO 151.52 V2 34.970 32.83 GP -17.79 ZAL 125.62 ZAP 110.67 ETS 350.51 ZAE 146.98 ETE 217.99 ZAC 48.13 ETC 138.10 CLP-111.76 RC 97.969 GL PLANETOCENTRIC CONIC C3 18.037 VHL 4.247 OLA 11.32 RAL 291.84 RAD 6567.7 VEL 11.808 PTH 2.09 VHP 3.121 DPA -39.55 RAP 308.83 ECC 1.2968 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 55.63 63.81 155.04 101.57 1 22 11 1948.9 -24.17 90.00 0 39 43 2548.94 15 31 39 4475.17 -26.03 3875.2 180.72 187.46 150.34 62.98 5.11 8.80 90.00 2 6 45 2268.21 16 47 18 4231.13 3 27 54 2014.28 17 42 38 4057.83 154.76 102.94 2 44 33 1668.2 -25.13 34.68 42.88 -27.18 100.00 149.78 61.63 17 57 49 3631.1 5.98 162.30 9.84 168.96 100.00 -27.65 14.44 153.84 106.76 1414.3 -30.24 22.67 110.00 18 50 16 147.76 12.58 148.16 57.95 3457.8 8.26 154.19 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 2219.8 SGR 620.9 SG3 772.4 RRT .9067 RRF .9803 RTF .9497 SGB 2305.0 R23 .2554 R13 .9574 TDE .7732 TRA -.9011 TC3-1.7866 BAU .4589 ST 1108.3 SR 250.3 SS 1332.7 ROE .1832 RRA -.0858 RC3 -.6560 FAU .17381 FDE 3.6201 FRA-1.7592 FC3-8.3423 8SP 6769 BDE .7946 BRA .9051 BC3 1.9032 FSP -2545 CRT .9797 CRS -.9997 CST -.9811 LSA 1743.3 MSA 167.0 SSA 5.8 SG1 2291.0 SG2 253.7 THA 14.41 EL1 1135.2 EL2 48.9 ALF 12.50 FLIGHT TIME 124.00 ARRIVAL DATE APR 5 1966 LAUNCH DATE DEC 2 1965 **OISTANCE 357.765** HELLOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.843 GAL -5.52 AZL 84.87 HCA 167.17 SMA 129.54 ECC .16814 INC 5.1254 VI 30.209
RP 108.41 LAP 1.14 LOP 236.82 VP 37.736 GAP 2.36 AZP 95.00 TAL 209.40 TAP 16.56 RCA 107.76 APO 151.32 VZ 34.957
RC 100.323 GL 34.90 GP -21.32 ZAL 123.85 ZAP 114.06 ETS 347.32 ZAE 142.72 ETE 217.93 ZAC 49.74 ETC 134.80 CLP-115.95 PLANETOCENTRIC CONIC C3 18.729 VHL 4.328 DLA 13.52 RAL 292.38 RAD 6567.8 VEL 11.837 PTH 2.10 VHP 3.257 DPA -43.20 RAP 308.67 ECC 1.3082 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 7 0 17 6 1 -25.54 -27.03 69.71 157.14 98.77 2032.4 61.36 90.00 0 23 8 2632.45 183.71 151.55 62.43 1809.1 3.00 177.03 90.00 15 52 32 4409.28 6.74 100.17 2 30 41 1747.3 -26.57 40.11 1 51 33 2347.27 -28.26 48.50 156.91 100.00 150.95 61.06 18 16 17 3569.7 3.92 158.91 17 6 47 4169.69 7.84 165.50 100.00 104.02 3 50 27 1483.9 -29.25 19.22 3 15 43 2083.92 -31.50 27.71 110.00 19 5 53 151.35 149.23 57.33 3405.8 6.30 145.00 4005.80 10.68 110.00 17 59 7 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1297.5 SR 340.7 SS 1354.1 CRT .9818 CRS -.9997 CST -.9851 TOE .9329 TRA -.9652 TC3-1.8915 BAU .5053 RDE .2552 RRA -.0982 RC3 -.7032 FAU .15899 SGT 2435.8 SGR 708.8 SG3 711.8 RRT .9206 RRF .9883 RTF .9544 SGB 2536.8 R23 .2532 R13 .9621 FOE 3.5982 FRA-1.5960 FC3-7.3491 BSP 7540 LSA 1898.9 MSA 165.2 SSA 4.5

SG1 2522.7 SG2 267.3 THA 15.17

EL1 1340.0 EL2 62.7 ALF 14.49

BDE .9672 BRA .9702 BC3 2.0180 FSP -2354

ARRIVAL DATE APR 7 1966

LAUNCH DATE DEC 2 1965

```
HELIOCENTRIC CONIC
                                                                                   DISTANCE 363.938
    RL 147.48 LAL .DD LOL 69.61 VL 27.817 GAL -5.39 AZL 84.28 HCA 170.35 SMA 129.36 ECC .16817 INC 5.7237 V1 30.209
RP 108.44 LAP .96 LOP 240.01 VP 37.705 GAP 2.69 AZP 95.64 TAL 208.56 TAP 18.91 RCA 107.60 APO 151.11 V2 34.945
RC 102.682 GL 37.97 GP -26.84 ZAL 121.46 ZAP 116.44 €TS 342.62 ZAE 137.31 ETE 219.39 ZAC 53.09 ETC 130.77 CLP-119.93
   PLANETOCENTRIC CONIC
     C3 20.153 VHL 4.489 DLA 16.73 RAL 292.85 RAD 6567.8 VEL 11.897 PTH 2.11 VHP 3.474 DPA -48.73 RAP 309.53 ECC 1.3317
    C3 ZU.153 WHL 4.489 DLA 16.73 RAL 292.85 RAD 6567.8 VEL 11.897 PTH 2.11 VHP 3.474 DPA -48.73 RAP 309.53 ECC 1.3317 LNCH AZHTH LNCH TIME L-I TIME IND LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 23 51 29 2765.13 -28.05 79.28 160.32 94.08 24 37 34 2165.1 -27.19 70.72 90.00 16 24 2 4311.30 3.62 178.19 153.52 61.90 17 35.53 3711.3 -.16 171.56 100.00 1 26 16 2472.18 -29.42 57.60 160.19 95.52 2 7 28 1872.2 -28.35 48.96 100.00 17 35 52 4079.48 4.84 160.48 152.85 60.47 18 43 52 3479.5 .87 153.95 110.00 2 55 29 2193.01 -33.01 35.85 159.64 99.42 3 32 2 1593.0 -31.56 27.02 110.00 18 23 8 3931.41 7.92 147.36 150.95 56.64 19 28 40 3331.4 3.48 141.09
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT CETERMINATION ACCURACY
                                                                             SGT 2655.2 SGR 844.2 SG3 629.5
RRT .9308 RRF .9931 RTF .9586
SGB 2786.2 R23 .2452 R13 .9669
                                                                                                                                          ST 1532.8 SR 475.0 SS 1372.0 CRT .9847 CRS -.9997 CST -.9886
     TOE 1.1547 TRA-1.0458 TC3-1.9084 BAU .5533
     ROE .3699 RRA -.1203 RC3 -.7587 FAU .13944
    FOE 3.5515 FRA-1.4264 FC3-5.9901 BSP 8423
BOE 1.2126 BRA 1.0527 BC3 2.0536 FSP -2112
                                                                                                                                          LSA 2105.1 MSA 162.2 SSA 3.3
                                                                              SG1 2770.5 SG2 .295.7 THA 16.68
                                                                                                                                           ELI 1602.8 EL2 79.1 ALF 17.01
LAUNCH DATE DEC 2 1965
                                                                                    FLIGHT TIME 128.00
                                                                                                                                                        ARRIVAL CATE APR 9 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 370.087
    RE 147.48 LAL .00 LOL 69.61 VL 27.789 GAL -5.24 AZL 83.10 HCA 173.54 SHA 129.16 ECC .16827 INC 6.9030 V1 30.209 RP 108.48 LAP .77 LOP 243.20 VP 37.672 GAP 3.01 AZP 96.86 TAL 207.66 TAP 21.20 RCA 107.43 APO 150.89 V2 34.932
                           43.09 GP -36.50 ZAL 117.80 ZAP 116.64 ETS 335.02 ZAE 129.04 ETE 222.40 ZAC 59.95 ETC 125.42 CLP-123.91
    RC 105.043 Gt
   PLANETOCENTRIC CONIC
    C3 23.708 VML 4.869 DLA 22.02 RAL 293.14 RAD 6568.0 VEL 12.045 PTH 2.15 VMP 3.922 DPA -58.22 RAP 312.80 ECC 1.3902 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    LNCH TIME L-1 LIME 22 53 54 3022.49 17 23 53 4132.43 0 34 50 2709.69 18 29 33 3920.47 2 15 39 2394.30 19 5 14 3808.63
                                                                                                              84.70 23 44 16
61.76 18 32 45
         90.00
                                                          -27.86
                                                                                        165.74
                                                                                                                                                                -28.30
                                                                           98.06
                                                                                                                                               2422.5
                                                                                                                                                                                  89.43
         90.00
                                                            -2.14
                                                                           168.21
                                                                                           157.79
                                                                                                                                                3532.4
                                                                                                                                                                  -5.90
                                                                                                                                                                                   161.55
                                                                                                               86.28 1 20 0
60.11 19 34 54
       100.00
                                                          -29.6A
                                                                            75.22
                                                                                           165.90
                                                                                                                                                2109.7
                                                                                                                                                                -29.88
                                                                                                                                                                                    66.42
       100.00
                                                            -.54
                                                                           151.74
                                                                                           156.90
                                                                                                                                                3320.5
                                                                                                                                                                  -4.51
                                                                                                                                                                                  145.21
                                                                                          166.06
                                                                                                               90.30 2 55 33
55.96 20 8 43
       110.00
                                                          -34.18
                                                                            51.42
                                                                                                                                                1794.3
                                                                                                                                                                -33.76
                                                                                                                                                                                   42.20
       110.00
                                                                                                                                                                                  134.68
                                                           3.28
                                                                           140.88
                                                                                           154.52
                                                                                                                                                3208.6
                                                                                                                                                                  -1.21
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SCT 2884.1 SCR 1043.7 SC3 498.6

RRT .9376 RRF .9952 RTF .9631

SCB 3067.2 R23 .2278 R13 .9726

SCI 3047.9 SC2 343.5 THA 18.99
    TDE 1.5525 TRA-1.1616 TC3-1.7204 BAU .5979
                                                                                                                                          ST 1880.3 SR 697.2 SS 1375.9
CRT .9884 CRS -.9996 CST -.9921
    ROE .5901 RRA -.1553 RC3 -.7741 FAU .10801
FDE 3.4278 FRA-1.1885 FC3-3.9442 BSP 9272
BDE 1.6608 BRA 1.1720 BC3 1.8865 FSP -1674
                                                                                                                                           LSA 2426.9 MSA 157.3 SSA
                                                                                                                                                                                       2.3
                                                                                                                                          EL1 2002.9 EL2 99.5 ALF 20.18
LAUNCH DATE DEC 2 1965
                                                                                   FLIGHT TIME 130.00
                                                                                                                                                       ARRIVAL DATE APR 11 1966
                                                                                  DISTANCE 376.207
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.759 GAL -5.09 AZL 79.65 HCA 176.71 SHA 128.95 ECC .16841 INCID.3524 VI 30.209 RP 108.52 LAP .59 LOP 246.38 VP 37.639 GAP 3.32 AZP 100.34 TAL 206.70 TAP 23.41 RCA 107.23 APO 150.67 VZ 34.920
    RC 107.406 GL 53.15 GP -56.03 ZAL 110.69 ZAP 110.85 ETS 320.69 ZAE 112.69 ETE 223.94 ZAC 75.02 ETC 116.63 CLP-129.56
   PLANETOCENTRIC CONIC
    C3 38.553 VHL 6.209 OLA 32.36 RAL 293.08 RAD 6568.5 VEL 12.646 PTH 2.30 VHP 5.517 OPA -76.65 RAP 331.85 ECC 1.6345
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    173.39
173.39
                                                                                                               62.29 19 10 28
62.29 23 10 10
62.29 19 10 28
                                                                                                                                            3504.3
         73.64
                                                          -17.43
                                                                          174.36
                                                                                                                                                              -21.00
                                                                          114.26
                                                                                                                                                2693.9
                                                                                                                                                                -20.99
                                                                                                                                                                                 107.10
                                                                                                                                                3504.3
                                                         -17.43
                                                                          174.36
                                                                                          173.39
                                                                                                                                                                -21.00
                                                                                                                                                                                 167.19
                                                                                                               62.29 23 10 10 2693.9
67.18 0 55 42 2363.1
56.90 22 12 10 2883.0
                                                                                        173.39
                                                                       114.26
                                                         -17.42
                                                                                                                                                                -20.99
                                                                                                                                                                                107.10
                                                        -26.17
                                    2963.14
3483.00
                                                                                         177.83
168.37
                                                                                                                                                                                  85.21
       110.00
                       0 6 19
                                                                            93.23
                                                                                                                                                                -29.02
                     21 14 7
                                                                         123.79
                                                                                                                                                               -13.38
                                                          -9.09
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                               SGT 3223.7 SGR 1179.4 SG3 270.2
RRT .9356 RRF .99D8 RTF .9733
SGB 3432.6 R23 .1877 R13 .9816
    TOE 2.6623 TRA-1.4624 TC3-1.0817 BAU .6195
                                                                                                                                           ST 2503.3 SR 965.7 SS 1241.6
     ROE 1.0444 RRA -.1809 RC3 -.5238 FAU .05415
                                                                                                                                           CRT .9914 CRS -.9991 CST -.9960
    FOE 2.8076 FRA -.8142 FC3-1.2160 BSP 10609
                                                                                                                                           LSA 2953.0 MSA 143.9 SSA 1.5
    BOE 2.8598 BRA 1.4736 BC3 1.2019 FSP
                                                               -931
                                                                               5G1 3410.0 SG2 393.6 THA 19.16
                                                                                                                                           EL1 2680.5 EL2 118.1 ALF 20.97
LAUNCH DATE DEC 2 1965
                                                                                    FLIGHT TIME 132.00
                                                                                                                                                        ARRIVAL DATE APR 13 1966
                                                                                  DISTANCE 381.999
  HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.727 GAL -4.86 AZL 7.27 HCA 179.59 SMA 128.73 ECC .16809 INC82.6053 VI 30.209 RP 108.56 LAP .40 LOP 249.56 VP 37.605 GAP 3.53 AZP 172.73 TAL 205.43 TAP 25.02 RCA 107.09 APO 150.37 V2 34.909 RC 109.770 GL 45.71 GP -52.82 ZAL 93.12 ZAP 92.61 ETS 183.67 ZAE 49.47 ETE 100.14 ZAC 108.24 ETC 359.87 CLP 94.32
   PLANETOCENTRIC CONIC
    C31465.720 VML 38.285 DLA 32.68 RAL 318.83 RAD 6573.2 VEL 39.837 PTH 3.56 VMP 46.293 DPA -38.74 RAP 143.29 ECC25.1220
    T2.96 19 40 22 4638.56 .76 204.12 230.03 57.33 20 57 40 4038.6 -3.56 197.80 107.04 0 6 20 3800.73 .78 141.92 230.03 57.33 20 57 40 4038.6 -3.56 197.80 107.04 0 6 20 3800.73 .78 141.92 230.03 57.33 20 57 40 4038.6 -3.56 197.80 107.04 0 6 20 3800.73 .78 141.92 230.03 57.33 20 57 40 4038.6 -3.56 197.80 107.04 0 6 20 3800.73 .78 141.92 230.03 57.33 20 57 40 4038.6 -3.56 197.80 107.04 0 6 20 3800.73 .78 141.92 230.03 57.33 1 9 40 3200.7 -3.54 135.60 107.04 0 6 20 3800.73 .78 141.92 230.02 57.33 1 9 40 3200.7 -3.54 135.60 107.04 0 6 20 3800.73 .78 141.92 230.02 57.33 1 9 40 3200.7 -3.54 135.60
                                                                                                               57.33 1 9 40
56.69 2 39 50
57.06 24 10 49
                       1 41 22 3507.94
                                                                                                                                                                                118.69
       110.00
                                                           -8.16
                                                                          125.12
                                                                                           235.82
                                                                                                                                                2907.9
                                                                                                                                                                -12.48
                     23 4 29
       110.00
                                       3979.34
                                                             9.71
                                                                          149.92
                                                                                           224.25
                                                                                                                                               3379.3
                                                                                                                                                                   5.30
                                                                                                                                                                                  143.60
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                                          ST 722.6 SR 2523.7 SS 2127.2
CRT .9782 CRS 1.0000 CST .9763
    TDE-4.7550 TRA 2.3184 TC3 -.0984 BAU 4.8091
                                                                              SGT 1115.4 SGR 3068.9 SG3 55.9
RRT .8657 RRF -.9997 RTF -.8538
SGB 3265.3 R23 -.0767 R13 -.9970
    RO-16.8485 RRA-1.7490 RC3 -.2248 FAU-.07987
    FOE 3.5492 FRA .4577 FC3 .0472 BSP 15527
BOE17.5066 BRA 2.9041 BC3 .2454 FSP 249
                                                                                                                                          LSA 3375.5 MSA 150.1 SSA .8
EL1 2621.2 EL2 144.5 ALF 74.30
                                                                              SG1 3221.7 SG2 531.8 THA 72.03
```

FLIGHT TIME 126.00

ARRIVAL DATE APR 15 1966

LAUNCH DATE DEC 2 1965

==

```
DISTANCE 388.464
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.694 GAL -4.77 AZL 93.95 MCA 183.13 SMA 128.50 ECC .16905 INC 3.9515 VI 30.209

RP 108.59 LAP .22 LOP 252.73 VP 37.570 GAP 3.93 AZP 86.05 TAL 204.69 TAP 27.82 RCA 106.78 APO 150.23 VZ 34.897

RC 112.133 GL -29.53 GP 55.51 ZAL 121.76 ZAP 114.09 ETS 36.28 ZAE 118.21 ETE 134.68 ZAC 47.77 ETC 222.98 CLP-136.14
   PLANETOCENTRIC CONIC
    C3 14.915 VHL 3.862 DLA -48.12 RAL 314.27 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 5.807 DPA 31.94 RAP 290.72 ECC 1.2455 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 49.32 5 31 19 1565.41 34.60 25.81 186.04 125.80 5 57 24 965.4 39.00 17.88 130.68 13 38 58 5371.85 34.61 247.68 186.05 125.79 15 8 29 4771.9 39.01 239.74 130.68 13 38 58 5371.85 34.61 247.68 186.05 125.79 15 8 29 4771.9 39.01 239.74 130.68 13 38 58 5371.85 34.61 247.68 186.05 125.79 15 8 29 4771.9 39.01 239.74 14.32 5 31 19 1565.41 34.60 25.81 186.04 125.80 5 57 24 965.4 39.00 17.88 130.68 13 38 58 5371.85 34.61 247.68 186.05 125.79 15 8 29 4771.9 39.01 239.74 14.32 5 31 19 1565.41 34.60 25.81 186.04 125.80 5 57 24 965.4 39.00 17.88 130.68 13 38 58 5371.85 34.61 247.68 186.05 125.79 15 8 29 4771.9 39.01 239.74
     C3 14.915 VHL 3.862 DLA -48.12 RAL 314.27 RAD 6567.6 VEL 11.675 PTH 2.05 VHP 5.807 DPA 31.94 RAP 290.72 ECC 1.2455
                                                              34.61
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ST 1947.9 SR 863.1 SS 803.4

CRT - .9863 CRS .9997 CST - .9898

LSA 2271.6 MSA 156.7 SSA 1.1
                                                                                      SGT 3218.0 SGR 1624.5 SG3 261.2
RRT -.9473 RRF -.9991 RTF ..9589
SGB 3604.8 R23 ..2215 R13 -.9750
     TDE-1.3081 TRA -.2235 TC3-3.2604 BAU .7383
     RDE .5788 RRA -.1150 RC3 1.7544 FAU .05673
    FOE-1.0758 FRA .1579 FC3-3.2929 BSP 11042
BCE 1.4305 BRA .2514 BC3 3.7025 FSP -842
                                                                                                                                                        EL1 2126.5 EL2 130.4 ALF 156.30
                                                                                      SG1 3574.2 SG2 468.4 THA 153.96
                                                                                            FLIGHT TIME 136.00
                                                                                                                                                                       ARRIVAL DATE APR 17 1966
LAUNCH DATE DEC 2 1965
                                                                                           DISTANCE 394.525
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 27.660 GAL -4.59 AZL 90.25 HCA 186.30 SMA 128.26 ECC .16941 INC .2502 VI 30.209 RP 108.63 LAP .03 LOP 255.91 VP 37.534 GAP 4.21 AZP 89.75 TAL 203.58 TAP 29.88 RCA 106.54 APO 149.99 VZ 34.886 RC 114.493 GL -2.13 GP 33.78 ZAL 126.34 ZAP 126.72 ETS 27.05 ZAE 131.56 ETE 147.28 ZAC 36.82 ETC 200.71 CLP-136.00
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 10.745 VML 3.278 DLA -21.50 RAL 306.07 RAD 6567.4 VEL 11.495 PTH 2.00 VHP 4.281 DPA 10.86 RAP 296.97 ECC 1.1768
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 6 10 51 1333.14 7.09 350.53 159.70 117.49 6 33 4 733.1 10.72 343.73
90.00 11 54 0 5463.86 28.25 252.23 164.67 87.91 13 25 4 4863.9 27.66 243.61
100.00 7 17 21 1118.53 5.67 334.09 159.04 119.36 7 35 59 518.5 9.74 327.44
100.00 13 30 11 5153.70 29.64 229.32 164.59 85.92 14 56 5 4553.7 28.76 220.63
110.00 7 54 27 1002.25 2.92 323.46 157.21 124.07 8 11 9 402.2 7.38 317.20
110.00 15 9 35 4842.75 33.07 205.24 164.12 80.83 16 30 17 4242.8 31.45 196.39
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 526.0 SR 96.0 SS 91.4
CRT -.8129 CRS .9404 CST -.8061
                                                                                       SCT 3396.1 SCR 1156.8 SC3 448.2
RRT -.9514 RRF -.9991 RTF .9527
SCB 3587.7 R23 .2713 R13 -.9616
     TOE -.2296 TRA -.5788 TC3-4.8692 BAU .7437
     ROE .0511 RRA .0101 RC3 1.7591 FAU .09809
                                                                                                                                                       LSA 537.1 MSA 72.8 SSA 22.8
EL1 531.8 EL2 55.3 ALF 171.47
     FDE -.1067 FRA -.0818 FC3-7.9036 BSP 11205
BDE .2353 BRA .5788 BC3 5.1772 FSP -1473
                                                                                       SG1 3571.7 SG2 338.7 THA 161.87
                                                                                                                                                                     ARRIVAL DATE APR 19 1966
                                                                                           FLIGHT TIME 138.00
LAUNCH DATE DEC 2 1965
                                                                                           DISTANCE 400.576
   HELIOCENTRIC CONIC
                               .00 LOL 69.61 VL 27.624 GAL -4.40 AZL 89.03 MCA 189.47 SMA 128.02 ECC .16986 INC .9732 V1 30.209
-.16 LOP 259.08 VP 37.498 GAP 4.49 AZP 90.96 TAL 202.44 TAP 31.91 RCA 106.28 APO 149.77 V2 34.875
8.21 GP 23.20 ZAL 124.30 ZAP 133.06 ETS 21.04 ZAE 135.24 ETE 157.24 ZAC 34.89 ETC 185.89 CLP-137.98
     RL 147.48 LAL
     RP 108.66 LAP
     RC 116.852 GL
    PLANETOCENTRIC CONIC
     C3 10.763 VHL 3.281 DLA -11.07 RAL 305.25 RAD 6567.4 VEL 11.496 PTH 2.00 VHP 4.022 DPA
                                                                                                                                                                    .60 RAP 299.76 ECC 1.1771
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       4 25 2 1726.26 -5.51

13 33 17 5071.44 24.10

5 40 50 1481.75 -6.38

15 0 11 4791.19 25.06

6 36 29 1307.43 -8.67

16 21 1 4538.27 27.59
                                                                                                                     117.82 4 53 49
                                                                                                                                                          1126.3
                                                                                                                                                                             -1.74
                                                                                                 156.84
                                                                                                                                                                                                      5.90
                                                                                  12.55
          90.00
                                                                -5.51
                                                                                                                                                                                                   216.49
                                                                                                                                      14 57 49
                                                                                                                                                             4471.4
                                                                                                                                                                                  21.76
                                                                                  224.38
                                                                                                    160.08
                                                                                                                          74.67
          90.00
                                                                                                                        119.26 6 5 31
73.14 16 20 2
123.20 6 58 17
68.97 17 36 39
                                                                                                    156.36
                                                                                                                                                              881.7
                                                                                                                                                                                 -2.44
                                                                                                                                                                                                   347.53
                                                                                  354.10
        100.00
                                                                                                                                                             4191.2
                                                                                                                                                                                 22.51
                                                                                                                                                                                                   195.60
                                                                                  203.47
                                                                                                    159.78
        100.00
                                                                                                                                                              707.4
                                                                                  339.47
                                                                                                    154.96
                                                                                                                                                                                 -4.24
                                                                                                                                                                                                   333.18
        110.00
                                                                                  183.29
                                                                                                    158.81
                                                                                                                                                             3938.3
                                                                                                                                                                                  24.48
                                                                                                                                                                                                   175.50
        110.00
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 3542.2 SGR 838.4 SG3 502.5

RRT -.9529 RRF -.9963 RTF .9516

SGB 3640.1 R23 .2803 R13 -.9561

SGI 3631.6 SG2 247.9 THA 167.23
                                                                                                                                                        ST 465.1 SR 66.8 SS 326.8

CRT -.736D CRS .9775 CST -.6840

LSA 531.5 MSA 212.1 SSA 12.5
     TDE .1588 TRA -.6741 TC3-5.0619 BAU .7511
     RDE -.0351 RRA .0177 RC3 1.2734 FAU .10870
     FDE .5277 FRA -.1377 FC3-8.7430 BSP 11335
BOE .1626 BRA .6743 BC3 5.2196 FSP -1642
                                                                                                                                                       EL1 467.7 EL2 45.0 ALF 173.91
                                                                                            FLIGHT TIME 140.00
                                                                                                                                                                       ARRIVAL DATE APR 21 1966
LAUNCH DATE DEC 2 1965
                                                                                           DISTANCE 406.611
    HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 27.587 GAL -4.20 AZL 88.41 MCA 192.65 SMA 127.77 ECC .17039 INC 1.5887 V1 30.209
RP 108.69 LAP -.35 LOP 262.25 VP 37.462 GAP 4.76 AZP 91.55 TAL 201.25 TAP 33.90 RCA 106.00 APO 149.54 V2 34.865
     RC 119.206 GL 13.32 GP 17.31 ZAL 121.91 ZAP 137.10 ETS 17.14 ZAE 135.95 ETE 163.59 ZAC 35.45 ETC 177.20 CLP-140.11
    PLANETOCENTRIC CONIC
     C3 10.967 VHL 3.312 DLA --5.68 RAL 305.76 RAD 6567.4 VEL 11.505 PTH 2.00 VHP 3.999 DPA -5.04 RAP 301.74 ECC 1.1805
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                           1303.7
                        3 44 39 1903.70
14 17 47 4901.67
                                                                                                                                                                                -7.40
                                                                -11.02
                                                                                                    157.58
                                                                                                                        116.25
                                                                                                                                         4 16 23
                                                                                    22.68
          90.00
                                                                                                                                                                                   17.70
                                                                                                                                                                                                    205.70
                                                                20.59
                                                                                  213.18
                                                                                                     159.33
                                                                                                                          70.12 15 39 29
                                                                                                                                                              4301.7
          90.00
                       5 3 19 1649.97
15 31 49 4630.64
6 5 24 1455.58
16 56 13 4397.79
                                                                                                                                                                                                    356.85
                                                              -11.85
                                                                                     3.59
                                                                                                    157.15
                                                                                                                         117.64
                                                                                                                                        5 30 49
                                                                                                                                                              1050.0
                                                                                                                                                                                  -A.06
        100.00
                                                                                                                           68.69 16 59 D
                                                                                                                                                              4030.6
                                                                                                                                                                                  18.38
                                                                                                                                                                                                    185.46
                                                               21.47
                                                                                  192.89
                                                                                                    158.97
        100.00
                                                                                                                         121.48
                                                                                                                                     18 9 31
                                                                                                                                                               855.6
                                                                                                                                                                                  -9.81
                                                                                                                                                                                                    341.04
                                                                -14.08
                                                                                   347.54
                                                                                                     155.86
        110.00
                                                                                                                                                                                  20.21
                                                                                                                                                                                                    166.83
                                                                                                     157.88
                                                                                                                         64.72
                                                                                                                                                              3797.8
                                                              23.82
                                                                                  174.12
        110.00
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 3699.6 SGR 655.1 SG3 510.1 ST 751.0 SR 74.8 SS 513.3 RRT -.9508 RRF -.9899 RTF .9518 CRT -.9065 CRS .9877 CST -.8889 SG8 3757.1 R23 .2655 R13 -.9542 LSA 890.5 MSA 199.9 SSA 10.7 SG1 3751.8 SG2 200.1 THA 170.42 EL1 754.1 EL2 31.5 ALF 174.83
      TOE .3723 TRA -.7137 TC3-5.1715 BAU .7718
      ROE -.0415 RRA .0135 RC3 .9825 FAU .10926
FOE .8520 FRA -.1262 FC3-8.6246 BSP 11774
      BDE .3746 BRA .7138 BC3 5.2640 FSP -1683
```

FLIGHT TIME 134.00

ARRIVAL DATE APR 23 1966

LAUNCH DATE DEC 2 1965

```
MELIOCENTRIC CONIC
                                                                                                  DISTANCE 412.630
     RL 147.48 LAL .00 LOL 69.61 VL 27.550 GAL -3.99 AZL 88.04 MCA 195.82 SMA 127.52 ECC .17100 INC 1.9600 V1 30.209 RP 108.72 LAP -.53 LOP 265.42 VP 37.425 GAP 5.03 AZP 91.89 TAL 200.03 TAP 35.86 RCA 105.71 APO 149.32 V2 34.856 RC 121.557 GL 16.37 GP 13.63 ZAL 119.63 ZAP 140.15 ETS 14.52 ZAE 135.69 ETE 167.65 ZAC 36.71 ETC 172.02 CLP-142.18
    PLANETOCENTRIC CONIC
      C3 11.116 VHL 3.334 DLA -2.28 RAL 306.79 RAD 6567.4 VEL 11.511 PTH 2.01 VHP 4.050 DPA -8.47 RAP 303.46 ECC 1.1829
     CS 11.116 VML 3.534 DLA -2.28 RAL 506.79 RAD 6567.4 VEL 11.511 PM 2.D1 VMP 4.050 DPA -8.47 RAP 505.46 ECC 1.1829

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 14 47 27 4798.04 18.05 206.64 159.78 67.81 16 7 25 4198.0 14.89 199.39

100.00 4 43 27 1753.92 -15.06 9.64 158.66 116.13 5 12 41 1153.9 -11.42 2.74

100.00 16 9 51 4532.25 18.91 186.71 159.40 66.41 17 25 23 3932.2 15.56 179.52

110.00 5 49 16 1547.90 -17.29 352.77 157.42 119.96 6 15 4 947.9 -13.18 346.07

110.00 17 20 32 4311.03 21.19 168.76 158.24 62.53 18 32 23 3711.0 17.34 161.74
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                         SGT 3848.3 SGR 542.1 SG3 500.0
RRT -.9424 RRF -.9779 RTF ..9517
SGB 3886.3 R23 ..2364 R13 -.9532
SGI 3882.2 SG2 179.7 THA 172.42
      TOE .5198 TRA -.7248 TC3-5.2931 BAU .7958 ROE -.0311 RRA .0068 RC3 .8088 FAU .10611
                                                                                                                                                                   ST 974.2 SR 56.0 SS 619.3
CRT -.9316 CRS .9793 CST -.9318
     FOE 1.0251 FRA -.0796 FC3-8.2634 BSP 12257
BOE .5208 BRA .7248 BC3 5.3545 FSP -1665
                                                                                                                                                                   LSA 1139.5 MSA 192.8 SSA 10.9
                                                                                                                                                                   EL1 975.6 EL2 20.3 ALF 176.93
LAUNCH DATE DEC 2 1965
                                                                                                   FLIGHT TIME 144.00
                                                                                                                                                                                   ARRIVAL CATE APR 25 1966
    HELIOCENTRIC CONIC
                                                                                                  DISTANCE 418.637
     RL 147.48 LAL .00 LOL 69.61 VL 27.511 GAL -3.77 AZL 87.79 HCA 198.99 SMA 127.26 ECC .17168 INC 2.2093 V1 30.209
RP 108.75 LAP -.72 LOP 268.59 VP 37.388 GAP 5.29 AZP 92.09 TAL 198.77 TAP 37.77 RCA 105.41 APO 149.11 V2 34.846
RC 123.903 GL 18.43 GP 11.14 ZAL 117.42 ZAP 142.68 ETS 12.68 ZAE 135.13 ETE 170.34 ZAC 38.19 ETC 168.80 CLP-144.15
    PLANETOCENTRIC CONIC
     C3 11.207 VHL 3.348 DLA .19 RAL 308.10 RAD 6567.4 VEL 11.515 PTH 2.01 VHP 4.132 DPA -10.69 RAP 305.10 ECC 1.1844 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 3 10 7 2091.01

90.00 15 10 58 4723.28

100.00 4 31 33 1828.34

100.00 16 32 13 4461.18

110.00 5 40 0 1614.09

110.00 17 40 16 4248.19
                                                                                                                              113.42 3 44 58
66.37 16 29 41
                                                                    -16.39
                                                                                         33.81
                                                                                                       160.83
                                                                                                                                                                      1491.0
                                                                                                                                                                                          -13.08
                                                                                                                                                                                                                   26.69
                                                                     15.07
                                                                                        202.04
                                                                                                            160.73
                                                                                                                                                                          4123.3
                                                                                                                                                                                               12.74
                                                                                                                                                                                                                   194.95
                                                                                                                                                                         114.81 5 2 1
64.98 17 46 34
118.65 6 6 54
61.14 18 51 4
                                                                                                                                                                                            -13.75
                                                                                                       160.44
160.38
                                                                    -17.24
                                                                                         14.09
                                                                                                                                                                                                                    7.04
                                                                   16.92
                                                                                        182.37
                                                                                                                                                                                                                  175.34
                                                                                                       159.24
                                                                                                                                                                                                               349.77
                                                                  -19.50
                                                                                        356.63
                                                                  19.17
                                                                                        165.00
                                                                                                           159.17
                                                                                                                                                                                                                  158.16
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
ST 1214.6 SR 43.6 SS 744.6
CRT -.9036 CRS .9678 CST -.9519
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 3901.6 SGR 452.4 SG3 468.7

RRT -.9216 RRF -.9547 RTF ..9439

SGB 3927.7 R23 ..2139 R13 -.9449

SGI 3923.8 SG2 174.6 THA 173.89
     TDE .6772 TRA -.6767 TC3-5.2884 BAU .7987
     RDE -.0241 RRA -.0079 RC3 .6726 FAU .09682
FDE 1.2192 FRA .0837 FC3-7.4795 BSP 11756
BDE .6775 BRA .6768 BC3 5.3311 FSP -1416
                                                                                                                                                                   LSA 1411.7 MSA 196.7 SSA 10.7
                                                                                                                                                                  ELT 1215.3 ELZ 18.7 ALF 178.14
                                                                                                                                                                                  ARRIVAL DATE APR 27 1966
LAUNCH DATE DEC 2 1965
                                                                                                  FLIGHT TIME 146.00
    HELLOCENTRIC CONTC.
                                                                                                 DISTANCE 424.621
     RL 147.48 LAL .00 LOL 69.61 VL 27.472 GAL -3.55 AZL 87.61 HCA 202.17 SMA 127.00 ECC .17247 INC 2.3893 VI 30.209
RP 108.78 LAP -.90 LOP 271.76 VP 37.351 GAP 5.55 AZP 92.21 TAL 197.49 TAP 39.65 RCA 105.10 APO 148.90 V2 34.838
RC 126.245 GL 19.91 GP 9.36 ZAL 115.24 ZAP 144.91 ETS 11.34 ZAE 134.46 ETE 172.20 ZAC 39.76 ETC 166.74 CLP-146.02
    PLANETOCENTRIC CONTC
     C3 11.264 VHL 3.356 DLA 2.14 RAL 309.59 RAO 6567.4 VEL 11.517 PTH 2.01 VHP 4.230 DPA -12.19 RAP 306.74 ECC 1.1854
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       3 1 37 2152.43 -18.01 37.58

15 31 21 4663.94 14.42 198.47

4 23 57 1886.85 -18.87 17.67

16 51 41 4404.76 15.26 179.00

5 34 29 1666.10 -21.16 359.75

17 57 39 4198.28 17.51 162.09
                                                                                                                                                                                         -14.84
         90.00
                                                                                                       162.74 112.22
                                                                                                                                                  3 37 29
                                                                                                                                                                        1552.4
                                                                                                                                                                                                                   30.34
                                                                                                                                112.22 3 37 29 1552.4
65.36 16 49 4 4063.9
113.62 4 55 24 1286.9
63.98 18 5 6 3804.8
117.49 6 2 15 1066.1
60.16 19 7 37 3598.3
          90.00
                                                                                                           162.06
                                                                                                                                                                                             10.98
                                                                                                                                                                                                                191.49
         100.00
                                                                                                           162.35
                                                                                                                                                                                             -15.52
                                                                                                                                                                                                                   10.48
                                                                                                       161.65
         100.00
                                                                                                                                                                                            11.64
                                                                                                                                                                                                                172.08
         110.00
                                                                                                           161.19
                                                                                                                                                                                            -17.31
                                                                                                                                                                                                                 352.73
                                                                                                                                                                                            13.40
        110.00
                                                                                                           160.41
                                                                                                                                                                                                                 155.38
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TDE .7527 TRA -.6787 TC3-5.5124 BAU .8353
                                                                                           SGT 4084.9 SGR 415.7 SG3 458.7
RRT -.8994 RRF -.9293 RTF .9481
                                                                                                                                                                   ST 1335.8 SR 16.0 SS 755.3
CRT -.4922 CRS .5943 CST -.9592
     RDE -.0050 RRA -.0102 RC3 .6186 FAU .09479
     FOE 1.2071 FRA .0919 FC3-7.2858 BSP 12780
BOE .7527 BRA .6787 BC3 5.5470 FSP -1491
                                                                                         SGB 4106.0 R23 .1715 R13 -.9488
SGI 4102.0 SG2 181.0 THA 174.76
                                                                                                                                                                   LSA 1523.1 MSA 187.4 SSA 12.1
EL1 1335.8 EL2 13.9 ALF 179.66
LAUNCH DATE DEC 2 1965
                                                                                                  FLIGHT TIME 148.00
                                                                                                                                                                                   ARRIVAL DATE APR 29 1966
    HELIOCENTRIC CONIC
                                                                                                  DISTANCE 430.591
    RL 147.48 LAL .00 LOL 69.61 VL 27.433 GAL -3.31 AZL 87.47 HCA 205.34 SMA 126.74 ECC .17335 INC 2.5262 V1 30.209 RP 108.80 LAP -1.08 LOP 274.92 VP 37.315 GAP 5.80 AZP 92.28 TAL 196.16 TAP 41.50 RCA 104.77 APO 148.70 V2 34.830 RC 128.581 GL 21.05 GP 8.02 ZAL 113.05 ZAP 146.91 ETS 10.34 ZAE 133.80 ETE 173.53 ZAC 41.39 ETC 165.41 CLP-147.79
    PLANETOCENTRIC CONIC
     C3 11.299 VHL 3.361 DLA 3.79 RAL 311.23 RAD 6567.4 VEL 11.519 PTH 2.01 VHP 4.337 DPA -13.20 RAP 308.41 ECC 1.1860
    C3 11.299 VHL 3.361 DLA 3.79 RAL 311.23 RAD 6567.4 VEL 11.519 PTH 2.01 VHP 4.337 OPA -13.20 RAP 308.41 ECC 1.1860 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 53 2204.35 -19.32 40.83 164.76 111.11 3 32 37 1604.3 -16.28 33.48 90.00 15 50 11 4613.33 12.96 195.47 163.57 64.60 17 7 4 4013.3 9.44 188.57 100.00 4 18 59 1936.26 -20.19 20.75 164.39 112.52 4 51 16 1336.3 -16.96 13.44 100.00 17 9 45 4356.64 13.81 176.17 163.15 63.22 18 22 22 3756.6 10.10 169.34 110.00 5 31 18 1709.95 -22.52 2.43 163.26 116.43 5 59 48 1110.0 -18.78 355.28 110.00 18 13 56 4155.72 16.05 159.65 161.88 59.40 19 23 12 3555.7 11.87 155.04
                                                                                                                                                                         1110.0 -18.78
3555.7
                                                                                       MID-COURSE EXECUTION ACCURACY
SGT 4211.0 SGR 385.1 SG3 439.7
RRT -.8659 RRF -.8936 RTF .9475
SGB 4228.6 R23 .1427 R13 -.9480
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
ST 1478.5 SR 21.2 SS 788.9
    DIFFERENTIAL CORRECTIONS
     TOE .8428 TRA -.6452 TC3-5.6552 BAU .8586
                                                                                           SGB 4228.6 R23 .1427 R13 -.9480 LSA 1665.8 MSA 183.6 SSA 12.9 SG1 4224.2 SG2 192.0 THA 175.46 ELI 1478.5 Ft2
              .0091 RRA -.0171 RC3 .5707 FAU .08985
     FOE 1.2314 FRA .1617 FC3-6.8842 BSP 13206
BOE .8428 BRA .6454 BC3 5.6839 FSP -1438
```

FLIGHT TIME 142.00

```
ARRIVAL DATE MAY 1 1966
                                                                                                 FLIGHT TIME 150.00
LAUNCH DATE DEC 2 1965
                                                                                                DISTANCE 436.546
   HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 27.393 GAL -3.07 AZL 87.37 HCA 208.50 SMA 126.47 ECC .17432 INC 2.6346 VI 30.209 RP 108.82 LAP -1.26 LOP 278.09 VP 37.278 GAP 6.06 AZP 92.32 TAL 194.81 TAP 43.32 RCA 104.42 APO 148.52 VZ 34.822 RC 130.91 GL 21.94 GP 7.00 ZAL 110.83 ZAP 148.75 ETS 9.59 ZAE 133.18 ETE 174.50 ZAC 43.06 ETC 164.55 CLP-149.47
    PLANETOCENTRIC CONIC
     C3 11.327 VML 3.366 DLA 5.24 RAL 313.00 RAD 6567.4 VEL 11.520 PTH 2.01 VMP 4.451 DPA -13.89 RAP 310.13 ECC 1.1864
     C3 11.327 VHL 3.366 OLA 5.24 RAL 313.00 RAO 6567.4 VEL 11.520 PTH 2.01 VHP 4.451 OPA -13.89 RAP 310.13 ECC 1.1864
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 251 58 2250.48 -20.42 43.77 166.91 110.05 3 29 28 1650.5 -17.51 36.31
90.00 16 8 13 4568.22 11.63 192.83 165.26 64.00 17 24 22 3968.2 8.04 185.99
100.00 4 15 47 1980.14 -21.31 23.53 166.55 111.47 4 48 47 1380.1 -18.21 16.11
100.00 17 27 6 4313.79 12.48 173.68 164.83 62.61 18 38 59 3713.8 8.71 166.92
110.00 5 29 41 1748.85 -23.67 4.86 165.44 115.41 5 58 50 1148.8 -20.06 357.58
110.00 18 29 40 4117.87 14.72 157.52 163.53 58.80 19 38 18 3517.9 10.48 150.98
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SC1 4330.8 SCR 365.5 SC3 420.7

RRT -.8252 RRF -.8510 RTF ..9467

SC8 4346.1 R23 ..1203 R13 -.9471

SC1 4341.3 SC2 205.9 THA 176.01
                                                                                                                                                                ST 1611.9 SR 41.2 SS 815.3
CRT .9358 CRS -.8803 CST -.9692
     TDE .9268 TRA -.6017 TC3-5.7935 BAU .8811
RDE .0222 RRA -.0242 RC3 .5365 FAU .08492
                                                                                                                                                                 LSA 1797.8 MSA 180.3 SSA 13.8
     FOE 1.2411 FRA .2318 FC3-6.4903 BSP 13620
                                                                                                                                                                EU1 1612.4 EL2 14.5 ALF 1.37
     BOE .9271 BRA .6022 BC3 5.8183 FSP -1382
                                                                                                                                                                                ARRIVAL DATE MAY 3 1966
                                                                                                 FLIGHT TIME 152.00
LAUNCH DATE DEC 2 1965
                                                                                                 DISTANCE 442.485
   HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 27.352 GAL -2.81 AZZ 87.28 HCA 211.67 SMA 126.20 ECC .17540 INC 2.7226 VI 30.209

RP 108.65 LAP -1.43 LOP 281.25 VP 37.242 GAP 6.51 AZP 92.32 TAL 193.43 TAP 45.10 RCA 104.07 APO 148.34 VZ 34.816

RC 133.236 GL 22.65 GP 6.18 ZAL 108.56 ZAP 150.46 ETS 9.02 ZAE 132.60 ETE 175.24 ZAC 44.78 ETC 164.01 CLP-151.05
    PLANETOCENTRIC CONIC
     C3 11.358 VHL 3.370 DLA 6.57 RAL 314.89 RAD 6567.4 VEL 11.522 PTH 2.01 VHP 4.569 DPA -14.32 RAP 311.89 ECC 1.1869 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         2 49 20 2293.07
16 25 54 4526.76
4 13 49 2020.61
17 44 7 4274.46
5 29 13 1784.62
18 45 12 4083.21
                                                                                                                                                  3 27 33
                                                                                       46.52
                                                                                                         169.18
                                                                                                                               109.01
                                                                                                                                                                    1693.1
                                                                                                                                                                                          -18.60
                                                                                                                                                                                                                38.95
           90.00
                                                                  -21.39
                                                                                                                               63.51 17 41 21
110.44 4 47 29
62.12 18 55 21
114.42 5 58 58
58.29 19 53 15
                                                                                                                                                                                                                183.63
                                                                                                                                                                        3926.8
                                                                                                                                                                                               6.74
                                                                                       190.42
                                                                                                           167.12
          90.00
                                                                    10.38
                                                                                                                                                                                            -19.31
                                                                                                                                                                        1420.6
                                                                                                                                                                                                                 18.60
                                                                  -22.30
                                                                                        26.13
                                                                                                          168.83
         100.00
                                                                                                                                                                        3674.5
                                                                                                                                                                                             7.42
                                                                                                                                                                                                               164.71
                                                                  11.23
                                                                                      171.42
                                                                                                         166.67
         100.00
                                                                                                                                                                                         -21.19
                                                                                                                                                                      1184.6
                                                                                                                                                                                                                359.74
                                                                                                         167.75
         110.00
                                                                                          7.13
                                                                 -24.70
                                                                                                                                                                       3483.2
                                                                                                                                                                                             9.20
                                                                                                                                                                                                               149.11
                                                                                                           165.35
         110.00
                                                                  13.49
                                                                                       155.59
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACT
SGT 4443.8 5GR 353.7 SG3 402.3
RRT -.1790 RRF -.8034 RTF .9459
SGB 4457.9 R23 .1033 R13 -.9462
LSA 1926.1 MSA 177.0 SSA 14.7
EL1 1743.4 EL2 15.9 ALF 1.96
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TDE 1.0090 TRA -.5469 TC3-5.9211 BAU .9025
     RDE .0344 RRA -.0316 RC3 .5112 FAU .08014
FDE 1.2429 FRA .3024 FC3-6.1084 BSP 13982
BDE 1.0096 BRA .5478 BC3 5.9432 FSP -1323
                                                                                           SG1 4452.4 SG2 221.3 THA 176.44
                                                                                                                                                                               ARRIVAL DATE MAY 5 1966
                                                                                                 FLIGHT TIME 154.00
LAUNCH DATE DEC 2 1965
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 448.408
     RL 147.48 LAL .00 LOL 69.61 VL 27.312 GAL -2.55 AZL 87.20 HCA 214.84 SMA 125.94 ECC .17659 INC 2.7963 V1 30.209 RP 108.87 LAP -1.60 LOP 284.41 VP 37.207 GAP 6.56 AZP 92.30 TAL 192.03 TAP 46.86 RCA 103.70 APO 148.18 V2 34.809 RC 135.553 GL 23.22 GP 5.53 ZAL 106.24 ZAP 152.05 ETS 8.59 ZAE 132.08 ETE 175.80 ZAC 46.54 ETC 163.69 CLP-152.56
    PLANETOCENTRIC CONIC
     C3 11.401 VHL 3.377 DLA 7.82 RAL 316.88 RAO 6567.4 VEL 11.523 PTH 2.01 VHP 4.690 DPA -14.57 RAP 313.71 ECC 1.1876
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        2 47 39 2333.51
16 43 30 4487.87
4 12 46 2059.01
18 1 4 4237.61
5 29 37 1818.53
19 0 43 4050.85
                                                                                                                                                                  1733.5
                                                                                                                               107.96 3 26 33
                                                                                                                                                                                        -19.60
                                                                    -22.27
                                                                                      49.16
                                                                                                        171.57
          90.00
                                                                                                                                                                                                              181.44
                                                                                                                                 63.10 17 58 18
109.41 4 47 5
                                                                                                                                                                       3887.9
                                                                                                                                                                                              5.51
           90.00
                                                                      9.19
                                                                                      188.18
                                                                                                          169.13
                                                                                                                                                                                                                21.00
                                                                                                                                                                       1459.0
                                                                                                                                                                                           -20.33
                                                                                       28.63
                                                                                                          171.23
                                                                                                                               109.41
         100.00
                                                                 -23.19
                                                                                                                               61.70 19 11 42
113.43 5 59 55
57.86 20 8 14
                                                                                                                                                                                                              162.66
                                                                                                                                                                      3637.6
1218.5
                                                                                                                                                                                             6.19
                                                                                     169.32
                                                                                                          168.67
         100.00
                                                                  10.05
                                                            -25.64
12.33
                                                                                                                                                                                                                 1.81
                                                                                                                                                                                           -22.24
                                                                                                          170.18
                                                                                         9.32
         110.00
                                                                                                                                                                                              8.00
                                                                                                                                                                       3450.9
                                                                                      153.80
                                                                                                          167.32
         110.00
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SGT 4553.3 SGR 347.6 SG3 384.9

RRT -.7297 RRF -.7531 RTF .9451

SGB 4566.5 R23 .0901 R13 -.9454

SGI 4560.4 SG2 237.3 THA 176.80
                                                                                                                                                                ST 1868.4 SR 81.1 SS 855.8
CRT .9754 CRS -.9270 CST -.9751
     TOE 1.0889 TRA -.4844 TC3-6.0387 BAU .9235
     RDE .0459 RRA -.0390 RC3 .4918 FAU .07562
                                                                                                                                                                 LSA 2049.3 MSA 173.5 SSA 15.5
     FOE 1.2376 FRA .3682 FC3-5.7423 BSP 14364
BDE 1.0899 BRA .4859 BC3 6.0587 FSP -1272
                                                                                                                                                                ELI 1870.1 ELZ 17.9 ALF 2.42
                                                                                                                                                                                ARRIVAL DATE MAY 7 1966
                                                                                                 FLIGHT TIME 156.00
LAUNCH DATE DEC 2 1965
                                                                                                DISTANCE 454.317
    HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 27.271 GAL -2.27 AZL 87.14 MCA 218.00 SMA 125.67 ECC .17790 INC 2.8591 V1 30.209
RP 108.88 LAP -1.76 LOP 287.58 VP 37.171 GAP 6.81 AZP 92.25 TAL 190.59 TAP 48.60 RCA 103.31 APO 148.03 VZ 34.804
RC 137.863 GL 23.67 GP 4.99 ZAL 103.85 ZAP-153.56 ETS 8.27 ZAE 131.61 ETE 176.24 ZAC 48.34 ETC 163.53 CLP-154.00
    PLANETOCENTRIC CONIC
     C3 11.462 VHL 3.386 DLA 9.00 RAL 318.98 RAD 6567.4 VEL 11.526 PTH 2.01 VHP 4.816 DPA -14.66 RAP 315.57 ECC 1.1886
     C3 11.462 VHL 3.386 DLA 9.00 RAL 318.98 RAD 6567.4 VEL 11.526 PTH 2.01 VHP 4.816 DPA -14.66 RAP 315.57 ECC 1.1886 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 46 43 2372.72 -23.07 51.76 174.09 106.90 3 26 16 1772.7 -20.53 44.00 90.00 17 1 10 4450.88 8.05 186.07 171.29 62.76 18 15 21 3850.9 4.33 179.36 100.00 4 12 27 2096.20 -24.01 31.09 173.77 108.37 4 47 23 1496.2 -21.27 23.36 100.00 18 18 7 4202.63 8.92 167.35 170.82 61.35 19 28 10 3602.6 5.03 160.72 110.00 5 30 42 1851.33 -26.51 11.47 172.74 112.42 6 1 33 1251.3 -23.23 3.84 110.00 19 16 21 4020.27 11.21 152.13 169.44 57.50 20 23 22 3420.3 6.85 145.76
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
SGT 4653.2 SGR 345.1 SG3 367.9
RRT -.6779 RRF -.7004 RTF .9439
SGB 4666.0 R23 .0796 R13 -.9441
SGB 4669.1 SG2 253.3 THA 177.11
CRBIT DETERMINATION ACCURACY
ST 1996.8 SR 99.5 S5 874.0
CRT .9776 CRS -.9277 CST -.9774
LSA 2175.2 MSA 170.5 S5A 16.2
SG1 4659.1 SG2 253.3 THA 177.11
EL1 1999.1 EL2 20.9 ALF 2.79
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
      TOE 1.1710 TRA -.4092 TC3-6.1309 BAU .9423
      ROE .0567 RRA -.0468 RC3 .4750 FAU .07109
FOE 1.2324 FRA .4370 FC3-5.3695 BSP 14651
BOE 1.1724 BRA .4119 BC3 6.1493 FSP -1211
```

ARRIVAL DATE MAY 9 1966

LAUNCH DATE DEC 2 1965

DISTANCE 460.209 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.229 GAL -1.98 AZL 87.09 HCA 221.17 SMA 125.40 ECC .17933 INC 2.9134 VI 30.209 RP 108.90 LAP -1.92 LOP 290.74 VP 37.136 GAP 7.06 AZP 92.19 TAL 189.14 TAP 50.31 RCA 102.91 APO 147.89 VZ 34.799 RC 140.164 GL 24.02 GP 4.54 ZAL 101.41 ZAP 154.98 ETS 8.04 ZAE 131.20 ETE 176.60 ZAC 50.19 ETC 163.49 CLP-155.37 PLANETOCENTRIC CONIC C3 11.548 VHL 3.398 DLA 10.14 RAL 321.17 RAD 6567.4 VEL 11.530 PTH 2.01 VHP 4.944 DPA -14.64 RAP 317.48 ECC 1.1901 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 46 22 2411.30 17 19 1 4415.42 176.75 105.80 3 26 33 1811.3 -21.41 46.49 -23.80 54.34 90.00 62.48 18 32 37 3.19 177.37 6.94 184.06 173.60 3815.4 90.00 4 12 43 2132.76 18 35 20 4169.19 5 32 22 1883.53 19 32 11 3991.19 1532.8 -22.17 25.71 -24.77 33.54 176.44 107.29 4 - 48 16 100.00 61.06 19 44 50 173.12 3569.2 3.90 158.88 7.82 165.47 100.00 -27.32 13.62 175.44 111.39 6 3 46 57.18 20 38 42 1283.5 -24.17 5.87 110.00 3391.2 5.75 144.23 150.56 171.71 10.15 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4753.8 SGR 346.1 SG3 352.3 RRT -.6270 RRF -.6493 RTF .9434 SGB 4766.4 R23 .0718 R13 -.9436 ST 2117.9 SR 117.4 55 885.8 TOE 1.2499 TRA -.3290 TC3-6.2147 BAU .9621 ROE .0674 RRA -.0544 RC3 .4610 FAU .D6706 FDE 1.2189 FRA .4963 FC3-5.0275 BSP 15004 BDE 1.2517 BRA .3334 BC3 6.2318 FSP -1166 CRT .9774 CRS -.9262 CST -.9794 LSA 2292.5 MSA 166.9 SSA 17.0 EL1 2121.0 EL2 24.8 ALF 3.10 EL1 2121.0 EL2 24.8 ALF SG1 4758.8 SG2 269.3 THA 177.38 FLIGHT TIME 160.00 ARRIVAL DATE MAY 11 1966 LAUNCH DATE DEC 2 1965 DISTANCE 466.086 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.188 GAL -1.68 AZL 87.04 MCA 224.33 SMA 125.14 ECC .18089 INC 2.9614 VI 30.209
RP 108.91 LAP -2.07 LOP 293.90 VP 37.102 GAP 7.31 AZP 92.12 TAL 187.66 TAP 51.99 RCA 102.50 APO 147.77 V2 34.795
RC 142.456 GL 24.27 GP 4.15 ZAL 98.92 ZAP 156.33 ETS 7.89 ZAE 130.82 ETE 176.88 ZAC 52.07 ETC 163.53 CLP-156.68 PLANETOCENTRIC CONIC C3 11.666 VML 3.416 DLA 11.23 RAL 323.46 RAD 6567.4 VEL 11.535 PTH 2.01 VMP 5.077 OPA -14.51 RAP 319.42 ECC 1.1920 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 179.55 104.67 3 27 20 62.25 18 50 8 1849.7 2 46 30 2449.67 -24.49 -22.24 90.00 56.94 49.00 3781.3 2.10 175.46 90.00 17 37 4381.28 5.86 182.13 176.06 4 13 30 2169.09 18 52 48 4137.08 5 34 33 1915.49 19 48 15 3963.46 106.18 4 49 39 1569.1 -23.02 28.07 -25.48 36.00 179.25 100.00 60.81 20 1 45 110.32 6 6 28 56.91 20 54 18 175.57 3537.1 2.82 157.11 100.00 6.76 163.68 1315.5 -25.07 7.91 110.00 -28.10 15.78 178.28 3363.5 4.70 142.77 110.00 9.12 149.07 174.13 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 4850.3 SGR 349.0 SG3 337.5 RRT -.5768 RRF -.5991 RTF .9428 ST 2238.3 SR 134.6 SS 896.7 CRT .9752 CRS -.9225 CST -.9811 TOE 1.3301 TRA -.2389 TC3-6.2760 BAU .9813 ROE .0778 RRA -.0621 RC3 .4476 FAU .06321 SGB 4862.8 R23 .0655 R13 -.9429 FOE 1.2054 FRA .5550 FC3-4.6908 BSP 15334 LSA 2409.4 MSA 163.8 SSA 17.6 BOE 1.3324 BRA .2468 BC3 6.2919 F6P -1119 SG1 4854.4 SG2 284.8 THA 177.62 EL1 2242.2 EL2 29.8 ALF 3.36 ARRIVAL DATE MAY 13 1966 FLIGHT TIME 162.00 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC DISTANCE 471.947 RL 147.48 LAL .00 LOL 69.61 VL 27.146 GAL -1.37 AZL 87.00 HCA 227.49 SMA 124.87 ECC .18260 INC 3.0042 V1 30.209 RP 108.92 LAP -2.21 LOP 297.06 VP 37.069 GAP 7.56 AZP 92.03 TAL 186.17 TAP 53.66 RCA 102.07 APO 147.67 VZ 34.791 RC 144.737 GL 24.44 GP 3.83 ZAL 96.36 ZAP 157.62 ETS 7.81 ZAE 130.50 ETE 177.12 ZAC 53.99 ETC 163.63 CLP-157.94 PLANETOCENTRIC CONIC C3 11.820 VHL 3.438 DLA 12.30 RAL 325.83 RAD 6567.5 VEL 11.542 PTH 2.01 VHP 5.212 DPA -14.29 RAP 321.40 ECC 1.1945 LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 47 4 2488.09 17 55 28 4348.38 4 14 43 2205.44 19 10 31 4106.26 5 37 10 1947.42 20 4 33 3937.04 103.50 3 28 32 1888.1 -23.02 51.54 90.00 -25.13 59.58 182.48 62.06 19 7 57 3748.4 1.04 173.63 90.00 4.81 178.68 -26.15 38.50 182.20 105.03 4 51 28 1605.4 -23.83 30.47 100.00 5,73 161.97 178.17 60.61 20 18 57 3506.3 1.77 155.42 100.00 109.21 6 9 37 56.68 21 10 10 1347.4 -25.94 9.99 -28.83 17.97 181.26 110.00 141.38 3337.0 3.69 110.00 8.13 176.70 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4941.4 SGR 353.2 SG3 323.3 RRT -.5279 RRF -.5504 RTF .9424 SGB 4954.0 R23 .0601 R13 -.9425 ST 2355.9 SR 151.3 SS 904.7 CRT .9720 CRS -.9180 CST -.9827 TOE 1.4109 TRA -.1407 TC3-6.3110 BAU .9997 ROE .0881 RRA -.0698 RC3 .4340 FAU .05954 LSA 2523.0 MSA 160.6 SSA 18.2 EL1 2360.5 EL2 35.5 ALF 3.57 FOE 1.1897 FRA .6089 FC3-4.3607 BSP 15665 BOE 1.4136 BRA .1571 BC3 6.3259 FSP -1078 SG1 4944.9 SG2 299.8 THA 177.83 LAUNCH DATE DEC 2 1965 ARRIVAL DATE MAY 15 1966 FLIGHT TIME 164.00 DISTANCE 477.792 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 27.105 GAL -1.05 AZL 86.96 MCA 230.65 SMA 124.61 ECC .18446 INC 3.0429 VI 30.209 RP 108.93 LAP -2.35 LOP 300.22 VP 37.036 GAP 7.81 AZP 91.93 TAL 184.65 TAP 55.30 RCA 101.62 APO 147.59 V2 34.788 RC 147.008 GL 24.52 GP 3.55 ZAL 93.76 ZAP 158.86 ETS 7.79 ZAE 130.21 ETE 177.31 ZAC 55.95 ETC 163.76 CLP-159.14 PLANETOCENTRIC CONIC C3 12.018 VHL 3.467 DLA 13.33 RAL 328.28 RAD 6567.5 VEL 11.550 PTH 2.02 VHP 5.352 DPA -13.99 RAP 323.41 ECC 1.1978 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 102.28 3 30 8 61.92 19 26 3 185.56 -23.77 1926.7 54.13 90.00 2 48 1 2526.74 18 14 6 4316.71 -25.72 62.26 3716.7 .01 171.86 90.00 3.80 178.50 181.44 4 53 41 -24.60 32.91 185.29 103.83 1642.0 100.00 4 16 19 2241.97 -26.77 41.04 60.45 20 36 26 3476.7 .77 153.80 100.00 19 28 29 4076.72 4.74 160.33 180.92 6 13 12 1379.5 -26.78 12.10 5 40 12 1979.47 20 21 5 3911.98 108.05 110.00 -29.53 20.21 184.40 56.49 21 26 17 2.74 3312.0 110.00 7.19 146.32 179.41 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5026.0 SGR 358.1 SG3 309.8 RRT - .4800 RRF - .5025 RTF .9418 SGB 5038.7 R23 .0555 R13 - .9419 SGI 5029.0 SG2 314.0 THA 178.03 ST 2475.1 SR 167.4 SS 913.1 CRT .9676 CR5 -.9124 CST -.9841 TOE 1.4955 TRA -.0304 TC3-6.3114 BAU 1.0163 RDE .0983 RRA -.0776 RC3 .4193 FAU .05595 LSA 2638.7 MSA 158.0 SSA 18.7 E:1 2480 4 FL2 42.1 ALF 3.75 FOE 1.1761 FRA .6643 FC3-4.0303 BSP 15917

FLIGHT TIME 158.00

BDE 1.4987 BRA .0833 BC3 6.3253 FSP -1031

LAUNCH DATE DEC 2 1965		FLIGHT TIME 166.00	ARRIVAL DATE HAY 17 1966
HELIOCENTRIC CONIC		DISTANCE 483.621	
		GAL71 AZL 86.92 HCA 233.82 5MA 124.34	
		GAP 8.07 AZP 91.82 TAL 183.12 TAP 56.93 ZAP 160-D* ETS 7.82 ZAE 129.95 ETE 177.48	
PLANETOCENTRIC CONIC	,, ,,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	2AF 100-04 (13 1.02 2AC 123.33 (16 117.40	2xc 37.54 Etc 165.55 CE7-165.51
· · · · · · · · ·		RAD 6567.5 VEL 11.561 PTH 2.02 VHP 5.495	
ENCH AZMTH LNCH TIME L-I TIM 90.00 2 49 19 2565.71	INJ LAT -26.25	INJ LONG INJ RT ASC INJ AZMTH INJ TIME 64.98 188.78 101.02 3 32 4	PO CST TIM INJ 2 LAT INJ 2 LONG 1965.7 -24.47 56.77
90.00 18 32 58 4286.37	2.82	176.80 184.34 51.81 19 44 25	3686.497 170.17
100.00 4 18 18 2278.75	-27.34	43.62 188.52 102.58 4 56 16	1678.7 -25.33 35.40
100.00 19 46 40 4048.57	3.80 -30.19	158.78 183.81 60.33 20.54 9 22.49 187.67 106.85 6.17 10	3448.618 152.25 1411.7 -27.59 14.26
110.00 5 43 38 2011.71 110.00 20 37 49 3888.37	6.30	22.49 187.67 106.85 6 17 10 145.07 182.25 56.33 21 42 38	3288.4 1.84 138.84
DIFFERENTIAL CORRECTIONS	*****	MID-COURSE EXECUTION ACCURACY	ORBIT DETERMINATION ACCURACY
TOE 1.5804 TRA .0871 TC3-6.28	3 BAU 1.0332	SGT 5109.0 SGR 363.7 SG3 297.2	ST 2589.2 SR 183.2 55 918.7
FOE 1 1609 FRA0851 RC3 .40	7 FAU .U5262	568 5121.9 823 .0513 R139416	LSA 2749.0 MSA 155.7 SSA 19.1
BDE 1.5841 BRA .1218 BC3 6.30	2 FSP -991	RRT4342 RRF4567 RTF .9415 SGB 5121.9 R23 .0513 R139416 SGI 5111.4 SG2 327.4 THA 178.22	EL1 2595.2 EL2 49.2 ALF 3.90
LAUNCH DATE DEC 2 1965		FLIGHT TIME 168.00	ARRIVAL DATE MAY 19 1966
HELIOCENTRIC CONIC		DISTANCE 489.431	
		GAL36 AZL 86.89 HCA 236.98 SMA 124.08 GAP 8.34 AZP 91.70 TAL 181.57 TAP 58.55	
		ZAP 161.18 ETS 7.91 ZAE 129.73 ETE 177.62	
PLANETOCENTRIC CONIC			
C3 12.571 VHL 3.546 DLA 15.1 LNCH AZMTH LNCH TIME L-I TIM		RAD 6567.5 VEL 11.574 PTH 2.02 VHP 5.643 Inj long Inj RT ASC Inj AZMTH Inj Time	
90.00 2 50 56 2605.02	-26.73	67.76 192.13 99.70 3 34 21	2005.0 -25.12 59.46
90.00 18 52 2 4257.50	1.89	175.19 187.39 61.74 20 3 0	3657.5 -1.90 168.56
100.00 4 20 37 2315.61	-27.86	46.25 191.89 101.29 4 59 13 157.31 186.83 60.24 21 12 4	1715.8 -26.02 37.93 3421.9 -1.09 150.79
100.00 20 5 2 4021.94 110.00 5 47 26 2044.15	2.90 -30.81	157.31 186.83 60.24 21 12 4 24.81 191.08 105.60 6 21 31	3421.9 -1.09 150.79 1444.2 -28.36 16.47
110.00 20 54 43 3866.36	5.47	143.91 185.23 56.21 21 59 9	3266.4 1.00 137.69
DIFFERENTIAL CORRECTIONS		MID-COURSE EXECUTION ACCURACY	ORBIT DETERMINATION ACCURACY
TDE 1.6615 TRA .2103 TC3-6.24 RDE .11977-RRA0923 RC3 .38		SGT 5190.9 SGR 369.8 SG3 285.2 RRT3914 RRF4150 RTF .9421 SGB 5204.1 R23 .0485 R139422 SGB 5204.1 R23 .0485 R139422	ST 2690.3 SR 199.1 SS 917.7 CRT .9584 CRS9020 CST9865
FOE 1.1398 FRA .7572 FC3-3.42		800 6204 1 021	101 7045 7 465 457 7 551 45 4
		300 3604.1 KE3 .0403 KI39466	LOA 2840.0 MOA 100.0 DOA 19.4
BDE 1.6658 BRA .2296 BC3 6.25		SG1 5193.0 SG2 340.2 THA 178.40	EL1 2697.1 EL2 56.7 ALF 4.06
		SG1 5193.0 SG2 340.2 THA 178.40	ELI 2697.1 EL2 56.7 ALF 4.06 ARRIVAL DATE MAY 21 1966
BDE 1.6658 BRA .2296 BC3 6.25		FLIGHT TIME 170.00	EL 2097.1 ELZ 30.7 ALF 4.50
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC	4 FSP -965	FLIGHT TIME 170.00 DISTANCE .000	ARRIVAL DATE MAY 21 1966
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL	1 VL 26.980 G 1 VP 36.941 G	FLIGHT TIME 170.00 DISTANCE .000 AL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL	1 VL 26.980 G 1 VP 36.941 G	FLIGHT TIME 170.00 DISTANCE .000 SAL .00 AZL 86.86 HCA 240.14 SMA 123.82	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F	FLIGHT TIME 170.00 DISTANCE .000 CAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 R INJ LAT -27.16 1.01	FLIGHT TIME 170.00 DISTANCE .000 CAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59 175.66 190.58 61.70 20 21 49	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F INJ LAT -27.16 1.01 -28.33	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VML 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38	FLIGHT TIME 170.00 DISTANCE .000 CAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 231 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3650.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VML 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38	FLIGHT TIME 170.00 DISTANCE .000 CAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3650.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL	1 VL 26.980 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59 173.66 190.58 61.70 20 14 9 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3650.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04	1 VL 26.980 0 1 VP 36.941 0 1 ZAL 85.70 2 O RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3650.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL CATE MAY 23 1966
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RR 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 155.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-1 TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 01STANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 3D.2D9 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.7D RAP 329.58 ECC 1.213D PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 363D.2 -2.78 167.03 1753.2 -26.66 4D.53 3396.9 -1.93 149.42 1476.9 -29.1D 18.73 3246.D .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 VI 3D.2D9
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.3 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.7	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 ZAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36 59 173.66 190.58 61.70 20 14 9 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 OISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6	1 VL 26.980 0 1 VP 36.941 0 1 VP 36.941 0 1 ZAL 85.70 2 0 RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 0 7 VP 36.911 0 5 ZAL 82.98 2	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PRAD 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VHP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6.26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 01STANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VHP 5.954	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 F INJ LAT -27.52	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PRAD 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 DPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 20 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z 0 RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 F INJ LAT -27.52 .19	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PRAD 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 DPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 20 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 F INJ LAT -27.52 .19 -28.74	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 RAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 175.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6.26 14 142.84 188.36 56.10 22.15 52 FLIGHT TIME 172.00 01STANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39.54 172.25 193.88 61.68 20.40 37 51.64 199.02 98.59 5 6 8	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 DPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 3996.94 110.00 20 11 46 3846.04 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZHTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 F INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 F INJ LAT -27.52 .19 -28.74	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 RAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 175.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6.26 14 142.84 188.36 56.10 22.15 52 FLIGHT TIME 172.00 01STANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39.54 172.25 193.88 61.68 20.40 37 51.64 199.02 98.59 5 6 8	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 V1 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 DPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246.0 .22 136.63 ARRIVAL DATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 DPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 396.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79 100.00 4 26 18 2390.66 100.00 20 42 5 3973.93 110.00 5 56 8 2109.60	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 R INJ LAT -27.52 .19 -28.74 1.27 -31.91	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 PARAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39 54 172.25 193.88 61.68 20 40 37 51.64 199.02 98.59 5 6 8 154.68 193.28 60.13 21 48 19 29.60 198.32 102.97 6 31 17 141.89 191.58	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246-0 .22 136.63 ARRIVAL OATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 OPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15 3373.9 -2.71 148.15 1509.6 -29.79 21.02
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 396.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79 100.00 4 26 18 2390.66 100.00 20 42 5 3973.93 110.00 5 56 8 2109.60	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 R INJ LAT -27.52 .19 -28.74 1.27 -31.91	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 PARAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39 54 172.25 193.88 61.68 20 40 37 51.64 199.02 98.59 5 6 8 154.68 193.28 60.13 21 48 19 29.60 198.32 102.97 6 31 17 141.89 191.58	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246-0 .22 136.63 ARRIVAL OATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 OPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15 3373.9 -2.71 148.15 1509.6 -29.79 21.02
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 396.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79 100.00 4 26 18 2390.66 100.00 20 42 5 3973.93 110.00 5 56 8 2109.60	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 R INJ LAT -27.52 .19 -28.74 1.27 -31.91	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 PAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 PARAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 173.66 190.58 61.70 20 21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6 26 14 142.84 188.36 56.10 22 15 52 FLIGHT TIME 172.00 DISTANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39 54 172.25 193.88 61.68 20 40 37 51.64 199.02 98.59 5 6 8 154.68 193.28 60.13 21 48 19 29.60 198.32 102.97 6 31 17 141.89 191.58	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246-0 .22 136.63 ARRIVAL OATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 OPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15 3373.9 -2.71 148.15 1509.6 -29.79 21.02
BDE 1.6658 BRA .2296 BC3 6.25 LAUNCH DATE DEC 2 1965 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.72 LOP 309.7 RC 153.743 GL 24.27 GP 2.5 PLANETOCENTRIC CONIC C3 12.940 VHL 3.597 DLA 16.2 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 52 54 2644.77 90.00 19 11 19 4230.17 100.00 4 23 18 2353.23 100.00 20 23 36 396.94 110.00 5 51 38 2076.89 110.00 21 11 46 3846.04 LAUNCH DATE DEC 2 1965 MELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.6 RP 108.94 LAP -2.83 LOP 312.6 RC 155.962 GL 24.03 GP 2.3 PLANETOCENTRIC CONIC C3 13.379 VHL 3.658 DLA 17.6 LNCH AZMTH LNCH TIME L-I TIME 90.00 2 55 9 2684.58 90.00 19 30 32 4204.79 100.00 4 26 18 2390.66 100.00 20 42 5 3973.93 110.00 5 56 8 2109.60	1 VL 26.980 G 1 VP 36.941 G 1 VP 36.941 G 1 ZAL 85.70 Z O RAL 336.07 R INJ LAT -27.16 1.01 -28.33 2.05 -31.38 4.70 1 VL 26.939 G 7 VP 36.911 G 5 ZAL 82.98 Z 8 RAL 338.76 R INJ LAT -27.52 .19 -28.74 1.27 -31.91	FLIGHT TIME 170.00 DISTANCE .000 GAL .00 AZL 86.86 HCA 240.14 SMA 123.82 GAP 8.60 AZP 91.57 TAL 180.00 TAP 60.14 RAP 162.28 ETS 8.04 ZAE 129.54 ETE 177.74 RAD 6567.5 VEL 11.590 PTH 2.03 VMP, 5.796 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 70.59 195.62 98.34 3 36.59 175.66 190.58 61.70 20.21 49 48.93 195.40 99.96 5 2 31 155.94 190.01 60.17 21 30 13 27.19 194.65 104.30 6.26 14 142.84 188.36 56.10 22.15 52 FLIGHT TIME 172.00 01STANCE 500.999 GAL .38 AZL 86.83 HCA 243.30 SMA 123.57 GAP 8.88 AZP 91.43 TAL 178.43 TAP 61.73 ZAP 163.34 ETS 8.23 ZAE 129.38 ETE 177.85 RAD 6567.5 VEL 11.609 PTH 2.03 VMP 5.954 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 73.45 199.21 96.96 3 39.54 172.25 193.88 61.68 20.40 37 51.64 199.02 98.59 5 6 8	ARRIVAL DATE MAY 21 1966 ECC .19106 INC 3.1411 VI 30.209 RCA 100.17 APO 147.48 V2 34.784 ZAC 62.02 ETC 164.31 CLP-162.51 OPA -12.70 RAP 329.58 ECC 1.2130 PO CST TIM INJ 2 LAT INJ 2 LONG 2044.8 -25.72 62.22 3630.2 -2.78 167.03 1753.2 -26.66 40.53 3396.9 -1.93 149.42 1476.9 -29.10 18.73 3246-0 .22 136.63 ARRIVAL OATE MAY 23 1966 ECC .19364 INC 3.1696 V1 30.209 RCA 99.64 APO 147.50 V2 34.784 ZAC 64.10 ETC 164.52 CLP-163.56 OPA -12.16 RAP 331.67 ECC 1.2202 PO CST TIM INJ 2 LAT INJ 2 LONG 2084.6 -26.27 65.01 3604.8 -3.59 165.61 1790.7 -27.26 43.15 3373.9 -2.71 148.15 1509.6 -29.79 21.02

ARRIVAL DATE MAY 25 1966

LAUNCH DATE DEC 2 1965

DISTANCE 506.753 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 26.898 GAL .77 AZL 86.80 HCA 246.46 SMA 123.31 ECC .19644 INC 3.1965 V1 30.209
RP 108.94 LAP -2.93 LOP 316.04 VP 36.881 GAP 9.16 AZP 91.28 TAL 176.84 TAP 63.30 RCA 99.09 APO 147.54 V2 34.785
RC 158.168 GL 23.72 GP 2.60 ZAL 80.24 ZAP 164.37 ETS 8.47 ZAE 129.24 ETE 177.95 ZAC 66.20 ETC 164.72 CLP-164.58 PLANETOCENTRIC CONIC C3 13.900 VHL 3.728 0LA 17.91 RAL 341.50 RAD 6567.5 VEL 11.631 PTH 2.04 VHP 6.118 DPA -11.58 RAP 333.78 ECC 1.2288 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 57 44 2724.64 19 49 48 4181.40 4 29 38 2428.29 21 0 35 3952.99 6 1 0 2142.46 21 45 43 3811.58 95.53 3 43 9 61.69 20 59 30 202.92 2124.6 -26.76 67.84 90.00 -27.82 76.34 90.00 -.56 170.94 197.31 3581.4 -4.34 164.30 97.19 5 10 7 60.11 22 6 28 101.60 6 36 42 55.97 22 49 15 100.00 -29.09 54.38 202.75 1828.3 -27.79 45.82 100.00 . 56 153.53 196.69 3353.0 -3.42 147.00 23.36 110.00 -32.38 32.04 202.12 1542.5 -30.45 110.00 3.39 141.04 194.92 3211.6 -1.10 134.83 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5399.9 SGR 386.2 SG3 252.4 RRT -.2652 RRF -.2869 RTF .9409 SGB 5408.7 R23 .0375 R13 -.9410 SGI 5395.9 SG2 372.3 THA 178.91 TOE 1.9321 TRA .6568 TC3-5.8708 BAU 1.0927 ST 2989.2 SR 244.3 SS 921.4 CRT .9426 CRS -.8859 CST -.9893 ROE .1549 RRA -.1127 RC3 .3266 FAU .04072 FOE 1.0976 FRA .8997 FC3-2.5360 BSP 17196 BOE 1.9383 BRA .6664 BC3 5.8799 FSP -848 LSA 3133.7 MSA 152.4 SSA 19.7 EL1 2998.0 EL2 81.3 ALF 4.41 LAUNCH DATE DEC 2 1965 FLIGHT TIME 176.00 ARRIVAL DATE MAY 27 1966 HELIOCENTRIC CONIC DISTANCE 512.485 RL 147.48 LAL .00 LOL 69.61 VL 26.857 GAL 1.18 AZL 86.78 MCA 249.62 SMA 123.06 ECC .19947 INC 3.2222 V1 30.209 RP 108.94 LAP -3.02 LOP 319.20 VP 36.853 GAP 9.45 AZP 91.12 TAL 175.24 TAP 64.86 RCA 98.51 APO 147.61 V2 34.787 RC 160.359 GL 23.34 GP 2.47 ZAL 77.51 ZAP 165.37 ETS 8.77 ZAE 129.12 ETE 178.04 ZAC 68.33 ETC 164.92 CLP-165.58 PLANETOCENTRIC CONIC C3 14.512 VHL 3.809 DLA 18.69 RAL 344.27 RAD 6567.6 VEL 11.657 PTH 2.05 VHP 6.289 DPA -10.95 RAP 335.89 ECC 1.2388 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.18 3 0 39 2764.75 20 8 57 4160.30 4 33 20 2465.91 94.09 3 46 44 2164.7 90.00 -28.04 79.26 206.73 70.70 61.71 21 18 18 90.00 -1.24 169.77 200.85 3560.3 -5.02 163.12 95.76 5 14 26 60.11 22 24 32 100.00 -29.38 57.14 206.59 1865.9 -28.27 48.51 21 18 58 3934.37 6 6 13 2175.32 22 2 35 3797.73 100.00 -.07 152.51 200.19 3334.4 -4.05 145.98 110.00 -32.A1 34.51 206.03 100.19 6 42 28 55.92 23 5 52 1575.3 -31.05 25.73 110.00 2.86 140.31 198.36 3197.7 -1.63 134.11 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5455.9 SGR 391.2 SG3 242.4 RRT - .2259 RRF - .2471 RTF .9413 SGB 5469.9 R23 .0344 R13 - .9414 SGI 5456.6 SG2 381.0 THA 179.07 TOE 2.0219 TRA .8233 TC3-5.6926 BAU 1.1060 ST 3068.9 SR 259.2 SS 916.7 CRT .9378 CRS -.8816 CST -.9901 ROE .1681 RRA -.1184 RC3 .3042 FAU .03813 FOE 1.0809 FRA .9400 FC3-2.2749 8SP 17442 BOE 2.0288 BRA .8318 BC3 5.7007 FSP -819 LSA 3209.7 MSA 152.9 SSA 19.5 EL1 3078.5 EL2 89.7 ALF 4.53 LAUNCH DATE DEC 2 1965 FLIGHT TIME 178.00 ARRIVAL DATE MAY 29 1966 HELIOCENTRIC CONIC DISTANCE 518.194 RL 147.48 LAL .00 LOL 69.61 VL 26.816 GAL 1.61 AZL 86.75 MCA 252.78 SMA 122.81 ECC .20276 INC 3.2468 V1 30.209
RP 108.93 LAP -3.10 LOP 322.37 VP 36.825 GAP 9.75 AZP 90.96 TAL 173.64 TAP 66.42 RCA 97.91 APO 147.71 V2 34.789
RC 162.536 GL 22.90 GP 2.35 ZAL 74.79 ZAP 166.35 ETS 9.12 ZAE 129.03 ETE 178.12 ZAC 70.48 ETC 165.12 CLP-166.55 PLANETOCENTRIC CONIC C3 15.225 VML 3.902 DLA 19.42 RAL 347.05 RAD 6567.6 VEL 11.688 PTH 2.06 VMP 6.468 DPA -10.28 RAP 338.02 ECC 1.2506 17.225 WHL 3.9UZ DLA 19.42 RAL 347.D5 RAD 6567.6 VEL 11.688 PTM 2.06 VMP 6.488 DPA -10.28 RAP 338.D2 ECC 1.2506

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 20 27 53 4141.72 -1.84 168.73 204.48 61.74 21 36 55 3541.7 -5.61 162.07

100.00 4 37 22 2503.39 -29.61 59.90 210.53 94.32 5 19 6 1903.4 -28.69 51.22

100.00 21 37 7 3918.32 -.61 151.63 203.80 60.11 22 42 25 3318.3 -4.59 145.09

110.00 6 11 46 2208.07 -33.17 37.00 210.05 98.76 6 48 34 1608.1 -31.61 28.12

110.00 22 19 13 3786.39 2.43 139.72 201.89 55.89 23 22 19 3186.4 -2.06 133.52 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5512.7 SGR 395.7 SG3 233.0 RRT -.1873 RRF -.2080 RTF .9418 TDE 2.1123 TRA 1.0010 TC3-5.4878 BAU 1.1185 ST 3139.4 SR 273.7 SS 910.4 RDE .1822 RRA -.1235 RC3 .2809 FAU .03567 CRT .9332 CRS -.8776 CST -.9908 FOE 1.0643 FRA .9795 FC3-2.0282 BSP 17672 BDE 2.1201 BRA 1.0086 BC3 5.4950 FSP -790 SGB 5526.9 R23 .0313 R13 -.9419 LSA 3276.4 MSA 154.1 SSA 19.3 SG1 5513.2 SG2 388.7 THA 179.23 EL1 3149.7 EL2 98.1 ALF 4.66 LAUNCH DATE DEC 2 1965 FLIGHT TIME 180.00 ARRIVAL DATE MAY 31 1966 HELIOCENTRIC CONIC DISTANCE 523.879 RL 147.48 LAL .00 LOL 69.61 VL 26.776 GAL 2.06 AZL 86.73 HCA 255.95 SMA 122.57 ECC .20632 INC 3.2706 V1 30.209 RP 108.92 LAP -3.17 LOP 325.53 VP 36.799 GAP 10.07 AZP 90.79 TAL 172.02 TAP 67.97 RCA 97.28 APO 147.85 V2 34.792 RC 164.699 GL 22.40 GP 2.25 ZAL 72.09 ZAP 167.30 ETS 9.54 ZAE 128.94 ETE 178.20 ZAC 72.65 ETC 165.30 CLP-167.50 PLANETOCENTRIC CONIC C3 16.053 VHL 4.007 OLA 20.08 RAL 349.83 RAD 6567.6 VEL 11.723 PTH 2.07 VHP 6.654 DPA -9.57 RAP 340.15 ECC 1.2642 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 7 31 2844.50 20 46 30 4125.90 4 41 46 2540.59 21 54 56 3905.04 6 17 39 2240.64 90.00 -28.29 85.08 214.60 91.18 3 54 56 2244.5 -27.83 76.44 90.00 -2.35 167.85 208.19 61.77 21 55 16 3525.9 -6.11 161.18 100.00 -29.77 62.66 214.54 92.88 5 24 7 1940.6 -29.05 53.93 60.12 23 0 1 100.00 -1.06 150.90 207.48 3305.0 -5.03 144.36 97.32 6 54 59 55.87 23 38 31 110.00 -33.48 39.49 214.15 1640.6 -32.11 30.53 2.10 110.00 22 35 33 3777.76 139.27 205.50 3177.8 -2.39 133.02 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5563.3 SGR 399.6 SG3 7274.0 RRT -.1484 RRF -.1682 RTF .9421 SGB 5577.6 R23 .0280 R13 -.9421 SGI 5563.6 SG2 395.2 THA 179.39 TDE 2.2062 TRA 1.1935 TC3-5.2493 BAU 1.1279 ST 3204.2 SR 288.0 SS 903.7 CRT .9286 CRS -.8739 CST -.9915 RDE .1971 RRA -.1278 RC3 .2568 FAU .03316 FOE 1.0494 FRA 1.0203 FC3-1.7885 BSP 17800 BDE 2.2150 BRA 1.2004 BC3 5.2556 FSP -758 LSA 3337.9 MSA 156.0 SSA 18.9 EL1 3215.3 EL2 106.5 ALF 4.78

FLIGHT TIME 174.00

ARRIVAL DATE JUN 2 1956

```
FLIGHT TIME 182.00
LAUNCH DATE DEC 2 1965
                                                                    DISTANCE 529.535
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.735 GAL 2.53 AZL 86.71 HCA 259.11 SMA 122.32 ECC .21018 INC 3.2938 V1 30.209
RP 108.91 LAP -3.23 LOP 328.70 VP 36.773 GAP 10.39 AZP 90.62 TAL 170.41 TAP 69.51 RCA 96.61 APO 148.03 VZ 34.796
                      21.84 CP 2.15 ZAL 69.42 ZAP 168.23 ETS 10.04 ZAE 128.88 ETE 178.27 ZAC 74.84 ETC 165.48 CLP-168.43
    RC 166.847 GL
   PLANETOCENTRIC CONIC
    C3 17.009 VHL 4.124 OLA 20.69 RAL 352.61 RAO 6567.7 VEL 11.764 PTH 2.08 VHP 6.849 DPA -8.84 RAP 342.29 ECC 1.2799
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 11 30 2883.80
21 4 39 4113.09
                                                                                                      3 59 34
                                                                                                                    2283.8
                                                              87.95
                                                                          218.64
                                                                                          89.74
                                                                                                                                    -28.05
                                               -28.32
       90.00
                                                             167.13
                                                                           211.98
                                                                                           61.81
                                                                                                    22 13 13
                                                                                                                      3513.1
                                                                                                                                                  160.46
        90.00
                                                -2.76
                  4 46 32 2577.38
22 12 19 3894.75
                                                -29.86
                                                                           218.62
                                                                                           91.45
                                                                                                      5 29 29
                                                                                                                      1977.4
                                                                                                                                    -29.34
                                                                                                                                                   56.62
                                                              65.39
      100.00
                                                                           211.23
                                                                                           60.14
                                                                                                    23 17 14
                                                                                                                      3294.7
                                                                                                                                     -5.38
                                                             150.33
      100.00
                                                -1.41
                   6 23 51 2272.92
22 51 29 3771.98
                                                                                           95.87
                                                                                                                      1672.9
                                                                                                                                                   32.94
                                               -33.74
                                                              41.97
                                                                           218.33
      110.00
                                                                                           55.86 23 54 21
                                                             138.97
                                                                                                                      3172.0
                                                                                                                                    -2.61
                                                                           209.17
                                                1.88
      110.00
                 22 51 29
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SCT 5610.9 SGR 403.1 SG3 215.3
RRT -.1108 RRF -.1298 RTF .9428
SGB 5625.4 R23 .0250 R13 -.9428
                                                                                                                  ST 3253.7 SR 301.8 SS 894.2
CRT .9244 CRS -.8706 CST -.9921
    TOE 2.2972 TRA 1.3944 TC3-5.0000 BAU 1.1382
   ROE .2131 RRA -.1312 RC3 .2328 FAU .03090
FOE 1.0330 FRA 1.0581 FC3-1.5726 BSP 18000
                                                                                                                 LSA 3384.0 MSA 158.3 SSA 18.5
EL1 3265.6 EL2 114.7 ALF 4.91
                                                                 5G1 5611.1 SG2 400.6 THA 179.54
    BOE 2.3071 BRA 1.4005 BC3 5.0055 FSP -731
                                                                                                                            ARRIVAL DATE JUN 4 1966
                                                                     FLIGHT TIME 184.00
LAUNCH DATE DEC 2 1965
                                                                    DISTANCE 535.161
  HELIOCENTRIC CONIC
   RL 147.48 LAL .00 LOL 69.61 VL 26.695 GAL 3.02 AZL 86.68 MCA 262.27 SMA 122.08 ECC .21436 INC 3.3164 VI 30.209
RP 108.89 LAP -3.29 LOP 331.87 VP 36.748 GAP 10.73 AZP 90.45 TAL 168.79 TAP 71.06 RCA 95.91 APO 148.25 VZ 34.800
RC 168.980 GL 21.25 GP 2.07 ZAL 66.80 ZAP 169.14 ETS 10.63 ZAE 128.82 ETE 178.34 ZAC 77.04 ETC 165.65 CLP-169.34
  PLANETOCENTRIC CONTC
   C3 18.111 VHL 4.236 OLA 21.24 RAL 355.36 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 7.055 DPA -8.07 RAP 344.42 ECC 1.2981 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   2322.5
                    3 15 52 2922.51
                                               -28.27
                                                              90.78
                                                                         222.72
                                                                                         88.32 4 4 35
61.84 22 30 40
                                                                                                                                   -28.20
                                                                                                                                                  82.12
       90.00
                                                                                                                      3503.5
                                                                                                                                     -6.82
                                                                                                                                                  159.91
       90.00
                  21 22 16
                                4103.51
                                                 -3.07
                                                              166.60
                                                                           215.82
                                                                                            90.03 5 35 14
60.15 23 33 57
                   4 51 40 2613.61
                                                                                                                      2013.6
                                                                                                                                    -29.57
                                                                                                                                                   59.29
                                                -29.89
                                                               68.08
                                                                           222.75
      100.00
                                                                                                                      3287.6
                                                                                                                                     -5.61
                                                                                                                                                  143.39
                  22 29 9
                   22 29 9 3887.63
6 30 22 2304.83
                                3887.63
                                                 -1.65
                                                             149.94
                                                                           215.03
      100.00
                                                                                            94.42 7 8 47
55.86 24 9 46
                                                                                                                      1704.8
                                                                                                                                    -32.95
                                                                                                                                                   35.35
                                                -33.93
                                                               44.45
                                                                           222.57
      110.00
                                                                                                                      3169.2
                                                                                                                                                  132.62
                 23 6 57
                                3769.18
                                                 1.77
                                                             138.82
                                                                           212.89
                                                                                                                                    -2.72
      110.00
   DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 5653.3 SGR 406.0 SG3 207.0
RRT -.0734 RRF -.0918 RTF .9435
                                                                                                                  ST 3292.0 SR 315.1 SS 883.1
CRT .9204 CRS -.8676 CST -.9927
    TOE 2.3881 TRA 1.6075 TC3-4.7333 BAU 1.1472
    ROE .2301 RRA -.1336 RC3 .2088 FAU .02871
                                                                 SGB 5667.8 R23 .0222 R13 -.9435
SGI 5653.4 SG2 404.9 THA 179.70
    FOE 1.0164 FRA 1.0956 FC3-1.3723 BSP 18194
BDE 2.3992 BRA 1.6130 BC3 4.7379 FSP -706
                                                                                                                  LSA 3419.1 MSA 161.1 55A 18.1
                                                                                                                  ELI 3304.8 EL2 122.8 ALF 5.04
                                                                                                                           ARRIVAL DATE JUN 6 1966
                                                                    FLIGHT TIME 186.00
LAUNCH DATE DEC 2 1965
  HELIOCENTRIC CONIC
                                                                   DISTANCE 540.753
   RL 147.48 LAL .00 LOL 69.61 VL 26.656 GAL 3.54 AZL 86.66 HCA 265.44 SMA 121.84 ECC .21890 INC 3.3388 VJ 30.209
RP 108.88 LAP -3.33 LOP 335.04 VP 36.724 GAP 11.09 AZP 90.27 TAL 167.17 TAP 72.60 RCA 95.17 APO 148.51 V2 34.805
RC 171.096 GL 20.61 GP 1.99 ZAL 64.22 ZAP 170.04 ETS 11.33 ZAE 128.77 ETE 178.41 ZAC 79.26 ETC 165.80 CLP-170.24
   PLANETOCENTRIC CONIC
    C3 19.377 VHL 4.402 DLA 21.73 RAL 358.08 RAO 6567.8 VEL 11.864 PTH 2.10 VHP 7.271 DPA -7.27 RAP 346.56 ECC 1.3189
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 20 39 2960.45
21 39 13 4097.34
                                                                                                                   2360 .4
                                                                          226.85
                                                                                          86.94
                                                                                                      4 9 59
                                                                                                                                  -28.29
                                                                                                                                                  84.89
                                               -28.16
                                                              93.55
       90.00
                                                                                                    22 47 30
                                                                                           61.86
                                                                                                                      3497.3
                                                                                                                                     -7.01
                                                                                                                                                 159.57
                                                 -3.27
                                                             166.25
                                                                           219.69
       90.00
                 4 57 11 2649.17
22 45 22 3883.85
6 37 11 2336.32
23 21 51 3769.47
                                               -29.86
                                                              70.73
                                                                           226.93
                                                                                           88.64
                                                                                                     5 41 20
                                                                                                                     2049.2
                                                                                                                                   -29.73
                                                                                                                                                  61.92
      100.00
                                               -1.78
                                                             149.73
                                                                           218.87
                                                                                           60.16 23 50 6
                                                                                                                      3283.9
                                                                                                                                    -5.74
                                                                                                                                                 143.18
      100.00
                                                                                                      7 16 7
                                                                                                                      1736.3
                                                                                                                                   -33.28
                                                                                                                                                   37.74
                                               -34.07
                                                              46.90
                                                                           226.86
                                                                                           92.98
      110.00
                                                                                           55.86 24 24 41
                                                                                                                      3169.5
                                                                                                                                    -2.71
                                                                                                                                                 132.63
                                                1.78
                                                             138.84
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 3319.8 SR 327.8 SS 871.3
CRT .9165 CRS -.8650 CST -.9932
                                                                 SGT 5690.8 SGR 408.2 SG3 199.1
    TDE 2.4792 TRA 1.8337 TC3-4.4532 BAU 1.1546
                                                                RRT -.0362 RRF -.0537 RTF .9443
SGB 5705.4 R23 .0194 R13 -.9444
    RDE .2480 RRA -.1350 RC3 .1854 FAU .02661
                                                                                                                 LSA 3443.9 MSA 164.2 SSA 17.6
EL1 3333.4 EL2 130.6 ALF 5.18
    FDE 1.0005 FRA 1.1324 FC3-1.1889 BSP 18367
    BOE 2.4916 BRA 1.8387 BC3 4.4570 FSP -681
                                                                 SG1 5690.8 SG2 407.9 THA 179.85
                                                                                                                            ARRIVAL DATE JUN 8 1966
LAUNCH DATE DEC 2 1965
                                                                     FLIGHT TIME 188.00
                                                                    DISTANCE 546.308
  HELIOCENTRIC CONIC
   RL 147.48 LAL .00 LOL 69.61 VL 26.616 GAL 4.08 AZL 86.64 HCA 268.60 SMA 121.61 ECC .22383 INC 3.3609 VI 30.209
RP 108.86 LAP -3.36 LOP 338.21 VP 36.701 GAP 11.47 AZP 90.08 TAL 165.55 TAP 74.15 RCA 94.39 APO 148.83 V2 34.811
RC 173.196 GL 19.94 GP 1.92 ZAL 61.71 ZAP 170.93 ETS 12.17 ZAE 128.74 ETE 178.47 ZAC 81.48 ETC 165.94 CLP-171.13
   PLANETOCENTRIC CONIC
    C3 20.830 VHL 4.564 DLA 22.15 RAL
                                                     .77 RAD 6567.8 VEL 11.925 PTH 2.12 VHP 7.501 DPA -6.45 RAP 348.70 ECC 1.3428
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                        85.60
                                                                                                                      2397.5
                                                                                                                                                  87.60
                    3 25 50 2997.47
                                                -28.00
                                                              96.25
                                                                          231.00
                                                                                                      4 15 48
                                                                                                                                    -28.32
                                                                                                                                    -7.09
                                                                                                                                                  159.42
                                 4094.76
                                                -3.35
                                                             166.11
                                                                           223.60
                                                                                           61.87
                                                                                                     23 3 40
                                                                                                                      3494.8
       90.00
                   21 55 25
                                                                                                       5 47 49
                                                                                                                      2083.9
                                                                                                                                    -29.84
                                                                                                                                                   64.50
                                                -29.78
                                                              73.31
                                                                           231.13
                                                                                           87.28
                                2683.93
      100.00
                                                                                                                                                  143.17
                  23 0 52
                                                 -1.79
                                                             149.72
                                                                           222.73
                                                                                            60.16
                                                                                                     24 5 35
                                                                                                                      3283.5
                                                                                                                                    -5.75
                                3883.53
      100.00
                                                                                                      7 23 44
                                                                                                                                    -33.56
                                                                                                                                                   40.12
                    6 44 17 2367.33
                                                -34.15
                                                              49.31
                                                                           231.18
                                                                                           91.55
                                                                                                                      1767.3
      110.00
                                                             139.02
                                                                           220.42
                                                                                            55.86
                                                                                                     24 39 2
                                                                                                                      3172.9
                                                                                                                                     -2.58
                                                                                                                                                  132.81
                  23 36 9
                                 3772.90
                                                 1.92
      110.00
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 3342.1 SR 339.7 SS 860.6
CRT .9128 CRS -.8626 CST -.9937
                                                                SCT 5724.6 SGR 409.8 SG3 191.6

RRT .0016 RRF -.0147 RTF .9452

SGB 5739.3 R23 -.0162 R13 .9452
    TOE 2.5742 TRA 2.0771 TC3-4.1576 BAU 1.1587
    RDE .2670 RRA -.1351 RC3 .1628 FAU .02450
                                                                                                                 LSA 3463.7 MSA 167.5 SSA 17.1
EL1 3356.4 EL2 138.1 ALF 5.31
    FOE .9872 FRA 1.1711 FC3-1.0182 BSP 18439
BOE 2.5880 BRA 2.0815 BC3 4.1608 FSP -653
                                                                 561 5724.6 SG2 409.8 THA
                                                                                                    .01
```

ARRIVAL DATE JUN 10 1966

LAUNCH DATE DEC 2 1965

```
DISTANCE 551.820
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.577 GAL 4.65 AZL 86.62 MCA 271.77 SMA 121.38 ECC .22919 INC 3.3830 V1 30.209
RP 108.84 LAP -3.38 LOP 341.38 VP 36.678 GAP 11.87 AZP 89.90 TAL 163.93 TAP 75.70 RCA 93.56 APO 149.20 V2 34.817
     RC 175.278 GL 19.24 GP 1.86 ZAL 59.26 ZAP 171.80 ETS 13.18 ZAE 128.70 ETE 178.54 ZAC 83.71 ETC 166.07 CLP-172.01
   PLANETOCENTRIC CONIC
     C3 22.495 VHL 4.743 DLA 22.52 RAL 3.39 RAD 6567.9 VEL 11.995 PTH
                                                                                                                     2.14 VHP 7.744 DPA -5.61 RAP 350.84 ECC 1.3702
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-1 TIME
3 31 27 3033.44
22 10 46 4095.90
5 9 21 2717.82
23 15 34 3886.75
6 51 37 2397.83
23 49 46 3779.51
                                                                                           235.17
                                                                                                                            + 22 i
23 i9 2
                                                                                                                84.31
                                                                                                                                                   2433.4
                                                                                                                                                                                       90.23
         90.00
                                                            -27.79
                                                                             98.86
                                                             -3.32
                                                                                                                   61.86
                                                                                                                                                    3495.9
                                                                                                                                                                       -7.05
                                                                                                                                                                                       159.48
         90.00
                                                                             166.17
                                                                                              227.52
                                                                                                                                                   2117.8
                                                                                                                                                                      -29.89
        100.00
                                                            -29.64
                                                                              75.82
                                                                                              235.35
                                                                                                                   85.97
                                                                                                                   60.15 24 20 21
90.14 7 31 35
55.88 24 52 46
                                                                                                                                                                       -5.64
                                                                                                                                                                                      143.35
        100.00
                                                            -1.68
                                                                             149.89
                                                                                              226.61
                                                                                                                                                    3286.8
                                                            -34.18
                                                                                                                                                   1797.8
                                                                                                                                                                     -33.79
        110.00
                                                                              51.70
                                                                                              235.53
                                                                             139.36
                                                                                                                                                   3179.5
                                                                                                                                                                       -2.32
        110.00
                                                           2.17
                                                                                              224.21
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 5753.4 SGR 410.9 SG3 184.4
RRT .0386 RRF .0231 RTF .9463
                                                                                                                                               ST 3349.1 SR 350.7 SS 847.6
CRT .9093 CRS -.8605, CST -.9942
     TDE 2.6654 TRA 2.3311 TC3-3.8649 BAU 1.1631
    ROE .2870 RRA -.1338 RC3 .1414 FAU .02258
FOE .9724 FRA 1.2079 FC3 -.8688 B3P 18596
BDE 2.6808 BRA 2.3350 BC3 3.8674 FSP -631
                                                                                 SG8 5768.1 R23 -.0136 R13 .9463
                                                                                                                                              LSA 3468.2 MSA 170.9 SSA 16.5
                                                                              EL1 3364.2 EL2 145.3 ALF
LAUNCH DATE DEC 2 1965
                                                                                      FLIGHT TIME 192.00
                                                                                                                                                            ARRIVAL DATE JUN 12 1966
                                                                                     DISTANCE 557.284
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.538 GAL 5.25 AZL 86.59 MCA 274.94 SMA 121.15 ECC .23502 INC 3.4052 V1 30.209
RP 108.82 LAP -3.39 LOP 344.55 VP 36.657 GAP 12.29 AZP 89.71 TAL 162.33 TAP 77.26 RCA 92.68 APO 149.62 VZ 34.824
RC 177.341 GL 18.53 GP 1.80 ZAL 56.88 ZAP 172.66 ETS 14.43 ZAE 128.67 ETE 178.60 ZAC 85.95 ETC 166.18 CLP-172.88
   PLANETOCENTRIC CONIC
    C3 24.403 VML 4.940 DLA 22.82 RAL 5.96 RAD 6568.0 VEL 12.074 PTH 2.16 VMP 8.002 DPA -4.75 RAP 352.98 ECC 1.4016 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 77 31 3068.25
22 25 12 4100.87
5 15 58 2750.75
23 29 25 3893.58
6 59 12 2427.80
0 6 36 3789.30
         90.00
                                                            -27.52
                                                                             101.37
                                                                                             239.35
                                                                                                                 83.07
                                                                                                                                 4 28 39
                                                                                                                                                   2468.2
                                                                                                                                                                    -28.20
                                                                                                                                                                                         92.77
                                                             -3.16
         90.00
                                                                             166.45
                                                                                              231.43
                                                                                                                   61.85 23 33 32
                                                                                                                                                    3500.9
                                                                                                                                                                       -6.90
        100.00
                                                            -29.46
                                                                              78.25
                                                                                              239.58
                                                                                                                   84.70
                                                                                                                                6 1 49
                                                                                                                                                    2150.8
                                                                                                                                                                      -29.88
                                                                                                                                                                                         69.47
        100.00
                                                           -1.45
                                                                             150.27
                                                                                                                   60.14 24 34 18
                                                                                                                                                    3293.6
                                                                                                                                                                      -5.42
                                                                                                                                                                                       143.72
                                                                                              230.49
                                                                                                                                                    1827.8 -33.96
3189.3 -1.95
        110.00
                                                            -34.16
                                                                               54.04
                                                                                                                   88.75 7 39 40
                                                                                                                                                                                         44.80
                                                                                              239.90
                                                                             139.87
                                                                                                                                 1 9 46
        110.00
                                                             2.54
                                                                                              227.99
                                                                                                                   55.90
                                                                                                                                                                                        133.67
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 $6T 5777.4 $GR 411.3 $G3 177.4

RRT .0756 RRF .0608 RTF .9477

$6B 5792.1 R23 -.0112 R13 .9477
     TOE 2.7569 TRA 2.6002 TC3-3.5711 BAU 1.1657
                                                                                                                                               ST 3346.6 SR 360.6 SS 834.4
    RDE .3079 RRA -.1311 RC3 .1212 FAU .02074
FDE .9581 FRA 1.2449 FC3 -.7357 BSP 18736
                                                                                                                                               CRT .9058 CRS -.8585 CST -.9947
                                                                                                                                              LSA 3463.4 HSA 174.4 SSA 16.0
     BOE 2.7741 BRA 2.6035 BC3 3.5731 FSP -609
                                                                                SGI 5777.5 SG2 410.1 THA .31
                                                                                                                                              EL1 3362.5 EL2 152.1 ALF
                                                                                      FLIGHT TIME 194.00
                                                                                                                                                           ARRIVAL DATE JUN 14 1966
LAUNCH DATE DEC 2 1965
                                                                                     DISTANCE 562.692
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.500 GAL 5.89 AZL 86.57 HCA 278.10 SMA 120.92 ECC .24136 INC 3.4276 V1 30.209
RP 108.79 LAP -3.39 LOP 347.73 VP 36.636 GAP 12.75 AZP 89.52 TAL 160.73 TAP 78.84 RCA 91.74 APO 150.11 V2 34.832
BC 179.385 GL 17.80 GP 1.75 ZAL 54.58 ZAP 173.51 ETS 16.00 ZAE 128.64 ETE 178.66 ZAC 88.19 ETC 166.27 CLP-173.75
   PLANETOCENTRIC CONIC
    C3 Z6.590 VHL 5.157 OLA 23.07 RAL 8.46 RAD 6568.1 VEL 12.164 PTH 2.18 VHP 8.279 DPA -3.88 RAP 355.11 ECC-1.4376
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 43 59 3101.77 -27.23 103.78 243.52 81.90 4 35 41 2501.8 -28.07 95.21
90.00 22 38 38 4109.70 -2.87 166.94 235.33 61.82 23 47 8 3509.7 -6.62 160.27
100.00 5 22 57 2782.69 -29.24 80.60 243.81 83.49 6 9 20 2182.7 -29.83 71.84
100.00 23 42 22 3904.01 -1.10 150.84 234.35 60.13 24 47 26 3304.0 -5.07 144.30
110.00 7 6 59 2457.25 -34.10 56.33 244.27 87.39 7 47 56 1857.2 -34.08 47.09
110.00 0 18 45 3802.23 3.04 140.55 231.77 55.94 1 22 8 3202.2 -1.46 134.34
     C3 26.590 VHL 5.157 OLA 23.07 RAL 8.46 RAD 6568.1 VEL 12.164 PTH 2.18 VHP 8.279 DPA -3.88 RAP 355.11 ECC 1.4376
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 5796.7 SGR 411.1 SG3 170.8
RRT .1128 RRF .0987 RTF .9492
                                                                                                                                               ST 3335.9 SR 369.4 SS 821.5
     TOE 2.8495 TRA 2.8860 TC3-3.2780 BAU 1.1659
    ROE .3298 RRA -.1268 RC3 .1026 FAU .01896
FOE .9451 FRA 1.2826 FC3 -.6172 BSP 18856
BOE 2.8686 BRA 2.8888 BC3 3.2796 FSP -587
                                                                                                                                              CRT .9024 CRS -.8567 CST -.9951
                                                                                 5G8 5811.3 R23 -. 0089 R13 .9492
                                                                                                                                               LSA 3450.8 MSA 177.7 SSA 15.5
                                                                                5G1 5796.9 SG2 408.4 THA
                                                                                                                                              EL1 3352.6 EL2 158.3 ALF 5.72
LAUNCH DATE DEC 2 1965
                                                                                      FLIGHT TIME 196.00
                                                                                                                                                            ARRIVAL DATE JUN 16 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 568.038
    RL 147.48 LAL .00 LOL 69.61 VL 26.462 GAL 6.56 AZL 86.55 MCA 281.28 SMA 120.70 ECC .24829 INC 3.4504 VI 30.209
RP 108.77 LAP -3.38 LOP 350.90 VP 36.617 GAP 13.23 AZP 89.32 TAL 159.15 TAP 80.42 RCA 90.73 APO 150.67 VZ 34.840
RC 181.409 GL 17.06 GP 1.70 ZAL 52.36 ZAP 174.36 ETS 18.04 ZAE 128.61 ETE 178.72 ZAC 90.44 ETC 166.34 CLP-174.62
   PLANETOCENTRIC CONIC
    C3 29.099 VHL 5.394 OLA 23.26 RAL 10.88 RAO 6568.2 VEL 12.267 PTH 2.21 VHP 8.575 OPA -2.99 RAP 357.24 ECC 1.4789
    C3 29.099 VML 5.394 OLA 23.26 RAL 10.88 RAO 6568.2 VEL 12.267 PM 2.31 VMP 8.575 OPA -2.99 RAP 557.24 ECC 1.4789
LNCH AZMTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 50 53 3133.99 -26.90 106.08 247.68 80.79 4 43 7 2534.0 -27.89 97.55
90.00 22 51 4 4122.40 -2.46 167.65 239.21 61.78 23 59 46 3522.4 -6.22 160.98
100.00 5 30 15 2813.60 -28.98 82.86 248.03 82.32 6 17 9 2213.6 -29.74 74.14
100.00 23 54 23 3918.02 -.62 151.61 238.19 60.11 24 59 41 3318.0 -4.60 145.07
110.00 7 14 55 2486.14 -33.98 58.58 248.63 86.07 7 56 22 1886.1 -34.15 49.34
110.00 0 30 8 3818.24 3.65 141.39 235.52 55.99 1 33 46 3218.2 -.84 135.18
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                              ST 3317.1 SR 376.9 SS 808.9
CRT .8992 CRS -.8551 CST -.9956
     TDE 2.9429 TRA 3.1892 TC3-2.9901 BAU 1.1637
                                                                                SGT 5811.3 SGR 410.3 SG3 164.4
     ROE .3526 RRA -.1208 RC3 .0856 FAU .01725
                                                                                  RRT .1500 RRF .1365 RTF .9508
    FDE. .9329 FRA 1.3213 FC3 -.5132 BSP 18970
BDE 2.9639 BRA 3.1915 BC3 2.9914 FSP -567
                                                                               SGB 5825.8 R23 -.0069 R13 .9508
SGI 5811.7 SGZ 405.6 THA .61
                                                                                                                                             LSA 3430.3 MSA 180.9 SSA 14.9
EL1 3334.4 EL2 164.1 ALF 5.85
```

FLIGHT TIME 190.00

ARRIVAL DATE JUN 18 1966 FLIGHT TIME 198.00 LAUNCH DATE DEC 2 1965 DISTANCE 573.311 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 26.424 GAL 7.28 AZL 86.53 MCA 284.45 SMA 120.49 ECC .25586 INC 3.4737 VI 30.209
RP 108.74 LAP -3.36 LOP 354.08 VP 36.598 GAP 13.75 AZP 89.13 TAL 157.59 TAP 82.03 RCA 89.66 APO 151.31 VZ 34.849
RC 183.413 GL 16.31 GP 1.65 ZAL 50.22 ZAP 175.19 ETS 20.80 ZAE 128.57 ETE 178.78 ZAC 92.68 ETC 166.39 CLP-175.49 PLANETOCENTRIC CONIC C3 31.980 VHL 5.655 OLA 23.40 RAL 13.22 RAD 6568.3 VEL 12.384 PTH 2.24 VHP 8.893 DPA -2.09 RAP 359.36 ECC 1.5263 C3 31.98U VML 5.655 DLA 23.4D RAL 13.22 RAD 6568.3 VEL 12.384 PTH 2.24 VMP 8.893 DPA -2.09 RAP 359.36 ECC 1.5263 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 25 2 26 4138.92 -1.93 168.57 243.05 61.74 24 11 25 3538.9 -5.70 161.91 100.00 5 37 52 2843.50 -28.69 85.03 252.24 81.21 6 25 15 2243.5 -29.60 76.35 100.00 0 9 22 3935.52 -.03 152.57 241.99 60.11 1 14 58 3335.5 -4.01 146.04 110.00 7 23 0 2514.54 -33.83 60.79 252.98 84.77 8 4 55 1914.5 -34.18 51.56 85.03 252.24 81.21 6 25 15 152.57 241.99 60.11 1 14 58 60.79 252.98 84.77 8 4 55 142.38 239.25 56.06 1 44 40 MID-COURSE EXECUTION ACCURACY 110.00 0 40 43 3837.24 4.37 142.38 3237.2 -.12 136.17 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5823.4 SGR 408.9 SG3 158.5 ST 3295.6 SR 383.1 SS 798.4 CRT .8960 CRS -.8538 CST -.9960 TOE 3.0417 TRA 3.5150 TC3-2.7046 BAU 1.1567 RRT .1880 RRF .1752 RTF .9526 SCB 5837.7 R23 -.0048 R13 .9526 SCI 5823.9 SC2 401.6 THA .76 RDE .3763 RRA -.1129 RC3 .0704 FAU .01553 LSA 3407.5 MSA 183.8 SSA 14.4 .9238 FRA 1.8629 FC3 -.4203 BSP 18988 FOE BOE 3.0649 BRA 3.5168 BC3 2.7055 FSP -544 ELI 3313.5 EL2 169.2 ALF 5.96 FLIGHT TIME 200.00 LAUNCH DATE DEC 2 1965 ARRIVAL DATE JUN 20 1966 DISTANCE 578.498 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 26.387 GAL 3.05 AZL 86.50 HCA 287.62 SMA 120.27 ECC .26415 INC 3.4976 V1 30.209
RP 108.71 LAP -3.33 LOP 357.26 VP 36.580 GAP 14.31 AZP 88.94 TAL 156.05 TAP 83.67 RCA 88.50 APO 152.04 VZ 34.858
RC 185.395 GL 15.56 GP 1.61 ZAL 48.16 ZAP 176.02 ETS 24.72 ZAE 128.53 ETE 178.83 ZAC 94.92 ETC 166.42 CLP-176.36 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC

C3 35.296 VML 5.941 DLA 23.49 RAL 15.47 RAD 6568.4 VEL 12.517 PTH 2.27 VMP 9.236 DPA -1.18 RAP 1.48 ECC 1.5809

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 4 5 51 3194.39 -26.17 110.35 255.96 78.77 4 59 6 2594.4 -27.45 101.92

90.00 23 12 44 4159.16 -1.28 169.70 246.85 61.71 24 22 3 3559.2 -5.05 163.05

100.00 5 45 44 2872.37 -28.37 87.12 256.42 80.16 6 33 36 2272.4 -29.44 78.48

100.00 0 19 29 3956.41 .68 153.72 245.76 60.11 1 25 25 3356.4 -3.30 147.19

110.00 7 31 11 2542.45 -33.64 62.94 257.30 83.51 8 13 34 1942.4 -34.17 53.74

110.00 0 50 31 3859.10 5.20 143.53 242.95 56.17 1 54 50 3259.1 .72 137.31

DIEFERBALIAL CORRECTIONS 250.42 80.16 6 33 36 53.72 245.76 60.11 1 25 25 62.94 257.30 83.51 8 13 34 43.53 242.95 56.17 1 54 50 MID-COURSE EXECUTION ACCURACY SGT 5829.0 SGR 406.9 CGT ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3263.7 SR 387.8 SS 787.3 CRT .8928 CRS -.8526 CST -.9964 SGT 5829.0 SGR 406.9 SG3 152.7 RRT .2255 RRF .2131 RTF .9546 TOE 3.1389 TRA 3.8576 TC3-2.4333 BAU 1.1485 ROE .4007 RRA -.1030 RC3 .0568 FAU .01394 SGB 5843.2 R23 -.0033 R13 .9546 LSA 3374.5 M5% 186.3 SSA 13.9 EL1 3282.1 EL2 173.7 ALF 6.07 FOE .9140 FRA 1.4042 FC3 -.3420 BSP 19082 SG1 5829.7 SG2 396.4 THA .91 BOE 3.1643 BRA 3.8590 BC3 2.4340 FSP -525 FLIGHT TIME 202.00 ARRIVAL DATE JUN 22 1966 LAUNCH DATE DEC 2 1965 DISTANCE 583.585 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 26.351 GAL 8.86 AZL 86.48 HCA 290.80 SMA 120.06 ECC .27324 INC 3.5225 V1 30.209
RP 108.68 LAP -3.29 LOP .44 VP 36.563 GAP 14.92 AZP 88.75 TAL 154.54 TAP 85.34 RCA 87.26 APO 152.87 V2 34.868
RC 187.357 GL 14.82 GP 1.58 ZAL 46.20 ZAP 176.82 ETS 30.69 ZAE 128.48 ETE 178.89 ZAC 97.15 ETC 166.43 CLP-177.24 PLANETOCENTRIC CONTC C3 39.122 VHL 6.255 DLA 23.53 RAL 17.63 RAD 6568.5 VEL 12.668 PTH 2.30 VHP 9.608 DPA -.27 RAP 3.58 ECC 1.6439 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 13 51 3222.57 23 21 58 4182.99 5 53 50 2900.25 0 28 37 3980.54 7 39 26 2569.86 0 59 30 3883.69 103.94 -27.19 260.05 77.86 5 7 34 2622.6 90.00 -25.78 112.32 164.39 250.59 61.69 24 31 41 3583.0 -4.29 171.03 90.00 -.51 80.53 79.16 6 42 10 2300.2 -29.24 -28.03 89.12 260.57 100.00 1 34 58 8 22 16 155.04 148.52 249.48 60.14 3380.5 -2.49 1.50 100.00 -33.40 65.05 261.59 82.28 1969.9 -34.11 55.88 110.00 56.30 3283.7 138.59 6.13 144.83 246.60 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5830.5 SGR 404.4 SG3 147.1 ST 3227.3 SR 391.0 55 777.6
RRT .2633 RRF .2511 RTF .9569 CRT .8898 CR5 -.8516 CST -.9968
SGB 5844.5 R23 -.0020 R13 .9569 LSA 3337.3 MSA 188.3 SSA 13.4
SGI 5831.5 SGZ 390.1 THA 1.05 ELI 3246.0 ELZ 177.4 ALF 6.17 TDE 3.2396 TRA 4.2232 TC3-2.1724 BAU 1.1365 RDE .4258 RRA -.0909 RC3 .0451 FAU .01241 FDE .9062 FRA 1.4481 FC3 -.2745 BSP 19158 BDE 3.2674 BRA 4.2242 BC3 2.1728 FSP -507 ARRIVAL DATE JUN 24 1966 FLIGHT TIME 204.00 LAUNCH DATE DEC 2 1965 DISTANCE 588.554 HELIOCENTRIC CONIC RL 147.48 LAL .00 LOL 69.61 VL 26.315 GAL 9.74 AZL 86.45 MCA 293.97 SMA 119.86 ECC .28324 INC 3.5484 VI 30.209
RP 108.65 LAP -3.24 LOP 3.62 VP 36.547 GAP 15.58 AZP 88.56 TAL 153.07 TAP 87.04 RCA 85.91 APO 153.80 V2 34.878
RC 189.297 GL 14.08 GP 1.54 ZAL 44.32 ZAP 177.58 ETS 40.67 ZAE 128.41 ETE 178.95 ZAC 99.36 ETC 166.42 CLP-178.14 PLANETOCENTRIC CONIC C3 43.550 VHL 6.599 DLA 23.53 RAL 19.70 RAD 6568.7 VEL 12.842 PTH 2.34 VHP 10.012 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C .64 RAP 5.67 ECC 1.7167 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-25.38 114.19 264.11 77.00 5 18 18 2840 4 -26.02 108.00 4 22 9 3249.44 23 30 9 4210.22 2649.4 77.00 5 16 18 -26.92 -25.38 114.19 90.00 172.55 254.28 61.69 24 40 20 3610.2 -3.42 165.92 .37 90.00 78.21 6 50 54 60.20 1 43 36 81.09 8 30 59 56.48 2 12 54 6 2 6 2927.14 0 36 49 4007.75 7 47 42 2596.79 1 7 43 3910.86 -27.67 91.04 264.67 2327.1 -29.01 82.49 100.00 253.14 3407.8 -1.57 150.01 2.42 156.53 100.00 265.83 1996.8 -34.01 57.98 -33.14 67.11 110.00 2.70 7.15 146.26 3310.9 140.01 250.21 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5827.5 SGR 401.4 SG3 141.8 ST 3186.7 SR 392.7 SS 769.3 RRT .3012 RRF .2893 RTF .9593 CRT .8869 CRS -.8508 CST -.9972 SG8 5841.3 R23 -.0010 R13 .9593 LSA 3296.2 MSA 189.8 SSA 12.9 SG1 5828.8 SG2 382.7 THA 1.19 EL1 3205.8 EL2 180.3 ALF 6.26 TOE 3.3445 TRA 4.6138 TC3-1.9228 BAU 1.1197 ROE .4516 RRA -.0765 RC3 .0350 FAU .01090 FOE .9001 FRA 1.4945 FC3 -.2167 BSP 19213 BOE 3.3748 BRA 4.6145 BC3 1.9231 FSP -489

LAUNCH DATE DEC 2 1965 FLIGHT TIME 206.00 ARRIVAL DATE JUN 26 1966 HELIOCENTRIC CONIC DISTANCE 393.383 RL 147.48 LAL .00 LOL 69.61 VL 26.279 GAL 10.68 AZL 86.42 MCA 297.15 SMA 119.66 ECC .29426 INC 3.5757 V1 30.209
RP 108.62 LAP -3.18 LOP 6.81 VP 36.532 GAP 16.30 AZP 88.37 TAL 151.63 TAP 88.79 RCA 84.44 APO 154.87 V2 34.889
RC 191.216 GL 13.34 GP 1.51 ZAL 42.54 ZAP 178.21 ETS 58.92 ZAE 128.32 ETE 179.00 ZAC 101.56 ETC 166.38 CLP-179.05 PLANETOCENTRIC CONIC C3 48.691 VHL 6.978 DLA 23.48 RAL 21.66 RAO 6568.8 VEL 13.040 PTH 2.38 VHP 10.453 DPA 1.55 RAP 7.75 ECC 1.8013 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 30 41 3275.02 268.12 5 25 16 2675.0 107.68 90.00 -24.98 115.95 76.20 -26.63 90.00 23 37 19 4240.65 257.89 24 47 59 3640.6 -2.44 167.62 1.35 174.25 61.71 6 10 32 2953.06 0 44 4 4037.84 6 59 45 1 51 22 100.00 92.87 268.73 2353.1 -28.77 84.38 -27.29 77.31 100.00 3.43 256.74 60.29 3437.8 -.55 151.66 158.19 7 55 58 2623.23 110.00 -32.84 270.02 2023.2 -33.88 60.03 69.11 79.94 8 39 41 110.00 1 15 8 3940.44 8.26 56.71 2 20 48 3340.4 147.84 253.77 3.82 141.56 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5822.4 SGR 397.9 SG3 136.9 RRT .3397 RRF .3280 RTF .9619 SGB 5836.0 R23 -.0001 R13 .9619 ST 3145.9 SR 392.9 SS 763.7 TDE 3.4582 TRA 5.0351 TC3-1.6834 BAU 1.0960 RDE .4781 RRA -.0595 RC3 .0267 FAU .00938 FDE .8972 FRA 1.5452 FC3 -.1668 BSP 19187 CRT .8843 CRS -.8505 CST -.9976 LSA 3255.4 MSA 190.5 SSA 12.4 SG1 5824.0 SG2 374.2 THA 1.34 BDE 3.4911 BRA 5.0355 BC3 1.6836 FSP -470 EL1 3165.0 EL2 182.3 ALF 6.32 LAUNCH DATE DEC 2 1965 FLIGHT TIME 208.00 ARRIVAL DATE JUN 28 1966 HELIOCENTRIC CONIC DISTANCE-598.043 RL 147.48 LAL .00 LOL 69.61 VL 26.245 GAL 11.70 AZL 86.40 HCA 300.33 SHA 119.46 ECC .30645 INC 3.6046 V1 30.209
RP 108.58 LAP -3.11 LOP 9.99 VP 36.517 GAP 17.09 AZP 88.18 TAL 150.26 TAP 90.59 RCA 82.85 APO 156.07 V2 34.900
RC 193.113 GL 12.62 GP 1.48 ZAL 40.86 ZAP 178.52 ETS 90.27 ZAE 128.22 ETE 179.06 ZAC 103.75 ETC 166.32 CLP-179.98 PLANETOCENTRIC CONIC C3 54.688 VHL 7.395 DLA 23.39 RAL 23.53 RAD 6569.0 VEL 13.268 PTH 2.42 VHP 10.937 DPA 2.45 RAP 9.81 ECC 1.9000 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 39 24 3299.33 -24.57 117.62 272.08 75.46 5 34 23 2699.3 -26.33 109.39 90.00 23 43 27 4274.04 2.43 176.11 261.44 61.78 24 54 41 3674.0 -1.36 169.48 6 19 3 2978.00 -26.91 94.63 272.72 7 8 41 2378.0 76.47 -28.50 86.19 100.00 0 50 24 4070.60 4.54 260.27 60.42 1 58 15 3470.6 159.99 . 57 153.46 110.00 8 4 11 2649.12 -32.52 71.06 2049.1 -33.72 274.14 78.83 8 48 20 62.03 1 21 46 110.00 3972.25 9.44 149.54 257.27 56.99 2 27 59 3372.2 5.03 143.23 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 3.5753 TRA 5.4825 TC3-1.4606 BAU 1.0679 SGT 5810.2 SGR 394.0 SG3 132.1 ST 3099.2 SR 391.6 SS 758.9 ROE .5052 RRA -.0399 RC3 .0198 FAU .00794 RRT .3779 RRF .3663 RTF .9647 CRT .8819 CRS -.8503 CST -.9979 CRT .8819 CRS -.000. C. . LSA 3209.1 MSA 190.5 SSA 11.9 FOE .8952 FRA 1.5986 FC3 -1257 BSP 19215 BOE 3.6108 BRA 5.4826 BC3 1.4607 FSP -453 SGB 5823.6 R23 .0003 R13 .9647 SG1 5812.1 SG2 364.6 THA 1.47 ARRIVAL DATE JUN 30 1966 LAUNCH DATE DEC 2 1965 FLIGHT TIME 210.00 HELIOCENTRIC CONIC DISTANCE 602.499 RL 147.48 LAL .00 LOL 69.61 VL 26.211 GAL 12.81 AZL 86.36 MCA 303.52 SMA 119.27 ECC .31997 INC 3.6354 V1 30.209 RP 108.55 LAP -3.03 LOP 13.18 VP 36.504 GAP 17.96 AZP 87.99 TAL 148.94 TAP 92.46 RCA 81.11 APO 157.43 V2 34.912 RC 194.989 GL 11.91 GP 1.45 ZAL 39.27 ZAP 178.27 ETS 124.20 ZAE 128.08 ETE 179.11 ZAC 105.90 ETC 166.24 CLP 179.07 PLANE TOCENTRIC CONIC C3 61.715 VHL 7.856 OLA 23.27 RAL 25.28 RAD 6569.2 VEL 13.530 PTH 2.47 VHP 11.471 OPA 3.35 RAP 11.85 ECC 2.0157 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 275.96 74.78 111.01 4 48 15 3322.36 -24.17 119.19 5 43 37 2722.4 -26.03 90.00 23 48 35 25 0 26 4310.16 3.59 178.13 264.90 61.89 3710.2 - .20 171.50 6 27 38 3001.93 0 55 50 4105.82 100.00 -26.52 96.30 276.64 75.67 7 17 40 -28.23 2401.9 87.91 100.00 5.72 161.94 263.72 60.61 2 4 15 3505.8 1.76 155.39 110.00 8 12 19 2674.40 -32.17 72.95 278.17 77.76 8 56 53 2074.4 -33.52 63.98 1 27 38 4006.11 10.69 151.36 260.70 2 34 24 3406.1 57.34 6.31 145.01 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5795.2 SGR 389.5 SG3 127.5 RRT .4160 RRF .4047 RTF .9676 SGB 5808.3 R23 .0007 R13 .9676 TOE 3.6993 TRA 5.9663 TC3-1.2520 BAU 1.0330 ST 3049.9 SR 388.7 SS 756.4 CRT .8796 CRS -.8504 CST -.9982 ROE .5329 RRA -.0173 RC3 .0144 FAU .00650 FOE .8957 FRA 1.6566 FC3 -.0911 BSP 19254 LSA 3160.6 MSA 189.8 SSA 11.4 BDE 3.7375 BRA 5.9663 BC3 1.2521 FSP -438 SG1 5797.5 SG2 354.1 THA 1.61 FL1 3069.1 FL2 183.7 ALF 6.42 LAUNCH DATE DEC 2 1965 FLIGHT TIME 212.00 ARRIVAL DATE JUL 2 1966 HELIOCENTRIC CONIC DISTANCE 606.708 RL 147.48 LAL .00 LOL 69.61 VL 26.177 GAL 14.02 AZL 86.33 MCA 306.70 SMA 119.08 ECC .33501 INC 3.6687 VI 30.209 RP 108.51 LAP -2.94 LOP 16.37 VP 36.492 GAP 18.92 AZP 87.81 TAL 147.71 TAP 94.41 RCA 79.19 APO 158.98 VZ 34.924 RC 196.842 GL 11.20 GP 1.43 ZAL 37.79 ZAP 177.60 ETS 145.03 ZAE 127.91 ETE 179.17 ZAC 108.02 ETC 166.13 CLP 178.07 PLANETOCENTRIC CONIC C3 69.995 VHL 8.366 OLA 23.10 RAL 26.92 RAD 6569.3 VEL 13.833 PTH 2.53 VHP 12.061 OPA 4.23 RAP 13.86 ECC 2.1519 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 57 11 3344.07 -23.77 120.65 279.76 74.14 5 52 55 -25.72 2744.1 112.53 23 52 45 4348.74 90.00 4.82 180.29 268.27 62.06 25 5 14 3748.7 1.05 173.65 3024.77 97.88 7 26 38 100.00 6 36 13 -26.12 288.47 74.93 2424.8 89.55 -27.94 1 0 21 2 9 24 9 5 20 100.00 4143.27 6.96 164.02 267.09 60.86 3543.3 3.03 157.45 74.77 110.00 8 20 21 2698.99 -31.80 -33.29 282.11 76.74 2099.0 65.87 1 32 42 4041.82 110.00 264.06 12.00 153.31 57.75 2 40 4 3441.8 7.66 146.91 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 3.8347 TRA 6.4884 TC3-1.0564 BAU .9886 SGT 5775.7 SGR 384.8 SG3 123.1 ST 3000.0 SR 384.3 SS 756.4 RDE .5612 RRA .0085 RC3 .0103 FAU .00503 FDE .8992 FRA 1.7204 FC3 -.0622 BSP 19264 BDE 3.8756 BRA 6.4884 BC3 1.0565 FSP -423 CRT .8777 CRS -.8510 CST -.9985 RRT .4543 RRF .4432 RTF .9706 SGB 5788.5 R23 .0008 R13 .9706 LSA 3112.0 MSA 188.2 SSA 10.9 SG1 5778.3 SG2 342.6 THA 1.74 EL1 3019.0 EL2 183.0 ALF 6.44

```
ARRIVAL DATE JUL 4 1966
                                                                                     FLIGHT TIME 214.00
LAUNCH DATE DEC 2 1965
                                                                                    DISTANCE 610.611
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.145 GAL 15.35 AZL 86.30 HCA 309.89 SMA 118.90 ECC .35181 INC 3.7048 V1 30.209 RP 108.47 LAP -2.84 LOP 19.56 VP 36.480 GAP 20.00 AZP 87.62 TAL 146.56 TAP 96.45 RCA 77.07 APO 160.73 VZ 34.936 RC 198.673 GL 10.51 GP 1.41 ZAL 36.42 ZAP 176.72 ETS 156.31 ZAE 127.69 ETE 179.22 ZAC 110.10 ETC 166.00 CLP 177.04
   PLANETOCENTRIC CONIC
     C3 79.813 VHL 8.934 DLA 22.90 RAL 28.45 RAD 6569.6 VEL 14.183 PTH 2.58 VHP 12.718 DPA 5.10 RAP 15.84 ECC 2.3135
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                73.56
                                                                                                                                                2764.4
                                                                                                                                                                  -25.42
                                                                                                                                                                                   113.94
                                                                                           283.46
                                                                                                                               6 2 14
                      5 6 9 3364.40
23 55 57 4389.54
                                                                           122.02
         90.00
                                                          -23.39
                                                                                                                 62.30 25 9 6
                                                                                                                                                 3789.5
                                                                                                                                                                     2.36
                                                                                                                                                                                    175.93
                                                                                            271.53
                                                            6.12
                                                                           182.59
         90.00
                                                                                                                 2446.4
                                                                                                                                                                   -27.64
                                                                                                                                                                                     91.09
                      6 44 46 3046.44
1 3 57 4182.74
                                                                                            284.20
                                                          -25.73
                                                                             99.37
        100.00
                                                                                            270.37
                                                                                                                                                 3582.7
                                                                                                                                                                     4.36
                                                                                                                                                                                    159.62
                                                                           166.23
       100.00
                                                            8.27
                                                                                                                                                 2122.7
                                                                                                                                                                  -33.05
                                                                                                                                                                                     67.67
                        8 28 14 2722.73
1 36 58 4079.21
                                                                                            285.93
                                                                             76.52
                                                          -31.42
       110.00
                                                                                                                                                 3479.2
                                                                                                                                                                  9.05
                                                                                                                                                                                    144.90
                                                                                            267.35
                                                                           155.36
                                                           13.35
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 5754.2 SGR 379.7 SG3 119.1
RRT .4929 RRF .4821 RTF .9737
SGB 5766.8 R23 .DD07 R13 .9737
SG1 5757.3 SG2 330.2 THA 1.87
                                                                                                                                            ST 2951.3 SR 378.6 $5 760.0
CRT .8764 CRS -.8521 CST -.9987
     TOE 3.9861 TRA 7.0577 TC3 -.8731 BAU .9317
    RDE .5903 RRA .0379 RC3 .0074 FAU .00347
FDE .9070 FRA 1.7918 FC3 -.0377 BSP .19176
BDE 4.0295 BRA 7.0578 BC3 .8732 FSP -406
                                                                                                                                            LSA 3065.4 MSA 185.7 SSA 10.4
EL1 2970.0 EL2 181.2 ALF 6.44
                                                                                     FLIGHT TIME 216.00
                                                                                                                                                          ARRIVAL DATE JUL 6 1966
LAUNCH DATE DEC 2 1965
                                                                                     DISTANCE 614.135
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.114 GAL 16.81 AZL 86.26 HCA 313.08 SMA 118.73 ECC .37063 INC 3.7445 VI 30.209

RP 108.43 LAP -2.73 LOP 22.75 VP 36.470 GAP 21.20 AZP 87.44 TAL 145.53 TAP 98.61 RCA 74.73 APO 162.73 VZ 34.948

RC 200.481 GL 9.83 GP 1.39 ZAL 35.17 ZAP 175.73 ETS 162.94 ZAE 127.43 ETE 179.27 ZAC 112.13 ETC 165.84 CLP 175.96
   PLANETOCENTRIC CONIC
     C3 91.335 VML 9.567 DLA 22.65 RAL 29.84 RAD 6569.8 VEL 14.590 PTH 2.65 VMP 13.454 DPA 5.94 RAP 17.78 ECC 2.5064
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             2783.2
                                                                                                                                                                -25.13
                      5 15 6 3363.19
0 2 5 4432.33
6 53 16 3066.75
1 6 37 4224.00
8 35 57 2745.44
1 40 25 4116.07
                                                                                          287.03
                                                          -23.02
                                                                          123.27
                                                                                                             73.04 6 11 29
         90.00
                                                              7.47
                                                                                             274.69
                                                                                                                 62.61
                                                                                                                               1 15 57
                                                                                                                                                  3832.3
                                                                                                                                                                      3.74
                                                                                                                                                                                     178.32
                                                                            185.01
         90.00
                                                                                                                             7 44 21
2 17 1
                                                                                                                                                                                      92.53
                                                                                             287.80
                                                                                                                 73.60
                                                                                                                                                 2466.7
                                                                                                                                                                   -27.35
                                                           -25.35
                                                                            100.76
       100.00
                                                                                                                                                  3624.0
                                                                                                                                                                      5.74
                                                                                                                                                                                     161.91
                                                                                             273.54
                                                                                                                 61.56
                                                              9.61
                                                                            168.55
        100.00
                                                                                                                             9 21 42
2 49 3
                                                                                                                                                 2145.4
                                                                                                                                                                   -32.79
                                                                                                                                                                                      69.39
                                                                                             289.61
                                                                                                                 74.87
                                                           -31.02
                                                                             78.17
       110.00
                                                                                                                                                                                     150.99
                                                                                                                                                 3518.1
                                                                                                                                                                    10.49
                                                                                             270.54
                                                                                                                 58.80
                                                           14.73
                                                                            157.53
       110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 2899.1 SR 371.5 SS 766.0
CRT .8755 CRS -.8535 CST -.9990
                                                                                SGT 5725.9 SGR 374.3 SG3 115.1
RRT .5308 RRF .5204 RTF .9768
SGB 5738.1-R23 .0003 R13 .9768
     TOE 4.1485 TRA 7.6726 TC3 -.7057 BAU .8636
     ROE .6200 RRA .0710 RC3 .0055 FAU .00189
     FOE .9172 FRA 1.8699 FC3 -.0179 BSP 19188
BOE 4.1945 BRA 7.6729 BC3 .7057 FSP -393
                                                                                                                                             LSA 3016.0 MSA 182.3 SSA 9.9
                                                                                                                                             EL1 2917.4 EL2 178.4 ALF 6.43
                                                                                 SG1 5729.3 SG2 317.0 THA 1.99
                                                                                                                                                         ARRIVAL DATE JUL 8 1966
                                                                                     FLIGHT TIME 218.00
LAUNCH DATE DEC 2 1965
                                                                                    DISTANCE 617.185
   HELIOCENTRIC CONIC
    RL 147.48 LAL .00 LOL 69.61 VL 26.085 GAL 18.43 AZL 86.21 HCA 316.27 SHA 118.57 ECC .39180 INC 3.7886 V1 30.209 RP 108.39 LAP -2.62 LOP 25.94 VP 36.461 GAP 22.56 AZP 87.26 TAL 144.63 TAP 100.90 RCA 72.11 APO 165.02 VZ 34.961 RC 202.264 GL 9.15 GP 1.37 ZAL 34.04 ZAP 174.63 ETS 167.23 ZAE 127.09 ETE 179.33 ZAC 114.10 ETC 165.66 CLP 174.81
    PLANETOCENTRIC CONIC
     C3 103.04D VHL 10.278 DLA 22.37 RAL 31.11 RAD 657C D VEL 15.066 PTH 2.71 VHP 14.282 DPA 6.75 RAP 19.67 ECC 2.7386
LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 23 59 3400.26 -22.68 124.41 290.46 72.57 6 20 40 2800.3 -24.85 116.41
90.00 0 3 16 4476.86 8,85 187.55 277.71 62.99 1 17 53 3876.9 5.16 180.82
100.00 7 1 36 3085.50 -24.98 102.03 291.24 73.03 7 53 2 2485.5 -27.07 93.85
100.00 1 8 20 4266.86 10.99 170.99 276.58 62.03 2 19 27 3666.9 7.17 164.29
110.00 8 43 27 2766.89 -30.63 79.72 293.13 74.03 9 29 34 2166.9 -32.51 71.01
                         1 42 59
                                        4158.22
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SCT 5693.6 SGR 368.6 SG3 111.4

RRT .5685 RRF .5585 RTF .9799

SGB 5705.5 R23 -.0002 R13 .9799

SGI 5697.4 SG2 303.0 THA 2.11
                                                                                                                                             ST 2846.9 SR 363.2 SS 775.9
     TOE 4.3300 TRA 8.3449 TC3 -.5514 BAU .7788
                                                                                                                                             CRT .8752 CRS -.8555 CST -.9992
     RDE .6506 RRA .1083 RC3 .0046 FAU .00017
                                                                                                                                            LSA 2967.7 MSA 178.0 SSA 9.3
EL1 2864.7 EL2 174.6 ALF 6.39
     FOE .9321 FRA 1.9578 FC3 -.0014 BSP 19170
     BOE 4.3786 BRA 8.3456 BC3 .5514 FSP -380
                                                                                     FLIGHT TIME 220.00
LAUNCH DATE DEC 2 1965
                                                                                    DISTANCE 619.634
    HELIOCENTRIC CONIC
     RL 147.48 LAL .00 LOL 69.61 VL 26.056 GAL 20.25 AZL 86.16 MCA 319.47 SMA 118.41 ECC .41573 INC 3.8382 VI _30.209 RP 108.35 LAP -2.49 LOP 29.13 VP 36.453 GAP 24.11 AZP 87.08 TAL 143.90 TAP 103.36 RCA 69.18 APO 167.64 V2 34.974 RC 204.023 GL 8.49 GP 1.35 ZAL 33.05 ZAP 173.44 ETS 170.22 ZAE 126.68 ETE 179.38 ZAC 115.99 ETC 165.45 CLP 173.58
    PLANETOCENTRIC CONIC
     C3 122.760 VHL 11.080 DLA 22.04 RAL 32.22 RAD 6570.3 VEL 15.624 PTH 2.78 VHP 15.221 DPA
                                                                                                                                                      7.53 RAP 21.49 ECC 3.0203
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 32 46 3415.34 -22.36 125.40 293.72 72.16 6 29 41 2815.3 -24.60 117.44
                       0 3 24 4522.94
7 9 49 3102.40
1 9 2 4311.12
8 50 42 2786.79
1 44 38 4199.50
                                                                                                                               1 18 47
                                                                                                                                                   3922.9
                                                                                                                                                                     6.62
                                                                                              280.58
                                                                                                                  63.46
                                                                            190.20
                                                            10.27
                                                                                                                  72.52
                                                                                                                             8 1 31
                                                                                                                                                  2502.4
                                                                                                                                                                    -26.80
                                                                                                                                                                                      95.04
                                                                            103.17
                                                                                              294.51
         100.00
                                                           -24.64
                                                                                                                             -2 20 53
                                                                                                                                                  3711.1
                                                                                                                                                                     8.62
                                                                                                                                                                                     166.77
                                                                                              279.47
                                                                                                                  62.58
                                                            12.39
                                                                            173.53
                                                                                296.46 73.26 9 37 8
52.16 276.57 60.18 2 54 38
MID-COURSE EXECUTION ACCURACY
SGT 5657.3 SGR 369 6 11
         100.00
                                                                                                                                                                    -32.24
                                                                                                                                                                                      72.50
                                                                                                                                                  2186.8
                                                           -30.25
                                                                              81.15
         110.00
                                                                                                                                                  3599.5
                                                                                                                                                                   13.45
                                                                                                                                                                                     155.44
                                                           17.55
                                                                            162.16
         110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5657.3 SGR 362.8 SG3 107.9
RRT .6057 RRF .5963 RTF .9829
SGB 5669.0 R23 -.0007 R13 .9829
SGI 5661.6 SG2 288.4 THA 2.23
                                                                                                                                             ST 2794.9 SR 353.7 SS 790.2
CRT .8756 CRS -.8582 CST -.9993
      TDE 4.5348 TRA 9.0832 TC3 -.4101 BAU-.6731
      RDE .6822 RRA .1503 RC3 .0045 FAU-.00175
FDE .9522 FRA 2.0573 FC3 .0123 BSP 19127
BDE 4.5858 BRA 9.0844 BC3 .4101 FSP -368
                                                                                                                                              LSA 2920.8 MSA 172.7 SSA 8.8
EL1 2812.0 EL2 169.8 ALF 6.35
```

```
ARRIVAL DATE FEB 11 1966
                                                                   FLIGHT TIME 70.00
LAUNCH DATE DEC 3 1965
                                                                   DISTANCE 182.287
  MELIOCENTRIC CONIC
                      .DO LOL 70.62 VL 26.399 GAL -6.51 AZL 86.68 HCA 80.77 SMA 120.31 ECC .25125 INC 3.3219 V1 30.214
3.28 LOP 151.38 VP 36.953 GAP -13.24 AZP 89.47 TAL 200.31 TAP 281.08 RCA 90.08 APO 150.54 V2 35.244
17.34 GP -1.45 ZAL 122.39 ZAP 5.07 ETS 15.40 ZAE 149.67 ETE 336.10 ZAC 62.52 ETC 161.97 CLP -4.86
    RL 147.46 LAL
    RP 107.52 LAP
    RC 45.858 GL
   PLANETOCENTRIC CONIC
    C3 25.994 VHL 5.098 DLA -1.82 RAL 304.61 RAD 6568.1 VEL 12.140 PTH 2.18 VHP 8.577 DPA -17.05 RAP 330.36 ECC 1.4278
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 7 10 2221.61 -19.74 41.93 169.74 110.72 3 44 11 1621.6 -16.74 34.53
                   3 7 10 2221.61
                                                                          170.75
                                                                                                   16 1 9
                                                                                                                    4378.6
                                                                                                                                   19.63
                                                                                                                                                210.52
                                                            218.18
                                                                                          72.07
       90.00
                 14 38 10 4978.63
                                               22.29
                                                                                                  5 0 21
                                                                                                                    1362.0
                                                                                                                                  -17.70
                                                                                                                                                 15.00
                                                                          169.28
                                                                                         111.92
      100.00
                   4 27 39
                               1961.95
                                               -20.85
                                                             22.37
                                                                                         70.88 17 18 55
115.26 6 3 12
67.53 18 25 27
                                                                                                                    4113.5
                                                                                                                                  20.60
                                                                                                                                                190.62
                16 0 22 4713.52
5 33 57 1754.41
17 10 33 4493.82
                                                                         170.33
      100.00
                                               23.42
                                                            198.28
                                                                                                                    1154.4
                                                                                                                                                357.92
                                                                         167.87
                                                                                         115.26
      110.00
                                               -23.84
                                                              5.21
                                                                                                                    3893.8
                                                                                                                                   23.19
                                                                                                                                                172.70
      110.00
                                                                         169.06
                                                26.47
                                                            180.32
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 306.7 SR 361.5 SS 319.2
CRT .8425 CRS .9953 CST .8570
                                                                SGT 713.9 SGR 405.7 SG3 105.7
RRT -.0608 RRF .0610 RTF -.6825
    TDE -.2596 TRA -.4333 TC3 .4383 BAU .1625
    RDE -.3209 RRA .0737 RC3 -.1631 FAU .03367
                                                                SGB 821.1 R23 .0001 R13 .6828
SG1 714.5 SG2 404.6 THA 177.09
                                                                                                                 LSA 553.5 MSA 140.9 SSA
                                                                                                                                                    22.1
    FDE .3817 FRA -.0560 FC3-1.1213 BSP 2017
BDF .4005 BRA .4396 BC3 .4676 FSP -263
                                                                                                                 EL1 455.6 EL2 131.1 ALF 50.55
    BDE .4005 BRA .4396 BC3 .4676 FSP
LAUNCH DATE DEC 3 1965
                                                                    FLIGHT TIME 72.00
                                                                   DISTANCE 189.099
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 26.610 GAL -6.52 AZL 86.66 MCA 84.01 SMA 121.54 ECC .24035 INC 3.3415 V1 30.214
RP 107.54 LAP 3.32 LOP 154.63 VP 37.099 GAP -12.26 AZP 89.65 TAL 201.66 TAP 285.67 RCA 92.33 APO 150.75 V2 35.239
                      18.11 GP -1.54 ZAL 123.80 ZAP 7.40 ETS 10.87 ZAE 148.59 ETE 337.01 ZAC 63.37 ETC 162.12 CLP
    RC 47.202 GL
  PLANETOCENTRIC CONIC
    C3 24.572 VHL 4.957 DLA -1.45 RAL 302.86 RAD 6568.0 VEL 12.081 PTH 2.16 VMP 8.040 DPA -16.86 RAP 331.25 ECC 1.4044 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST'TIM INJ 2 LAT INJ 2 LONG
                                                                                                      3 34 24
       90.00
                   2 57 25 2219.30
                                               -19.68
                                                             41.78
                                                                         167.15
                                                                                        110.78
                                                                                                                    1619.3
                                                                                                                                 -16.68
                                                                                                                                                 34.39
                                                                                                                                                 208.91
                                                             216.52
                                                                          167.92
                                                                                          71.40
                                                                                                    15 56 31
                                                                                                                                    19.01
                 14 33 58
                                                21.75
       90.00
                               4953.19
                                                                                         111.99 4 50 44
70.19 17 14 8
115.37 5 53 57
                                                                                                                     1359.1
                                                                                                                                   -17.61
                                                                                                                                                  14.82
                   4 18 5 1959.09
                                               -20.78
                                                             22.19
                                                                          166.69
      100.00
                 15 55 59 4688.63
                                                                          167.50
                                                                                                                     4088.6
                                                                                                                                   19.95
                                                                                                                                                 189.05
                                               22.86
      100.00
                                                             196.64
                                                                                                                                                 357.67
                                                                                                                     1150.3
                                                                                                                                   -20.10
                                                               4.95
                                                                          165.30
      110.00
                   5 24 47
                               1750.30
                                               -23.72
                                                                                          115.37 5 53 57
66.80 18 20 17
                                                                                                                                   22.48
                                                                                                                                                 171.23
                                                             178.77
                 17 5 46
                                4470.18
                                               25.84
                                                                          166.21
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                SGT 735.3 SGR 405.8 SG3 119.5
RRT -.0660 RRF .0674 RTF -.6976
                                                                                                                 ST 316.2 SR 359.3 SS 344.9
CRT .8602 CRS .9957 CST .8590
    TOE -. 2439 TRA -. 4106 TC3 . 4898 BAU . 1709
    RDE -. 3102 RRA .0663 RC3 -.1753 FAU .03686
    FDE .4272 FRA -.0996 FC3-1.2985 BSP 2098
RDF .3946 BRA .4159 BC3 .5202 FSP -303
                                                                SGB 839.8 R23 -. 0014 R13 .6979
                                                                                                                LSA 572.7 MSA 139.9 SSA 23.0
                                                                 SG1 736.0 SG2 404.5 THA 177.01
                                                                                                                 EL1 461.9 EL2 125.4 ALF 49.24
                                                                                                                          ARRIVAL DATE FEB 15 1966
                                                                   FLIGHT TIME 74.00
LAUNCH DATE DEC 3 1965
   HELIOCENTRIC CONIC
                                                                   DISTANCE 195.905
    RL 147.46 LAL .00 LOL 70.62 VL 26.800 GAL -6.53 AZL 86.64 HCA 87.26 SHA 122.68 ECC .23067 INC 3.3609 V1 30.214
RP 107.55 LAP 3.36 LOP 157.88 VP 37.230 GAP -11.33 AZP 89.84 TAL 203.02 TAP 290.27 RCA 94.38 APO 150.98 V2 35.234
RC 48.656 GL 18.82 GP -1.65 ZAL 125.17 ZAP 9.85 ETS 8.50 ZAE 147.76 ETE 337.74 ZAC 64.15 ETC 162.25 CLP -9.71
   PLANETOCENTRIC CONIC
    C3 23.401 VML 4.837 DLA -1.11 RAL 301.16 RAD 6568.0 VEL 12.032 PTH 2.15 VMP 7.533 DPA -16.70 RAP 332.05 ECC 1.3851
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                    1618.0
                                                                                                                                 -16.65
                                                                                                                                                 34.31
                                                                                        110.81
                                                                                                     3 25 4
                    2 48 6 2218.03
                                               -19.65
                                                             41.70
                                                                         164.72
       90.00
                                                                                         70.83 15 51 56
112.03 4 41 33
                                                                                                                     4330.5
                                                                                                                                   18.44
                                                                                                                                                207.50
                                4930.54
                                                                          165.29
        90.00
                  14 29 45
                                               21.25
                                                            215.04
                                                                                                                    1357.3
                   4 8 56
                                1957.29
                                               -20.73
                                                             22.07
                                                                          164.27
       100.00
                               4666.50
                                                                                          69.61 17 9 23
                                                                                                                    4066.5
                                                                                                                                   19.36
                                                                                                                                                187.67
                                                                         164.87
                   15 51 37
                                               22.34
                                                             195.20
       100.00
                 5 16 D 1747.36
17 1 2 4449.20
                                                                                                     5 45 7
                                                                                                                    1147.4
                                                                                                                                  -20.01
                                                                                                                                                357.50
                                               -23.63
                                                              4.76
                                                                         162.90
                                                                                         115.45
       110.00
                                                                                                  18 15 11
                                                                                                                    3849.2
                                                                                                                                   21.83
                                                                                                                                                169.94
                                                                          163.57
                                                                                          66.18
                                               25.27
                                                             177.41
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                RGT 754.9 SGR 404.9 SG3 135.4

RRT -.0723 RRF .0751 RTF -.7110

SGB 856.7 R23 -.0031 R13 .7114

SGI 755.7 SG2 403.4 THA 176.89
                                                                                                                ST 325.1 SR 356.1 SS 372.4
CRT .8767 CRS .9952 CST .8616
LSA 592.6 MSA 139.5 SSA 23.8
    TOE -.2482 TRA -.3881 TC3 .5392 BAU .1785
    ROE -.3001 RRA .0593 RC3 -.1869 FAU .04051
    FOE .4796 FRA -.1506 FC3-1.4985 BSP 2175
BOE .3894 BRA .3926 BC3 .5706 FSP -350
                                                                                                                 EL1 467.2 EL2 119,2 ALF 47.98
                                                                    FLIGHT TIME 76.00
                                                                                                                           ARRIVAL DATE FEB 17 1966
LAUNCH DATE DEC 3 1965
                                                                    DISTANCE 202.701
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 26.970 GAL -6.55 AZL 86.62 MCA 90.50 SMA 123.73 ECC .22212 INC 3.3802 VI 30.214
RP 107.57 LAP 3.38 LOP 161.12 VP 37.347 GAP -10.44 AZP 90.03 TAL 204.37 TAP 294.87 RCA 96.24 APO 151.21 V2 35.227
RC 50.208 GL 19.48 GP -1.77 ZAL 126.48 ZAP 12.41 ETS 7.07 ZAE 147.17 ETE 338.30 ZAC 64.82 ETC 162.34 CLP -12.29
   PLANETOCENTRIC CONIC
    C3 22.439 VHL 4.737 OLA -.79 RAL 299.54 RAD 6567.9 VEL 11.992 PTH 2.14 VHP 7.053 OPA -16.59 RAP 332.74 ECC 1.3693
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                    2 39 16 2217.67
                                                                                         110.61
                                                                                                      3 16 14
                                                                                                                    1617.7
                                                                                                                                  -16.64
                                                                                                                                                  34.29
                                                -19.64
                                                              41.68
                                                                          162.49
       90.00
                                                20.79
                                                             213.75
                                                                           162.88
                                                                                           70.33
                                                                                                     15 47 29
                                                                                                                     4310.4
                                                                                                                                    17.92
                                                                                                                                                 206.25
        90.00
                   14 25 39
                               4910.45
                                                -20.71
                                                              22.02
                                                                          162.04
                                                                                         112.05
                                                                                                     4 32 51
                                                                                                                     1356.5
                                                                                                                                   -17.54
                                                                                                                                                 14.66
                    4 0 15
                               1956.47
       100.00
                                                             193.94
                                                                                           69.10 17 4 48
                                                                                                                     4046.9
                                                                                                                                   18.83
                                                                                                                                                 186.46
                  15 47 21
                               4646.89
                                               21.87
                                                                          162.45
      100.00
                                                                                         115.50 5 36 44
65.64 18 10 17
                                                                                                                     1145.5
                                                                                                                                   -19.95
                                                                                                                                                 357.38
                    5 7 39
                               1745.47
                                                -23.58
                                                               4.64
                                                                          160.68
       110.00
                               4430.65
                                                                                                                     3830.6
                                                                                                                                   21.26
                                                                                                                                                 168.81
                  16 56 26
                                               24.76
                                                             176 -21
                                                                           161.14
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 333.0 SR 351.8 35 402.0
CRT .8917 CRS .9940 CST .8646
    TOE -.2521 TRA -.3662 TC3; .5843 BAU .1851
                                                                 SGT 771.8 SGR 403.2 SG3 153.5
                                                                 RRT -.0797 RRF .0843 RTF -.7224
    ROE -. 2904 RRA .0525 RC3 -. 1978 FAU .04468
                                                                                                                 LSA 613.4 MSA 139.7 SSA 24.4
EL1 471.2 EL2 112.6 ALF 46.76
    FOE .5402 FRA -.2099 FC3-1.7238 BSP 2245
BDE .3846 BRA .3699 BC3 .6169 FSP -404
                                                                 SGB 870.8 R23 -. 0054 R13 .7229
                                                                 5G1 772.7 SG2 401.4 THA 176.73
```

```
FLIGHT TIME 78.00
                                                                                                                                                ARRIVAL DATE FEB 19 1966
LAUNCH DATE DEC 3 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 209.483
    RL 147.46 LAL .00 LOL 70.62 VL 27.122 GAL -6.58 AZL 86.60 HCA 93.74 SNA 124.68 ECC .21460 INC 3.3994 V1 30.214
RP 107.60 LAP 3.39 LOP 164.37 VP 37.450 GAP -9.60 AZP 90.22 TAL 205.69 TAP 299.43 RCA 97.93 APO 151.44 V2 35.220
RC 51.850 GL 20.08 GP -1.91 ZAL 127.70 ZAP 15.10 ELB 6.11 ZAE 146.85 ETE 338.68 ZAC 65.38 ETC 162.40 CLP -14.98
   PLANETOCENTRIC CONIC
    C3 21.650 VHL 4.653 DLA
                                           -.49 RAL 298.01 RAD 6567.9 VEL 11.959 PTH
                                                                                                           2.13 VHP 6.602 OPA -16.53 RAP 333.33 FCC 1.3563
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 30 58 2218.15

14 21 43 4892.64

3 52 5 1956.51

15 43 17 4629.52

4 59 48 1744.53

16 52 3 4414.27
                                                                                                      110.80
                                                                                     160.44
                                                                                                                                     1618.2
        90.00
                                                       -19.66
                                                                       41.71
                                                                                                                      3 7 56
                                                                                                                                                       -16.65
                                                                                                                                                                          34.32
        90.00
                                                       20.3A
                                                                       212.60
                                                                                       160.68
                                                                                                          69.90
                                                                                                                     15 43 16
                                                                                                                                         4292.6
                                                                                                                                                         17.46
                                                                                                                                                                         205.14
       100.00
                                                       -20.71
                                                                        22.02
                                                                                      159.99
                                                                                                        112.05
                                                                                                                     4 24 41
                                                                                                                                        1356.5
                                                                                                                                                        -17.54
                                                                                                                                                                          14.67
                                                                                                                                        4029.5
                                                                                                   68.66 17 0 27
115.53 5 28 53
65.18 18 5 38
                                                                                   160.25
158.65
       100.00
                                                      21.44
                                                                      192.82
                                                                                                                                                        18.35
                                                                                                                                                                         185.39
       110.00
                                                      -23.55
                                                                        4.59
                                                                                                                                       1144.5
                                                                                                                                                        -19.92
                                                                                                                                                                         357.33
                                                                       175.16
      110.00
                                                      24.29
                                                                                      158.93
                                                                                                                                        3814.3
                                                                                                                                                         20.74
                                                                                                                                                                         167.82
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 340.0 SR 346.4 SS 434.0

CRT .9049 CRS .9923 CST .8675

LSA 635.3 MSA 140.7 SSA 24.7

EL1 473.7 EL2 105.8 ALF 45.59
                                                                           SGT 785.5 SGR 400.6 SG3 174.3
RRT -.0883 RRF .0953 RTF -.7314
    TOE -.2555 TRA -.3455 TC3 .6237 BAU .1903
    ROE - .2809 RRA .0461 RC3 - .2082 FAU .04944
                                                                           SGB 881.7 R23 -.0083 R13 .7320
SGI 786.5 SG2 398.4 THA 176.53
    FOE .6106 FRA -.2783 FC3-1.9771 BSP 2300
BDE .3798 BRA .3486 BC3 .6576 FSP -467
LAUNCH DATE DEC 3 1965
                                                                               FLIGHT TIME 80.00
                                                                                                                                                ARRIVAL DATE FER 21 1966
   HELIOCENTRIC CONTC.
                                                                              DISTANCE 216.249
    RL 147.46 LAL .00 LOL 70.62 VL 27.258 GAL -6.61 AZL 86.58 HCA 96.98 SMA 125.55 ECC .20801 INC 3.4188 V1 30.214
RP 107.62 LAP 3.39 LOP 167.62 VP 37.541 GAP -8.79 AZP 90.42 TAL 206.97 TAP 303.95 RCA 99.44 APO 151.67 V2 35.212
RC 53.572 GL 20.63 GP -2.06 ZAL 128.83 ZAP 17.92 ETS 5.42 ZAE 146.79 ETE 338.89 ZAC 65.82 ETC 162.43 CLP -17.81
   C3 21.004 VHL 4.583 DLA -.22 RAL 296.58 RAD 6567.9 VEL 11.932 PTH 2.12 VHP 6.177 DPA -16.53 RAP 333.79 ECC 1.3457 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 23 14 2219.38 -19.68 41.79 158.58 110.78 3 013 1619.4 -16.68 34.40 90.00 14 18 4 4876.83 20.01 211.59 158.69 69.53 15 39 20 4276.8 17.04 204.17 100.00 3 44 29 1957.32 -20.73 22.08 158.14 112.03 4 17 6 1387 3 100.00 4 52 29 1744 43
   PLANETOCENTRIC CONIC
                     4 52 29 1744.43
16 47 59 4399.78
                                                                                                       115.53 5 21 34
64.78 18 1 18
       110.00
                                                      23.88
                                                                       174.25
                                                                                                                                         3799.8
                                                                                       156.93
                                                                                                                                                          20.28
                                                                                                                                                                         166.95
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 795.2 SGR 397.1 SG3 197.9
                                                                                                                                    ST 345.4 SR 339.8 SS 468.5
CRT .9160 CRS .9901 CST .8700
LSA 658.3 MSA 142/5 SSA 24.8
    TOE -.2580 TRA -.3263 TC3 .6563 BAU .1942
                                                                           RRT -.0989 RRF .1085 RTF -.7380
SGB 888.8 R23 -.0117 R13 .7388
    ROE - .2715 RRA .0400 RC3 - .2182 FAU .05488
    FDE .6922 FRA -.3569 FC3-2.2620 BSP 2339
BDE .3745 BRA .3288 BC3 .6916 FSP -538
                                                                           SG1 796.5 SG2 394.5 THA 176.25
                                                                                                                                    EL1 474.2 EL2 99.3 ALF 44.48
                                                                               FLIGHT TIME 82.00
                                                                                                                                               ARRIVAL DATE FEB 23 1966
LAUNCH DATE DEC 3 1965
                                                                               DISTANCE 222.995
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 27.378 GAL -6.63 AZL 86.56 HCA 100.22 SMA 126.34 ECC .20226 INC 3.4385 VI 30.214
RP 107.64 LAP 3.38 LOP 170.86 VP 37.621 GAP -8.01 AZP 90.61 TAL 208.19 TAP 308.41 RCA 100.79 APO 151.89 V2 35.204
RC 55.368 GL 21.13 GP -2.23 ZAL 129.85 ZAP 20.90 ETS 4.90 ZAE 147.01 ETE 338.92 ZAC 66.12 ETC 162.41 CLP -20.79
   PLANETOCENTRIC CONIC
                                              .04 RAL 295.26 RAD 6567.8 VEL 11.910 PTH 2.12 VHP 5.778 DPA -16.60 RAP 334.10 ECC 1.3370
    C3 20.475 VHL 4.525 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   156.92
                                                                                                                                        1621.3
                                                                                                      110.73
                                                                                                                     2 53 6
                                                                                                                                                      -16.73
      90.00
                                                       -19.73
                                                                      41.91
                     2 16 5 2221.29
                                                                                                    69.21 15 35 47
111.99 4 10 5
67.95 16 52 44
115.51 5 14 49
64.43 17 57 22
                    14 14 44
                                                                      210.69
                                                                                      156.90
                                                                                                                                        4262.7
                                                                                                                                                         16.66
        90.00
                                    4862.71
                                                       19.67
                    14 14 44 4862.71 19.07

3 37 26 1958.84 -20.77

15 36 3 4600.38 20.71

4 45 44 1745.09 -23.56

16 44 15 4386.91 23.50
                                                                                                                                        1358.8
                                                                                                                                                        -17.61
       100.00
                                                                       22.17
                                                                                     156.48
                                                                                  156.46
155.16
       100.00
                                                                      190.97
                                                                                                                                        4000.4
                                                                                                                                                   17.,.
-19.93
                                                                                                                                                       17.54
                                                                                                                                                                        183.61
                                                                        4.62
                                                                                                                                        1145.1
                                                                                                                                                                        357.36
       110.00
                                                                                                                                        3786.9
                                                                                                                                                         19.86
                                                                                                                                                                        166.18
       110.00
                                                                      173.44
                                                                                      155.13
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 800.1 SGR 392.9 SG3 225.1

RRT -.1151 RRF .1258 RTF -.7433

SGB 891.4 R23 -.0138 R13 .7443

SGI 801.8 SG2 389.5 THA 175.76
                                                                                                                                ST 346.8 SR 331.9 SS 504.4
CRT .9250 CRS .9876 CST .8711
LSA 680.7 MSA 144.6 SSA 24.8
    TOE -.2575 TRA -.3076 TC3 .6831 BAU .1971
    RDE -.2619 RRA .0340 RC3 -.2279 FAU .06115
    FOE .7845 FRA -.4488 FC3-2.5857 BSP 2397
BDE .3672 BRA .3095 BC3 .7202 FSP -625
                                                                                                                                 EL1 471.0 EL2 92.8 ALF 43.64
LAUNCH DATE DEC 3 1965
                                                                               FLIGHT TIME 84.00
                                                                                                                                                ARRIVAL CATE FEB 25 1966
                                                                              DISTANCE 229.719
   HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 27.484 GAL -6.66 AZL 86.54 MCA 103.46 SMA 127.04 ECC .19726 INC 3.4586 V1 30.214
RP 107.67 LAP 3.36 LOP 174.10 VP 37.690 GAP -7.28 AZP 90.81 TAL 209.33 TAP 312.78 RCA 101.98 APO 152.10 V2 35.195
                         21.58 GP -2.42 ZAL 130.77 ZAP 24.05 ETS 4.49 ZAE 147.51 ETE 338.73 ZAC 66.26 ETC 162.35 CLP -23.94
         57.230 GL
   PLANETOCENTRIC CONIC
    C3 20.042 VHL 4,477 OLA
                                              .29 RAL 294.07 RAD 6567.8 VEL 11.892 PTH 2.11 VHP 5.404 OPA -16.75 RAP 334.26 ECC 1.3298
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 9 30 2223.83 -19.79 42.07 155.44 110.67 2 46 34 1623.8 -16.80 34.67 90.00 14 11 48 4849.96 19.36 209.89 155.30 68.92 15 32 38 4250.0 16.32 202.53
                  3 30 58 1961.01
15 33 1 4588.01
4 39 32 1746.43
16 40 57 4375.35
                                                       -20.83
                                                                       22.31
                                                                                      155.01
                                                                                                       111.94
                                                                                                                      4 3 39
                                                                                                                                        1361.0
                                                                                                                                                        -17.67
                                                                                                                                                                          14.94
       100.00
                                                                                                     67.66 16 49 29 3988.0
115.47 5 8 38 1146.4
64.12 17 53 53 3775.4
      100.00
                                                      20.39
                                                                      190.19
                                                                                    154.87
                                                                                                                                                        17.18
      110.00
                                                       -23.60
                                                                         4.71
                                                                                      153.69
                                                                                                                                                        -19.98
                                                                                                                                                                         357.44
                                                      23.16
                                                                       172.71
                                                                                      153.53
       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
ST 347.7 SR 322.6 SS 543.8
CRT .9321 CRS .9850 CST .8716
LSA 705.9 MSA 147.5 SSA 24.5
EL1 466.2 EL2 .87.2 ALF 42.71
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 798.6 SGR 387.9 SG3 255.8
RRT -.1303 RRF .1455 RTF -.7432
    TOE -.2566 TRA -.2928 TC3 .6970 BAU .1973
    RDE -.2519 RRA .0283 RC3 -.2375 FAU .06821
    FOE .8927 FRA -.5516 FC3-2.9464 BSP 2395
BDE .3596 BRA .2942 BC3 .7364 FSP -720
                                                                        5GB <u>887.9</u> R23 -.0198 R13 .7446
                                                                          SG1 800.7 SG2 383.6 THA 175.30
```

ARRIVAL DATE FEB 27 1968

LAUNCH DATE DEC 3 1965

HELIOCENTRIC CONIC DISTANCE 236.419 RL 147.46 LAL .00 LOL 70.62 VL 27.577 GAL -6.68 AZL 86.52 MCA 106.69 SMA 127.67 ECC .19293 INC 3.4792 V1 30.214
RP 107.70 LAP 3.33 LOP 177.34 VP 37.749 GAP -6.57 AZP 91.00 TAL 210.38 TAP 317.07 RCA 103.04 APO 152.30 V2 35.186
RC 59.152 GL 22.00 GP -2.64 ZAL 131.57 ZAP 27.39 ETS 4.14 ZAE 148.30 ETE 338.30 ZAC 66.22 ETC 162.24 CLP -27.27 PLANETOCENTRIC CONIC C3 19.686 VHL 4.437 DLA .53 RAL 293.01 RAD 6567.8 VEL 11.877 PTH 2.11 VMP 5.057 DPA -16.99 RAP 334.23 ECC 1.3240 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 -16.89 2 3 29 2226.96 42.27 154.14 110.60 2 40 36 1627.0 34.86 -19.87 14 9 19 4838.31 19.07 153.90 68.66 15 29 58 4238.3 16.00 201.82 90.00 209.15 111.87 3 57 48 111.87 16 46 42 115.42 5 3 1 63.85 17 50 51 3 25 4 1963.79 15 30 25 4576.71 153.71 1363.8 -17.75 15.11 -20.90 22.49 100.00 20.10 189.48 153.46 3976.7 16.86 182.18 4 33 52 1748.41 16 38 6 4364.85 1148.4 152.41 -20.04 357.56 -23.66 4.83 110.00 22.84 172.06 152.12 3764.9 19.14 164.88 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 789.8 SGR 382.2 SG3 290.5 RRT -.1475 RRF .1691 RTF -.7380 ST 345.7 SR 311.9 SS 586.3 CRT .9368 CRS .9824 CST .8703 LSA 732.9 MSA 150.9 SSA 24.0 TDE -.2536 TRA -.2815 TC3 .6986 BAU .1950 RDE -.2414 RRA .0226 RC3 -.2472 FAU .07618 FOE 1.0174 FRA -.6676 FC3-3.3502 BSP 2361 BDE .3501 BRA .2824 BC3 .7411 FSP -829 SGB 877.4 R23 -. 0285 R13 .7399 SG1 792.4 SG2 376.8 THA 174.72 EL1 458.2 EL2 82.3 ALF 41.86 LAUNCH DATE DEC 3 1965 FLIGHT TIME 88.00 ARRIVAL DATE MAR 1 1966 HELIOCENTRIC CONIC **DISTANCE 243.093** RL 147.46 LAL .00 LOL 70.62 VL 27.658 GAL -6.69 AZL 86.50 MCA 109.93 SMA 128.22 ECC .18919 INC 3.5005 V1 30.214
RP 107.73 LAP 3.29 LOP 180.58 VP 37.799 GAP -5.89 AZP 91.19 TAL 211.33 TAP 321.25 RCA 103.96 APO 152.47 V2 35.176 61.127 GL 22.39 GP -2.88 ZAL 132.25 ZAP 30.94 ETS 3.83 ZAE 149.39 ETE 337.58 ZAC 65.99 ETC 162.06 CLP -30.82 PLANETOCENTRIC CONIC C3 19.391 VHL 4.404 DLA .76 RAL 292.07 RAD 6567.8 VEL 11.865 PTH 2.10 VHP 4.734 DPA -17.32 RAP 334.01 ECC 1.3191 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 59 2230.66 -19.96 42.50 153.02 110.52 2 35 10 1630.7 -16.98 35.09 90.00 14 7 19 4827.47 208.47 152.67 68.43 15 27 46 4227.5 15.71 201.16 18.80 111.79 3 52 28 67.16 16 44 24 100.00 15.31 3 19 41 1967.13 -20.98 22.70 152.59 1367.1 -17.84 100.00 15 28 18 4566.22 19.82 188.82 152.23 3966.2 16.56 181.55 115.35 4 57 56 63.60 17 48 19 110.00 4 28 45 1750.98 16 35 44 4355.14 -23.74 4.99 151.29 1151.0 -20.12 357.71 110.00 22.55 171.46 150.88 3755.1 18.82 164.31 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 773.3 SGR 376.3 SG3 330.0 RRT -.1719 RRF .1993 RTF -.7285 ST 337.4 SR 299.7 SS 630.1 CRT .9388 CRS .9796 CST .8654 TOE -.2457 TRA -.2724 TC3 .6908 BAU .1911 ROE -.2302 RRA .0170 RC3 -.2575 FAU .08526 FOE 1.1567 FRA -.8002 FC3-3.8067 BSP 2333 SGB 860.0 R23 -.0376 R13 .7314 SG1 776.8 SG2 369.1 THA 173.82 LSA 759.2 MSA 154.0 SSA 23.5 BOE .3367 BRA .2729 BC3 .7372 FSP EL1 444.4 EL2 78.3 ALF 41.39 FLIGHT TIME 90.00 ARRIVAL DATE MAR 3 1966 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC 01STANCE 249.741 RL 147.46 LAL .00 LOL 70.62 VL 27.727 GAL -6.70 AZL 86.48 MCA 113.16 SMA 128.70 ECC .18597 INC 3.5227 V1 30.214
RP 107.76 LAP 3.24 LOP 183.82 VP 37.840 GAP -5.24 AZP 91.39 TAL 212.17 TAP 325.33 RCA 104.76 APO 152.63 V2 35.166
RC 63.151 GL 22.75 GP -3.15 ZAL 132.82 ZAP 34.72 ETS 3.54 ZAE 150.78 ETE 336.49 ZAC 65.55 ETC 161.81 CLP -34.60 PLANETOCENTRIC CONIC C3 19.145 VHL 4.376 DLA 1.00 RAL 291.25 RAO 6567.8 VEL 11.854 PTH 2.10 VHP 4.437 DPA -17.76 RAP 333.57 ECC 1.3151 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH 'INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 30 15 152.06 110.42 1634.9 -17.10 35.35 90.00 1 53 0 2234.93 -20.06 42.77 15 26 6 4217.2 200.54 90.00 14 5 49 4817.17 18.54 207.83 151.60 68.21 15.42 3 14 49 1971.05 15 26 42 4556.27 4 24 7 1754.11 3 47 40 1371.1 100.00 -21.08 22.95 151.64 111.70 -17.95 15.55 66.93 16 42 38 115.27 4 53 21 63.37 17 46 18 100.00 19.56 151.16 3956.3 16.27 180.95 188.20 150.35 1154.1 -20.23 357.90 110.00 -23.83 115.27 5.19 16 33 52 3746.0 18.52 163.77 110.00 4345.98 22.27 170.89 149.81 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGI 746.8 SGR 370.0 SG3 373.7 RRT -.1933 RRF .2335 RTF -.7077 ST 327.2 SR 285.7 SS 678.0 CRT .9378 CRS .9770 CST .8572 TDE -.2360 TRA -.2696 TC3 .6639 BAU .1833 RDE -.2181 RRA .0114 RC3 -.2683 FAU .09524 FDE 1.3178 FRA -.9441 FC3-4.3065 BSP 2219 BOE .3214 BRA .2699 BC3 .7160 FSP -1097 SGB 833.5 R23 -.0559 R13 .7124 SG1 751.3 SG2 360.9 THA 172.88 LSA 789.3 MSA 157.6 SSA 22.7 EL1 427.7 EL2 75.9 ALF 40.87 LAUNCH DATE DEC 3 1965 FLIGHT TIME 92.00 ARRIVAL DATE HAR 5 1966 HELIOCENTRIC CONIC **DISTANCE 256.361** RL 147.46 LAL .00 LOL 70.62 VL 27.787 GAL -6.71 AZL 86.45 MCA 116.39 SMA 129.11 ECC .18320 INC 3.5459 V1 30.214
RP 107.80 LAP 3.18 LOP 187.05 VP 37.873 GAP -4.62 AZP 91.58 TAL 212.90 TAP 329.28 RCA 105.46 APO 152.76 V2 35.155
RC 65.219 GL 23.09 GP -3.45 ZAL 133.28 ZAP 38.75 ETS 3.25 ZAE 152.46 ETE 334.92 ZAC 64.89 ETC 161.48 CLP -38.62 PLANETOCENTRIC CONIC C3 18.937 VHL 4.352 OLA 1.24 RAL 290.57 RAD 6567.8 VEL 11.846 PTH 2.10 VHP 4.166 DPA -18.31 RAP 332.90 ECC 1.3117 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 29 2239.79 -20.17 43.08 151.25 110.30 2 25 49 1639.8 -17.23 35.65 2 25 49 151.25 110.30 4807.16 207.20 68.00 15 24 58 4207.2 15.14 -18.08 100.00 3 10 24 1975.55 -21.20 23.23 150.84 111.59 3 43 20 1375.6 15.83 66.72 16 41 23 15 25 37 4546.62 100.00 19.30 187.60 150.25 3946.6 15.98 4 19 58 1757.81 16 32 32 4337.13 4 49 16 110.00 -23.93 5.42 149.55 115.17 1157.8 -20.34 63.15 17 44 49 110.00 22.00 170.35 148.90 3737.1 18.22 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 710.9 SGR 363.8 SG3 422.1 RRT -.2155 RRF .2744 RTF -.6739 ST 311.4 SR 270.0 SS 728.2 CRT .9324 CRS .9743 CST .8424 LSA 820.8 MSA 161.1 SSA 22.0 TDE -.2216 TRA -.2719 TC3 .6209 BAU .1725 ROE -.2050 RRA .0058 RC3 -.2802 FAU .10625 FOE 1.4978 FRA-1.1015 FC3-4.8572 BSP 2067 SGB 798.6 R23 -. 0836 R13 .6816 BOE .3019 BRA .2720 BC3 .6812 FSP -1253 SG1 716.6 SG2 352.4 THA 171.68 EL1 405.2 EL2 75.0 ALF 40.64

FLIGHT TIME 86.00

```
ARRIVAL DATE HAR 7 1966
LAUNCH DATE DEC 3 1965
                                                                                                                                                   FLIGHT TIME 94.00
                                                                                                                                                   DISTANCE 262.953
      HELIOCENTRIC CONIC
       RL 147.46 LAL .00 LOL 70.62 VL 27.836 GAL -6.70 AZL 86.43 HCA 119.62 SMA 129.46 ECC .18083 INC 3.5705 V1 30.214
RP 107.83 LAP 3.10 LOP 190.29 VP 37.899 GAP -4.03 AZP 91.77 TAL 213.50 TAP 333.12 RCA 106.05 APO 152.87 V2 35.143
RC 67.327 GL 23.42 GP -3.78 ZAL 133.62 ZAP 43.02 ETS 2.95 ZAE 154.41 ETE 332.72 ZAC 93.57 ETC 279.47 CLP -42.89
      PLANETOCENTRIC CONTC
       PLANETOCENTRIC CONIC

C3 18.757 VHL 4.331 DLA 1.49 RAL 290.00 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 3.920 QPA -18.98 RAP 331.99 ECC 1.3087

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 14 4 27 4797.15 18.03 206.58 149.93 67.79 15 24 24 4197.2 14.86 199.34

100.00 3 6 25 1980.68 -21.32 23.56 150.18 111.46 3 39 25 1380.7 -18.22 16.14

100.00 15 25 6 4536.99 19.04 187.00 149.48 66.51 16 40 43 3937.0 15.70 179.80

110.00 4 16 15 1762.10 -24.06 5.69 148.91 115.05 4 45 37 1162.1 -20.48 358.38

110.00 16 31 45 4328.33 21.73 169.81 148.13 62.94 17 43 54 3728.3 17.93 162.74
                                                                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                          SGT 655.8 SGR 356.4 SG3 471.4
RRT -.2062 RRF .3119 RTF -.6052
SGB 755.2 R23 -.1436 R13 .6182
SGI 671.3 SG2 345.9 THA 171.40
                                                                                                                                                                                                                                                     ST. 301.2 SR 251.5 SS 791.6
CRT .9213 CRS .9756 CST .8235
LSA 867.6 MSA 166.6 SSA 20.6
        TOE -.2103 TRA -.2687 TC3 .5414 BAU .1542
       ROE -.1900 ARA .0007 RC3 -.2917 FAU .11696
FOE 1.7242 FRA-1.2429 FC3-5.3984 BSP 1663
BOE .2834 BRA .2887 BC3 .6150 FSP -1369
                                                                                                                                                                                                                                                     EL1 364.6 EL2 76.5 ALF 39.43
LAUNCH DATE DEC 3 1965
                                                                                                                                                    FLIGHT TIME 96.00
                                                                                                                                                                                                                                                                           ARRIVAL DATE MAR 9 1966
                                                                                                                                                   DISTANCE 269.515
     HELIOCENTRIC CONIC
       RL 147.46 LAL .00 LOL 70.62 VL 27.878 GAL -6.69 AZL 86.40 HCA 122.84 SHA 129.75 ECC .17880 INC 3.5967 V1 30.214
RF 107.87 LAP 3.02 LOP 193.52 VP 37.919 GAP -3.46 AZP 91.95 TAL 214.00 TAP 336.84 RCA 106.55 APO 152.95 V2 35.132
RC 69.470 GL 23.75 GP -4.15 ZAL 133.85 ZAP 47.57 ETS 2.61 ZAE 136.62 ETE 329.64 ZAC 93.45 ETC 279.22 CLP -47.43
      PLANETOCENTRIC CONIC
       PLANETOCENTRIC CONIC
C3 18.601 VHL 4.313 DLA 1.75 RAL 289.55 RAD 6567.8 VEL 11.831 PTH 2.10 VHP 3.700 DPA -19.76 RAP 330.81 ECC 1.3061
LNOH AZMTH LNOCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 14 4 35 4787.10 17.77 205.96 149.30 67.39 15 24 22 4187.1 14.58 198.74
100.00 3 2 47 1986.42 -21.47 23.93 149.67 111.32 3 35 54 1386.4 -18.38 16.49
100.00 15 25 6 4527.33 18.78 186.40 148.85 66.30 16 40 34 3927.3 15.41 179.23
110.00 4 12 54 1786.97 -24.20 6.00 148.40 114.91 4 42 21 1167.0 -20.64 358.67
110.00 16 31 29 4319.54 21.46 189.27 147.49 62.73 17 43 29 3719.5 17.63 162.23
DIFFERENTIAL CORRECTIONS
MID-COURSE EXECUTION ACCURACY
TOE -.1772 TRA -.2983 TC3 .4758 BAU .1408 8GT 615.6 SGR 352.7 SG3 530.2 ST 263.7 SR 232.9 SS 836.1
     DIFFERENTIAL CORRECTIONS
                                                                                                                                         SGT 615.6 SGR 352.7 3G3 530.2
RRT -.2347 RRF .3745 RTF -.5267
SGB 709.5 R23 -.2012 R13 .5527
SG1 623.5 SG2 336.5 THA 169.09
                                                                                                                                                                                                                                                    ST 263.7 SR 232.9 SS 836.1

CRT .8949 CRS .9689 CST .7737

LSA 891.3 MSA 167.4 SSA 20.2

EL1 342.6 EL2 80.0 ALF 41.04
        TOE -.1772 TRA -.2963 TC3 .4758 BAU .1408
        ROE -.1752 RRA -.0056 RC3 -.3071 FAU .13062
        FOE 1.9160 FRA-1.4410 FC3-6.0793 BSP 1582
BDE .2492 BRA .2964 BC3 .5663 FSP -1599
                                                                                                                                                   FLIGHT TIME 98.00
                                                                                                                                                                                                                                                                          ARRIVAL DATE HAR 11 1966
LAUNCH DATE DEC 3 1965
                                                                                                                                                   DISTANCE 276.047
      HELIOCENTRIC CONIC
       RL 147.46 LAL .00 LOL 70.62 VL 27.911 GAL -6.68 AZL 86.38 MCA 126.06 SMA 129.98 ECC .17706 INC 3.6249 VI 30.214
RP 107.90 LAP 2.93 LOP 196.74 VP 37.932 GAP -2.91 AZP 92.14 TAL 214.37 TAP 340.44 RCA 106.97 APO 153.00 V2 35.120
RC 71.643 GL 24.07 GP -4.55 ZAL 133.98 ZAP $2.36 ETS 2.24 ZAE 159.01 ETE 325.30 ZAC 93.33 ETC 278.92 CLP -52.22
      PLANETOCENTRIC CONIC
        PLANETOCENTRIC CONIC
C3 18,460 VML 4.297 DLA 2.03 RAL 289,21 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 3.507 DPA -20.66 RAP 329.37 ECC 1.3038
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 3 7 13 2258.31 -20.61 44.27 149.69 109.86 2 14 51 1656.3 -17.71 36.79
90.00 14 5 18 4776.65 17.50 205.31 148.79 67.38 15 24 55 4176.6 14.28 198.11
900.00 2 59 30 1992.89 -21.63 24.34 149.28 111.15 3 32 43 1392.9 -18.56 16.89
100.00 15 25 42 4517.28 18.50 185.79 148.34 66.09 16 41 0 3917.3 15.11 178.63
110.00 4 9 54 1772.51 -24.36 6.36 148.03 114.76 4 39 27 1172.5 -20.81 359.00
110.00 16 51 47 4310.43 21.17 168.72 146.97 62.51 17 43 37 3710.4 17.32 161.71
DIFFERENTIAL CORRECTIONS
                                                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                                                ST 231.0 SR 211.8 SS 889.8 CRT .8429 CRS .9654 CST .6921 LSA 927.8 MSA 169.7 SSA 19.3 EL1 301.0 EL2 87.5 ALF 42.06
                                                                                                                                        SGT 566.1 SGR 349.1 SG3 588.7
RRT -.2118 RRF .4350 RTF -.3876
SGB 665.1 R23 -.3128 R13 .4275
SG1 573.5 SG2 336.8 THA 168.57
        TOE -.1444 TRA -.3180 TC3 .3740 BAU .1219
        ROE -.1587 RRA -.0115 RC3 -.3226 FAU .14379
FOE 2.1437 FRA-1.6205 FC3-6.7433 BSP 1284
BOE .2145 BRA .3182 BC3 .4939 FSP -1794
                                                                                                                                                    FLIGHT TIME 100.00
LAUNCH DATE DEC 3 1965
                                                                                                                                                                                                                                                                           ARRIVAL DATE MAR 13 1966
                                                                                                                                                   DISTANCE 282.551
     HELIOCENTRIC CONIC
       RL 147.46 LAL .00 LOL 70.62 VL 27.937 GAL -6.65 AZL 86.34 MCA 129.29 SMA 130.17 ECC .17558 INC 3.6554 VI 30.214
RP 107.94 LAP 2.83 LOP 199.97 VP 37.940 GAP -2.36 AZP 92.32 TAL 214.65 TAP 343.91 RCA 107.31 APO 153.02 V2 35.108
RC 73.845 GL 24.41 GP -5.00 ZAL 134.00 ZAP 57.40 ETS 1.83 ZAE 161.47 ETE 319.17 ZAC 93.21 ETC 278.56 CLP -57.26
      PLANETOCENTRIC CONIC
       PLANETOCENTRIC CONIC
(3 18.35) VHL 4.281 DLA 2.33 RAL 288.98 RAD 6567.7 VEL 11.820 PTH 2.09 VHP 3.340 DPA -21.66 RAP 327.69 ECC 1.3017
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 34 3 2266.04 -20.78 44.77 149.43 109.68 2 11 49 1666.0 -17.91 37.27
90.00 14 6 36 4765.61 17.21 204.63 148.40 67.16 15 26 4 4165.6 13.97 197.45
100.00 2 56 28 2000.17 -21.80 24.81 149.02 110.97 3 29 48 1400.2 -18.76 17.34
100.00 15 26 53 4506.71 18.21 185.14 147.94 65.87 16 42 0 3906.7 14.80 178.01
110.00 4 7 12 1778.77 -24.54 6.75 147.77 114.58 4 36 51 1178.8 -21.01 359.38
110.00 16 32 39 4300.87 20.87 168.14 146.57 62.29 17 44 20 3700.9 17.00 161.16
                                                                                                                                       MID-COURSE EXECUTION ACCURACY
SGT 530.6 SGR 347.1 SG3 647.5
RRT -.1351 RRF .4989 RTF -.1717
SGB 634.1 R23 -.4614 R13 .2170
SG1 534.2 SG2 341.6 THA 171.41
      DIFFERENTIAL CORRECTIONS
         TOE -. 1045 TRA -. 3473 TC3 .2495 BAU .1032
        ROE -.1410 RRA -.0175 RC3 -.3391 FAU .15689
FOE 2.3776 FRA-1.7943 FC3-7.4095 BSP 954
                                                                                                                  954
         BDE .1755 BRA .3477 BC3 .4210 FSP -1990
```

ARRIVAL DATE MAR 15 1966

```
LAUNCH DATE DEC 3 1965
                                                                    DISTANCE 289.024
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 27.956 GAL -6.62 ATL 86.31 MCA 132.50 SMA 130.30 ECC .17432 INC 3.6889 VI 30.214
RP 107.98 LAP 2.72 LOP 203.19 VP 37.942 GAP -1.88 ATP 92.49 TAL 214.77 TAP 347.27 RCA 107.59 APO 153.02 V2 35.095
RC 76.070 GL 24.75 GP -5.48 TAL 133.92 TAP 62.65 ETS 1.35 TAE 163.82 ETE 310.41 TAC 58.21 ETC 158.03 CLP -62.51
  PLANETOCENTRIC CONIC
                                                                                             2.09 VHP 3.201 DPA -22.75 RAP 325.77 ECC 1.2997
                                      2.66 RAL 288.85 RAD 6567.7 VEL 11.815 PTH
    C3 18.211 VHL 4.267 DLA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  37.81
                                                                                                                     1674.7
                                                                                                     2 9 0
                                                                                                                                  -18.14
                                                                         149.28
                               2274.74
                                               -20.98
                                                              45.33
                                                                                         109.46
       90.00
                   1 31 5
                                                                                          66.93 15 27 48
                                                                                                                      4153.8
                                                                                                                                    13.63
                                                                                                                                                  196.76
                  14 8 34 4753.83
                                                16.90
                                                             203.91
                                                                          148.11
       90.00
                                                                                                                                    -18.98
                                                                                                                                                   17.84
                2 53 40 2008.37
15 28 41 4495.44
                                                                                                                      1408.4
                                                -22.00
                                                              25.34
                                                                           148.88
                                                                                          110.76
                                                                                                      3 27 8
      100.00
                                                                                                                      3895.4
                                                                                                                                    14.45
                                                                                                                                                  177.34
                                                                                           65.65 16 43 36
                                                             184.45
                                                                        147.65
                                                17.69
      100.00
                                                                                                                      1185.9
                                                                                                                                   -21.23
                                                                                                     4 34 31
                   4 4 45 1785.86
                                                                          147.64
                                                                                         114.38
                                               -24.74
                                                               7.21
      110.00
                                                                                           62.06 17 45 35
                                                                                                                      3690.7
                                                                                                                                     16.65
                 16 34 5
                                                                         146.27
                                                 20.55
                                                             167.53
                                4290.71
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 527.5 SGR 347.7 SG3 705.6
RRT .0047 RRF .5666 RTF .1098
                                                                                                                  ST 171.6 SR 165.1 SS 991.0
CRT .4867 GRS .9548 CST .2286
    TDE -.0560 TRA -.3826 TC3 .1059 BAU .0907
    RDE -.1226 RRA -.0232 RC3 -.3570 FAU .16993
                                                                                                                  LSA 1004.4 MSA 172.7 SSA
                                                                                                                                                      17.6
    FDE 2.5986 FRA-1.9652 FC3-8.0787 BSP 710
                                                                 SG8 631.8 R23 .5657 R13 .1119
                                                                                                                  EL1 205.4 EL2 120.5 ALF 42.74
                                                                                                    . 32
    BOE .1348 BRA .3833 BC3 .3724 FSP -2204
                                                                 5G1 527.5 5G2 347.7 THA
                                                                                                                            ARRIVAL DATE MAR 17 1966
                                                                     FLIGHT TIME 104.00
LAUNCH DATE DEC 3 1965
                                                                     DISTANCE 295.469
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 27.969 GAL -6.58 AZL 86.27 HCA 135.72 SMA 130.39 ECC .17326 INC 3.7259 V1 30.214
RP 108.02 LAP 2.60 LOP 206.40 VP 37.940 GAP -1.40 AZP 92.67 TAL 214.80 TAP 350.52 RCA 107.80 APO 152.99 V2 35.082
RC 78.316 GL 25.11 GP -6.00 ZAL 133.74 ZAP 68.06 ETS .82 ZAE 165.77 ETE 298.15 ZAC 56.35 ETC 156.87 CLP -67.93
  PLANETOCENTRIC CONIC
    C3 18.097 VHL 4.254 DLA 3.02 RAL 288.82 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 3.088 DPA -23.91 RAP 323.67 ECC 1.2978 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         149.25
                                                                                          109.22
                                                                                                      2 6 20
                                                                                                                      1684.6
                                                                                                                                    -18.39
                                                                                                                                                   38.42
                                                -21.20
                                                              45.96
                   1 28 15 2284.57
       90.00
                                                                                                   15 30 10
                                                                                                                      4141.1
                                                                                                                                     13.26
                                                                                                                                                   196.00
                                                              203.13
                                                                           147.93
                                                                                           66.69
        90.00
                  14 11 9
                                 4741.09
                                                 16.55
                                                                                          110.52 3 24 38
65.41 16 45 48
                                                                                                                                    -19.23
                                                                                                                                                    18.42
                                                                                                                      1417.6
                                                              25.94
                                                                           148.85
                    2 51 0 2017.65
                                                -22.23
      100.00
                                                                                                                                     14.08
                                                                                                                      3883.2
                  15 31 5 4483.24
                                                 17.55
                                                             163.71
                                                                           147.46
      100.00
                                                                                                                                  -21.49
                                                                                                                      1193.9
                  4 2 29 1793.92
16 36 6 4279.74
                                                                                                      4 32 23
                                                -24.96
                                                               7.73
                                                                           147.63
                                                                                          114.15
      110.00
                                                                                                   17 47 25
                                                                                                                      3679.7
                                                                                                                                     16.27
                                                 20.20
                                                              166.87
                                                                           146.08
                                                                                           61.82
      110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 576.4 SGR 350.2 SG3 756.5
RRT .1933 RRF .6316 RTF .3979
SGB 674.5 R23 .5207 R13 .4548
SG1 58215 SG2 340.0 THA 10.21
                                                                                                                  ST 172.2 SR 139.9 SS 1037.0
CRT .0916 CR5 .9461 CST -.2124
LSA 1046.0 MSA 173.5 SSA 16.6
    TOE' -. 0010 TRA -. 4257 TC3 -. 0612 BAU . 0919
    MOE -.1035 RRA -.0287 RC3 -.3750 FAU .18161
    FOE 2.8108 FRA-2.1101 FC3-8.6880 BSP 748
                                                                                                                  EL1 173.6 EL2 138.3 ALF 11.82
    BOE .1033 BRA .4266 BC3 .3800 FSP -2394
                                                                                                                            ARRIVAL DATE HAR 19 1966
                                                                     FLIGHT TIME 106.00
LAUNCH DATE DEC 3 1965
    RL 147.46 LAL .00 LOL 70.62 VL 27.976 GAL -6.53 AZL 86.23 HCA 138.93 SHA 130.45 ECC .17235 INC 3.7675 V1 30.214 RP 108.06 LAP 2.47 LOP 209.62 VP 37.933 GAP -.93 AZP 92.84 TAL 214.73 TAP 353.66 RCA 107.96 APO 152.93 V2 35.069 RC 80.581 GL 25.50 GP -6.56 ZAL 133.46 ZAP 73.57 ETS .21 ZAE 166.91 ETE 282.17 ZAC 54.43 ETC 155.54 CLP -73.46
                                                                     DISTANCE 301.885
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.990 VML 4.241 DLA 3.43 RAL 288.88 RAD 6567.7 VEL 11.806 PTH 2.09 VMP 3.001 DPA -25.12 RAP 321.43 ECC 1.2961
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        149.33
                                                                                         108.94 2 3 45
66.44 15 33 12
                                                                                                                                  -18.67
                                                                                                                      1695.7
                                                                                                                                                   39.12
                   1 25 30 2295.74
14 14 25 4727.15
                                               -21.45
                                                               46.69
                                                                                                                                    12.85
                                                                                                                                                  195.18
                                                                           147.84
                                                                                                                      4127.1
                                                              202.28
                                                16.18
                                                                                                                                    -19.52
                                                                                                                                                   19.08
                                                                                          110.24
                                                                                                      3 22 14
                                                                                                                      1428.2
                                                                           148.94
                                                               26.62
       100.00
                    2 48 26 2028.21
                                               -22.48
                                                                                                                                                  175.85
                                                                                            65.15 16 48 39
                                                                                                                      3869.9
                                                                                                                                    13.68
                                                              182.90
                                                                           147.37
                  15 34 10
                                4469.91
                                               17.17
       100.00
                                                                                                                                                      .86
                                                                                                      4 30 24
                                                                                                                      1203.1
                                                                                                                                    -21.77
                                                                           147.72
                                                                                          113.88
                                                               8.32
                                                                                           113.88 4 30 24
61.56 17 49 52
                    4 0 21 1803.11
                                               -25.22
                                                                                                                                                   159.27
                                                                                                                                     15.86
                                                                                                                      3667.8
                                                              166.16
                                                                           145.97
                   16 38 44
                                4267.77
                                                19.81
       110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 209.6 SR 113.5 55 1081.1

CRT -.2702 CRS .9331 CST -.5785

LSA 1093.1 MSA 174.4 SSA 15.6

EL1 212.6 EL2 107.7 ALF 168.76
                                                               SGT 682.3 SGR 354.2 SG3 803.0
-RRT .3743 RRF .6917 RTF .6164
SGB 768.8 R23 .4238 R13 .6689
    TOE .0602 TRA -.4757 TC3 -.2491 BAU .1118
    ROE -.0831 RRA -.0336 RC3 -.3923 FAU .19111
FOE 3.0088 FRA-2.2156 FC3-9.1968 BSP 1170
BOE .1026 BRA .4768 BC3 .4647 FSP -2544
                                                                  5G1 698.7 SG2 320.7 THA 14.00
                                                                                                                             ARRIVAL DATE MAR 21 1966
                                                                     FLIGHT TIME 108.00
LAUNCH DATE DEC 3 1965
                                                                     DISTANCE 308.272
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 27.978 GAL -6.47 AZL 86.19 HCA 142.15 SHA 130.46 ECC .17159 INC 3.8147 VI 30.214
RP 108.10 LAP 2.34 LOP 212.83 VP 37.922 GAP -.48 AZP 93.01 TAL 214.55 TAP 356.70 RCA 108.07 APO 152.85 V2 35.056
RC 82.862 GL 25.93 GP -7.17 ZAL 133.07 ZAP 79.12 ETS 359.53 ZAE 166.86 ETE 264.32 ZAC 52.52 ETC 154.03 CLP -79.03
   PLANETOCENTRIC CONIC
                                      3.88 RAL 289.03 RAD 6567.7 VEL 11.801 PTH 2.09 VHP 2.940 DPA -26.36 RAP 319.12 ECC 1.2944
     C3 17.890 VHL 4.230 OLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -18.99
                                                                                                                                                    39.92
                                                                                                                      1708.5
                                                               47.52
                                                                            149.52
                                                                                          108.61
                                                                                                       2 1 11
                    1 22 43 2308.53
                                                -21.73
        90.00
                                                                                                                                                   194.27
                                                                                                                       4111.8
                                                                                                                                     12.40
                                                                                           66.16
                                                                                                      15 36 56
                                                              201.35
                                                                            147.84
                   14 15 24
                                 4711.76
                                                 15.76
        90.00
                                                                                                                                                    19.83
                                                                                                                                     -19.84
                                                                                                                       1440.3
                                                                                           109.92
                                                                                                       3 19 52
                    2 45 52 2040.31
                                                -22.76
                                                                            149.13
       100.00
                  15 37 56 4455.21
3 58 17 1813.68
                                                                                                                                     13.22
                                                                                                                                                   174.99
                                                                            147.37
                                                                                            64.87
                                                                                                     16 52 11
                                                                                                                       3855.2
                                                 16.75
                                                              182.01
       100.00
                                                                                                                       1213.7
                                                                                                                                     -22.10
                                                                                                      4 28 30
                                                -25.50
                                                                9.00
                                                                            147.93
                                                                                           113.57
       110.00
                                                                                                                                      15.40
                                                 19.38
                                                              165.38
                                                                            145.96
                                                                                            61.28
                                                                                                      17 52 55
                                                                                                                       3654.6
       110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 277.1 SR 86.5 55 1119.3
CRT -.4663 CRS .9088 CST -.7767
     TDE .1278 TRA -.5304 TC3 -.4526 BAU .1459
                                                                  SGT 833.8 SGR 359.9 SG3 837.4
RRT .5161 RRF .7466 RTF .7528
SGB 908.1 R23 .3493 R13 .7871
     RDE -. 0623 RRA -. 0379 RC3 -. 4091 FAU . 19823
                                                                                                                   LSA 1142.9 HSA 174.9 SSA 14.5
     FOE 3.1741 FRA-2.2832 FC3-9.5925 BSP -1776
                                                                                                                   EL1 280.3 EL2 75.6 ALF 171.07
                                                                  SG1 857.2 SG2 299.8 THA 14.35
     BOE .1422 BRA .5318 BC3 .6100 FSP -2663
```

FLIGHT TIME 102.00

Ē

Ī

≣

.0281 RRA -.0510 RC3 -.4738 FAU .19892

FOE 3.4425 FRA-2.1607 FC3-9.7588 85P 4703 BDE .4509 BRA .7704 BC3 1.4077 FSP -2776

ROE

```
ARRIVAL CATE MAR 31 1966
LAUNCH DATE DEC 3 1965
                                                                 FLIGHT TIME 118.00
  HELIOCENTRIC CONIC
                                                                 DISTANCE 339.803
   RL 147.46 LAL .00 LOL 70.62 VL 27.925 GAL -6.03 AZL 85.77 HCA 158.17 SMA 130.08 ECC .16941 INC 4.2260 V1 30.214 RP 108.31 LAP 1.57 LOP 228.84 VP 37.822 GAP 1.51 AZP 93.92 TAL 212.32 TAP 10.49 RCA 108.04 APO 152.12 V2 34.990
    RC 94.449 GL 29.12 GP -11.69 7AL 129.48 7AP 104.86 ETS 354.48 7AE 154.14 ETE 216.53 7AC 45.90 ETC 144.26 CLP-105.18
   PLANETOCENTRIC CONIC
                                    7.40 RAL 290.92 RAD 6567.7 VEL 11.792 PTH 2.09 VHP 2.978 CPA -33.22 RAP 309.25 ECC 1.2909
    C3 17.678 VHL 4.205 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                1 3 25 2416.85
14 52 46 4597.90
       90.00
                                             -23.91
                                                           54.72
                                                                      152.33
                                                                                     105.64
                                                                                                 1 43 42
                                                                                                                1816.9
                                                                                                                             -21.53
                                                                                                                                            46.85
                                                                                      64.39 16 9 24
                                                                                                                3997.9
                                                                                                                                           187.68
       90.00
                                              12.51
                                                           194.56
                                                                       149.19
                                                                                                                               8.96
                2 28 19 2143.04
16 10 33 4346.94
3 44 40 1904.08
17 10 41 4158.67
                                                                                                 3 4 2
      100.00
                                             -24.98
                                                           34.23
                                                                       151.98
                                                                                      106.98
                                                                                                                1543.Q
                                                                                                                              -22.41
                                                                                                                                            26.37
                                                                                      63.08 17 23 D
110.71 4 16 24
59.45 18 20 O
                                                                                                                3746.9
                                                                    148.69
                                                                                                                               9.79
      100.00
                                              13.51
                                                           175.60
                                                                                                                                           168.79
                                            -27.83
                                                                       150.90
                                                                                                                1304.1
                                                                                                                             -24.75
      110.00
                                                            15.01
                                                                                                                                            7.18
                                                                      147.19
                                                                                                                3558.7
      110.00
                                                          159.82
                                                                                                                             11.98
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TDE .5432 TRA -.8280 TC3-1.5321 BAU .3805
RDE .0559 RRA -.0548 RC3 -.4945 FAU .19257
                                                              $6T 1871.5 $GR 429.4 $G3 831.8

RRT .8434 RRF .9351 RTF .9371

$GB 1920.1 R23 .2476 R13 .9431
                                                                                                             ST 816.0 SR 80.4 SS 1223.9
CRT .9839 CRS -.9885 CST -.9682
   FDE 3.4301 FRA-2.0510 FC3-9.4304 BSP 5466
                                                                                                            LSA 1463.2 MSA 171.0 SSA
                                                                                                                                             8.5
    BDE .5460 BRA .8298 BC3 1.6100 FSP -2719
                                                              SG1 1906.7 SG2 226.5 THA 11.11
                                                                                                             EL1 819.8 EL2 14.3 ALF
                                                                  FLIGHT TIME 120.00
LAUNCH DATE DEC 3 1965
                                                                                                                       ARRIVAL DATE APR 2 1966
  HELIOCENTRIC CONIC
                                                                 DISTANCE 346.034
   RL 147.46 LAL .00 LOL 70.62 VL 27.904 GAL -5.92 AZL 85.61 HCA 161.36 SMA 129.93 ECC .16923 INC 4.3855 V1 30.214
RP 108.35 LAP 1.40 LOP 232.04 VP 37.795 GAP 1.87 AZP 94.16 TAL 211.63 TAP 13.00 RCA 107.94 APO 151.92 V2 34.977
   RC 96.794 GL 30.20 GP -13.31 ZAL 128.33 ZAP 109.17 ETS 352.83 ZAE 150.77 ETE 214.17 ZAC 45.74 ETC 141.87 CLP-109.72
  PLANETOCENTRIC CONIC
   C3 17.798 VHL 4.219 DLA
                                    8.59 RAL 291.48 RAO 6567.7 VEL 11.797 PTH 2.09 VHP 3.048 DPA -35.08 RAP 308.13 ECC 1.2929
   LNCH AZMTH LNCH TIME L-I TIME
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                0 56 21 2456.52
15 4 16 4561.35
2 21 52 2180.71
16 21 27 4312.40
3 39 37 1937.39
17 20 11 4128.48
       90.00
                                             -24.61
                                                           57.41
                                                                     153.42
                                                                                    104.47
                                                                                                 1 37 17
                                                                                                                1856.5
                                                                                                                                            49.45
                                                                                                                            -22.38
                                                                                                16 20 18
       90.00
                                              11.42
                                                           192.43
                                                                        149.79
                                                                                       63.91
                                                                                                                 3961.4
                                                                                                                                7.83
                                                                                                                                            185.60
                                                                                      105.82 2 58 12
62.60 17 33 19
      100.00
                                             -25.70
                                                                      153.09
                                                                                                                1580.7
                                                           36.80
                                                                                                                              -23.28
                                                                                                                                            28.83
      100.00
                                              12.43
                                                          173.60
                                                                       149.27
                                                                                                                3712.4
                                                                                                                               8.66
                                                                                                                                           166.84
                                                                                      109.56 4 11 54
58.96 18 28 59
                                                                                                                             -25.67
      110.00
                                             -28.61
                                                           17.28
                                                                     152.05
                                                                                                                1337.4
                                                                                                                                            9.33
      110.00
                                              15.10
                                                          158.11
                                                                       147.73
                                                                                                                3528.5
                                                                                                                              10.87
  DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SCT 2086.2 SGR 462.6 SC3 797.2
RRT .8726 RRF .9568 RTF .9447
SGB 2136.8 R23 .2518 R13 .9500
                                                                                                             ST 951.9 SR 125.1 SS 1240.7
CRT .9791 CRS -.9979 CST -.9747
   TOE .6466 TRA -.8852 TC3-1.7186 BAU .4272
   ROE .0898 RRA -.0591 RC3 -.5200 FAU .18351
FOE 3.4165 FRA-1.9086 FC3-8.9264 BSP 6191
BOE .6528 BRA .8872 BC3 1.7955 FSP -2605
                                                                                                             LSA 1559.5 MSA 170.1 SSA
                                                              SG1 2125.3 SG2 221.7 THA 11.07
                                                                                                             ELI 959.7 EL2' 25.2 ALF 7.34
LAUNCH DATE DEC 3 1965
                                                                 FLIGHT TIME 122.00
                                                                                                                      ARRIVAL DATE APR 4 1966
                                                                 DISTANCE 352.240
  HELIOCENTRIC CONIC
   RL 147.46 LAL
RP 108.39 LAP
                       .00 LOL 70.62 VL 27.880 GAL -5.80 AZL 85.39 HCA 164.56 5MA 129.77 ECC .16912 INC 4.6082 V1 30.214 1.23 LOP 235.23 VP 37.765 GAP 2.22 AZP 94.44 TAL 210.88 TAP 15.44 RCA 107.82 APO 151.71 V2 34.964
   RC 99.145 GL 31.62 GP -15.54 TAL 126.94 TAP 113.07 ETS 350.67 TAE 147.23 ETE 213.20 TAC 46.24 ETC 139.20 CLP-113.99
  PLANETOCENTRIC CONIC
   C3 18.072 VHL 4.251 OLA 10.12 RAL 292.07 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 3.141 DPA -37.48 RAP 307.45 ECC 1.2974
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                0 46 25 2510.00
15 18 52 4515.00
2 12 47 2231.49
16 35 12 4268.74
                                                                    154.83
                                                                                                            1910.0
                                                                                                 1 28 15
                                                                                                                           -23.45
       90.00
                                             -25.47
                                                           61.09
                                                                                     102.81
                                                                                                                                            53.00
                                                                                       63.38 16 34 7
                                                          189.74
                                                                                                                3915.0
                                                                                                                               6.37
                                                                                                                                           182.97
       90.00
                                             10.02
                                                                       150.57
                                                                                                 2 49 58
                                                                                                                                            32.21
      100.00
                                             -26.59
                                                           40.31
                                                                       154.53
                                                                                     104.18
                                                                                                                1631.5
                                                                                                                             -24.38
                                                                                       62.05 17 46 20
      100.00
                                             11.05
                                                          171.10
                                                                      150.03
                                                                                                                3668.7
                                                                                                                               7.23
                                                                                                                                         164.39
                             1982.31
      110.00
                                                                                                4 5 27
                                                                                                                                            12.29
                  3 32 24
                                            -29.59
                                                           20.41
                                                                      153.55
                                                                                     107.95
                                                                                                                1382.3
                                                                                                                             -26.85
                                                                                               18 40 14
                 17 32 3
      110.00
                              4/19/1.69
                                             13.76
                                                          156.00
                                                                       148.44
                                                                                      58.40
                                                                                                                3490.7
                                                                                                                                9.48
                                                                                                                                           149.52
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
   TOE .7645 TRA -.9437 TC3-1.8770 BAU .4730
                                                              SGT 2297.4 SGR 514.2 SG3 754.3
RRT .8955 RRF .9734 RTF .9502
SGB 2354.2 R23 .2567 R13 .9553
                                                                                                            ST 1102.0 SR 182.2 SS 1256.9
CRT .9778 CRS -.9995 CST -.9796
   RDE .1333 RRA -.0666 RC3 -.5564 FAU .17273
FDE 3.3906 FRA-1.7643 FC3-8.2747 BSP 6931
                                                                                                            LSA 1673.0 MSA 168.2 SSA
                                                                                                                                              5.8
   BDE .7761 BRA .9461 BC3 1.9578 FSP -2483
                                                              SG1 2343.5 SG2 224.3 THA 11.44
                                                                                                            EL1 1116.3 EL2 37.7 ALF
                                                                                                                                              9.20
                                                                                                                      ARRIVAL DATE APR 6 1966
LAUNCH DATE DEC 3 1965
                                                                 FLIGHT TIME 124.00
  HELIOCENTRIC CONIC
                                                                 DISTANCE 358.423
   RL 147.46 LAL .00 LOL 70.62 VL 27.855 GAL -5.67 AZL 85.06 MCA 167.75 SMA 129.58 ECC .16909 INC 4.9437 V1 30.214
RP 108.43 LAP 1.05 LOP 238.42 VP 37.734 GAP 2.55 AZP 94.83 TAL 210.06 TAP 17.81 RCA 107.67 APO 151.50 V2 34.951
RC 101.502 GL 33.59 GP -18.82 ZAL 125.19 ZAP 116.39 ETS 347.65 ZAE 143.28 ETE 213.63 ZAC 47.75 ETC 136.05 CLP-118.00
  PLANETOCENTRIC CONIC
                                                                                         2.10 VHP 3.269 DPA -40.85 RAP 307.37 ECC 1.3069
   C3 18.646 VHL 4.318 DLA 12.23 RAL 292.65 RAD 6567.8 VEL 11.833 PTH
   PO.DO D 31 20 2587.41
90.00 D 38 36 4452.25
                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
                                             -26.52
                                                                      156.79
                                                                                                                1987.4
                                                           66.51
                                                                                     100.30
                                                                                                 1 14 27
                                               8.09
                                                          186.15
                                                                       151.66
                                                                                       62.77
                                                                                                16 52 48
                                                                                                                3852.2
                                                                                                                               4.37
                  1 58 56 2304.90
16 53 41 4209.99
                                                                       156.54
                                              -27.71
                                                            45.47
                                                                                      101.68
                                                                                                 2 37 21
                                                                                                                1704.9
                                                                                                                              -25.82
                                                                                               18 3 51
                 16 53 41
                                               9.16
                                                          167.76
                                                                       151.08
                                                                                       61.42
                                                                                                                3610.0
                                                                                                                                5.27
                                                                                                                                           161.13
                 3 21 18 2047.16
17 47 48 4040.49
                                                                                                3 55 25
                                             -30.86
                                                           25.03
                                                                      155.66
                                                                                      105.49
                                                                                                                1447.2
                                                                                                                                            16.68
                                                                                       57.73 18 55 9
                 17 47 48
                                             11.95
                                                          153.24
                                                                       149.42
                                                                                                                3440.5
                                                                                                                                7,61
  DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
    TOE .9114 TRA-1.0068 TC3-1.9875 BAU .5180
                                                             SCT 2505.4 SGR 594.4 SG3 699.2
RRT .9126 RRF .9848 RTF .9541
SGB 2575.0 R23 .2599 R13 .9595
                                                                                                           ST 1278.0 SR 262.7 SS 1280.2
CRT .9789 CRS -.9996 CST -.9835
   RDE .1961 RRA -.0784 RC3 -.6064 FAU .15900
   FOE 3.3773 FRA-1.6061 FC3-7.3823 BSP 7687
BDE .9323 BRA 1.0099 BC3 2.0780 FSP -2312
                                                                                                            LSA 1820.2 MSA 166.9 SSA
                                                            SG1 2564.0 SG2 237.5 THA 12.32
                                                                                                           ELI 1303.6 EL2 52.6 ALF 11.40
```

ARRIVAL DATE APR 8 1966

```
LAUNCH DATE DEC 3 1965
                                                                       DISTANCE 364.584
  MELIOCENTRIC CONIC
                        .00 LOL 70.62 VL 27.827 GAL -5.53 AZL 84.49 HCA 170.94 SMA 129.39 ECC .16911 INC 5.5095 V1 30.214 .87 LOP 241.60 VP 37.702 GAP 2.87 AZP 95.44 TAL 209.19 TAP 20.13 RCA 107.51 APO 151.27 V2 34.939
   RL 147.46 LAL
   RP 108.46 LAP
                       36.59 GP -24.15 TAL 122.81 TAP 118.74 ETS 343.01 TAE 138.25 ETE 215.73 TAC 50.99 ETC 132.03 CLP-121.80
   RC 103.862 GL
  PLANETOCENTRIC CONIC
                                                                                                2.11 VHP 3.469 CPA -46.18 RAP 308.23 ECC 1.3276
   C3 19.909 VHL 4.462 OLA 15.38 RAL 293.16 RAD 6567.8 VEL 11.887 PTH
   LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         66.99
                   0 5 30 2712.76
16 8 30 4357.86
                                                 -27.73
                                                                75.48
                                                                             159.81
                                                                                              95.96
                                                                                                         0 50 43
                                                                                                                         2112.8
                                                                                                                                        -26.62
       90.00
                                                                                                      17 21 8
                                                                                                                                                        174.16
                                                                                               62.11
                                                                                                                          3757.9
                                                                                                                                           1.34
                                                               180.81
                                                                             153.42
                                                   5.11
       90.00
                   16 8 30
                                                                                                                                         -27.73
                                                                                                                                                         45.46
                    1 35 16 2423.30
17 21 26 4122.55
                                                                 54.02
                                                                              159.64
                                                                                               97.37
                                                                                                         2 15 39
                                                                                                                          1823.3
                                                 -29.05
      100.00
                                                                                               60.71 18 30 8
                                                                                                                                           2.33
                                                                                                                                                        156.31
                                                                             152.78
                                                                                                                          3522.5
                                                               162.87
                                                   6.28
      100.00
                 17 21 26
                                                                                            101.23 3 38 6
56.95 19 17 3
                                                                                                                                                        23.98
                                                                             158.98
                                                                                                                          1551.1
                                                                                                                                         -30.61
                                                 -32.50
                                                                 32.69
      110.00
                   3 2 15 2151.14
18 10 56 3967.47
                                                                                                                          3367.5
                                                                                                                                           4.85
                                                                                                                                                        142.98
                                                               149.28
                                                                              150.96
      110.00
                   18 10 56
                                                 9.27
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1509.4 SR 388.2 SS 1310.8
CRT .9823 CRS -.9995 CST -.9874
                                                                   SGT 2708.8 SGR 724.6 SG3 623.3
RRT .9248 RRF .9917 RTF .9575
SGB 2804.0 R23 .2561 R13 .9639
    TOE 1.1257 TRA-1.0797 TC3-1.9983 BAU .5611
   ROE .3004 RRA -.0988 RC3 -.6714 FAU .14031
                                                                                                                      LSA 2029.9 MSA 163.5 SSA 3.2
EL1 1557.0 EL2 70.4 ALF 14.21
   FOE 3.3742 FRA-1.4301 FC3-6.1015 BSP 8393
   BOE 1.1651 BRA 1.0843 BC3 2.1081 FSP -2069
                                                                    SG1 2791.2 SG2 267.5 THA 14.03
                                                                                                                                  ARRIVAL DATE APR 10 1966
                                                                        FLIGHT TIME 128.00
LAUNCH DATE DEC 3 1965
                                                                       DISTANCE 370.721
  HELIOCENTRIC CONIC
                        .00 LOL 70.62 VL 27.797 GAL -5.38 AZL 83.32 HCA 174.12 SMA 129.18 ECC .16920 INC 6.6828 VI 30.214 .68 LOP 244.79 VP 37.669 GAP 3.19 AZP 96.65 TAL 208.25 TAP 22.37 RCA 107.32 APO 151.04 V2 34.926 41.86 GP -34.07 ZAL 119.03 ZAP 118.83 ETS 335.05 ZAE 130.16 ETE 219.83 ZAC 58.01 ETC 126.35 CLP-125.60
   RL 147.46 LAL
   RP 108.50 LAP
   RC 106.225 GL
  PLANETOCENTRIC CONIC
   C3 23.296 VHL 4.827 DLA 20.82 RAL 293.45 RAD 6567.9 VEL 12.028 PTH 2.15 VHP 3.892 DPA -55.91 RAP 311.38 ECC 1.3834 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 6 6 2964.18 -28.15 93.82 165.30 86.80 23 55 31 2364.2 -28.30 85.16
                                                                                                         18 15 59
                                                                                                                                           -4.32
                                                                                                                           3582.2
                  17 6 16
                                                                170.99
                                                                              157.35
                                                                                               61.69
       90.00
                                4182.19
                                                    -.54
                  0 45 15 2657.19
18 13 45 3964.41
2 22 53 2351.73
18 52 36 3842.64
                                                                                                                           2057.2
                                                                                                                                          -29.76
                                                                                                                                                          62.52
                                                                                                           1 29 32
                                                                71.32
                                                                              165.38
                                                                                               88.33
                                                  -29.85
      100.00
                                                                                               60.12 19 19 50
                                                                                                                                           -3.03
                                                                                                                           3364.4
                                                    .95
                                                                154.15
                                                                              156.52
      100.00
                                                                                                                           1751.7
                                                                                                                                          -33.43
                                                                                                           3 2 4
                                                  -34.12
                                                                48.10
                                                                              165.36
                                                                                               92.27
      110.00
                                                                                               56.09 19 56 39
                                                                                                                                             .09
                                                                                                                           3242.6
                                                   4.57
                                                                142.67
                                                                              154.27
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 2931.3 SCR 939.3 SC3 499.9
RRT .9332 RRF .9946 RTF .9617
SCB 3078.1 R23 .2396 R13 .9698
SCI 3061.1 SC2 323.2 THA 16.84
                                                                                                                       ST 1851.2 SR 608.6 SS 1329.5
    TOE 1.5105 TRA-1.2002 TC3-1.8102 BAU .6069
                                                                                                                       CRT .9867 CRS -.9995 CST -.9912
    RDE .5105 RRA -.1377 RC3 -.7210 FAU .11043
FDE 3.3059 FRA-1.2136 FC3-4.1039 BSP 9306
                                                                                                                       LSA 2353.6 MSA 158.8 SSA 2.1
                                                                                                                       EL1 1946.4 EL2 94.2 ALF 18.02
    BOF 1.5944 BRA 1.2081 BC3 1.9486 FSP -1676
                                                                                                                                 ARRIVAL DATE APR 12 1966
                                                                       FLIGHT TIME 130.00
LAUNCH DATE DEC 3 1965
                                                                       DISTANCE 376.830
                       .00 LOL 70.62 VL 27.765 GAL -5.22 AZL 79.40 MCA 177.30 SNA 128.96 ECC .16935 INC10.6010 V1 30.214 .50 LOP 247.97 VP 37.634 GAP 3.49 AZP 100.59 TAL 207.25 TAP 24.55 RCA 107.12 APO 150.80 V2 34.914 53.35 GP -56.43 ZAL 110.90 ZAP 111.48 ETS 318.66 ZAE 111.97 ETE 222.61 ZAC 75.27 ETC 116.19 CLP-131.47
  HELIOCENTRIC CONIC
    RL 147.46 LAL
    RP 108.54 LAP
    RC 108.588 GL
   PLANETOCENTRIC CONIC
    C3 40.211 VML 6.341 DLA 32.61 RAL 293.30 RAD 6568.5 VEL 12.711 PTH 2.31 VMP 5.676 DPA -77.08 RAP 332.31 ECC 1.6618 LNCH AZMTH LNCH TIME L-I TIHE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       -20.84
                 17 55 27 4125.94
22 15 45 3293.49
17 55 27 4125.94
22 15 45 3293.49
                                                                                                                           3525.9
       73.10
                                                                             174.35
                                                                                              61.86
                                                 -17.22
                                                               175.90
                                                                                               61.86 23 10 38
61.86 19 4 13
61.86 23 10 38
66.28 24 43 10
56.98 22 14 59
                                                                                                                                          -20.83
                                                                                                                                                        106.99
                                                                                                                           2693.5
                                                               114.11
                                                                              174.34
                                                 -17.20
       106.90
                                                                                                                                                        168.77
                                                                                                                           3525.9
                                                                                                                                        -20.84
                                                                              174:35
                                                               175.90
                                                 -17.22
       73.10
                                                                                                                                        -20.83
                                                                                                                                                        106.99
                                                                                                                           2693.5
                                                              114.11
                                                                              174.34
                                                 -17.20
       106.90
                                                                                                                                                        87.26
                                                                                                                                        -28.35
                                                                                                                           2392.9
                                                                 95.17
                                                                              178.60
                  23 53 18 2992.85
21 17 4 3474.57
                                                 -25.37
       110.00
                                                                                                                                        -13.68
                                                                                                                           2874.6
                                                  -9.40
                                                               123.33
                                                                              169.61
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2553.2 SR 908.1 55 1208.5
CRT .9906 CRS -.9989 CST -.9960
                                                                    SGT 3270.2 SGR 1098.8 SG3 254.2
RRT .9287 RRF .9883 RTF .9732
SGB 3449.9 R23 .1928 R13 .9807
    TOE 2.7728 TRA-1.5245 TC3-1.0411 BAU .6143
    ROE 1.0033 RRA -.1581 RC3 -.4710 FAU .05083
FOE 2.7121 FRA -.7927 FC3-1.0943 BSP 10225
                                                                                                                       LSA 2963.7 M5A 143.1 SSA
                                                                                                                       EL1 2707.4 EL2 117.2 ALF 19.45
                                                                    SG1 3427.9 SG2 388.6 THA 17.56
    BDE 2.9487 BRA 1.5326 BC3 1.1427 FSP -846
                                                                                                                                  ARRIVAL DATE APR 14 1966
                                                                        FLIGHT TIME 132.00
LAUNCH DATE DEC 3 1965
                                                                        DISTANCE 383.061
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 27.732 GAL -5.08 AZL 120.67 MCA 180.61 SMA 128.73 ECC .16982 INC30.6521 VI 30.214
RP 108.58 LAP .31 LOP 251.15 VP 37.599 GAP 3.82 AZP 59.33 TAL 206.32 TAP 26.93 RCA 106.87 APO 150.59 V2 34.903
RC 110.951 GL -64.20 GP 78.03 ZAL 98.05 ZAP 96.15 ETS 139.98 ZAE 83.84 ETE 225.50 ZAC 72.62 ETC 336.97 CLP 121.11
   PLANETOCENTRIC CONIC
    C3 244.960 VHL 15.651 DLA -68.90 RAL 18.05 RAD 6571.4 VEL 19.138 PTH 3.09 VHP 21.473 DPA 62.02 RAP 251.86 ECC 5.0314
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.14 8 34 28 2313.92 7.24 74.98 285.23 158.72 9 13 2 1713.9 14.68 72.41
                                                                                                                            5255.6
                                                                                                          20 34 27
                                                                               285.25
                                                                                              158.72
                                                     7.24
                                                                 264.18
                   18 56 51
                                 5855.60
       155.86
                                                                                                                            1713.9
                                                                                                                                           14.68
                                                                                                                                                         72.41
                                                                                                           9 13 2
                                                                                              158.72
                                                                 74.98
                                                                               285.23
                    8 34 28 2313.92
                                                     7.24
        24.14
                                                                                                         20 34 27
                                                                                                                            5255.6
                                                                                                                                           14.69
                                                                254.18
                                                                               285.25
                                                                                              158.72
                   18 56 51
                                  5855.60
                                                     7.24
       155.86
                                5855.60
2313.92
                                                                                                           9 13 2
                                                                                                                            1713.9
                                                                                                                                           14.68
                                                                                                                                                          72.41
                                                                                              158.72
                                                    7.24
                                                                 74.98
                                                                               285.23
                    8 34 28
        24.14
                                                                                                        20 34 27
                                                                                                                            5255.6
                                                                                                                                           14.69
                                                                                              158.72
                                  5855.60
                                                                264.18
                                                                               285.25
                   18 56 51
       145.86
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 516.4 SR 1670.3 SS 579.9
CRT .5479 CRS -.9758 CST -.7176
                                                                    SGT 1712.2 SGR 3838.7 SG3 73.8
    TOE .1673 TRA 1.6809 TC3 .0255 BAU .5559
                                                                    RRT .9257 RRF .9926 RTF .9648
SGB 4203.3 R23 -.0609 R13 .9981
     RDE-3.4932 RRA 3.5218 RC3 .1678 FAU-.00801
                                                                                                                       LSA 1789.6 MSA 436.1 SSA
    FOE -.5178 FRA .8147 FC3 .0283 BSP 5704
BOE 3.4972 BRA 3.9024 BC3 .1697 FSP 78
                                                                 SG1 4160.6 SG2 597.4 THA 67.06
                                                                                                                       EL1 1695.7 EL2 425.5 ALF 79.73
```

FLIGHT TIME 126.00

ARRIVAL DATE APR 16 1966 FLIGHT TIME 134.00 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC DISTANCE 389.050 RL 147.46 LAL .00 LOL 70.62 VL 27.697 GAL -4.88 AZL 91.89 HCA 183.70 SHA 128.49 ECC .16995 INC 1.8778 V1 30.214 RP 108.61 LAP .12 LOP 254.32 VP 37.563 GAP 4.08 AZP 88.12 TAL 205.16 TAP 28.86 RCA 106.65 APO 150.32 V2 34.892 RC 113.313 GL -15.13 GP 44.87 TAL 126.96 ZAP 120.47 ETS 32.44 ZAE 125.34 ETE 139.67 ZAC 41.58 ETC 213.42 CLP-135.69 PLANETOCENTRIC CONIC C3 12.138 VHL 3.484 DLA -34.39 RAL 308.43 RAD 6567.5 VEL 11.555 PTH 2.02 VHP 4.884 DPA 21.65 RAP 294.09 ECC 1.1998 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 36 2 1262.84 11 39 51 5594.79 6 36 2 1262.84 11 39 51 5584.79 6 36 2 1262.84 11 39 51 5584.79 171.08 112.50 662.8 6 57 5 69.62 26.72 354.91 252.61 13 12 55 4984.8 29.53 26.72 260.69 171.09 112.49 110.38 6 57 5 662.8 29.52 26.72 354.91 171.08 112.50 112.49 13 12 55 112.50 6 57 5 112.49 13 12 55 252.61 4984.8 29.53 26.72 260.69 171.09 346.83 562.8 29.52 26.72 354.91 171.08 69.62 4984.8 252.61 29.53 260.69 171.09 26.72 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3213.2 SCR 1379.9 SC3 341.9 RRT -.9456 RRF -.9996 RTF .9520 SCB 3496.9 R23 .2580 R13 -.9659 SCI 3472.2 SC2 415.3 THA 157.56 ST 1178.5 SR 406.4 SS 468.1 CRT -.9637 CRS .9997 CST -.9699 TDE -.6958 TRA -.4495 TC3-4.1128 BAU .7346 ROE .2458 RRA -.0267 RC3 1.8920 FAU .07646 LSA 1324.2 MSA 140.1 SSA FDE -.67D9 FRA .0264 FC3-5.4535 BSP 10544 BDE .7379 BRA .4503 BC3 4.5271 FSP -1092 2.4 EL1 1242.3 EL2 102.9 ALF 161.48 ARRIVAL CATE APR 18 1966 LAUNCH DATE DEC 3 1965 FLIGHT TIME 136.00 DISTANCE 395.105 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 27.661 GAL -4.69 AZL 89.45 MCA 186.87 SMA 128.24 ECC .17031 INC .5505 V1 30.214
RP 108.64 LAP -.07 LOP 257.50 VP 37.526 GAP 4.36 AZP 90.55 TAL 204.03 TAP 30.90 RCA 106.40 APO 150.08 V2 34.881
RC 115.673 GL 4.60 GP 26.97 ZAL 126.97 ZAP 130.61 ETS 23.19 ZAE 134.31 ETE 153.38 ZAC 35.16 ETC 191.42 CLP-136.92 PLANETOCENTRIC CONIC C3 11.080 VHL 3.329 DLA -14.90 RAL 304.71 RAD 6567.4 VEL 11.509 PTH 2.00 VHP 4.093 DPA 4.24 RAP 298.67 ECC 1.1824 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 4 52 5 1600.72 12 54 6 5208.86 6 5 23 1364.25 14 23 29 4920.57 6 55 39 1206.80 15 49 43 4650.79 157.05 358.90 5.52 118.28 5 18 46 1000.7 2.31 90.00 -1.48 14 20 55 4608.9 225.66 24.45 90.00 26.24 233.87 161.31 78.96 119.80 6 28 7 77.34 15 45 30 341.09 764.3 1.55 100.00 -2.44 347.61 156.52 4320.6 25.29 27.31 100.00 212.42 161.06 7 15 46 606.8 327.92 155.00 123.87 110.00 -4.88 334.14 17 7 13 4050.8 27.47 30.09 72.96 110.00 191.09 160.22 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3434.3 SGR 939.7 SG3 479.6 RRT -.9519 RRF -.9984 RTF .9507 SGB 3560.5 R23 .2852 R13 -.9568 5T 382.4 5R 41.7 55 179.7 CRT -.5657 CR5 .8800 CST -.3159 TOE .0094 TRA -.6921 TC3-4.8149 BAU .7431 ROE -.0153 RRA .0298 RC3 1.4086 FAU .10613 FOE .2727 FRA -.1917 FC3-8.2927 BSP 11074 LSA 388.5 MSA 170.7 SSA SG1 3549.6 SG2 278.6 THA 165.31 BDE .0179 BRA .6927 BC3 5.0167 FSP -1570 EL1 383.2 EL2 34.3 ALF 176.44 ARRIVAL DATE APR 20 1966 FLIGHT TIME 138.00 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC DISTANCE 401.147 RL 147.46 LAL .00 LOL 70.62 VL 27.624 GAL -4.50 AZL 88.54 HCA 190.05 SHA 127.99 ECC .17075 INC 1.4567 V1 30.214
RP 108.68 LAP -.25 LOP 260.67 VP 37.490 GAP 4.64 AZP 91.44 TAL 202.85 TAP 32.90 RCA 106.13 APO 149.84 V2 34.870 RC 118.029 GL 12.02 GP 18.62 ZAL 124.50 ZAP 135.67 ETS 17.69 ZAE 136.17 ETE 162.02 ZAC 35.01 ETC 179.17 CLP-139.01 PLANETOCENTRIC CONIC C3 11.319 VHL 3.364 DLA -7.28 RAL 304.68 RAC 6567.4 VEL 11.520 PTH 2.01 VHP 3.982 CPA -3.83 RAP 301.06 ECC 1.1863 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 156.84 3 48 40 1859.47 13 57 14 4958.93 5 6 31 1608.27 15 22 4 4685.32 116.74 1259.5 4 19 40 13.36 90.00 -9.67 20.13 71.55 15 19 52 19.15 209.28 159.11 90.00 21.87 216.89 354.53 5 33 20 1008.3 118.14 100.00 -10.53 1.21 156.38 70.11 16 40 9 121.97 6 30 27 66.11 17 52 24 4085.3 19.86 188.85 100.00 22.78 196.43 158.76 155.05 339.11 819.6 -8.47 6 6 47 1419.62 16 38 17 4446.78 -12.79 345.55 110.00 21.76 157.70 3846.8 169.79 25.21 177.25 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 657.1 SR 81.5 SS 451.7 CRT -.8891 CRS .9887 CST -.8486 SGT 3584.2 SGR 685.3 SG3 504.6 RRT -.9525 RRF -.9939 RTF .9501 SGB 3649.1 R23 .2824 R13 -.9530 TOE .3044 TRA -.7604 TC3-4.9005 BAU .7572 RDE -.0456 RRA .0263 RC3 1.0097 FAU .11043 FOE .7618 FRA -.2126 FC3-8.4460 BSP 11355 LSA 774.9 MSA 205.1 SSA 9.3 SG1 3643.3 SG2 205.3 THA 169.65 ELI 661.1 ELZ 37.1 ALF 173.69 BOE .3078 BRA .7608 BC3 5.0035 FSP -1650 ARRIVAL DATE APR 22 1966 FLIGHT TIME 140.00 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC DISTANCE 407.173 RL 147.46 LAL .00 LOL 70.62 VL 27.586 GAL -4.30 AZL 88.07 MCA 193.22 SMA 127.73 ECC .17128 INC 1.9290 V1 30.214
RP 108.71 LAP -.44 LOP 263.84 VP 37.452 GAP 4.91 AZP 91.88 TAL 201.64 TAP 34.87 RCA 105.85 APO 149.61 V2 34.860
RC 120.382 GL 15.84 GP 13.98 ZAL 122.14 ZAP 139.06 ETS 14.28 ZAE 136.18 ETE 167.15 ZAC 36.17 ETC 172.52 CLP-141.12 PLANETOCENTRIC CONIC C3 11.513 VHL 3.393 OLA -3.15 RAL 305.49 RAD 6567.4 VEL 11.528 PTH 2.01 VHP 4.010 DPA -8.22 RAP 302.89 ECC 1.1895 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 20 34 1992.95 14 31 49 4832.50 4 40 27 1735.30 15 54 38 4565.39 -10.16 -13.65 27.91 115.05 3 53 47 1392.9 20.97 158.14 90.00 68.54 15 52 21 4232.5 15 84 201.47 18.93 208.79 159.15 90.00 116.43 5 9 22 67.14 17 10 43 120.24 6 10 51 63.26 18 18 36 1135.3 -10.83 1.67 100.00 -14.50 8.55 157.72 3965.4 16.53 181.50 100.00 19.80 188.77 158.77 1532.23 5 45 19 -16.75 351.87 156.45 932.2 -12.61 345.21 110.00 17 6 15 4341.23 22.13 170.60 157.62 3741.2 18.36 163.49 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 906.4 SR 66.3 SS 585.2 CRT -.9457 CRS .9845 CST -.9201 LSA 1062.9 MSA 196.2 SSA 9.4 TOE .4782 TRA -.7861 TC3-5.0034 BAU .7798 SGT 3734.7 SGR 544.8 SG3 500.1 RRT -.9476 RRF -.9843 RTF ..9501 SGB 3774.3 RZ3 ..2568 R13 -.9518 ROE -.0376 RRA .0191 RC3 .7959 FAU .10840 FDE .9940 FRA -.1793 FC3-8.1509 BSF 11811 BDE .4797 BRA .7863 BC3 5.0664 FSP -1651 SG1 3770.3 SG2 172.4 THA 172.11 EL1 908.6 EL2 21.5 ALF 176.04

ARRIVAL DATE APR 24 1966

```
FLIGHT TIME 142.00
LAUNCH DATE DEC 3 1965
                                                                                                                    DISTANCE 413.182
    HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 27.548 GAL -4.08 AZL 87.78 MCA 196.40 SMA 127.47 ECC .17188 INC 2.2213 V1 30.214
RP 108.74 LAP -.63 LOP 267.01 VP 37.415 GAP 5.17 AZP 92.13 TAL 200.40 TAP 36.79 RCA 105.56 APO 149.38 V2 34.851
RC 122.731 GL 18.21 GP 11.06 ZAL 119.92 ZAP 141.74 ETS 12.04 ZAE 135.64 ETE 170.34 ZAC 37.65 ETC 168.68 CLP-143.14
    PLANETOCENTRIC CONIC
                                                                 -.42 RAL 306.67 RAD 6567.4 VEL 11.533 PTH 2.01 VHP 4.084 DPA -10.87 RAP 304.55 ECC 1.1912
      C3 11.620 VML 3.409 DLA -.42 RAL 306.67 RAD 6567.4 VEL 11.533 PTH 2.01 VMP 4.084 DPA -10.87 RAP 304.55 ECC 1.1912 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 56 51 4749.55 16.78 203.65 159.80 113.62 3 39 38 1479.8 -12.76 26.03 100.00 4 26 7 1818.01 -16.94 13.47 159.39 115.00 4 56 25 1218.0 -13.43 6.44 100.00 16 18 23 4486.54 17.64 183.91 159.53 65.47 17 33 9 3886.5 14.18 176.82 110.00 5 33 55 1605.77 -19.22 356.14 158.18 118.82 6 0.41 1005.8 -15.23 349.30 110.00 17 27 4 4271.54 19.93 166.38 158.33 61.64 18.38 16 3671.5 15.99 159.48 DISFERSITIAL CORRECTIONS
       C3 11.620 VML 3.409 DLA
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SGB 3905.1 R23 .2200 R13 -.9508
SG1 3901.7 SG2 162.6 THA 173.66
                                                                                                                                                                                                ST 1094.5 SR 41.4 SS 662.9
CRT -.9465 CRS .9618 CST -.9426
      TOE .6034 TRA -.7890 TC3-5.1338 BAU -.8044
                                                                                                                                                                                       CRT -.9465 CRS .9618 LS: -.9-20
LSA 1265.8 MSA 191.6 SSA 10.2
ELI 1095.2 EL2 13.3 ALF 177.95
      ROE -.0230 RRA .0113 RC3 .6717 FAU .10411
      FOE 1.1133 FRA -.1191 FC3-7.7565 BSP 12293
      BOE .6039 BRA .7891 BC3 5.1776 FSP -1613
                                                                                                                    FLIGHT TIME 144.00
                                                                                                                                                                                                                   ARRIVAL DATE APR 26 1966
LAUNCH DATE DEC 3 1965
                                                                                                                    DISTANCE 419.178
    HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 27.508 GAL -3.86 AZL 87.58 HCA 199.57 SMA 127.20 ECC .17256 INC 2.4204 V1 30.214
RP 108.76 LAP -.81 LOP 270.17 VP 37.378 GAP 5.43 AZP 92.28 TAL 199.11 TAP 38.68 RCA 105.25 APO 149.15 V2 34.842
                                      19.84 GP 9.09 ZAL 117.76 ZAP 144.04 ETS 10.48 ZAE 134.96 ETE 172.43 ZAC 39.22 ETC 166.35 CLP-145.05
      RC 125.075 GL
     PLANE TOCENTRIC CONIC

C3 11.668 VHL 3.416 OLA 1.64 RAL 308.08 RAO 6567.4 VEL 11.535 PTH 2.01 VHP 4.177 OPA -12.57 RAP 306.18 ECC 1.1920 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 21 2144.37 -17.80 37.08 161.62 112.39 3 31 5 1544.4 -14.62 29.86 100.00 15 17 42 4686.66 15.06 199.83 161.08 65.73 16 35 49 4086.7 11.66 192.81 100.00 4 17 27 1879.53 -18.67 17.22 161.23 113.78 4 48 46 1279.5 -15.30 10.05 100.00 16 38 17 4426.74 15.91 180.31 160.67 64.36 17 52 4 3826.7 12.33 173.35 110.00 5 27 27 1660.44 -20.98 359.40 160.04 117.62 5 55 7 1060.4 -17.12 352.41 110.00 17 44 6 4218.59 18.19 163.27 159.43 60.55 18 55 5 3618.6 14.13 156.50 OLFFERENTIAL CORRECTIONS
    PLANETOCENTRIC CONIC
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SCT 3960.2 SCR 397.8 SC3 457.8
RRT -.9096 RRF -.9384 RTF .9446
SCB 3980.2 R23 .1871 R13 -.9454
                                                                                                                                                                                                ST 1287.9 SR 22.6 55 748.1
CRT -.8503 CRS .8842 CST -.9550
      TOE .7313 TRA -.7502 TC3-5.1946 BAU .8154
       ROE -.0114 RRA -.0003 RC3 .5816 FAU .09625
                                                                                                                                                                                       CRT -.8503 CRS .8842 CB1 -.8500
LSA 1476.9 M5A 193.5 SSA 10.5
EL1 1288.0 EL2 11.9 ALF 179.15
      FOE 1.2327 FRA .0129 FC3-7.1413 BSP 12146
BDE .7314 BRA .7502 BC3 5.2271 FSP -1437
                                                                                                               SG1 3976.8 SG2 164.6 THA 174.77
                                                                                                                                                                                                                  ARRIVAL DATE APR 28 1966
                                                                                                                  FLIGHT TIME 146.00
LAUNCH CATE DEC 3 1965
                                                                                                                  DISTANCE 425.153
    HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 27.468 GAL -3.63 AZL 87.43 HCA 202.74 SMA 126.94 ECC .17334 INC 2.5658 V1 30.214
RP 108.79 LAP -.99 LOP 273.34 VP 37.341 GAP 5.68 AZP 92.37 TAL 197.80 TAP 40.54 RCA 104.93 APO 148.94 VZ 34.834
RC 127.413 GL 21.04 GP 7.66 ZAL 115.61 ZAP 146.09 ETS 9.36 ZAE 134.26 ETE 173.87 ZAC 40.83 ETC 164.90 CLP-146.87
    PLANETOCENTRIC CONIC
                                                                 3.32 RAL 309.64 RAD 6567.4 VEL 11.536 PTH 2.01 VHP 4.282 DPA -13.70 RAP 307.83 ECC 1.1923
      C3 11.684 VHL 3.418 DLA 3.32 RAL 309.64 RAD 6567.4 VEL 11.536 PTH 2.01 VHP 4.282 DPA -13.70 RAP 307.83 ECC 1.1923 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 49 4 2196.85 -19.13 40.36 163.54 111.28 3 25 41 1596.9 -16.07 33.02 90.00 15 36 26 4634.75 13.58 196.74 162.47 64.91 16 53 41 4034.8 10.09 189.80 100.00 4 11 58 1929.48 -20.01 20.32 163.16 112.68 4 44 7 1329.5 -16.77 13.03 100.00 16 56 14 4377.36 14.44 177.38 162.04 63.54 18 9 11 3777.4 10.77 170.52 110.00 5 23 46 1704.74 -22.36 2.11 162.01 116.56 5 52 11 1104.7 -18.61 354.98 110.00 18 0 55 4174.86 16.71 160.74 160.77 59.74 19 10 30 3574.9 12.56 154.09
       C3 11.684 VHL 3.418 DLA
                                                                                                          MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                             SGT 4111.6 SGR 368.9 SG3 442.8

RRT -.8791 RRF -.9053 RTF .9461

SGB 4128.2 R23 .1513 R13 -.9466

SG1 4124.4 SG2 175.3 THA 175.48
                                                                                                                                                                                                ST 1411.1 SR 14.2 S5 767.8
CRT .5615 CRS -.5344 CST -.9611
      TOE .8097 TRA -.7349 TC3-5.3827 BAU .8450
       ROE .0050 RRA -.0058 RC3 .5392 FAU .09252
                                                                                                                                                                                                LSA 1595.5 MSA 187.7 SSA 11.7
EL1 1411.2 EL2 11.7 ALF .32
      FOE 1.2353 FRA .0589 FC3-6.8551 BSP 12847
BOE .8097 BRA .7349 BC3 5.4096 FSP -1439
                                                                                                                                                                                                                   ARRIVAL DATE APR 30 1966
                                                                                                                    FLIGHT TIME 148.00
LAUNCH DATE DEC 3 1965
                                                                                                                    DISTANCE 431.114
    HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 27.428 GAL -3.39 AZL 87.32 MCA 205.91 SMA 126.67 ECC .17421 INC 2.6770 V1 30.214
RP 108.81 LAP -1.17 LOP 276.51 VP 37.304 GAP 5.94 AZP 92.41 TAL 196.45 TAP 42.36 RCA 104.60 APO 148.73 V2 34.826
RC 129.747 GL 21.97 GP 6.59 ZAL 113.45 ZAP 147.97 ETS 8.53 ZAE 133.59 ETE 174.89 ZAC 42.48 ETC 163.99 CLP-148.59
     PLANETOCENTRIC CONIC
      C3 11.684 VHL 3.418 DLA 4.78 RAL 311.34 RAD 6567.4 VEL 11.536 PTH 2.D1 VHP 4.392 DPA -14.44 RAP 3D9.52 ECC 1.1923 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 44 54 2242.41 -20.23 43.25 165.57 110.24 3 22 16 1642.4 -17.30 35.81 100.00 15 54 10 4589.18 12.25 194.05 164.03 64.27 17 10 39 3989.2 8.69 187.18 100.00 4 8 29 1972.79 -21.13 23.06 165.21 111.65 4 41 22 1372.8 -18.00 15.66 100.00 17 13 15 4334.03 13.11 174.85 163.60 62.89 18 25 29 3734.0 9.37 168.06 110.00 5 21 53 1743.08 -23.51 4.49 164.09 115.56 5 50 56 1143.1 -19.87 357.24 110.00 18 16 21 4136.51 15.38 158.56 162.30 59.09 19 25 17 3536.5 11.17 151 99
      C3 11.684 VHL 3.418 DLA 4.78 RAL 311.34 RAD 6567.4 VEL 11.536 PIH 2.01 VHP 4.392 DPA -14.44 RAP 309.52 ECC 1.1923
                               18 16 21
                                                                              15.38
           110.00
                                                                                                         MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
SGT 4234.7 SGR 348.7 SG3 424.1 ST 1539.5 SR 33.7 55 7
     DIFFERENTIAL CORRECTIONS
                                                                                                       NID-COURSE EXECUTION ACCORDS:

SCT 4234.7 SGR 348.7 SG3 424.1

ST 1539.5 SR 33.7 SS 793.3

RRT -.8392 RRF -.8632 RTF ..9454

CRT ..9257 CRS -.9034 CST -.9657

SGB 4249.0 R23 ..1255 R13 -.9458

LSA 1722.4 MSA 184.3 SSA 12.7

SG1 4244.8 SG2 189.2 THA 176.04

EL1 1539.9 EL2 12.8 ALF 1.16
       TDE 18915 TRA -.6982 TC3-5.5355 BAU .8683
RDE .0187 RRA -.0129 RC3 .5070 FAU .08760
       FOE 1.2439 FRA .1310 FC3-6.4912 BSP 13280
BOE .8917 BRA .6984 BC3 5.5586 FSP -1389
```

```
LAUNCH DATE DEC 3 1965
                                                                             FLIGHT TIME 150.00
                                                                                                                                           ARRIVAL CATE MAY 2 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 437.059
    RL 147.46 LAL .00 LOL 70.62 VL 27.387 GAL -3.14 AZL 87.23 MCA 209.07 SMA 126.39 ECC .17518 INC 2.7656 VI 30.214
RP 108.84 LAP -1.34 LOP 279.67 VP 37.267 GAP 6.19 AZP 92.42 TAL 195.08 TAP 44.15 RCA 104.25 APO 148.54 V2 34.819
RC 132.074 GL 22.71 GP 5.76 ZAL 111.24 ZAP 149.71 ETS 7.91 ZAE 132.98 ETE 175.64 ZAC 44.17 ETC 163.45 CLP-150.21
   PLANETOCENTRIC CONIC
     C3 11.680 VHL 3.418 DLA 6.10 RAL 313.16 RAD 6567.4 VEL 11.535 PTH 2.01 VHP 4.508 DPA -14.90 RAP 311.25 ECC 1.1922
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 42 8 2283.86 -21.19 45.92 167.72 109.24 3 20 12 1683.9 -18.37 38.38
                  2 42 8 2283.86

16 11 26 4547.60

4 6 22 2012.16

17 29 $2 4294.53

5 21 14 1777.85

18 31 30 4101.60
         90.00
                                                     11.01
                                                                     191.63
                                                                                    165.77
                                                                                                     63.75 17 27 13
                                                                                                                                    3947.6
                                                                                                                                                     7.40
                                                                                                                                                                   184.81
       100.00
                                                     -22.09
                                                                     25.58
                                                                                    167.37
                                                                                                     110.66
                                                                                                                  4 39 54
                                                                                                                                    1412.2
                                                                                                                                                    -19.08
                                                                                                                                                                    18.08
                                                                                                    62.36 18 41 27
114.61 5 50 52
58.55 19 39 51
                                                                               165.32
                                                                     172.57
                                                                                                                                    3694.5
                                                                                                                                                     8.08
                                                                                                                                                               165.84
       100.00
                                                     11.87
                                                                                  166.27
164.00
       110.00
                                                    -24.51
                                                                      6.70
                                                                                                                                    1177.9
                                                                                                                                                   -20.98
                                                                                                                                                                  359.33
                                                                                                                                  3501.6
                                                                                                                                                     9.88
                                                                                                                                                                  150.10
       110.00
                                                                     156.61
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 4350.8 SGR 336.9 SG3 405.7

RRT -.7930 RRF -.8154 RTF ..9446

SGB 4363.8 RZ3 .1061 R13 -.9449

SG1 4359.0 SG2 204.9 THA 176.48
     TOE .9705 TRA -.6508 TC3-5.6810 BAU .8903
                                                                                                                               ST 1664.2 SR 54.4 SS 815.4
CRT .9680 CRS -.9418 CST -.9693
     RDE .0313 RRA -.0203 RC3 .4843 FAU .08276
    FOE 1.2449 FRA .2037 FC3-6.1341 BSP 13666
BDE .9711 BRA .6511 BC3 5.7016 FSP -1332
                                                                                                                               LSA 1845.1 MSA 181.0 SSA 13.6
                                                                                                                               ELI 1665.0 EL2 13.7 ALF
                                                                                                                                                                       1.81
LAUNCH DATE DEC 3 1965
                                                                             FLIGHT TIME 152.00
                                                                                                                                           ARRIVAL DATE MAY 4 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 442.989
    RL 147.46 LAL .00 LOL 70.62 VL 27.345 GAL -2.88 AZL 87.16 MCA 212.24 SMA 126.12 ECC .17626 INC 2.8380 V1 30.214
RP 108.86 LAP -1.51 LOP 282.83 VP 37.230 GAP 6.44 AZP 92.40 TAL 193.68 TAP 45.92 RCA 103.89 APO 148.35 V2 34.812
RC 134.395 GL 23.30 GP 5.11 ZAL 108.98 ZAP 151.33 ETS 7.45 ZAE 132.43 ETE 176.20 ZAC 45.90 ETC 163.15 CLP-151.76
   PLANETOCENTRIC CONIC
    C3 11.683 VHL 3.418 DLA 7.33 RAL 315.08 RAD 6567.4 VEL 11.536 PTH 2.01 VHP 4.628 DPA -15.16 RAP 313.04 ECC 1.1923 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 40 23 2322.88
16 28 34 4508.68
4 5 14 2049.19
17 46 23 4257.61
5 21 30 1810.50
18 46 37 4069.06
                                                                                                                                                 -19.34
        90.00
                                                                                 169.99
                                                                                                  108.24 3 19 5
63.31 17 43 42
                                                    -22.04
                                                                     48.46
                                                                                                                                   1722.9
                                                                                                                                                                    40.83
        90.00
                                                       9.83
                                                                     189.38
                                                                                    167.65
                                                                                                                                    3908.7
                                                                                                                                                      6.17
                                                                                                                                                                    182.61
                                                                                169.64
167.19
168.57
                                                                                                    109.68 4 39 23
61.92 18 57 21
113.67 5 51 41
58.10 19 54 26
       100.00
                                                     -22.96
                                                                     27.99
                                                                                                                                    1449.2
                                                                                                                                                    -20.07
                                                                                                                                                                    20.39
       100.00
                                                     10.70
                                                                     170.46
                                                                                                                                    3657.6
                                                                                                                                                      6.86
                                                                                                                                                                    163.77
                                                                                                                                                  -22.00
       110.00
                                                    -25.42
                                                                      8.80
                                                                                                                                    1210.5
                                                                                                                                                                     1.31
                                                    12.98
       110.00
                                                                     154.80
                                                                                    165.84
                                                                                                                                    3469.1
                                                                                                                                                     8.68
                                                                                                                                                                    148.36
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                      SGT 4461.1 SGR 331.2 SG3 388.1
RRT -.7429 RRF -.7642 RTF .9436
    TOE 1.0477 TRA -.5934 TC3-5.8167 BAU .9114
                                                                                                                               ST 1785.9 SR 74.2 SS 833.8
CRT .9805 CRS -.9493 CST -.9722
    ROE .0431 RRA -.0278 RC3 .4678 FAU .07809
                                                                      SGB 4473.4 R23 .0918 R13 -.9439
SGI 4467.9 SG2 221.3 THA 176.84
    FOE 1.2392 FRA .2755 FC3-5.7866 BSP 14031
BOE 1.0486 BRA .5940 BC3 5.8355 FSP -1277
                                                                                                                               LSA 1964.2 MSA 177.8 SSA 14.5
                                                                                                                              ELI 1787.3 ELZ 14.6 ALF 2.33
                                                                                                                                           ARRIVAL DATE MAY 6 1966
LAUNCH DATE DEC 3 1965
                                                                             FLIGHT TIME 154.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 448.904
    RL 147.46 LAL .00 LOL 70.62 VL 27.304 GAL -2.61 AZL 87.10 MCA 215.41 SMA 125.85 ECC .17745 INC 2.8988 VI 30.214
RP 108.87 LAP -1.68 LOP 286.00 VP 37.194 GAP 6.68 AZP 92.36 TAL 192.25 TAP 47.66 RCA 103.52 APO 148.18 V2 34.806
RC 136.709 GL 23.78 GP 4.57 ZAL 106.66 ZAP 152.86 ETS 7.10 ZAE 131.93 ETE 176.63 ZAC 47.67 ETC 163.02 CLP-153.22
   PLANETOCENTRIC CONIC
    C3 11.700 VHL 3.421 OLA 8.49 RAL 317.12 RAC 6567.4 VEL 11.536 PTH 2.01 VHP 4.750 CPA -15.27 RAP 314.87 ECC 1.1926
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 107.23 3 18 43
62.94 18 0 18
108.69 4 39 35
61.54 19 13 22
112.71 5 53 11
57.71 20 9 9
                   2 39 23 2360.54
16 45 46 4471.64
4 4 51 2084.90
18 3 0 4222.51
5 22 29 1841.94
19 1 51 4038.24
                                                                                172.38
                                                                                                                  3 18 43 1760.5 -20.25 43.22
                                                     -22.82
                                                                    50.95
                                                        8.69
                                                                     187.25
                                                                                   169.68
                                                                                                                                    3871.6
                                                                                                                                                     4.99
                                                                                                                                                                   180.52
                                                     -23.76
                                                                     30.34
                                                                                 172.05
                                                                                                                                    1484.9
                                                                                                                                                   -20.99
                                                                                                                                                                   22.54
                   18 3 D
                                                                                                                                    3622.5
                                                                                                                                                                  161.82
       100.00
                                                        9.57
                                                                    168.47
                                                                                   169.22
                                                                                                                                                     5.69
                                                                                                                                                   -22.95
                                                     -26.26
                                                                      10.85
                                                                                171.01
                                                                                                                                    1241.9
                                                                                                                                                                     3.26
                                                                                                                                                  7.52
                                                                                                                                    3438.2
                                                                     153.11
                                                                                   167.84
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                        SGT 4568.9 SGR 329.9 SG3 371.6
RRT -.6914 RRF -.7121 RTF .9429
SGB 4580.8 R23 .0809 R13 -.9431
                                                                                                                              ST 1904.4 SR 93.0 SS 848.9
CRT .9850 CRS -.9494 CST -.9746
     TOE 1.1232 TRA -.5283 TC3-5.9438 BAU .9325
    RDE .0542 RRA -.0354 RC3 .4553 FAU .07374
    FDE 1.2286 FRA .3420 FC3-5.4559 BSP 14401
BCE 1.1245 BRA .5295 BC3 5.9612 FSP -1228
                                                                                                                              LSA 2079.7 MSA 174.4 55A 15.4
                                                                         SG1 4574.6 SG2 238.0 THA 177.13
                                                                                                                              ELI 1906.6 ELZ 16.0 ALF 2.75
                                                                             FLIGHT TIME 156.00
                                                                                                                                           ARRIVAL DATE MAY 8 1966
LAUNCH DATE DEC 3 1965
                                                                            DISTANCE 454.804
    RL 147.46 LAL .00 LOL 70.62 VL 27.262 GAL -2.33 AZL 87.05 HCA 218.57 SMA 125.58 ECC .17876 INC 2.9508 V1 30.214
RP 108.89 LAP -1.84 LOP 289.16 VP 37.159 GAP 6.93 AZP 92.31 TAL 190.80 TAP 49.37 RCA 103.13 APO 148.03 V2 34.801
RC 139.015 GL 24.16 GP 4.13 ZAL 104.27 ZAP 154.31 ETS 6.85 ZAE 131.49 ETE 176.97 ZAC 49.49 ETC 163.00 CLP-154.62
  PLANETOCENTRIC CONIC
    C3 11.739 VHL 3.426 DLA 9.61 RAL 319.25 RAD 6567.4 VEL 11.538 PTH 2.D1 VHP 4.876 DPA -15.24 RAP 316.76 ECC 1.1932
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 174.91
                                                                                                                                                  -21.10
        90.00
                     2 38 59 2397.57
                                                     -23.55
                                                                     53.42
                                                                                                    106.20
                                                                                                                  3 18 56
                                                                                                                                   1797 6
                                                                                                                                                                    45.60
                   17 3 11 4435.99 7.58
4 5 3 2119.97 -24.51
18 19 48 4188.81 8.47
5 24 3 1872.77 -27.05
19 17 18 4008.78 10.79
        90.00
                                                                     185.22
                                                                                   171.87
                                                                                                     62.64 18 17 7
                                                                                                                                    3836.0
                                                                                                                                                      3.85
                                                                                                                                                                   178.52
       100.00
                                                                     32.68
                                                                                   174.58
                                                                                                     107.67
                                                                                                                  4 40 23
                                                                                                                                    1520.0
                                                                                                                                                    -21.86
                                                                                                                                                                     24.88
                                                                                                    61.22 19 29 37
111.74 5 55 16
57.37 20 24 7
                                                                                171.39
173.57
       100.00
                                                                     166.57
                                                                                                                                    3588.8
                                                                                                                                                     4.56
                                                                                                                                                                   159.96
       110.00
                                                                     12.90
                                                                                                                                    1272.8
                                                                                                                                                  -23.86
                                                                                                                                                                     5.19
      110.00
                                                                     151-51
                                                                                   169.99
                                                                                                                                    340A.8
                                                                                                                                                     6.41
                                                                                                                                                                   145.15
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4667.3 SGR 331.2 SG3 355.5

RRT -.6388 RRF -.6589 RTF .9418

SGB 4679.1 R23 .0721 R13 -.9420

SGI 4672.1 SG2 254.5 THA 177.40
                                                                                                                              ST 2026.4 SR 110.6 SS 864.4
CRT .9859 CRS -.9456 CST -.9768
    TDE 1.2016 TRA -.4513 TC3-6.0453 BAU .9513
    ROE .0646 RRA -.0433 RC3 .4441 FAU .06938
FOE 1.2190 FRA .4103 FC3-5.1170 BSP 14699
BOE 1.2034 BRA .4534 BC3 6.0616 FSP -1172
                                                                                                                             LSA 2199.1 MSA 171.2 SSA 16.2
EL1 2029.3 EL2 18.5 ALF 3.08
```

ARRIVAL DATE HAY 10 1966

```
LAUNCH CATE DEC 3 1965
                                                                                DISTANCE 460.688
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 27.220 GAL -2.03 A7L 87.00 HCA 221.74 SMA 125.31 ECC .18019 INC 2.9960 V1 30.214 RP 108.90 LAP -1.99 LOP 292.32 VP 37.124 GAP 7.18 A7P 92.24 TAL 189.32 TAP 51.06 RCA 102.73 APO 147.89 V2 34.797 RC 141.512 GL Z4.44 GP 3.77 7AL 101.82 7AP 155.68 ETS 6.68 7AE 131.09 ETE 177.24 7AC 51.34 ETC 163.07 CLP-155.96
   PLANETOCENTRIC CONIC
    C3 11.805 VHL 3.436 DLA 10.70 RAL 321.48 RAD 6567.4 VEL 11.541 PTH 2.01 VHP 5.005 DPA -15.11 RAP 318.68 ECC 1.1943
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      177.57
                                                                                                                                                                            48.00
                                                                                                                                                         -21.91
                    2 39 4 2434.42
17 20 53 4401.49
4 5 45 2154.85
18 36 53 4156.29
                                                                        55.90
                                                                                                        105.13 3 19 39
                                                                                                                                         1834.4
                                                        -24.22
        90.00
                                                                                                        62.38 18 34 15
106.62 4 41 40
60.95 19 46 10
110.73 5 57 50
57.07 20 39 22
                                                                                                                                                                           176.59
                                                                                                                                          3801.5
                                                                                                                                                             2.75
                                                                        183.27
                                                                                       174.21
                                                        6.50
        90.00
                                                                                                                                                                            27.14
                                                                         35.04
                                                                                       177.26
                                                                                                                                          1554.9
                                                                                                                                                           -22.69
                                                        -25.21
                                                                                     173.72
                                                                                                                                                                           158.17
                                                                                                                                          3556.3
                                                                                                                                                             3.47
                                                                       164.75
       100.00
                                                          7.40
                                                                                     176.28
172.29
                                                                                                                                                          -24.74
                    5 26 7 1903.40 -27.81
19 33 1 3980.51 9.75
                                                                                                                                          1303.4
                                                                         14.96
       110.00
                                                                                                                                                             5.35
                                                                                                                                                                           143.66
                                                                                                                                          3380.5
                                                                        149.98
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4765.5 SGR 334.9 SG3 340.6
RRT -.5877 RRF -.6077 RTF .9411
SGB 4777.3 R23 .0652 R13 -.9413
SG1 4769.6 SG2 270.7 THA 177.63
                                                                                                                                      ST 2144.4 SR 127.7 SS 876.4
CRT .9848 CRS -.9410 C6T -.9788
    TOE 1.2788 TRA -.3684 TC3-6.1349 BAU .9706
    RDE .0748 RRA -.0511 RC3 .4343 FAU .06541
FDE 1.2053 FRA .4710 FC3-4.7970 BSP 15030
BDE 1.2809 BRA .3719 BC3 6.1503 FSP -1125
                                                                                                                                      LSA 2314.0 MSA 167.7 SSA 16.9
EL1 2148.1 EL2 22.2 ALF 3.36
                                                                                                                                                  ARRIVAL DATE MAY 12 1966
                                                                                 FLIGHT TIME 160.00
LAUNCH DATE DEC 3 1965
                                                                                 DISTANCE 466.557
    RL 147.46 LAL .00 LOL 70.62 VL 27.178 GAL -1.73 AZL 86.96 MCA 224.90 SMA 125.04 ECC .18176 INC 3.0359 V1 30.214 RP 108.92 LAP -2.14 LOP 295.48 VP 37.089 GAP 7.42 AZP 92.15 TAL 187.83 TAP 52.73 RCA 102.31 APO 147.76 V2 34.793 RC 143.598 GL 24.65 GP 3.46 ZAL 99.31 ZAP 156.99 ETS 6.58 ZAE 130.74 ETE 177.46 ZAC 53.24 ETC 163.20 CLP-157.24
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 11.904 VML 3.450 DLA 11.76 RAL 323.80 RAD 6567.5 VEL 11.545 PTH 2.02 VMP 5.137 DPA -14.89 RAP 320.64 ECC 1.1959
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      180.38
                                                                                                        104.02
                                                                                                                        3 20 46
                                                        -24.86
                                                                        58.43
        90.00
                       2 39 34 2471.42
                                                                                                          62.17 18 51 42
105.53 4 43 23
60.73 20 3 1
109.68 6 0 51
56.82 20 54 55
                                                                                                                                                              1.67
                                                                                                                                           3768.0
                                                                                        176.70
                                                           5.44
                                                                        181.38
        90.00
                     17 38 54
                                      4368.02
                                                                                                                                                            -23.49
                                                                                                                                                                             29.44
                                                                                                                                           1589.8
                                                                                        180.08
                                                        -25.87
                                                                          37.43
                       4 6 53 2189.84
       100.00
                                                                                                                                                             2.40
                                                                                                                                           3524.8
                    18 54 17 4124.83
5 28 37 1934.08
                                                                        163.00
                                                                                        176.19
                                                           6.35
       100.00
                                                                                      176.19
                                                                                                                                                           -25.58
                                                                                                                                          1334.1
                                                                         17.05
                                                        -28.53
       110.00
                                                                                                                                           3353.4
                                                                                                                                                              4.31
   110.00 19 49 2
DIFFERENTIAL CORRECTIONS
                                                         8.74
                                                                        148.53
                                                                                        174.73
                                      3953.36
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            SGT 4860.0 SGR 340.1 SG3 326.6
RRT -.5384 RRF -.5588 RTF ..9406
SGB 4871.9 R23 .0601 R13 -.9408
SGI 4863.4 SG2 286.4 THA 177.83
                                                                                                                                      ST 2259.9 SR 144.4 SS 885.3
CRT .9823 CRS -.9354 CST -.9805
     TOE 1.3560 TRA -.2762 TC3-6.2042 BAU .9897
     RDE .0849 RRA -. 0589 RC3 .4245 FAU .06170
                                                                                                                                     LSA 2425.7 MSA 164.2 SSA 17.6
EL1 2264.3 EL2 27.0 ALF 3.59
    FOE 1.1887 FRA .5292 FC3-4.4868 BSP 15360
BOE 1.3587 BRA .2824 BC3 6.2187 FSP -1083
                                                                                                                                                  ARRIVAL DATE MAY 14 1966
                                                                                 FLIGHT TIME 162.00
LAUNCH DATE DEC 3 1965
                                                                                 DISTANCE 472.410
    RL 147.46 LAL .00 LOL 70.62 VL 27.136 GAL -1.41 AZL 86.93 HCA 228.06 SMA 124.77 ECC .18348 INC 3.0717 V1 30.214
RP 108.93 LAP -2.28 LOP 298.64 VP 37.055 GAP 7.67 AZP 92.05 TAL 186.31 TAP 54.38 RCA 101.88 APO 147.66 V2 34.790
RC 145.874 GL 24.76 GP 3.19 ZAL 96.74 ZAP 158.24 ETS 6.53 ZAE 130.44 ETE 177.64 ZAC 55.17 ETC 163.37 CLP-158.46
   HELLOCENTRIC CONTC
   PLANETOCENTRIC CONIC
     C3 12.043 VHL 3.470 DLA 12.79 RAL 326.21 RAO 6567.5 VEL 11.551 PTH 2.02 VHP 5.273 DPA -14.60 RAP 322.63 ECC 1.1982
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        1908.6
                                                                                                       102.85 3 22 15
62.00 19 9 30
104.39 4 45 29
60.54 20 20 13
108.58 6 4 17
56.61 21 10 47
                                                                                                                                                        -23.43
                                                                                     183.32
                                                        -25.45
                                                                       61.01
                      2 40 26 2508.76
        90.00
                                                                                                                                           3735.6
                                                                                                                                                              .62
                                                                                                                                                                            172.91
                     17 57 15 4335.56
4 8 23 2225.11
                                                          4.40
                                                                       179.55
                                                                                        179.33
         90.00
                                                                                                                                           1625.1
                                                                                                                                                           -24.25
                                                                                                                                                                             31.78
                                                                                     183.04
                                                        -26.49
                                                                         39.86
        100.00
                                                                                                                                          3494.4
                                                                                                                                                             1.37
                                                                                                                                                                            154.77
                                                                                        178.82
                                                          5.34
                                                                       161.31
                    19 11 59 4094.44
5 31 32 1964.98
20 5 20 3927.34
        100.00
                                                                                                                                          1365.0
                                                                                                                                                          -26.41
                                                                                      182.13
                                                                         19.19
                                                        -29.22
        110.00
                                                                                                                                          3327.3
                                                                                                                                                             3.32
                                                       7.77
                                                                        147.14
                                                                                        177.32
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2373.9 SR 160.5 SS 892.6
CRT .9788 CRS -.9294 CST -.9820
                                                                            SGT 4951.1 SGR 346.2 SG3 313.5
RRT -.4911 RRF -.5123 RTF .9403
SGB 4963.2 R23 .0560 R13 -.9405
SG1 4954.0 SG2 301.4 THA 178.03
     TOE 1.4347 TRA -.1755 TC3-6.2495 BAU 1.0084
     RDE .0949 RRA -.0668 RC3 .4140 FAU .05823
FDE 1.1719 FRA .5842 FC3-4.1858 BSP 15689
BDE 1.4378 BRA .1878 BC3 6.2632 FSP -1044
                                                                                                                                     LSA 2536.1 MSA 160.9 SSA 18.3
EL1 2379.1 EL2 32.8 ALF 3.79
                                                                                                                                                   ARRIVAL CATE MAY 16 1966
                                                                                  FLIGHT TIME 164.00
LAUNCH DATE DEC 3 1965
                                                                                 DISTANCE 478.247
   HELIOCENTRIC CONIC
     RL 147.46 LAL .00 LOL 70.62 VL 27.093 GAL -1.09 AZL 86.90 HCA 231.22 SHA 124.50 ECC .18534 INC 3.1040 V1 30.214
RP 108.93 LAP -2.42 LOP 301.80 VP 37.022 GAP 7.93 AZP 91.95 TAL 184.78 TAP 56.00 RCA 101.42 APO 147.58 V2 34.787
RC 148.138 GL 24.80 GP 2.96 ZAL 94.12 ZAP 159.44 ETS 6.54 ZAE 130.17 ETE 177.79 ZAC 57.14 ETC 163.57 CLP-159.65
    PLANETOCENTRIC CONIC
     C3 12.228 VHL 3.497 DLA 13.79 RAL 328.70 RAD 6567.5 VEL 11.559 PTH 2.02 VHP 5.412 DPA -14.23 RAP 324.65 ECC 1.2012
ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       2 41 38 2546.58
18 15 55 4304.16
                                                                                                         101.64
                                                                                                                         3 24 5
                                                         -26.00
                                                                          63.64
                                                                                      186.42
182.12
         90.00
                                                                                                                                                                            171.16
                                                                                                            61.87 19 27 39
                                                                                                                                            3704.2
                                                                                                                                                             - .39
                                                                        177.80
                     18 15 55
                                                          3,40
         90.00
                                                                                                                                                            -24.98
                                                                                                                         4 47 56
                                                                                                                                                                             34.18
                       4 10 15 2260.80
19 29 59 4065.18
                                                                                       186.15
                                                                                                           103.20
                                                                                                                                           1660.8
                                                                          42.36
                                                        -27.07
        100.00
                                                                                                          60.40 20 37 44
107.44 6 8 5
56.43 21 26 57
                                                                                                                                                                            153.16
                                                                                                                                           3465.2
                                                                                                                                                               .38
                                                                      159.70
                                                                                         181.59
                                                           4.36
        100.00
                      19 29 59
                                                                                                                                           1396.2
                                                                                                                                                        -27.20
                                                                                                                                                                            13.22
                                    1996.19
                                                        -29.88
                                                                          21.39
                                                                                         185.28
                        5 34 49
        110.00
                                                                                                                                           3302.5
                                                                                                                                                             2.38
                                                                                                                                                                            139.58
                                                     6.84
                                                                     145.82
                                                                                         180.06
                      20 21 55
                                                                           MID-COURSE EXECUTION ACCURACY
SGT 5036.3 SGR 352.7 SG3 300.7
RRT -.4451 RRF -.4667 RTF .9400
SGB 5048.6 R23 .0521 R13 -.9401
SGB 5038.7 SG2 315.7 THA 178.21
SGB 5038.7 SG2 315.7 THA 178.21
SGB 5038.7 SG2 315.7 THA 178.21
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE 1.5157 TRA -. 0650 TC3-6.2628 BAU 1.0259
     ROE .1049 RRA -.0745 RC3 .4020 FAU .05483
     FOE 1.1560 FRA .6373 FC3-3.8823 BSP 16000
BOE 1.5194 BRA .0989 BC3 6.2757 FSP -1006
```

FLIGHT TIME 158.00

ARRIVAL DATE MAY 18 1966

LAUNCH DATE DEC 3 1965

DISTANCE 484.068 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 27.051 GAL -.74 AZL 86.87 MCA 234.38 SMA 124.23 ECC, .18738 INC 3.1336 VI 30.214
RP 108.94 LAP -2.55 LOP 304.97 VP 36.990 GAP 8.18 AZP 91.83 TAL 183.23 TAP 57.62 RCA 100.96 APO 147.51 V2 34.786
RC 150.390 GL 24.76 GP 2.76 ZAL 91.45 ZAP 160.59 ETS 6.59 ZAE 129.94 ETE 177.91 ZAC 59.14 ETC 163.78 CLP-160.78 PLANETOCENTRIC CONIC C3 12.463 VHL 3.530 DLA 14.77 RAL 331.26 RAD 6567.5 VEL 11.569 PTH 2.02 VHP 5.556 DPA -13.80 RAP 326.70 ECC 1.2051 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 43 9 2584.93 -26.49 66.34 189.65 100.38 3 26 14 1984.9 -24.79 58.08 2.42 185.06 61.78 19 46 7 3673.9 -1.37 169.48 90.00 18 34 53 4273.93 176.11 101.96 4 50 44 60.28 20 55 33 106.24 6 12 16 56.28 21 43 23 36.64 4 12 27 2296.93 189.41 1696.9 -25.68 100.00 -27.60 44.91 151.63 100.00 19 48 16 4037.16 3.41 158.15 184.51 3437.2 - . 57 -.57 -27.97 188.57 5 38 28 2027.77 1427.8 15.35 110.00 -30.50 23.64 110.00 20 38 44 3879.08 5.95 144.58 182.94 3279.1 1.48 138.35 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 26D2.7 SR 191.4 S5 9D6.8 CRT .9694 CR5 -.916D CST -.9848 SGT 5113.6 SGR 359.2 SG3 288.6 RRT -.3999 RRF -.4213 RTF .9392 SGB 5126.2 R23 .0481 R13 -.9393 TOE 1.6015 TRA .0583 TC3-6.2355 BAU 1.0410 ROE .1150 RRA -. 0824 RC3 .3880 FAU .05143 LSA 2758.3 MSA 156.0 SSA 19.2 FOE 1.1431 FRA .6926 FC3-3.5725 BSP 16196 BCE 1.6056 BRA .1009 BC3 6.2475 FSP -959 SG1 5115.6 SG2 329.1 THA 178.38 EL1 2609.3 EL2 46.9 ALF 4.08 ARRIVAL DATE MAY 20 1966 LAUNCH DATE DEC 3 1965 FLIGHT TIME 168.00 DISTANCE 489.871 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 27.009 GAL -.39 AZL 86.84 MCA 237.54 SMA 123.97 ECC .18958 INC 3.1609 V1 30.214
RP 108.94 LAP -2.67 LOP 308.13 VP 36.958 GAP 8.44 AZP 91.70 TAL 181.67 TAP 59.21 RCA 100.47 APO 147.47 V2 34.785
RC 152.629 GL 24.64 GP 2.59 ZAL 88.75 ZAP 161.70 ETS 6.69 ZAE 129.73 ETE 178.02 ZAC 61.18 ETC 164.01 CLP-161.88 PLANETOCENTRIC CONIC C3 12.758 VHL 3.572 DLA 15.71 RAL 333.90 RAD 6567.5 VEL 11.582 PTH 2.03 VHP 5.704 0PA -13.31 RAP 328.76 ECC 1.2100 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.41 193.02 99.07 3 28 41 2023.8 60.76 2 44 57 2623.78 -26.94 69.09 90.00 61.72 20 4 50 100.67 4 53 51 60.20 21 13 36 104.99 6 16 48 56.16 22 0 1 -2.30 167.87 18 54 5 4245.06 1.49 174.49 188.14 3645.1 90.00 -28.09 100.00 4 14 58 2333.50 47.52 192.80 1733.5 -26.33 39.16 3410.6 -1.47 150.17 100.00 20 6 45 4010.58 2.51 156.69 187.58 -31.09 -28.72 110.00 5 42 29 2059.69 110.00 20 55 44 3857.15 25.94 192.01 1459.7 17.54 5.12 143.43 185.95 3257.2 .64 137.21 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5192.4 SGR 366.1 SG3 277.1 RRT -.3581 RRF -.3808 RTF .9395 SGB 5205.3 R23 .0460 R13 -.9396 SGI 5194.1 SG2 341.8 THA 178.55 ST 2704.2 SR 206.8 SS 906.4 CRT .9644 CRS -.9099 CST -.9859 TOE 1.6828 TRA .1856 TC3-6.1940 BAU 1.0584 RDE .1258 RRA -. 0897 RC3 .3731 FAU .04849 LSA 2855.4 MSA 153.8 SSA 19.5 EL1 2711.6 EL2 54.6 ALF 4.22 FDE 1.1225 FRA .7384 FC3-3.2907 BSP 16540 BDE 1.6875 BRA .2062 BC3 6.2052 FSP -933 ARRIVAL DATE MAY 22 1966 FLIGHT TIME 170.00 LAUNCH DATE DEC 3 1965 DISTANCE 495.656 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.967 GAL -.02 AZL 86.81 HCA 240.71 SMA 123.71 ECC .19199 INC 3.1864 V1 3D.214
RP 108.94 LAP -2.78 LOP 311.29 VP 36.927 GAP 8.71 AZP 91.56 TAL 180.09 TAP 60.79 RCA 99.96 APO 147.46 V2 34.784
RC 154.855 GL 24.45 GP 2.44 ZAL 86.01 ZAP 162.78 ETS 6.84 ZAE 129.56 ETE 178.12 ZAC 63.24 ETC 164.24 CLP-162.95 PLANETOCENTRIC CONIC C3 13.119 VML 3.622 DLA 16.62 RAL 336.59 RAD 656745 VEL 11.598 PTH 2.03 VHP 5.856 DPA -12.77 RAP 330.85 ECC 1.2159 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT.ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 47 4 2663.12 -27.33 71.91 196.53 97.71 3 31 27 2063.1 -25.98 63.50 90.00 19 13 28 4217.72 .61 172.97 191.37 61.69 20 23 46 3617.7 -3.18 166.34 100.00 4 17 48 2370.48 -28.53 50.18 196.33 99.33 4 57 19 1770.5 -26.94 41.73 190.78 195.60 3385.6 -2.32 .1491.9 -29.42 3236.9 -.13 60.15 21 31 50 103.70 6 21 42 56.06 22 16 49 20 25 25 3985.60 1.67 5 46 50 2091.93 -31.63 21 12 52 3836.91 4.36 -2.32 155.32 100.00 28.29 110.00 189.10 142,37 110.00 ORBIT DETERMINATION ACCURACY #ID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5262.4 SGR 379.9 SG3 274.5 RRT -.3401 RRF -.4108 RTF .9186 SGB 5276.0 R23 .1031 R13 -.9188 SGI 5264.0 SG2 357.1 THA 178.59 ST 2708.9 SR 226.7 SS 844.3 CRT .9509 CRS -.8651 CST -.9766 TOE 1.7051 TRA .4283 TC3-6.1608 BAU 1.0823 ROE .1396 RRA -.1021 RC3 .3577 FAU .04645 FDE 1.0084 FRA .9798 FC3-3.0656 BSP 17204 BDE 1.7108 BRA .4403 BC3 6.1712 FSP -931 L5A 2840.2 MSA 187.8 SSA 19.4 EL1 2717.5 EL2 70.0 ALF 4.55 FLIGHT TIME 172.00-ARRIVAL DATE MAY 24 1966 LAUNCH DATE DEC 3 1965 DISTANCE 501.423 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.925 GAL .36 AZL 86.79 MCA 243.87 SMA 123.45 ECC .19459 INC 3.2104 V1 3D.214
RP 108.94 LAP -2.88 LOP 314.45 VP 36.897 GAP 8.98 AZP 91.42 TAL 178.50 TAP 62.36 RCA 99.43 APO 147.47 V2 34.785
RC 157.067 GL 24.18 GP 2.30 ZAL 83.25 ZAP 163.82 ETS 7.03 ZAE 129.41 ETE 178.21 ZAC 65.34 ETC 164.47 CLP-163.98 PLANETOCENTRIC CONIC C3 13.553 VHL 3.681 DLA 17.49 RAL 339.33 RAO 6567.5 VEL 11.616 PTH 2.04 VHP 6.015 DPA -12.19 RAP 332.95 ECC 1.2230 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 96.31 3 34 30 61.68 20 42 49 97.96 5 1 6 66.29 2 49 28 2702.82 74.76 200.16 2102.8 -26.50 -27.66 90.00 - .21 194.71 3592.2 -4.00 164.91 19 32 56 4192.16 171.54 90.00 4 20 58 2407.73 20 44 7 3962.47 -28.91 199.98 1807.7 -27.51 44.36 52.88 100.00 60.12 21 50 10 102.36 6 26 56 55.99 22 33 41 194.10 199.31 192.37 -3.10 147.52 154.05 3362.5 100.00 .88 5 51 32 2124.37 21 30 3 3818.60 -32.13 1524.4 -30.09 22.07 30.69 110.00 MID-COURSE EXECUTION ACCURACY
SGT 532A 7 CCP 21 30 3 141.41 3218.6 -.83 135.20 3.66 110.00 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 2909.8 SR 236.5 SS 912.5 CRT .9533 CRS -.8976 CST -.9880 LSA 3054.8 MSA 152.3 SSA 19.8 EL1 2918.5 EL2 71.2 ALF 4.43 SGT 5328.7 SGR 378.6 SG3 255.6 TOE 1.8616 TRA .4785 TC3-5.9808 BAU 1.0854 RRT -.2749 RRF -.2957 RTF .9385 SGB 5342.2 R23 .0380 R13 -.9385 SGI 5329 R SG2 .363 9 THA 178.88 RRT -.2749 RRF -.2957 RTF .9385 RDE .1483 RRA -.1037 RC3 .3366 FAU .04242 FDE 1.0965 FRA .8356 FC3-2.7098 BSP 16893 BDE 1.8675 BRA .4896 BC3 5.9903 FSP -847 SG1 5329.8 SG2 363.9 THA 178.88

FLIGHT TIME 166.00

ARRIVAL DATE MAY 26 1966

LAUNCH DATE DEC 3 1965

Ξ

DISTANCE 507.169 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.884 GAL .76 A7L 86.77 MCA 247.03 SMA 123.19 ECC .19741 INC 3.2330 V1 30.214
RP 108.94 LAP -2.98 LOP 317.62 VP 36.868 GAP 9.27 A7P 91.26 TAL 176.89 TAP 63.92 RCA 98.87 APO 147.51 VZ 34.786
RC 159.265 GL 23.84 GP 2.18 7AL 80.48 7AP 164.83 ETS 7.27 7AE 129.29 ETE 178.28 7AC 67.45 ETC 164.69 CLP-164.98 PLANETOCENTRIC CONIC C3 14.070 VHL 3.751 DLA 18.31 RAL 342.11 RAD 6567.6 VEL 11.639 PTH 2.04 VHP 6.179 DPA -11.56 RAP 335.06 ECC 1.2316 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 52 10 2742.78 -27.93 77.66 203.90 94.88 3 37 53 2142.8 -26.96 69.13 61.70 21 1 54 96.55 5 5 12 60.11 22 8 31 100.98 6 32 31 55.94 22 50 34 3568.6 -4.75 163.58 170.23 198.18 -.98 90.00 19 52 25 4168.60 1845.2 -28.02 47.03 203.75 -29.23 55.62 100.00 4 24 27 2445.18 197.55 3341.4 -3.81 146.37 21 2 49 3941.43 5 56 34 2156.97 21 47 11 3802.41 .17 152.89 100.00 1557.0 -30.72 24.40 -32.58 33.13 203.15 100.98 110.00 3.04 140.56 195.75 3202.4 -1.45 134.35 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5395.5 SGR 384.6 SG3 246.0 RRT -.2365 RRF -.2577 RTF .9391 SGB 5409.2 R23 .0355 R13 -.9392 SGI 5396.3 SG2 373.6 THA 179.03 ST 2996.1 SR 251.2 55 909.6 CRT .9480 CRS -.8924 CST -.9889 TOE 1.9492 TRA .6375 TC3-5.8401 BAU 1.1002 ROE .1607 RRA -.1099 RC3 .3165 FAU .03989 FOE 1.0798 FRA .8781 FC3-2.4546 BSP 17185 LSA 3137.4 MSA 152.1 55A 19.8 EL1 3005.5 EL2 79.7 ALF 4.55 BOE 1.9558 BRA .6469 BC3 5.8487 FSP -825 FLIGHT TIME 176.00 ARRIVAL DATE MAY 28 1966 LAUNCH DATE DEC 3 1965 DISTANCE 512.893 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.842 GAL 1.18 AZL 86.75 MCA 250.19 SMA 122.94 ECC .20047 INC 3.2547 VI 30.214
RP 108.93 LAP -3.06 LOP 320.78 VP 36.839 GAP 9.56 AZP 91.10 TAL 175.28 TAP 65.47 RCA 98.29 APO 147.58 V2 34.788
RC 161.449 GL 23.43 GP 2.07 ZAL 77.72 ZAP 165.81 ETS 7.55 ZAE 129.18 ETE 178.36 ZAC 69.59 ETC 164.91 CLP-165.96 PLANETOCENTRIC CONIC C3 14.680 VHL 3.831 DLA 19.08 RAL 344.92 RAD 6567.6 VEL 11.665 PTH 2.05 VHP 6.350 DPA -10.90 RAP 337.18 ECC 1.2416 LNCH AZMTH LNCH TIME L-I TIME INI LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 12 2782.85 -28.13 80.57 207.74 93.43 3 41 35 2182.9 -27.35 71.99 61.73 201.77 21 20 55 3547.3 -5.43 162.39 90.00 20 11 48 4147.32 -1.66 169.04 4 28 17 2482.69 21 21 24 3922.72 6 1 57 2189.62 22 4 13 3788.55 -29.49 58.38 207.62 95.12 5 9 40 1882.7 -28.47 49.72 100.00 60.11 22 26 47 99.57 6 38 27 -.46 151.87 201.10 3322.7 -4.44 145.33 100.00 35.59 207.10 1589.6 -31.30 -1.98 26.77 -32.97 110.00 55.90 23 7 21 3188.6 133.63 2.51 139.83 199.24 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5454.9 SGR 390.0 SG3 236.4 RRT -.1984 RRF -.2195 RTF .9396 SGB 5468.8 R23 .0328 R13 -.9397 TDE 2.0372 TRA .8064 TC3-5.6653 BAU 1.1134 ST 3073.2 SR 265.9 55 904.2 CRT .9429 CRS -.8875 CST -.9898 ROE .1739 RRA -.1155 RC3 .2949 FAU .03737 LSA 3210.8 MSA 152.5 SSA 19.6 EL1 3083.4 EL2 88.3 ALF 4.67 FOE 1.0623 FRA .9186 FC3-2.2041 BSP 17435 BOE 2.0446 BRA .8147 BC3 5.6729 FSP -798 SG1 5455.4 SG2 382.2 THA 179.18 ARRIVAL DATE MAY 30 1966 FLIGHT TIME 178.00 LAUNCH DATE DEC 3 1965 DISTANCE 518.594 RL 147.46 LAL .00 LOL 70.62 VL 26.801 GAL 1.62 AZL 86.72 HCA 253.35 SMA 122.69 ECC .20379 INC 3.2755 VI 30.214
RP 108.92 LAP -3.14 LOP 323.95 VP 36.812 GAP 9.86 AZP 90.94 TAL 173.66 TAP 67.02 RCA 97.68 APO 147.69 V2 34.791
RC 163.619 GL 22.96 GP 1.98 ZAL 74.97 ZAP 166.77 ETS 7.89 ZAE 129.10 ETE 178.42 ZAC 71.75 ETC 165.12 CLP-166.92 PLANETOCENTRIC CONIC C3 15.395 VHL 3.924 DLA 19.79 RAL 347.75 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 6.529 DPA -10.19 RAP 339.31 ECC 1.2534 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG 91.98 3 45 37 61.77 21 39 47 93.68 5 14 28 60.12 22 44 52 98.14 6 44 43 55.87 23 23 59 -27.68 74.88 211.67 2222.9 2 58 34 2822.88 20 30 58 4128.57 83.50 -28.25 90.00 -6.02 161.33 3528.6 -2.27 168.00 205.45 90.00 52.43 1920.1 -28.86 61.14 211.59 4 32 28 2520.10 -29.69 100.00 -4.98 144.44 3306.6 21 39 45 3906.58 150.98 204.75 -1.01 100.00 6 7 41 2222.20 -33.31 22 21 2 3777.25 2.08 -31.83 29.16 211.15 1622.2 -33.31 38.08 110.00 -2.41 3177.2 139.24 202.82 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCI 5500.6 SGR 394.9 SG3 227.3 RRT -.1609 RRF -.1819 RTF .9402 SGB 5523.8 R23 .0303 R13 -.9402 SGI 5510.0 SG2 389.7 THA 179.34 ST 3140.7 SR 280.2 S5 896.8 CRT .9379 CRS -.8829 CST -.9905 TOE 2.1258 TRA .9867 TC3-5.4625 BAU 1.1257 RDE .1880 RRA -.1204 RC3 .2723 FAU .03495 FDE 1.0445 FRA .9585 FC3-1.9656 BSP 17667 BDE 2.1341 BRA .9940 BC3 5.4693 FSP -771 LSA 3274.5 MSA 153.8 SSA 19.3 EL1 3151.7 EL2 96.9 ALF 4.79 ARRIVAL DATE JUN 1 1966 FLIGHT TIME 180.00 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC DISTANCE 524.270 RL 147.46 LAL .00 LOL 70.62 VL 26.760 GAL 2.07 AZT 86.70 HCA 256.51 SMA 122.44 ECC .20738 INC 3.2957 V1 30.214
RP 108.91 LAP -3.20 LOP 327.12 VP 36.785 GAP 10.17 AZP 90.77 TAL 172.04 TAP 68.55 RCA 97.05 APO 147.83 V2 34.794
RC 165.775 GL 22.44 GP 1.89 ZAL 72.24 ZAP 167.71 ETS 8.29 ZAE 129.03 ETE 178.49 ZAC 73.93 ETC 165.32 CLP-167.85 PLANETOCENTRIC CONIC C3 16.226 VHL 4.028 DLA 20.45 RAL 350.58 RAD 6567.7 VEL 11.731 PTH 2.07 VHP 6.716 DPA -9.46 RAP 341.44 ECC 1.2670 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 3 50 D 215.68 90.52 2262.7 -27.94 90.00 3 2 17 2862.69 -28.31 86.41 61.81 21 58 21 92.23 5 19 37 60.14 23 2 40 3512.6 -6.53 20 49 48 4112.61 -2.78 167.10 209.21 90.00 1957.3 -29.19 55.15 4 37 0 2557.28 21 57 47 3893.25 -29.82 63.90 215.64 100.00 3293.2 -5.43 -1.46 150.25 208.48 96.69 6 51 ... 96.69 23 40 20 100.00 -32.31 1654.6 6 13 44 2254.62 22 37 32 3768.67 215.29 -33.60 40.56 3168.7 1.75 110.00 138.80 206.47 MID-COURSE EXECUTION ACCURACY
SGT 5559.6 SGR 399.1 SG3 218.8 ST 3205.1 SR 294.2 S5 891.6
RRT -.1229 RRF -.1427 RTF .9404 CRT .9330 CRS -.8787 CST -.9912
SGB 5573.9 R23 .0267 R13 -.9405 LSA 3336.2 MSA 155.7 SSA 19.0
EL1 3216.9 EL2 105.5 ALF 4.90 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE 2.2196 TRA 1.1828 TC3-5.2247 BAU 1.1347 ROE .2029 RRA -.1246 RC3 .2489 FAU .03250 FOE 1.0313 FRA 1.0008 FC3-1.7337 BSP 17778

FLIGHT TIME 174.00

BOE 2.2288 BRA 1.1894 BC3 5.2307 FSP -738

ARRIVAL DATE JUN 3 1966 FLIGHT TIME 182.00 LAUNCH DATE DEC 3 1965 CISTANCE 529.918 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.719 GAL 2.55 AZL 86.68 HCA 259.68 SMA 122.19 ECC .21129 INC 3.3153 VI 30.214
RP 108.90 LAP -3.26 LOP 330.28 VP 36.759 GAP 10.50 AZP 90.59 TAL 170.41 TAP 70.09 RCA 96.38 APO 148.01 VZ 34.798
RC 167.915 GL 21.86 GP 1.81 ZAL 69.54 ZAP 168.63 ETS 8.76 ZAE 128.97 ETE 178.55 ZAC 76.13 ETC 165.51 CLP-168.77 PLANETOCENTRIC CONIC C3 17.190 VHL 4.146 OLA 21.05 RAL 353.39 RAD 6567.7 VEL 11.772 PTH 2.08 VHP 6.912 OPA -8.69 RAP 343.58 ECC 1.2829 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 6 22 2902.06 -28.30 89.29 299.75 89.07 3 54 45 2302.1 -28.13 80.62 21 8 12 4099.70 4 41 54 2594.04 22 15 21 3882.96 6 20 7 2286.76 90.00 -3.19 213.05 61.85 22 16 31 3499.7 -6.94 159.70 166.38 219.75 90.80 5 25 8 1994.D 100.00 -29.88 66.63 212.28 219.51 60.16 23 20 4 95.24 6 58 14 55.85 23 56 21 100.00 149.69 3283.0 -5.77 -1.81 1686.8 110.00 -33.83 43.05 -32.73 110.00 22 53 38 3763.00 1.54 138.50 210.19 3163.0 -2.95 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 5605.5 SGR 402.8 SG3 210.4 RRT -.0863 RRF -.1055 RTF .9413 SGB 5619.9 R23 .0240 R13 -.9413 SGI 5605.6 SG2 401.3 THA 179.64 ST 3251.5 SR 307.8 SS 881.4 CRT .9285 CRS -.8750 CST -.9918 TOE 2.3086 TRA 1.3860 TC3-4.9769 BAU 1.1449 ROE .2189 RRA -.1278 RC3 .2254 FAU .03028 FDE 1.0141 FRA 1.0384 FC3-1.5252 BSP 17987 LSA 3379.2 MSA 158.0 SSA BDE 2.3189 BRA 1.3919 BC3 4.9820 FSP EL1 3264.1 EL2 113.8 ALF LAUNCH DATE DEC 3 1965 FLIGHT TIME 184.00 ARRIVAL DATE JUN 5 1966 HELIOCENTRIC CONIC **DISTANCE 535.535** RL 147.46 LAL .00 LOL 70.62 VL 26.679 GAL 3.04 AZL 86.67 HCA 262.84 SMA 121.95 ECC .21552 INC 3.3345 V1 30.214
RP 108.89 LAP -3.31 LOP 333.45 VP 36.734 GAP 10.84 AZP 90.42 TAL 168.78 TAP 71.62 RCA 95.67 APO 148.23 V2 34.803 RC 170.040 CL 21.24 CP 1.74 7AL 66.89 7AP 169.53 ETS 9.31 7AE 128.92 ETE 178.61 7AC 78.33 ETC 165.68 CLP-169.67 PLANETOCENTRIC CONIC C3 18.302 VHL 4.278 DLA 21.59 RAL 356.19 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 7.118 DPA -7.89 RAP 345.72 ECC 1.3012 C3 18.302 VHL 4.278 DLA 21.59 RAL 356.19 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 7.118 DPA -7.89 RAP 345.72 ECC 1.3012 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 10 52 2940.83 -28.23 92.12 223.87 87.65 3 59 53 2340.8 -28.25 83.45 90.00 21 26 1 4090.08 -3.50 165.84 216.93 61.88 22 34 11 3490.1 -7.24 159.15 100.00 4 47 11 2630.23 -29.89 69.32 223.92 89.38 5 31 2 2030.2 -29.65 60.52 100.00 22 32 22 3875.91 -2.05 149.30 216.13 60.17 23 36 58 3275.9 -6.01 142.74 110.00 6 26 49 2318.54 -34.00 45.51 223.78 93.79 7 5 28 1718.5 -33.10 36.39 110.00 23 9 14 3760.38 1.44 138.36 213.95 55.64 24 11 54 3160.4 -3.05 132.16 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5647.0 SGR 405.9 SG3 202.4 RRT -.0498 RRF -.0683 RTF .9421 SGB 5661.6 R23 .0212 R13 -.9421 TOE 2.3983 TRA 1.6023 TC3-4.7107 BAU 1.1537 ST 3288.0 SR 320.9 SS 870.8 RDE .2359 RRA -.1300 RC3 .2020 FAU .02815 CRT .9242 CRS -.8716 CST -.9924 LSA 3412.6 MSA 160.8 SSA 18.1 FOE .9982 FRA 1.0765 FC3-1.3315 BSP 18178 BOE 2.4098 BRA 1.6076 BC3 4.7151 FSP SG1 5647.1 SG2 405.4 THA 179.79 ELI 3301.3 EL2 122.1 ALF -690 LAUNCH DATE DEC 3 1965 FLIGHT TIME 186.00 ARRIVAL DATE JUN 7 1966 **DISTANCE 541.117** RL 147.46 LAL .00 LOL 70.62 VL 26.639 GAL 3.57 AZL 86.65 MCA 266.01 SMA 121.71 ECC .22011 INC 3.3535 VI 30.214
RP 108.87 LAP -3.35 LOP 336.62 VP 36.710 GAP 11.20 AZP 90.23 TAL 167.15 TAP 73.15 RCA 94.92 APO 148.50 VZ 34.808
RC 172.148 GL 20.58 GP 1.68 ZAL 64.29 ZAP 170.41 ETS 9.97 ZAE 128.89 ETE 178.67 ZAC 80.56 ETC 165.84 CLP-170.56 PLANETOCENTRIC CONIC C3 19.583 VHL 4.425 OLA 22.07 RAL 358.95 RAO 6567.8 VEL 11.873 PTH 2.11 VHP 7.336 OPA -7.07 RAP 347.86 ECC 1.3223 CS 19.583 WH 4.425 OLA 22.07 RAL 358.95 RAD 6567.8 VEL 11.875 PH 2.11 VAP 7.536 DA 7.107 RAP 547.86 ECC 1.3225 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 15 46 2978.81 -28.09 94.89 228.03 86.27 4 5 25 2378.8 -28.31 86.23 90.00 21 43 9 4083.97 -3.70 165.50 220.86 61.91 22 51 13 3484.0 -7.43 158.81 100.00 4 52 52 2665.73 -29.83 71.96 228.13 87.99 5 37 18 2065.7 -29.79 63.15 100.00 22 48 45 3872.28 -2.17 149.10 220.02 60.18 23 53 17 3272.3 -6.13 142.54 110.00 6 33 49 2349.88 -34.11 47.95 228.11 92.35 7 12 59 1745.9 -33.41 38.78 110.00 23 24 17 3760.89 1.46 138.39 217.75 55.84 24 26 57 3160.9 -3.03 132.19 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGE 5683.7 SGR 408.4 SG3 194.8 RRT -.0135 RRF -.0313 RTF .9431 SGE 5698.4 R23 .0185 R13 -.9431 SGE 5683.7 SG2 408.3 THA 179.94 ST 3313.4 SR 333.4 SS 859.0 CRT .9201 CRS -.8685 CST -.9930 TOE 2.4878 TRA 1.8315 TC3-4.4314 BAU 1.1611 ROE .2539 RRA -.1311 RC3 .1791 FAU .02610 FOE .9823 FRA 1.1140 FC3-1.1540 BSP 18347 LSA 3435.2 MSA 163.9 SSA 17.6 ELI 3327.6 ELZ 130.0 ALF 51.30 BOE 2.5007 BRA 1.8361 BC3 4.4350 FSP -666 LAUNCH DATE DEC 3 1965 FLIGHT TIME 188.00 ARRIVAL DATE JUN 9 1966 DISTANCE 546.662 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.599 GAL 4.12 ATL 86.63 MCA 269.17 SMA 121.48 ECC .22510 INC 3.3723 V1 30.214
RP 108.85 LAP -3.37 LOP 339.79 VP 36.687 GAP 11.58 AZP 90.05 TAL 165.52 TAP 74.69 RCA 94.13 APO 148.82 VZ 34.814
RC 174.239 GL 19.88 GP 1.62 ZAL 61.75 ZAP 171.29 ETS 10.75 ZAE 128.85 ETE 178.72 ZAC 82.79 ETC 165.98 CLP-171.44 PLANETOCENTRIC CONIC C3 21.054 VHL 4.588 OLA 22.48 RAL 1.67 RAD 6567.9 VEL 11.935 PTH 2.12 VHP 7.567 OPA -6.23 RAP 350.00 ECC 1.3465 LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 21 7 3015.83 -27.90 97.58 232.21 84.94 4 11 22 2415.8 -28.31 88.94 90.00 21 59 31 4081.54 -3.78 165.37 224.82 61.92 23 7 32 3481.5 -7.51 158.67 100.00 4 58 56 2700.41 -29.72 74.53 232.37 86.64 5 43 56 2100.4 -29.87 65.73 100.00 25 4 22 3872.19 -2.18 149.09 223.93 60.18 24 8 54 3272.2 -6.13 142.54 110.00 6 41 7 2380.74 -34.17 50.36 232.48 90.93 7 20 47 1780.7 -33.67 41.15 110.00 23 38 41 3764.65 1.60 138.58 221.57 55.85 24 41 25 3164.6 -2.89 132.38 90.93 7 20 47 55.85 24 41 25 23 38 41 3164.6 110.00 3764.63 1.60 138.58 221.57 -2.89 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5716.7 SGR 410.1 SG3 187.7 ST 3333.5 SR 345.0 SS 848.5 RRT .0235 RRF .0069 RTF .9440 CRT .9160 CRS -.8657 CST -.9935 SGB 5731.4 R23 -.0154 R13 .9440 LSA 3452.9 MSA 167.3 SSA 17.1 SG1 5716.7 SG2 410.0 THA .10 EL1 3348.4 EL2 137.8 ALF 5.42 TOE 2.5813 TRA 2.0785 TC3-4.1354 BAU 1.1648 RDE .2730 RRA -.1309 RC3 .1570 FAU .02403 FOE .9693 FRA 1.1536 FC3 -.9881 BSP 18415 BDF 2.5957 BRA 2.0826 BC3 4.1384 FSP -639

ARRIVAL DATE JUN 11 1966

```
FLIGHT TIME 190:00
LAUNCH DATE DEC 3 1965
                                                                                                                          CISTANCE 552.163
   HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 26.560 GAL 4.70 AZL 86.61 MCA 272.34 SMA 121.24 ECC .23052 INC 3.3911 VI 30.214
RP 108.83 LAP -3.39 LOP 342.97 VP 36.665 GAP 11.98 AZP 89.86 TAL 163.89 TAP 76.23 RCA 93.29 APO 149.19 V2 34.821
RC 176.312 GL 19.17 GP 1.57 ZAL 59.28 ZAP 172.15 ETS 11.70 ZAE 128.83 ETE 178.78 ZAC 85.03 ETC 166.11 CLP-172.31
    PLANFTOCENTRIC CONIC
      C3 22.743 VHL 4.769 DLA 22.84 RAL 4.34 RAD 6567.9 VEL 12.005 PTH Z.14 VHP 7.812 DPA -5.37 RAP 352.14 ECC 1.3743 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 26 54 3051.73 -27.65 100.18 236.41 83.66 4 17 45 2451.7 -28.25 91.56 100.00 22 14 59 4082.94 -3.73 165.44 228.78 61.91 23 23 2 3482.9 -7.46 158.75 100.00 5 5 23 2734.16 -29.56 77.02 236.62 85.34 5 50 57 2134.2 -29.89 68.24 100.00 23 19 10 3875.75 -2.06 149.29 227.85 60.17 24 23 46 3275.7 -6.01 142.73 110.00 6 48 40 2411.06 -34.18 52.73 236.86 89.53 7 28 51 1811.1 -33.87 43.50 110.00 23 52 23 3771.61 1.87 138.95 225.40 55.86 24 55 15 3171.6 -2.63 132.75
                                                                                           4.34 RAD 6567.9 VEL 12.005 PTH 2.14 VHP 7.812 DPA -5.37 RAP 352.14 ECC 1.3743
      C3 22.745 VHL 4.769 DLA 22.84 RAL
                                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                            ST 3337.3 SR 355.7 SS 835.2
CRT .9122 CRS -.8631 CST -.9940
                                                                                                                     SGT 5744.2 SGR 411.3 SG3 180.6
RRT .0596 RRF .0437 RTF .9453
      TOE 2.6702 TRA 2.3356 TC3-3.8428 BAU 1.1692
      RDE .2930 RRA -.1293 RC3 .1359 FAU .02216
FDE .9541 FRA 1.1907 FC3 -.8436 BSP 18572
                                                                                                                                                                                                             LSA 3454.3 MSA 170.9 SSA 16.5
                                                                                                                    SGB 5758.9 R23 -.0130 R13 .9453
                                                                                                                                                                                                             EL1 3353.1 EL2 145.1 ALF 5.56
      BOE 2.6862 BRA 2.3392 BC3 3.8452 FSP -618
                                                                                                                   SG1 5744.2 SG2 410.6 THA .25
                                                                                                                            FLIGHT TIME 192.00
                                                                                                                                                                                                                                ARRIVAL DATE JUN 13 1966
LAUNCH DATE DEC 3 1965
                                                                                                                           DISTANCE 557.615
    HELIOCENTRIC CONIC
      RL 147.46 LAL .00 LOL 70.62 VL 26.521 GAL 5.31 A7L 86.59 HCA 275.51 SMA 121.01 ECC .23643 INC 3.4100 V1 30.214
RP 108.81 LAP -3.39 LOP 346.14 VP 36.644 GAP 12.41 A7P 89.67 TAL 162.28 TAP 77.79 RCA 92.40 APO 149.62 V2 34.828
RC 178.366 GL 18.43 GP 1.52 ZAL 56.88 ZAP 173.01 ETS 12.87 ZAE 128.80 ETE 178.83 ZAC 87.27 ETC 166.22 CLP-173.18
     C3 24.682 VHL 4.968 DLA 23.13 RAL 6.94 RAD 6568.0 VEL 12.085 PTH 2.16 VHP 8.072 DPA -4.49 RAP 354.28 ECC 1.4062 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 33 8 3086.39 -27.37 102.68 240.62 82.43 4 24 34 2486.4 -28.13 94.09 90.00 22 29 29 4088.28 -3.56 165.74 232.74 61.89 23 37 38 3488.3 -7.29 159.05 100.00 5 12 13 2766.91 -29.35 79.44 240.88 84.09 5 58 20 2166.9 -29.86 70.67 100.00 23 33 5 3883.00 -1.81 149.69 231.77 60.16 24 37 48 3283.0 -29.78 110.00 6 56 27 2440.84 -34.14 55.05 241.27 88.15 7 37 8 1840.8 -34.09 110.00 0 9 17 3781.84 2.26 139.48 229.23 85 20 2166.9 -34.09 23 17 100.00 0 9 17 3781.84 2.26 139.48 229.23 85 20 2166.9 -34.09 23 17 100.00 0 9 17 3781.84 2.26 139.48 229.23 85 20 2166.9 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 17 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -34.09 23 1840.8 -3
    PLANETOCENTRIC CONIC
                                                                                                                  HIO-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    SCT 5767.1 SCR 411.8 SC3 173.9
RRT .0959 RRF .0808 RTF .9467
SCB 5781.8 R23 -.0106 R13 .9467
                                                                                                                                                                                                             ST 3332.6 SR 365.3 SS 822.3
CRT .9084 CRS -.8608 CST -.9945
       TOE 2.7600 TRA 2.6084 TC3-3.5478 BAU 1.1713
      RDE .3141 RRA -.1262 RC3 .1162 FAU .D2035
FDE .9403 FRA 1.2285 FC3 -.7137 BSP 18708
                                                                                                                                                                                                            LSA 3447.5 MSA 174.4 SSA 16.0
Fil 3349.1 EL2 152.0 ALF 5.70
                                                                                                                     SG1 5767.2 SG2 409.9 THA .39
       BDE 2.7778 BRA 2.6115 BC3 3.5497 FSP -597
                                                                                                                                                                                                                              ARRIVAL CATE JUN 15 1966
                                                                                                                           FLIGHT TIME 194.00
LAUNCH DATE DEC 3 1965
                                                                                                                           DISTANCE 563.010
    HELIOCENTRIC CONIC
      RL 147.46 LAL ... .0D LOL 70.62 VL 26.482 GAL 5.95 AZL 86.57 HCA 278.68 SMA 120.79 ECC .24287 INC 3.4291 VI 30.214 RP 108.78 LAP -3.39 LOP 349.32 VP 36.623 GAP 12.87 AZP 89.48 TAL 160.68 TAP 79.35 RCA 91.45 APO 150.12 V2 34.836 RC 180.400 GL 17.68 GP 1.47 ZAL 54.55 ZAP 173.86 ETS 14.36 ZAE 128.78 ETE 178.89 ZAC 89.52 ETC 166.31 CLP-174.04
     PLANETOCENTRIC CONIC
      C3 26.906 VHL 5.187 DLA 23.36 RAL 9.47 RAC 6568.1 VEL 12.177 PTH 2.19 VHP 8.351 DPA -3.60 RAP 356,41 ECC 1.4428
      LNCH AZHTH LNCH TIME L-I TIME 'INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                           3 39 50 3119.72
22 42 59 4097.61
5 19 25 2798.61
23 46 4 3893.95
7 4 26 2470.06
0 21 28 3795.27
                                                                                                                                                                                                             2519.7
                                                                                                                                                                                                                                         -27.98
                                                                                                                                                             81.28
                                                                                                                                                                                      4 31 49
                                                                                                                                   244.82
                                                                                                            105.06
                                                                                     -27.05
             90.00
                                                                                                                                                                   61.86 23 51 16

62.89 6 6 4

60.14 24 50 58

66.80 7 45 36

55.92 1 24 44
                                                                                                                                                                                                                    3497.6
                                                                                                                                                                                                                                              -7.00
                                                                                                                                                                                                                                                                      159.58
                                                                                                                                       236.68
                                                                                                              166.27
             90.00
                                                                                      -3.26
                                                                                                                                  235.67
245
                                                                                                                                       245.14
                                                                                                                                                                                                                    2198.6
                                                                                                                                                                                                                                            -29.79
                                                                                                                                                                                                                                                                       73.02
                                                                                                                81.76
                                                                                     -29.11
            100.00
                                                                                                                                                                                                                    3294.0
                                                                                                                                                                                                                                             -5.40
                                                                                                                                                                                                                                                                      123.74
                                                                                                             150.29
                                                                                      -1.44
           100.00
                                                                                                                                                                                                                    1870.1
                                                                                                                                                                                                                                           -34.12
                                                                                                                                                                                                                                                                        48.09
                                                                                    -34.05
                                                                                                                57.33
           110.00
                                                                                                                                       233.04
                                                                                                                                                                                                                    3195.3
                                                                                                                                                                                                                                             -1.72
                                                                                                                                                                                                                                                                       133.98
                                                                                                             140.19
                                                                                     2.77
           110.00
                                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                            ST 3319.3 SR 373.8 SS 809.5
CRT .9047 CRS -.8586 CST -.9950
                                                                                                                    SGT 5785.4 SGR 411.7 SG3 167.5
RRT .1323 RRF .1178 RTF .9483
       TOE 2.8504 TRA 2.8984 TC3-3.2541 BAU 1.1711
       ROE .3360 RRA -.1215 RC3 .0981 FAU .01859
FOE .9273 FRA 1.2673 FC3 -.5982 BSP 18823
                                                                                                                                                                                                             LSA 3432.3 MSA 177.9 SSA 15.4
                                                                                                                     SGB 5800.1 R23 -.0084 R13 .9483
                                                                                                                     SG1 5785.7 SG2 408.1 THA
                                                                                                                                                                                                             EL1 3336.5 EL2 158.4 ALF 5.83
                                                                                                                                                                                  .54
       BOE 2.8701 BRA 2.9009 BC3 3.2556 FSP -576
                                                                                                                                                                                                                                ARRIVAL DATE JUN 17 1966
                                                                                                                           FLIGHT TIME 196.00
LAUNCH DATE DEC 3 1965
                                                                                                                           DISTANCE 568.342
     HELIOCENTRIC CONIC
      RL 147.46 LAL ... .00 LOL 70.62 VL 26.444 CAL 6.64 A7L 86.55 HCA 281.85 SMA 120.57 ECC .24989 INC 3.4485 V1 30.214 RP 108.76 LAP -3.37 LOP 352.49 VP 36.604 CAP 13.36 A7P 89.29 TAL 159.09 TAP 80.94 RCA 90.44 APO 150.69 V2 34.845 RC 182.414 GL 16.92 GP 1.43 7AL 52.31 ZAP 174.70 ETS 16.32 ZAE 128.75 ETE 178.94 ZAC 91.77 ETC 166.38 CLP-174.90
      C3 29.460 VHL 5.428 DLA 23.54 RAL 11.92 RAD 6568.2 VEL 12.281 PTH 2.21 VHP 8.650 DPA -2.70 RAP 358.54 ECC 1.4848 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 46 57 3151.65 -26.70 107.33 249.01 80.19 4 39 29 2551.6 -27.78 98.83 90.00 22 55 24 4110.93 -2.83 167.01 240.59 61.81 24 3 55 3510.9 -6.58 160.33 100.00 5 26 57 2829.24 -28.83 84.00 249.40 81.74 6 14 6 2229.2 -29.67 75.29 100.00 0 2 1 3908.56 -.95 151.09 239.54 60.12 1 7 10 3308.6 -4.91 144.55 110.00 7 12 35 2498.74 -33.92 59.56 250.06 85.49 7 54 14 1898.7 -34.17 50.33 110.00 0 32 52 3811.83 3.40 141.05 236.83 55.97 1 36 24 3211.8 -1.09 134.85
     PLANETOCENTRIC CONIC
                                                                                                                151.09 239.54 60.12 1 7 10
59.56 250.06 85.49 7 54 14
141.05 236.83 55.97 1 36 24
MIO-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                            ST 3302.7 SR 380.9 SS 798.6
CRT .9011 CRS -.8568 CST -.9955
                                                                                                                     SGT 5801.1 SGR 411.0 SG3 161.5
RRT .1695 RRF .1557 RTF .9500
       TDE 2.9457 TRA 3.2095 TC3-2.9603 BAU 1.1664
                                                                                                                 SCT 5801.1 SGR 411.0 903 10...

RRT 1695 RRF .1557 RTF .9500 CRT .9011 CRS -.8568 C5T -.9905
SGB 5815.7 R23 -.0061 R13 .9500 LSA 3414.3 MSA 181.1 555 14.9
CCC 4801 6 SG2 405.0 THA .69 EL1 3320.5 EL2 164.3 ALF 5.95
       RDE .3589 RRA -.1150 RC3 .0815 FAU .01683
FDE .9171 FRA 1.3085 FC3 -.4946 BSP 18841
       BOE 2.9675 BRA 3.2116 BC3 2.9614 FSP -552
```

ARRIVAL DATE JUN 19 1966 FLIGHT TIME 198.00 LAUNCH DATE DEC 3 1965 HELIOCENTRIC CONIC **DISTANCE 573.598** RL 147.46 LAL .00 LOL 70.62 VL 26.406 GAL 7.36 A7L 86.53 MCA 285.02 SMA 120.35 ECC .25757 INC 3.4684 VI 30.214
RP 108.73 LAP -3.35 LOP 355.67 VP 36.585 GAP 13.88 A7P 89.10 TAL 157.52 TAP 82.54 RCA 89.35 APO 151.35 VZ 34.854
RC 184.407 GL 16.16 GP 1.40 ZAL 50.16 ZAP 175.54 ETS 19.00 ZAE 128.72 ETE 179.00 ZAC 94.01 ETC 166.43 CLP-175.76 PLANETOCENTRIC CONTC C3 32.398 VHL 5.692 DLA 23.66 RAL 14.28 RAD 6568.3 VEL 12:400 PTH 2.24 VHP 8.971 DPA -1.79 RAP .66 ECC 1.5332 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 54 30 3182.14 23 6 43 4128.18 253.19 79.17 4 47 33 2582.1 -27.55 101.04 -26.33 109.49 90.00 61.77 24 15 31 3528.2 -6.04 161.31 167.97 244.47 90.00 -2.28 5 34 48 2858.79 D 13 3 3926.76 253.63 80.65 6 22 27 2258.8 -29.52 77.48 86.14 -28.52 100.00 60.11 1 18 29 3326.8 145.56 243.38 100.00 -.33 152.09 8 3 0 -33.75 254.44 84.21 1926.9 -34.18 52.52 110.00 7 20 53 2526.89 0 43 27 3831.43 61.74 1 47 18 240.59 56.04 3231.4 -.34 142.08 110.00 4.15 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5810.1 SGR 409.6 SG3 155.6 RRT .2060 RRF .1927 RTF .9520 SGB 5824.5 R23 -.0044 R13 .9520 SGI 5810.7 SG2 400.8 THA .84 ST 3273.9 SR 386.7 SS 786.6 CRT .8976 CRS -.8550 CST -.9959 TOE 3.0379 TRA 3.5356 TC3-2.6798 BAU 1.1611 ROE .3825 RRA -.1067 RC3 .0667 FAU .01522 FOE .9061 FRA 1.3491 FC3 -.4068 BSP 18949 BOE 3.0619 BRA 3.5372 BC3 2.6807 FSP -534 LSA 3384.2 #3A 184.1 SSA 14.4 EL1 3292.3 EL2 169.5 ALF 6.07 ARRIVAL DATE JUN 21 1966 FLIGHT TIME 200.00 LAUNCH DATE DEC 3 1965 DISTANCE 578.766 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.369 GAL 8.14 AZL 86.51 MCA 288.20 SMA 120.13 ECC .26599 INC 3.4890 V1 30.214
RP 108.70 LAP -3.31 LOP 358.85 VP 36.567 GAP 14.45 AZP 88.91 TAL 155.98 TAP 84.17 RCA 88.18 APO 152.09 V2 34.863
RC 186.379 GL 15.40 GP 1.36 ZAL 48.09 ZAP 176.37 ETS 22.93 ZAE 128.68 ETE 179.05 ZAC 96.25 ETC 166.45 CLP-176.63 PLANETOCENTRIC CONIC 2.27 VHP 9.318 CPA C3 35.782 VHL 5.982 DLA 23.74 RAL 16.56 RAD 6568.4 VEL 12.536 PTH C3 35.782 VHL 5.982 DLA 23.74 RAL 16.56 RAD 6568.4 VEL 12.536 PTH 2.27 VMP 9.318 DPA -.87 RAP 2.78 ECC 1.5889 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 2 27 3211.21 -25.94 111.53 257.34 78.22 4 55.58 2611.2 -27.30 103.13 90.00 23 16 56 4149.25 -1.60 169.15 248.29 61.72 24 26 5 3549.3 -5.37 162.50 100.00 5 42 55 2887.28 -28.19 88.19 257.83 79.62 6 31 2 2287.3 -29.33 79.57 100.00 0 23 5 3948.42 .41 153.28 247.18 60.11 1 28 53 3348.4 -3.57 146.75 110.00 7 29 16 2554.52 -33.54 63.87 258.79 82.97 8 11 51 1954.5 -34.15 54.68 110.00 0 53 13 3853.94 5.00 143.26 244.32 56.14 1 57 26 3253.9 .52 137.04 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ... SGT 5814.9 SGR 407.7 SG3 150.0 RRT .2427 RRF .2298 RTF .9542 ST 3239.9 SR 391.0 SS 775.8 TOE 3.1327 TRA 3.8830 TC3-2.4081 BAU 1.1523 ROE .4069 RRA -.0963 RC3 .0536 FAU .01367 FOE .8967 FRA 1.3916 FC3 -.3307 BSP 19040 CRT .8941 CRS -.8535 CST -.9963 SGB 5829.1 R23 -.0030 R13 .9542 SG1 5815.7 SG2 395.4 THA .98 LSA 3349.1 MSA 186.7 SSA 13.8 BOE 3.1590 BRA 3.8842 BC3 2.4087 FSP -516 EL1 3258.7 ELZ 174.1 ALF ARRIVAL DATE JUN 23 1966 FLIGHT TIME 202.00 LAUNCH DATE DEC 3 1965 DISTANCE 583.831 HELIOCENTRIC CONIC RELIGUENINIC CONIC

RL 147.46 LAL .00 LOL 70.62 VL 26.332 GAL 8.97 AZL 86.49 MCA 291.37 SMA 119.92 ECC .27522 INC 3.5103 VL 30.214

RP 108.67 LAP -3.27 LOP 2.03 VP 36.550 GAP 15.06 AZP 88.72 TAL 154.46 TAP 85.84 RCA 86.92 APO 152.93 V2 34.873

RC 188.330 GL 14.64 GP 1.33 ZAL 46.11 ZAP 177.18 ETS 29.17 ZAE 128.63 ETE 179.10 ZAC 98.49 ETC 166.46 CLP-177.51 PLANETOCENTRIC CONIC C3 39.692 VHL 6.300 OLA 23.77 RAL 18.74 RAD 6568.5 VEL 12.691 PTH 2.31 VMP 9.695 DPA .05 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMII.

77.33 5 4 42
61.69 24 35 37
78.65 6 39 50
60.13 1 38 21
7 20 45 4 10 44 3238.87 23 26 3 4173.99 5 51 16 2914.72 0 32 8 3973.37 7 37 43 2581.65 1 2 9 3879.20 261.46 2638.9 -27.03 105.11 -25.54 113.46 90.00 170.53 252.06 3574.0 -4.58 163.89 - .80 90.00 2314.7 -29.12 81.59 -27.84 262.01 -90.15 100.00 3373.4 -2.73 148.12 250.92 1.25 154.65 100.00 8 20 45 -34.07 263.10 81.76 1981.7 56.80 65.95 110.00 -33.29 56.28 2 6 49 3279.2 1.49 138.36 144.59 248.00 110.00 5.96 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5815.3 SCR 405.2 SC3 144.6 RRT .2796 RRF .2670 RTF .9565 SCB 5829.4 R23 -.0017 R13 .9565 SCI 5816.4 SC2 388.9 THA 1.12 ST 3201.1 SR 393.7 55 766.3 CRT .8908 CRS -.8521 CST -.9967 TOE 3.2307 TRA 4.2534 TC3-2.1474 BAU 1.1397 ROE .4321 RRA -.0837 RC3 .0422 FAU .01215 FOE .8889 FRA 1.4364 FC3 -.2650 BSP 19112 BOE 3.2594 BRA 4.2542 BC3 2.1478 FSP -498 LSA 3309.6 MSA 188.8 SSA 13.3 EL1 3220.3 EL2 177.9 ALF 6.27 ARRIVAL DATE JUN 25 1966 FLIGHT TIME 204.00 LAUNCH DATE DEC 3 1965 DISTANCE 588.776 HELIOCENTRIC CONIC RL 147.46 LAL .00 LOL 70.62 VL 26.296 GAL 9.86 AZL 86.47 MCA 294.55 SMA 119.72 ECC .28539 INC 3.5325 V1 30.214
RP 108.63 LAP -3.21 LOP 5.21 VP 36.534 GAP 15.73 AZP 88.53 TAL 152.99 TAP 87.54 RCA 85.55 APO 153.88 V2 34.884
RC 190.259 GL 13.89 GP 1.30 ZAL 44.23 ZAP 177.94 ETS 40.34 ZAE 128.57 ETE 179.15 ZAC 100.70 ETC 166.44 CLP-178.40 PLANETOCENTRIC CONIC C3 44.221 VHL 6.650 OLA 23.75 RAL 20.82 RAD 6568.7 VEL 12.868 PTH 2.34 VHP 10.104 DPA .97 RAP 6.98 ECC 1.7278 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -26.74 76.51 5 13 43 2665.2 106.98 90.00 4 19 18 3265.16 -25.13 115.27 265.54 255.76 61.68 24 44 7 3602.2 -3.68 165,47 90.00 23 34 5 4202.19 . 11 172.10 5 59 48 2941.16 0 40 12 4001.43 -27.47 77.72 6 48 49 2341.2 -28.88 83.52 100.00 92.03 266.13 1 46 54 8 29 40 60.18 3401.4 -1.78 149.67 100.00 2.20 156.19 254.60 7 46 11 2608.29 1 10 18 3907.06 80.59 2008.3 -33.96 58.87 110.00 -33.01 67.98 267.36 3307.1 146.06 251.63 56.46 2 15 25 2.55 139.81 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 3162.6 SR 395.0 S5 759.5 CRT .8877 CRS -.8512 CST -.9971 SGT 5814.3 SGR 402.2 SG3 139.6 RRT .3173 RRF .3051 RTF .9590 TOE 3.3374 TRA 4.6539 TC3-1.8941 BAU 1.1199 ROE .4579 RRA -.0687 RC3 .0327 FAU .01060 FOE .8845 FRA 1.4856 FC3 -.2075 BSP 19064 SGB 5828.2 R23 -.0006 R13 .9590 SGI 5815.7 SG2 381.3 THA 1.26 LSA 3270.8 MSA 190.2 SSA 12.8 EL1 3182.0 EL2 180.8 ALF 6.35 BDE 3.3687 BRA 4.6544 BC3 1.8944 FSP -477

ARRIVAL DATE JUN 27 1966

```
DISTANCE 593.575
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 26.260 GAL 10.82 ATL 86.44 HCA 297.73 SMA 119.52 ECC .29660 INC 3.5560 V1 30.214
RP 108.60 LAP -3.15 LOP 8.40 VP 36.519 GAP 16.46 ATP 88.34 TAL 151.56 TAP 89.29 RCA 84.07 APO 154.96 V2 34.895
RC 192.167 GL 13.15 GP 1.28 ZAL 42.44 ZAP 178.55 ETS 62.85 ZAE 128.48 ETE 179.20 ZAC 102.91 ETC 166.40 CLP-179.31
  PLANETOCENTRIC CONIC
                                                                                                                            1.89 RAP
                                                                                                                                          9.06 ECC 1.8144
   C3 49.487 VHL 7.035 DLA 23.69 RAL 22.80 RAO 6568.8 VEL 13.071 PTH 2.39 VHP 10.552 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -26.45
                 4 28 7 3290.12
23 41 3 4233.64
                                                                                                        5 22 58
                                                                                                                        2690.1
                                                 -24.73
                                                              116.99
                                                                           269.57
                                                                                            75.74
       90.00
                                                                                                                                                     167.23
                                                                                             61.70 24 51 37
                                                                                                                         3633.6
                                                                                                                                        -2.67
                                                                            259.40
                                                  1.12
                                                              173.86
       90.00
                    6 8 28 2966.59
0 47 19 4032.40
                                                                                                       6 57 55
                                                                                                                        2366.6
                                                                                                                                       -28.63
                                                                                                                                                      85.36
                                                 -27.09
                                                                93.83
                                                                            270.21
                                                                                             76.85
      100.00
                                                                                             60.27 1 54 32
79.46 8 38 33
                                                                                                                                        -.73
                                                                                                                                                     151.37
                                                                            258.22
                                                                                                                        3432.4
                                                  3.25
                                                              157.89
      100.00
                                                                                                                                                      60.90
                   7 54 39 2634.41
1 17 38 3937.34
                                                                                                                        2034.4
                                                                                                                                       -33.81
                                                                            271.57
                                                -32.71
                                                                69.96
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       3337.3
                                                                                                                                         3.71
                                                                                                                                                     141.40
                                                              147.67
                                                8.14
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 5805.9 SCR 398.6 SC3 134.7
RRT .3544 RRF .3423 RTF .9617
SCB 5819.6 R23 .0001 R13 .9617
SCI 5807.6 SC2 372.6 THA 1.40
                                                                                                                    ST 3115.9 SR 394.7 SS 752.9
CRT .8846 CRS -.8504 CST -.9975
   TOE 3.4440 TRA 5.0770 TC3-1.6593 BAU 1.0979
   ROE .4843 RRA -.0512 RC3 .0246 FAU .00916
FDE .8803 FRA 1.5362 FC3 -.1603 BSP 19143
                                                                                                                    LSA 3224.1 MSA 191.0 SSA 12.3
                                                                                                                     EL1 3135.4 EL2 182.9 ALF 6.42
   BOE 3.4779 BRA 5.0773 BC3 1.6595 FSP -462
                                                                                                                               ARRIVAL DATE JUN 29 1966
                                                                      FLIGHT TIME 208.00
LAUNCH DATE DEC 3 1965
                                                                     DISTANCE 598.200
  HELIOCENTRIC CONIC
   RL 147.46 LAL .00 LOL 70.62 VL 26.825 GAL 11.86 AZL 86.42 MCA 300.91 SMA 119.32 ECC .30901 INC 3.5808 VI 30.214
RP 108.57 LAP -3.07 LOP 11.59 VP 36.505 GAP 17.26 AZP 88.16 TAL 150.18 TAP 91.09 RCA 82.45 APO 156.19 V2 34.906
RC 194.054 GL 12.41 GP 1.25 ZAL 40.75 ZAP 178.72 ETS 102.17 ZAE 128.37 ETE 179.25 ZAC 105.09 ETC 166.33 CLP 179.76
  PLANETOCENTRIC CONIC
   C3 55.636 VML 7.459 OLA 23.59 RAL 24.67 RAD 6569.0 VEL 13.304 PTH 2.43 VMP 11.044 OPA 2.80 RAP 11.12 ECC 1.9156
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 37 8 3313.77 -24.32 118.60 273.54 75.03 5 32 21 2713.8 -26.14 110.41
                                                                                                       24 58 7
7 7 5
2 1 16
                                                                                                                         3668.1
                                                                                                                                         -1.56
                                                                                              61.76
                                4268.07
                                                   2.23
                                                               175.78
                                                                             262.95
       90.00
                  23 46 59
                  6 17 14 2991.01
0 53 30 4066.06
8 3 2 2659.99
1 24 11 3969.85
                                                                                              76.03
                                                                                                                         2391.0
                                                                                                                                       -28.36
                                                 -26.70
                                                               95.54
                                                                             274.22
                                                                                                                         3466.1
                                                                                              60.40
                                                  4.39
                                                              159.74
                                                                            261.76
      100.00
                                                                                                       8 47 22
2 30 21
                                                                                                                         2060.0
                                                                                                                                       -33.63
                                                                                              78.37
                                                -32.37
                                                                71.88
                                                                             275.70
                                                                                                                                          4.94
                                                                                                                         3369.9
                                                                                              56.97
                                                  9.36
                                                               149.41
                                                                             258.72
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5793.2 SGR 394.5 SG3 130.0
RRT .3916 RRF .3797 RTF .9647
SGB 5806.6 R23 .0005 R13 .9647
SG1 5796.2 SG2 362 0 TM4
                                                                                                                     ST 3067.3 SR 392.8 SS 748.4
    TOE 3.5579 TRA 5.5315 TC3-1.4371 BAU 1.0690
                                                                                                                     CRT .8818 CRS -.8498 CST -.9978
   ROE .5113 RRA - .0310 RC3 .0181 FAU .00774
FOE .8783 FRA 1.5908 FC3 - .1205 BSP 19180
BDE 3.5945 BRA 5.5315 BC3 1.4372 FSP - 446
                                                                                                                     LSA 3175.8 MSA 191.1 SSA 11.8
                                                                  SG1 5795.2 SG2 362.9 THA 1.53
                                                                                                                     EL1 3086.8 EL2 184.1 ALF
                                                                                                                               ARRIVAL DATE JUL 1 1966
                                                                      FLIGHT TIME 210.00
LAUNCH DATE DEC 3 1965
                                                                     DISTANCE 602.614
  HELIOCENTRIC CONIC
   RC 195.918 CL 11.69 GP 1.23 TAL 39.16 TAP 178.28 ETS 135.74 TAE 128.24 ETE 179.30 TAC 107.24 ETC 166.24 CLP 178.80
   PLANETOCENTRIC CONIC
    C3 62.852 VHL 7.928 DLA 23.45 RAL 26.43 RAD 6569.2 VEL 13.572 PTH 2.48 VHP 11.586 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    4 46 16 3336.13
23 51 55 4305.22
6 26 2 3014.41
0 58 45 4102.17
                                                                          277.44
                                                                                             74.37
                                                                                                         5 41 52
                                                                                                                        2736.1
                                                -23.92
                                                              120.12
                                                                                             61.87 25 3 40
                                                                                                                         3705.2
                                                                                                                                                     171.22
                                                                            266.42
                  23 51 55
                                                  3.43
                                                              177.85
                                                                                             .75.26 7 10 ...
40.59 2 7 7
                                                                                                                                       -28.07
                                                                                                                                                      88.81
                                                                                                                        2414.4
                                                                            278.15
                   6 26 2
                                                -26.30
                                                               97.16
                                                                                                                         3502.2
                                                                                                                                        1.64
                                                                                                                                                     155.19
                    0 58 45
                                                  5.60
                                                              161.74
                                                                            265.22
                                                                                                     8 56 6
                                                                                                                                                     64.79
                                                                                                                        2084.9
                   8 11 21 2684.94
1 29 56 4004.40
                                                                                             77.32
                                                -32.01
                                                               73.73
                                                                            279.74
                                                                                                        2 36 40
                                                                                                                                                     144.92
                                                                            262.16
                                                                                             57.32
                                                                                                                         3404.4
                                                                                                                                         6.25
                                                10.63
                                                              151.27
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  RET 1-4289 RRF .4173 RTF .9677
SGB 5789.8 R23 .0008 R13 .9677
SG1 5779.1 SG2 352.2 THA 1.66
                                                                                                                    ST 3016.8 SR 389.4 SS 746.2
CRT .8793 CRS -.8497 CST -.9981
    TOE 3.6798 TRA 6.0218 TC3-1.2287 BAU 1.0325
   ROE .5388 RRA -.0078 RC3 .0130 FAU .00631
FOE .8790 FRA 1.6504 FC3 -.0870 BSP 19203
BOE 3.7190 BRA 6.0218 BC3 1.2287 FSP -431
                                                                                                                    LSA 3126.2 MSA 190.4 SSA 11.3
                                                                                                                     EL1 3036.3 EL2 184.3 ALF
                                                                                                                                                         6.50
                                                                      FLIGHT TIME 212.00
                                                                                                                               ARRIVAL DATE JUL 3 1966
LAUNCH DATE DEC 3 1965
                                                                      DISTANCE 606.771
  HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 26.158 GAL 14.22 AZL 86.36 HCA 307.28 SMA 118.94 ECC .33811 INC 3.6361 V1 30.214
RP 108.49 LAP -2.89 LOP 17.96 VP 36.480 GAP 19.13 AZP 87.80 TAL 147.64 TAP 94.92 RCA 78.73 APO 159.16 V2 34.930
RC 197.761 GL 10.97 GP 1.21 ZAL 37.68 ZAP 177.50 ETS 152.75 ZAE 128.06 ETE 179.35 ZAC 109.36 ETC 166.12 CLP 177.81
   PLANETOCENTRIC CONIC
        71.366 VHL 8.448 DLA 23.27 RAL 28.08 RAD 6569.4 VEL 13.882 PTH
                                                                                               2.53 VHP 12.187 DPA
                                                                                                                            4.58 RAP 15.17 ECC 2.1745
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -25.53
                                                                                                                      2757.2
                                                                                             73.77
                                                                                                        5 51 25
                                                                                                                                                     113.44
                                                              121.53
                                                                            281.25
       90.00
                   4 55 28 3357.15
                                                 -23.53
                  23 55 51 4344.82
6 34 51 3036.71
1 3 5 4140 49
8 19 32 2709.18
1 34 52 4040.79
                                                                                                                         3744.8
                                                                                                                                         .92
                                                                                                                                                     173.43
                                                                             269.79
                                                                                              62.04
                                                               180.07
                                                  4.70
        90.00
                                                                                                        7 25 28
                                                                                                                         2436.7
                                                                                                                                       -27.78
                                                                                                                                                       90.40
                                                                98.70
                                                                             281.99
                                                                                              74.54
                                                 -25.91
                                                                                                                         3540.5
                                                                                                                                         2.93
                                                                                                                                                      157.30
                                                               163.87
                                                                             268.60
                                                                                              60.84
                                                                                                        2 12 5
                                                  6.87
                                                                75.52
                                                                                              76.32
                                                                                                        9 4 41
                                                                                                                         2109.2
                                                                                                                                       -33.19
                                                                                                                                                      66.64
                                                                             283.69
                                                 -31.64
                                                               153.25
                                                                             265.53
                                                                                                        2 42 13
                                                                                                                         3440.8
                                                                                                                                         7.62
                                               11.96
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 3.8129 TRA 6.5521 TC3-1.0336 BAU .9862
                                                                  SGT 5756.4 SGR 385.1 SG3 121.4
RRT .4663 RRF .4549 RTF .9708
                                                                                                                    ST 2965.8 SR 384.6 SS 746.8
CRT .8771 CRS -.8500 CST -.9984
                                                                                                               CRT .8771 LNJ
LSA 3076.7 M5A 188.7 SSA 10.0
EL1 2985.0 EL2 183.5 ALF 6.51
    ROE .5670 RRA .0186 RC3 .0092 FAU .00485
FOE .8829 FRA 1.7160 FC3 -.0588 BSP 19205
                                                                  SGB 5769.3 R23 .0008 R13 .9708
                                                                  SG1 5759.2 SG2 340.5 THA 1.79
    BDE 3.8549 BRA 6.5522 BC3 1.0337 FSP -416
```

FLIGHT TIME 206.00

ARRIVAL DATE JUL 5 1966

LAUNCH DATE DEC 3 1965

```
DISTANCE 610.612
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 26.126 GAL 15.57 AZL 86.33 HCA 310.47 SMA 118.76 ECC .35524 INC 3.6673 V1 30.214
RP 108.45 LAP -2.79 LOP 21.15 VP 36.468 GAP 20.23 AZP 87.62 TAL 146.50 TAP 96.97 RCA 76.57 APO 160.95 V2 34.942
RC 199.580 GL 10.27 GP 1.19 ZAL 36.31 ZAP 176.56 ETS 161.53 ZAE 127.84 ETE 179.40 ZAC 111.44 ETC 165.98 CLP 176.77
   PLANETOCENTRIC CONIC
                                                                                                                                5.44 RAP 17.15 ECC 2.3409
    C3 81.477 VHL 9.026 DLA 23.05 RAL 29.60 RAD 6569.6 VEL 14.242 PTH 2.59 VHP 12.856 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 4 41 3376.77

0 2 43 4386.60

6 43 36 3057.81

1 6 29 4180.79

8 27 34 2732.55

1 39 0 4078.82
                                                                                                           6, 0 57
                                                                                                                            2776.8
                                                                                                                                          -25.23
        90.00
                                                  -23.15
                                                                 122.85
                                                                              284.95
                                                                                               73.22
                                                                                                                            3786.6
                                                                                                                                                          175.76
                                                                               273.05
                                                                                                                                             2.27
        90.00
                                                    6.03
                                                                 182.43
                                                                                                 52.28
                                                                                                            1 15 50
                                                                                                                                                           91.90
                                                                                                                            2457.8
                                                                                                                                           -27.48
       100.00
                                                   -25.52
                                                                 100.15
                                                                               285.72
                                                                                                 73.88
                                                                                                            7 34 34
       100.00
                                                                                                61.15
                                                                                                           2 16 10
                                                                                                                            3580.8
                                                                                                                                             4.29
                                                                                                                                                         159.52
                                                   8.20
                                                                 166.12
                                                                               271.87
                                                                                                            9 13 7
                                                                                                                            2132.5
                                                                                                                                           -32.94
                                                                                                                                                          68.42
       110.00
                                                 -31.25
                                                                  77.24
                                                                               287.51
                                                                                                75.38
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                              9.04
                                                                                                                                                          148.88
                                                 13.33
                                                                                                                            3478.8
      110.00
                                                                 155.34
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5734.0 SGR 379.9 SG3 117.4
RRT .5039 RRF .4929 RTF .9739
     TDE 3.9616 TRA 7.1304 TC3 -.8513 BAU .9273
                                                                                                                        5T 2916.0 SR 378.3 SS 750.8 CRT .8755 CR5 -.8508 CST -.9987
    RDE .5958 RRA .D486 RC3 .D066 FAU .D0329
FDE .8908 FRA 1.7893 FC3 -.D350 BSP 19122
                                                                    SGB 5746.6 R23 .0006 R13 .9739
SG1 5737.2 SG2 328.0 THA 1.92
                                                                                                                        LSA 3029.0 MSA 186.1 SSA
EL1 2934.8 EL2 181.7 ALF
                                                                                                                                                             10.3
    BDE 4.0061 BRA 7.1305 BC3 .8513 FSP -401
                                                                                                                                                              6.51
                                                                                                                                   ARRIVAL DATE JUL 7 1966
LAUNCH DATE DEC 3 1965
                                                                        FLIGHT TIME 216.00
   HELIOCENTRIC CONIC
                                                                        DISTANCE 614.057
    RL 147.46 LAL .00 LOL 70.62 VL 26.095 GAL 17.06 AZL 86.30 MCA 313.66 SMA 118.59 ECC .37446 INC 3.7017 V1 30.214

RP 108.41 LAP -2.68 LOP 24.35 VP 36.458 GAP 21.46 AZP 87.44 TAL 145.48 TAP 99.14 RCA 74.18 APO 163.00 V2 34.955

RC 201.376 GL 9.58 GP 1.17 ZAL 35.06 ZAP 175.53 ETS 166.70 ZAE 127.57 ETE 179.45 ZAC 113.46 ETC 165.81 CLP 175.68
   PLANETOCENTRIC CONIC
    C3 93.569 VHL 9.673 DLA 22.79 RAL 31.00 RAD 6569.8 VEL 14.660 PTH 2.66 VHP 13.607 DPA 6.28 RAP 19.08 ECC 2.5399 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
        90.00
                     5 13 51 3394.84
0 4 40 4430.32
                                                   -22.79
                                                                 124.05
                                                                              288.53
                                                                                                72.72
                                                                                                            6 10 26
                                                                                                                            2794.8
                                                                                                                                           -24.94
                                                                                                                                                         116.04
                                                                                                                             3830.3
                                                                                                                                              3.67
                                                                                                                                                          178.21
                                                                 184.90
                                                                               276.20
                                                                                                 62.59
                                                                                                            1 18 31
        90.00
                    0 4 40
                                                    7.40
                   6 52 16 3077.54
1 8 57 4222.85
8 35 24 2754.87
1 42 18 4118.29
                                                                                                                                                           93.29
       100.00
                                                   -25.14
                                                                 101.49
                                                                               284.32
                                                                                                 73.27
                                                                                                            7 43 33
                                                                                                                             2477.5
                                                                                                                                            -27.19
                                                                                                          7 43 33
2 19 20
                                                                                                                             3622.9
                                                                                                                                                          161.84
                                                                 168.49
                                                                               275.03
                                                                                                                                             5.70
       100.00
                                                    9.58
                                                                                                 61.55
                                                                                                            9 21 19
                                                                                                                             2154.9
                                                                                                                                                           70.11
       110.00
                                                   -30.85
                                                                  78.85
                                                                               291.18
                                                                                                 74.50
                                                                                                                                           -32.67
                                                   14.74
                                                                                                 58.80
                                                                                                            2 50 56
                                                                                                                             3518.3
                                                                                                                                            10.50
                                                                                                                                                          151.00
       110.00
                                                                 157.54
                                                                               272.01
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5704.9 SGR 374.3 SG3 113.6
RRT .5409 RRF .5303 RTF .9771
SG8 5717.2 R23 .0002 R13 .9771
                                                                                                                       ST 2863.D SR 370.7 SS 757.3
CRT .8743 CRS -.8520 CST -.9989
    TOE 4.1219 TRA 7.7557 TC3 -.6849 BAU .8568
    ROE .6253 RRA .0823 RC3 .0050 FAU .00170
FOE .9014 FRA 1.8698 FC3 -.0158 BSP 19122
                                                                                                                        LSA 2979.0 MSA 182.7 SSA
                                                                                                                                                             9.8
    BOE 4.1690 BRA 7.7562 BC3 .6850 FSP -388
                                                                     SG1 5708.5 SG2 314.6 THA 2.04
                                                                                                                        EL1 2881.4 EL2 178.8 ALF
                                                                                                                                                              6.48
                                                                                                                                   ARRIVAL DATE JUL 9 1966
                                                                        FLIGHT TIME 218.00
LAUNCH DATE DEC 3 1965
                                                                        DISTANCE 617.009
   HELIOCENTRIC CONIC
    RL 147.46 LAL .00 LOL 70.62 VL 26.065 GAL 18.72 AZL 86.26 HCA 316.86 SMA 118.43 ECC .39610 INC 3.7400 V1 30.214
RP 108.37 LAP -2.56 LOP 27.54 VP 36.449 GAP 22.85 AZP 87.27 TAL 144.60 TAP 101.46 RCA 71.52 APO 165.34 V2 34.968
RC 203.147 GL 8.91 GP 1.16 ZAL 33.94 ZAP 174.40 ETS 170.08 ZAE 127.23 ETE 179.50 ZAC 115.42 ETC 165.61 CLP 174.52
   PLANETOCENTRIC CONIC
    C3 108.146 VHL 10.399 OLA 22.49 RAL 32.25 RAD 6570.1 VEL 15.149 PTH 2.72 VHP 14.453 OPA
                                                                                                                                7.09 RAP 20.96 ECC 2.7798
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 5 22 57 3411.17

0 5 36 4475.73

7 0 48 3095.68

1 10 26 4266.46
                                                                             291.96
                                                                                                72.28
                                                                                                            6 19 48
                                                                                                                            2811.2
                                                                                                                                         -24.67
        90.00
                                                   -22.45
                                                                 125.13
                                                                                                          1 20.12
                                                                                                                            3875.7
                                                                                                                                             5.12
        90.00
                                                    8.82
                                                                 187.49
                                                                               279.21
                                                                                                62.98
                                                                                                                            2495.7
                                                                                                                                           -26.91
                                                                                                                                                           94.57
                                                                                                           7 52 23
       100.00
                                                   -24.7B
                                                                 102.72
                                                                               292.76
                                                                                                72.72
                                                                                                          2 21 33
                                                                                                                            3666.5
                                                                                                                                             7.15
       100.00
                                                   10.98
                                                                 170.97
                                                                               27Á.06
                                                                                                62.02
                                                                                                          9 29 16
2 54 2
                                                                                                                            2175.9
                                                                                                                                                           71.68
       110.00
                   8 43 0 2775.89
1 44 43 4159.00
                                                                                                73.68
                                                                                                                                           -32.39
                                                 -30.46
                                                                  80.37
                                                                               294.69
                                                                               275.08
                                                                                                59.46
                                                                                                                            3559.D
                                                                                                                                           11.99
       110.00
                                                   16.16
                                                                 159.84
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5672.0 SCR 368.4 SC3 110.0
RRT .5776 RRF .5675 RTF .9802
SCB 5684.0 R23 -.0002 R13 .9802
                                                                                                                        ST 2810.2 SR 361.8 SS 767.8
CRT .8737 CRS -.8538 CST -.9991
    TOE 4.3014 TRA 8.4402 TC3 -.5318 BAU .7688
    ROE .6556 RRA .1202 RC3 .0043 FAU-.00004
FOE .9167 FRA 1.9602 FC3 .0003 BSP 19094
                                                                                                                        LSA 2930.2 MSA 178.2 SSA
                                                                     SG1 5676.0 SG2 300.5 THA 2.15
                                                                                                                        EL1 2828.0 EL2 174.9 ALF
    BOE 4.3511 BRA 8.4410 BC3 .5318 FSP -375
                                                                                                                                   ARRIVAL DATE JUL 11 1966
LAUNCH DATE DEC 3 1965
                                                                         FLIGHT TIME 220,00
                                                                        01STANCE 619.332
   HELTOCENTRIC CONIC
                        .00 LOL 70.62 VL 26.037 GAL 20.58 AZL 86.22 HCA 320.05 SMA 118.27 ECC .42057 INC 3.7832 V1 30.214
-2.43 LOP 30.74 VP 36.442 GAP 24.43 AZP 87.10 TAL 143.89 TAP 103.95 RCA 68.53 APO 168.02 V2 34.981
8.24 GP 1.14 ZAL 32.97 ZAP 173.19 ETS 172.47 ZAE 126.80 ETE 179.56 ZAC 117.30 ETC 165.40 CLP 173.29
    RL 147.46 LAL
    RP 108.33 LAP
    RC 204.893 GL
   PLANETOCENTRIC CONIC
                                                                                                   2.79 VHP 15.413 DPA
    C3 125.871 VHL 11.219 OLA 22.15 RAL 33.36 RAD 6570.3 VEL 15.723 PTH
                                                              INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT
                                                                                                                                                        118.14
                                                                                                            6 28 59
                                                                                                                                          -24.42
                     5 31 54 3425.49
                                                   -22.15
                                                                 126.07
                                                                              295.20
                                                                                                71.90
                                                                                                                             2825.5
        90.00
                    0 5 27 4522.63
7 9 8 3111.94
1 10 53 4311.41
8 50 20 2795.32
                                                                               282.06
                                                                                                            1 20 49
                                                                                                                             3922.6
                                                                                                                                             6.61
                                                                                                                                                          183.40
                                                   10.26
                                                                 190.18
                                                                                                 63.46
        90.00
                                                   -24.44
                                                                 103.81
                                                                               296.01
                                                                                                 72.24
                                                                                                             8 1 0
                                                                                                                             2511.9
                                                                                                                                                           95.70
       100.00
                                                   12.40
                                                                               280.95
                                                                                                 62.58
                                                                                                                             3711.4
                                                                                                                                              8.63
                                                                                                                                                          166.78
       100.00
                                                                 173.54
                                                                                                 72.94
                                                                                                            9 36 56
                                                                                                                                                           73.13
                                                   -30.08
                                                                  81.75
                                                                               298.00
       110.00
                                                                 162.23
                                                                               278.02
                                                                                                 60.21
                                                                                                            2 56 11
                                                                                                                             3600.8
                                                                                                                                            13.49
                                                                                                                                                          155.52
                     1 46 11
                                  4200.79
                                                  17.59
       110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5635.0 SGR 362.2 SG3 106.6
RRT .6138 RRF .6044 RTF .9832
                                                                                                                       ST 2757.7 SR 351.8 SS 782.8
CRT .8739 CRS -.8563 CST -.9993
     TDE 4.5047 TRA 9.1918 TC3 -.3917 BAU .6592
    RDE .6869 RRA .1627 RC3 .0044 FAU-.00199
FOE .9373 FRA 2.0626 FC3 .0137 BSP 19052
BDE 4.5568 BRA 9.1932 BC3 .3917 FSP -363
                                                                   SGB 5646.6 R23 -.0009 R13 .9832
SG1 5639.4 SG2 285.7 THA 2.27
                                                                                                                        LSA 2883.0 MSA 172.9 SSA 8.7
                                                                                                                       EL1 2774.9 EL2 170.0 ALF 6.39
```

FLIGHT TIME 214.00

```
ARRIVAL DATE FEB 12 1966
                                                                                          FLIGHT TIME 70.00
LAUNCH DATE DEC 4 1965
                                                                                         DISTANCE 183.230
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.533 GAL -6.84 AZL 86.66 HCA 81.38 SMA 121.05 ECC .24699 INC 3.3402 V1 30.219 RP 107.53 LAP 3.30 LOP 153.00 VP 37.042 GAP -12.81 AZP 89.50 TAL 201.99 TAP 283.37 RCA 91.16 APO 150.95 V2 35.242 RC 46.516 GL 17.47 GP -1.23 ZAL 124.62 ZAP 6.17 ETS 10.33 ZAE 149.20 ETE 336.99 ZAC 62.88 ETC 162.18 CLP -6.04
   PLANETOCENTRIC CONIC
     C3 26.154 VHL 5,114 DLA -2.02 RAL 303.27 RAD 6568.1 VEL 12.146 PTH 2.18 VHP 8.348 DPA -16.70 RAP 330.72 ECC 1.4304
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 59 20 2217.09 -19.63 41.64 168.46 110.83 3 36 17 1617.1 -16.62 34.26 90.00 14 27 27 4986.19 22.45 218.68 169.58 72.27 15 50 34 4386.2 19.81 211.00
                                                                                                                   72.27 15 50 34
112.02 4 52 22
71.08 17 8 25
115.36 5 55 1
67.74 18 15 9
                     4 19 45 1957.72 -20.74
15 49 44 4720.78 23.58
5 25 50 1750.84 -23.73
17 0 8 4500.43 26.64
                                                                                                                                                          1357.7
                                                                                  22.10
                                                                                                  168.00
        100.00
                                                                                                                                                     4120.8
1150.8
                                                                                                                                                                        20.78
-20.12
                                                                               198.76
                                                                                               169.17
        100.00
                                                                                                                                                                                                357.70
                                                             -23.73
                                                                                  4.98
                                                                                                 166.58
        110.00
                                                                                                167.90
                                                                                                                                                           3900.4
                                                                                                                                                                               23.38
                                                                                180.76
        110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 705.3 SGR 404.4 SG3 109.6
RRT -.0535 RRF .0548 RTF -.6776
SGB 813.2 R23 -.0008 R13 .6779
                                                                                                                                                      ST 300.8 SR 362.3 SS 316.3
CRT .8503 CR6 .9955 CST .8471
LSA 549.6 MSA 138.6 SSA 22.6
     TOE -.2371 TRA -.4176 TC3 .4459 BAU .1656
     ROE -.3226 RRA .0699 RC3 -.1600 FAU .03502
     FOE .3890 FRA -.0961 FC3-1.1594 BSP 1956
BDE .4004 BRA .4234 BC3 .4737 FSP -273
                                                                                     SG1 706.0 SG2 403.6 THA 177.39
                                                                                                                                                      ELI 453.6 ELZ 126.4 ALF 51.20
                                                                                          FLIGHT TIME 72.00
LAUNCH DATE DEC ' 4 1965
                                                                                          DISTANCE 190.044
    RL 147.44 LAL .00 LOL 71.64 VL 26.735 GAL -6.84 AZL 86.64 MCA 84.62 SHA 122.26 ECC .23664 INC 3.3563 V1 30.219
RP 107.55 LAP 3.34 LOP 156.25 VP 37.182 GAP -11.84 AZP 89.69 TAL 203.38 TAP 288.00 RCA 93.33 APO 151.19 V2 35.236
RC 47.916 GL 18.17 GP -1.31 ZAL 126.02 ZAP 8.59 ETS 7.64 ZAE 148.27 ETE 337.81 ZAC 63.67 ETC 162.32 CLP -8.49
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 24.825 VHL 4.982 DLA -1.68 RAL 301.55 RAD 6568.0 VEL 12.091 PTH 2.16 VHP 7.821 DPA -16.51 RAP 331.54 ECC 1.4086 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 50 1 2214.55 -19.57 41.48 165.96 110.89 3 26 56 1614.5 -16.55 34.10 90.00 14 23 5 4962.97 21.96 217.16 166.86 71.66 15 45 48 4363.0 19.25 209.53
                       4 10 35 1954.69
15 45 13 4698.07
5 17 2 1746.69
16 55 16 4478.83
                                                              -20.67
                                                                                                   165.50
                                                                                                                      112.09
                                                                                                                                      4 43 10
                                                                                                                                                           1354.7
                                                                                                                                                                              -17.49
                                                                                                                                                                                                 14.56
                                                                                  21.91
                                                                                                                        70.45 17 3 31
                                                                                                                                                            4098.1
                                                                                                                                                                              20.20
                                                                                                                                                                                               189.65
                                                                                197.26
                                                                                                   166.44
                                                              23.07
         100.00
                                                                                                                      115.47 5 46 8
67.07 18 9 54
                                                                                                                                                           1146.7
                                                                                                                                                                          -19.99
22.74
                                                                                                                                                                                                 357.46
                                                                                                   164.10
                                                                                   4.72
                                                              -23.61
        110.00
                                                                                                                                                     3878.8
                                                                                                                                                                                               171.77
                                                                                179.34
                                                                                                   165.16
        110.00
                                                             26.07
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT GETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 725.2 SGR 404.3 SG3 124.1
RRT -.0578 RRF .0602 RTF -.6922
                                                                                                                                                     ST 309.4 SR 360.3 SS 341.8
CRT .8675 CRS .9949 CST .8494
     TOE - .2412 TRA - .3951 TC3 .4941 BAU .1736
     ROE -.3127 RRA .0628 RC3 -.1709 FAU .03843
                                                                                     SGB 830.3 R23 -.0023 R13 .6925
     FOE .4363 FRA -.1447 FC3-1.3403 BSP 2036
BOE .3949 BRA .4001 BC3 .5228 FSP -316
                                                                                                                                                      LSA 568.1 MSA 138.1 SSA 23.5
                                                                                     SG1 725.7 SG2 403.4 THA 177.33
                                                                                                                                                      EL1 459.3 EL2 120.7 ALF 49.99
                                                                                                                                                                   ARRIVAL DATE FEB 16 1966
                                                                                         FLIGHT TIME 74.00
LAUNCH DATE DEC 4 1965
                                                                                         OISTANCE 196.850
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.917 GAL -6.85 A7L 86.63 MCA 87.87 SMA 123.36 ECC .22749 INC 3.3722 VI 30.219 RP 107.56 LAP 3.37 LOP 159.50 VP 37.308 GAP -10.93 A7P 89.87 TAL 204.77 TAP 292.63 RCA 95.30 APO 151.43 V2 35.230 RC 49.420 GL 18.83 GP -1.41 7AL 127.35 ZAP 11.12 ETS 6.13 ZAE 147.58 ETE 338.46 ZAC 64.37 ETC 162.43 CLP -11.03
    PLANETOCENTRIC CONIC
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 41 11 2212.97 -19.53 41.38 163.63 110.92 3 18 4 1613.0 -16.51 34.00 90.00 14 18 47 4942.45 21.51 215.82 164.35 71.13 15 41 9 4342.4 18.74 208.24 100.00 4 1 53 1952.65 -20.61 21.78 163.18 112.14 4 34 25 1352.7 -17.43 14.43 100.00 15 40 46 4678.00 22.61 195.95 163.93 69.91 16 58 44 4078.0 19.67 188.39
     C3 23.732 VHL 4.872 DLA -1.38 RAL 299.90 RAD 6568.0 VEL 12.046 PTH 2.15 VHP 7.323 DPA -16.37 RAP 332.26 ECC 1.3906
                                                                                                                    112.14 4 34 25
69.91 16 58 44
115.55 5 37 43
66.49 18 4 48
                                                                            195.95
                                                                                                                                                     1143.6
                                                                                                                                                                           -19.89
22.16
                          5 8 39 1743.63 -23.52
16 50 29 4459.79 - 25.56
                                                                                               161.79
                                                                                   4.53
        110.00
                                                                                                                                                                                               170.59
                                                                                178.09
                                                                                                  162.64
                       16 50 29
        110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 743.0 SGR 403.4 SG3 140.9 ST 315.1 SR 357.3 SS 368.2 RRT -.0668 RRF .0681 RTF -.7071 CRT .8826 CRS .9934 CST .8510 SGB 845.4 R23 -.0012 R13 .7074 LSA 585.6 HSA 138.0 SSA 24.3 SG1 743.7 SG2 402.1 THA 177.06 ELI 462.4 EL2 114.5 ALF 49.07
     TOE - .2432 TRA - .3716 TC3 .5422 BAU .1814
     ROE - .3033 RRA .0560 RC3 - .1811 FAU .04238
     FOE .4896 FRA -.2025 FC3-1.5462 BSP 2146
BOE .3888 BRA .3758 BC3 .5717 FSP -367
                                                                                                                                                                    ARRIVAL DATE FEB 18 1966
                                                                                           FLIGHT TIME 76.00
LAUNCH DATE DEC 4 1965
                                                                                          DISTANCE 203.643
     HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 22.834 VHL 4.778 DLA -1.10 RAL 298.34 RAD 6567.9 VEL 12.009 PTH 2.14 VMP 6.853 DPA -16.26 RAP 332.87 ECC 1.3758
    C3 22.834 VHL 4.778 DLA -1.1D RAL 298.34 RAD 6567.9 VEL 12.009 PTH 2.14 VHP 6.853 DPA -16.26 RAP 332.87 ECC 1.3758
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 32 51 2212.27 -19.51 41.33 161.50 110.94 3 9 44 1612.3 -16.49 33.96
90.00 14 14 37 4924.33 21.11 214.64 162.06 70.67 15 36 42 4324.3 18.28 207.11
100.00 3 53 41 1951.52 -20.59 21.71 161.05 112.17 4 26 13 1351.5 -17.40 14.36
100.00 15 36 28 4660.31 22.19 194.80 161.64 69.44 16 54 9 4060.3 19.20 187.29
110.00 5 0 46 1741.57 -23.46 4.40 159.68 115.61 5 29 47 1141.6 -19.82 357.15
110.00 16 45 53 443.03 25.10 17.01 160.33 66.00 17 59 56 3843.0 21.64 169.56
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SG1 757.9 SGR 401.5 SG3 159.9 ST. 322.0 SR 353.2 SS 397.5 SGB 857.6 R23 -.0035 R13 .7175 LSA 605.4 MSA 138.9 SSA 24.8 SG1 758.6 SG2 400.0 THA 176.93 EL1 465.6 EL2 108.2 ALF 47.95
                                                                                  SGT 757.9 SGR 401.5 SG3 159.9
RRT -.0729 RRF .0760 RTF -.7171
SGB 857.6 R23 -.0035 R13 .7175
     TDE -.2466 TRA -.3508 TC3 .5825 BAU .1871
      RDE - .2942 RRA .0497 RC3 - .1907 FAU .04684
     FOE .5524 FRA -.2681 FC3-1.7760 BSP 2206
BOE .5839 BRA .3543 BC3 .6129 FSP -424
```

```
LAUNCH DATE DEC 4 1964
                                                                                         FLIGHT TIME 78.00
                                                                                                                                                               ARRIVAL DATE FEB 20 1966
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 210.422
      RL 147.44 LAL .0D LOL 71.64 VL 27.225 GAL -6.88 AZL 86.60 HCA 94.35 SMA 125.30 ECC .21236 INC 3.4040 VI 30.219
RP 107.61 LAP 3.39 LOP 165.99 VP 37.517 GAP -9.22 AZP 90.26 TAL 207.46 TAP 301.81 RCA 98.69 APO 151.91 V2 35.216
RC 52.701 GL 19.96 GP -1.63 ZAL 129.77 ZAP 16.54 ETS 4.50 ZAE 146.98 ETE 339.27 ZAC 65.44 ETC 162.56 CLP -16.46
     PLANETOCENTRIC CONIC
      C3 22.097 VHL 4.701 DLA '-.84 RAL 296.88 RAD 6567.9 VEL 11.978 PTH 2.13 VHP 6.411 DPA -16.22 RAP 333.37 ECC 1.3637
      C3 22.097 VML 4.701 DLA -.84 RAL 296.88 RAD 6567.9 VEL 11.978 PTH 2.13 VMP 6.411 DPA -16.22 RAP 333.37 ECC 1.3637 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 25 6 2212.34 -19.51 41.34 159.56 110.94 3 1.58 1612.3 -16.49 33.97 90.00 14 10 42 4908.35 20.74 213.61 159.98 70.28 15 32 30 4308.3 17.87 206.12 100.00 3 46 3 1951.21 -20.58 21.69 159.11 112.17 4 18 34 1351.2 -17.39 14.35 100.00 15 32 26 4644.71 21.82 193.80 159.55 69.04 16 49 51 4044.7 18.77 186.32 110.00 4 53 24 1740.39 -23.43 4.33 157.75 115.64 5 22 24 1140.4 -19.78 357.08 110.00 16 41 34 4428.30 24.69 176.06 158.24 65.57 17 55 23 3828.3 21.18 168.67
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
      TOE -.2493 TRA -.3313 TC3 .6170 BAU .1916
ROE -.2852 RRA .0437 RC3 -.1996 FAU .05195
                                                                                   SGT 769.3 SGR 398.6 SG3 181.6
RRT -.0805 RRF .0856 RTF -.7250
SGB 866.5 R23 -.0061 R13 .7255
                                                                                                                                                ST 327.6 SR 348.1 SS 429.1
CRT .9087 CRS .9890 CST .8566
LSA 626.3 MSA 140.6 SSA 25.0
      FOE .6254 FRA -.3437 FC3-2.0353 BSP 2248
BOE .3788 BRA .3341 BC3 .6484 FSP -490
                                                                                   SG1 770.2 SG2 396.9 THA 176.75
                                                                                                                                                 EL1 467.0 EL2 101.9 ALF 46.91
 LAUNCH DATE DEC 4 1965
                                                                                         FLIGHT TIME 80.00
                                                                                                                                                               ARRIVAL DATE FEB 22 1966
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 217.182
     RL 147.44 LAL .00 LOL 71.64 VL 27.353 GAL -6.90 AZL 86.58 HCA 97.59 SMA 126.14 ECC .20620 INC 3.4200 V1 30.219
RP 107.63 LAP 3.39 LOP 169.24 VP 37.603 GAP -8.42 AZP 90.45 TAL 208.74 TAP 306.32 RCA 100.13 APO 152.15 V2 35.208
RC 54.462 GL 20.45 GP -1.76 ZAL 130.84 ZAP 19.46 ETS 4.01 ZAE 147.09 ETE 339.43 ZAC 65.78 ETC 162.57 CLP -19.38
    PLANETOCENTRIC CONIC
      C3 21.493 VHL 4.636 DLA
                                                 -.60 RAL 295.52 RAD 6567.9 VEL 11.953 PTH
                                                                                                                       2.13 VHP 5.996 OPA -16.23 RAP 333.72 ECC 1.3537
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 17 55 2213.11

14 7 5 4894.19

3 38 59 1951.62

15 28 43 4630.91

4 46 35 1739.99

16 37 36 4415.30
          90.00
                                                             -19.53
                                                                                             157.81
                                                                               41.39
                                                                                                                 110.92
                                                                                                                                   2 54 48
                                                                                                                                                     1613.1
                                                                                                                                                                       -16.51
                                                                                                                                                                                            34.01
                                                                                                                   69.94 15 28 40
112.16 4 11 31
68.69 16 45 54
115.65 5 15 35
65.21 17 51 11
          90.00
                                                               20.42
                                                                               212.70
                                                                                                 158.10
                                                                                                                                                       4294.2
                                                                                                                                                                         17.50
                                                                                                                                                                                           205.24
         100.00
                                                              -20.59
                                                                                21.72
                                                                                             157.37
                                                                                                                                                       1351.6
                                                                                                                                                                        -17.40
                                                                                                                                                                                            14.37
                                                                                                                                                                    18.39 185.48
-19.77 357.06
                                                                                            157.68
156.02
        100.00
                                                             21.48
                                                                               192.91
                                                                                                                                                       4030.9
         110.00
                                                          -23.41
                                                                                 4.30
                                                                                                                                                       1140.0
        110.00
                                                            24.32
                                                                               175.23
                                                                                                 156.36
                                                                                                                                                       3815.3
                                                                                                                                                                          20.77
                                                                                                                                                                                           167.88
    DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                                 ST 331.4 SR 341.8 SS 462.8
CRT .9186 CRS .9864 CST .8586
     TOE -.2507 TRA -.3135 TC3 .6436 BAU .1943
                                                                                   SGT 776.0 SGR 394.9 SG3 206.4
RRT -. 0896 RRF . 0973 RTF -. 7298
     RDE -.2763 RRA .0379 RC3 -.2080 FAU .05776
     FOE .7093 FRA -.4306 FC3-2.3267 BSP 2278
BDE .3730 BRA .3157 BC3 .6763 FSP -566
                                                                                                                                                 LSA 647.9 MSA 143.0 SSA 25.1
EL1 466.3 EL2 96.0 ALF 45.97
                                                                                   SGB 870.7 R23 -. 0094 R13 .7304
                                                                                 SG1 777.1 SG2 392.8 THA 176.49
LAUNCH DATE DEC 4 1965
                                                                                       FLIGHT TIME 82.00
                                                                                                                                                              ARRIVAL DATE FEB 24 1966
    HELIOCENTRIC CONIC
                                                                                       DISTANCE 223.921
    RL 147.44 LAL .00 LOL 71.64 VL 27.467 GÁL -6.92 AZL 86.56 MCA 100.83 SMA 126.89 ECC .20083 INC 3.4362 V1 30.219
RP 107.66 LAP 3.38 LOP 172.48 VP 37.678 GAP -7.66 AZP 90.65 TAL 209.93 TAP 310.76 RCA 101.41 APO 152.38 V2 35.200
RC 56.291 GL 20.90 GP -1.90 ZAL 131.80 ZAP 22.54 ETS 3.63 ZAE 147.49 ETE 339.39 ZAC 65.97 ETC 162.54 CLP -22.47
    PLANETOCENTRIC CONIC
     C3 20.997 VHL 4.582 DLA -.37 RAL 294.29 RAD 6567.9 VEL 11.932 PTH 2.12 VHP 5.607 DPA -16.32 RAP 333.93 ECC 1.3456
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                      2 11 19 2214.51
14 3 51 4881.55
3 32 29 1952.68
15 25 22 4618.61
                                                                                            156.25 110.89 2 48 14
156.43 69.64 15 25 13
155.81 112.14 4 5 2
                                                            -19.57
                                                                               41.48
                                                                                                                                                 1614.5 -16.55
                                                                                                                                                                                           34.10
          90.00
                                                              20.12
                                                                              211.89
                                                                                                                                                      4281.6
                                                                                                                                                                                          204.46
                                                                                                                                                                         17.17
                                                                                           155.81
156.00
        100.00
                                                           -20.62
                                                                               21.78
                                                                                                                                                     1352.7
                                                                                                                                                                     -17.43
                                                                                                                                                                                         14.43
                                                                                                                  68.39 16 42 21
115.64 5 9 21
64.89 17 47 24
       100.00
                                                            21.17
                                                                              192.13
                                                                                                                                                     4018.6
                                                                                                                                                                        18.05
                                                                                                                                                                                          184.72
                      4 40 20 1740.30
16 34 0 4403.76
                                                          -23.42
       110.00
                                                                                            154.47
154.68
                                                                                4.32
                                                                                                                                                    1140.3
                                                                                                                                                                        -19.78
                                                                                                                                                                                          357.08
       110 00
                                                            23.99
                                                                              174.50
                                                                                                                                                      3803.8
                                                                                                                                                                         20.41
                                                                                                                                                                                          167.19
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                   SGT 777.4 SGR 390.3 SG3 234.6
RRT -.1004 RRF .1113 RTF -.7311
                                                                                                                                                ST 333.1 SR 334.2 SS 499.2
CRT .9264 CRS .9836 CST .8595
LSA 670.8 MSA 146.0 SSA 24.9
    TOE -.2505 TRA -.2981 TC3 .6612 BAU .1953
     ROE -.2671 RRA .0324 RC3 -.2160 FAU .06439
    FOE .8065 FRA -.5297 FC3-2.6549 BSP 2286
BDE .3662 BRA .2999 BC3 .6956 FSP -653
                                                                                   SGB 869.9 R23 -.0137 R13 .7319
                                                                                   SG1 778.7 SG2 387.7 THA 176.16
                                                                                                                                                 EL1 463.1 EL2 90.5 ALF 45.10
LAUNCH DATE DEC 4 1965
                                                                                        FLIGHT TIME 84.00
                                                                                                                                                               ARRIVAL DATE FEB 26 1966
   HELIOCENTRIC CONTC
                                                                                      ... DISTANCE 230.636
    RL 147.44 LAL .00 LOL 71.64 VL 27.567 GAL -6.93 AZL 86.55 MCA 104.06 SMA 127.56 ECC .19619 INC 3.4529 VI 30.219
RP 107.69 LAP 3.35 LOP 175.72 VP 37.742 GAP -6.93 AZP 90.84 TAL 211.05 TAP 315.11 RCA 102.54 APO 152.59 V2 35.191
RC 58.184 GL 21.30 GP -2.07 ZAL 132.65 ZAP 25.81 ETS 3.32 ZAE 148.17 ETE 339.14 ZAC 65.99 ETC 162.46 CLP -25.73
   PLANETOCENTRIC CONIC
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 5 18 2216.48 -19.61 41.60 154.87 110.84 2 42 14 1616.5 -16.61 34.22 90.00 14 1 1 4870.15 19.85 211.17 154.95 69.38 15 22 12 4270.1 16.86 203.76 100.00 3 26 34 1954.33 -20.66 21.89 154.44 112.10 3 59 8 1354.3 -17.48 14.53 100.00 15 22 26 4607.53 20.89 191.42 154.52 68.12 16 39 14 4007.5 17.74 184.05 110.00 4 34 39 1741.23 -23.45 4.38 153.11 115.61 5 3 40 1141.2 -19.81 357.13 110.00 16 30 51 4993.39 23.69 173.84 183.10
    C3 20.588 VHL 4.537 DLA
                                                -.16 RAL 293.18 RAD 6567.8 VEL 11.915 PTH
                                                                                                                      2.12 VHP 5.245 OPA -16.48 RAP 333.96 ECC 1.3388
                                                                                                                   115.61 5 3 40 1141.2
64.60 17 44 4 3793.4
                                                                                                                                                                                       357.13
166.57
                      16 30 51
       110.00
                                        4393.39
                                                         23,69
                                                                             173.84
                                                                                              153.19
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ST 330.1 SR 325.5 SS 536.9 CRT .9318 CRS .9806 CST .8579 LSA 693.0 MSA 149.1 SSA 24.6 EL1 455.6 E12 955.5
                                                                                 SGT 772.6 SGR 385.0 SG3 267.0
RRT -.1169 RRF .1299 RTF -.7299
SGB 863.2 R23 -.0171 R13 .7311
SG1 774.3 SG2 381.6 THA 175.59
    TDE -. 2467 TRA -. 2840 TC3 .6714 BAU .1948
    RDE -.2576 RRA .0271 RC3 -.2240 FAU .07200
    FDE .9158 FRA -.6445 FC3-3.0277 BSP 2305
BDE .3567 BRA .2853 BC3 .7078 FSP -757
                                                                                                                                                EL1 455.6 EL2 85.6 ALF 44.57
```

ARRIVAL DATE FEB 28 1966

```
FLIGHT TIME 86.00
LAUNCH DATE DEC 4 1965
   RL 147.44 LAL .00 LOL 71.64 VL 27.654 GAL -6.95 AZL 86.53 HCA 107.30 SMA 128.16 ECC .19217 INC 3.4699 VI 30.219
RP 107.72 LAP 3.31 LOP 178.96 VP 37.797 GAP -6.23 AZP 91.03 TAL 212.06 TAP 319.36 RCA 103.53 APO 152.78 V2 35.181
RC 60.133 GL 21.67 GP =2.25 ZAL 133.38 ZAP 29.28 ETS 3.05 ZAE 149.15 ETE 338.64 ZAC 65.82 ETC 162.33 CLP -29.20
                                                                         DISTANCE 237.327
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                          .05 RAL 292.20 RAD 6567.8 VEL 11.901 PTH 2.11 VHP 4.908 DPA -16.73 RAP 333.80 ECC 1.3332
   C3 20.248 VHL 4.500 DLA .05 NAL 292.20 NAU 0501.0 TEL 11.501 INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 59 49 2219.01 -19.68 41.76 153.67 110.78 2 36 48 1619.0 -16.67 34.37
    C3 20.248 VHL 4.500 DLA
       90.00 1 59 49 2219.01
90.00 13 58 40 4859.67
                                                                                                69.14 15 19 39 112.05 3 53 48 67.88 16 36 36 115.57 4 58 32 64.35 17 41 14
                                                                                                                                               16.58
                                                                                                                                                             203.12
                                                                                                                               4259.7
                                                                                153.65
                                                                  210.50
                                                   19.59
                                                                                                                                              -17.54
                                                                                                                                                             14.67
                                                                                                                               1356.5
                                                                   22.03
                                                                                153.24
                   3 21 11 1956.55
15 19 59 4597.37
                                                   -20.71
                                                                                                                              3997.4
                                                                                                                                              17.45
                                                                                                                                                             183.43
                                                                              153.21
                                                   20.63
                                                                 190.78
      100.00
                                                                                                                                             -19.86
                                                                                                                                                             357.22
                                                                                                                              1142.7
                                                                               151.92
                                                                                              . 115.57
                   4 29 30 1742.75
16 28 10 4383.93
                                                 -23.50
                                                                    4.47
                                                                              151.89
                                                                                                                               3783.9
                                                                                                                                              19.77
                                                                                                                                                             166.01
                                                                  173.25
                                                   23.41
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 759.9 SGR 379.0 SG3 303.2
RRT -.1315 RRF .1505 RTF -.7206
SGB 849.1 R23 -.0256 R13 .7223
                                                                                                                           ST 326.1 SR 315.2 SS 578.4
CRT .9347 CRS .9779 CST .8545
LSA 718.5 NSA 152.9 SSA 24.0
    TOE -.2420 TRA -.2755 TC3 .6662 BAU .1910
    ROE -.2474 RRA .0219 RC3 -.2319 FAU .08047
    FOE 1.0435 FRA -.7707 FC3-3.4405 BSP 2250
BOE .3461 BRA .2763 BC3 .7054 FSP -871
                                                                                                                           EL1 446.1 EL2 81.9 ALF 43.97
                                                                      5G1 762.0 SG2 374.6 THA 175.05
                                                                                                                                      ARRIVAL DATE MAR 2 1966
                                                                          FLIGHT TIME 88.00
LAUNCH DATE DEC 4 1965
                                                                          DISTANCE 243.991
    RL 147.44 LAL .0D LOL 71.64 VL 27.729 GAL -6.96 AZL 86.51 HCA 110.53 SMA 128.67 ECC .18871 INC 3.4876 V1 30.219
RP 107.75 LAP 3.27 LOP 182.20 VP 37.842 GAP -5.57 AZP 91.22 TAL 212.97 TAP 323.50 RCA 104.39 APO 152.96 V2 35.171
RC 62.133 GL 22.01 GP -2.46 ZAL 134.00 ZAP 32.96 ETS 2.79 ZAE 150.44 ETE 337.84 ZAC 65.44 ETC 162.14 CLP -32.88
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 19.964 VHL 4.468 DLA .26 RAL 291.34 RAD 6567.8 VEL 11.889 PTH 2.11 VHP 4.596 DPA -17.08 RAP 333.43 ECC 1.3286 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
                                                                               152.64
                                                    -19.75
                                                                   41.96
                     1 54 52 2222.07
        90.00
                                                                                                                                                              202.52
                                                                                                             15 17 37
                                                                                                                                4249.9
                                                                                                                                               16.32
                                                                                                   68.92
                                                                  209.88
                                                                                 152.52
                                  4849.87
                                                    19.36
        90.00
                    13 56 47
                                                                                                 111.98 3 48 59
67.65 16 34 28
                                                                                                                                                              14.84
                   3 16 20 1959.29
15 18 0 4587.88
4 24 52 1744.80
16 25 58 4375.14
                                                                                                                               1359.3
                                                                                                                                              -17.62
                                                                   22.20
                                                                                152.21
                                                    -20.78
       100.00
                                                                                                                                                              182.85
                                                                                                                               3987.9
                                                                                                                                               17.18
                                                    20.39
                                                                  190.18
                                                                                152.08
       100.00
                                                                                                 115.52 4 53 56
64.12 17 38 53
                                                                                                                                                              357.34
                                                                                150.89
                                                                                                                               1144.8
                                                                                                                                               -19.93
                                                    -23.56
                                                                    4.60
                                                                                                                               3775.1 19.48
       110.00
                                                                                                                                                              165.48
                                                                  172.70
                                                   23.15
                                                                                 150.75
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 738.6 SGR 372.3 SG3 343.9
RRT -.1483 RRF .1758 RTF -.7035
SGB 827.2 R23 -.0377 R13 .7062
                                                                                                                           ST 317.8 SR 303.6 SS 622.2
CRT .9345 CRS .9753 CST .8472
    TOE -.2337 TRA -.2710 TC3 .6477 BAU .1844
    ROE - .2366 RRA .0169 RC3 - .2401 FAU .08996
                                                                                                                           LSA 745.1 MSA 156.7 SSA 23.4
    FOE 1.1881 FRA -.9114 FC3-3.9012 BSP Z161
BDE .3326 BRA .2715 BC3 -.6908 FSP -1000
                                                                                                                           EL1 432.3 EL2 79.5 ALF 43.60
                                                                       SGI 741.4 SG2 366.8 THA 174.34
                                                                                                                                      ARRIVAL DATE MAR 4 1966
                                                                          FLIGHT TIME 90.00
LAUNCH DATE DEC 4 1965
                                                                          DISTANCE 250.628
    RL 147.44 LAL .00 LOL 71.64 VL 27.794 GAL -6.96 AZL 86.49 HCA 113.76 SMA 129.12 ECC .18574 INC 3.5060 V1 30.219 RP 107.78 LAP 3.21 LOP 185.44 VP 37.880 GAP -4.93 AZP 91.41 TAL 213.76 TAP 327.52 RCA 105.14 APO 153.11 V2 35.160
   HELIOCENTRIC CONIC .
    RC 64.180 GL 22.33 GP -2.69 ZAL 134.51 ZAP 36.89 ETS 2.54 ZAE 152.03 ETE 336.63 ZAC 64.85 ETC 161.87 CLP -36.80
    PLANETOCENTRIC CONIC
                                                                                                    2.11 VHP 4.311 DPA -17.53 RAP 332.83 ECC 1.3246
                                            .47 RAL 290.61 RAD 6567.8 VEL 11.879 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              151.76
                 H LNCH TIME L-1 TIME

1 50 24 2225.65

13 55 25 4840.51

3 11 58 1962.56

15 16 32 4578.83

4 20 43 1747.38

16 24 17 4366.78
                                                                                               110.63
                                                                                                               2 27 30
                                                                   42.18
                                                    -19.84
                                                                                                 68.71 15 16 5
111.90 3 44 41
        90.00
                                                                                                                                               16.06
                                                                                                                               4240.5
                                                                                151.54
                                                     19.13
                                                                  209.29
         90.00
                                                                                                                                                              15.04
                                                                                                                                              -17.71
                                                                                                               3 44 41
                                                                                                                               1362.6
                                                                                151.33
                                                   -20.87
                                                                    22.41
        100.00
                                                                                                 67.44 16 32 51
115.45 4 49 50
63.90 17 37 4
                                                                                                                                             16.92
                                                                                                                               3978.8
                                                                   189.61
                                                                                151.10
                                                   20.15
        100.00
                                                                                                                                                              357.50
                                                                                                                                              -20.01
                                                                                                                               1147.4
                                                                                150.02
                                                                    4.76
                                                    -23.63
        110.00
                                                                                                                                               19.21
                                                                                                                              3766.8
                                                                                 149.77
                                                                   172.18
                                                   22.90
                                                                                                                           ORBIT DETERMINATION ACCURACY
        110.00
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 708.8 SGR 365.3 SG3 389.4
RRT -.1694 RRF .2072 RTF -.6765
SGB 797.4 R23 -.0540 R13 .6809
                                                                                                                           ST 303.4 SR 290.5 SS 667.3
CRT .9300 CRS .9725 CST .8335
     TOE -.2204 TRA -.2704 TC3 .6165 BAU .1753
     ROE - .2251 RRA .0118 RC3 - .2490 FAU .10060
                                                                                                                           LSA 771.8 MSA 160.1 SSA
                                                                                                                                                                  22.8
     FDE 1.3482 FRA-1.0688 FC3-4.4161 BSP 2062
BDE .3150 BRA .2707 BC3 .6649 FSP -1151
                                                                                                                            EL1 412.6 EL2 78.5 ALF 43.66
                                                                       5G1 712.4 5G2 358.2 THA 173.31
                                                                                                                                       ARRIVAL DATE MAR 6 1966
                                                                           FLIGHT TIME 92.00
 LAUNCH DATE DEC 4 1965
                                                                          DISTANCE 257.236
     RL 147.44 LAL .00 LOL 71.64 VL 27.848 GAL -6.96 A7L 86.47 HCA 116.99 SHA 129.50 ECC .18319 INC 3.5254 V1 30.219
RP 107.81 LAP 3.14 LOP 188.67 VP 37.909 GAP -4.32 A7P 91.60 TAL 214.43 TAP 331.42 RCA 105.78 APO 153.23 V2 35.149
RC 66.268 GL 22.63 GP -Z.94 7AL 134.90 ZAP 41.06 ETS 2.29 ZAE 153.91 ETE 334.91 ZAC 64.03 ETC 161.52 CLP -40.97
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                            .69 RAL 290.00 RAD 6567.8 VEL 11.870 PTH 2.11 VHP 4.051 DPA -18.09 RAP 331.99 ECC 1.3211
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                151.03
                     1 46 23 2229.77
13 54 34 4831.33
                                                     -19.93
         90.00
                                                                                                                                                               201.40
                                                                                                                                                15.81
                                                                                                                                 4231.3
                                                                                                              15 15 6
                                                                                  150.72
                                                                                                    68.51
                                                                    208.71
                                                     18.90
          90.00
                                                                                                  111.81 3 40 49
67.24 16 31 46
                                                                                                                                               -17.82
                                                                                                                                                               15.27
                                                                                                                                 1366.4
                    3 8 3 1966.36
15 15 36 4569.97
4 17 1 1750.46
16 23 7 4358.63
                                                                                 150.61
                                                     -20.96
                                                                    22.65
        100.00
                                                                                                                                                               181.77
                                                                                150.28
                                                                                                                                3970.0
                                                                                                                                               16.67
                                                                    189.05
                                                     19.92
        100.00
                                                                                                                                                               357.68
                                                                                                    115.37 4 46 12
63.69 17 35 45
                                                                                                                                               -20.11
                                                                                                                                1150.5
                                                                                                  115.37
                                                   -23.72
                                                                     4.96
                                                                                 149.31
        110.00
                                                                                                                                                 18.94
                                                                                                                                3758.6
                                                                                  148.94
                                                                    171.67
                                                    22.66
        110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                        5T 285.7 SR 275.8 55 715.6

CRT .9193 CRS .9701 CST .8113

LSA 801.5 MSA 163.7 SSA 22.0
                                                                      SGT 669.6 SGR 358.0 SG3 438.9
RRT -.1850 RRF .2429 RTF -96297
      TOE -.2037 TRA -.2771 TC3 .5653 BAU .1621
      ROE - .2126 RRA .0069 RC3 - .2583 FAU .11209
                                                                      SGB 759.3 R23 -.0840 R13 ..6371
SGI 674.1 SG2 349.5 THA 172.26
      FOE 1.5287 FRA-1.2358 FC3-4.9733 BSP 1878
                                                                                                                            EL1 389.0 EL2
                                                                                                                                                   79.7 ALF 43.90
      BOE .2944 BRA .2772 BC3 .6215 FSP -1311
```

```
LAUNCH DATE DEC 4 1965
                                                                      FLIGHT TIME 94.00
                                                                                                                               ARRIVAL DATE MAR 8 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 263.815
    RL 147.44 LAL .00 LOL 71.64 VL 27.893 GAL -6.95 AZL 86.45 MCA 120.22 SMA 129.82 ECC .18100 INC 3.5459 V1 30.219
RP 107.85 LAP 3.06 LOP 191.90 VP 37.932 GAP -3.73 AZP 91.79 TAL 214.98 TAP 335.19 RCA 106.32 APO 153.32 V2 35.138
     RC 68.394 GL 22.92 GP -3.22 ZAL 135.19 ZAP 45.49 ETS 2.01 ZAE 156.07 ETE 332.46 ZAC 62.97 ETC 161.00 CLP -45.40
   PLANETOCENTRIC CONIC
    C3 19.328 VML 4.396 DLA .91 RAL 289.51 RAD 6567.8 VEL 11.862 PTH 2.10 VMP 3.817 DPA -18.75 RAP 330.89 ECC 1.3181 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 42 46 2234.46
13 54 16 4822.13
        90.00
                                                 -20.05
                                                                             150.44
                                                                                           110.43
                                                                                                       2 20 1
                                                                                                                      1634.5
                                                               42.74
                                                                                                                                      -17.09
                                                                                                                                                      35.32
                                                                                                      15 14 39
        90.00
                                                               208.14
                                                                             150.03
                                                 18.67
                                                                                             68.31
                                                                                                                        4222.1
                                                                                                                                       15.56
                                                                                                                                                     200.84
                  3 4 32 1970.71
15 15 12 4561.10
       100.00
                                                                22.93
                                                                             150.02
                                                 -21.07
                                                                                            111.70
                                                                                                       3 37 23
                                                                                                                        1370.7
                                                                                                                                      -17.94
                                                                                                                                                     15.53
                                                                                             67.04 16 31 13
       100.00
                                                 19.69
                                                               188.50
                                                                             149.58
                                                                                                                        3961.1
                                                                                                                                       16.41
                                                                                                                                                    181.24
       110.00
                    4 13 45 1754.07
16 22 28 4350.51
                                                -23.83
                                                                                                        4 42 59
                                                                 5.19
                                                                             148.73
                                                                                            115.27
                                                                                             115.27 4 42 59
63.49 17 34 59
                                                                                                                        1154.1
                                                                                                                                      -20.22
                                                                                                                                                    357.90
                  16 22 28
       110.00
                                                 22.41
                                                               171.17
                                                                             148.24
                                                                                                                        3750.5
                                                                                                                                       18.67
                                                                                                                                                    164.03
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 623.5 SGR 350.7 SG3 492.2

RRT -.1941 RRF .2843 RTF -.5548

SGB 715.4 R23 -.1327 R13 .5680

SG1 628.8 SG2 341.1 THA 171.15
                                                                                                                   ST 262.7 SR 259.5 SS 765.5

CRT .8976 CRS .9678 CST .7732

LSA 833.0 MSA 166.9 SSA 21.2

EL1 359.7 EL2 83.5 ALF 44.61
    TOE -.1815 TRA -.2901 TC3 .4956 BAU .1456
     ROE -.1991 RRA .0020 RC3 -.2684 FAU .12440
    FDE 1.7259 FRA-1.4126 FC3-5.5723 BSP 1643
    BDE .2694 BRA .2901 BC3 .5636 FSP -1485
LAUNCH DATE DEC 4 1965
                                                                      FLIGHT TIME 96.00
                                                                                                                               ARRIVAL DATE MAR 10 1966
   HELIOCENTRIC CONIC
                                                                      OISTANCE 270.363
    RL 147.44 LAL .00 LOL 71.64 VL 27.930 GAL -6.93 AZL 86.43 HCA 123.44 SMA 130.08 ECC .17913 INC 3.5678 V1 30.219
RP 107.89 LAP 2.98 LOP 195.13 VP 37.948 GAP -3.17 AZP 91.97 TAL 215.41 TAP 338.85 RCA 106.78 APO 153.39 V2 35.126
RC 70.553 GL 23.21 GP -3.53 ZAL 135.37 ZAP 50.18 ETS 1.70 ZAE 158.46 ETE 329.00 ZAC 61.68 ETC 160.52 CLP -50.09
   PLANETOCENTRIC CONIC
    C3 19.161 VHL 4.377 DLA
                                       1.15 RAL 289.13 RAD 6567.8 VEL 11.855 PTH
                                                                                               2.10 VHP 3.611 OPA -19.52 RAP 329.54 ECC 1.3153
    LNCH AZMTH LNCH TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 30 2239.75 -20.17 43.08 149.99 110.30 2 16 50 1639.8 -17.23 35.65
        90.00
                  13 54 32 4812.72
                                                  18.43
                                                               207.55
                                                                             149.46
                                                                                                       15 14 44
                                                                                             68.11
                                                                                                                        4212.7
                                                                                                                                       15.30
                                                                                                                                                     200.27
                  3 1 23 1975.66
15 15 20 4552.05
4 10 51 1758.22
                                                 -21.20
                                                                23.24
                                                                             149.57
                                                                                                       3 34 18
                                                                                            111.58
                                                                                                                        1375.7
                                                                                                                                       -18.08
                                                                                                                                                      15.63
       100.00
                                                  19.44
                                                               187.94
                                                                            149.02
                                                                                             66.84
                                                                                                      16 31 12
                                                                                                                        3952.0
                                                                                                                                       16.14
                                                                                                                                                     180.70
                                                -23.95
                                                                 5.45
                                                                            148.28
                                                                                            115.16
                                                                                                       4 40 9
                                                                                                                        1158.2
                                                                                                                                      -20.36
                                                                                                                                                     358.14
       110.00
                  16 22 21
                                 4342.25
                                                                                             63.28 17 34 44
                                                  22.16
                                                               170.66
                                                                             147.67
                                                                                                                        3742.3
                                                                                                                                       18.39
                                                                                                                                                    163.55
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  SGT 575.5 SGR 343.9 SG3 548.9
RRT -.1902 RRF .3329 RTF -.4379
                                                                                                                    ST 233.6 SR 241.8 SS 814.7
CRT .8539 CRS .9651 CST .7044
    TDE -.1523 TRA -.3091 TC3 .4082 BAU .1267
    RDE -.1846 RRA -.0030 RC3 -.2794 FAU .13751
    FOE 1.9328 FRA-1.5985 FC3-6.2130 BSP 1376
BDE .2393 BRA .3091 BC3 .4947 FSP -1678
                                                                  SGB 670.4 R23 -.2099 R13 .4608
SG1 581.1 SG2 334.4 THA 170.26
                                                                                                                    LSA 864.7 MSA 169.4 SSA 20.4
                                                                                                                    EL1 323.7 EL2 90.8 ALF 46.15
LAUNCH DATE DEC 4 1965
                                                                      FLIGHT TIME 98.00
                                                                                                                              ARRIVAL DATE MAR 12 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 276.883
   RL 147.44 LAL .00 LOL 71.64 VL 27.959 GAL -6.90 AZL 86.41 HCA 126.66 SMA 130.29 ECC .17753 INC 3.5913 V1 30.219
RP 107.92 LAP 2.88 LOP 198.35 VP 37.958 GAP -2.63 AZP 92.15 TAL 215.72 TAP 342.38 RZA 107.16 APO 153.42 V2 35.114
RC 72.741 GL 23.50 GP -3.87 ZAL 135.45 ZAP 55.12 ETS 1.36 ZAE 161.01 ETE 324.04 ZAC 60.16 ETC 159.83 CLP -55.03
   PLANETOCENTRIC CONIC
    C3 19.005 VHL 4.360 OLA 1.40 RAL 288.86 RAO 6567.8 VEL 11.848 PTH 2.10 VHP 3.430 DPA -20.39 RAP 327.93 ECC 1.3128
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 36 32 2245.73
13 55 21 4802.90
2 58 32 1981.25
15 16 2 4542.61
                                                                                         110.16 2 13 58
67.91 15 15 23
                                                                                                                                 -17.38
                                                -20.31
                                                               43.46
                                                                          149.65
                                                                                                                     1645.7
                                                                                                                                                     36.01
                                                 18.18
                                                              206.94
                                                                            149.01
                                                                                                                        4202.9
                                                                                                                                      15.02
                                                                                                                                                    199.68
      100.00
                                                -21.34
                                                               23.60
                                                                            149.23
                                                                                           111.45
                                                                                                        3 31 33
                                                                                                                       1381.3
                                                                                                                                      -18.24
                                                                                                                                                     16.18
      100.00
                  15 16 2
                                                19.19
                                                              187.35
                                                                            148.57
                                                                                             66.63 16 31 45
                                                                                                                        3942.6
                                                                                                                                      15.87
                                                                                                                                                    180.14
                               1762.96
                                                                                                       4 37 39
                                                                                                                        1163.0
                   4 8 16
                                                -24.08
                                                                 5.75
                                                                            147.96
                                                                                           115.03
                                                                                                                                      -20.51
                                                                                                                                                    358.43
                                                                                                    17 35 1
      110.00
                   16 22 47
                                4333.66
                                                21.90
                                                              170.13
                                                                            147.21
                                                                                             63.07
                                                                                                                        3733.7
                                                                                                                                       18.11
                                                                                                                                                    163.05
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 SGT 535.7 SGR 337.5 SG3 606.4

RRT -.1479 RRF .3853 RTF -.2527

SGB 633.1 R23 -.3269 R13 .2841
                                                                                                                  ST 204.0 SR 222.5 SS 865.0
CRT .7651 CRS .9627 CST .5802
LSA 899.7 MSA 171.9 SSA 19.5
    TDE -.1177 TRA -.3368 TC3 .2968 BAU .1056
   RDE -.1692 RRA -.0077 RC3 -.2909 FAU .15064
FDE 2.1512 FRA-1.7786 FC3-6.8619 BSP 1032
BDE .2061 BRA .3369 BC3 .4156 FSP -1869
                                                                                                                    EL1 283.8 EL2 103.0 ALF 48.25
                                                                  SG1 539.4 SG2 331.4 THA 171.42
                                                                                                                              ARRIVAL DATE MAR 14 1966
LAUNCH DATE DEC 4 1965
                                                                      FLIGHT TIME 100.00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 283.372
                       .00 LOL 71.64 VL 27.981 GAL -6.87 AZL 86.38 MCA 129.88 SMA 130.45 ECC .17617 INC 3.6169 V1 30.219 2.77 LOP 201.58 VP 37.963 GAP -2.11 AZP 92.32 TAL 215.91 TAP 345.79 RCA 107.47 APO 153.43 V2 35.101
   RL 147.44 LAL
   RP 107.96 LAP
   RC 74.954 GL 23.80 GP -4.24 ZAL 135.43 ZAP 60.28 ETS
                                                                                  .98 TAE 163.59 ETE 316.82 TAC 58.45 ETC 159.00 CLP -60.19
  PLANETOCENTRIC CONIC
   C3 18.858 VHL 4.343 OLA
                                      1.68 RAL 288.70 RAD 6567.8 VEL 11.842 PTH 2.10 VHP 3.277 DPA -21.35 RAP 326.09 ECC 1.3104
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   1 33 50 2252.47
                                                -20.47
                                                               43.90
                                                                           149.43
                                                                                         110.00
                                                                                                        2 11 22
                                                                                                                       1652.5
                                                                                                                                      -17.56
       90.00
                  13 56 44
                                4792.50
                                                17.91
                                                              206.29
                                                                            148.67
                                                                                            67.70
                                                                                                      15 16 36
                                                                                                                        4192.5
                                                                                                                                      14.73
      100.00
                    2 55 57
                               1987.57
                                                -21.49
                                                               24.00
                                                                            149.02
                                                                                           111.29
                                                                                                        3 29 5
                                                                                                                        1387.6
                                                                                                                                      -18.41
                                                                                                                                                     16.56
                  15 17 18 4532.63
4 5 59 1768.36
                                                                                                                        3932.6
      100.00
                                                18.92
                                                              186.73
                                                                            148.22
                                                                                            66.42 16 32 50
                                                                                                                                      15.57
                                                                                           114.88 4 35 28
62.85 17 35 50
      110.00
                                                -24.24
                                                               6.09
                                                                            147.75
                                                                                                                        1168.4
                                                                                                                                      -20.68
                                                                                                                                                    358.75
                               4324.61
      110.00
                  16 23 45
                                               21.62
                                                              169.58
                                                                            146.86
                                                                                                                       3724.6
                                                                                                                                     17.80
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 177.3 SR 202.2 SS 912.1

CRT .5783 CRS .9595 CST .3446

LSA 934.8 MSA 173.5 SSA 18.7

EL1 239.6 EL2 122.1 ALF 51.40
   TOE -.0752 TRA -.3710 TC3 .1661 BAU .0871
                                                              SGT 520.0 SGR 332.2 SG3 663.9
RRT -.0572 RRF .4431 RTF .0030
SGB 617.1 R23 -.4438 R13 .0144
   ROE -.1531 RRA -.0124 RC3 -.3031 FAU .16377
   FOE 2.3655 FRA-1.9551 FC3-7.5184 BSP 697
BOE .1705 BRA .3712 BC3 .3456 FSP -2070
                                                                 SG1 520.6 SG2 331.3 THA 176.48
```

ARRIVAL DATE MAR 16 1966

```
FLIGHT TIME 102.00
LAUNCH DATE DEC 4 1965
                                                                                     DISTANCE 289.832
    RL 147.44 LAL .00 LOL 71.64 VL 27.996 GAL -6.83 AZL 86.36 MCA 133.10 SMA 130.56 ECC .17500 INC 3.6449 V1 30.219
RP 108.00 LAP 2.66 LOP 204.80 VP 37.962 GAP -1.62 AZP 92.49 TAL 215.99 TAP 349.09 RCA 107.71 APO 153.41 V2 35.089
RC 77.191 GL 24.11 GP -4.63 ZAL 135.31 ZAP 65.62 ETS .54 ZAE 165.95 ETE 306.25 ZAC 56.59 ETC 158.02 CLP -65.54
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 18.716 VML 4.326 DLA 1.98 RAL 288.63 RAD 6567.8 VEL 11.836 PTH 2.10 VMP 3.151 DPA -22.37 RAP 324.04 ECC 1.3080 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-1 TIME
1 31 19 2260.0.7
13 58 43 4781.34
2 53 35 1994.73
15 19 8 4521.92
4 3 57 1774.50
16 25 16 4314.91
                                                                                           149.32
                                                                                                              109.82
                                                                                                                               2 8 59
                                                                              44.38
                                                           -20.65
         90.00
                                                                                                                              15 18 24
                                                                                                                                                                                       198.39
                                                                                                                                                    4181.3
                                                                                                                                                                      14.42
                                                                             205.60
                                                                                              148.43
                                                                                                                  67.47
                                                             17.62
         90.00
                                                                                                                                3 26 50
                                                                                                                                                    1394.7
                                                                                                                                                                      -18.61
                                                                                                                                                                                        17.00
                                                                                                                 111.11
                                                           -21.67
                                                                              24.46
                                                                                              148.91
        100.00
                                                                                                                 66.19 16 34 30
114.70 4 33 31
62.62 17 37 11
                                                                                                                                                                                       174.91
                                                                                                                                                   3921.9
                                                                                                                                                                     15.25
                                                             18.63
                                                                             186.07
                                                                                              147.98
        100.00
                                                                                                                                                    1174.5
                                                                                                                                                                                       359.12
                                                                                                                                                                      -20.88
                                                                               6.48
                                                                                              147.65
                                                           -24.41
        110.00
                                                                                                                                                                                       161.96
                                                                                                                                                    3714.9
                                                                                                                                                                     17.48
                                                                             168.99
                                                                                              146.61
                                                           21.31
        110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RET .0877 RRF .5016 RTF .2932
SGB 639.3 R23 .4633 R13 .3156
SGI 550.2 SG2 325.5 THA 4.61
                                                                                                                                               ST 168.2 SR 180.5 SS 958.7
CRT .2475 CRS .9563 CST -.0268
     TOE -.0269 TRA -.4134 TC3 .0117 BAU .0789
     ROE -.1360 RRA -.0167 RC3 -.3150 FAU .17576
FDE 2.5779 FRA-2.1071 FC3-8.1297 BSP 531
                                                                                                                                               LSA 974.2 MSA 175.1 SSA 17.7
EL1 195.5 EL2 150.4 ALF 52.97
     BDE .1387 BRA .4137 BC3 .3152 FSP -2249
                                                                                                                                                             ARRIVAL DATE MAR 18 1966
                                                                                       FLIGHT TIME 104.00
LAUNCH DATE DEC 4 1965
                                                                                      DISTANCE 296.262
    RL 147.44 LAL .00 LOL 71.64 VL 28.006 GAL -6.78 AZL 86.32 HCA 136.32 SHA 130.62 ECC .17401 INC 3.6761 V1 30.219
RP 108.04 LAP 2.54 LOP 208.01 VP 37.957 GAP -1.14 AZP 92.66 TAL 215.96 TAP 352.28 RCA 107.90 APO 153.35 V2 35.076
RC 79.446 GL 24.44 GP -5.06 ZAL 135.10 ZAP 71.10 ETS .05 ZAE 167.72 ETE 291.21 ZAC 54.63 ETC 156.89 CLP -71.02
   HELIOCENTRIC CONIC
    C3 18.578 VHL 4.310 OLA 2.31 RAL 288.66 RAD 6567.8 VEL 11.830 PTH 2.10 VHP 3.051 OPA -23.44 RAP 321.83 ECC 1.3058 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 28 57 2268.70 -20.84 44.94 149.32 109.61 2 6 46 1668.7 -17.98 37.43 90.00 14 1 19 4769.24 17.30 204.86 148.29 67.23 15 20 48 4169.2 14.07 197.67 100.00 2 51 22 2002.85 -21.87 24.98 148.91 110.90 3 24 45 1402.8 -18.83 17.50 100.00 15 21 34 4510.32 18.31 185.36 147.83 65.95 16 36 45 3910.3 14.90 178.22 110.00 4 2 6 1781.50 -24.61 6.93 147.66 114.51 4 31 47 1181.5 -21.10 359.55 110.00 16 27 21 4304.43 20.98 168.36 146.45 62.38 17 39 5 3704.4 17.10
   PLANETOCENTRIC CONIC
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 188.3 SR 157.9 SS 1001.1
CRT -.1466 CRS .9523 CST -.4242
LSA 1015.5 MSA 176.2 SSA 16.7
                                                                                  SGT 631.6 SGR 323.8 SG3 764.9
RRT .2453 RRF .5607 RTF .5380
SGB 709.7 R23 .3976 R13 .5718
     TOE .0282 TRA -.4621 TC3 -.1619 BAU .0906
     ROE -.1185 RRA -.0205 RC3 -.3266 FAU .18625
     FDE 2.7721 FRA-2.2318 FC3-8.6792 BSP 848
BDE .1218 BRA .4626 BC3 .3646 FSP -2411
                                                                                                                                                EL1 192.4 EL2 152.9 ALF 160.15
                                                                                  SG1 638.1 SG2 310.7 THA 9.42
                                                                                                                                                            ARRIVAL DATE HAR 20 1966
                                                                                       FLIGHT TIME 106.00
LAUNCH DATE DEC 4 1965
                                                                                      DISTANCE 302.663
     RL 147.44 LAL .00 LOL 71.64 VL 28.010 GAL -6.72 A7L 86.29 HCA 139.53 SMA 130.65 ECC .17316 INC 3.7111 VI 30.219
RP 108.08 LAP 2.41 LOP 211.23 VP 37.948 GAP -.69 A7P 92.82 TAL 215.83 TAP 355.35 RCA 108.03 APO 153.28 V2 35.063
RC 81.719 GL 24.79 GP -5.52 ZAL 134.79 ZAP 76.64 ETS 359.51 ZAE 168.41 ETE 272.19 ZAC 52.64 ETC 155.59 CLP -76.58
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 18.444 VHL 4.295 DLA 2.69 RAL 288.78 RAD 6567.7 VEL 11.825 PTH 2.09 VHP 2.977 DPA -24.54 RAP 319.52 ECC 1.3035 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                  -18.23
13.69
                      1 26 40 2278.52

14 4 32 4756.01

2 49 15 2012.11

15 24 38 4497.65

4 0 22 1789.52

16 30 0 4293.01
                                                                                                                                                 1678.5
4156.0
                                                                                                               109.37 2 4 38
66.98 15 23 48
                                                                                           149.42
                                                                             45.57
                                                            -21.07
          90.00
                                                                                                                                                                                        196.88
                                                                             204.04
                                                                                               148.23
          90.00
                                                             16.95
                                                                                                                             3 22 47
16 39 35
4 30 12
17 41 33
                                                                                                                                                                     -19.08
                                                                                                                                                                                        18.08
                                                                                             149.02
                                                                                                                  110.66
                                                                                                                                                    1412.1
                                                                              25.58
                                                            -22.09
         100.00
                                                                                                                                                                      14.52
                                                                                                                                                                                        177.47
                                                                                                                   65.69
                                                                                                                                                    3897.7
                                                                                               147.77
                                                                             184.58
        100.00
                                                             17.95
                                                                                                                                                                     -21.35
16.73
                                                                                                                                                                                          .03
                                                                                                                                                   1189.5
                                                                                              147.78
                                                                                                                  114.28
                                                                                7.44
                                                            -24.84
         110.00
                                                                                                                                                                                        160.71
                                                                                                                                                    3693.0
                                                                                                                  62.11
                                                                                               146.38
                                                                             167.67
                                                           20.62
        110.00
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 239.0 SR 135.0 SS 1036.1
CRT -.4352 CRS .9464 CST -.6892
                                                                                  SGT 761.5 SGR 321.5 SG3 804.8
RRT .3821 RRF .6198 RTF .7025
SGB 826.5 R23 .3290 R13 .7279
      TOE .0898 TRA -.5157 TC3 -.3515 BAU .1202
     ROE -.1007 RRA -.0239 RC3 -.3380 FAU .19498
FOE 2.9316 FRA-2.3275 FC3-9.1525 BSP 1407
BOE .1349 BRA .5162 BC3 .4876 FSP -2560
                                                                                                                                              LSA 1057.1 HSA 176.5 SSA 15.7
                                                                                                                                                EL1 248.3 EL2 117.0 ALF 162.09
                                                                                  SG1 773.0 SG2 292.6 THA 10.72
                                                                                                                                                             ARRIVAL DATE HAR 22 1966
                                                                                       FLIGHT TIME 108.00
 LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 309.036
     RL 147.44 LAL .00 LOL 71.64 VL 28.008 GAL -6.66 AZL 86.25 HCA 142.74 SMA 130.64 ECC .17245 INC 3.7511 V1 30.219
RP 108.12 LAP 2.27 LOP 214.44 VP 37.935 GAP -.25 AZP 92.99 TAL 215.59 TAP 358.33 RCA 108.11 APO 153.17 V2 35.050
RC 84.008 GL 25.17 GP -6.01 ZAL 134.38 ZAP 82.18 ETS 358.90 ZAE 167.73 ETE 252.85 ZAC 50.69 ETC 154.15 CLP -82.13
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 18.313 VHL 4.279 DLA 3.10 RAL 288.98 RAD 6567.7 VEL 11.819 PTH 2.09 VHP 2.928 DPA -25.64 RAP 317.18 ECC 1.3014
      LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              149.62
                                                                                                                                                                     -18.52
                                                                                46.30
                                                                                                                 109.09
                                                             -21.32
                        1 24 22 2289.79
14 8 27 4741.40
                                                                                                                   66.70 15 27 28
110.39 3 20 52
                                                                                                                                                                                         196.02
                                                                                                                                                     4141.4
                                                                                                                                                                        13.27
                                                                                              148.25
                                                                              203.15
                                                             16.56
                                                                                                                                                                                         18.74
                                                                                                                                                     1422.7
                                                                                                                                                                      -19.37
                                                                                               149.22
                                                                                                                  110.39
                                                                                26.27
                                                             -22.35
                        2 47 10 2022.75
         100.00
                                                                                                                   65.41 16 43 4
114.01 4 28 42
61.83 17 44 36
                                                                                                                                                      3883.7
                                                                                                                                                                      14.10
                                                                                                                                                                                         176.65
                                                                                               147.79
                                                                              183.73
                        15 28 21
                                          4483.67
                                                             17.56
         100.00
                                                                                                                                                     1198.8
                                                                                               148.00
                                                                                                                  114.01
                                                             -25.09
                                                                                  8.04
                        3 58 43 1798.75
16 33 16 4280.43
          110.00
                                                                                                                                                      3680.4
                                                                                                                                                                       16.30
                                                                                                                                                                                        159.99
                                                                                               146.40
                                                             20.22
                                                                               166.91
          110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                 SGT 928.3 SGR 319.6 SG3 833.3
RRT .4921 RRF .6750 RTF .8012
SGB 981.9 R23 .2789 R13 .8174
                                                                                                                                             ST 311.8 SR 111.3 SS 1067.8
CRT -.5906 CRS .9383 CST -.8224
       TOE .1562 TRA -.5738 TC3 -.5558 BAU .1605
       ROE -. 0825 RRA -. 0266 RC3 -. 3480 FAU . 20086
                                                                                                                                              LSA 1103.8 MSA 176.8 SSA 14.7
EL1 319.2 EL2 87.7 ALF 167.11
      FOE 3.0647 FRA-2.3751 FC3-9.4956 BSP 2067
      BOE .1766 BRA .5744 BC3 .6558 FSP -2658
                                                                                   5G1 942.9 5G2 274.0 THA 10.51
```

ARRIVAL DATE MAR 24 1966

LAUNCH DATE DEC 4 1965

```
DISTANCE 315.381
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 28.003 GAL -6.58 AZL 86.20 HCA 145.95 SMA 130.60 ECC .17186 INC 3.7973 V1 30.219
RP 108.16 LAP 2.13 LOP 217.64 VP 37.919 GAP .18 AZP 93.15 TAL 215.26 TAP 1.21 RCA 108.16 APO 153.05 V2 35.036
     RC 86.309 GL
                             25.59 GP -6.55 ZAL 133.88 ZAP 87.63 ETS 358.23 ZAE 165.85 ETE 237.21 ZAC 48.86 ETC 152.57 CLP -87.62
   PLANETOCENTRIC CONIC
                                                 3.57 RAL 289.26 RAD 6567.7 VEL 11.814 PTH 2.09 VHP 2.903 POPA -26.75 RAP 314.90 ECC 1.2993
     C3 18.188 VHL 4.265 DLA
    C3 18.188 VML 4.265 DLA 3.57 RAL 289.26 RAD 6567.7 VEL 11.814 PIM 2.09 VMP 2.905 VMP 2
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 398.8 SR 87.4 SS 1090.8
CRT -.6628 CRS .9236 CST -.8899
     TOE .2270 TRA -.6341 TC3 -.7689 BAU .2062
ROE -.0641 RRA -.0290 RC3 -.3576 FAU .20427
                                                                                   SGT 1118.8 SGR 319.3 SG3 851.1
RRT .5794 RRF .7281 RTF .8596
    FOE 3.1507 FRA-2.3881 FC3-9.7232 BSP 2774
BDE .2359 BRA .6348 BC3 .8480 FSP -2738
                                                                                                                                                  LSA 1151.2 MSA 176.2 SSA 13.6
                                                                                   SGB 1163.5 R23 .2480 R13 .8701
                                                                                  SG1 1134.9 SG2 256.6 THA 9.90
                                                                                                                                                 EL1 403.1 EL2 64.8 ALF 171.51
                                                                                        FLIGHT TIME 112.00
                                                                                                                                                                ARRIVAL DATE MAR 26 1966
LAUNCH DATE DEC 4 1965
                                                                                        DISTANCE 321.699
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 27.993 GAL -6.50 AZL 86.15 MCA 149.15 SMA 130.53 ECC .17136 INC 3.8519 V1 30.219
RP 108.20 LAP 1.97 LOP 220.85 VP 37.899 GAP .58 AZP 93.31 TAL 214.84 TAP 3.99 RCA 108.16 APO 152.90 V2 35.023
RC 88.623 GL 26.07 GP -7.16 ZAL 133.27 ZAP 92.94 ETS 357.48 ZAE 163.22 ETE 226.16 ZAC 47.22 ETC 150.87 CLP -92.96
   PLANETOCENTRIC CONIC
                                                 4.11 RAL 289.62 RAO 6567.7 VEL 11.809 PTH 2.09 VHP 2.900 CPA -27.86 RAP 312.75 ECC 1.2974
     C3 18.072 VHL 4.251 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 19 24 2318.10
14 18 33 4706.91
2 42 40 2049.52
15 37 58 4450.72
3 55 19 1822.11
16 41 47 4250.88
                                                                                                                                    1 58 2
                                                                                                                                                                                             40.52
                                                                                                                                                    1718.1
         90.00
                                                             -21.94
                                                                                48.15
                                                                                               150.34
                                                                                                                  108.37
                                                                                                                                                                        -19.23
                                                                                                                                15 37 O
3 16 49
                                                               15.62
                                                                                                                                                                                            193.99
          90.00
                                                                               201.05
                                                                                                148.55
                                                                                                                     66.08
                                                                                                                                                        4106.9
                                                                                                                                                                          12.26
        100.00
                                                             -22.97
                                                                                28.01
                                                                                                149.95
                                                                                                                   109.67
                                                                                                                                                        1449.5
                                                                                                                                                                         -20.08
                                                                                                                                                                                             20.41
                                                                                                                     64.79 16 52 8
                                                                                                                                                    3850.7
        100.00
                                                             16.62
                                                                              181.74
                                                                                                148.07
                                                                                                                                                                          13.08
                                                                                                                                                                                           174.73
                                                                                                                                  4 25 41
                                                                                                                                                      1222.1
        110.00
                                                             -25.73
                                                                                  9.55
                                                                                                148.76
                                                                                                                   113.32
                                                                                                                                                                         -22.35
                                                                                                                                                                                             2.03
                                                                                                                    113.32 4 25 41 1222.1
61.20 17 52 38 3650.9
                                                                                                                                                                       15.27
                                                                               165.16
        110.00
                                                             19.26
                                                                                                146.66
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 5T 495.2 SR 62.7 55 1111.4
CRT -.6744 CRS .8936 CST -.9252
                                                                                    SGT 1323.9 SGR 319.9 SG3 855.6
     TOE .3015 TRA -.6956 TC3 -.9870 BAU .2543
                                                                                   RRT .6506 RRF .7767 RTF .8944
SGB 1362.0 R23 .2304 R13 .9015
     ROE -. 0450 RRA -. 0306 RC3 -. 3662 FAU .20437
    FOE 3.2091 FRA-2.3497 FC3-9.7903 BSP 3505
BOE 3048 BRA .6962 BC3 1.0527 FSP -2758
                                                                                                                                                 LSA 1205.5 MSA 175.8 SSA 12.4
                                                                                   5G1 1340.7 SG2 239.9 THA 9.23
                                                                                                                                                  EL1 497.1 EL2 46.1 ALF 175.08
                                                                                                                                                              ARRIVAL DATE MAR 28 1966
                                                                                        FLIGHT TIME 114.00
LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 327.991
     RL 147.44 LAL .00 LOL 71.64 VL 27.979 GAL -6.41 AZL 86.08 MEA 152.36 SMA 130.44 ECC .17096 INC 3.9177 VI 30.219
RP 108.24 LAP 1.82 LOP 224.05 VP 37.877 GAP .98 AZP 93.47 TAL 214.34 TAP 6.69 RCA 108.14 APO 152.73 VZ 35.010
     RC 90.946 GL 26.62 GP -7.87 ZAL 132.56 ZAP 98.04 ETS 356.64 ZAE 160.21 ETE 218.72 ZAC 45.85 ETC 149.08 CLP -98.11
   PLANETOCENTRIC CONIC
                                                  4.73 RAL 290.05 RAO 6567.7 VEL 11.805 PTH 2.09 VHP 2.917 OPA -28.99 RAP 310.80 ECC 1.2958
     C3 17.973 VHL 4.239 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 16 26 2336.25
14 24 56 4686.19
2 40 0 2066.71
15 44 3 4430.97
                                                                                                150.86
                                                                                                                   107.89
                                                                                                                                  1 55 22
                                                                                                                                                   1736.3
                                                                                                                                                                        -19.67
                                                                                                                                                                                            41.67
          90.00
                                                             -22.32
                                                                               49.34
                                                                                                                     65.73
                                                                                                                                15 43 2
          90.00
                                                             15.05
                                                                              199.80
                                                                                                148.81
                                                                                                                                                       4086.2
                                                                                                                                                                         11.64
                                                                                                                                                                                          192.78
                                                                                                150.49
                                                                                                                   109.20
                                                                                                                                  3 14 27
                                                                                                                                                       1466.7
                                                                                                                                                                         -20.53
                                                                                                                                                                                            21.49
        100.00
                                                             -23.36
                                                                                29.14
                                                                                                148.33
                                                                                                                     64.43 16 57 54
                                                                                                                                                       3831.0
                                                                                                                                                                         12.47
                                                                                                                                                                                          173.59
        100.00
                                                             16.04
                                                                              180.56
                                                                                                                     112.86 4 23 58
60.84 17 57 45
                         3 53 21 1837.17
16 47 12 4233.27
                                                                                                149.31
                                                                                                                                                       1237.2
                                                                                                                                                                         -22.81
                                                                                                                                                                                            2.96
        110.00
                                                           -26.14
                                                                                10.54
                                                                                                                   112.86
                                                                                                146.90
                                                                                                                                                       3633.3
                                                                                                                                                                         14.65
                                                                                                                                                                                          157.32
        110.00
                                                           18.58
                                                                               164.12
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
     TOE .3788 TRA -.7569 TC3-1.2054 BAU .3034
                                                                                                                                                  ST 598.2 SR 37.9 SS 1124.7
CRT -.5809 CRS .7954 CST -.9457
                                                                                    SGT 1536.4 SGR 323.4 SG3 850.1
     ROE -.0255 RRA -.0324 RC3 -.3757 FAU .20223
                                                                                   RRT .7109 RRF .8228 RTF .9164
     FOE 3.2245 FRA-2.2840 FC3-9.7408 BSP 4254
                                                                                  SGB 1570.0 R23 .2233 R13 .9216
                                                                                                                                                  LSA 1262.4 MSA 174.7 55A 11.2
                                                                                                                                                  EL1 598.6 EL2 30.8 ALF 177.89
     BDE .3797 BRA .7576 BC3 1.2626 FSP -2760
                                                                                   SG1 1553.9 SG2 224.9 THA 8.69
                                                                                        FLIGHT TIME 116.00
                                                                                                                                                               ARRIVAL DATE MAR 30 1966
                                                                                        DISTANCE 334.257
   HELIOCENTRIC CONIC
    RU 147.44 LAU .00 LOL 71.64 VL 27.962 GAL -6.30 AZL 86.00 HCA 155.56 SMA 130.31 ECC .17063 INC 3.9992 V1 30.219
RP 108.29 LAP 1.65 LOP 227.25 VP 37.852 GAP 1.35 AZP 93.64 TAL 213.75 TAP 9.31 RCA 108.08 APO 152.55 V2 34.996
RC 93.279 GL 27.27 GP -8.72 ZAL 131.73 ZAP 102.88 EIS 355.67 ZAE 157.05 ETE 213.80 ZAC 44.79 ETC 147.19 CLP-103.03
   PLANETOCENTRIC CONIC
     C3 17.901 VHL 4.231 DLA 5.46 RAL 290.55 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 2.952 DPA -30.19 RAP 309.11 ECC 1.2946
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 12 53 258.26
14 32 26 462.30
2 36 48 2067.38
15 51 12 4408.21
3 50 57 1853.30
16 53 32 4213.05
          90.00
                                                             -22.7A
                                                                                               151.52
                                                                                                                   107.30
                                                                                                                                   1 52 11
                                                                                                                                                      1758.3
                                                                                                                                                                                            43.07
                                                                                                                                                                         -20.19
                                                                               50.79
                                                                                                                                  15 50 9
                                                                                                                                                        4062.3
                                                                                                                                                                          10.93
                                                                                                                                                                                            191.39
          90.00
                                                              14.37
                                                                               198.37
                                                                                                149.15
                                                                                                                     65.34
                                                                                                                                   3 11 36
                                                                                                                                                       1487.6
                                                                                                                                                                         -21.06
                                                                                                                                                                                             22.81
        100.00
                                                             -23.82
                                                                                30.52
                                                                                                151.15
                                                                                                                   104.61
                                                                                                                                 17 4 40
                                                                                                                                                       3808.2
       100.00
                                                              15.37
                                                                               179.20
                                                                                                148.68
                                                                                                                     64.04
                                                                                                                                                                          11.75
                                                                                                                                                                                           172.28
                                                                                                                                  4 21 53
       110.00
                                                                                                                                                       1255.5
                                                                                                                                                                                             4.10
                                                             -26.61
                                                                                11.75
                                                                                                150.00
                                                                                                                   112.29
                                                                                                                                                                       -23.36
                                                                                                                                18 3 45
        110,00
                       16 53 32
                                         4213.05
                                                             18.00
                                                                               162.94
                                                                                                147.23
                                                                                                                    60.44
                                                                                                                                                       3613.1
                                                                                                                                                                          13.93
                                                                                                                                                                                            156.20
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 1749.7 SGR 329.9 SG3 832.7
RRT .7623 RRF .8646 RTF .9302
SGB 1780.6 R23 .2241 R13 .9342
                                                                                                                                                 ST 707.6 SR 17.7 S5 1138.3
CRT .1442 CRS .0947 CST -.9582
LSA 1329.1 HSA 173.9 SSA 9.9
     TOE .4602 TRA -.8164 TC3-1.4179 BAU .3517
    ROE -.0037 RRA -.0340 RC3 -.3860 FAU .19710
FOE 3.2244 FRA-2.1748 FC3-9.5323 BSP 4963
BOE .4603 BRA .8171 BC3 1.4695 FSP -2705
                                                                                  SGB 1780.6 R23 .2241 R13 .9342
SG1 1768.0 SG2 211.4 THA 8.30
                                                                                                                                                 EL1 707.7 EL2 17.5 ALF
                                                                                                                                                                                                  .21
```

FLIGHT TIME 110.00

```
ARRIVAL DATE APR 1 1966
                                                                    FLIGHT TIME 118.00
LAUNCH DATE DEC 4 1965
                                                                    DISTANCE 340.498
  HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 27.942 GAL -6.19 AZL 85.90 HCA 158.76 SMA 130.17 ECC .17039 INC 4.1035 V1 30.219
RP 108.33 LAP 1.49 LOP 230.44 VP 37.825 GAP 1.72 AZP 93.83 TAL 213.10 TAP 11.85 RCA 107.99 APO 152.35 VZ 34.983
    RC 95.621 GL 28.05 GP -9.78 ZAL 130.77 ZAP 107.41 ETS 354.51 ZAE 153.86 ETE 210.64 ZAC 44.12 ETC 145.20 CLP-107.68
  PLANETOCENTRIC CONIC
                                     6.34 RAL 291.10 RAD 6567.7 VEL 11.801 PTH
                                                                                            2.09 VHP 3.006 DPA -31.54 RAP 307.75 ECC 1.2941
    C3 17.872 VHL 4.228 DLA
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  1785.6
                                                                                                                                   -20.83
                                                                                        106.54
                                                                         152.33
                                                                                                     1 48 8
       90.00
                   1 8 23 2385.64
                                               -23.32
                                                             52.62
                                                                                                    15 58 35
                                                                                                                     4034.2
                                                                                                                                    10.07
                                                                                                                                                 189.76
                                                                                           64.91
                                                                           149.61
                  14 41 21
                               4634.18
                                                13.57
                                                             196.70
       90.00
                                                                                          107.86
                                                                                                      3 7 58
                                                                                                                     1513.6
                                                                                                                                   -21.70
                                                                                                                                                  24.47
                2 32 44 2113.55
15 59 41 4381.49
3 47 53 1876.39
                                                              32.25
                                                                           151.97
      100.00
                                               -24.37
                                                                                        63.60 17 12 42
111.55 4 19 11
60.00 18 10 51
                                                                                                                     3781.5
                                                                                                                                    10.90
                                                                                                                                                 170.75
                                                                          149.11
                                                14.56
                                                             177.63
      100.00
                                                                                                                                   -24.02
                                                                                                                                                  5.54
                                                                          150.85
                                                                                                                     1278.4
                                               -27.20
                                                              13.27
                                                                           147.64
                                                                                                                     3589.4
                                                                                                                                    13.09
                                                                                                                                                 154.89
                  17 1 2 4189.42
                                              17.20
                                                             161.58
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE .5457 TRA -.8747 TC3-1.6216 BAU .3991
RDE .0202 RRA -.0365 RC3 -.4008 FAU .19036
FDE 3.1976 FRA-2.0535 FC3-9.2214 BSP 5722
BDE .5461 BRA .8755 BC3 1.6704 FSP -2641
                                                                SGT 1962.0 SGR 343.6 SG3 807.8
RRT .8073 RRF .9028 RTF .9396
SGB 1991.9 R23 .2309 R13 .9430
                                                                                                                 ST 822.7 SR 32.8 55 1148.0
CRT .9640 CRS -.9214 CST -.9667
                                                                                                                 LSA 1402.1 MSA 172.6 SSA 8.6
                                                                SG1 1981.8 SG2 200.8 THA 8.13
                                                                                                                 EL1 823.3 EL2 8.7 ALF 2.20
                                                                    FLIGHT TIME 120.00
                                                                                                                            ARRIVAL DATE APR 3 1966
LAUNCH DATE DEC 4 1965
                                                                    DISTANCE 346.714
  HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 27.919 GAL -6.07 AZL 85.76 HCA 161.95 SMA 130.01 ECC .17021 INC 4.2427 VI 30.219 RP 108.37 LAP 1.31 LOP 233.63 VP 37.796 GAP 2.07 AZP 94.03 TAL 212.37 TAP 14.32 RCA 107.88 APO 152.13 V2 34.970
   RC 97.969 GL 29.03 GP -11.18 ZAL 129.63 ZAP 111.61 ETS 353.05 ZAE 150.65 ETE 208.86 ZAC 43.93 ETC 143.06 CLP-112.05
  PLANETOCENTRIC CONIC
   C3 17.917 VHL 4.233 DLA 7.43 RAL 291.70 RAD 6567.7 VEL 11.803 PTH 2.09 VHP 3.076 DPA -33.14 RAP 306.75 ECC 1.2949 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1820.9
                                                                                                                                  -21.62
                                                                          153.34
                                                                                         105.52
                                                                                                      1 42 42
                   1 2 21 2420.94
14 52 10 4600.06
                                               -23.98
                                                               54.99
       90.00
                                                                                                                                                  187.80
                                                                                           64.42
                                                                                                     16 8 50
                                                                                                                      4000.1
                                                                                                                                      9.03
                                                12.57
                                                             194.69
                                                                           150.16
       90.00
                  14 52 10
                   2 27 16 2147.08
16 9 57 4349.15
3 43 40 1908.01
17 10 3 4160.98
                                                              34.51
                                                                           153.00
                                                                                          106.86
                                                                                                     3 3 3
                                                                                                                      1547.1
                                                                                                                                    -22.51
                                                                                                                                                  26.64
                                               -25.06
      100.00
                                                                                                                                                  168.91
                                               13.58
                                                             175.73
                                                                           149.66
                                                                                           63.11 17 22 26
                                                                                                                     3749.1
                                                                                                                                      9.86
                  16 9 57
      100.00
                                                                                          110.57
                                                                                                     4 15 28
                                                                                                                     1308.0
                                                                                                                                    -24.87
                                                                                                                                                    7.43
                                               -27.92
                                                               15.27
                                                                           151.91
      110.00
                                                                                           59.49 18 19 24
                                                                                                                     3561.0
                                                                                                                                    12.06
                                                                                                                                                  153.33
                                                             159.95
                                                                           148.15
                  17 10 3
                                              16.23
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT OFTERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 2169.7 SGR 367.3 SG3 774.5
RRT .8453 RRF .9353 RTF .9457
SGB 2200.6 R23 .2421 R13 .9489
SG1 2192.0 SG2 194.2 THA 8.21
                                                                                                                 ST 946.8 SR 69.3 SS 1161.2
CRT .9795 CRS -.9927 CST -.9726
    TOE .6394 TRA -.9310 TC3-1.8083 BAU .4448
    RDE .0491 RRA -.0400 RC3 -.4217 FAU .18153
                                                                                                                 LSA 1490.0 MSA 171.7 SSA 7.2
EL1 949.2 EL2 13.9 ALF 4.10
    FDE 3.1715 FRA-1.9084 FC3-8.7710 BSP 6436
    BDE .6413 BRA .9318 BC3 1.8569 FSP -2538
                                                                                                                           ARRIVAL DATE APR 5 1966
                                                                    FI 16HT TIME 122.00
LAUNCH DATE DEC 4 1965
                                                                    DISTANCE 352.908
  HELIOCENTRIC CONIC
                        .00 LOL 71.64 VL 27.894 GAL -5.95 AZL 85.56 HCA 165.14 SMA 129.82 ECC .17011 INC 4.4394 V1 30.219
1.14 LOP 236.82 VP 37.765 GAP 2.41 AZP 94.29 TAL 211.57 TAP 16.71 RCA 107.74 APO 151.91 V2 34.957
    RL 147.44 LAL
RP 108.41 LAP
                      30.32 GP -13.14 TAL 128.28 TAP 115.41 ETS 351.11 TAE 147.37 ETE 208.31 TAC 44.36 ETC 140.63 CLP-116.14
    RC 100.323 GL
   PLANETOCENTRIC CONIC
                                     8.85 RAL 292.33 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 3.167 OPA -35.24 RAP 306.19 ECC 1.2978
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 53 45 2468.84
15 5 48 4556.80
2 19 24 2192.59
16 22 50 4308.29
3 37 28 1948.28
17 21 15 4125.35
                                                                                                                                  -22.64
                                                                                                                   1868.8
                                                                          154.65
                                                                                         104.09
                                                                                                     1 34 54
                                                -24.82
                                                             58.25
       90.00
                                                                                                                     3956.8
                                                                                                                                     7.68
                                                             192.16
                                                                           150.87
                                                                                           63.86 16 21 45
                                               11.29
        90.00
                                                                                                                     1592.6
                                                                                                                                    -23.55
                                                                           154.32
                                                                                          105.44
                                                                                                     2 55 57
                                                              37.61
                                               -25.92
      100.00
                                                                                                                                     8.53
                                                                                           62.54 17 34 38
                                                                                                                     3708.3
                                                                           150.35
                                               12.30
                                                             173.36
      100.00
                                                                                                                                  -25.97
                                                                                                     4 9 57
                                                                                                                     1348.3
                                                                           153.29
                                                                                          109.18
                                               -28.85
                                                              18.03
      110.00
                                                                                          58.91 18 30 1
                                                                                                                                    10.76
                                                                                                                     3525.4
                                              14.99
                                                                           148.80
                                                             157.94
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .7455 TRA -.9881 TC3-1.9709 BAU .4894
RDE .0860 RRA -.0464 RC3 -.4546 FAU .17136
                                                                SGT 2373.7 SGR 408.7 SG3 734.8

RRT .8764 RRF .9610 RTF .9502

SGB 2408.6 R23 .2544 R13 .9534

SGI 2400.7 SG2 194.6 THA 8.64
                                                                                                                 ST 1083.5 SR 118.0 55 1175.8
CRT .9747 CRS -.9987 CST -.9773
    ROE .0860 RRA - .0464 RC3 - .4546 FAU .17136
FDE 3.1416 FRA-1.7641 FC3-8.1979 BSP 7167
                                                                                                                 LSA 1594.2 MSA 170.2 SSA
                                                                                                                 ELI 1089.6 EL2 26.3 ALF 6.06
    BDE .7504 BRA .9892 BC3 2.0227 FSP -2429
                                                                                                                            ARRIVAL DATE APR 7 1966
                                                                     FLIGHT TIME 124.00
 AUNCH DATE DEC 4 1965
                                                                     DISTANCE 359.078
   HELTOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 27.866 GAL -5.81 AZL 85.26 HCA 168.34 SMA 129.63 ECC .17007 INC 4.7402 V1 30.219
RP 108.44 LAP .96 LOP 240.01 VP 37.733 GAP 2.74 AZP 94.64 TAL 210.71 TAP 19.05 RCA 107.58 APO 151.67 V2 34.945
RC 102.682 GL 32.14 GP -16.11 TAL 126.58 ZAP 118.68 ETS 348.32 ZAE 143.77 ETE 209.11 ZAC 45.71 ETC 137.69 CLP-119.97
   PLANETOCENTRIC CONIC
    C3 18.540 VHL 4.306 DLA 10.82 RAL 292.96 RAO 6567.8 VEL 11.829 PTH 2.09 VHP 3.286 OPA -38.28 RAP 306.18 ECC 1.3051
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 40 23 2538.93 -25.89 63.11 156.44 101.89 1 22 42 1938.9 -23.99 54.95
                                                                                                     16 39 9
                                                  9.50
                                                              188.76
                  15 24 11
                                 4498.02
        90.00
                                                                                                      2 44 47
                                                                                                                      1659.2
                                                                                                                                    -24.95
                                                                                                                                                   34.07
                                                                                          103.25
                                                -27.04
                                                              42.24
                                                                           156.15
                    2 7 8 2259.16
       100.00
                                                                                                     17 51 0
                                                                                                                                                  163.52
                                                                                                                      3652.9
                                                                                                                                      6.71
                                                                                            61.87
                                                 10.55
                                                             170.20
                                                                           151.29
                  16 40 7
                                 4252.86
       100.00
                                                                                                                      1407.2
                                                                                                                                    -27.48
                                                                                                                                                   13.96
                                                                                          107.02
                   3 27 39 2007.22
                                               -30.10
                                                               22.17
                                                                           155.21
       110.00
                                                                                            58.22 18 44 3
                                                                                                                      3477.7
                                                                                                                                     9.00
                                                                                                                                                  148.82
                                 4077.75
                                                13.30
                                                              155.28
                                                                           149.67
                  17 36 5
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCUMALY
SGT 2569.9 SGR 478.3 SG3 684.7
RRT .8996 RRF .9788 RTF .9533
SGB 2614.0 R23 .2647 R13 .9569
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1248.3 SR 188.0 SS 1202.2
    TDE .8811 TRA-1.0463 TC3-2.0839 BAU .5314
                                                                                                                  CRT .9746 CRS -.9992 CST -.9814
           .1399 RRA -.0568 RC3 -.5037 FAU .15850
                                                                                                                 LSA 1735.0 MSA 168.8 SSA 4.4
EL1 1261.7 EL2 41.6 ALF 8.36
    FOE 3.1409 FRA-1.6027 FC3-7.4011 BSP 7835
BDE .8921 BRA 1.0479 BC3 2.1439 FSP -2264
                                                             SG1 2605.9 SG2 205.9 THA 9.56
```

ARRIVAL DATE APR 9 1966

LAUNCH DATE DEC 4 1965

DISTANCE 365.226 HELIOCENTRIC CONIC .00 LOL 71.64 VL 27.836 GAL -5.66 AZL 84.74 HCA 171.52 SMA 129.42 ECC .17009 INC 5.2636 VI 30.219 .77 LOP 243.20 VP 37.700 GAP 3.06 AZP 95.21 TAL 209.79 TAP 21.32 RCA 107.40 APO 151.43 VZ 34.932 RL 147.44 LAL RC 105.043 GL 35.02 GP -21.12 7AL 124.25 7AP 121.08 ETS 343.84 7AE 139.22 ETE 211.70 7AC 48.74 ETC 133.73 CLP-123.60 PLANETOCENTRIC CONIC C3 19.608 VHL 4.428 DLA 13.85 RAL 293.51 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 3.466 CPA -43.26 RAP 307.04 ECC 1.3227 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 16 51 2654.90 -27.26 71.32 159.24 97.99 1 1 6 2054.9 -25.87 62.92 62.43 17 5 37 3808.5 90.00 15 52 8 4408.51 6.72 183.66 153.37 2.97 176.99 1 45 30 2368.99 17 6 10 4169.65 100.00 -28.51 50.07 159.02 99.38 2 24 59 1769.0 -26.92 41.63 7.84 165.50 152.76 3569.6 3.92 158.90 100.00 158.25 3 10 9 2104.13 17 58 0 4007.27 110.00 -31.82 29.19 103.20 1504.1 -29.68 20.64 151.43 10.74 151.01 3407.3 6.36 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 2769.5 SGR 602.7 SG3 618.9 RRT .9167 RRF .9893 RTF .9563 SGB 2834.3 R23 .2659 R13 .9609 ST 1460.5 SR 299.5 SS 1235.5 CRT .9783 CRS -.9992 CST -.9854 TOE 1.0734 TRA-1.1210 TC3-2.1153 BAU .5750 ROE .2299 RRA -.0774 RC3 -.5802 FAU .14221 FOE 3.1540 FRA-1.4496 FC3-6.2788 BSP 8625 LSA 1929.2 MSA 166.0 SSA 3.1 BOE 1.0977 BRA 1.1237 BC3 2.1935 FSP -2075 SG1 2824.5 SG2 236.2 THA 11.36 EL1 1489.6 EL2 60.8 ALF 11.36 FLIGHT TIME 128.00 ARRIVAL DATE APR 11 1966 LAUNCH DATE DEC 4 1965 DISTANCE 371.352 HELIOCENTRIC CONIC .DO LOL 71.64 VL 27.804 GAL -5.51 AZL 83.59 MCA 174.71 SMA 129.19 ECC .17018 INC 6.4087 V1 30.219 .59 LOP 246.38 VP 37.665 GAP 3.36 AZP 96.38 TAL 208.82 TAP 23.53 RCA 107.21 APO 151.18 V2 34.920 RL 147.44 LAL RP 108.52 LAP RC 107.406 GL 40.38 GP -31.15 ZAL 120.41 ZAP 121.17 ETS 335.58 ZAE 131.52 ETE 216.93 ZAC 55.76 ETC 127.67 CLP-127.20 PLANETOCENTRIC CONIC C3 22.742 VHL 4.769 DLA 19.38 RAL 293.81 RAD 6567.9 VEL 12.005 PTH 2.14 VHP 3.854 DPA -53.10 RAP 310.03 ECC 1.3743 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 20 8 2897.44 -28.31 89.24 24 8 26 2297.4 88.95 164.65 80.29 61.71 17 57 55 90.71 1 40 45 60.21 19 3 27 90.00 16 47 17 4237.21 1.24 174.06 156.87 3637.2 -2.55 167.43 0 57 29 2596.20 17 56 33 4013.68 -29.88 66.79 164.65 1996.2 -29.47 58.01 -1.37 100.00 2.62 156.86 156.11 3413.7 150.34 94.59 3 10 9 56.29 19 43 25 2 31 48 2301.11 -33.91 44.16 164.43 1701.1 -32.90 35.06 18 38 44 3881.53 6.05 144.71 153.98 3281.5 1.58 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1805.0 SR 515.5 SS 1278.2 CRT .9843 CRS -.9993 CST -.9901 SGT 2974.9 SGR 827.4 SG3 503.7 RRT .9277 RRF .9939 RTF .9600 SGB 3087.8 R23 .2522 R13 .9667 TOE 1.4494 TRA-1.2352 TC3-1.9169 BAU .6166 RDE .4271 RRA -.1173 RC3 -.6622 FAU .11358 FDE 3.1686 FRA-1.2373 FC3-4.3237 BSP 9369 BDE 1.5110 BRA 1.2407 BC3 2.0280 FSP -1691 LSA 2265.4 MSA 160.9 SSA 1.9 ELI 1875.1 ELZ 87.7 ALF 15.74 SG1 3073.3 SG2 299.1 THA 14.61 ARRIVAL CATE APR 13 1966 LAUNCH DATE DEC 4 1965 FLIGHT TIME 130.00 HELIOCENTRIC CONIC DISTANCE 377.449 RL 147.44 LAL .00 LOL 71.64 VL 27.771 GAL -5.34 AZL 79.02 HCA 177.88 SMA 128.96 ECC .17031 INC10.9782 V1 30.219
RP 108.56 LAP .40 LOP 249.56 VP 37.629 GAP 3.66 AZP 100.97 TAL 207.79 TAP 25.67 RCA 107.00 APO 150.93 V2 34.909
RC 109.770 GL 53.77 GP -57.30 ZAL 110.92 ZAP 111.81 ETS 316.31 ZAE 110.89 ETE 221.24 ZAC 75.91 ETC 115.55 CLP-133.45 PLANETOCENTRIC CONIC C3 42.603 VHL 6.527 CLA 33.11 RAL 293.53 RAD 6568.6 VEL 12.805 PTH 2.33 VHP 5.902 DPA -77.89 RAP 334.02 ECC 1.7011 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 61.14 18 55 14 61.13 23 14 6 61.14 18 55 14 61.13 23 14 6 64.67 24 27 42 57.26 22 24 57 175.63 3560.8 -20.70 171.37 72.08 17 45 53 4160.82 -16.98 178.44 22 19 19 3287.76 -16.97 113.54 175.62 2687.8 -20.69 106.47 17 45 53 4160.82 -16.98 178.44 175.63 3560.8 -20.70 171.37 2687.8 106.47 107.92 22 19 19 3287.76 -16.97 113.54 175.62 -20.69 23 36 52 3049.60 -23.77 98.80 179.33 2449.6 -26.97 91.10 2847.0 -14.66 21 27 30 3446.98 -10.42 121.85 171.61 115.31 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 2.8710 TRA-1.6419 TC3-1.0249 BAU .6323 SGT 3332.0 SGR 1020.7 SG3 236.1 ST 2572.8 SR 843.2 SS 1159.8 RRT .9198 RRF .9846 RTF .9734 SGB 3484.8 R23 .1964 R13 .9801 CRT .9891 CRS -.9984 CST -.9959 ROE .9589 RRA -.1452 RC3 -.4266 FAU .04844 FOE 2.5745 FRA -.8025 FC3 -.9844 BSP 10982 BDE 3.0269 BRA 1.6483 BC3 1.1101 FSP -828 LSA 2941.9 MSA 143.6 SSA 1.2 SG1 3463.4 SG2 385.2 THA 15.94 EL1 2704.9 EL2 118.7 ALF 18.00 FLIGHT TIME 132.00 ARRIVAL DATE APR 15 1966 LAUNCH DATE DEC 4 1965 DISTANCE 383.594 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.736 GAL -5.18 AZL 101.14 MCA 181.12 SMA 128.72 ECC .17064 INC11.1432 V1 30.219
RP 108.59 LAP .22 LOP 252.73 VP 37.593 GAP 3.97 AZP 78.86 TAL 206.76 TAP 27.88 RCA 106.76 APO 150.69 V2 34.897
RC 112.133 GL -54.24 GP 73.53 ZAL 110.01 ZAP 104.15 ETS 48.81 ZAE 102.77 ETE 137.51 ZAC 60.17 ETC 240.38 CLP-149.59 PLANETOCENTRIC CONIC C3 43.241 VHL 6.576 DLA -68.91 RAL 341.86 RAD 6568.6 VEL 12.830 PTH 2.34 VHP 9.807 DPA 49.13 RAP 280.51 ECC 1.7116 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.12 6 6 8 1957.23 29.67 66.59 239.16 155.54 6 38 45 1357.2 36.89 62.88 155.88 16 28 34 5498.85 29.68 255.78 239.18 155.53 18 0 13 4898.8 36.90 252.06 24.12 6 6 8 1957.23 29.67 66.59 239.16 155.54 6 38 45 1357.2 36.89 62.88 155.53 18 0 13 155.54 6 38 45 155.53 18 0 13 155.8A 16 28 34 5498.85 29.68 255.78 239.18 4898.8 36.90 252.06 24.12 6 6 8 1957.23 29.67 66.59 239.16 1357.2 36.89 62.88 16 28 34 36.90 155.88 5498.85 29.68 255.78 239.18 4898.8 252.06 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2928.3 SR 1001.8 SS 926.6 CRT -.9889 CRS .9976 CST -.9968 TOE-3.3429 TRA .4114 TC3-1.1104 BAU .7049 SGT 3407.2 SGR 1438.3 SG3 122.9 RRT -.9427 RRF -.9903 RTF .9799 ROE 1.1135 RRA -.3427 RC3 .5036 FAU .02501 F0E-1.2342 FRA .2723 FC3 -.5007 BSP 13541 SGB 3698.4 R23 .1511 R13 -.9885 SG1 3671.5 SG2 445.2 THA 157.96 LSA 3227.1 MSA 152.0 SSA .6 EL1 3091.8 EL2 140.9 ALF 161.27 BDE 3.5235 BRA .5355 BC3 1.2193 FSP

FLIGHT TIME 126.00

-459

LAUNCH DATE DEC 4 1965	FLIGHT TIME 134.00	ARRIVAL DATE APR 17 1966
HELIOCENTRIC CONIC	DISTANCE 389.636	ecc 17000 the 1314 Nt 30 210
RP 108.63 LAP .03 LOP 255.91 VP 37.556 RC 114.493 GL -3.02 GP 34.45 7AL 129.35	GAL -4.99 AZL 90.37 HCA 184.27 SMA 128.47 GAP 4.24 AZP 89.63 TAL 205.63 TAP 29.90 ZAP 126.45 ETS 27.53 ZAE 131.16 ETE 146.82	RCA 106.52 APO 150.42 V2 34.886 7AC 37.02 ETC 201.58 CLP-136.09
C3 11.556 VML 3.401 CLA -22.61 RAL 305.22 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 6 14 5 1296.41 8.24 90.00 11 28 19 5530.94 28.31	RAD 6567.4 VEL 11.531 PTH 2.01 VHP 4.348 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 348.45 160.24 117.19 6 35 41 257.13 165.40 90.37 13 0 30	DPA 11.51 RAP 296.79 ECC 1.19U3 PO CST TIM INJ 2 LAT INJ 2 LONG 696.4 11.82 341.60 4930.9 28.07 248.47
100.00 7 18 42 1087.81 6.89 100.00 13 6 23 5214.77 29.85	332.39 159.51 119.16 7 36 50 233.85 165.37 88.29 14 33 18 322.37 157.55 124.00 8 8 59	487.8 10.73 325.70 4614.8 29.29 225.09 381.4 8.46 316.09
110.00 7 52 38 981.45 3.72 110.00 14 48 57 4893.90 33.56 DIFFERENTIAL CORRECTIONS	322.37 157.55 124.00 8 8 59 209.15 165.05 83.09 16 10 31 MID-COURSE EXECUTION ACCURACY	4293.9 32.24 200.17 ORBIT DETERMINATION ACCURACY
TDE2834 TRA6607 TC3-4.5221 BAU .7444 RDE .0619 RRA .0324 RC3 1.6520 FAU .09584	PRT - 0481 PRF - 9995 RTF 9499	ST 606.1 SR 111.1 5S 135.6 CRT8814 CRS .9877 CST9073 LSA 626.4 MSA 74.0 SSA 12.6
FDE1877 FRA1715 FC3-7.1737 BSP 11011 BDE .2901 BRA .6615 BC3 4.8144 FSP -1392		ELI 614.0 EL2 51.8 ALF 170.76
LAUNCH DATE DEC 4 1965	FLIGHT TIME 136.00	ARRIVAL DATE APR 19 1966
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.663	OISTANCE 395.683 GAL -4.80 AZL 88.76 HCA 187.45 SMA 128.21	ECC .17124 INC 1.2367 VI 30.219
RC 116.852 GL 10.04 GP 20.73 7AL 127.11	GAP 4.52 A7P 91.23 TAL 204.46 TAP 31.91 ZAP 133.95 ETS 18.86 ZAE 136.11 ETE 159.63 RAD 6567.4 VEL 11.535 PTH 2.01 VHP 3.989	ZAC 34.67 ETC 182.35 CLP-137.91
C3 11.672 VML 3.416 DLA -9.52 RAL 303.75 LNCH AZMTH LNCH TIME L-I TIME INJ LAT 90.00 3 58 49 1793.81 -7.64	INJ LONG INJ RT ASC INJ AZMTH INJ TIME 16.37 156.34 117.35 4.28 43	PO CST TIM INJ 2 LAT INJ 2 LONG 1193.8 -3.91 9.67
90.00 13 32 10 5037.36 23.47 100.00 5 15 29 1546.47 -8.52	222.09 159.33 73.68 14.56 8 357.71 155.86 118.76 5.41 16	4437.4 21.01 214.28 946.5 -4.62 351.10
100.00 14 58 11 4759.94 24.42 110.00 6 13 6 1366.08 -10.84	201.36 159.01 72.21 16 17 31 342.63 154.47 122.62 6 35 52	4159.9 21.76 193.58 766.1 -6.46 336.27
110.00 16 17 4 4513.09 26.96 DIFFERENTIAL CORRECTIONS	181.60 158.00 68.14 17 32 17 HID-COURSE EXECUTION ACCURACY	ORBIT DETERMINATION ACCURACY
TDE .2089 TRA7992 TC3-4.6615 BAU .7464 RDE0447 RRA .0406 RC3 1.0738 FAU .11103	SGT 3480.6 SGR 740.8 SG3 496.0 RRT9530 RRF9970 RTF .9491 SGB 3558.6 R23 .2933 R139529 SG1 3551.8 SG2 219.9 THA 168.49	CRT8343 CRS .9864 CST7626
FDE .6091 FRA2964 FC3-8.2352 BSP 11076 BDE .2136 BRA .8002 BC3 4.7836 FSP -1626	SGI 3551.8 SG2 219.9 THA 168.49	EL1 550.2 EL2 44.2 ALF 172.91
LAUNCH DATE DEC 4 1965	FLIGHT TIME 138.00	ARRIVAL DATE APR 21 1966
HELIOCENTRIC CONIC	015TANCE 401.716 CAL -4.60 AZL 88.11 HCA 190.62 SHA 127.95	ECC .17167 INC 1.8875 V1 30.219
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL, 15.22 GP 14.44 7AL 124.58	015TANCF 401.716	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 TAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02	DISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 TAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH A7MTH LNCH TIME L-I TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89	OISTANCE 401.716 GAL -4.60 ÄŽL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 APP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 146.90 116.74 5 6 52	ECC .17167 INC 1.8875 V1 30.219 RCA 1D5.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 ZAL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-I TIME INJ LAT 90.00 318 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51.42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23	ECC .17167 INC 1.8875 V1 30.219 RCA 1D5.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 TAL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-I TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS	OISTANCE 401.716 GAL -4.60 A7L 88.11 HCA 190.62 SMA 127.95 GAP 4.79 A7P 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 MID-COURSE EXECUTION ACCURACY	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL . 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.43 100.00 4 38 16 1715.25 -13.89 100.00 4 38 16 1715.25 -13.89 100.00 5 42 7 1515.36 -16.17 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERNTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 MID-COURSE EXECUTION ACCURACY SCT 3624.8 SGR 551.0 SG3 499.2	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH A7MTH LNCH TIME L-I TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647	OISTANCE 401.716 GAL -4.60 A7L 88.11 HCA 190.62 SMA 127.95 GAP 4.79 A7P 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRI9516 RRF9897 RTF9484 SGE 3666.4 R232772 R139503	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054 FDE .9552 FRA2781 FC3-8.0089 BSP 11406	OISTANCE 401.716 GAL -4.60 A7L 88.11 HCA 190.62 SMA 127.95 GAP 4.79 A7P 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRI9516 RRF9897 RTF9484 SGE 3666.4 R232772 R139503	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7
HELIOCENTRIC CONIC RR 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL . 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.43 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TOE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054 FDE .9552 FRA2781 FC3-8.0089 BSP 11406 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 351 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF9484 SGE 3666.4 R232772 R139503 SGE 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-I TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TOE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054 FOE .9552 FRA2781 FC3-8.0089 BSP 11408 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.585 RP 108.72 LAP53 LOP 265.42 VP 37.443 RC 121.557 GL 18.02 GP 10.93 ZAL 122.31	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 351 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 MID-COURSE EXECUTION ACCURACY SCT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF .9484 SCB 3666.4 R23 .2772 R139503 SCB 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAL -4.39 AZL 87.76 HCA 193.80 SMA 127.69 GAP 5.05 AZP 92.18 TAL 202.02 TAP 35.82 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT -9461 CRS .9869 CST -9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 ECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.63 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647 RDE0445 RRA .0314 RC3 .7862 FAU .11054 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 MELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.585 RC 121.557 GL 18.02 GP 10.93 ZAL 122.31 PLANETOCENTRIC CONIC C3 12.091 VHL 3.477 DLA95 RAL 305.32	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VMP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 723 172.61 157.16 64.08 18 4 50 MID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF .9484 SGG 3666.4 R23 .2772 R139503 SGI 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAL -4.39 AZL 87.76 MCA 193.80 SMA 127.69 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40	ECC .17167 INC 1.88T5 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT -9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 ECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL . 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TOE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 MELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.585 RP 108.72 LAP53 LOP 265.42 VP 37.441 RC 121.557 GL 18.02 GP 10.93 7AL 122.31 PLANETOCENTRIC CONIC C3 12.091 VHL 3.477 OLA95 RAL 305.32 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT 90.00 2 59 37 2071.50 -15.86	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 35.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAO 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 351 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 MID-COURSE EXECUTION ACCURACY SCT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF .9484 SCB 3666.4 R23 .2772 R139503 SCB 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAL -4.39 AZL 87.76 HCA 193.80 SMA 127.69 GAP 5.05 AZP 92.18 TAL 202.02 TAP 35.82 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40	ECC .17167 INC 1.8875 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 PAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERNINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 PCCC .17219 INC 2.2411 V1 30.219 PCCA 105.70 APO 149.67 V2 34.856 PCCA 37.13 ETC 168.47 CLP-142.10 OPA -11.11 RAP 304.04 ECC 1.1990 PO CST TIM INJ 2 LAT INJ 2 LONG 1471.5 -12.51 25.54 4174.5 14.22 197.98
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.63 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 15 39 18 4601.00 20.73 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647 RDE0445 RRA .0314 RC3 .7862 FAU .11054 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.589 RP 108.72 LAP53 LOP 265.42 VP 37.443 RC 121.557 GL 18.02 GP 10.93 7AL 122.31 PLANETOCENTRIC CONIC C3 12.091 VHL 3.477 DLA95 RAL 305.32 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 259 37 2071.50 -15.86 90.00 14 43 33 4774.48 17.44 100.00 4 20 31 1810.54 -16.73	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 65 59 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF .9484 SGE 3666.4 R23 .2772 R139503 SGI 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAL -4.39 AZL 87.76 HCA 193.80 SMA 127.69 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40 PRAO 6567.5 VEL 11.553 PTH 2.02 VHP 4.037 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 32.62 158.90 113.77 3 34 8	ECC .17167 INC 1.88T5 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT CETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT -9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 ECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10 DPA -11.11 RAP 304.04 ECC 1.1990 PO CST TIM INJ 2 LAT INJ 2 LONG 1471.5 -12.51 25.54 4174.5 14.22 197.98 1210.5 -13.20 6.00 3910.7 14.91 178.24
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL . 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 OLA -4.09 RAL 304.28 LNCH AZHTH LNCH TIME L-I TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.83 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TOE .4337 TRA8435 TC3-4.7221 BAU .7647 ROE0445 RRA .0314 RC3 .7862 FAU .11054 FDE .9552 FRA2781 FC3-8.0089 BSP 11408 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.589 RC 121.557 GL 18.02 GP 10.93 7AL 122.31 PLANETOCENTRIC CONIC C3 12.091 VHL 3.477 OLA95 RAL 305.32 LNCH AZHTH LNCH TIME L-I TIME INJ LAT 90.00 2 59 37 2071.50 -15.86 90.00 14 43 33 4774.48 17.44 100.00 4 20 31 1810.54 -16.73 100.00 16 5 20 4510.68 18.32 110.00 5 27 44 1600.09 -19.04	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 65 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT9516 RRF9897 RTF .9484 SGB 3666.4 R23 .2772 R139503 SGI 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAP 5.05 AZP 92.18 TAL 202.02 TAP 35.82 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40 2 RAO 6567.5 VEL 11.553 PTH 2.02 VHP 4.037 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 32.62 158.90 113.77 3 34 8 205.18 159.22 67.33 16 3 7 13.02 158.49 115.14 4 50 41 185.38 158.82 65.96 17 20 30 355.81 157.25 118.94 5 54 24	ECC .17167 INC 1.88T5 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT -9461 CRS .9869 CST -9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 ECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10 OPA -11.11 RAP 304.04 ECC 1.1990 PO CST TIM INJ 2 LAT INJ 2 LONG 1471.5 -12.51 25.54 1174.5 14.22 197.98 1210.5 -13.20 6.00
HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.624 RP 108.69 LAP35 LOP 262.25 VP 37.481 RC 119.206 GL. 15.22 GP 14.44 7AL 124.58 PLANETOCENTRIC CONIC C3 11.949 VHL 3.457 DLA -4.09 RAL 304.28 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 3 18 51 1971.46 -13.02 90.00 14 16 2 4869.55 19.63 100.00 4 38 16 1715.25 -13.89 100.00 15 39 18 4601.00 20.73 110.00 5 42 7 1515.36 -16.17 110.00 16 51 56 4373.65 23.11 DIFFERENTIAL CORRECTIONS TDE .4337 TRA8435 TC3-4.7221 BAU .7647 RDE0445 RRA .0314 RC3 .7862 FAU .11054 BOE .4360 BRA .8441 BC3 4.7871 FSP -1634 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.585 RC 121.557 GL 18.02 GP 10.93 ZAL 122.31 PLANETOCENTRIC CONIC C3 12.091 VHL 3.477 DLA95 RAL 305.32 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT 90.00 2 59 37 2071.50 -15.66 90.00 14 43 33 4774.48 17.44 100.00 4 20 31 1810.54 -16.73 100.00 16 5 20 4510.68 18.32 110.00 5 27 44 1600.09 -19.04 DIFFERENTIAL CORRECTIONS DIFFERENTIAL CORRECTIONS	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 65 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT -9516 RRF -9897 RTF 9484 SGE 3666.4 R23 .2772 R139503 SGI 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAP 5.05 AZP 92.18 TAL 202.02 TAP 35.82 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40 P. RAO 6567.5 VEL 11.553 PTH 2.02 VHP 4.037 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 32.62 158.90 113.77 3 34 8 205.18 159.22 67.33 16 3 7 13.02 158.49 115.14 4 50 41 185.38 158.82 65.96 17 20 30 355.81 157.25 118.94 5 54 24 MIO-COURSE EXECUTION ACCURACY SGT 3773.2 SGR 449.8 SG3 487.0	ECC .17167 INC 1.88T5 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT -9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 ECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10 DPA -11.11 RAP 304.04 ECC 1.1990 PO CST TIM INJ 2 LAT INJ 2 LONG 1471.5 -12.51 25.54 4174.5 14.22 197.98 1210.5 -13.20 6.00 3910.7 14.91 178.24 1000.1 -15.03 348.98 3693.9 16.76 160.76 ORBIT DETERMINATION ACCURACY ST 1039.5 SR 50.8 SS 639.0
HELIOCENTRIC CONIC RL 147.44 LAL	OISTANCE 401.716 GAL -4.60 AZL 88.11 HCA 190.62 SMA 127.95 GAP 4.79 AZP 91.86 TAL 203.26 TAP 33.88 ZAP 137.92 ETS 14.16 ZAE 136.64 ETE 166.51 RAD 6567.5 VEL 11.547 PTH 2.02 VHP 3.975 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 26.64 157.33 115.37 3 51 42 211.13 158.67 69.36 15 37 12 7.37 156.90 116.74 5 6 52 191.01 158.30 67.96 16 55 59 350.91 155.60 120.53 6 7 23 172.61 157.16 64.08 18 4 50 HID-COURSE EXECUTION ACCURACY SGT 3624.8 SGR 551.0 SG3 499.2 RRT -9516 RRF -9897 RTF 9484 SGE 3666.4 R23 .2772 R13 -9503 SGI 3662.6 SG2 167.6 THA 171.75 FLIGHT TIME 140.00 DISTANCE 407.731 GGAP 5.05 AZP 92.18 TAL 202.02 TAP 35.82 ZAP 140.79 ETS 11.35 ZAE 136.18 ETE 170.40 2 RAO 6567.5 VEL 11.553 PTH 2.02 VHP 4.037 INJ LONG INJ RT ASC INJ AZMTH INJ TIME 32.62 158.90 113.77 3 34 8 ZOD.18 159.22 67.33 16 3 7 13.02 158.49 115.14 4 50 41 185.38 158.82 65.96 17 20 30 355.81 157.25 118.94 5 54 24 MID-COURSE EXECUTION ACCURACY SGT 3773.2 SGR 449.8 SG3 487.0 RRT9425 RRF9752 RTF .9484	ECC .17167 INC 1.88T5 V1 30.219 RCA 105.99 APO 149.92 V2 34.865 ZAC 35.65 ETC 173.21 CLP-140.03 DPA -7.85 RAP 302.32 ECC 1.1967 PO CST TIM INJ 2 LAT INJ 2 LONG 1371.5 -9.50 19.74 4269.5 16.85 203.73 1115.2 -10.19 .53 4001.0 17.55 183.65 915.4 -12.00 344.28 3773.6 19.43 165.40 ORBIT DETERMINATION ACCURACY ST 838.5 SR 77.1 SS 548.7 CRT9461 CRS .9869 CST9050 LSA 985.0 MSA 199.8 SSA 7.9 EL1 841.7 EL2 24.9 ALF 175.03 ARRIVAL DATE APR 23 1966 PECC .17219 INC 2.2411 V1 30.219 RCA 105.70 APO 149.67 V2 34.856 ZAC 37.13 ETC 168.47 CLP-142.10 OPA -11.11 RAP 304.04 ECC 1.1990 PO CST TIM INJ 2 LAT INJ 2 LONG 1471.5 -12.51 25.54 4174.5 14.22 197.98 1210.5 -13.20 6.00 3910.7 14.91 178.24 1000.1 -15.03 348.98 3693.9 16.76 160.76 ORBIT DETERMINATION ACCURACY

ARRIVAL DATE APR 25 1966

LAUNCH DATE DEC 4 1965

DISTANCE 413.729 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.545 GAL -4.18 AZL 87.54 HCA 196.97 SMA 127.42 ECC .17278 INC 2.4640 V1 30.219
RP 108.75 LAP -.72 LOP 268.59 VP 37.405 GAP 5.31 AZP 92.36 TAL 200.75 TAP 37.72 RCA 105.40 APO 149.43 V2 34.846 19.81 GP 8.70 ZAL 120.18 ZAP 143.17 ETS 9.52 ZAE 135.47 ETE 172.78 ZAC 38.71 ETC 165.80 CLP-144.07 RC 123.903 GL PLANETOCENTRIC CONIC 1.23 RAL 306.62 RAD 6567.5 VEL 11.555 PTH 2.02 VHP 4.127 OPA -13.07 RAP 305.66 ECC 1.1998 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 48 38 2140.08 -17.69 36.82 160.64 112.47 3 24 18 1540.1 -14.49 29.60 66.09 16 23 24 113.85 4 41 49 64.72 17 39 50 117.68 5 47 45 60.93 18 43 16 160.23 4107.7 12.28 194.04 90.00 15 4 56 4707.68 15.64 201.10 4 10 33 1875.85 16 25 42 4447.14 1275.9 -15.19 9.83 100.00 -18.57 16.99 160.24 12.97 181.53 159.81 3847.1 174.52 16.51 100.00 5 20 6 1658.12 17 32 38 4237.63 159.04 1058.1 -17.04 352.28 359.26 110.00 -20.91 3637.6 14.80 157.57 164.38 158.57 18.82 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3924.9 SGR 392.8 SG3 472.0 RRT -.9239 RRF -.9527 RTF .9492 SGB 3944.5 RZ3 .1946 R13 -.9499 ST 1187.4 SR 23.6 SS 683.1 CRT -.9076 CRS .8521 CST -.9490 TOE .6713 TRA -.8611 TC3-5.0080 BAU .8180 ROE -.0115 RRA .0160 RC3 .5617 FAU .10285 FDE 1.1603 FRA -.1759 FC3-7.3337 BSP 12554 LSA 1357.0 MSA 188.6 SSA 9.9 5G1 3941.7 5G2 149.7 THA 174.71 EL1 1187.6 EL2 9.9 ALF 178.97 BDE .6714 BRA .8612 BC3 5.0394 FSP -1604 FLIGHT TIME 144.00 ARRIVAL DATE APR 27 1966 LAUNCH DATE DEC 4 1965 DISTANCE 419.716 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71-64 VL 27.505 GAL -3.95 AZL 87.38 MCA 200.14 SMA 127.14 ECC .17346 INC 2.6184 V1 30.219
RP 108.78 LAP -.90 LOP 271.76 VP 37.367 GAP 5.57 AZP 92.46 TAL 199.44 TAP 39.58 RCA 105.09 APO 149.20 V2 34.838
RC 126.245 GL 21.09 GP 7.18 ZAL 118.07 ZAP 145.27 ETS 8.26 ZAE 134.73 ETE 174.33 ZAC 40.31 ETC 164.23 CLP-145.93 PLANETOCENTRIC CONIC C3 12.138 VML 3.484 DLA 2.95 RAL 308.12 RAD 6567.5 VEL 11.555 PTH 2.D2 VMP 4.228 DPA -14.30 RAP 307.28 ECC 1.1998 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 41 50 2193.29 -19.05 40.14 162.47 111.36 3 18 23 1593.3 -15.98 32.81 111.36 3 18 23 65.21 16 41 13 4054.3 10.69 190.93 90.00 15 23 39 4654.35 14.15 197.90 161.49 112.75 4 36 39 63.84 17 56 53 116.60 5 44 20 60.06 18 58 35 1326.5 12.85 4 4 33 1926.48 -19.93 20.13 162.09 -16.68 100.00 11.38 171.60 100.00 16 43 37 4396.39 15.01 178.50 161.07 3796.4 1103.0 354.88 5 15 57 1703.00 -22.31 2.00 160.92 -18.55 110.00 155.07 3592.6 13.20 110.00 17 48 42 4192.64 17.31 161.76 159.79 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1373.6 SR 10.6 SS 767.3 CRT -.2251 CRS .1727 CST -.9578 SGT 3982.9 SGR 345.6 SG3 440.9 TOE .7967 TRA -.8067 TC3-5.0499 BAU .8234 RRT - .8900 RRF - .9130 RTF .9421 SGB 3997.9 R23 .1606 R13 - .9426 SGI 3994.8 SGZ 157.1 THA 175.58 ROE -. 0007 RRA . 0035 RC3 . 4959 FAU . 09361 FOE 1.2744 FRA -.0140 FC3-6.6766 BSP 12146 BDE .7967 BRA .8067 BC3 5.0742 FSP -1374 LSA 1561.4 MSA 193.9 SSA 10.2 EL1 1373.6 EL2 10.3 ALF 179.90 FLIGHT TIME 146.00 ARRIVAL DATE APR 29 1966 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC DISTANCE 425.682 RL 147.44 LAL - .00 LOL 71.64 VL 27.464 GAL -3.71 AZL 87.27 MCA 203.31 SMA 126.87 ECC .17423 INC 2.7322 V1 30.219
RP 108.80 LAP -1.08 LOP 274.92 VP 37.330 GAP 5.82 AZP 92.51 TAL 198.10 TAP 41.41 RCA 104.77 APO 148.97 V2 34.830
RC 128.581 GL 22.05 GP 6.08 ZAL 115.97 ZAP 147.19 ETS 7.36 ZAE 134.02 ETE 175.39 ZAC 41.94 ETC 165.30 CLP-147.69 PLANETOCENTRIC CONIC 4.40 RAL 309.74 RAD 6567.5 VEL 11.554 PTH 2.02 VHP 4.337 OPA -15.09 RAP 308.94 ECC 1.1993 C3 12.111 VHL 3.480 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -17.1A 164.40 110.35 3 14 45 1638.0 35.54 2 37 27 2238.01 -20.13 42.97 90.00 64.54 16 57 47 111.75 4 33 41 63.17 18 12 48 115.63 5 42 51 59.38 19 13 0 162.94 400A.7 9.29 188.30 90.00 15 40 58 4608.67 12.83 195.20 100.00 4 0 52 1968.99 -21.03 22.82 164.03 1369.0 -17.89 15.43 162.50 3752.9 9.98 169.13 100.00 17 0 15 4352.93 13.69 175.95 110.00 5 13 50 1740.58 -23.43 162.89 1140.6 -19.79 357.09 18 3 46 4154.10 15.99 159.56 161.20 3554.1 11.61 152.95 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE .8628 TRA -.7901 TC3-5.2568 BAU .8546 ROE .0153 RRA -.0020 RC3 .4714 FAU .09015 SGT 4136.1 SGR 329.0 SG3 426.6 RRT -.8525 RRF -.8738 RTF .9440 SGB 4149.2 R23 .1295 R13 -.9443 ST 1477.5 SR 27.0 SS 775.2 CRT .8775 CRS -.9046 CST -.9623 LSA 1658.1 MSA 188.0 SSA' 11.5 FDE 1.2538 FRA .0301 FC3-6.4446 BSP 12916 BDE .8629 BRA .7901 BC3 5.2779 FSP -1389 SG1 4145.6 SG2 171.6 THA 176.11 EL1 1477.7 EL2 13.0 ALF .92 FLIGHT TIME 148.00 APRIVAL DATE MAY 1 1966 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC DISTANCE 431.633 RL 147.44 LAL .00 LOL 71.64 VL 27.422 GAL -3.47 AZL 87.18 MCA 206.48 SMA 126.59 ECC .17510 INC 2.8201 V1 30.219
RP 108.82 LAP -1.26 LOP 278.09 VP 37.292 GAP 6.07 AZP 92.52 TAL 196.73 TAP 43.21 RCA 104.43 APO 148.76 V2 34.822
RC 130.911 GL 22.80 GP 5.25 ZAL 113.83 ZAP 148.96 ETS 6.70 ZAE 133.37 ETE 176.14 ZAC 43.60 ETC 162.77 CLP-149.36 PLANETOCENTRIC CONIC C3 12.073 VHL 3.475 OLA 5.69 RAL 311.49 RAD 6567.5 VEL 11.552 PTH 2.02 VHP 4.451 DPA -15.57 RAP 310.64 ECC 1.1987 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 34 38 2277.99 -21.06 45.54 166.42 109.38 3 12 36 1678.0 -18.22 38.01 185.94 3967.4 90.00 15 57 44 4567.36 11.60 192.78 164.55 63.99 17 13 51 8.01 110.80 4 32 7 1406.9 17.76 100.00 3 58 40 2006.94 -21.97 25.25 166.06 -18.94 100.00 17 16 23 4313.64 12.47 173.67 154.10 62.61 18 28 17 3713.6 8.71 166.91 5 13 5 1774.06 18 18 28 4119.29 110.00 -24.40 6.45 164.95 114.72 5 42 39 1174.1 -20.86 359.10 58.82 19 27 7 3519.3 10.54 151.06 110.00 14.77 157.60 162.78 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE .9366 TRA -.7513 TC3-5.4217 BAU .8781 SGT 4258.0 SGR 318.1 SG3 408.7 RRT -.8066 RRF -.8260 RTF .9434 ST 1593.D SR 48.1 55 794.1 CRT .9547 CRS -.9593 CST -.9660 ROE .0285 RRA -.0092 RC3 .4522 FAU .08538 SGB 4269.9 R23 .1077 R13 -.9437 SG1 4265.7 SG2 187.7 THA 176.55 FOE 1.2494 FRA .1022 FC3-6.1230 BSP 13356 BOE .9370 BRA .7514 BC3 5.4405 FSP -1341 LSA 1770.9 MSA 184.8 SSA 12.5 EL1 1593.7 EL2 14.3 ALF 1.65

FLIGHT TIME 142.00

ARRIVAL DATE MAY 3 1966

```
LAUNCH DATE DEC 4 1965
                                                                                                       DISTANCE 437.570
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                         6.89 RAL 313.35 RAD 6567.5 VEL 11.551 PTH 2.02 VHP 4.568 DPA -15.83 RAP 312.39 ECC 1.1981
      C3 12.036 VHL 3.469 DLA
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          2 32 52 2315.26 -21.88
16 14 20 4528.80 10.44
3 57 30 2042.29 -22.80
17 32 23 4277.00 11.32
5 13 17 1805.17 -25.27
18 33 6 4086.89 13.62
                                                                                                                                     108.44
                                                                                                                                                                                                     -19.16
                                                                                              47.96
                                                                                                                168.56
                                                                                                                                                           3 11 28 1715.3
                                                                                                                                                                                                                              40.35
           90.00

    166.31
    63.53
    17 29 48
    3928.8
    6.80

    168.21
    109.87
    4 31 33
    1442.3
    -19.89

    165.85
    62.15
    18 43 40
    3677.0
    7.50

    167.13
    113.82
    5 43 22
    1205.2
    -21.83

    164.50
    58.34
    19 41 13
    3486.9
    9.34

                                                                                                                                                                                                                              183.75
                                                                                             190.54
                                                                                                                  166.31
           90.00
                                                                                                                                                                                                                               19.95
                                                                                               27.54
                                                                                                                  168.21
         100.00
                                                                                            171.57
                                                                                                                 165.85
                                                                                                                                                                                                                              164.86
                                                                                             0.45 167.13
155.79
         100.00
                                                                                                                                                                                                                                   .99
         110.00
                                                                                                                                                                                                                              149.31
         110.00
                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                ST 1708.9 SR 67.9 SS 812.1
CRT .9762 CRS -.9674 CST -.9691
      TOE 1.0104 TRA -.7001 TC3-5.5741 BAU .8997
     ROE .0404 RRA -.0168 RC3 .4390 FAU .08062
FDE 1.2426 FRA .1779 FC3-5.7990 BSP 13727
                                                                                                                                                                            LSA 1884.4 MSA 181.8 SSA 13.5
EL1 1710.1 EL2 14.7 ALF 2.22
     BDE 1.0112 BRA .7003 BC3 5.5914 FSP -1285
                                                                                                 SG1 4376.7 SG2 204.7 THA 176.89
                                                                                                       FLIGHT TIME 152.00
                                                                                                                                                                                              ARRIVAL DATE MAY 5 1966
LAUNCH DATE DEC 4 1965
                                                                                                       DISTANCE 443.491
   HELIOCENTRIC CONIC
     RL 147.44 LAL .00 LOL 71.64 VL 27.338 GAL -2.94 A7L 87.05 HCA 212.81 SMA 126.04 ECC .17714 INC 2.9480 VI 30.219
RP 108.87 LAP -1.60 LOP 284.41 VP 37.218 GAP 6.56 A7P 92.48 TAL 193.91 TAP 46.73 RCA 103.71 APO 148.37 V2 34.809
RC 135.553 GL 23.90 GP 4.09 7AL 109.38 7AP 152.16 ETS 5.86 7AE 132.25 ETE 177.10 7AC 47.03 ETC 162.41 CLP-152.44
    PLANETOCENTRIC CONIC
                                                          8.03 RAL 315.31 RAD 6567.5 VEL 11.550 PTH 2.02 VHP 4.688 DPA -15.94 RAP 314.20 ECC 1.1976
     C3 12.009 VML 3.465 DLA 8.03 RAL 315.31 RAD 6567.5 VEL 11.550 PTH 2.02 VMP 4.688 DPA -15.94 RAP 314.20 ECC 1.1976
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 16 30 59 4492.06 9.32 188.42 168.22 63.14 17 45 52 3892.1 5.64 181.67
100.00 3 57 7 2076.22 -23.57 29.77 170.48 108.93 4 31 43 1476.2 -20.77 22.09
100.00 17 48 27 4242.14 10.20 169.58 167.75 61.75 18 59 10 3642.1 6.35 162.91
110.00 5 14 12 1834.98 -26.08 10.39 169.43 112.93 5 44 47 1235.0 -22.74 2.82
110.00 18 47 51 4056.15 12.52 154.09 166.38 57.93 19 55 28 3456.2 8.19 147.67
DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
     C3 12.009 VHL 3.465 DLA
    DIFFERENTIAL CORRECTIONS
                                                                                              MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                                                                                                                           ST 1822.7 SR 86.7 SS 827.4
CRT .9852 CRS -.9668 CST -.9717
                                                                                                SCT 4479.0 SGR 312.6 SC3 374.4 ST 1822.7 SR 86.7 SS 827.4 RRT -.7032 RRF -.7208 RTF .9415 CRT .9852 CRS -.9668 CST -.9717 SGB 4489.9 R23 .0803 R13 -.9417 LSA 1995.5 MSA 178.6 SSA 14.4 SG1 4484.4 SG2 222.0 THA 177.18 EL1 1824.7 EL2 14.8 ALF 2.68
      TOE 1.0828 TRA -.6407 TC3-5.7191 BAU .9208
      RDE .0516 RRA -.0244 RC3 .4299 FAU .07612
     FOE 1.2312 FRA .2493 FC3-5.4876 BSP 14093
BOE 1.0800 BRA .6411 BC3 5.7353 FSP -1234
                                                                                                                                                                              LSA 1995.5 MSA 178.6 SSA 14.4
                                                                                                                                                                                             ARRIVAL DATE MAY 7 1966
                                                                                                       FLIGHT TIME 154.00
LAUNCH DATE DEC 4 1965
                                                                                                       DISTANCE 449.397
    HELIOCENTRIC CONIC
     RL 147.44 LAL .00 LOL 71.64 VL 27.295 GAL -2.67 AZL 87.00 MCA 215.98 SMA 125.76 ECC .17833 INC 2.9966 VI 30.219 RP 108.88 LAP -1.76 LOP 287.58 VP 37.182 GAP 6.80 AZP 92.43 TAL 192.47 TAP 48.44 RCA 103.34 APO 148.19 V2 34.804 RC 137.863 GL 24.30 GP 3.67 ZAL 107.06 ZAP 153.63 ETS 5.60 ZAE 131.78 ETE 177.41 ZAC 48.81 ETC 162.44 CLP-153.87
    PLANETOCENTRIC CONIC
      C3 12.001 VML 3.464 DLA 9.12 RAL 317.38 RAD 6567.5 VEL 11.549 PTH 2.02 VMP 4.812 DPA -15.91 RAP 316.05 ECC 1.1975
     C3 12.001 VHL 3.464 OLA 9.12 RAL 317.38 RAD 6567.5 VEL 11.549 PTH 2.02 VMP 4.812 DPA -15.91 RAP 316.05 ECC 1.1975
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 16 47 52 4456.59 8.22 186.39 170.28 62.81 18 2 9 3856.6 4.51 179.68
100.00 3 57 18 2109.51 -24.29 31.98 172.89 107.98 4 32 28 1509.5 -21.60 24.21
100.00 18 4 46 4208.55 9.11 167.68 169.80 61.41 19 14 54 3608.6 5.22 161.05
110.00 5 15 42 1864.18 -26.84 12.32 171.86 112.01 5 46 46 1264.2 -23.61 4.55
110.00 19 2 51 4026.65 11.45 152.48 168.40 57.57 20 9 58 3426.6 7.09 146.10

DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY

ORBIT DETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
SGT 4583.0 SGR 315.2 SG3 358.7
RRT -.6504 RRF -.6678 RTF .9406
SGB 4593.9 R23 .0716 R13 -.9407
SG1 4587.6 SG2 239.2 THA 177.43
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1936.0 SR 104.5 SS 840.7
CRT .9892 CRS -.9632 CST -.9740
      TOE 1.1552 TRA -.5720 TC3-5.8513 BAU .9412
      ROE .0622 RRA -.0322 RC3 .4229 FAU .07185
                                                                                                                                                                            LSA 2105.9 MSA 175.2 SSA 15.3
EL1 1938.8 EL2 15.3 ALF 3.06
      FOE 1.2172 FRA .3181 FC3-5.1830 BSP 14444
BOE 1.1569 BRA .5729 BC3 5.8666 FSP -1185
                                                                                                                                                                                             ARRIVAL DATE HAY 9 1966
                                                                                                         FLIGHT TIME 156.00
 LAUNCH DATE DEC 4 1965
                                                                                                         DISTANCE 455.288
    HELIOCENTRIC CONIC
     RL 147.44 LAL .00 LOL 71.64 VL 27.253 GAL -2.38 AZL 86.96 MCA 219.14 SMA 125.49 ECC .17964 INC 3.0383 VI 30.219
RP 108.90 LAP -1.92 LOP 290.74 VP 37.146 GAP 7.05 AZP 92.36 TAL 190.99 TAP 50.14 RCA 102.94 APO 148.03 V2 34.799
RC 140.164 GL 24.60 GP 3.32 ZÄL 104.67 ZAP 155.02 ETS 5.42 ZAE 131.36 ETE 177.66 ZAC 50.64 ETC 162.55 CLP-155.23
     PLANETOCENTRIC CONIC
     C3 12.016 VHL 3.466 DLA 10.19 RAL 319.55 RAD 6567.5 VEL 11.550 PTH 2.02 VHP 4.938 DPA -15.77 RAP 317.95 ECC 1.1978 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 31 36 2421.29 -23.99 55.02 175.74 105.51 3 11.57 1821.3 -21.63 47.14 90.00 17 5 5 4422.08 7.14 184.43 172.48 62.53 18 18 47 3822.1 3.41 177.75 100.00 3 57 59 2142.67 -24.97 34.21 175.42 106.99 4 33 42 1542.7 -22.40 26.35 100.00 18 21 22 4175.94 8.04 165.85 172.00 61.11 19 30 58 3575.9 4.13 159.25 110.00 5 17 42 1893.23 -27.56 14.27 174.43 111.07 5 49 15 1293.2 -24.45 6.49 110.00 19 18 9 3998.14 10.40 150.93 170.57 57.25 20 24 47 3398.1 6.01 144.59 DISSERBRITIAL CORRECTIONS
      C3 12.D16 VHL 3.466 DLA 10.19 RAL 319.55 RAD 6567.5 VEL 11.550 PTH 2.D2 VHP 4.938 DPA -15.77 RAP 317.95 ECC 1.1978
                                                                                              MID-COURSE EXECUTION ACCURACY
SGT 4680.1 SGR 319.7 SG3 343.5
RRT -.5980 RRF -.6151 RTF .9394
SGB 4691.0 R23 .0644 R13 -.9396
SGI 4684.0 SG2 256.0 THA 177.65
SGI 4684.0 SG2 256.0 THA 177.65
SGI 4684.0 SG2 256.0 THA 177.65
     DIFFERENTIAL CORRECTIONS
      TOE 1.2304 TRA -.4928 TC3-5.9615 BAU .9600
      RDE .0722 RRA -.0402 RC3 .4165 FAU .06766
      FDE 1.2049 FRA .3864 FC3-4.8748 BSP 14736
BDE 1.2325 BRA .4944 BC3 5.9761 FSP -1132
```

FLIGHT TIME 150.00

ARRIVAL DATE MAY 11 1966

LAUNCH DATE DEC 4 1965

DISTANCE 461.164 MELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.210 GAL -2.08 AZL 86.93 HCA 222.30 SHA 125.21 ECC .18107 INC 3.0747 V1 30.219 RP 108.91 LAP -2.07 LOP 293.90 VP 37.111 GAP 7.29 AZP 92.27 TAL 189.50 TAP 51.81 RCA 102.54 APO 147.88 V2 34.795 RC 142.456 GL 24.83 GP 3.03 TAL 102.22 TAP 156.35 ETS 5.30 TAE 130.99 ETE 177.85 TAC 52.51 ETC 162.72 CLP-156.53 PLANETOCENTRIC CONIC C3 12.062 VHL 3.473 OLA 11.23 RAL 321.81 RAD 6567.5 VEL 11.552 PTH 2.02 VHP 5.066 DPA -15.55 RAP 319.89 ECC 1.1985 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 32 5 2456.58 17 22 38 4388.39 1856.6 178.40 104.47 3 13 1 -22.38 49.45 -24.61 57.41 90.00 62.29 18 35 47 3788.4 2.33 175.86 6.08 182.53 174.84 90.00 4 35 20 1576.0 -23.18 28.53 3 59 4 2176.01 36.48 178.10 105.96 100.00 -25.61 18 38 20 4144.19 5 20 7 1922.42 19 47 24 7.00 164.08 174.34 60.86 3544.2 3.06 157.50 100.00 110.08 5 52 9 56.98 20 39 57 1322.4 -25.26 8.36 -28.26 16.25 177.14 110.08 110.00 19 33 47 3970.55 9.38 149.45 172.69 3370.6 4.97 143.14 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY \$\text{SCT 4777.6 \$\text{SCR 325.9 \$\text{SC3} 329.6}\$\$ RRT -.5482 RRF -.5661 RTF .9389 \$\text{SCB 4788.7 R23} .0594 R13 -.9391 ST 2164.9 SR 137.9 S5 864.3 CRT .9894 CRS -.9517 CST -.9781 TOE 1.3041 TRA -.4077 TC3-6.0615 BAU .9797 ROE .0821 RRA -.0481 RC3 .4105 FAU .06390 LSA 2329.0 MSA 168.3 SSA 16.9 FDE 1.1875 FRA .4469 FC3-4.5866 BSP 15079 SG1 4781.0 SG2 272.4 THA 177.85 BOE 1.3067 BRA .4105 BC3 6.0754 FSP -1091 EL1 2169.2 EL2 20.0 ALF 3.61 FLIGHT TIME 160.00 ARRIVAL DATE MAY 13 1966 LAUNCH DATE DEC 4 1965 HELIOCENTRIC CONIC DISTANCE 467.025 RL 147.44 LAL .00 LOL 71.64 VL 27.167 GAL -1.77 AZL 86.89 MCA 225.47 SMA 124.94 ECC .18265 INC 3.1070 V1 30.219 RP 108.92 LAP -2.21 LOP 297.06 VP 37.076 GAP 7.54 AZP 92.18 TAL 187.99 TAP 53.45 RCA 102.12 APO 147.75 V2 34.791 24.98 CP 2.78 ZAL 99.70 ZAP 157.62 ETS 5.24 ZAE 130.67 ETE 178.01 ZAC 54.41 ETC 162.93 CLP-157.78 RC 144.737 GL PLANETOCENTRIC CONIC C3 12.143 VHL 3.485 DLA 12.25 RAL 324.16 RAD 6567.5 VEL 11.556 PTH 2.02 VMP 5.199 DPA -15.24 RAP 321.86 ECC 1.1998 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 32 55 2492.34 17 40 36 4355.47 4 0 31 2209.78 18 55 40 4113.27 -25.20 181.22 103.37 3 14 27 1892.3 -23.11 51.82 90.00 59.87 18 53 12 3755.5 1.26 174.02 90.00 5.04 180.67 177.35 62.10 100.00 -26.22 38.80 180.93 104.89 4 37 21 1609.8 -23.92 30.76 5.97 162.36 176.84 60.66 20 4 14 3513.3 2.01 155.80 109.05 5 55 27 56.74 20 55 30 110.00 5 22 56 1951.93 110.00 19 49 46 3943.87 -28.93 180.00 1351.9 -26.06 10.28 18.29 3343.9 3.95 141.74 5.39 148.02 175.36 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4870.2 SGR 333.0 SG3 316.3 RRT -.5003 RRF -.5189 RTF .9384 SGB 4881.5 R23 .0552 R13 -.9385 ST 2277.0 SR 153.9 SS 872.8 CRT .9872 CRS -.9451 CST -.9798 TOE 1.3793 TRA -.3132 TC3-6.1376 BAU .9986 ROE .0919 RRA -.0561 RC3 .4037 FAU .06029 FOE 1.1704 FRA .5056 FC3-4.2985 BSP 15408 BOE 1.3824 BRA .3182 BC3 6.1509 FSP -1050 LSA 2437.8 MSA 164.8 SSA 17.6 EL1 2282.0 EL2 24.5 ALF 3.82 SG1 4873.0 SG2 288.2 THA 178.03 ARRIVAL DATE MAY 15 1966 FLIGHT TIME 162.00 LAUNCH DATE DEC 4 1965 DISTANCE 472.870 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.124 GAL -1.45 AZL 86.86 MCA 228.63 SMA 124.66 ECC .18437 INC 3.1358 V1 30.219
RP 108.93 LAP -2.35 LOP 300.22 VP 37.042 GAP 7.79 AZP 92.07 TAL 186.46 TAP 55.08 RCA 101.68 APO 147.65 VZ 34.788
RC 147.008 GL 25.06 GP 2.57 ZAL 97.11 ZAP 158.83 ETS 5.23 ZAE 130.38 ETE 178.14 ZAC 56.36 ETC 163.16 CLP-158.98 PLANETOCENTRIC CONIC C3 12.266 VHL 3.502 OLA 13.26 RAL 326.61 RAD 6567.5 VEL 11.561 PTH 2.02 VHP 5.334 DPA -14.87 RAP 323.87 ECC 1.2019 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 34 3 2528.72 17 58 57 4323.35 4 2 18 2244.09 19 13 23 4085.21 1928.7 90.00 184.18 102.22 3 16 12 -23.80 54.26 -25.74 62.39 3723.3 4.01 178.87 180.01 61.95 19 11 1 .23 172.23 90.00 41.19 183.91 103.76 4 39 42 1644.1 -24.64 33.05 100.00 -26.80 3483.2 179.49 60.48 20 21 26 .99 154.15 100.00 4.96 160.69 5 26 6 1981.90 20 6 5 3918.17 183.01 107.97 5 59 8 1381.9 -26.84 12.26 110.00 -29.58 20.38 56.54 21 11 23 177.97 3318.2 2.97 140.39 110.00 146.65 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2390.7 SR 169.4 SS 881.2 CRT .9837 CRS -.9381 CST -.9814 SGT 4957.9 SGR 340.5 SG3 303.7 RRT -.4540 RRF -.4734 RTF .9379 SGB 4969.5 R23 .0516 R13 -.9380 TOE 1.4578 TRA -.2086 TC3-6.1852 BAU 1.0163 RDE .1015 RRA -. 0641 RC3 .3955 FAU .05684 LSA 2548.4 MSA 161.5 SSA 18.3 EL1 2396.5 EL2 30.4 ALF 3.99 FOE 1.1547 FRA .5627 FC3-4.0116 BSP 15699 BOE 1.4613 BRA .2182 BC3 6.1978 FSP -1009 5G1 4960.3 5G2 303.2 THA 178:21 ARRIVAL DATE MAY 17 1966 FLIGHT TIME 164.00 LAUNCH DATE DEC 4 1965 DISTANCE 478.699 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 27.081 GAL -1.12 AZL 86.84 MCA 231.79 SMA 124.39 ECC .18624 INC 3.1621 V1 30.219
RP 108.94 LAP -2.48 LOP 303.38 VP 37.009 GAP 8.04 AZP 91.96 TAL 184.91 TAP 56.70 RCA 101.22 APO 147.56 V2 34.786
RC 149.266 GL 25.06 GP 2.39 ZAL 94.47 ZAP 160.00 ETS 5.26 ZAE 130.14 ETE 178.24 ZAC 58.34 ETC 163.41 CLP-160.14 PLANETOCENTRIC CONIC C3 12.436 VHL 3.526 DLA 14.24 RAL 329.13 RAD 6567.5 VEL 11.568 PTH 2.D2 VHP 5.473 DPA -14.44 RAP 325.90 ECC 1.2047 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1965.8 -24.47 101.01 3 18 14 56.78 90.00 2 35 28 2565.80 -26.25 64.99 187.29 19 29 13 3692.1 -.78 170.49 18 17 41 4292.12 3.01 177.12 182.83 61.83 90.00 4 4 24 19 31 27 102.57 1679.0 -25.34 35.41 100.00 4 42 23 2279.02 -27.34 43.64 187.03 60.35 20 39 1 3454.1 .01 152.56 100.00 4054.14 3.98 159.09 182.29 6 3 9 -27.60 1412.4 14.31 5 29 37 20 22 43 106.83 110.00 2012.36 -30.20 22.53 186.18 56.37 21 27 36 139.11 3293.6 2.04 110.00 3893.56 6.50 145.35 180.73 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY SGT 5039.7 SGR 348.1 SG3 291.6 RRT -.4092 RRF -.4291 RTF .9375 SGB 5051.7 R23 .0481 R13 -.9376 DIFFERENTIAL CORRECTIONS ST 2504.1 SR 184.5 SS 888.5 TDE 1.5388 TRA -. 0943 TC3-6.2002 BAU 1.0328 ROE .1112 RRA -.0720 RC3 .3854 FAU .05348 FOE 1.1395 FRA .6173 FC3-3.7228 BSP 15966 CRT .9794 CRS -.9309 CST -.9829 LSA 2658.6 MSA 158.5 SSA 18.8 EL1 2510.6 EL2 37.1 ALF 4.13 BOE 1.5428 BRA .1187 BC3 6.2121 FSP -971

FLIGHT TIME 158.00

```
ARRIVAL DATE HAY 19 1966
                                                                                        FLIGHT TIME 166.00
LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 484.512
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 27.039 GAL -.77 AZL 86.81 HCA 234.95 SNA 124.12 ECC .18829 INC 3.1861 V1 30.219
RP 108.94 LAP -2.61 LOP 306.55 VP 36.976 GAP 8.29 AZP 91.83 TAL 183.34 TAP 58.29 RCA 100.75 APO 147.49 V2 34.785
RC 151.511-GL 24.98 GP 2.23 TAL 91.78 ZAP 161.12 ETS 5.34 ZAE 129.92 ETE 178.34 ZAC 60.35 ETC 163.67 CLP-161.25
   PLANETOCENTRIC CONIC
     C3 12.660 VML 3.558 DLA 15.20 RAL 331.74 RAD 6567.5 VEL 11.578 PTH 2.02 VMP 5.617 CPA -13.95 RAP 327.95 ECC 1.2084
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 37 10 2603.58
10 36 45 4261.96
4 6 47 2314.57
19 49.49 4026.20
5 33 29 2043.32
20 39 37 3070.21
                                                                                                                 99.75 3 20 34
61.75 19 47 47
                                                                                                                                                    2003.6
                                                             -26.72
                                                                                             190.54
                                                                              67.66
         90.00
                                                                                                                                                                                            168.81
                                                                                                 185.80
                                                                                                                                                        3662.0
                                                                                                                                                                           -1.75
                                                                2.04
                                                                              175.44
         90.00
                                                                                                                   -26.00
                                                                                                                                                                                             37.85
                                                                                                 190.30
                                                             -27.84
                                                                                46.16
        100.00
                                        4026.20 3.04
2043.32 -30.79
3870.21 5.62
                                                                                                                                                                                           151.02
                                                                                                                                                                            - .94
                                                                              157.55
                                                                                                 185.24
        100.00
                                                                                                                                                                         -28.34
                                                                                                                                                                                             16.41
                                                                                                189.49
                                                                                24.75
       110.00
                                                                                                                                                                            1.14
                                                                              144.12
                                                                                                 183.64
       110.00
                                                                                MID-COURSE EXECUTION ACCURACY
SGT 5119.9 SGR 355.8 SG3 280.2
ST 2610.9 SR 199.6 SS 8
   DIFFFRENTIAL CORRECTIONS
                                                                                                                                                 ST 2610.9 SR 199.6 SS 892.1
CRT .9746 CRS -.9238 CST -.9842
                                                                                  SCT 5119.9 SCR 355.8 SC3 280.2 ST 2610.9 SR 199.6 SS 892.1 RRT -.3670 RRF -.3880 RTF ..9373 CRT ..9746 CRS -.9238 CST -.9842 SC8 5132.3 R23 .0457 R13 -.9374 LSA 2761.8 MSA 155.9 SSA 19.2 SCI 5121.6 SG2 330.9 THA 178.53 ELI 2618.1 EL2 44.6 ALF 4.26
     TDE 1.6193 TRA .0280 TC3-6.1915 BAU 1.0498
     RDE .1213 RRA -.0797 RC3 .3737 FAU .05039
    FOE 1.1216 FRA .6686 FC3-3.4458 BSP 16265
BOE 1.6238 BRA .0845 BC3 6.2027 FSP -938
                                                                                                                                                              ARRIVAL DATE HAY 21 1966
                                                                                        FLIGHT TIME 168.00
LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 490.307
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.996 GAL -.41 AZL 86.79 HCA 238.11 SMA 123.86 ECC .19051 INC 3.2084 V1 30.219
RP 108.94 LAP -2.72 LOP 309.71 VP 36.944 GAP 8.55 AZP 91.70 TAL 181.76 TAP 59.87 RCA 100.26 APO 147.45 V2 34.784
RC 153.743 GL 24.83 GP 2.10 ZAL 89.05 ZAP 162.21 ETS 5.45 ZAE 129.74 ETE 178.42 ZAC 62.40 ETC 163.93 CLP-162.33
    PLANETOCENTRIC CONIC

C3 12.945 VHL 3.598 DLA 16.13 RAL 334.41 RAD 6567.5 VEL 11.590 PTH 2.03 VHP 5.765 DPA -13.41 RAP 330.03 ECC 1.2130

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LONG

90.00 2 39 8 2642.05 - -27.13 70.40 193.93 98.44 3 23 10 2042.0 -25.68 62.03

90.00 18 56 6 4233.03 1.10 173.82 188.91 61.70 20 6 39 3633.0 -2.69 167.19

100.00 4 9 29 2350.71 -28.30 48.75 193.72 100.05 4 48.40 1750.7 -26.62 40.35

100.00 20 8 27 3999.60 2.14 156.09 188.34 60.18 21 15 6 3399.6 -1.84 149.56

110.00 5 37 41 2074.76 -31.35 27.04 192.96 104.39 6 12 15 1474.8 -29.05 18.58

110.00 20 56 44 3848.31 4.79 142.96 186.69 56.11 22 0 53 3248.3 .31 156.75
   PLANETOCENTRIC CONIC
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5193.6 SGR 363.2 SG3 269.1

RRT - .3255 RRF - .3463 RTF .9373

SGB 5206.3 R23 .0422 R13 -.9374

SGI 5195.0 SG2 343.3 THA 178.69
                                                                                                                                                  ST 2716.4 SR 214.4 SS 895.6
CRT .9694 CRS -.9171 CST -.9855
     TOE 1.7030 TRA .1595 TC3-6.1445 BAU 1.0652
     RDE .1317 RRA -. 0872 RC3 .3598 FAU .04732
                                                                                                                                                 LSA 2864.1 MSA 153.6 SSA 19.6
EL1 2724.4 EL2 52.5 ALF 4.38
    FDE 1.1060 FRA .7161 FC3-3.1651 BSP 16525
BDE 1.7081 BRA .1817 BC3 6.1550 FSP -902
                                                                                                                                                               ARRIVAL DATE MAY 23 1966
                                                                                       FLIGHT TIME 170.00
LAUNCH DATE DEC 4 1965
                                                                                       CISTANCE 496.084
    RL 147.44 LAL .00 LOL 71.64 VL 26.954 GAL -.04 A7L 86.77 HCA 241.27 SMA 123.59 ECC .19293 INC 3.2291 VI 30.219 RP 108.94 LAP -2.83 LOP 312.87 VP 36.913 GAP 8.82 A7P 91.55 TAL 180.17 TAP 61.44 RCA 99.75 APO 147.44 V2 34.784 RC 155.962 GL 24.61 GP 1.97 TAL 86.29 ZAP 163.26 ETS 5.60 ZAE 129.58 ETE 178.49 ZAC 64.47 ETC 164.18 CLP-163.38
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 13.297 VHL 3.647 DLA 17.02 RAL 337.14 RAD 6567.5 VEL 11.605 PTH 2.03 VHP 5.917 DPA -12.83 RAP 332.12 ECC 1.2188
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 41 23 2681.10 -27.49 73.20 197.46 97.08 3 26 4 2081.1 -26.22 64.76 90.00 19 15 39 4205.59 .22 172.29 192.17 61.68 20 25 45 3605.6 -3.57 165.66
                      4 12 29 2387.34 -28.71 51.40
20 27 15 3974.58 1.29 154.71
5 42 12 2106.60 -31.86 29.38
21 14 0 3828.09 4.02 141.90
                                                                                                                     98.71
                                                                                                                                 4 52 16
                                                                                                                                                        1787.3
                                                                                                                                                                         -27.21
                                                                                                                                                                                            42.92
                                                                                                197.27
        100.00
                                                                                                               60:13 21 33 29
103:09 6 17 19
56:03 22 17 48
                                                                                                                                                       3374.6
                                                                                                                                                                          -2.69
                                                                                                                                                                                           148.19
                                                                                                191.57
        100.00
                                                                                                                                                                         -29.73
                                                                                                                                                       1506.6
                                                                                                                                                                                            20.81
                                                                                               196.57
        110.00
                                                                                                                                                        3228.1
                                                                                                                                                                           .-.47
                                                                                                                                                                                           135.69
                                                                                                189.87
        110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5245.3 SGR 370.0 SG3 251.2
RRT -.2847 RRF -.3029 RTF .9457
                                                                                                                                                  ST 2772.6 SR 230.3 SS 864.7
CRT .9672 CRS -.9194 CST -.9881
     TOE 1.7608 TRA .2528 TC3-6.0838 BAU 1.0832
                                                                                                                                          CRT .9672 LIL
LSA 2910.0 M5A 139.7 SSA ....
ELĪ 2781.5 ELZ 58.3 ALF 4.59
     ROE .1436 RRA -. 0923 RC3 .3442 FAU .04451
                                                                                   SGB 5258.3 R23 .0338 R13 -.9457
    FOE 1.0543 FRA .6787 FC3-2.8976 BSP 17415
BCE 1.7666 BRA .2692 BC3 6.0935 FSP -949
                                                                                   SG1 5246.3 SG2 354.6 THA 178.84
                                                                                                                                                                ARRIVAL DATE MAY 25 1966
                                                                                        FLIGHT TIME 172.00
LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 501.843
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.911 GAL .35 AZL 86.75 HCA 244.44 SMA 123.33 ECC .19555 INC 3.2486 V1 30.219
RP 108.94 LAP -2.93 LOP 316.04 VP 36.883 GAP 9.09 AZP 91.40 TAL 178.56 TAP 62.99 RCA 99.21 APO 147.45 V2 34.785
RC 158.168 GL 24.31 GP 1.87 ZAL 83.51 ZAP 164.28 ETS 5.79 ZAE 129.45 ETE 178.55 ZAC 66.58 ETC 164.43 CLP-164.39
   PLANETOCENTRIC CONIC
     C3 13.725 VHL 3.705 DLA 17.88 RAL 339.92 RAD 6567.5 VEL 11.624 PTH 2.04 VHP 6.076 DPA -12.20 RAP 334.22 ECC 1.2259
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    2120.7
                                                                                                                                                                                            67.56
                                                                                                                     95.68
                                                                                                                                    3 29 15
                                                                                                                                                                        -26.71
                       2 43 54 2720.67
19 35 20 4179.82
                                                                                76.06
                                                                                                201.12
                                                            -27.79
          90.00
                                                                                                                                                                                            164.21
                                                                               170.86
                                                                                                 195.56
                                                                                                                      61.69
                                                                                                                                 20 45 0
                                                                                                                                                        3579.8
                                                                                                                                                                           -4.39
                                                                -.61
          90.00
                      4 15 47 2424.41 -29.06
20 46 9 3951.32 .51
5 47 4 2138.77 -32.33
21 31 21 3809.72 3.32
                                                        -29.06
                                                                                                                                                                          -27.74
                                                                                                                                                                                            45.54
                                                                                54.10
                                                                                                 200.95
                                                                                                                      97.33
                                                                                                                                  4 56 11
                                                                                                                                                        1824.4
        100.00
                                                                                                                  60.11 21 52 1
101.75 6 22 43
55.96 22 34 51
                                                                                                                                                        3351.3
                                                                                                                                                                          -3.48
                                                                                                                                                                                           146.91
                                                                                                194.94
                                                                              153.44
        100.00
                                                                                                                                                        1538.8
                                                                                                                                                                          -30.38
                                                                                                                                                                                             23.10
                                                                                 31.77
                                                                                                 200.31
                                                                                                                                                        3209.7
                                                                                                                                                                         -1.17
                                                                                                                                                                                           134.74
                                                             3.32
                                                                                                 193.18
                                                                              140.94
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY

SCT 5331.1 SGR 377.2 SG3 249.0 ST 2911.8 SR 243.6 SS 898.3

RRT -.2468 RRF -.2677 RTF .9368 CRT .9582 CRS -.9037 CST -.9876

SGB 5344.5 R23 .0366 R13 -.9368 LSA 3053.1 MSA 152.0 SSA 19.9

SG1 5332.0 SG2 365.4 THA 179.00 EL1 2921.2 EL2 69.5 ALF 4.59
    DIFFERENTIAL CORRECTIONS
      TOE 1.8754 TRA .4559 TC3-5.9537 BAU 1.0941
     ROE 1.542 RRA -.1011 RC3 .3261 FAU .04166
FOE 1.0757 FRA .8136 FC3-2.6279 BSP 16941
BDE 1.8817 BRA .4670 BC3 5.9626 FSP -828
```

ARRIVAL CATE MAY 27 1966

LAUNCH DATE DEC 4 1965

```
CISTANCE 507.582
  HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 26.869 GAL .76 AZL 86.73 MCA 247.60 SMA 123.07 ECC .19840 INC 3.2672 V1 30.219
RP 108.94 LAP -3.02 LOP 319.20 VP 36.854 GAP 9.37 AZP 91.25 TAL 176.94 TAP 64.54 RCA 98.65 APO 147.49 V2 34.787
RC 160.359 GL 23.94 GP 1.77 ZAL 80.71 ZAP 165.27 ETS 6.02 ZAE 129.34 ETE 178.61 ZAC 68.70 ETC 164.68 CLP-165.38
   PLANETOCENTRIC CONIC
    C3 14.239 VHL 3.773 DLA 18.69 RAL 342.75 RAD 6567.6 VEL 11.646 PTH 2.04 VHP 6.240 DPA -11.53 RAP 336.34 ECC 1.2343
   C3 14.239 VHL 3.773 DLA 18.69 RAL 342.75 RAD 6567.6 VEL 11.646 PTH 2.04 VHP 6.24D DPA -11.53 RAP 336.34 ECC 1.2343 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 246 44 2760.58 -28.02 78.95 204.89 94.24 3 32 44 2160.6 -27.14 70.40 90.00 19 55 3 4156.06 -1.38 169.53 199.08 61.71 21 4 19 3556.1 -5.15 162.88 100.00 4 19 24 2461.74 -29.35 56.83 204.75 95.92 5 0 26 1861.7 -28.22 48.21 10.00 21 5 3 3930.14 -.21 152.27 198.43 60.11 22 10 33 3330.1 -4.19 145.74 110.00 5 52 17 2171.14 -32.76 34.20 204.18 100.37 6 28 28 1571.1 -30.98 25.43 110.00 21 48 40 3793.50 2.70 140.09 196.61 55.91 22 51 53 3193.5 -1.79 133.89
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5394.0 SGR 383.4 SG3 239.6

RRT -.2086 RRF -.2296 RTF .9372

SGB 5407.6 R23 .0339 R13 -.9372
                                                                                                                     ST 2999.5 SR 258.1 55 896.3
CRT .9527 CRS -.8979 CST -.9885
    TOE 1.9638 TRA .6185 TC3-5.8092 BAU 1.1074
    ROE .1665 RRA -.1073 RC3 .3067 FAU .03906
   FOE 1.0601 FRA .8569 FC3-2.3746 BSP 17189
BOE 1.9708 BRA .6277 BC3 5.8173 FSP -803
                                                                                                                     LSA 3137.4 MSA 151.7 SSA 19.8
                                                                                                                     ELI 3009.6 ELZ 78.2 ALF 4.69
                                                                  SG1 5394.6 SG2 375.0 THA 179.15
                                                                       FLIGHT TIME 176.00
                                                                                                                                ARRIVAL DATE MAY 29 1966
LAUNCH DATE DEC 4 1965
                                                                       DISTANCE 513.298
  HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 26.827 GAL 1.18 ATL 86.72 MCA 250.76 SMA 122.81 ECC .20149 INC 3.2849 V1 30.219
RP 108.93 LAP -3.10 LOP 322.37 VP 36.826 GAP 9.66 AZP 91.08 TAL 175.32 TAP 66.08 RCA 98.07 APO 147.56 V2 34.789
RC 162.536 GL 23.51 GP 1.69 ZAL 77.92 ZAP 166.24 ETS 6.29 ZAE 129.25 ETE 178.67 ZAC 70.85 ETC 164.91 CLP-166.34
  PLANETOCENTRIC CONIC
    C3 14.848 VHL 3.853 OLA 19.45 RAL 345.60 RAD 6567.6 VEL 11.672 PTH 2.05 VMP 6.412 OPA -10.83 RAP 338.46 ECC 1.2444
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 49 51 2800.68
20 14 40 4134.56
                                                                                                                        2200.7
                                                                                                                                        -27.51
                                                                                                                                                        73.27
                                                 -28.19
                                                               81.87
                                                                             208.76
                                                                                            92.79
                                                                                                        3 36 32
       90.00
                  20 14 40
                                4134.56
                                                  -2.07
                                                               168.33
                                                                             202.70
                                                                                              61.75
                                                                                                        21 23 34
                                                                                                                          3534.6
                                                                                                                                         -5.83
                                                                                                                                                       161.67
       90.00
                 4 23 21 2499.17
21 23 51 3911.30
5 57 50 2203.61
22 5 52 3779.63
                                                                                              94.49 5 5 1
60.12 22 29 2
                                                 -29.58
                                                               59.59
                                                                             208.66
                                                                                                                         1899.2
                                                                                                                                        -28.65
                                                                                                                                                        50.91
      100.00
                                                                                                                                                       144.70
                                                   -.85
                                                               151.24
                                                                             202.03
                                                                                                                         3311.3
                                                                                                                                         -4.82
      100.00
                                                                                              98.96 6 34 33
55.88 23 8 52
                                                                                                                                                       27.79
                                                -33.13
                                                                36.66
                                                                             208.17
                                                                                                                         1603.6
                                                                                                                                       -31.53
                                                   2.17
      110.00
                                                               139.37
                                                                             200.14
                                                                                                                         3179.6
                                                                                                                                         -2.32
                                                                                                                                                       133.16
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5453.2 SGR 389.2 SG3 230.6

RRT -.1718 RRF -.1928 RTF .9378

SGB 5467.1 R23 .0313 R13 -.9378
                                                                                                                     ST 3075.3 SR 272.4 55 891.5
CRT .9473 CRS -.8926 CST -.9894
    TOE 2.0510 TRA .7901 TC3-5.6388 BAU 1.1207
    RDE .1796 RRA -.1128 RC3 .2859 FAU .03662
                                                                                                                     LSA 3209.8 MSA 152.2 SSA 19.7
   FDE 1.0434 FRA .8983 FC3-2.1354 BSP 17433
                                                                   SG1 5453.6 SG2 383.4 THA 179.29
    BDE 2.0589 BRA .7981 BC3 5.6460 FSP -777
                                                                                                                     EL1 3086.1 EL2 86.9 ALF 4.80
                                                                                                                               ARRIVAL DATE MAY 31 1966
                                                                      FLIGHT TIME 178.00
LAUNCH DATE DEC 4 1965
  HELIOCENTRIC CONIC
                                                                     DISTANCE 518.991
   RL 147.44 LAL .00 LOL 71.64 VL 26.786 GAL 1.62 AZL 86.70 HCA 253.92 SMA 122.56 ECC .20484 INC 3.3019 V1 30.219
RP 108.92 LAP -3.17 LOP 325.53 VP 36.798 GAP 9.96 AZP 90.92 TAL 173.69 TAP 67.61 RCA 97.46 APO 147.67 V2 34.792
    RC 164.699 GL 23.01 GP 1.61 TAL 75.14 TAP 167.18 ETS 6.61 TAE 129.17 ETE 178.72 TAC 73.02 ETC 165.13 CLP-167.28
   PLANETOCENTRIC CONIC
   C3 15.564 VHL 3.945 DLA 20.16 RAL 348.47 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 6.591 DPA -10.09 RAP 340.59 ECC 1.2561 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      2240.8
                                                                                                                                     -27.81
                                                                                                                                                       76.17
                  2 53 19 2840.77
20 34 4 4115.60
                                                -28.29
                                                                84.80 212.72
                                                                                         91.32 3 40 40
61.80 21 42 40
       90.00
                                                                                                                                                      160.60
                                                                                                                         3515.6
                                                                                                                                         -6.43
                                                  -2.68
                                                               167.27
                                                                             206.43
       90.00
                                                                                             93.04 5 9 56
60.14 22 47 20
                                                                                                                                        -29.01
                                                                                                                                                       53.63
                   4 27 40 2536.56
                                                -29.75
                                                                62.36
                                                                             212.66
                                                                                                                         1936.6
      100.00
                                                                             205.72
                                                                                                                         3295.0
                                                                                                                                        -5.37
                                                                                                                                                      143.80
                  21 42 25
                                3895.05
                                                  -1.40
                                                              150.35
      100.00
                                                                                              97.53 6 40 59
55.86 23 25 39
                                                                                                                                       -32.04
                                                                                                                                                       30.19
                   6 3 43
                                 2236.04
                                                                             212.26
                                                                                                                        1636.0
                                                -33.44
                                                                39.14
      110.00
                                                                                                                                        -2.75
                  22 22 51
                                                                             203.76
                                                                                                                         3166.3
                                                                                                                                                      132.57
                                 3768.33
                                                 1.74
                                                              138.78
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 3140.9 SR 286.6 SS 884.3
CRT .9421 CR5 -.8875 CST -.9901
                                                                  SCT 5506.5 SGR 394.4 SG3 221.8
RRT -.1354 RRF -.1563 RTF .9384
SGB 5520.6 R23 .0289 R13 -.9384
    TOE 2.1383 TRA .9733 TC3-5.4380 BAU 1.1328
    ROE .1937 RRA - .1176 RC3 .2640 FAU .03425
                                                                                                                    LSA 3271.9 MSA 153.4 SSA 19.4
   FCE 1.0258 FRA .9387 FC3-1.9052 BSP 17660
BCE 2.1471 BRA .9803 BC3 5.4444 FSP -752
                                                                                                                     EL1 3152.5 EL2 95.7 ALF
                                                                                                                                                         4.92
                                                                   SG1 5506.8 SG2 390.8 THA 179.44
                                                                                                                                ARRIVAL DATE JUN 2 1966
                                                                       FLIGHT TIME 180.00
LAUNCH DATE DEC 4 1965
                                                                      DISTANCE 524.659
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.400 VHL 4.050 DLA 20.81 RAL 351.34 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 6.778 CPA -9.32 RAP 342.73 ECC 1.2699
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2280.7
                                                                                                                                        -28.04
                    2 57 8
                              2880.67
                                                 -28.32
                                                               87.72
                                                                            216.76
                                                                                              89.86
                                                                                                         3 45 9
       90.00
                                                                                                                          3499.5
                                                                                                                                         -6.94
                                                                                                                                                       159.69
                   20 53 9
4 32 20
                                                                                              61.85
                                                                                                        22 1 29
                                 4099.47
                                                 -3.20
                                                               166.37
                                                                             210.25
       90.00
                                                                                                                          1973.7
                                                                                                          5 15 13
                                                                                                                                        -29.31
                                                                                                                                                        56.36
                                 2573.72
                                                -29.85
                                                                65.12
                                                                             216.74
                                                                                              91.59
      100.00
                   22 0 39 3881.65
6 9 56 2268.33
                                                                                                                          3281.6
                                                                                                                                         -5.81
                                                                                                                                                       143.06
                                                                                              60.16 23 5 21
      100.00
                                                 -1.86
                                                               149.61
                                                                             209.50
                                                                                                          6 47 45
                                                                                                                          1668.3
                                                                                                                                                        32.59
      110.00
                                                -33.70
                                                                41.52
                                                                             216.44
                                                                                              96.08
                                                                                              55.84 23 42 11
                                                                                                                          3159.8
                                                                                                                                        -3.08
                                                                                                                                                       132.13
                  22 39 32
                                                 1.41
                                                                             207.46
      110.00
                               3759.80
                                                              138.33
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 3202.8 SR 300.3 SS 878.5
CRT .9370 CRS -.8829 CST -.9909
                                                                  SGT 5555.3 SGR 398.9 SG3 213.6
RRT -.0985 RRF -.1186 RTF .9389
    TOE 2.2304 TRA 1.1722 TC3-5.2025 BAU 1.1419
    RDE .2086 RRA -.1216 RC3 .2412 FAU .03187
                                                                                                                  LSA 3331.0 MSA 155.4 SSA 19.1
EL1 3215.1 EL2 104.5 ALF 5.03
                                                                  SGB 5569.6 R23 .0258 R13 -.9389
    FDE 1.0119 FRA .9812 FC3-1.6824 8SP 17779
                                                                  SG1 5555.5 SG2 397.0 THA 179.59
    BDE 2.2402 BRA 1.1785 BC3 5.2081 FSP -721
```

FLIGHT TIME 174.00

```
ARRIVAL DATE JUN 4 1966
                                                                       FILIGHT TIME 182.00
LAUNCH DATE DEC 4 1965
                                                                      DISTANCE 530.298
   RL 147.44 LAL .00 LOL 71.64 VL 26.703 GAL 2.56 AZL 86.67 HCA 260.25 SMA 122.06 ECC .21241 INC 3.3345 V1 30.219 RP 108.89 LAP -3.29 LOP 331.87 VP 36.746 GAP 10.61 AZP 90.57 TAL 170.41 TAP 70.65 RCA 96.14 APO 147.99 V2 34.800 RC 168.980 GL 21.86 GP 1.48 ZAL 69.66 ZAP 169.01 ETS 7.41 ZAE 129.07 ETE 178.82 ZAC 77.41 ETC 165.54 CLP-169.11
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 17.370 VML 4.168 DLA 21.41 RAL 354.20 RAD 6567.7 VEL 11.779 PTH 2.08 VMP 6.975 DPA -8.53 RAP 344.87 ECC 1.2859
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2320.2
       90.00
                   3 1 20 2920.15
21 11 47 4086.44
                                                                90.61
                                                                             220.87
                                                                                             88.41
                                                                                                         3 50 0
                                                                                                                                       -28.20
                                                                                                                                                         81.94
                                                  -28.28
                                                                                                        22 19 53
                                                                                               61.90
                                                                                                                          3486.4
                                                                                                                                         -7.35
                                                                                                                                                        158.95
                                                   -3.62
                                                               165.64
                                                                              214.13
        90.00
                  4 37 22 2610.47
22 18 25 3871.35
                                                                67.85
                                                                              220.89
                                                                                               90.15
                                                                                                         5 20 53
                                                                                                                          2010.5
                                                                                                                                         -29.55
                                                                                                                                                         59.06
                                                -29.89
      100.00
                                                                                                                          3271.4
                                                                                               60.18 23 22 57
94.62 6 54 50
55.84 23 58 21
                                                                                                                                         -6.16
                                                                                                                                                       142.49
                                                               149.05
                                                                              213.35
      100.00
                                                  -2.21
                                             -33.91
                  6 16 30 2300.35
22 55 47 3754.24
                                                                                                                          1700.3
                                                                                                                                        - 32 . 90
                                                                                                                                                         35.01
                                                                44.10
                                                                              220.69
      110.00
                                                                                                                        3154.2
                                                                                                                                        -3.29
                                                                                                                                                       131.84
                                                               138.04
                                                                              211.22
      110.00
                                                 1.20
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 3247.1 SR 313.7 SS 868.5
CRT .9323 CRS -.8788 CST -.9916
                                                                  SCT 5600.3 SCR 402.9 SC3 205.6
RRT -.0628 RRF -.0823 RTF .9398
SCB 5614.8 R23 .0231 R13 -.9398
    TOE 2.3182 TRA 1.3778 TC3-4.9564 BAU 1.1521
   ROE .2246 RRA -.1246 RC3 .2183 FAU .02972
FOE .9952 FRA 1.0192 FC3-1.4810 BSP 17987
                                                                                                                    LSA 3372.2 MSA 157.6 SSA 18.6
EL1 3260.3 EL2 113.1 ALF 5.15
    BOE 2.3290 BRA 1.3835 BC3 4.9612 FSP -698
                                                                   SG1 5600.4 SG2 402.1 THA 179.74
                                                                                                                                 ARRIVAL DATE JUN 6 1966
                                                                       FLIGHT TIME 184.00
LAUNCH DATE DEC 4 1965
                                                                       DISTANCE 535.906
  HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 26.662 GAL 3.07 AZL 86.65 MCA 263.41 SMA 121.82 ECC .21669 INC 3.3503 V1 30.219
RP 108.88 LAP -3.33 LOP 335.04 VP 36.721 GAP 10.95 AZP 90.38 TAL 168.77 TAP 72.18 RCA 95.42 APO 148.22 V2 34.805
RC 171.096 GL 21.21 GP 1.42 TAL 66.98 TAP 169.90 ETS 7.92 TAE 129.03 ETE 178.87 TAC 79.63 ETC 165.72 CLP-170.00
   23 10.493 VML 4.300 OLA 21.93 RAL 357.03 RAO 6567.7 VEL 11.827 PTH 2.09 VMP 7.183 CPA -7.71 RAP 347.01 ECC 1.3044 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 5 56 2959.01 -28.17 93.45 225.02 86.99 3 55 15 2350 0
  PLANETOCENTRIC CONIC
                  21 29 49 4076.78
4 42 48 2646.66
22 35 38 3864.37
6 23 23 2332.01
23 11 33 3751.78
                                                                                                        22 37 46
                                                                              218.07
                                                                                               61.93
                                                   -3.93
                                                                165.10
       90.00
                                                                                               88.74 5 26 55
60.20 23 40 2
                                                                                                                                         -29.72
                                                                                                                                                         61.74
                                                                              225.10
                                                                                                                          2046.7
                                                  -29.87
                                                                 70.54
                                                                                                                        3264.4
      100.00
                                                                                                                                                        142.10
                                                                              217.25
                                                                                                                                         -6.39
      100.00
                                                   -2.44
                                                                148.66
                                                                                               93.17 7 2 15
55.83 24 14 4
                                                                                                                                        -33.24
                                                                                                                          1732.0
                                                                                                                                                         37.41
                                            -34.05
                                                                 46.56
                                                                              225.01
      110.00
                                                                                                                                                        131.71
                                                 1.11
                                                                137.91
                                                                              215.03
                                                                                                                           3151.8
                                                                                                                                          -3.38
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5640.4 SGR 406.1 SG3 197.9 ST 3281.6 SR 326.6 SS 858.1 RRT -.0272 RRF -.0460 RTF .9407 CRT .9276 CRS -.8750 CST -.9922 SG8 5655.0 R23 .0203 R13 -.9407 LSA 3403.8 MSA 160.5 SSA 18.2 SG1 5640.4 SG2 406.0 THA 179.89 EL1 3295.6 EL2 121.5 ALF 5.28
                                                                                                                      ST 3281.6 SR 326.6 SS 858.1
CRT .9276 CRS -.8750 CST -.9922
    TOE 2.4065 TRA 1.5978 TC3-4.6894 BAU 1.1604
    ROE .2417 RRA - .1265 RC3 .1953 FAU .02761
    FOE .9794 FRA 1.0583 FC3-1.2925 BSP 18167
BDE 2.4186 BRA 1.6028 BC3 4.6935 FSP -674
                                                                                                                                 ARRIVAL DATE JUN 8 1966
                                                                      FLIGHT TIME 186.00
LAUNCH CATE DEC 4 1965
                                                                      DISTANCE 541.479
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 19.789 VML 4.448 OLA 22.40 RAL 359.84 RAD 6567.8 VEL 11.881 PTH 2.11 VHP 7.402 CPA -6.87 RAP 349.15 ECC 1.3257
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2397.0
                  10 58 2997.05
21 47 9 4070.70
4 48 39 2682.11
22 52 9 3860.88
6 30 34 2363.22
23 26 43 3752.53
                                                                                                                                       -28.32
                                                                                                         4 0 55
                                                                           229.21 85.61
                                                -28.00
                                                               96.22
       90.00
                                                                                                        22 54 59
                                                                                                                                         -7.84
                                                                                                                          3470.7
                                                               164.76
                                                                              222.05
                                                                                               61.96
                                                   -4.12
        90.00
                                                                                                                          2082.1
                                                                                                                                                         64.37
                                                                                                                                         -29.83
                                                -29.79
                                                                73.17
                                                                              229.34
                                                                                               87.36
                                                                                                         5 33 21
       100.00
                                                                                               60.21 23 56 30
91.74 7 9 58
55.83 24 29 15
                                                                                                                          3260.9
                                                               148.47
                                                                              221.18
                                                                                                                                         -6.51
                                                 -2.56
       100.00
                                                                                                                          1763.2
                                                                                                                                        -33.53
                                                                 48.99
                                                                              229.38
                                                -34.14
       110.00
                                                                                                                          3152.5
                                                                                                                                          -3.35
                                                 1.14
                                                                              218.88
                                                               137.95
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 3305.1 SR 338.8 SS 846.5
CRT .9232 CRS -.8715 CST -.9927
                                                                    SGT 5676.4 SGR 408.7 SG3 190.6
    TOE 2.4947 TRA 1.8302 TC3-4.4102 BAU 1.1677
                                                                  RRT .0083 RRF -.0098 RTF .9418
SGB 5691.1 R23 -.0177 R13 .9418
    RDE .2598 RRA -.1273 RC3 .1729 FAU .02561
                                                                                                                      LSA 3424.6 MSA 163.7 SSA 17.6
    FCE .9639 FRA 1.0964 FC3-1.1206 BSP 18336
BCE 2.5082 BRA 1.8346 BC3 4.4136 FSP -652
                                                                                                                      EL1 3319.8 EL2 129.6 ALF 5.41
                                                                    SG1 5676.4 SG2 408.7 THA .03
                                                                                                                                 ARRIVAL DATE JUN 10 1966
                                                                        FLIGHT TIME 188.00
LAUNCH DATE DEC 4 1965
                                                                       DISTANCE 547.013
   HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 26.582 GAL 4.16 AZL 86.62 HCA 269.74 SHA 121.34 ECC .22639 INC 3.3814 V1 30.219
RP 108.84 LAP -3.38 LOP 341.38 VP 36.674 GAP 11.69 AZP 90.01 TAL 165.49 TAP 75.23 RCA 93.87 APO 148.81 V2 34.817
RC 175.278 GL 19.82 GP 1.32 ZAL 61.79 ZAP 171.64 ETS 9.23 ZAE 128.98 ETE 178.97 ZAC 84.10 ETC 166.03 CLP-171.75
   PLANE TOCENTRIC CONIC
                                                                                                                              -6.00 RAP 351.30 ECC 1.3502
    C3 21.280 VHL 4.613 DLA 22.80 RAL 2.59 RAD 6567.9 VEL 11.944 PTH 2.13 VHP 7.634 DPA
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2434.1
                   3 16 27 3034.08
22 3 39 4068.42
                                                                                              84.28 4 7 1
                                                  -27.78
                                                                 98.90
                                                                             233.43
                                                                                                       23 11 28
        90.00
                                                                                                                           3468.4
                                                                                                                                          -7.92
                                                                                                                                                        157.92
                                                                                               61.97
                                                                164.63
                                                                              226.05
                                                   -4.20
        90.00
                   4 54 53 2716.71
23 7 55 3861.02
                                                                                                           5 40 10
                                                                                                                           2116.7
                                                                                                                                         -29.89
                                                                                                                                                         66.94
                                                                 75.73
                                                                              233.61
                                                                                               86.01
                                                  -29.65
       100.00
                                                                                               60.21 24 12 16
90.32 7 17 57
55.84 24 43 50
                                                                                                                           3261:0
                                                                                                                                          -6.50
                                                                                                                                                        141.92
                                                                148.48
                                                                              225.14
                                                   -2.56
       100.00
                   6 38 3 2393.92
23 41 14 3756.57
                                                                                                                                                         42.17
                                                -34.18
                                                                 51.39
                                                                              233.78
       110.00
                                                                                                                           3156.6
                                                                                                                                                        131.96
                                                               138.16
                                                                              222.74
                                                                MID-COURSE EXECUTION ACCURACY

SGT 5708.1 SGR 410.6 SG3 183.7

RRT .0446 RRF .0276 RTF .9428

SGB 5722.9 R23 -.0146 R13 .9428

SGB 5722.9 R23 -.0146 R13 .9428

SGB 5708.1 SG2 410.2 THA .18

EL1 3338.2 EL2 137.5 ALF 5.54
       110.00
   DIFFERENTIAL CORRECTIONS
    TOE 2.5864 TRA 2.0804 TC3-4.1138 BAU 1.1712
    ROE .2789 RRA -.1268 RC3 .1512 FAU .02358
FDE .9509 FRA 1.1364 FC3 -.9592 BSP 18394
    BOE 2.6014 BRA 2.0843 BC3 4.1166 FSP -625
```

ARRIVAL DATE JUN 12 1966

LAUNCH DATE DEC 4 1965

DISTANCE 552.503 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.542 GAL 4.74 AZL 86.60 HCA 272.91 SMA 121.11 ECC .23188 INC 3.3969 VI 30.219
RP 108.82 LAP -3.39 LOP 344.55 VP 36.652 GAP 12.10 AZP 89.83 TAL 163.85 TAP 76.76 RCA 93.03 APO 149.19 V2 34.824 RC 177.341 GL 19.08 GP 1.28 ZAL 59.29 ZAP 172.50 ETS 10.10 ZAE 128.96 ETE 179.02 ZAC 86.34 ETC 166.15 CLP-172.61 PLANETOCENTRIC CONIC C3 22.994 VHL 4.795 DLA 23.14 RAL 5.29 RAC 6567.9 VEL 12.016 PTH 2.14 VHP 7.880 CPA -5.12 RAP 353.44 ECC 1.3784 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 83.01 -28.19 237.66 2469.9 - 90.00 4 13 34 3 22 24 3069.92 -27.51 101.49 61.96 23 27 5 84.72 5 47 22 3470.1 -7.86 158.02 90.00 22 19 15 4070.09 -4.14 164.72 230.06 69.44 237.90 2150.3 -29.88 100.00 5 1 32 2750.32 -29.46 78.22 60.20 24 27 13 88.92 7 26 12 55.85 24 57 45 142.13 23 22 48 3864.92 6 45 48 2424.07 23 55 1 3763.93 1824.1 3264.9 -6.37 100.00 -2.42 148.70 229.11 -33.94 110.00 -34.17 53.75 238.21 -2.92 132.34 3163.9 110.00 1.57 138.55 226.61 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5734.3 SGR 411.9 SG3 177.D RRT .0799 RRF .0635 RTF .9442 ST 3323.7 SR 360.6 SS 822.7 CRT .9148 CRS -.8654 CST -.9938 TOE 2.6733 TRA 2.3408 TC3-3.8208 BAU 1.1752 RCE .2990 RRA -.1249 RC3 .1306 FAU .02175 FDE .9358 FRA 1.1743 FC3 -.8188 BSP 18556 SGB 5749.1 R23 -.0124 R13 .9442 LSA 3438.7 MSA 17D.9 SSA 16.5 EL1 334D.1 EL2 145.0 ALF 5.68 SG1 5734.4 SG2 410.6 THA BDE 2.6899 BRA 2.3442 BC3 3.8230 FSP -605 . 33 ARRIVAL CATE JUN 14 1966 LAUNCH DATE DEC 4 1965 FLIGHT TIME 192.00 HELIOCENTRIC CONIC DISTANCE 557.943 RL 147.44 LAL .00 LOL 71.64 VL 26.503 GAL 5.36 AZL 86.59 MCA 276.08 SMA 120.88 ECC .23787 INC 3.4125 V1 30.219
RP 108.79 LAP -3.39 LOP 347.73 VP 36.631 GAP 12.53 AZP 89.64 TAL 162.23 TAP 78.31 RCA 92.13 APO 149.63 V2 34.832
RC 179.385 GL 18.32 GP 1.24 ZAL 56.87 ZAP 173.35 ETS 11.18 ZAE 128.94 ETE 179.07 ZAC 88.59 ETC 166.26 CLP-173.47 PLANETOCENTRIC CONIC C3 24.964 VHL 4.996 DLA 23.42 RAL 7.93 RAD 6568.D VEL 12.097 PTH 2.17 VHP 8.143 DPA -4.23 RAP 355.58 ECC 1.4108 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 81.81 -27.20 103.97 241.89 4 20 34 2504.4 -28.05 95.41 90.00 3 28 50 3104.44 3475.8 158.34 23 41 46 -7.68 90.00 22 33 50 4075.82 -3.96 165.05 234.06 61.94 83.48 5 54 57 60.18 24 41 20 5 8 34 2782.89 23 36 47 3872.61 2182.9 -29.83 71.86 100.00 -29.24 80.61 242.19 3272.6 142.56 -6.12 100.00 -2.16 149.12 233.07 87.56 7 34 42 46.81 1853.7 -34.07 110.00 6 53 48 2453.65 0 11 58 3774.61 -34.11 56.05 242.64 1 14 53 3174.6 -2.51 132.90 110.00 O 11 58 1.98 139.11 230.48 55.87 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3316.8 SR 369.9 SS 810.1 CRT .9107 CR5 -.8627 CST -.9943 SGT 5756.4 SGR 412.5 SG3 170.5 RRT .1154 RRF .0998 RTF .9458 SGB 5771.2 R23 -.0100 R13 .9458 TDE 2.7613 TRA 2.6177 TC3-3.5250 BAU 1.1770 ROE .3201 RRA -.1214 RC3 .1113 FAU .01996 FOE .9222 FRA 1.2129 FC3 -.6923 BSP 18684 LSA 3429.8 MSA 174.5 SSA 16.0 SG1 5756.6 SG2 4D9.7 THA .48 BOE 2.7798 BRA 2.6205 BC3 3.5267 FSP -584 EL1 3333.9 EL2 152.0 ALF 5.81 FLIGHT TIME 194.00 ARRIVAL DATE JUN 16 1966 LAUNCH CATE CEC 4 1965 HELIOCENTRIC CONIC DISTANCE 563.325 RL 147.44 LAL .00 LOL 71.64 VL 26.464 GAL 6.02 A7L 86.57 MCA 279.25 SMA 120.65 ECC .24439 INC 3.4283 VI 30.219
RP 108.77 LAP -3.38 LOP 350.90 VP 36.610 GAP 12.99 AZP 89.45 TAL 160.62 TAP 79.87 RCA 91.17 APO 150.14 V2 34.840
RC 181.409 GL 17.56 GP 1.21 ZAL 54.52 ZAP 174.20 ETS 12.55 ZAE 128.92 ETE 179.12 ZAC 90.84 ETC 166.35 CLP-174.32 PLANETOCENTRIC CONIC C3 27.226 VHL 5.218 CLA 23.64 RAL 10.49 RAC 6568.1 VEL 12.190 PTH 2.19 VHP 8.424 CPA -3.32 RAP 357.71 ECC 1.4481 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 246.13 80.67 4 28 2 61.90 23 55 27 82.30 6 2 53 60.16 24 54 32 86.23 7 43 22 55.90 1 27 20 2537.5 -27.87 97.81 3 35 44 3137.54 22 47 21 4085.68 -26.86 106.33 -7.38 158.90 3485.7 90.00 -3.64 165.60 238.04 246.48 74.19 100.00 5 15 59 2814.34 -28.97 82.91 2214.3 -29.73 23 49 48 3884.11 -1.77 149.75 237.01 3284.1 -5.73 143.20 100.00 7 2 D 2482.66 1882.7 49.07 -34.00 58.31 247.08 -34.15 0 24 12 133.63 3788.55 2.51 139.83 234.33 55.90 1 27 20 3188.6 -1.98 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3300.9 SR 378.0 SS 797.4 SGT 5773.7 SGR 412.4 SG3 164.3 RRT .1511 RRF .1361 RTF .9475 SGB 5788.4 R23 -.0078 R13 .9475 TDE 2.8494 TRA 2.9113 TC3-3.2308 BAU 1.1765 CRT .9067 CRS -.8602 CST -.9948 RDE .3421 RRA -.1163 RC3 .0936 FAU .01824 FDE .9094 FRA 1.2523 FC3 -.5800 BSP 18802 BDE 2.8699 BRA 2.9136 BC3 3.2321 FSP --565 LSA 3412.1 MSA 178.1 55A 15.4 SG1 5774.0 SG2 407.6 THA .62 FL1 3318.7 FL2 158.6 ALF 5.94 FLIGHT TIME 196.00 ARRIVAL DATE JUN 18 1966 LAUNCH DATE DEC 4 1965 DISTANCE 568.641 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.425 GAL 6.71 A7L 86.56 HCA 282.42 SMA 120.43 ECC .25152 INC 3.4444 V1 30.219
RP 108.74 LAP -3.36 LOP 354.08 VP 36.591 GAP 13.48 AZP 89.26 TAL 159.02 TAP 81.45 RCA 90.14 APO 150.72 V2 34.849
RC 183.413 GL 16.78 GP 1.17 ZAL 52.26 ZAP 175.04 ETS 14.38 ZAE 128.90 ETE 179.16 ZAC 93.10 ETC 166.42 CLP-175.18 PLANETOCENTRIC CONIC C3 29.828 VHL 5.462 DLA 23.81 RAL 12.97 RAD 6568.2 VEL 12.296 PTH 2.21 VHP 8.726 DPA -2.40 RAP 359.84 ECC 1.4909 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 250.35 79.61 4 35 56 2569.2 90.00 3 43 7 3169.15 -26.49 108.57 24 8 5 3499.6 -6.94 159.70 166.38 241.99 61.85 90.00 22 59 45 4099.64 -3.20 250.76 81.17 6 11 10 2244.7 -29.60 76.43 100.00 5 23 45 2844.67 -28.67 85.12 1 10 43 3299.4 -5.22 144.04 240.92 60.13 100.00 0 5 44 3899.36 -1.26 150.59 -34.18 51.29 7 10 22 2511.10 7 52 13 110.00 -33.85 60.52 251.50 84.93 1911.1 3205.7 -1.32 55.95 1 39 2 0 35 36 3.17 238.16 110.00 3805.69 140.73 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3281.9 SR 384.8 SS 786.6 CRT .9028 CRS -.8581 CST -.9953 LSA 3391.8 MSA 181.5 SSA 14.9 EL1 3300.2 EL2 164.5 ALF 6.06 SGT 5788.5 SGR 411.7 SG3 158.5 RRT .1874 RRF .1732 RTF .9493 TOF 2.9425 TRA 3.2270 TC3-2.9360 BAU 1.1712 ROE .3650 RRA -.1093 RC3 .0775 FAU .01651 FOE .8993 FRA 1.2945 FC3 -.4792 BSP 18808 SGB 5803.1 R23 -.0057 R13 .9493 SG1 5789.0 SG2 404.4 THA .77 BOE 2.9651 BRA 3.2289 BC3 2.9370 FSP -542

FLIGHT TIME 190.00

```
ARRIVAL DATE JUN 20 1966
                                                                                        FLIGHT TIME 198.00
LAUNCH DATE DEC 4 1965
                                                                                        DISTANCE 573.880
   HELIOCENTRIC CONIC
    RE 147.44 LAL .00 LOL 71.64 VL 26.387 GAL 7.45 AZL 86.54 HCA 285.60 SMA 120.21 ECC .25931 INC 3.4609 VL 30.219
RP 108.71 LAP -3.33 LOP 357.26 VP 36.572 GAP 14.01 AZP 89.07 TAL 157.45 TAP 83.05 RCA 89.04 APO 151.38 VZ 34.858
RC 185.395 GL 16.00 GP 1.14 ZAL 50.09 ZAP 175.87 ETS 16.93 ZAE 128.87 ETE 179.21 ZAC 95.35 ETC 166.47 CLP-176.04
   PLANETOCENTRIC CONIC
    C3 32.824 VHL 5.729 DLA 23.92 RAL 15.36 RAD 6568.3 VEL 12.418 PTH 2.24 VHP 9.051 DPA FT.48 RAP
    C3 32.824 VHL 5.729 DLA 23.92 RAL 15.36 RAD 6568.3 VEL 12.418 PTH 2.24 VHP 9.051 DPA -1.48 RAP 1.96 ECC 1.5402 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 50 55 3199.24 -26.10 110.69 254.55 78.61 4 44 14 2599.2 -27.41 102.27 90.00 23 11 1 4117.66 -2.62 167.39 245.90 61.79 24 19 39 3517.7 -6.37 160.72 100.00 5 31 50 2873.86 -28.35 87.23 255.02 80.11 6 19 44 2273.9 -29.43 78.59 100.00 0 16 43 3918.28 -.62 151.62 244.79 60.11 1 22 1 3318.3 -4.59 145.09 110.00 7 18 52 2538.99 -33.66 62.68 255.91 83.67 8 1 11 1939.0 -34.17 53.47 110.00 0 46 10 3825.91 5.94 141.79 241.95 56.02 1 49 56 3225.9 -.55 135.58
                                                      -.62
-33.66
3.94
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5796.7 SGR 410.4 SG3 152.8
RRT .2232 RRF .2094 RTF .9514
SGB 5811.2 R23 -.0041 R13 .9514
                                                                                                                                                  ST 3250.9 SR 390.1 SS 774.8
CRT .8990 CRS -.8559 CST -.9958
    TOE 3.0324 TRA 3.5574 TC3-2.6554 BAU 1.1656
    RDE .3887 RRA -.1005 RC3 .0631 FAU .01494
FDE .8884 FRA 1.3360 FC3 -.3939 BSP 18917
                                                                                                                                                  LSA 3359.6 MSA 184.5 SSA 14.3
EL1 3269.8 EL2 169.9 ALF 6.17
                                                                                  SG1 5797.4 SG2 400.0 THA .91
    BDE 3.0572 BRA 3.5588 BC3 2.6561 FSP -524
                                                                                        FLIGHT TIME 200.00
                                                                                       DISTANCE 579.029
   HELIOCENTRIC CONIC
   RL 147.44 LAL .00 LOL 71.64 VL 26.350 GAL 8.24 A7L 86.52 HCA 288.77 SMA 119.99 ECC .26786 INC 3.4779 V1 30.219
RP 108.68 LAP -3.29 LOP .44 VP 36.555 GAP 14.59 A7P 88.88 TAL 155.90 TAP 84.67 RCA 87.85 APO 152.14 V2 34.868
RC 187.357 GL 15.23 GP 1.12 TAL 48.01 TAP 176.71 ETS 20.79 TAE 128.83 ETE 179.26 TAC 97.59 ETC 166.49 CLP-176.90
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 36.279 VHL 6.023 DLA 23.98 RAL 17.65 8AD 6568.4 VEL 12.556 PTH 2.28 VHP 9.402 DPA -.55 RAP 4.08 ECC 1.5971
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 59 8 3227.82 -25.70 112.69 258.72 77.69 4 52 56 2627.8 -27.14 104.32
90.00 23 21 8 4139.60 -1.91 168.61 249.75 61.74 24 30 7 3539.6 -5.67 161.95
100.00 5 40 13 2901.93 -28.01 89.24 259.25 79.10 6 28 34 2301.9 -29.22 80.65
100.00 0 26 40 3940.72 .15 152.85 248.61 60.11 1 32 21 3340.7 -3.83 146.33
110.00 7 27 29 2566.34 -33.44 64.78 260.28 82.44 8 10 15 1966.3 -34.12 55.60
110.00 0 55 54 3849.07 4.82 143.00 245.70 56.12 2 0 3 3249.1 .33 136.79
                     3 59 8 3227.82
23 21 8 4139.60
5 40 13 2901.93
0 26 40 3940.72
7 27 29 2566.34
0 55 54 3849.07
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SCT 5800.3 SGR 408.4 SG3 147.4

RRT .2591 RRF .2457 RTF .9537

SGB 5814.7 R23 -.0026 R13 .9537

SGI 5801.3 SG2 394.4 THA 1.05
                                                                                                                                                   ST 3214.2 SR 394.0 SS 764.1
CRT .8952 CRS -.8540 CST -.9962
     TOE 3.1243 TRA 3.9091 TC3-2.3839 BAU 1.1565
    RDE .4131 RRA -.0896 RC3 .0504 FAU .01341
FDE .8790 FRA 1.3794 FC3 -.3199 BSP 19010
BDE 3.1515 BRA 3.9101 BC3 2.3845 FSP -507
                                                                                                                                           CRT .8952 LR3 -.0,-0
LSA 3321.9 MSA 187.2 SSA 13.8
EL1 3233.5 EL2 174.5 ALF 6.28
                                                                                                                                                               ARRIVAL DATE JUN 24 1966
                                                                                        FLIGHT TIME 202.90
LAUNCH DATE DEC 4 1965
                                                                                      DISTANCE 584.073
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 40.274 YHL 6.346 DLA 23.99 RAL 19.85 RAD 6568.5 VEL 12.714 PTH 2.31 VHP 9.783 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      4 7 42 3254.93
23 30 6 4165.29
5 48 49 2928.93
0 35 37 3966.52
7 36 8 2593.19
1 4 47 3875.03
                                                                                              262.87
                                                                                                                                                   2654.9
                                                                                                                                                                       -26.86
                                                                            114.57
                                                                                                                     76.83
                                                                                                                                  5 1 57
                                                             -25.29
                                                                                                                     61.70 24 39 32
                                                                                                                                                       3565.3
                                                                                                                                                                         -4.86
                                                                                                                                                                                           163.40
                                                                                                253.54
         90.00
                                                              -1.08
                                                                             170.05
                                                                                                                     78.15 6 37 38
60.12 1 41 43
                                                                                                                                                                         -29.00
                                                                                                                                                                                            82.62
                                                                                                                                                       2328.9
                                                             -27.64
                                                                               91.17
                                                                                                263.45
        100.00
                                                                                                                                                                                           147.75
                                                                                                                                                       3366.5
                                                                                                                                                                          -2.96
                                                               1.02
                                                                              154.27
                                                                                                252.37
        100.00
                                                                                                                                                                        -34.03
                                                                                                                                 8 19 21
2 9 22
                                                                                                                                                       1993.2
                                                                                                                                                                                            57 70
                                                       -33.18
5.80
                                                                                                                     81.25
                                                                                66.83
                                                                                                264.61
        110.00
                                                                                                                                                    3213.0
                                                                                                                                                                                           138.14
                                                           5.80
                                                                                                249.40
                                                                                                                     56.25
                                                                                                                                                                           1.33
                                                                              144.37
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5799.9 SGR 405.9 SG3 142.2
RRT .2952 RRF .2822 RTF .9562
SGB 5814.1 R23 -.0014 R13 .9562
SGI 5801.2 SG2 387.7 THA 1.19
                                                                                                                                                 ST 3173.6 SR 396.3 SS 754.9
CRT .8915 CRS -.8524 CST -.9966
     TOE 3.2200 TRA 4.2850 TC3-2.1223 BAU 1.1429
    ROE .4382 RRA -.0765 RC3 .0395 FAU .01191
FDE .8715 FRA 1.4254 FC3 -.2559 BSP 19077
BDE 3.2497 BRA 4.2857 BC3 2.1226 FSP -489
                                                                                                                                                  LSA 3280.7 MSA 189.3 SSA 13.3
EL1 3193.3 EL2 178.4 ALF 6.37
                                                                                                                                                                ARRIVAL DATE JUN 26 1966
                                                                                        FLIGHT TIME 204.00
LAUNCH DATE DEC 4 1965
                                                                                       DISTANCE 588.991
          147.44 LAL .00 LOL 71.64 VL 26.277 GAL 9.98 A7L 86.49 MCA 295.13 SMA 119.58 ECC .28758 INC 3.5141 VI 30.219 108.62 LAP -3.18 LOP 6.81 VP 36.522 GAP 15.89 A7P 88.51 TAL 152.91 TAP 88.03 RCA 85.19 APO 153.97 VZ 34.889 191.216 GL 13.69 GP 1.07 ZAL 44.13 ZAP 178.29 ETS 39.88 ZAE 128.72 ETE 179.36 ZAC 102.05 ETC 166.47 CLP-178.66
   HELIOCENTRIC CONIC
    RL 147.44 LAL
     RC 191.216 GL 13.69 GP
   PLANETOCENTRIC CONIC
                                                                                                                                                            1.31 RAP 8.28 ECC 1.7391
                                                                                                                       2.35 VHP 10.198 DPA
     C3 44.909 VHL 6.701 DLA 23.96 RAL 21.95 RAD 6568.7 VEL 12.895 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       -26.56
                                                                                266.97
                                                                                                                      76.03 5 11 15
                                                                                                                                                       2680.6
                                         3280.61
                                                             -24.88
                                                                              116.34
         90.00
                          4 16 35
                                                                              171.67
                      23 37 58
                                         4194.51
                                                               -.14
                         5 57 36 2954.88
                                                             -27.27
        100.00
                                                                              155.86
                         0 43 34 3995.47
                                                               2.00
                         7 44 48 2619.52
                                                             -32.89
                                                                              145.88
                                                             6.88
                        1 12 51 3903.59
   DIFFERENTIAL CORRECTIONS
     TOE 3.3240 TRA 4.6909 TC3-1.8695 BAU 1.1226
     ROE .4640 RRA -.0609 RC3 .0303 FAU .01038
FDE .8672 FRA 1.4756 FC3 -.2000 BSP 19023
     BOE 3.3563 BRA 4.6913 BC3 1.8697 FSP -470
```

ARRIVAL DATE JUN 28 1966

LAUNCH DATE DEC 4 1965

DISTANCE 593.760 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.241 GAL 10.96 AZL 86.47 HCA 298.31 SHA 119.38 ECC .29899 INC 5.5336 V1 30.219
RP 108.58 LAP -3.11 LOP 9.99 VP 36.507 GAP 16.63 AZP 88.32 TAL 151.48 TAP 89.78 RCA 83.68 APO 155.07 V2 34.900
RC 193.113 GL 12.94 GP 1.05 ZAL 42.33 ZAP 178.87 ETS 69.03 ZAE 128.64 ETE 179.40 ZAC 104.25 ETC 166.42 CLP-179.57 PLANETOCENTRIC CONIC C3 50.304 VHL 7.092 DLA 23.89 RAL 23.94 RAD 6568.9 VEL 13.102 PTH 2.39 VHP 10.652 DPA 2.23 RAP 10.36 ECC 1.8279 UNCH A7NTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 25 42 3304.92 -24.47 118.00 271.02 75.30 5 20 47 2704.9 -26.26 109.79 90.00 23 44 45 4227.00 .91 173.49 260.91 61.70 24 55 12 3627.0 -2.88 166.86 2379.8 6 6 32 2979.81 0 50 32 4027.35 7 53 26 2645.33 1 20 6 3934.58 -28.48 6 56 12 100.00 -26.88 94.75 271.69 76.41 3427.3 -.90 151.09 60.25 1 57 39 157.61 259.71 100.00 3.08 8 37 32 2045.3 -33.74 110.00 -32.57 70.78 273.12 78.99 3334.6 3.60 147.53 MID-COURSE EXECUTION ACCURACY 256.65 56.66 2 25 41 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5763.5 SGR 399.4 SG3 132.6 RRT .3688 RRF .3551 RTF .9842 ST 3084.7 SR 396.3 SS 742.1 CRT .8847 CRS -.8500 CST -.9974 TDE 3.4280 TRA 5.1202 TC3-1.5897 BAU 1.0692 RDE .4903 RRA -.0429 RC3 .0240 FAU .00894 FDE .8631 FRA 1.5275 FC3 -.1539 BSP 19055 SGB 5777.3 R23 -.0022 R13 .9642 SG1 5765.4 SG2 371.1 THA 1.47 LSA 3191.6 MSA 191.7 SSA 11.8 EL1 3104.6 EL2 183.5 ALF BDE 3.4629 BRA 5.1203 BC3 1.5899 FSP -454 ARRIVAL DATE JUN 30 1966 FLIGHT TIME 208.00 DISTANCE 598.348 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.206 CAL 12.02 AZL 86.45 MCA 301.49 SMA 119.18 ECC .31162 INC 3.5544 V1 30.219
RP 108.55 LAP -3.03 LOP 13.18 VP 36.493 GAP 17.44 AZP 88.14 TAL 150.10 TAP 91.59 RCA 82.04 APO 156.32 V2 34.912
RC 194.989 GL 12.19 GP 1.03 ZAL 40.64 ZAP 178.86 ETS 117.40 ZAE 128.53 ETE 179.45 ZAC 106.43 ETC 166.34 CLP 179.50 PLANETOCENTRIC CONIC C3 56.611 VHL 7.524 DLA 23.77 RAL 25.83 RAD 6569.D VEL 13.341 PTH 2.44 VHP 11.152 DPA 3.14 RAP 12.42 ECC 1.9317
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 275.01 74.61 5 30 28 2727.9 -25.95 111.40 4 35 0 3327.89 -24.07 119.56 90.00 3662.5 61.75 25 1 30 23 50 28 4262.50 2.06 175.47 264.47 90.00 6 15 33 3003.71 0 56 32 4061.92 2403.7 -28.20 88.04 7 5 36 2 4 14 -26.49 96.42 275.72 75.61 100.00 3461.9 .27 60.38 4.25 159.52 263.26 100.00 8 46 32 2070.6 -33.55 8 2 1 2670.58 1 26 33 3967.80 -32.22 72.67 277.26 77.92 4.86 2 32 40 3367.8 149.30 110.00 9.28 260.18 56.95 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3034.2 SR 393.9 SS 737.9 CRT .8815 CRS -.8491 CST -.9978 SGT 5774.8 SGR 395.0 SG3 128.1 TOE 3.5387 TRA 5.5811 TC3-1.4129 BAU 1.0694 RRT .4047 RRF .3924 RTF .9646 SGB 5788.3 R23 .0006 R13 .9646 RDE .5172 RRA -.0221 RC3 .0165 FAU .00755 FDE .8613 FRA 1.5836 FC3 -.1155 BSP 19143 LSA 3141.5 MSA 191.7 SSA 11.7 SG1 5777.1 SG2 361.1 THA 1.59 EL1 3054.1 EL2 184.7 ALF BOE 3.5763 BRA 5.5812 BC3 1.4130 FSP -439 ARRIVAL DATE JUL 2 1966 FLIGHT TIME 210.00 LAUNCH DATE DEC 4 1965 DISTANCE 602.719 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.172 GAL 13.16 AZL 86.42 HCA 304.68 SHA 118.99 ECC .32565 INC 3.5766 V1 30.219
RP 108.51 LAP -2.94 LOP 16.37 VP 36.480 GAP 18.34 AZP 87.96 TAL 148.79 TAP 93.47 RCA 80.24 APO 157.74 VZ 34.924 RC 196.842 GL 11.46 GP 1.01 TAL 39.05 TAP 178.23 ETS 146.92 TAE 128.39 ETE 179.50 TAC 108.58 ETC 166.24 CLP 178.54 PLANETOCENTRIC CONIC 4.04 RAP 14.46 ECC 2.0537 C3 64.023 VHL 8.001 OLA 23.62 RAL 27.59 RAO 6569.2 VEL 13.615 PTH 2.49 VHP 11.703 OPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.64 278.92 2749.5 121.02 73.99 5 40 14 90.00 4 44 25 3349.54 -23.67 3700.7 25 6 50 23 55 9 4300.71 3.28 177.60 267.95 61.86 90.00 2426.6 -27.91 89.68 7 15 2 6 24 35 3026.56 -26.09 98.00 279.66 74.87 100.00 2 9 55 3498.9 1.53 155.01 161.56 266.73 60.57 1 1 36 4098.92 5.49 100.00 8 55 25 -33.33 74.49 2095.2 -31.86 281.32 76.90 8 10 30 2695.20 110.00 3403.0 151.20 2 38 54 6.20 263.63 57.31 1 32 11 4003.05 10.58 110.00 MID-COURSE EXECUTION ACCURACY ORBIT CETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2982.6 SR 389.9 SS 736.1 CRT .8787 CRS -.8487 CST -.9981 TOE 3.6579 TRA 6.0791 TC3-1.2051 BAU 1.0316 SGT 5757.8 SGR 390.4 SG3 123.7 RRT .4411 RRF .4292 RTF .9677 SGB 5771.0 R23 .0008 R13 .9677 ROE .5445 RRA .0017 RC3 .0117 FAU .00613 FDE .8623 FRA 1.6448 FC3 -.0829 BSP 19154 LSA 3090.8 MSA 191.0 55A 11.2 EL1 3002.2 EL2 184.9 ALF SG1 5760.3 SG2 350.2 THA BOE 3.6982 BRA 6.0791 BC3 1.2052 FSP -425 1.72 ARRIVAL DATE JUL 4 1966 FLIGHT TIME 212.00 DISTANCE 606.823 HELIOCENTRIC CONIC RL 147.44 LAL .00 LOL 71.64 VL 26.139 GAL 14.42 AZL 86.40 HCA 307.87 SMA 118.80 ECC .34128 INC 3.6006 V1 30.219
RP 108.47 LAP -2.84 LOP 19.56 VP 36.468 GAP 19.35 AZP 87.79 TAL 147.57 TAP 95.43 RCA 78.26 APO 159.35 V2 34.936
RC 198.673 GL 10.74 GP .99 ZAL 37.57 ZAP 177.35 ETS 159.71 ZAE 128.21 ETE 179.54 ZAC 110.70 ETC 166.11 CLP 177.55 PLANETOCENTRIC CONIC 2.54 VHP 12.315 DPA C3 72.781 VHL 8.531 OLA 23.42 RAL 29.24 RAD 6569.4 VEL 13.933 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.32 -25.33 73.41 282.74 2769.8 4 53 53 3369.85 -23.28 122.38 90.00 .81 1 15 8 3741.3 173.24 62.03 179.88 271.32 90.00 0 2 47 4341.34 4.59 4341.34 3048.30 2448.3 -27.62 91.22 99.50 283.51 74.18 6 33 37 -25.70 100.00 3538 .1 2.85 157.17 1 5 44 4138.13 8 18 50 2719.08 270.11 60.82 2 14 42 163.74 100.00 6.79 75.92 9 4 9 2119.1 -33.09 67.40 76.25 285.27 110.00 -31.48 57.73 2 44 20 3440.1 7.59 146.81 267.01 11.94 153.21 110.00 1 37 D 4040.11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2930.4 SR 384.5 SS 737.0 CRT .8762 CRS -.8487 CST -.9984 LSA 3040.1 MSA 189.3 SSA 10.7 EL1 2949.8 EL2 184.1 ALF 6.58 SGT 5736.8 SGR 385.3 SG3 119.7 RRT .4776 RRF .4660 RTF .9709 SGB 5749.7 R23 .0008 R13 .9709 SGI 5739.7 SG2 338.4 THA 1.84 TOE 3.7863 TRA 6.6178 TC3-1.0112 BAU .9839 ROE .5725 RRA .0287 RC3 .0082 FAU .00467 FOE .8663 FRA 1.7121 FC3 -.0556 BSP 19155 BDE 3.8313 BRA 6.6178 BC3 1.0112 FSP -410

FLIGHT TIME 206.00

ARRIVAL DATE JUL 6 1966

LAUNCH DATE DEC 4 1965

```
DISTANCE 610.598
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.106 GAL 15.79 AZL 86.37 HCA 311.06 SMA 118.62 ECC .35876 INC 3.6267 V1 30.219
RP 108.43 LAP -2.73 LOP 22.75 VP 36.457 GAP 20.46 AZP 87.62 TAL 146.44 TAP 97.50 RCA 76.07 APO 161.18 V2 34.948
RC 200.481 GL 10.03 GP .98 ZAL 36.20 ZAP 176.37 ETS 166.23 ZAE 127.99 ETE 179.59 ZAC 112.77 ETC 165.95 CLP 176.50
   PLANETOCENTRIC CONIC
                                                                                                                                              5.79 RAP 18.45 ECC 2.3692
     C3 83.198 VHL 9.121 CLA 23.19 RAL 30.77 RAD 6569.6 VEL 14.302 PTH 2.60 VHP 12.997 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 3 21 3388.74

0 5 28 4384.12

6 42 34 3068.82

1 8 56 4179.27

8 27 0 2742.08

1 40 59 4078.78
                                                                                                                                      2788.7
                                                                                      286.45
                                                                                                       72.89 5 59 49
                                                                                                                                                        -25.04
                                                        -22.91
                                                                       123.64
                                                                                                                                                                        115.62
                                                                          82.29 274.58 62.26 1 18 32

00.90 287.24 73.54 7 33 43

66.04 273.38 61.14 2 18 35

77.93 289.09 75.00 9 12 42

55.34 270.30 58.23 2 48 58

MID-COURSE EXECUTION ACCURACY
                                                                        182.29
                                                                                                                                          3784.1
                                                                                                                                                            2.19
                                                                                                                                                                           175.62
                                                         5.95
       100.00
                                                        -25.31
                                                                        100.90
                                                                                                                                          2468.8
                                                                                                                                                          -27.32
                                                                                                                                                                            92.68
                                                                                                                                         3579.3
                                                                       166.04
                                                                                                                                                           4.24
                                                                                                                                                                           159.43
       100.00
                                                          8.15
                                                                         77.93
                                                                                                                                         2142.1
                                                                                                                                                         -32.83
                                                                                                                                                                           69.14
       110.00
                                                      -31.08
                                                                                                                                         3478.8
                                                                                                                                                            9.04
                                                                                                                                                                          148.88
                                                                       155.34
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5713.4 SGR 379.9 SG3 115.8
RRT .5142 RRF .5031 RTF .9742
SGB 5726.0 R23 .0006 R13 .9742
SGI 5716.8 SG2 325.7 THA 1.96
                                                                                                                                    ST 2879.6 SR 377.8 SS 741.5
CRT .8743 CRS -.8493 CST -.9987
    TOE 3.9345 TRA 7.2051 TC3 -.8298 BAU .9230
    ROE .6011 RRA .0592 RC3 .0059 FAU .00312
FOE .8745 FRA 1.7874 FC3 -.0324 RSP 10032
                                                                                                                                    LSA 2991.6 MSA 186.6 SSA 10.2
EL1 2898.6 EL2 182.2 ALF 6.57
    BOE 3.9802 BRA 7.2053 BC3 .8298 FSP -395
                                                                                                                                                  ARRIVAL CATE JUL 8 1956
                                                                                FLIGHT TIME 216.00
LAUNCH DATE DEC 4 1965
                                                                                DISTANCE 613.962
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.075 GAL 17.32 AZL 86.34 HCA 314.25 SMA 118.45 ECC .37838 INC 3.6556 V1 30.219
RP 108.39 LAP -2.62 LOP 25.94 VP 36.447 GAP 21.72 AZP 87.45 TAL 145.44 TAP 99.68 RCA 73.63 APO 163.27 V2 34.961
RC 202.264 GL 9.34 GP .96 ZAL 34.96 ZAP 175.31 ETS 170.12 ZAE 127.71 ETE 179.63 ZAC 114.79 ETC 165.77 CLP 175.41
   PLANETOCENTRIC CONIC
    C3 95.677 VHL 9.781 DLA 22.92 RAL 32.16 RAD 6569.9 VEL 14.732 PTH 2.67 VHP 13.763 DPA 6.63 RAP 20.38 ECC 2.5746
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 12 45 3406.08 -22.56 124.79 290.03 72.41 6 9 31 2806.1 -24.75 116.81
        90.00 5 12 45 3406.08

90.00 0 7 10 4428.78

100.00 6 51 25 3087.96

100.00 1 11 11 4222.13

110.00 8 34 58 2764.00

110.00 1 44 8 4118.85
                                                                                                                        1 20 59
                                                                                                                                          3828.8
                                                                                                                                                             3.62
                                                                                                                                                                           178.12
                                                          7.35
                                                                        184.81
                                                                                        277.71
                                                                                                           62.58
                                                                                                          72.95 7 42 53
61.54 2 21 33
74.14 9 21 2
58.81 2 52 46
                                                                                                                                          2488.0
                                                                                                                                                           -27.03
                                                                                                                                                                            94.03
                                                        -24.93
                                                                        102.20
                                                                                       290.84
        100.00
                                                                                                                                          3622.1
                                                                                                                                                             5.68
                                                                                                                                                                           161.80
       100.00
                                                         9.55
                                                                       168.45
                                                                                        276.54
                                                  -30.69
14.76
                                                                         79.51
                                                                                                                                                         -32.55
                                                                                                                                                                            70.79
                                                                                                                                         2164.0
       110.00
                                                                                        292.76
                                                                                                                                          3518.8
                                                                                                                                                           10.52
       110.00
                                                                        157.57
                                                                                        273.49
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            RET .5503 RRF .5396 RTF .9774
SGB 5695.9 R23 .0002 R13 .9774
SGI 5687.3 SGZ 312.1 THA 2.08
                                                                                                                                      ST 2825.9 SR 369.6 55 748.6
     TDE 4.0924 TRA 7.8411 TC3 -.6644 BAU .8499
    ROE .6303 RRA .0935 RC3 .0046 FAU .00152
FOE .8854 FRA 1.8702 FC3 -.0137 BSP 19067
                                                                                                                                      CRT .8728 CRS -.8502 CST -.9989
                                                                                                                                    LSA 2941.0 MSA 183.1 SSA 9.7
    BDE 4.1407 BRA 7.8417 BC3 .6644 FSP -383
                                                                                                                                    EL1 2844.4 EL2 179.2 ALF
                                                                                                                                                ARRIVAL DATE JUL 10 1966
                                                                                FLIGHT TIME 218.00
LAUNCH DATE DEC 4 1965
                                                                                DISTANCE 616.811
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.046 GAL 19.01 AZL 86.31 HCA 317.44 SMA 118.29 ECC .40049 INC 3.6879 V1 30.219
RP 108.35 LAP -2.49 LOP 29.14 VP 36.438 GAP 23.14 AZP 87.28 TAL 144.58 TAP 102.02 RCA 70.92 APO 165.67 V2 34.974
RC 204.023 GL 8.66 GP .95 ZAL 33.85 ZAP 174.16 ETS 172.70 ZAE 127.36 ETE 179.68 ZAC 116.74 ETC 165.57 CLP 174.24
   PLANETOCENTRIC CONIC
    C3 110.746 VHL 10.524 DLA 22.61 RAL 33.41 RAD 6570.1 VEL 15.234 PTH 2.73 VHP 14.627 DPA
                                                                                                                                             7.43 RAP 22.26 ECC 2.8226
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          72.00 6 19 4
62.98 1 22 24
72.43 7 51 51
62.02 2 23 33
73.35 9 29 5
59.48 2 55 42
                                                                                                                                      2821.7
                                                                                                                                                        -24.49
        90.00 5 22 2 3421.66
90.00 0 7 49 4475.07
100.00 7 0 6 3105.49
100.00 1 12 27 4266.48
                                                                                    293.45
                                                       -22.23
                                                                     125.82
                                                                                                                                         3875.1
                                                                                                                                                            5.10
                                                         8.80
                                                                       187.45
                                                                                       280.71
                                                                                                                                         2505.5
                                                                                                                                                          -26.75
                                                       -24.58
                                                                       103.38
                                                                                       294.27
                                                                                                                                         3666.5
                                                                                                                                                            7.15
                                                        10.98
                                                                       170.97
                                                                                       279.56
       100.00
                                                  -30.29
16.20
                                                                                                                                                        -32.27
12.03
                                                                                                                                                                            72.33
                      8 42 40 2784.60
                                                                                                                                         2184.5
                                                                         80.99
                                                                                       296.25
       110.00
                                                                                                                       2 55 42
                                                                                                                                         3560.1
                       1 46 22 4160.12
                                                                       159.90
                                                                                       276.55
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 5649.8 SGR 367.9 SG3 108.7
RRT .5861 RRF .5760 RTF .9805
SG8 5661.8 R23 -.0004 R13 .9805
SG1 5653.9 SG2 297.9 THA 2.19
                                                                                                                                    ST 2772.6 SR 360.3 SS 759.7
CRT .8720 CRS -.8518 CST -.9991
     TDE 4.2699 TRA 8.5374 TC3 -.5124 BAU .7587
    RCE .6603 RRA .1319 RC3 .0041 FAU-.00024
FDE .9010 FRA 1.9633 FC3 .0019 BSP 19044
BDE 4.3207 BRA 8.5384 BC3 .5124 FSP -371
                                                                                                                                   LSA 2891.7 HSA 178.6 SSA 9.2
                                                                                                                                     EL1 2790.4 EL2 175.2 ALF 6.49
                                                                                                                                                 ARRIVAL DATE JUL 12 1966
                                                                                ELICHT TIME 220.00
LAUNCH DATE DEC 4 1965
                                                                                DISTANCE 619.004
   HELIOCENTRIC CONIC
    RL 147.44 LAL .00 LOL 71.64 VL 26.018 GAL 20.91 A7L 86.28 MCA 320.64 SMA 118.14 ECC .42552 INC 3.7243 V1 30.219
RP 108.31 LAP -2.36 LOP 32.33 VP 36.430 GAP 24.76 A7P 87.12 TAL 143.90 TAP 104.53 RCA 67.87 APO 168.41 V2 34.987
RC 205.757 GL 7.99 GP .94 ZAL 32.89 ZAP 172.93 ETS 174.55 ZAE 126.92 ETE 179.73 ZAC 118.60 ETC 165.34 CLP 172.99
   PLANETOCENTRIC CONIC
                                                                                                                                              8.20 RAP 24.06 ECC 3.1248
    C3 129.106 VHL 11.362 DLA 22.26 RAL 34.49 RAD 6570.4 VEL 15.825 PTH 2.80 VHP 15.609 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       71.64 6 28 25
                                                                                                                                      2835.2
                                                                                                                                                         -24.25
                      5 31 10 3435.21
0 7 23 4522.77
                                                       -21.94
                                                                      126.71
                                                                                      296.6A
         90.00
                                                                                                                                          922.8
                                                                                                                                                             6.62
                                                                                        283.54
                                                                                                           63.46
                                                                                                                        1 22 46
                                                        10.26
                                                                       190.19
                      7 8 35 3121.10 -24.25
1 12 39 4312.11 12.42
8 50 5 2803.56 -29.92
1 47 39 4202.42 17.65
                                                                                                                                          2521.1
                                                                                        297.51
                                                                                                           71.97
                                                                                                                        8 0 36
                                                                                                                                                          -26.49
                                                                       104.43
       100.00
                                                                                                                     2 24 32
9 36 48
                                                                                                           62.59
                                                                                                                                          3712.1
                                                                                                                                                             8.66
                                                                                        282.42
                                                                       173.58
       100.00
                                                                                                                                          2203.6
                                                                                                                                                      -32.00
                                                                                        299.54
                                                                                                           72.63
                                                                        82.34
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                          3602.4
                                                                                                                                                           13.55
                                                                       162.33
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
SGT 5612.0 SGR 361.5 SG3 105.4
RRT .6214 RRF .6119 RTF .9835
SGB 5623.6 R23 -.0010 R13 .9835
SGI 5616.5 SG2 283.0 THA 2.30
EL1 2736.8 EL2 170.2 ALF 6.42
   DIFFERENTIAL CORRECTIONS
    THE 4.4715 TRA 9.3026 TC3 -.3736 BAU .6449
     ROE .6913 RRA .1749 RC3 .0043 FAU-.00223
    FDE .9221 FRA 2.0687 FC3 .0149 BSP 18990 BDE 4.5247 BRA 9.3043 BC3 .3736 FSP -359
```

FLIGHT TIME 214.00

ARRIVAL DATE FEB 13 1966

```
FLIGHT TIME 70.00
LAUNCH DATE DEC 5 1965
                                                                            DISTANCE 184.180
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 26.666 GAL -7.17 AZL 86.64 MCA 81.99 SMA 121.81 ECC .24302 INC 3.3561 V1 30.223 RP 107.54 LAP 3.32 LOP 154.63 VP 37.132 GAP -12.38 AZP 89.53 TAL 203.73 TAP 285.72 RCA 92.21 APO 151.41 V2 35.239
    RC 47.202 GL 17.54 GP -1.00 ZAL 126.84 ZAP 7.35 ETS 6.64 ZAE 148.83 ETE 337.83 ZAC 63.18 ETC 162.38 CLP -7.28
   PLANETOCENTRIC CONIC
    C3 26.410 VHL 5.139 DLA -2.24 RAL 301.96 RAD 6568.1 VEL 12.157 PTH 2.18 VHP 8.122 DPA -16.35 RAP 331.02 ECC 1.4346
   C3 26.410 VHL 5.139 DLA -2.24 RAL 301.96 RAD 6568.1 VEL 12.157 PTH 2.18 VMP 8.122 DPA -16.35 RAP 331.02 ECC 1.4346 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 51 51 2212.54 -19.52 41.35 167.27 110.93 3 28 44 1612.5 -16.50 33.98 90.00 14 16 38 4995.57 22.64 219.30 168.51 72.52 15 39 54 4395.6 20.04 211.60 100.00 4 12 9 1953.51 -20.64 21.83 166.80 112.12 4 44 43 1353.5 -17.46 14.48 100.00 15 39 1 4729.83 23.78 199.35 168.10 71.34 16 57 51 4129.8 21.01 191.65 110.00 5 18 0 1747.38 -23.63 4.76 165.37 115.45 5 47 7 1147.4 -20.01 357.50 110.00 16 49 40 4508.72 26.85 181.31 166.85 68.00 18 4 49 3908.7 23.63 173.63
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 696.3 SGR 403.2 SG3 113.7
RRT -.0488 RRF .0487 RTF -.6745
                                                                                                                              ST 292.8 SR 363.1 SS 312.6
CRT .8569 CRS .9944 CST .8354
    TOF -. 2330 TRA -. 4011 TC3 .. 4532 BAU .. 1692
    ROE -.3251 RRA .0664 RC3 -.1561 FAU .03652
                                                                        SGB 804.6 R23 .0007 R13 .6747
                                                                                                                              LSA 544.2 MSA 136.4 SSA
                                                                                                                                                                      23.2
    FDE .3960 FRA -.1393 FC3-1.1971 BSP 1932
BDE .4000 BRA .4066 BC3 .4793 FSP -286
                                                                        SG1 696.7 SG2 402.5 THA 177.57
                                                                                                                              ELI 450.3 ELZ 121.7 ALF 52.11
                                                                                                                                          ARRIVAL DATE FER 15 1966
LAUNCH DATE DEC 5 1965
                                                                            FLIGHT TIME 72.00
                                                                           DISTANCE 190.995
  HELIOCENTRIC CONIC
   RL 147.41 LAL .00 LOL 72.65 VL 26.860 GAL -7.16 A7L 86.63 MCA 85.23 SMA 122.98 ECC .23323 INC 3.3687 VI 30.223 RP 107.55 LAP 3.36 LOP 157.88 VP 37.266 GAP -11.43 A7P 89.72 TAL 205.15 TAP 290.39 RCA 94.30 APO 151.66 VZ 35.234 RC 48.656 GL 18.19 GP -1.06 7AL 128.20 ZAP 9.85 ETS 5.08 ZAE 148.04 ETE 338.57 ZAC 63.90 ETC 162.51 CLP -9.79
   PLANETOCENTRIC CONIC
   C3 25.167 VHL 5.017 DLA -1.95 RAL 300.29 RAD 6568.0 VEL 12.106 PTH 2.17 VHP 7.605 DPA -16.17 RAP 331.76 ECC 1.4142
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 43 0 2209.76 -19.45 41.18 164.86 130.99 3 19 50 1609.8 -16.42 33.81
90.00 14 12 10 4974.50 22.20 217.91 165.91 71.96 15 35 4 4374.5 19.53 210.26
                   4 3 26 1950.29
15 34 24 4709.20
5 9 36 1743.17
16 44 44 4489.08
                                                                                                                  4 35 56
                                                                                                                                   1350.3
                                                                                                                                                   -17.36
       100.00
                                                     -20.55
                                                                     21.63
                                                                                   164.39
                                                                                                    112.19
                                                                                                    70.76 16 52 54
115.56 5 38 39
67.38 17 59 33
                                                    23.33
                                                                                                                                   4109.2
                                                                                                                                                   20.49
                                                                    197.99
                                                                                   165.50
       100.00
                                                                                                                                   1143.2
                                                                                                                                                  -19.87
                                                     -23.51
                                                                      4.50
                                                                                  162.98
       110.00
                                                                    180.01
                                                                                                                                   3889.1
                                                                                                                                                    23.05
                                                                                   164.23
       110.00
                                                    26.34
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                               ST 300.2 SR 361.3 SS 337.7
CRT .8732 CRS .9928 CST .8376
                                                                        SGT 714.3 SGR 403.0 SG3 129.0
RRT -.0525 RRF .0533 RTF -.6882
    TOE -.2365 TRA -.3792 TC3 .4978 BAU .1765
    ROE -.3158 RRA .0597 RC3 -.1656 FAU .04017
    FDE .4448 FRA -.1935 FC3-1.3818 BSP 2009
                                                                        SGB 820.1 R23 -. 0004 R13 .6884
                                                                                                                               LSA 561.7 MSA 136.5 SSA 24.0
    BOE .3946 BRA .3839 BC3 .5247 FSP
                                                         -330
                                                                        SG1 714.8 SG2 402.2 THA 177.52
                                                                                                                              EL1 455.2 EL2 116.1 ALF 51.03
                                                                            FLIGHT TIME 74.00
                                                                                                                                         ARRIVAL DATE FEB 17 1966
LAUNCH DATE DEC 5 1965
                                                                            DISTANCE 197.799
   HELIOCENTRIC CONIC
   RL 147.41 LAL .00 LOL 72.65 VL 27.033 GAL -7.16 A7L 86.62 MCA 88.47 SMA 124.06 ECC .22459 INC 3.3812 VI 30.223
RP 107.57 LAP 3.38 LOP 161.12 VP 37.385 GAP -10.53 A7P 89.91 TAL 206.56 TAP 295.04 RCA 96.20 APO 151.92 VZ 35.227
RC 50.208 GL 18.78 GP -1.14 ZAL 129.48 ZAP 12.46 ETS 4.14 ZAE 147.50 ETE 339.15 ZAC 64.53 ETC 162.60 CLP -12.40
   PLANETOCENTRIC CONIC
    C3 24.144 VHL 4.914 DLA -1.68 RAL 298.69 RAD 6568.0 VEL 12.063 PTH 2.16 VHP 7.117 CPA -16.03 RAP 332.41 ECC 1.3974
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                162.64
                    2 34 39 2207.89
14 7 48 4955.98
3 55 13 1948.02
15 29 55 4691.08
                                                                                                 111.04
        90.00
                                                                                                                 3 11 27
                                                                                                                                  1607.9
                                                     -19.41
                                                                     41.06
                                                                                                    71.47
                                                                                                                15 30 24
                                                                                                                                   4356.0
                                                                                                                                                  19.07
                                                                    216.70
                                                                                   163.52
        90.00
                                                     21.81
                                                                                                                 4 27 41
                                                                                                                                  1348.0
                                                                                                                                                  -17.30
                                                                                                    112.25
       100.00
                                                    -20.50
                                                                     21.49
                                                                                   162.18
                                                                                                   70.26 16 48 6
115.65 5 30 40
66.85 17 54 29
                                                                                                                                   4091.1
       100.00
                                                     22.91
                                                                    196.80
                                                                                   163.11
                                                                                                                                  1140.0
                                                                                                                                                  -19.77
                                                                                                                                                                  357.06
                                                                      4.30
                                                                                   160.78
       110.00
                     5 1 40 1740.00
                                                    -23.41
                                                                    178.88
                                                                                   161.83
                                                                                                                                  3871.9
       110 00
                    16 30 58
                                   4471.86
                                                     25.89
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 306.7 SR 358.5 SS 364.6
CRT .8879 CRS .9906 CST .8402
                                                                        SGT 730.D SGR 401.8 SG3 146.4
RRT -.0569 RRF .0589 RTF -.6997
    TOE - .2397 TRA - .3581 TC3 .5387 BAU .1828
    RDE -.3070 RRA .0533 RC3 -.1745 FAU .04434
                                                                        SGB 833.3 R23 -.0019 R13 .6999
                                                                                                                              LSA 579.8 MSA 137.4 SSA 24.6
    FOE .5011 FRA -.2563 FC3-1.5900 BSP 2071
                                                                        SG1 730.5 SG2 400.9 THA 177.43
                                                                                                                              EL1 458.8 EL2 110.3 ALF 50.01
    BCE .3895 BRA .3621 BC3 .5662 FSP
                                                         - 382
                                                                            FLIGHT TIME 76.00
                                                                                                                                          ARRIVAL DATE FEB 19 1966
LAUNCH DATE DEC 5 1965
                                                                           DISTANCE 204,590
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.188 GAL -7.17 A7L 86.61 HCA 91.72 SMA 125.04 ECC .21702 INC 3.3937 VI 30.223
RP 107.60 LAP 3.39 LOP 164.37 VP 37.491 GAP -9.66 AZP 90.10 TAL 207.94 TAP 299.66 RCA 97.90 APO 152.18 V2 35.220
RC 51.850 GL 19.32 GP -1.23 ZAL 130.69 ZAP 15.19 ETS 3.52 ZAE 147.23 ETE 339.58 ZAC 65.04 ETC 162.67 CLP -15.14
    RL 147.41 LAL
    RC 51.850 GL
   PLANETOCENTRIC CONIC
    C3 23.305 VHL 4.828 DLA -1.43 RAL 297.20 RAD 6567.9 VEL 12.028 PTH 2.15 VHP 6.657 DPA -15.94 RAP 332.93 ECC 1.3835
    LNCH AZMTH LNCH TIME L-I TIME
90.00 2 26 51 2206.83
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                -16.35
                                                                                                                 3 3 38
                                                                                                                                   1606.8
                                                                                                                                                                   33.63
                                                     -19.38
                                                                     40.99
                                                                                  160.61
                                                                                                   111.06
                    14 3 38 4939.72
3 47 32 1946.59
15 25 39 4675.20
4 54 15 1737.75
                                                                                                                                                                  208.07
                                                                                                                15 25 58
                                                                                                                                   4339.7
                                                                                                                                                   18.67
                                                      21.45
                                                                    215.64
                                                                                   161.35
                                                                                                     71.06
        90.00
                                                                                                                                                  -17.26
                                                                                                                4 19 59
                                                                                                                                   1346.6
                                                                                                                                                                  14.07
       100.00
                                                     -20.46
                                                                     21.40
                                                                                   160.16
                                                                                                    112.28
                                                                                                                16 43 34
                                                                                                                                   4075.2
                                                                                                                                                   19.60
                                                                                                                                                                  188.21
       100.00
                                                     22.55
                                                                    195.77
                                                                                  160.93
                                                                                                      69.83
       110.00
                                                     -23.35
                                                                       4.16
                                                                                  158.77
                                                                                                    115.71
                                                                                                                 5 23 13
                                                                                                                                   1137.8
                                                                                                                                                  -19.70
                                                                                                                                                                  356.92
                                                                                                     115.71 5 23 13
66.40 17 49 42
       110.00
                    16 35 25
                                    4456.80
                                                      25.48
                                                                    177.90
                                                                                    159.64
                                                                                                                                   3856.8
                                                                                                                                                  22.07
                                                                                                                                                                  170.41
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 743.D SGR 399.8 SG3 166.5
RRT -. D657 RRF . D667 RTF -. 7110
                                                                                                                              ST 310.3 SR 354.8 SS 392.7
CRT .9004 CRS .9878 CST .8418
LSA 597.1 MSA 138.6 SSA 25.1
    TOE -. 2407 TRA -. 3366 TC3 .5773 BAU .1886
    ROE -. 2986 RRA . . 0474 RC3 -. 1826 FAU . 04918
    FDE .5649 FRA -.3301 FC3-1.8270 BSP
                                                        2161
-445
                                                                        SGB 843.7 R23 -. 0012 R13 .7113
                                                                        SG1 743.6 SG2 398.5 THA 177.16
                                                                                                                            EL1 459.7 EL2 104.2 ALF 49.24
    BDE .3835 BRA .3399 BC3 .6055 FSP
```

ARRIVAL DATE FEB 21 1966

```
FLIGHT TIME 78.00
LAUNCH DATE DEC 5 1965
                                                                               DISTANCE 211.364
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.326 GAL -7.18 AZL 86.59 HCA 94.96 SMA 125.93 ECC .21041 INC 3.4062 V1 30.223 RP 107.62 LAP 3.39 LOP 167.62 VP 37.583 GAP -8.84 AZP 90.29 TAL 209.27 TAP 304.23 RCA 99.43 APO 152.43 VZ 35.212 RC 53.572 GL 19.80 GP -1.32 TAL 131.79 ZAP 18.06 ETS 3.08 ZAE 147.23 ETE 339.84 ZAC 65.42 ETC 162.71 CLP -18.01
   PLANETOCENTRIC CONIC
    C3 22.615 VHL 4.756 DLA -1.21 RAL 295.81 RAC 6567.9 VEL 12.000 PTH 2.14 VMP 6.225 DPA -15.91 RAP 333.33 ECC 1.3722
   C3 22.615 VHL 4.756 DLA -1.21 RAL 295.81 RAD 6567.9 VEL 12.000 PTH 2.14 VHP 6.225 DPA -15.91 RAP 333.33 ECC 1.3722 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 19 39 2206.49 -19.37 40.97 158.78 111.07 2 56 25 1606.5 -16.34 33.61 90.00 13 59 46 4925.43 21.13 214.71 159.39 70.70 15 21 51 4325.4 18.31 207.18 100.00 3 40 25 1945.92 -20.44 21.36 158.33 112.30 4 12 51 1345.9 -17.24 14.02 100.00 15 21 40 4661.24 22.22 194.86 158.97 69.47 16 39 21 4061.2 19.22 187.35 110.00 4 47 23 1736.33 -23.31 4.07 156.95 115.74 5 16 19 1136.3 -19.65 356.84 110.00 16 31 12 4443.59 25.12 177.04 157.68 66.01 17 45 16 3843.6 21.66 169.60
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 314.6 SR 349.9 SS 423.9
CRT .9113 CRS .9849 CST .8441
                                                                            SGT 751.6 SGR 396.7 SG3 189.3
RRT -.0716 RRF .0744 RTF -.7170
    TOE -.2425 TRA -.3185 TC3 .6060 BAU .1920
    ROE -.2901 RRA .0418 RC3 -.1900 FAU .05463
                                                                            SGB 849.9 R23 -.0035 R13 .7173
SG1 752.4 SG2 395.3 THA 177.01
                                                                                                                                     LSA 616.9 MSA 141.0 SSA 25.3
    FOE .6403 FRA -.4134 FC3-2.0912 BSP 2193
BDE .3781 BRA .3213 BC3 .6351 FSP -514
                                                                                                                                     ELI 460.1 EL2 98.5 ALF 48.34
                                                                                                                                                  ARRIVAL CATE FEB 23 1966
                                                                                FLIGHT TIME 80.00
LAUNCH DATE DEC 5 1965
                                                                               DISTANCE 218.118
  HELIOCENTRIC CONIC
   RL 147.41 LAL .00 LOL 72.65 VL 27.448 GAL -7.19 A7L 86.58 HCA 98.20 SHA 126.73 ECC .20466 INC 3.4188 V1 30.223 RP 107.64 LAP 3.38 LOP 170.86 VP 37.664 GAP -8.06 A7P 90.49 TAL 210.53 TAP 308.72 RCA 100.80 APO 152.67 V2 35.204 RC 55.368 GL 20.23 GP -1.43 7AL 132.79 7AP 21.08 ETS 2.74 7AE 147.51 ETE 339.94 7AC 65.65 ETC 162.70 CLP -21.04
   PLANETOCENTRIC CONIC
    C3 22.047 VHL 4.695 DLA -1.00 RAL 294.53 RAD 6567.9 VEL 11.976 PTH 2.13 VHP 5.820 DPA -15.94 RAP 333.57 ECC 1.3628 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 13 1 2206.80
13 56 14 4912.79
3 33 54 1945.91
15 18 2 4648.91
4 41 4 1735.63
16 27 21 4431.96
                                                                                                                                                        -16.34
                                                                                      157.14
                                                                                                                        2 49 48
                                                                                                                                         1606.8
                                                       -19.38
                                                                        40.99
                                                                                                        111.06
        90.00
                                                                                                                     15 18 7
                                                                                                                                          4312.8
                                                                                                                                                           17.98
                                                                                                                                                                           206.39
                                                                        213.90
                                                                                        157.64
                                                                                                           70.39
                                                        20.85
        90.00
                                                                                        156.69
                                                                                                         112.30
                                                                                                                       4 6 19
                                                                                                                                          1345.9
                                                                                                                                                           -17.24
                                                                                                                                                                            14.02
                                                                         21.36
       100.00
                                                       -20.44
                                                                                                         69.15 16 35 31
115.76 5 10 0
65.68 17 41 13
                                                                        194.07
                                                                                       157.22
                                                                                                                                          4048.9
                                                                                                                                                           18.89
                                                                                                                                                                           186.58
                                                       21.92
       100.00
                                                                                                                                          1135.6
                                                                                                                                                           -19.63
                                                                                                                                                                           356.80
                                                                          4.03
                                                                                       155.33
                                                       -23.29
       110.00
                                                                                                                                          3632.0
                                                                                                                                                          21.30
                                                                                                                                                                           168.89
                                                                        176.29
                                                                                        155.91
                                                       24.79
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 755.5 SGR 392.7 SG3 215.3
RRT -.0790 RRF .0842 RTF -.7197
SGB 851.5 R23 -.0066 R13 .7202
                                                                                                                                     ST 316.9 SR 343.9 55 457.1
CRT .9200 CRS .9819 CST .8453
    TOE -.2429 TRA -.3025 TC3 .6270 BAU .1937
    ROE -.2816 RRA .0365 RC3 -.1969 FAU .06086
FDE .7270 FRA -.5089 FC3-2.3897 BSP 2208
                                                                                                                                     LSA 637.4 MSA 144.1 SSA 25.2
EL1 458.3 EL2 93.2 ALF 47.54
                                                                            SG1 756.4 SG2 391.1 THA 176.79
    BOE .3719 BRA .3047 BC3 .6572 FSP
                                                            -594
                                                                                                                                                 ARRIVAL DATE FEB 25 1966
                                                                                FLIGHT TIME 82.00
LAUNCH DATE DEC 5 1965
                                                                               DISTANCE 224.849
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                              -.80 RAL 293.38 RAD 6567.9 VEL 11.957 PTH 2.13 VHP 5.442 OPA -16.03 RAP 333.66 ECC 1.3551
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                        -16.37
                    2 6 39 2207.70
13 53 6 4901.51
3 27 56 1946.52
15 14 49 4637.93
                                                                                                      111.04
                                                                                    155.69
                                                                                                                                        1607.7
                                                                                                                       2 43 46
                                                        -19.40
                                                                         41.05
        90.00
                                                                                                                                                                           205.69
                                                                                                                                          4301.5
                                                                                                                                                           17.69
                                                        20.59
                                                                        213.17
                                                                                       156.08
                                                                                                          70.12
                                                                                                                      15 14 47
         90.00
                                                                                                                                          1346.5
                                                                                                                                                           -17.26
                                                                                       155.24
                                                                                                         112.28
                                                                                                                       4 0 23
                                                       -20.46
                                                                         21.39
       100.00
                                                                                                         68.87 16 32 7
115.76 5 4 15
                                                                                                                                                                           185.91
                                                                                      155.66
                                                                                                                                          4037.9
                                                                                                                                                          18.59
                                                       21.65
                                                                        193.36
       100.00
                                                                                                                                                                           356.79
                                                                                                                                          1135.6
                                                                                                                                                          -19.63
                                                      -23.28
                                                                                       153.88
                      4 35 20 1735.57
16 23 55 4421.63
                                                                          4.02
       110.00
                                                                                                          65.38 17 37 37
                                                                                                                                                           20.97
                                                                                      154.35
                                                                                                                                          3821.6
                                                       24.50
                                                                        175.63
       110.00
                     16 23 55
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 317.0 SR 336.8 SS 492.6
CRT .9263 CRS .9788 CST .8448
                                                                            SGT 753.6 SGR 387.9 SG3 244.9
RRT -.0878 RRF .0961 RTF -.7182
SGB 847.5 R23 -.0106 R13 .7189
     TDE -.2414 TRA -.2892 TC3 .6385 BAU .1933
    RDE -.2728 RRA .0315 RC3 -.2033 FAU .06794
FDE .8266 FRA -.6178 FC3-2.7257 BSP 2201
                                                                                                                                     LSA 658.9 MSA 147.7 SSA 24.9
EL1 453.9 EL2 88.6 ALF 46.87
                                                                            561 754.6 562 385.8 THA 176.49
     BDE .3643 BRA .2909 BC3 .6701 FSP
                                                              -686
                                                                                                                                                  ARRIVAL DATE FEB 27 1966
                                                                                 FLIGHT TIME 84.00
LAUNCH DATE DEC 5 1965
                                                                                 DISTANCE 231:556
   HELTOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.649 GAL -7.21 AZL 86.56 MCA 104.67 SMA 128.09 ECC .19536 INC 3.4448 VI 30.223 RP 107.70 LAP 3.33 LOP 177.34 VP 37.794 GAP -6.59 AZP 90.87 TAL 212.78 TAP 317.45 RCA 103.07 APO 153.11 V2 35.186 RC 59.152 GL 20.98 GP -1.68 ZAL 134.47 ZAP 27.67 ETS 2.24 ZAE 148.96 ETE 339.55 ZAC 65.62 ETC 162.57 CLP -27.62
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 1 29 2209.13 -19.44 41.14 154.41 111.01 2 38 19 1609.1 -16.41 33.77
                                                                                                                     15 11 55
                     13 50 24 4891.31
3 22 33 1947.66
15 12 2 4628.01
4 30 8 1736.10
16 20 56 4412.34
                                                         20.35
                                                                        212.52
         90.00
                                                                                                          112.26 3 55 0
68.62 16 29 10
                                                                                                                                                          -17.29
                                                                                                                                           1347.7
                                                                                        153.97
                                                         -20.49
                                                                          21.47
        100.00
                                                                                                                                           4028.0
                                                                        192.73
                                                                                        154.28
                                                                                                                                                           18.31
                                                        21.41
                                                                         115.75 4 59 4

152.97 65.12 17 34 28

MID-COURSE EXECUTION ACCURACY

SGT 745.2 SGR 382.2 SGT

RRT - 1017
        100.00
                                                                                                                                                           -19.64
                                                                                                                                                                           356.83
                                                                                                                                          1136.1
                                                        -23.30
        110.00
                                                                                                                                                            20.68
                                                       24.24
                                                                        175.04
                                                                                                                                          3812.3
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 312.3 SR 328.5 S5 529.6

CRT .9298 CRS .9757 CST .8413

LSA 680.0 MSA 151.3 SSA 24.6
                                                                           SGT 745.2 SGR 382.2 SG3 278.6

RRT -.1017 RRF .1115 RTF -.7133

SGB 837.5 R23 -.0136 R13 .7143
     TOE -.2362 TRA -.2779 TC3 .6419 BAU .1913
     ROE -. 2637 RRA . 0266 RC3 -. 2096 FAU . 07602
     FOE .9390 FRA -.7422 FC3-3.1062 BSP 2201
BDF .3540 BRA .2791 BC3 .6752 FSP -795
                                                                          5G1 746.5 SG2 379.5 THA 175.97
                                                                                                                                     EL1 445.2 EL2 84.8 ALF 46.56
     BDE .3540 BRA .2791 BC3 .6752 FSP
```

```
ARRIVAL DATE MAR 1 1966
LAUNCH DATE DEC 5 1965
                                                                                 FLIGHT TIME 86.00
                                                                                 DISTANCE 238.237
   HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 27.730 GAL -7.22 AZL 86.54 MCA 107.90 SMA 128.65 ECC .19164 INC 3.4583 VI 30.223
RP 107.73 LAP 3.29 LOP 180.58 VP 37.844 GAP -5.90 AZP 91.06 TAL 213.75 TAP 321.65 RCA 103.99 APO 153.30 V2 35.176
RC 61.127 GL 21.30 GP -1.83 ZAL 135.14 ZAP 31.27 ETS 2.02 ZAE 150.13 ETE 338.98 ZAC 65.31 ETC 162.42 CLP -31.22
    PLANETOCENTRIC CONIC
     C3 20.862 VML 4.567 OLA -.43 RAL 291.46 RAO 6567.8 VEL 11.927 PTH 2.12 VMP 4.764 DPA -16.48 RAP 333.25 ECC 1.3433 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 56 33 2211.06
13 48 10 4881.90
3 17 42 1949.32
15 9 43 4618.87
4 25 28 1737.15
16 18 25 4403.81
                                                                                                                                                         -16.46
         90.00
                                                                                      153.30
                                                                                                        110.96 2 33 24
69.65 15 9 32
                                                                                                                                         1611.1
                                                         -19.48
                                                                         41.26
                                                                                                                                                                              33.89
         90.00
                                                          20.13
                                                                         211.92
                                                                                         153.51
                                                                                                                                            4281.9
                                                                                                                                                             17.18
                                                                                                                                                                             204.48
                                                                                                          112.22 3 50 11
68.40 16 26 42
115.72 4 54 26
64.89 17 31 49
                                                                                     152.86
        100.00
                                                         -20.53
                                                                         21.57
                                                                                                                                           1349.3
                                                                                                                                                            -17.34
                                                                                                                                                                            14.23
        100.00
                                                         21.18
                                                                         192.14
                                                                                        153.08
                                                                                                                                           4018.9
                                                                                                                                                            18.06
                                                                                                                                                                            184.74
                                                                                      153.08
        110.00
                                                         -23.33
                                                                           4.12
                                                                                                                                           1137.1
                                                                                                                                                         -19.68
                                                                                                                                                                           356.89
                                                                                                                                                                             167.19
       110.00
                                                        23.99
                                                                         174.50
                                                                                         151.76
                                                                                                                                           3803.8
                                                                                                                                                            20.41
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 306.2 SR 318.8 SS 569.9
CRT .9305 CRS .9729 CST .8351
                                                                            SGT 728.6 SGR 375.7 SG3 316.3
RRT -.1135 RRF .1288 RTF -.6991
SGB 819.7 R23 -.0215 R13 .7006
     TOE -.2296 TRA -.2722 TC3 .6301 BAU .1857
     ROE -.2540 RRA .0221 RC3 -.2157 FAU .08502
     FDE 1.0690 FRA -.8792 FC3-3.5283 BSF 2129
BDE .3424 BRA .2731 BC3 .6660 FSP -914
                                                                                                                                       LSA 703.9 MSA 155.3 SSA 24.1
                                                                            SG1 730.3 SG2 372.4 THA 175.47
                                                                                                                                       EL1 434.3 EL2 82.4 ALF 46.24
LAUNCH DATE DEC 5 1965
                                                                                  FLIGHT TIME 88.00
                                                                                                                                                    ARRIVAL DATE MAR 3 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 244.890
    RL 147.41 LAL .00 LOL 72.65 VL 27.800 GAL -7.22 ATL 86.53 HCA 111.13 SMA 129.13 ECC .18845 INC 3.4723 V1 30.223
RP 107.76 LAP 3.24 LOP 183.82 VP 37.886 GAP -5.25 AZP 91.25 TAL 214.60 TAP 325.74 RCA 104.80 APO 153.47 V2 35.166
RC 63.151 GL 21.60 GP -2.00 TAL 135.69 ZAP 35.10 ETS 1.82 TAE 151.62 ETE 338.08 TAC 64.79 ETC 162.22 CLP -35.05
   PLANFTOCENTRIC CONIC
    C3 20.583 VHL 4.537 DLA -.25 RAL 290.69 RAD 6567.8 VEL 11.915 PTH 2.12 VHP 4.464 DPA -16.84 RAP 332.73 ECC 1.3387 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 52 7 2213.48
13 46 26 4873.04
3 13 21 1991.47
15 7 54 4610.28
4 21 19 1738.69
16 16 24 4395.83
                                                                                      152.35
                                                                                                                                                         -16.52
                                                                                                        110.91
         90.00
                                                        -19.54
                                                                         41.41
                                                                                                                         2 29 1
                                                                                                                                           1613.5
                                                                                                                                                                              34.04
                                                                                                            69.45 15 7 39
         90.00
                                                         19.92
                                                                         211.35
                                                                                         152.47
                                                                                                                                            4273.0
                                                                                                                                                             16.94
                                                                                                                                                                             203.94
       100.00
                                                         -20.58
                                                                         21.71
                                                                                        151.92
                                                                                                           112.17
                                                                                                                        3 45 52
                                                                                                                                            1351.5
                                                                                                                                                            -17.40
                                                                                                                                                                              14.36
                                                                                                            68.19 16 24 44
115.68 4 50 18
64.67 17 29 40
       100.00
                                                                                      152.04
                                                        20.96
                                                                         191.60
                                                                                                                                            4010.3
                                                                                                                                                            17.82
                                                                                                                                                                            184.21
                                                                                     150.58
       110.00
                                                         -23.38
                                                                           4.22
                                                                                                          115.68
                                                                                                                                           1138.7
                                                                                                                                                            -19.73
                                                                                                                                                                             356.98
                                                                                                                                                           20.15
       110.00
                                                       23.76
                                                                         174.00
                                                                                        150.72
                                                                                                                                           3795.8
                                                                                                                                                                            166.71
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
     TOE -.2196 TRA -.2713 TC3 .6040 BAU .1771
                                                                            SGT 703.3 SGR 368.4 SG3 358.4
RRT -.1260 RRF .1496 RTF -.6744
                                                                                                                                      ST 296.2 SR 307.8 $5 612.5
CRT .9272 CRS .9705 CST .8237
     ROE - .2437 RRA .0177 RC3 - .2219 FAU .09502
    FOE 1.2158 FRA-1.0308 FC3-3.9967 BSP 2016
BOE .3280 BRA .2718 BC3 .6435 FSP -1049
                                                                            SGB 794.0 R23 -.0337 R13 .6767
SG1 705.4 SG2 364.4 THA 174.85
                                                                                                                                      LSA 729.2 MSA 159.4 SSA 23.4
                                                                                                                                       EL1 419.4 EL2 81.4 ALF 46.19
LAUNCH DATE DEC 5 1964
                                                                                FLIGHT TIME 90.00
                                                                                                                                                   ARRIVAL DATE MAR 5 1966
                                                                                DISTANCE 251.515
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.859 GAL -7.21 AZL 86.51 HCA 114.36 SMA 129.55 ECC .18571 INC 3.4869 V1 30.223 RP 107.80 LAP 3.18 LOP 187.05 VP 37.919 GAP -4.62 AZP 91.44 TAL 215.34 TAP 329.70 RCA 105.49 APO 153.61 V2 35.155 RC 65.219 GL 21.88 GP -2.19 ZAL 136.14 ZAP 39.17 ETS 1.61 ZAE 153.41 ETE 336.76 ZAC 64.04 ETC 161.94 CLP -39.12
   PLANETOCENTRIC CONIC
                                             -.D7 RAL 290.03 RAD 6567.8 VEL 11.905 PTH 2.12 VHP 4.190 DPA -17.29 RAP 331.96 ECC 1.3348
    C3 20.342 VHL 4.510 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 48 9 2216.37
13 45 12 4864.51
3 9 28 1954.09
15 6 35 4602.03
4 17 38 1740.69
16 14 54 4388.19
                                                                                      151.56
                                                                                                       110.84 2 25 6
                                                                                                                                                         -16.60
                                                                                                                                       1616.4
         90.00
                                                        -19.61
                                                                        41.59
                                                                                                                                                                        34.21
                                                                                                         69.25 15 6 17
112.10 3 42 2
         90.00
                                                                        210.81
                                                                                                                                           4264.5
                                                                                                                                                                            203.42
                                                         19.71
                                                                                        151.59
                                                                                                                                                            16.71
       100.00
                                                        -20.65
                                                                         21.87
                                                                                      151.12
                                                                                                                                          1354.1
                                                                                                                                                            -17.47
                                                                                                                                                                             14.52
                                                                                                         67.99 16 23 17 4002.0
115.63 4 46 39 1140.7
64.46 17 28 2 3788.2
                                                                                     151.15
149.79
       100.00
                                                       20.75
                                                                        191.07
                                                                                                                                                           17.58
                                                                                                                                                                            183.71
                                                                                                                                                        17.58
       110.00
                                                       -23.43
                                                                          4.34
                                                                                                                                                                            357.10
       110.00
                                                     23.54
                                                                        173.52
                                                                                        149.83
                                                                                                                                                             19.90
                                                                                                                                                                            166.26
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 669.9 SGR 360.6 SG3 4D5.2
RRT -.1423 RRF .1758 RTF -.6365
SGB 760.8 R23 -.0501 R13 .6404
                                                                                                                                      ST 279.8 SR 295.6 SS 655.7
CRT .9179 CRS .9679 CST .8030
    TOE -.2039 TRA -.2747 TC3 .5652 BAU .1658
    ROE -.2326 RRA .0133 RC3 -.2284 FAU .10618
FOE 1.3763 FRA-1.1985 FC3-4.5188 BSP 1890
BOE .3093 BRA .2750 BC3 .6096 FSP -1205
                                                                                                                                      LSA 754.1 MSA 163.0 SSA
                                                                                                                                                                               22.8
                                                                             SG1 672.7 SG2 355.5 THA 173.91
                                                                                                                                      EL1 398.6 EL2 82.4 ALF 46.71
LAUNCH DATE DEC 5 1965
                                                                                FLIGHT TIME 92.00
                                                                                                                                                   ARRIVAL DATE MAR 7 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 258.110
    RL 147.41 LAL .00 LOL 72.65 VL 27.909 GAL -7.20 AZL 86.50 HCA 117.59 SMA 129.90 ECC .18335 INC 3.5022 V1 30.223
RP 107.83 LAP 3.10 LOP 190.29 VP 37.945 GAP -4.01 AZP 91.62 TAL 215.95 TAP 333.54 RCA 106.08 APO 153.72 V2 35.143
RC 67.327 GL 22.15 GP -2.39 ZAL 136.48 ZAP 43.49 ETS 1.38 ZAE 155.50 ETE 334.86 ZAC 63.05 ETC 161.57 CLP -43.44
   PLANETOCENTRIC CONIC
    C3 20.128 VHL 4.486 DLA
                                               .12 RAL 289.50 RAO 6567.8 VEL 11.896 PTH 2.11 VMP 3.943 DPA -17.85 RAP 330.95 ECC 1.3313
   C3 20.128 VNL 4.486 DLA .12 RAL 289.50 RAD 6567.8 VEL 11.896 PTH 2.11 VMP 3.943 DPA -17.85 RAP 330.95 ECC 1.3313 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 44 37 2219.76 -19.69 41.81 150.90 110.77 2 21 37 1619.8 -16.69 34.42 90.00 13 44 30 4856.07 19.51 210.27 150.84 69.06 15 5 26 4256.1 16.49 202.90 100.00 3 6 1 1957.19 -20.73 22.07 150.47 112.03 3 38 38 1357.2 -17.56 14.71 100.00 15 5 47 4593.87 20.54 190.56 150.40 67.80 16 22 21 3993.9 17.35 183.22 110.00 4 14 24 1743.16 -23.51 4.50 149.14 115.56 4 43 27 1143.2 -19.87 357.25 110.00 16 13 54 4380.67 23.32 173.04 149.08 64.26 17 26 54 3780.7 19.66 165.81
                                                                                                                              ORBIT DETERMINATION ACCURACY
ST 260.8 SR 281.9 SS 702.0
CRT .8993 CRS .9659 CST .7700
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
    TDE -.1850 TRA -.2859 TC3 .5063 BAU .1502
                                                                             SGT 628.9 SGR 352.2 SG3 455.5
                                                                                                                               CRT .8993 CRS .9659 CST .7700
LSA 782.3 MSA 166.6 SSA 22.0
EL1 374.3 EL2 85.9 ALF 47.48
    RDE -.2207 RRA .0092 RC3 -.2351 FAU .11809
                                                                             RRT -.1514 RRF .2050 RTF -.5727
    FOE 1.5561 FRA-1.3742 FC3-5.0792 BSP 1677
                                                                             SGB 720.8 R23 -.0812 R13 .5794
    BDE .2879 BRA .2860 BC3 .5582 FSP -1368
                                                                            SG1 632.1 SG2 346.4 THA 173.06
```

ARRIVAL DATE MAR 9 1966

```
LAUNCH DATE DEC 5 1965
    CISTANCE 264.676
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                              .33 RAL 289.09 RAC 6567.8 VEL 11.888 PTH 2.11 VHP 3.723 CPA -18.51 RAP 329.68 ECC 1.3281
   C3 19.935 VHL 4.465 CLA .33 RAL 289.09 RAD 6567.8 VEL 11.888 PTH 2.11 VHP 3.723 CPA -18.51 RAP 329.68 ECC 1.3281
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 41 28 2223.66 -19.79 42.06 150.37 110.68 2 18 32 1623.7 -16.80 34.66
90.00 13 44 19 4847.55 19.30 209.74 150.22 68.87 15 5 7 4247.5 16.26 202.38
100.00 3 2 58 1960.79 -20.82 22.30 149.94 111.94 3 35 39 1360.8 -17.66 14.93
100.00 15 5 31 4585.65 20.33 190.04 149.78 67.60 16 21 56 3985.7 17.12 182.72
110.00 4 11 33 1746.09 -23.59 4.68 148.63 115.48 4 40 40 1146.1 -19.97 357.42
110.00 16 13 25 4373.12 23.09 172.57 148.45 64.07 17 26 18 3773.1 19.41 165.36
                                                                                                                                   ORBIT SETERHINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 237.2 SR 266.9 SS 749.2

CRT .8633 CRS .9641 CST .7134

LSA 812.1 MSA 169.9 SSA 21.2
                                                                           SGT 584.0 SGR 343.5 SG3 509.2
RRT -.1515 RRF .2388 RTF -.4715
    TCE -.1605 TRA -.3040 TC3 .4286 BAU .1312
                                                                          RRT -.1515 RRF .2388 RTF -.4715 CRT .8633 CRS .9641 CST .7134

SCB 677.5 R23 -.1327 R13 .4831 L5A 812.1 MSA 169.9 S5A 21.2

SCI 587.4 SC2 337.5 THA 172.38 ELI 344.8 EL2 92.7 ALF 48.90
    ROE - .2079 RRA .0052 RC3 - .2421 FAU .13071
    FOE 1.7501 FRA-1.5574 FC3-5.6769 BSP 1408
BOE .2626 BRA .3040 BC3 .4922 FSP -1544
                                                                                                                                                ARRIVAL CATE MAR 11 1966
                                                                               FIRST TIME 96.00
LAUNCH DATE DEC 5 1965
                                                                               CISTANCE 271.211
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.982 GAL -7.16 AZL 86.46 HCA 124.04 SMA 130.42 ECC .17961 INC 3.5359 V1 30.223 RP 107.90 LAP 2.93 LOP 196.74 VP 37.977 GAP -2.89 AZP 91.98 TAL 216.80 TAP 340.84 RCA 106.99 APO 153.84 V2 35.120
    RC 71.643 GL 22.66 GP -2.86 ZAL 136.85 ZAP 52.91 ETS .86 ZAE 160.44 ETE 328.21 ZAC 60.37 ETC 160.54 CLP
   PLANETOCENTRIC CONIC
                                              .54 RAL 288.78 RAD 6567.8 VEL 11.880 PTH 2.11 VMP 3.529 CPA -19.26 RAP 328.15 ECC 1.3251
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 19.752 VHL 4.444 DLA
                                                                                                     110.58 2 15 48
68.67 15 5 19
111.85 3 33 0
67.41 16 22 3
115.39 4 38 14
63.87 17 26 12
                                                                                                                                                     -16.92
                                                                                                                                      1628.1
                     1 38 40 2228.10
13 44 40 4838.77
                                                                                    149.97
         90.00
                                                       -19.89
                                                                        42.34
                                                                                                                                         4238.8
                                                                                                                                                          16.02
                                                        19.08
                                                                       209.18
                                                                                       149.72
         90.00
                                                                                     149.54
                                                                                                                                                          -17.78
                    3 0 15 1964.92
15 5 46 4577.19
4 9 5 1749.51
16 13 26 4365.37
                                                                                                                                         1364.9
                                                                         22.56
                                                       -20.93
       100.00
                                                                                    149.28
148.24
147.94
                                                                                                                                         3977.2
                                                                                                                                                          16.87
       100.00
                                                       20.11
                                                                       189.51
                                                                                                                                                          -20.08
                                                                                                                                        1149.5
                                                       -23.69
                                                                         4.90
       110.00
                                                                                                                                                           19.16
                                                                                                                                         3765.4
                                                                       172.09
                                                      22.86
       110.00
                                                                                                                               ORBIT CETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 542.6 SGR 334.7 SG3 565.5
RRT -.1365 RRF .2789 RTF -.3170
SGB 637.5 R23 -.2115 R13 .3351
                                                                                                                                    ST 209.3 5R 250.8 5S 794.6
CRT .7913 CRS .9621 CST .6105
LSA 841.4 MSA 172.3 SSA 20.5
     TOE -.1289 TRA -.3282 TC3 .3333 BAU .1100
     ROE -.1944 RRA .0013 RC3 -.2496 FAU .14397
    FOE 1.9481 FRA-1.7473 FC3-6.3103 BSP 1108
BDE .2333 BRA .3282 BC3 .4164 FSP -1738
                                                                                                                                    EL1 309.8 EL2 103.6 ALF 51.47
                                                                           SG1 545.6 SG2 329.8 THA 172.39
                                                                                                                                                ARRIVAL DATE HAR 13 1966
                                                                               FLIGHT TIME 98.00
LAUNCH DATE DEC 5 1965
    RL 147.41 LAL .0D LOL 72.65 VL 28.007 GAL -7.13 A7L 86.45 HCA 127.26 SMA 130.60 ECC .17813 INC 3.5547 VI 30.223
RP 107.94 LAP 2.83 LOP 199.97 VP 37.984 GAP -2.36 AZP 92.15 TAL 217.05 TAP 344.31 RCA 107.33 APO 153.86 V2 35.108
RC 73.845 GL 22.92 GP -3.13 ZAL 136.88 ZAP 57.98 ETS .55 ZAE 163.14 ETE 322.43 ZAC 58.70 ETC 159.85 CLP -57.93
                                                                               DISTANCE 277.717
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                               .77 RAL 288.58 RAD 6567.8 VEL 11.873 PTH 2.11 VHP 3.362 CPA -20.10 RAP 326.38 ECC 1.3222
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     C3 19.580 VHL 4.425 DLA
                                                                                                      -17.05
                   1 36 9 2233.15 -20.01

13 45 34 4829.55 18.85

2 57 51 1969.62 -21.05

15 6 34 4568.32 19.88

4 6 55 1753.44 -23.81

16 13 59 4357.26 22.62
                                                                                    149.58
                                                                       42.56
         90.00
                                                                                                                                                                         201.29
                                                                                                                                         4229.6
                                                                                                                                                          15.76
                                                                                       149.33
                                                                       208.60
                                                                                                                                         1369.6
                                                                                                                                                        -17.91
                                                                                                                                                                          15.47
                                                                        22.86
                                                                                    149.26
        100.00
                                                                                                                                         3968.3
                                                                                                                                                         16.62
                                                                                                                                                                        181.67
                                                                       188.95
                                                                                       148.89
                                                                                    147.96
                                                                                                        115.29 4 36 8
63.66 17 26 36
                                                                                                                                                     -20.20
18.89
                                                                                                                                                                         357.86
                                                                                                                                        1153.4
                                                                          5.15
        110.00
                                                                                                                                         3757.3
                                                                                                                                                                         164.43
                                                                       171.59
                                                                                       147.54
        110.00
                                                                         MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCUMANTS
SCT 518.9 SGR 325.8 SG3 621.5
RRT -.0829 RRF .3215 RTF -.0890
SGB 612.7 R23 -.3100 R13 .1056
                                                                                                                                   ST 194.3 SR 233.3 SS 840.9
CRT .6487 CRS .9607 CST .4288
LSA 874.4 MSA 174.7 SSA 19.6
EL1 271.9 EL2 120.4 ALF 55.09
    DIFFERENTIAL CORRECTIONS
     TOE -.0921 TRA -.3613 TC3 .2146 BAU .0876
     RDE -.1801 RRA -.0022 RC3 -.2569 FAU .15699
     FDE 2.1549 FRA-1.9264 FC3-6.9416 BSP 733
BDE .2023 BRA .3613 BC3 .3348 FSP -1925
                                                                          561 520.0 SG2 323.9 THA 175.12
                                                                                                                                                 ARRIVAL CATE MAR 15 1966
                                                                                 FLIGHT TIME 100.00
 LAUNCH DATE DEC 5 1965
     RL 147.41 LAL .00 LOL 72.65 VL 28.025 GAL -7.09 A7L 86.42 HCA 130.48 SMA 130.73 ECC .17687 INC 3.5751 V1 30.223 RP 107.98 LAP 2.72 LOP 203.19 VP 37.986 GAP -1.85 A7P 92.32 TAL 217.17 TAP 347.65 RCA 107.61 APO 153.85 V2 35.095 RC 76.070 GL 23.18 GP -3.42 7AL 136.82 ZAP 63.25 ETS .21 ZAE 165.79 ETE 313.72 ZAC 56.86 ETC 159.03 CLP -63.20
                                                                                DISTANCE 284.192
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 19.412 VHL 4.406 DLA 1.02 RAL 288.47 RAD 6567.8 VEL 11.866 PTH 2.10 VHP 3.223 DPA -21.00 RAP 324.39 ECC 1.3195
      1 33 53 2238.87
13 47 1 4819.76
                                                                                     149.50
                                                                         43.03
                                                        -20.15
          90.00
                                                                                                         68.26 15 7 21
111.60 3 28 37
                                                                                                                                                          15.49
                                                                                                                                                                          200.70
                                                                                                                                          4219.8
                                                                         207.99
                                                                                        149.04
                                                         18.61
          90.00
                     2 55 42 1974.97
15 7 53 4558.90
4 5 2 1757.95
16 15 3 4348.67
                                                                                                                                                         -18.06
                                                                                                                                                                           15.79
                                                                                                                                          1375.0
                                                                       23.20 149.08 111.60 3 28 37 1375.0 -18.06 15.79

188.36 148.59 66.99 16 23 52 3958.9 16.34 181.11

5.43 147.79 115.16 4 34 20 1158.0 -20.35 358.13

171.06 147.24 63.44 17 27 31 3748.7 18.61 163.93

MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY

SGT 529.4 SGR 317.1 SG3 676.3 ST 168.4 SR 215.1 SS 883.1

RRT .0080 RRF .3690 RTF .1879 CRT .3789 CRS .9589 CST .1179

SG8 617.1 R23 .3667 R13 .1895 LSA 907.2 M5A 176.1 SSA 18.8

SG1 529.4 SG2 317.1 THA .43 EL1 231.7 EL2 144.6 ALF 61.58
                                                                         23.20
                                                                                       149.08
                                                       -21.18
                                                        19.63
         100.00
                                                       -23.94
                                                      22.36
         110.00
    DIFFERENTIAL CORRECTIONS
      TDE -.0479 TRA -.4008 TC3 .0771 BAU .0715
      RDE -.1653 RRA -.0056 RC3 -.2644 FAU .16970
      FOE 2.3513 FRA-2.0976 FC3-7.5683 BSP 425
      BOE .1721 BRA .4009 BC3 .2754 FSP -2119
```

FLIGHT TIME 94.00

ARRIVAL DATE MAR 17 1966

LAUNCH DATE DEC 5 1965 DISTANCE 290.637 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 28.036 GAL -7.04 AZL 86.40 HCA 133.70 SHA 130.81 ECC .17579 INC 3.5976 V1 30.223 RP 108.02 LAP 2.60 LOP 206.40 VP 37.983 GAP -1.36 AZP 92.49 TAL 217.19 TAP 350.89 RCA 107.82 APO 153.81 V2 35.082 RC 78.316 GL 23.45 GP -3.73 ZAL 136.67 ZAP 68.68 ETS 359.82 ZAE 168.07 ETE 300.52 ZAC 54.89 ETC 158.07 CLP -68.63 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC

C3 19.246 VML 4.387 OLA 1.29 RAL 288.47 RAO 6567.8 VEL 11.859 PTH 2.10 VMP 3.110 OPA -21.94 RAP 322.22 ECC 1.3167

LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 13 15 0 2245.36 -20.30 43.44 149.43 110.17 2 9 15 1645.4 -17.37 35.99

90.00 13 49 2 4809.21 18.34 207.33 148.84 68.04 15 9 11 4209.2 15.20 200.06

100.00 2 53 46 1981.05 -21.33 23.58 149.01 111.45 3 26 47 1381.0 -18.23 16.16

100.00 15 9 46 4548.76 19.36 187.73 148.39 66.77 16 25 35 3948.8 16.05 180.50

110.00 4 3 24 1763.12 -24.09 5.76 147.73 115.02 4 32 47 1165.1 -20.51 358.44

110.00 16 16 38 4339.45 22.07 170.49 147.04 63.21 17 28 58 3739.5 18.30 163.39 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 175.7 SR 196.0 SS 923.8 CRT .0065 CRS .9576 CST -.2660 LSA 943.8 MSA 177.6 SSA 17.8 SCT 590.1 SCR 308.2 SC3 725.8 RRT .1276 RRF .4174 RTF .4509 SCB 665.8 R23 .3413 R13 .4674 SCI 591.9 SC2 304.8 THA 5.19 TDE .0014 TRA -.4483 TC3 -.0825 BAU .0729 RDE -.1499 RRA -.0083 RC3 -.2710 FAU .18096 FDE 2.5402 FRA-2.2378 FC3-8.1398 BSP 559 BDE .1499 BRA .4484 BC3 .2833 FSP -2286 ELI 196.0 ELZ 175.7 ALF 88.29 ARRIVAL DATE HAR 19 1966 FLIGHT TIME 104.00 LAUNCH DATE DEC 5 1965 DISTANCE 297.053 HELIOCENTRIC CONSC RL 147.41 LAL .00 LOL 72.65 VL 28.042 GAL -6.99 AZL 86.38 HCA 136.91 SMA 130.85 ECC .17486 INC 3.6226 V1 30.223
RP 108.06 LAP 2.47 LOP 209.62 VP 37.975 GAP -.89 AZP 92.65 TAL 217.10 TAP 354.01 RCA 107.97 APO 153.73 V2 35.069
RC 80.581 GL 23.74 GP -4.06 ZAL 136.42 ZAP 74.20 ETS 359.39 ZAE 169.50 ETE 281.68 ZAC 52.85 ETC 156.97 CLP -74.16 PLANETOCENTRIC CONIC C3 19.081 VHL 4.368 CLA 1.60 RAL 288.55 RAD 6567.8 VEL 11.852 PTH 2.10 VHP 3.023 DPA -22.91 RAP 319.93 ECC 1.3140 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 55 2252.75 -20.48 43.91 149.45 110.00 2 7 27 1652.7 -17.57 36.45 90.00 13 51 37 4797.75 18.05 206.62 148.73 67.80 15 11 35 4197.8 14.88 199.37 100.00 2 52 0 1987.97 -21.50 24.03 149.04 111.28 3 25 8 1388.0 -18.42 16.59 100.00 15 12 13 4537.76 19.06 187.05 148.28 66.53 16 27 51 3937.8 15.72 179.85 110.00 4 1 57 1769.03 -24.26 6.13 147.76 114.86 4 31 26 1169.0 -20.70 358.79 110.00 16 18 46 4329.47 21.77 169.88 146.91 62.97 17 30 55 3729.5 17.97 162.81 1.60 RAL 288.55 RAD 6567.8 VEL 11.852 PTH 2.10 VHP 3.023 DPA -22.91 RAP 319.93 ECC 1.3140 C3 19.081 VHL 4.368 OLA ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 700.2 SGR 299.5 SG3 768.2 RRT .2432 RRF .4671 RTF .6432 SGB 761.6 R23 .2869 R13 .6587 SG1 704.8 SG2 288.6 THA 7.14 ST 211.1 SR 176.2 SS 960.2 CRT - 3282 CRS .9564 CST - .5770 TOE .0567 TRA -.5016 TC3 -.2600 BAU .0969 ROE -.1342 RRA -.0106 RC3 -.2769 FAU .19041 LSA 982.5 MSA 178.6 55A 16.9 FOE 2.7070 FRA-2.3456 FC3-8.6392 BSP 1084 EL1 227.5 EL2 154.4 ALF 149.49 BDE .1456 BRA .5017 BC3 .3798 FSP -2430 ARRIVAL DATE HAR 21 1966 FLIGHT TIME 106.00 LAUNCH DATE DEC 5 1965 DISTANCE 303.440 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 28.043 GAL -6.92 A7L 86.35 HCA 140.12 SMA 130.86 ECC .17407 INC 3.6508 V1 30.223 RP 108.10 LAP 2.34 LOP 212.83 VP 37.963 GAP -.44 A7P 92.80 TAL 216.90 TAP 357.02 RCA 108.08 APO 153.64 V2 35.056 RC 82.862 GL 24.05 GP -4.41 7AL 136.09 7AP 79.74 ETS 358.92 7AE 169.53 ETE 259.58 7AC 50.81 ETC 155.73 CLP -79.71 PLANFTOCENTRIC CONIC 1.94 RAL 288.72 RAD 6567.8 VEL 11.845 PTH 2.10 VHP 2.962 DPA -23.89 RAP 317.58 ECC 1.3113 C3 18,916 VHL 4.349 OLA LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 28 5 2261.17 13 54 48 4785.24 2 50 19 1995.89 15 15 15 4525.75 4 0 38 1775.82 16 21 25 4318.59 -17.79 109.79 2 5 46 67.55 15 14 33 111.08 3 23 35 1661.2 149.57 148.70 90.00 -20.67 44.45 198.62 4185.2 14.53 205.84 17.72 90.00 24.53 149.16 186.31 148.24 6.57 147.90 169.21 146.87 17.08 1395.9 -18.64 -21.70 100.00 15.37 179.13 3925.7 18.73 100.00 -24.45 21.43 -20.92 359.20 1175.8 110.00 17.60 162.18 3718.6 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS SGT 849.1' SGR 291.1 SG3 802.2 RRT .3410 RRF .5188 RTF .7640 SGB 897.6 R23 .2430 R13 .7747 SG1 855.5 SG2 271.6 THA 7.42 5T 259.9 SR 156.2 SS 988.7 CRT -.5436 CRS .9546 CST -.7591 LSA 1021.1 MSA 178.7 SSA 15.9 TOE .1173 TRA -.5590 TC3 -.4514 BAU .1346 ROE -.1184 RRA -.0124 RG3 -.2820 FAU .19789 FOE 2.8350 FRA-2.4222 FC3-9.0568 BSP 1708 EL1 286.3 EL2 123.6 ALF 158.30 BOE .1666 BRA .5591 BC3 .5323 FSP -2560 ARRIVAL DATE MAR 23 1966 FLIGHT TIME 108.00 LAUNCH DATE DEC 5 1965 **DISTANCE 309.799** HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 28.039 GAL -6.85 A7L 86.32 HCA 143.33 SMA 130.83 ECC .17340 INC 3.6830 VI 30.223 RP 108.14 LAP 2.20 LOP 216.04 VP 37.948 GAP -.01 A7P 92.96 TAL 216.61 TAP 359.94 RCA 108.14 APO 153.51 V2 35.043 RC 85.157 GL 24.39 GP -4.79 ZAL 135.66 ZAP 85.24 ETS 358.41 ZAE 168.10 ETE 240.14 ZAC 48.85 ETC 154.38 CLP -85.22 PLANETOCENTRIC CONIC C3 18.751 VHL 4.330 CLA 2.31 RAL 288.97 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 2.925 DPA -24.85 RAP 315.26 ECC 1.3086 C3 18.751 VHL 4.330 OLA 2.31 RAL 288.97 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 2.925 DPA -24.85 RAP 315.26 ECC 1.3086 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LATTIN 2 LONG 90.00 12617 2270.85 -20.89 45.08 149.78 109.56 2 4 8 1670.9 -18.04 37.57 90.00 13 58 37 4771.45 17.36 204.99 148.74 67.27 15 18 9 4171.4 14.13 197.80 100.00 2 48 42 2005.00 -21.92 25.12 149.38 110.85 3 22 7 1405.0 -18.89 17.64 100.00 15 18 53 4512.53 18.37 185.49 148.29 65.99 16 34 6 3912.5 14.97 178.35 110.00 3 59 25 1783.66 -24.67 7.07 148.13 114.45 4 29 9 1183.7 -21.16 359.68 110.00 16 24 40 4306.63 21.05 168.49 146.91 62.43 17 36 26 3706.6 17.19 16T.49 MID-COURSE EXECUTION ACCURACY

SGT 1026.0 SGR 282.9 SG3 825.3 ST 344.5 SR 135.7 SS 1012.1

RRT .4230 RRF .5703 RTF .8360 CRT -.6650 CRS .9527 CST -.8525

SGB 1064.3 R23 .2134 R13 .8429 LSA 1062.7 MSA 178.4 SSA 14.9

SG1 1033.4 SG2 254.5 THA 7.08 EL1 357.2 EL2 97.8 ALF 164.10 DIFFERENTIAL CORRECTIONS TOE .1817 TRA -.6196 TC3 -.6548 BAU .1791 RDE -.1024 RRA -.0137 RC3 -.2860 FAU .20265 FDE 2.9296 FRA-2.4534 FC3-9.3563 BSP 2389 BOE .2086 BRA .6198 BC3 .7146 FSP -2651

FLIGHT TIME 102.00

ARRIVAL CATE MAR 25 1966

-19.18

14.53

1415.6

3897.9

18.29

177.49

LAUNCH DATE DEC 5 1965

HELIOCENTRIC CONIC

PLANETOCENTRIC CONIC

100.00

100.00

66.98 15 22 23 110.57 3 20 38 65.70 16 38 9 114.18 4 28 6 62.12 17 40 3 2 47 3 2015.57 15 23 11 4497.87 3 58 13 1792.80 16 28 30 4293.41 -21.45 1192.8 -24.93 7.65 148.45 167.69 16.74 110.00 20.63 147.02 3693.4 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 429.1 SR 114.7 SS 1031.0 CRT -.7332 CRS .9504 CST -.9014 LSA 1108.3 MSA 178.0 SSA 13.8 SGT 1221.4 SGR 274.7 SG3 836.4 RRT .4939 RRF .6213 RTF .8791 SGB 1251.9 R23 .1955 R13 .8837 SG1 1229.2 SG2 237.4 THA 6.59 TOE .2490 TRA -.6822 TC3 -.8666 BAU .2270 ROE -.0861 RRA -.0144 RC3 -.2888 FAU .20440 FOE 2.9909 FRA-2.4387 FC3-9.5191 BSP 3106 BOE .2634 BRA .6824 BC3 .9135 FSP -2697 EL1 437.5 EL2 76.5 ALF 168.55 ARRIVAL DATE MAR 27 1966 LAUNCH DATE DEC 5 1965 FLIGHT TIME 112.00 HELIOCENTRIC CONIC DISTANCE 322.432 RL 147.41 LAL .00 LOL 72.65 VL 28.017 GAL -6.68 AZL 86.24 HCA 149.74 SMA 130.67 ECC .17236 INC 3.7648 VI 30.223 RP 108.22 LAP 1.90 LOP 222.45 VP 37.908 GAP .81 AZP 93.25 TAL 215.75 TAP 5.49 RCA 108.15 APO 153.20 V2 35.016 RC 89.783 GL 25.19 GP -5.69 ZAL 134.53 ZAP 95.82 ETS 357.22 ZAE 162.74 ETE 217.23 ZAC 45.42 ETC 151.38 CLP -95.85 PLANETOCENTRIC CONIC C3 18.432 VML 4.293 DLA 3.23 RAL 289.71 RAD 6567.7 VEL 11.824 PTH 2.09 VMP 2.917 DPA -26.73 RAP 310.96 ECC 1.3034.
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 150.49 108.95 2 0 40 1695.2 -18.66 39.09 1 22 25 2295.21 -21.44 46.65 90.00 66.66 15 27 20 4139.0 13.20 195.88 149.06 90.00 14 8 21 4739.04 16.50 203.00 2 45 16 2027.98 15 28 12 4481.50 3 56 58 1803.56 16 32 59 4278.68 3 19 4 1428.0 -19.51 19.06 150.10 110.25 100.00 -22.47 26.61 65.37 16 42 53 113.87 4 27 1 14.03 176.53 148.60 3881.5 100.00 17.50 183.60 1203.6 -21.78 148.87 110.00 -25.23 8.35 61.79 17 44 18 3678.7 16.24 110.00 20.16 166.81 147.20 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1426.1 SGR 267.3 SG3 835.9 RRT 15574 RRF .6728 RTF .9056 SGB 1450.9 R23 .1874 R13 .9088 SG1 1434.0 SG2 220.7 THA 6.11 ST 520.6 SR 92.9 SS 1046.3 CRT -.7723 CRS .9469 CST -.9290 LSA 1158.7 MSA 177.5 SSA 12.6 TOE .3189 TRA -.7445 TC3-1.0815 BAU .2760 ROE -.0693 RRA -.0148 RC3 -.2912 FAU .20330 FOE 3.0222 FRA-2.3784 FC3-9.5488 BSP 3832 BOE 3263 BRA .7447 BC3 1.1200 FSP -2699 EL1 525.5 EL2 58.5 ALF 172.05 ARRIVAL DATE MAR 29 1966 FLIGHT TIME 114.00 - LAUNCH DATE DEC 5 1965 DISTANCE 328.709 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 28.001 GAL -6.58 AZL 86.18 HCA 152.94 SMA 130.56 ECC .17197 INC 3.8185 V1 30.223 RP 108.26 LAP 1.74 LOP 225.65 VP 37.883 GAP 1.19 AZP 93.40 TAL 215.19 TAP 8.14 RCA 108.10 APO 153.01 V2 35.003 RC 92.112 GL 25.67 GP -6.25 ZAL 133.82 ZAP 100.80 ETS 356.52 ZAE 159.62 ETE 211.29 ZAC 44.08 ETC 149.78 CLP-100.86 PLANETOCENTRIC CONIC C3 18.287 VHL 4.276 DLA 3.79 RAL 290.18 RAD 6567.7 VEL 11.818 PTH 2.09 VHP 2.941 CPA -27.67 RAP 309.13 ECC 1.3010 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1710.8 151.00 -19.05 1 20 7 2310.82 14 14 26 4719.71 -21.78 47.67 194.74 4119.7 12.64 201.83 149.33 15.97 19.98 1442.7 -19.90 2 43 14 2042.73 15 34 1 4463.03 150.61 -22.81 27.57 148.86 3863.0 175.45 16.97 182.48 3 55 32 1816.41 -25.58 16 38 11 4262.11 19.63 1216.4 -22.18 9.18 149.40 110.00 15.66 3662.1 147.45 165.82 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1634.9 SGR 262.0 SG3 826.4 RRT .6181 RRF .7270 RTF .9227 SGB 1655.8 R23 .1877 R13 .9251 SGI 1643.1 SG2 205.0 THA 5.75 5T 616.6 SR 70.3 SS 1054.9 CRT -.7885 CRS .9380 CST -.9461 TOE .3905 TRA -.8059 TC3-1.2959 BAU .3249 ROE -.0520 RRA -.0153 RC3 -.2943 FAU .20015 LSA 1211.1 MSA 176.3 SSA 11.4 FDE 3.0150 FRA-2.2943 FC3-9.4753 BSP 4563 BDE .3939 BRA .8060 BC3 1.3289 FSP -2686 EL1 619.1 EL2 43.1 ALF 174.83 ARRIVAL CATE MAR 31 1966 FLIGHT TIME 116.00 LAUNCH DATE DEC 5 1965 DISTANCE 334.961 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 27.982 GAL -6.47 AZL 86.11 HCA 156.14 SMA 130.42 ECC .17166 INC 3.8853 VI 30.223 RP 108.31 LAP 1.57 LOP 228.84 VP 37.857 GAP 1.56 AZP 93.55 TAL 214.56 TAP 10.70 RCA 108.03 APO 152.80 V2 34.990 RC 94.449 GL 26.24 GP -6.93 ZAL 133.00 ZAP 105.49 ETS 355.72 ZAE 156.48 ETE 207.40 ZAC 43.05 ETC 148.13 CLP-105.61 PLANETOCENTRIC CONIC C3 18.161 VHL 4.262 DLA 4.44 RAL 290.72 RAD 6567.7 VEL 11.813 PTH 2.09 VHP 2.983 DPA -28.65 RAP 307.59 ECC 1.2989 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 151.62 1 56 9 108.06 1729.7 48.91 90.00 1 17 20 2329.74 -22.19

FLIGHT TIME 110.00

DISTANCE 316.128

RL 147.41 LAL .00 LOL 72.65 VL 28.030 GAL -6.77 AZL 86.28 HCA 146.54 SMA 130.76 ECC .17283 INC 3.7205 V1 30.223 RP 108.18 LAP 2.05 LOP 219.25 VP 37.929 GAP .41 AZP 93.11 TAL 216.22 TAP 2.76 RCA 108.16 APO 153.37 V2 35.030 RC 87.465 GL 24.77 GP -5.22 7AL 135.15 7AP 90.62 ETS 357.84 7AE 165.67 ETE 226.32 7AC 47.03 ETC 152.92 CLP -90.63

C3 18.589 VML 4.312 OLA 2.74 RAL 289.31 RAD 6567.8 VEL 11.831 PTH 2.10 VMP 2.911 DPA -25.79 RAP 313.03 ECC 1.3059 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 24 25 2282.07 -21.15 45.80 150.09 109.28 2 2 27 1682.1 -18.32 38.27 90.00 14 3 7 4756.15 16.96 204.05 148.87 66.98 15 22 23 4156.1 13.70 196.89

149.69

148.41

25.80

184.60

-22.18

17.96

149.67

151.24 149.20

150.05

200.49

28.74

181.21

164.71

10.20

15.36

-23.22

16.36

-26.00

19.01

14 21 32

DIFFERENTIAL CORRECTIONS

2 40 45 2060.64 15 40 47 4441.88

3 53 47 1832.08 16 44 15 4243.20

TDE .4649 TRA -.8645 TC3-1.5048 BAU .3725 ROE -.0332 RRA -.0158 RC3 -.2988 FAU .19441 FOE 2.9960 FRA-2.1725 FC3-9.2678 BSP 5274 BDE .4661 BRA .8647 BC3 1.5341 FSP -2624

90.00

100.00

100.00

4697.55

65.92

109.37

15 39 49

3 15 6

64.63 16 54 49 3841.9 113.02 4 24 19 1232.1 61.04 17 54 58 3643.2

10-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1842.5 SGR 259.4 SG3 806.8 ST 717.3 SR 45.8 SS 1064.3 RRT .6768 RRF .7818 RTF .9336 CRT -.7736 CRS .9128 CST -.9568 SGB 1860.7 R23 .1944 R13 .9356 LSA 1272.2 MSA 175.6 SSA 10.1 SG1 1850.9 SG2 190.1 THA 5.50 EL1 718.2 EL2 29.0 A.F.

4097.5

1460.6

11.98

-20.37

12.81

-22.66

193,44

21.11

174.22

2.64

ARRIVAL DATE APR 2 1966 FLIGHT TIME 118.00 LAUNCH DATE DEC 5 1965 DISTANCE 341.188 HELIOCENTRIC CONIC RL 147.41 LAL ... 00 LOL 72.65 VL 27.959 GAL -6.35 AZL 86.03 HCA 159.34 SHA 130.26 ECC .17142 INC 3.9714 VI 30.223 RP 108.35 LAP 1.40 LOP 232.04 VP 37.828 GAP 1.92 AZP 93.72 TAL 213.85 TAP 13.19 RCA 107.93 APO 152.58 V2 34.977 26.92 GP -7.79 ZAL 132.05 ZAP 109.90 ETS 354.75 ZAE 153.40 ETE 204.94 ZAC 42.39 ETC 146.40 CLP-110.09 96.794 GL PLANETOCENTRIC CONIC C3 18.068 VHL 4.251 DLA 5.23 RAL 291.32 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 3.040 DPA -29.76 RAP 306.36 ECC 1.2974 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 13 45 2353.29 -22.67 50.46 152.37 107.43 1 52 58 1753.3 -20.08 42.75 90.00 14 29 52 4671.63 14.64 198.93 150.10 65.49 15 47 44 4071.6 11.21 191.93 2 37 34 2082.96 15 48 44 4417.18 3 51 28 1851.68 16 51 20 4221.23 1483.0 -20.94 108.74 3 12 17 -23.72 30.21 152.00 100.00 108.74 3 12 17 64.19 17 2 22 3817.2 12.03 172.79 15.63 179.74 149.62 100.00 112.41 4 ZZ 19 50.60 18 1 41 1251.7 -23.24 3.86 -26.52 11.49 150.84 110.00 14.22 156.65 3621.2 163.42 16 51 20 4221.23 18.28 148.17 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2047.9 SGR 263.0 SG3 781.5 RRT .7351 RRF .8378 RTF .9412 SGB 2064.8 R23 .2074 R13 .9430 SGI 2057.1 SG2 177.5 THA 5.43 ST 822.2 SR 20.0 SS 1070.5 CRT -.5752 CRS .7376 CST -.9644 TOE .5422 TRA -.9214 TC3-1.7064 BAU .4188 ROE -.0126 RRA -.0173 RC3 -.3075 FAU .18744 LSA 1338.6 MSA 174.3 SSA 8.7 FOE 2.9558 FRA-2.0417 FC3-8.9812 BSP 5988 EL1 822.3 EL2 16.3 ALF 179.20 BDE .5424 BRA .9216 BC3 1.7339 FSP -2558 ARRIVAL DATE APR 4 1966 FLIGHT TIME 120.00 LAUNCH DATE DEC 5 1965 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 27.934 GAL -6.23 AZL 85.91 MCA 162.54 SMA 130.08 ECC .17124 INC 4.0873 V1 30.223 RP 108.39 LAP 1.23 LOP 235.23 VP 37.797 GAP 2.27 AZP 93.90 TAL 213.08 TAP 15.62 RCA 107.80 APO 152.35 V2 34.964 RC 99.145 GL 27.78 GP -8.95 ZAL 130.95 ZAP 113.97 ETS 353.52 ZAE 150.38 ETE 203.60 ZAC 42.17 ETC 144.55 CLP-114.28 DISTANCE 347.392 PLANETOCENTRIC CONIC C3 18.036 VML 4.247 DLA 6.21 RAL 291.97 RAD 6567.7 VEL 11.808 PTH 2.09 VMP 3.111 DPA -31.08 RAP 305.50 ECC 1.2968 ENCH AZMTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -20.79 1 8 53 2383.71 14 39 53 4640.35 2 33 10 2111.83 15 58 17 4387.46 3 48 10 1877.12 16 59 47 4194.93 106.59 1 48 37 65.00 15 57 14 107.91 3 8 22 153.30 1783.7 -23.28 52.49 4040.4 10.26 190.12 150.62 197.07 13.75 1511.8 -21.66 24.36 152.94 100.00 -24.34 32.13 63.70 17 11 24 111.60 4 19 27 60.10 18 9 42 3787.5 11.09 171.09 150.12 14.74 100.00 177.98 5.46 1277.1 -23.99 151.82 -27.16 13.19 110.00 155.19 3594.9 13.28 17.39 161.90 148.65 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 935.4 SR 19.8 SS 1081.5 CRT .9297 CRS -.8980 CST -.9699 TOE .6268 TRA -.9748 TC3-1.8915 BAU .4626 ROE .0119 RRA -.0197 RC3 -.3222 FAU .17860 SGT 2246.4 SGR 275.5 SG3 748.9 RRT .7899 RRF .8900 RTF .9462 SGB 2263.2 R23 .2257 R13 .9478 .0119 RRA -.0197 RC3 -.3222 FAU .17860 LSA 1419.5 MSA 173.5 SSA 7.3 FOE 2.9224 FRA-1.8890 FC3-8.5732 BSP 6655 BOE .6269 BRA .9750 BC3 1.9187 FSP -2452 EL1 935.6 EL2 7.3 ALF SG1 2257.0 SG2 168.1 THA 5.56 1.13 ARRIVAL DATE APR 6 1966 FLIGHT TIME 122.00 LAUNCH DATE DEC 5 1965 DISTANCE 353.572 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 27.906 GAL -6.09 AZL 85.75 HCA 165.73 SMA 129.88 ECC .17113 INC 4.2530 V1 30.223 RP 108.43 LAP 1.05 LOP 238.42 VP 37.765 GAP 2.60 AZP 94.12 TAL 212.24 TAP 17.97 RCA 107.65 APO 152.11 V2 34.951 RC 101.502 GL 28.92 GP -10.60 ZAL 129.64 ZAP 117.68 ETS 351.85 ZAE 147.37 ETE 203.33 ZAC 42.50 ETC 142.44 CLP-118.20 PLANETOCENTRIC CONIC 7.49 RAL 292.64 RAO 6567.7 VEL 11.811 PTH 2.09 VMP 3.199 DPA -32.84 RAP 305.05 ECC 1.2981 C3 18.112 VHL 4.256 OLA ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -21.71 1825.2 154.48 105.40 1 42 11 -24.06 55.28 90.00 1 1 46 2425.15 64.43 16 9 5 106.73 3 2 34 63.12 17 22 40 110.44 4 15 2 59.51 18 19 34 187.85 4000.9 9.05 151.26 14 52 25 4600.88 12.60 194.74 90.00 26.90 -22.60 1551.2 2 26 43 2151.21 16 10 9 4350.06 34.79 154.14 -25.14 100.00 168.96 3750.1 9.89 150.75 175.79 13.60 100.00 7.69 3 43 10 1911.94 17 10 12 4162.08 110.44 1311.9 -24.97 153.06 -28.01 15.54 110.00 153.39 3562.1 12.10 149.24 16.27 160.01 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2440.2 SGR 304.4 SG3 712.2 RRT .8382 RRF .9344 RTF .9498 SGB 2459.1 R23 .2469 R13 .9516 ST 1050.4 SR 59.2 SS 1095.1 TOE .7226 TRA-1.0276 TC3-2.0555 BAU .5048 CRT .9682 CRS -.9951 CST -.9746 RDE .0428 RRA -.0248 RC3 -.3490 FAU .16890 LSA 1515.8 MSA 172.0 SSA FOE 2.8914 FRA-1.7393 FC3-8.0735 BSP 7321 BOE .7239 BRA 1.0279 BC3 2.0849 FSP -2345 SG1 2453.6 SG2 165.1 THA 6.00 EL1 1062.0 EL2 14.8 ALF 3.09 ARRIVAL DATE APR 8 1966 FLIGHT TIME 124.00 LAUNCH DATE DEC 5 1965 DISTANCE 359.729 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 27.876 GAL -5.95 AZL 85.49 HCA 168.92 SMA 129.67 ECC .17109 INC 4.5118 V1 30.223
RP 108.46 LAP .87 LOP 241.60 VP 37.732 GAP 2.92 AZP 94.43 TAL 211.34 TAP 20.26 RCA 107.48 APO 151.85 V2 34.939 RC 103.862 GL 30.56 GP -13.17 ZAL 128.02 ZAP 120.93 ETS 349.38 ZAE 144.18 ETE 204.31 ZAC 43.65 ETC 139.79 CLP-121.86 PLANETOCENTRIC CONIC C3 18.409 VHL 4.291 DLA 9.27 RAL 293.32 RAD 6567.7 VEL 11.823 PTH 2.09 VHP 3.310 OPA -35.45 RAP 305.10 ECC 1.3030 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -22.99 156.08 103.55 1 31 53 0 50 26 2486.44 -25.10 59.46 90.00 3947.2 7.38 191.60 152.10 63.74 16 24 57 11.00 90.00 15 9 10 -23.92 30.74 1609.5 38.78 155.77 104.90 2 53 9 -25.22 100.00 2 16 19 2209.46 8.24 166.11 62.43 17 37 37 3699.4 172.85 151.57 16 25 58 4299.42 100.00 12.03 -26.37 11.05 108.63 4 7 37 1363.6 3 34 54 1963.57 19.10 154.76 110.00 -29.19 58.80 18 32 31 10.49 3518.1 150.01 157.53 14.73 110.00 17 23 53 4118.07 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1209.7 SR 117.6 55 1120.7 CRT .9670 CRS -.9981 CST -.9787 LSA 1644.4 MSA 170.8 SSA 4.4 EL1 1215.0 EL2 29.8 ALF 5.37 SGT 2627.4 SGR 360.6 SG3 667.9 RRT .8759 RRF .9662 RTF .9522 TDE .8430 TRA-1.0817 TC3-2.1782 BAU .5448 RDE .0871 RRA -.0336 RC3 -.3942 FAU .15725 RRT .8759 RRF SGB 2652.0 R23 .2664 R13 .9543 SG1 2646.4 SG2 172.8 THA 6.88 FDE 2.8916 FRA-1.5813 FC3-7.3951 BSP 7953

BOE .8475 BRA 1.0822 BC3 2.2135 FSP -2201

```
FLIGHT TIME 126.00
LAUNCH DATE DEC 5 1965
                                                                DISTANCE 365.865
   MELIOCENTRIC CONIC
   RL 147.41 LAL .00 LOL 72.65 VL 27.845 CAL -5.80 A7L 85.02 MCA 172.11 SMA 129.44 ECC .17110 INC 4.9758 VI 30,223 RP 108.50 LAP .68 LOP 244.79 VP 37.697 CAP 3.24 A7P 94.93 TAL 210.39 TAP 22.49 RCA 107.30 APO 151.59 V2 34.926
                     33.21 GP -17.69 ZAL 125.80 ZAP 123.41 ETS 345.22 ZAE 140.20 ETE 207.18 ZAC 46.34 ETC 135.99 CLP-125.31
   RC 106.225 GL
   PLANETOCENTRIC CONIC
   C3 19.247 VHL 4.387 DLA 12.09 RAL 293.93 RAD 6567.8 VEL 11.859 PTH 2.10 VHP 3.468 DPA -39.93 RAP 3D5.93 ECC 1.3168
                                          INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                                  100.20
                                                                    158.58
                                                                                                             1990.1
                                                         66.71
                                                                                               1 12 56
                                                                                                                          -24.88
                                                                                                                                        58.44
       90.00
                  0 29 46 2590.13
                                            -26.56
                 15 34 40
       90.00
                             4464.46
                                             8.47
                                                         186.84
                                                                      153.39
                                                                                     62.88
                                                                                              16 49 4
                                                                                                              3864.5
                                                                                                                            4.76
                                                                                                                                       180.12
                 1 57 17 2307.90
16 49 50 4221.92
                                                                                               2 35 45
                                                                                                             1707.9
                                                                                                                                        37.39
                                            -27.75
                                                                     158.32
                                                                                    101.57
                                                                                                                           -25.88
      100.00
                                                          45.69
                                                                                    101.57 2 35 45
61.54 18 0 12
                                                                                                                                       161.79
      100.00
                                             9.55
                                                         168.44
                                                                     152.81
                                                                                                             3621.9
                                                                                                                            5.67
                                                                                 105.34 3 53 38
57.87 18 51 41
                                                                    157.45
                  3 19 28 2050.75
17 44 9 4051.83
                                                                                                                          -28.51
      110.00
                                            -30.93
                                                          25.29
                                                                                                             1450.8
                                                                                                                                        16.92
      110.00
                 17 44 9
                                            12.36
                                                         153.86
                                                                      151.14
                                                                                                             3451.8
                                                                                                                            8.03
                                                                                                                                       147.44
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 2814.4 SGR 471.3 SG3 611.2
RRT .9027 RRF .9847 RTF .9546
SGB 2853.6 R23 .2756 R13 .9576
   TOE 1.0177 TRA-1.1486 TC3-2.2219 BAU .5845
                                                                                                          ST 1407.8 SR 213.5 SS 1160.0
CRT .9722 CRS -.9986 CST -.9831
   ROE .1624 RRA -.0518 RC3 -.4732 FAU .14276
FOE 2.9285 FRA-1.4328 FC3-6.4214 BSP 8630
                                                                                                          LSA 1828.8 MSA 168.1 SSA 3.0
   BOE 1.0306 BRA 1.1498 BC3 2.2717 FSP -2032
                                                            SG1 2846.5 SG2 200.5 THA 8.64
                                                                                                          EL1 1423.0 EL2 49.4 ALF 8.40
                                                                FLIGHT TIME 128.00
                                                                                                                    ARRIVAL DATE APR 12 1966
LAUNCH DATE DEC 5 1965
                                                                DISTANCE 371.979
  HELIOCENTRIC CONIC
                     .00 LOL 72.65 VL 27.811 GAL -5.64 A7L 83.94 MCA 175.29 SMA 129.21 ECC .17118 INC 6.0617 VI 30.223 .50 LOP 247.97 VP 37.661 GAP 3.54 A7P 96.04 TAL 209.38 TAP 24.67 RCA 107.09 APO 151.33 V2 34.914 38.53 GP -27.53 ZAL 121.98 ZAP 123.69 ETS 336.80 ZAE 133.18 ETE 213.45 ZAC 53.10 ETC 129.58 CLP-128.72
   RL 147.41 LAL
RP 108.54 LAP
   RC 108.588 GL
  PLANETOCENTRIC CONIC
   C3 22.009 VHL 4.691 DLA 17.59 RAL 294.25 RAD 6567.9 VEL 11.974 PTH 2.13 VHP 3.807 DPA -49.58 RAP 3D8.70 ECC 1.3622 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      2.13 VHP 3.807 OPA -49.58 RAP 308.70 ECC 1.3622
   LNCH AZMTH LNCH TIME L-I TIME
      90.00
                                            -28.24
                                                                    163.71
                                                                                   92.13 24 23 47
                                                                                                           2218.5
                 23 36 48 2818.53
                                                         83.18
                                                                                                                         -27.65
                                                                                                                                       74.56
       90.00
                 16 26 14
                             4300.21
                                              3.27
                                                         177.57
                                                                      156.36
                                                                                     61.86
                                                                                             17 37 54
                                                                                                              3700.2
                                                                                                                             -.52
                                                                                                                                       170.94
                  1 12 20 2523.15
                                                          61.37
                                                                                     93.56
                                                                                               1 54 23
                                                                                                             1923.1
                                                                                                                                        52.66
      100.00
                                            -29.70
                                                                      163.63
                                                                                                                           -28.89
                                                                                     60.42 18 45 10
97.38 3 20 24
56.61 19 28 31
      100.00
                17 37 19
                             4070.82
                                             4.55
                                                         160.01
                                                                                                             3470.8
                                                                                                                              .57
                                                                      155.66
                                                                                                                                       153.47
                 2 43 5 2239.21
18 23 4 3927.52
                                            -33.47
                                                                                                             1639.2
                                                                                                                           -32.09
     110.00
                                                          39.38
                                                                      163.21
                                                                                                                                        30.42
                                                                                                             3327.5
      110.00
                                            7.78
                                                         147.15
                                                                      153.67
                                                                                                                             3.33
                                                                                                                                       140.88
  DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                          ORBIT DETERMINATION ACCURACY
                                                            SGT 3015.3 SGR 702.3 SG3 510.4
RRT .9201 RRF .9926 RTF .9579
   TOE 1.3642 TRA-1.2647 TC3-2.0475 BAU .6271
                                                                                                          ST 1736.6 SR 415.3 SS 1219.2
   ROE .3385 RRA -.0931 RC3 -.5915 FAU .11752
                                                                                                          CRT .9806 CRS -.9990 CST -.9883
   FOE 3.0067 FRA-1.2574 FC3-4.6230 BSP 9465
BOE 1.4056 BRA 1.2681 BC3 2.1313 FSP -1718
                                                            SG8 3096.0 R23 .2660 R13 .9631
                                                                                                          LSA 2155.9 MSA 163.7 SSA
                                                                                                                                            1.8
                                                           SG1 3084.3 SG2 268.9 THA 12.19
                                                                                                         ELI 1783.8 EL2 79.3 ALF 13.22
                                                                                                                  ARRIVAL DATE APR 14 1966
LAUNCH DATE DEC 5 1965
                                                               FLIGHT TIME 130.00
                                                              DISTANCE 378.064
  HELIOCENTRIC CONIC
   RL 147.41 LAL .00 LOL 72.65 VL 27.776 GAL -5.47 AZL 78.38 HCA 178.46 SMA 128.97 ECC .17131 INC11.6176 V1 30.223 RP 108.58 LAP .31 LOP 251.15 VP 37.624 GAP 3.83 AZP 101.62 TAL 208.31 TAP 26.77 RCA 106.87 APO 151.06 V2 34.903
   RC 110.951 CL 54.66 GP -59.07 ZAL 110.56 ZAP 111.59 ETS 313.23 ZAE 109.09 ETE 219.67 ZAC 77.26 ETC 114.38 CLP-135.70
  PLANETOCENTRIC CONIC
   C3 46.635 VHL 6.829 DLA 34.09 RAL 293.78 RAD 6568.7 VEL 12.961 PTH 2.36 VHP 6.271 DPA -79.43 RAP 338.74 ECC 1.7675
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 59.82 18 41 34
59.82 25 22 41
59.82 18 41 34
59.82 23 22 41
60.85 23 42 12
58.76 23 5 21
                                                                   177.55
                                                                                                                        -20.55
                                                                                                                                    175.84
                                                                                                            3619.5
      70.18
               17 31 14 4219.51
                                            -16.66
                                                       182.81
      109.82
                                                                                                             2674.6
                                                                                                                          -20.53
                                                                                                                                       105.36
                             3274.55
                                            -16.65
                                                        112.33
                                                                    177.54
                22 28 6
                                                                                                                                       175.84
                17 31 14 4219.51
                                            -16.66
                                                        182.81
                                                                    177.55
                                                                                                             3619.5
                                                                                                                          -20.55
      70.1A
                                                                                                             2674.6
                                                                                                                         -20.53
                                                                                                                                       105.36
      109.82
                22 28 6 3274.55
                                            -16.65
                                                        112.33
                                                                    177.54
                                                                                                                         -22.43
                22 48 40 3211.84
                                            -18.70
                                                        108.66
                                                                    178.77
                                                                                                             2611.8
                                                                                                                                       101.52
                22 9 51
                              3330.22
                                           -14.64
                                                        115.43
                                                                     176.30
                                                                                                             2730.2
                                                                                                                         -18.67
                                                                                                                                       108.63
     110.00
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                         ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                            SGT 3370.8 SGR 913.6 SG3 210.4
RRT .9030 RRF .9761 RTF .9742
SGB 3492.4 R23 .1978 R13 .9799
                                                                                                         ST 2701.6 SR 780.3 SS 1133.5
   TOE 3.1618 TRA-1.6773 TC3 -.8779 BAU .5876
                                                                                                        CRT .9879 CRS -.9975 CST -.9964
   RDE .9293 RRA -. 0881 RC3 -. 3425 FAU . 04087
   FOE 2.4797 FRA -.7177 FC3 -.7587 BSP 9168
                                                                                                         LSA 3028.7 MSA 139.6 55A 1.0
                                                            SG1 3471.6 SG2 381.1 THA 13.92
                                                                                                         EL1 2809.6 EL2 116.2 ALF 15.95
   BOE 3.2956 BRA 1.6796 BC3 .9424 FSP
                                                -633
                                                               FLIGHT TIME 132.00
                                                                                                                   ARRIVAL DATE APR 16 1966
LAUNCH DATE DEC 5 1965
  HELIOCENTRIC CONIC
                                                               DISTANCE 384.173
   RL 147.41 LAL .00 LOL 72.65 VL 27.740 GAL -5.29 ATL 94.17 HCA 181.67 SMA 128.71 ECC .17158 INC 4.1613 VI 30.223 RP 108.61 LAP .12 LOP 254.32 VP 37.587 GAP 4.12 AZP 85.83 TAL 207.23 TAP 28.91 RCA 106.63 APO 150.80 V2 34.892
   RC 113.313 GL -29.62 GP 55.57 ZAL 124.66 ZAP 114.75 ETS 37.92 ZAE 117.63 ETE 135.71 ZAC 47.80 ETC 223.06 CLP-137.77
  PLANETOCENTRIC CONIC
   C3 16.534 VHL 4.066 DLA -48.36 RAL 313.59 RAD 6567.7 VEL 11.744 PTH 2.07 VMP 5.982 DPA 31.99 RAP 290.68 ECC 1.2721
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                             33.81
                                                         27.66
                                                                    187.04
                                                                                  126.91
                                                                                              5 42 14
                                                                                                             991.4
                                                                                                                          34.35
                                                                                                                                       19.92
      49.00
                             1591.39
     131.00
                13 25 32
                              5392.49
                                             33.82
                                                        249.00
                                                                     187.05
                                                                                   126.90 14 55 25
                                                                                                             4792.5
                                                                                                                           38.36
                                                                                                                                       241.25
      49.00
                  5 15 43
                             1591.39
                                             33.81
                                                         27.66
                                                                     187.04
                                                                                   126.91
                                                                                              5 42 14
                                                                                                             991.4
                                                                                                                           38.35
                                                                                                                                       19.92
                                                                                   126.90 14 55 25
126.91 5 42 14
126.90 14 55 25
                                                        249.00
                                                                     187.05
                                                                                                             4792.5
                                                                                                                           38.36
                                                                                                                                       241.25
     131.00
                13 25 32 5392.49
                                             33.82
                                             33.81
                                                         27.66
                                                                     187.04
                                                                                                             991.4
                                                                                                                           34.35
                                                                                                                                        19.92
       49.00
                             1591.39
                13 25 32 5392.49
                                           33.82
                                                        249.00
                                                                     187.05
                                                                                                             4792.5
                                                                                                                           34.36
  DIFFERENTIAL CORRECTIONS
                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                         ORBIT DETERMINATION ACCURACY
                                                           SGT 3086.7 SGR 1458.8 SG3 232.4
RRT -.9382 RRF -.9988 RTF ..9539
                                                                                                         ST 1914.3 SR 787.9 S5 761.3
CRT -.9849 CRS ..9996 CST -.9894
   TOE-1.3521 TRA -.2714 TC3-2.9011 BAU .7208
   RDE .5566 RRA -.1030 RC3 1.4884 FAU .05252
   FOE-1.0427 FRA .1280 FC3-2.7499 BSP 9689
BOE 1.4622 BRA .2903 BC3 3.2607 FSP -702
                                                          SGB 3414.D R23 .2406 R13 -.9706 LSA 2200.4 MSA 152.9 SSA .5
SG1 3382.8 SG2 460.8 TMA 155.61 EL1 2066.2 EL2 126.3 ALF 157.85
```

```
ARRIVAL CATE APR 18 1966
LAUNCH DATE DEC 5 1965
                                                                          FLIGHT TIME 134.00
                                                                        CISTANCE 390.221
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.702 GAL -5.10 A7L 89.21 HCA 184.84 SMA 128.45 ECC .17184 INC .7862 V1 30.223 RP 108.64 LAP -.07 LOP 257.50 VP 37.549 GAP 4.40 A7P 90.78 TAL 206.08 TAP 30.92 RCA 106.38 APO 150.53 V2 34.881
                        6.28 GP 24.82 7AL 129.82 7AP 131.48 ETS 21.51 7AE 135.18 ETE 155.35 7AC 34.73 ETC 188.44 CLP-136.87
   PLANETOCENTRIC CONIC
    C3 11.993 VHL 3.463 DLA -13.47 RAL 303.35 RAD 6567.5 VEL 11.549 PTH 2.02 VMP 4.061 DPA
                                                                                                                                 2.13 RAP 299.06 ECC 1.1974
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  LNCH TIME L-1 TIME
4 26 7 1667.09
12 53 30 5175.47
5 40 24 1427.42
14 21 54 4890.38
6 32 47 1263.35
15 46 0 4627.22
                                                                             156.50
                                                                                             118.10 4 53 54
77.87 14 19 45
119.57 6 4 11
                                                                                                                           1067.1
                                                    -3.62
                                                                   9.23
                                                                                                                                                .17
                                                                                                                                                             2.60
                                                                                                                              4575.5
                                                    25.78
                                                                  231.54
                                                                                160.65
                                                                                                                                              23.85
                                                                                                                                                            223.40
                                                                                                                               827.4
                                                    -4.57
                                                                 351.09
                                                                               155.97
                                                                                                                                                            344.55
                                                                                                76.32 15 43 24
123.54 6 53 50
72.08 17 3 7
       100.00
                                                    26.84
                                                                 210.30
                                                                               160.38
                                                                                                                             4290.4
                                                                                                                                                            202.16
                                                                             154.46
                                                    -7.02
                                                                 337.13
                                                                                                                             663.3
                                                                                                                                              -2.56
                                                                                                                                                            330.88
       110.00
                                                   29.61
                                                                 189.42
                                                                                159.49
                                                                                                                             4027.2
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 3375.5 SGR 847.7 SG3 472.5
RRT -.9508 RRF -.9990 RTF .9477
                                                                                                                        ST 432.8 SR 61.9 SS 215.4
CRT - 6684 CRS .9689 CST - 5076
    TOE .0523 TRA -.8108 TC3-4.4462 BAU .7390
    ROE -. 0299 RRA . 0534 RC3 1.2147 FAU .10820
    FOE .3426 FRA -.3351 FC3-7.8103 BSP 10832
BDE .0603 BRA .8126 BC3 4.6092 FSP -1548
                                                                                                                         LSA 451.5 MSA 183.2 55A
                                                                     SGB 3480.3 R23 .2993 R13 -.9531
                                                                    SG1 3470.9 SG2 255.4 THA 166.50
                                                                                                                         EL1 434 8 EL2 45.8 ALF 174.48
LAUNCH DATE DEC 5 1965
                                                                          FLIGHT TIME 136.00
                                                                                                                                     ARRIVAL DATE APR 20 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 396.259
    RL 147.41 LAL .00 LOL 72.65 VL 27.664 GAL -4.91 A7L 88.18 HCA 188.02 SMA 128.19 ECC .17219 INC 1.8247 V1 30.223 RP 108.68 LAP -.25 LOP 260.67 VP 37.511 GAP 4.67 AZP 91.81 TAL 204.89 TAP 32.91 RCA 106.11 APO 150.26 V2 34.870
    RC 118.029 GL 14.41 GP 15.14 7AL 126.99 ZAP 136.71 ETS 14.24 7AE 137.06 ETE 165.61 ZAC 35.13 ETC 174.23 CLP-138.94
   PLANETOCENTRIC CONIC
    C3 12.415 VHL 3.524 DLA -5.17 RAL 303.18 RAD 6567.5 VEL 11.567 PTH 2.02 VMP 3.946 DPA -7.25 RAP 301.72 ECC 1.2043
    C3 12.415 VML 3.524 OLA -5.17 RAL 303.18 RAD 6567.5 VEL 11.567 PTH 2.02 VMP 3.946 DPA -7.25 RAP 301.72 ECC 1.2043 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 18 42 1945.60 -12.27 25.12 156.65 115.72 3 51 7 1345.6 -8.70 18.25 100.00 4 37 36 1691.06 -13.14 5.96 156.20 117.09 5 5 47 1091.1 -9.40 359.16 100.00 15 23 19 4641.38 21.74 193.58 158.02 68.96 16 40 41 4041.4 18.68 186.12 110.00 5 40 15 1494.91 -15.46 349.75 154.88 120.87 6 5 10 894.9 -11.26 343.17 110.00 16 37 9 4410.30 24.18 174.91 156.90 65.07 17 50 40 3810.3 20.61 167.58
                                                                                                                            3810.3
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 3537.3 SGR 567.7 SG3 500.0
RRT -.9548 RRF -.9940 RTF ..9478
SGB 3582.6 R23 .2928 R13 -.9499
                                                                                                                          ST 759.0 SR 85.4 SS 496.9
CRT -.9360 CRS .9874 CST -.8816
    TOE .3746 TRA -.9041 TC3-4.4790 BAU .7549
    ROE -. 0496 RRA . 0458 RC3 . 7904 FAU . 11335
    FOE .8823 FRA -.3938 FC3-7.9039 BSP 11249
                                                                                                                          LSA 888.5 MSA 202.0 SSA
    BOE .3779 BRA .9052 BC3 4.5482 FSP -1655
                                                                     SG1 3578:7 SG2 166.7 THA 171.27
                                                                                                                          EL1 763.2 EL2 29.9 ALF 173.98
                                                                                                                                    ARRIVAL DATE APR 22 1966
LAUNCH DATE DEC 5 1965
                                                                         FLIGHT TIME 138.00
                                                                        DISTANCE 402.281
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.624 GAL -4.70 AZL 87.73 HCA 191.19 SHA 127.92 ECC .17261 INC 2.2733 VI 30.223 RP 108.71 LAP -.44 LOP 263.84 VP 37.473 GAP 4.94 AZP 92.23 TAL 203.66 TAP 34.85 RCA 105.84 APO 150.00 V2 34.860 RC 120.382 GL 17.90 GP 10.67 ZAL 124.61 ZAP 139.84 ETS 10.54 ZAE 136.74 ETE 170.59 ZAC 36.66 ETC 168.11 CLP-141.05
   PLANETOCENTRIC CONIC
    C3 12.627 VHL 3.553 CLA -1.39 RAL 304.03 RAC 6567.5 VEL 11.576 PTH 2.02 VHP 3.992 CPA -11.45 RAP 303.56 ECC 1.2078
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 53 46 2067.20
14 31 14 4797.23
4 14 28 1806.89
15 53 13 4532.78
5 21 14 1597.89
17 2 57 4314.53
                                                                                                                           1467.2
                                                                                                            3 28 13
                                                                                                                                          -12.39
       90.00
                                                   -15.74
                                                                  32.36
                                                                               158.15
                                                                                             113.85
                                                                                                                                                            25.29
                                                                                                           15 51 11
                                                   18.03
                                                                 206.59
                                                                                158.62
                                                                                                 67.79
                                                                                                                              4197.2
                                                                                                                                             14.86
                                                                                                                                                           199.34
                                                                                                            4 44 35
                                                                                                                              1206.9
                                                                  12.80
                                                                                157.73
                                                                                                115.21
                                                                                                                                             -13.09
                                                                                                                                                             5.79
       100.00
                                                   -16.62
                                                                                                 66.42 17 8 46
118.99 5 47 52
62.61 18 14 51
                                                                                                                                            15.58
                                                                  186.74
                                                                                158.23
                                                                                                                           3932.8
                                                                                                                                                            179.55
       100.00
                                                   18.92
                                                                  355.68
                                                                                156.47
                                                                                               118.99
                                                                                                                              997.9
                                                                                                                                            -14.95
                                                                                                                                                           348.66
      110.00
                                                   -18.96
                                                                              157.02
                                                                                                                                            17.46
                                                                                                                             3714.5
                                                                                                                                                           161.94
      110.00
                                                 21.30
                                                                 168.97
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SCT 3662.8 SGR 435.9 SG3 487.8
RRT -.9493 RRF -.9817 RTF ..9468
SGB 3688.7 R23 ..2599 R13 -.9479
SGI 3686.2 SG2 136.2 THA 173.55
                                                                                                                         ST 996.1 SR 61.0 55 620.8
CRT -,9763 CRS .9750 CST -.9302
    TOE .5488 TRA -.9239 TC3-4.5405 BAU .7732
    ROE -.0356 RRA .0340 RC3 .6030 FAU .10937
    FOE 1.1073 FRA -.3344 FC3-7.4988 BSP 11480
                                                                                                                         LSA 1158.8 MSA 196.2 SSA 7.1
    BOE .5500 BRA .9245 BC3 4.5803 FSP -1601
                                                                                                                         EL1 997.9 EL2 13.2 ALF 176.58
LAUNCH DATE DEC 5 1965
                                                                         FLIGHT TIME 140.00
                                                                                                                                     ARRIVAL DATE APR 24 1966
                                                                        DISTANCE 408.286
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.584 GAL -4.49 AZL 87.47 HCA 194.37 SMA 127.64 ECC .17312 INC 2.5271 V1 30.223 RP 108.74 LAP -.63 LOP 267.01 VP 37.434 GAP 5.20 AZP 92.45 TAL 202.39 TAP 36.76 RCA 105.55 APO 149.74 V2 34.851 RC 122.731 GL 19.90 GP 8.15 ZAL 122.47 ZAP 142.31 ETS 8.38 ZAE 136.00 ETE 173.33 ZAC 38.26 ETC 165.03 CLP-143.07
   PLANETOCENTRIC CONIC
    C3 12.690 VHL 3.562 DLA
                                          .96 RAL 305.23 RAD 6567.5 VEL 11.579 PTH 2.02 VHP 4.078 OPA -13.72 RAP 305.19 ECC 1.2089
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 41 9 2141.13
14 53 28 4725.43
4 2 57 1877.31
16 14 22 4464.49
5 12 13 1660.48
17 21 35 4254.11
                                                                              159.82
                                                                                              112.45
                                                                                                                           1541.1
       90.00
                                                                                                             3 16 50
                                                                                                                                             -14.52
                                                   -17.72
                                                                  36.88
                                                                                                                                                            29.67
                                                                                               66.41 16 12 14
113.82 4 34 14
65.04 17 28 46
                                                                                                                                             12.80
                                                                                                                                                            195.08
       90.00
                                                   16.13
                                                                  202.18
                                                                                159.49
                                                                                                                              4125.4
      100.00
                                                  -18.61
                                                                  17.08
                                                                                159.42
                                                                                                                              1277.3
                                                                                                                                             -15.23
                                                                                                                                                             9.92
                                                                                                                              3864.5
                                                                                                                                            13.51
                                                                                                                                                            175.53
      100.00
                                                  17.01
                                                                 182.57
                                                                                159.07
                                                                                                          5 39 54
18 32 29
                                                                                               117.62
                                                                                                                              1060.5
                                                                                                                                                            352.41
      110.00
                                                   -20.99
                                                                  359.41
                                                                               158.20
                                                                                                                                           -17.12
      110.00
                                                   19.36
                                                                 165.35
                                                                                157.82
                                                                                                 61.26
                                                                                                                              3654.1
                                                                                                                                              15.38
                                                                                                                                                            158.49
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 3806.2 SGR 368.6 SG3 471.1
RRT -.9334 RRF -.9599 RTF .9464
SGB 3824.0 R23 .2104 R13 -.9471
                                                                                                                        ST 1155.5 SR 32.7 S5 679.5

CRT -.9676 CRS .9111 CST -.9454

LSA 1326.9 MSA 193.0 SSA 8.2
    TDE .6591 TRA -.9296 TC3-4.6819 BAU .7991
```

SG1 3821.7 SG2 131.8 THA 174.83

FL1 1155.9 FL2 8.3 ALF 178.43

RDE -.0176 RRA .0255 RC3 .5126 FAU .10464 FDE 1.1927 FRA -.2675 FC3-7.1386 BSP 11996

BDE .6594 BRA .9300 BC3 4.7099 ESP -1562

```
ARRIVAL DATE APR 26 1966
                                                                                             FLIGHT TIME 142.00
LAUNCH DATE DEC 5 1965
                                                                                            DISTANCE 414.274
   HELIOCENTRIC CONIC
    RL 147.41 LAL - .00 LOL 72.65 VL 27.542 GAL -4.27 A7L 87.31 HCA 197.54 SMA 127.37 ECC .17371 INC 2.69D1 V1 30.223 RP 108.76 LAP -.81 LOP 270.17 VP 37.396 GAP 5.45 A7P 92.57 TAL 201.09 TAP 38.63 RCA 105.24 APO 149.49 V2 34.842 RC 125.075 GL 21.23 GP 6.53 ZAL 120.41 ZAP 144.46 ETS 6.98 ZAE 135.21 ETE 174.98 ZAC 39.85 ETC 163.35 CLP-144.99
   PLANETOCENTRIC CONIC
     C3 12.675 VHL 3.560 DLA. 2.70 RAL 306.64 RAD 6567.5 VEL 11.578 PTH 2.02 VHP 4.178 DPA -15.06 RAP 306.78 ECC 1.2086
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG IN) RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       111.33 3 10 28
65.48 16 29 49
112.71 4 28 37
64.12 17 45 36
116.53 5 36 3
60.35 18 47 33
                                                                                                                                                               1594.7
                                                                                                                                                                                  -16.02
                                                                                                   161.56
                          2 33 53 2194.71
                                                                 -19.08
                                                                                    40.23
         90.00
                                                                                                                                                                 4071.3
                                                                                                                                                                                     11.20
                                                                                                       160.63
                                                                  14.63
                                                                                    198.91
          90.00
                        15 11 58 4671.32
                                                                                                                                                                 1328.3
                                                                                                                                                                                    -16.73
                                                                                                                                                                                                        12.96
                                                                                    20.25
                                                                                                      161.17
                                                                 -19.98
        100.00
                          3 56 29 1928.28
                                                                                                                                                                                    11.90
                                                                                                                                                                 3813.0
                                                                                   179.49
                                                                                                      160.21
                        16 32 3 4412.99
5 7 37 1705.64
                                                                 15.51
        100.00
                                                                                                                                                                 1105.6
                                                                                                                                                                                  -18.64
                                                                                                      159.99
                                                                 -22.39
                                                                                      2.16
        110.00
                                                                                                                                                                                     13.77
                       17 37 25 4208.39
                                                                17.85
                                                                                   162.67
                                                                                                      158.92
                                                                                                                                                                 3608.4
        110.00
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 1278.5 SR 13.3 SS 707.5
CRT -.3415 CRS .1412 CST -.9533
LSA 1449.0 MSA 188.7 SSA 9.5
                                                                                     SCT 3952.4 SGR 332.6 SG3 454.5

RRT -.9063 RRF -.9291 RTF ..9470

SGB 3966.3 R23 ..1652 R13 -.9474

SGI 3963.9 SG2 140.2 THA 175.63
     TOE .7415 TRA -.9244 TC3-4.8609 BAU .8274
     ROE - .0004 RRA .0183 RC3 .4653 FAU .10020
     FOE 1.2131 FRA -.2047 FC3-6.8441 BSP 12613
BOE .7415 BRA .9245 BC3 4.8831 FSP -1542
                                                                                                                                                        EL1 1278.5 EL2 12.5 ALF 179.80
                                                                                                                                                                          ARRIVAL DATE APR 28 1966
                                                                                              FLIGHT TIME 144.00
LAUNCH DATE DEC 5 1965
                                                                                             DISTANCE 420.252
   HELIOCENTRIC CONIC
    RELIGION INTO CONTROL OF THE CONTROL
    PLANETOCENTRIC CONIC
                                                    4.13 RAL 308.20 RAD 6567.5 VEL 11.576 PTH 2.02 VHP 4.285 DPA -15.88 RAP 308.40 ECC 1.2076
     C3 12.616 VML 3.552 DLA 4.13 RAL 308.20 RAD 6567.5 VEL 11.576 PTH 2.02 VMP 4.285 DPA -15.88 RAP 308.40 ECC 1.2076
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               1638.2
                                                                                                                                                                                  -17.19
                          2 29 26 2238.24
15 28 53 4625.82
                                                                                     42.99
                                                                                                     163.38
                                                                                                                         110.34
                                                                                                                                            3 6 44
                                                                 -20.14
          90.00
                                                                                                                                          16 45 58
                                                                                                                                                                  4025.8
                                                                                                                                                                                        9.82
                                                                                                       161.98
                                                                                                                             64.78
                                                                  13.33
                                                                                    196.21
                          15 28 53
          90.00
                                                                                                                                           4 25 32
                        3 52 42 1969.63
16 48 17 4369.66
5 5 23 1742.15
17 52 5 4169.91
                                                                                                                                                                                     -17.91
                                                                                                                                                                 1369.6
                                                                                                                           111.73
                                                                  -21.05
                                                                                      22.86
                                                                                                       163.01
        100.00
                                                                                                                        63.42 18 1 7
115.59 5 34 25
59.65 19 1 35
                                                                                                                                                                  3769.7
                                                                                                                                                                                      10.52
                                                                                                                                                                                                        170.08
                                                                 14.20
                                                                                    176.93
                                                                                                       161.54
        100.00
                                                                                                                                                                 1142.1
                                                                                                                                                                                                        357.19
                                                                                       4.44
                                                                                                       161.86
                                                                 -23.48
         110.00
                                                                                                                                                                 3569.9
                                                                                                                                                                                      12.38
                                                                                                                                                                                                        153.81
                                                                                    160.46
                                                                                                       160.23
                                                                16.54
         110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 4010.1 SGR 302.7 SG3 424.6
RRT -.8631 RRF -.8786 RTF .9401
      TDE .8540 TRA -.8657 TC3-4.9216 BAU .8332
                                                                                                                                                            ST 1444.0 SR 19.9 SS 776.4
                                                                                                                                                            CRT .7510 CRS -.8415 CST -.9596
      RDE .0108 RRA .0070 RC3 .4250 FAU .09121
     FOE 1.2975 FRA -.0438 FC3-6.2585 BSP 12229
BOE .8541 BRA .8657 BC3 4.9399 FSP -1325
                                                                                         SGB 4021.5 R23 .1307 R13 -.9404
                                                                                                                                                           LSA 1628.0 MSA 193.9 SSA 10.0
                                                                                         SG1 4018.7 SG2 152.5 THA 176.27
                                                                                                                                                         EL1 1444.1 EL2 13.2 ALF
                                                                                                                                                                         ARRIVAL DATE APR 30 1966
                                                                                             FLIGHT TIME 146.00
LAUNCH DATE DEC 5 1965
                                                                                            DISTANCE 426.208
     RL 147.41 LAL .0D LOL 72.65 VL 27.459 GAL -3.79 AZL 87.11 MCA 203.88 SMA 126.8D ECC .17514 INC 2.8895 V1 30.223 RP 108.81 LAP -1.17 LOP 276.51 VP 37.319 GAP 5.95 AZP 92.64 TAL 198.4D TAP 42.28 RCA 104.6D APO 149.01 V2 34.826 RC 129.747 GL 22.95 GP 4.60 ZAL 116.30 ZAP 148.2D ETS 5.35 ZAE 133.75 ETE 176.78 ZAC 43.08 ETC 161.94 CLP-148.5D
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                    5.38 RAL 309.88 RAO 6567.5 VEL 13.573 PTH 2.02 VHP 4.397 DPA -16.36 RAP 310.06 ECC 1.2064
     LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           3 4 36
                                                                                                    165.29
                         2 26 40 2276.23
15 45 1 4585.33
                                                                                    45.42
                                                                                                                         109.43
                                                                  -21.02
           90.00
                                                                                                                          64.22 17 1 26
110.83 4 23 59
                                                                                                                                                                                                       186.96
                                                                                                                                                                 3985.3
                                                                                                                                                                                      8.57
                                                                 12.14
                                                                                    193.83
                                                                                                      163.47
           90.00
                       3 50 33 2005.67
17 3 49 4331.12
5 4 37 1773.88
18 6 14 4135.68
                                                                                                                                                                 1405.7
                                                                                                                                                                                    -18.91
                                                                                                                                                                                                        17.68
                                                                                     25.16
                                                                                                      164.93
                                                                -21.94
         100.00
                                                                                                                         62.85 18 16 0
114.72 5 34 11
59.08 19 15 10
                                                                                                                                                                                                       167.89
                                                                                                                                                                 3731.1
                                                                                                                                                                                      9.28
                                                                                    174.68
                                                                                                  163.02
                                                                 13.02
         100.00
                                                                                                                                                                1173.9
                                                                                                                                                                                    -20.86
                                                                                                                                                                                                       359.09
                                                                                      6.44
                                                                                                      163.80
                                                                -24.40
         110.00
                                                                                                                                                                 3535.7
                                                                                                                                                                                     11.14
                                                                                                                                                                                                       151.95
                                                                                    158.52
                                                                                                      161.69
                                                                15.35
         110 00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 4158.3 SGR 295.8 SG3 410.5
RRT -.8185 RRF -.8334 RTF .9417
                                                                                                                                                            ST 1535.8 SR 42.3 SS 778.7
      TOE .9121 TRA -.8449 TC3-5.1350 BAU .8638
                                                                                                                                                          CRT .9215 CRS -.9632 CST -.9630
      RDE .0256 RRA .0011 RC3 .4134 FAU .08770
                                                                                         SCB 4168.8 R23 .1068 R13 -.9420
SCI 4165.3 SC2 169.6 THA 176.66
                                                                                                                                                            LSA 1712.1 MSA 188.5 SSA 11.3
      FOE 1.2646 FRA .0046 FC3-6.0536 BSP 12971
                                                                                                                                                        EL1 1536.3 EL2 16.4 ALF
                                                                                                                                                                                                         1.45
      BDE .9124 BRA .8449 BC3 5.1516 FSP -1336
                                                                                                                                                                           ARRIVAL DATE MAY 2 1966
                                                                                              FLIGHT TIME 148.00
LAUNCH DATE DEC 5 1965
                                                                                             DISTANCE 432.150
    HELTOCENTRIC CONIC
      RL 147.41 LAL .00 LOL 72.65 VL 27.416 GAL -3.54 AZL 87.04 HCA 207.05 SMA 126.52 ECC .17600 INC 2.9556 V1 30.223
RP 108.84 LAP -1.34 LOP 279.67 VP 37.281 GAP 6.20 AZP 92.63 TAL 197.00 TAP 44.05 RCA 104.25 APO 148.79 V2 34.819
      RC 132.074 GL 23.56 GP 3.99 ZAL 114.19 ZAP 149.87 ETS 4.87 ZAE 133.13 ETE 177.30 ZAC 44.73 ETC 161.73 CLP-150.11
    PLANETOCENTRIC CONIC
                                                    6.53 RAL 311.67 RAD 6567.5 VEL 11.569 PTH 2.02 VHP 4.512 DPA -16.61 RAP 311.78 ECC 1.2051
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 25 1 2311.29 -21.79 47.70 167.30 108.54 3 3 33 1711.3 -19.06 40.10 90.00 16 0 57 4547.62 11.01 191.63 165.11 63.75 17 16 45 3947.6 7.40 184.82
                         2 c5

16 0 57 4547.5c

3 49 28 2038.90

17 19 11 4295.25

5 4 50 1803.05

18 20 19 4103.85
                                                                                                                            109.96
                                                                                                                                            4 23 27
                                                                                                                                                                  1438.9
                                                                                                                                                                                     -19.80
                                                                                                        166.95
                                                                 -22.73
                                                                                      27.32
          100.00
                                                                                                                             62.37 18 30 46
                                                                                                                                                                  3695.2
                                                                                                                                                                                       8.10
                                                                                                                                                                                                        165.88
                                                                  11.89
                                                                                    172.61
                                                                                                       164.65
          100.00
                                                                                                                           113.88 5 34 53
58.59 19 26 42
                                                                                                                                                                 1203.1
                                                                                                                                                                                  -21.77
9.97
                                                                                                                                                                                                             .86
                                                                                                       165.85
                                                                 -25.21
                                                                                       8.31
          110.00
                                                                                                                                                                                                       150.22
                                                                                                                                                                 3503.9
                                                                                                        163.30
                                                                  14.23
                                                                                     156.73
          110.00
                                                                                         MID-COURSE EXECUTION ACCURACY
SCT 4278.9 SGR 292.7 SG3 393.6 ST 1640.2 SR 62.4 55 792.2
RRT -.7675 RRF -.7814 RTF ..9412 CRT ..9601 CRS -.9782 CST -.9661
SGB 4288.9 R23 ..0900 R13 -.9414 LSA 1813.0 MSA 185.5 SSA 12.4
EL1 1641.3 EL2 17.4 ALF 2.09
                                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
      TDE .9787 TRA -.8033 TC3-5.3112 BAU .8877
RDE .0380 RRA -.0061 RC3 .4049 FAU .08314
FDE 1.2496 FRA .0776 FC3-5.7745 BSP 13423
BDE .9794 BRA .8033 BC3 5.3266 FSP -1293
```

ARRIVAL DATE MAY 4 1966

```
LAUNCH DATE DEC 5 1965
                                                                          DISTANCE 438.077
  HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.373 GAL -3.28 AZL 86.99 MCA 210.22 SMA 126.24 ECC .17696 INC 3.0088 VI 30.223 RP 108.86 LAP -1.51 LOP 282.83 VP 37.243 GAP 6.44 AZP 92.60 TAL 195.59 TAP 45.80 RCA 103.90 APO 148.58 V2 34.812 RC 134.395 GL 24.05 GP 3.50 ZAL 112.01 ZAP 151.45 ETS 4.51 ZAE 132.57 ETE 177.67 ZAC 46.43 ETC 161.69 CLP-151.65
   PLANETOCENTRIC CONIC
    C3 12.394 VHL 3.521 DLA 7.63 RAL 313.57 RAD 6567.5 VEL 11.566 PTH 2.02 VHP 4.630 DPA -16.69 RAP 313.55 ECC 1.2040
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              1744.B
                                                                                                                                            -19.88
                                                                                               107.66
                                                                                                              3 3 14
                     2 24 9 2344.85
16 16 58 4511.63
        90.00
                                                   -22.50
                                                                  49.91
                                                                               169.43
                                                                                                 63.34 17 32 9
109.09 4 23 40
                                                                                                                               3911.6
                                                                                                                                                6.26
                                                                                                                                                              182.78
                                                     9.92
                                                                  189.55
                                                                                 156.89
                   16 16 58
        90.00
                 16 16 36 4711.00

3 49 9 2070.67 -23.45

17 34 38 4261.05 10.81

5 5 46 1850.90 -25.97

18 34 31 4073.58 13.15
                                                                                                                                              -20.63
                                                                                                                                                              21.74
                                                                                                                               1470.7
                                                                   29.40
                                                                                 169.09
       100.00
                                                                                              61.96 18 45 39
113.05 5 36 17
58.16 19 42 24
                                                                             166.43
168.02
                                                                                                                               3661.0
                                                                                                                                                6.97
                                                                                                                                                              163.97
                                                                  170.66
      100.00
                                                                                                                              1230.9
                                                                                                                                              -22.62
                                                                                                                                                               2.57
                                                                   10.13
      110.00
                                                                                                                               3473.6
                                                                                                                                                8.84
                                                                                                                                                              148.60
                                                                 155.05
                                                                                165.05
      110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1748.7 SR 81.0 SS 807.3
CRT .9773 CRS -.9795 CST -.9688
                                                                      SGT 4387.7 SGR 293.4 SG3 376.8
RRT -.7137 RRF -.7268 RTF .9400
    TOE 1.0479 TRA -.7485 TC3-5.4699 BAU .9088
    RDE .0493 RRA -.0138 RC3 .3995 FAU .07849
                                                                      SGB 4397.5 R23 .0778 R13 -.9402
SG1 4392.7 SG2 205,3 THA 177.26
                                                                                                                           LSA 1919.0 MSA 182.7 SSA 13.4
    FDE 1.2370 FRA .1552 FC3-5.4823 BSP 13776
BDE 1.0491 BRA .7486 BC3 5.4845 FSP -1238
                                                                                                                           EL1 1750.5 EL2 17.1 ALF 2.59
                                                                                                                                       ARRIVAL DATE MAY 6 1966
                                                                           FLIGHT TIME 152.00
LAUNCH DATE DEC 5 1965
                                                                          DISTANCE 443.989
  HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.330 GAL -3.01 AZL 86.95 HCA 213.38 SHA 125.96 ECC .17803 INC 3.0528 VI 30.223 RP 108.87 LAP -1.68 LOP 286.00 VP 37.206 GAP 6.69 AZP 92.55 TAL 194.14 TAP 47.52 RCA 103.53 APO 148.38 V2 34.806 RC 136.709 GL 24.44 GP 3.12 TAL 109.77 ZAP 152.94 ETS 4.26 ZAE 132.07 ETE 177.94 ZAC 48.18 ETC 161.78 CLP-153.11
   PLANETOCENTRIC CONIC
    C3 12.338 VHL 3.512 DLA 8.68 RAL 315.57 RAD 6567.5 VEL 11.564 PTH 2.02 VHP 4.751 DPA -16.64 RAP 315.37 ECC 1.2030
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 23 51 2377.79
16 33 13 4476.76
3 49 25 2101.82
17 50 20 4227.95
5 7 17 1858.16
18 48 58 4044.38
                                                                                                                                             -20.65
                                                                               171.68
                                                                                                 106.76
                                                                                                               3 3 29
                                                                                                                               1777.8
                                                    -23.17
                                                                   52.09
                                                                                                             17 47 50
                                                                                                                                                              180.81
                                                                                                                                3876.8
                                                                                                                                                  5.16
                                                                                                   62.99
                                                      8.85
                                                                   187.55
                                                                                 158.82
        90.00
                                                                                                               4 24 27
                                                                                                                                1501.8
                                                                                                                                               -21.41
                                                                                                                                                               23.72
                                                                                                  108.20
                                                    -24.13
                                                                   31.47
                                                                                 171.35
                                                                                168.35
                                                                                                   61.60 19 0 48
                                                                                                                                3628.0
                                                                                                                                                 5.87
                                                                                                                                                              162.13
                                                     9.74
                                                                   168.78
                                                                               170.31
                                                                                                 112.20 5 38 15
57.78 19 56 22
                                                                                                                             1258.2
3444.4
                                                                                                                                               -23.43
                                                                                                                                                                4.27
                                                   -26.68
                                                                    11.92
                                                                                                                                               7.75
                                                                                                                                                              147.04
       110.00
                                                    12.09
                                                                   153.45
                                                                                 166.95
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4495.4 SGR 297.4 SG3 361.1
RRT -.6602 RRF -.6734 RTF .9391
SGB 4505.2 R23 .0690 R13 -.9393
                                                                                                                            5T 1854.9 SR 98.8 55 819.6
    TOE 1.1155 TRA -.6869 TC3-5.6246 BAU .9300
                                                                                                                            CRT .9860 CRS -.9769 CST -.9712
    ROE .0600 RRA -.0214 RC3 .3965 FAU .07417
                                                                                                                           LSA 2022.4 MSA 179.5 SSA 14.4
    FOE 1.2203 FRA .2263 FC3-5.2047 BSF 14150
BOE 1.1171 BRA .6873 BC3 5.6386 FSP -1191
                                                                       SG1 4499.7 SG2 223.1 THA 177.49
                                                                                                                           EL1 1857.5 EL2 16.4 ALF
                                                                                                                                                                  3.01
                                                                                                                                       ARRIVAL DATE MAY 8 1966
                                                                           FLIGHT TIME 154.00
 LAUNCH DATE DEC 5 1965
                                                                           DISTANCE 449.887
    HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.287 GAL -2.73 A7L 86.91 HCA 216.55 SMA 125.67 ECC .17922 INC 3.0898 VI 30.223 RP 108.89 LAP -1.84 LOP 289.16 VP 37.169 GAP 6.93 A7P 92.48 TAL 192.67 TAP 49.22 RCA 103.15 APO 148.20 V2 34.801 RC 139.015 GL 24.76 GP 2.81 7AL 107.45 7AP 154.35 ETS 4.08 7AE 131.63 ETE 178.15 7AC 49.97 ETC 161.95 CLP-154.50
    PLANETOCENTRIC CONIC
     C3 12.302 VHL 3.507 OLA 9.71 RAL 317.67 RAD 6567.5 VEL 11.562 PTH 2.02 VHP 4.874 DPA -16.49 RAP 317.24 ECC 1.2025
     LNCH AZHTH LNCH TIME LITTIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1810.7
                   2 24 1 2410.69
16 49 49 4442.64
3 50 8 2132.92
18 6 23 4195.64
5 9 15 1885.34
19 3 45 4015.99
                                                                              174.06
                                                                                                                                            -21.40
                                                                                               105.82 3 4 11
62.69 18 3 52
                                                     -23.79
                                                                   54.30
         90.00
                                                                                                                                                 4.07
                                                                                                                                3842.6
                                                       7.79
                                                                   185.60
                                                                                  170.89
         90.00
                                                                                                                                               -22.17
                                                                                                                                                                25.72
                                                                                                                                1532.9
                                                   -24.77
                                                                    33.55
                                                                               173.74
                                                                                                  107.29
                                                                                                              4 25 41
                                                                                                  107.29 4 25 41
61.29 19 16 18
111.33 5 40 41
57.45 20 10 41
        100.00
                                                                                  170.41
                                                                                                                                3595.6
                                                                                                                                                 4.79
                                                      8.69
                                                                   166.95
        100.00
                                                                                                                                                                 5.98
                                                                                                                                               -24.22
                                                                                 172.73
                                                                                                                                1285.3
                                                     -27.37
                                                                    13.74
        110.00
                                                                                                                                3416.0
                                                                                                                                                 6.69
                                                    11.06
                                                                   151.90
                                                                                  168.99
        110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1953.5 SR 115.7 S5 831.5
CRT .9906 CRS -.9721 CST -.9734
                                                                      SGT 4596.5 SGR 303.3 SG3 346.2

RRT -.6075 RRF -.6212 RTF .9382

SGB 4606.4 R23 .0625 R13 -.9383

SG1 4600.2 SG2 240.7 THA 177.70
     TOE 1.1850 TRA -.6154 TC3-5.7624 BAU .9500
     ROE .0701 RRA -.0293 RC3 .3943 FAU .07002
                                                                                                                            LSA 2128.1 HSA 176.1 SSA 15.3
     FDE 1.2036 FRA .2957 FC3-4.9272 BSP 14485
BDE 1.1870 BRA .6161 BC3 5.7759 FSP -1144
                                                                                                                            ELT 1966.8 EL2 15.8 ALF
                                                                                                                                        ARRIVAL DATE MAY 10 1966
                                                                            FLIGHT TIME 156.00
 LAUNCH DATE DEC 5 1965
                                                                           DISTANCE 455.770
    HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 27.243 GAL -2.44 A7L 86.88 MCA 219.71 SMA 125.39 ECC .18053 INC 3.1218 V1 30.223 RP 108.90 LAP -1.99 LOP 292.32 VP 37.133 GAP 7.17 A7P 92.40 TAL 191.18 TAP 50.89 RCA 102.76 APO 148.03 V2 34.797 RC 141.312 GL 25.01 GP 2.55 ZAL 105.06 ZAP 155.70 ETS 3.96 ZAE 131.24 ETE 178.31 ZAC 51.80 ETC 162.17 CLP-155.82
    PLANETOCENTRIC CONIC
     C3 12.294 VHL 3.506 DLA 10.73 RAL 319.87 RAD 6567.5 VEL 11.562 PTH 2.02 VMP 5.000 DPA -16.25 RAP 319.15 ECC 1.2023
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 24 32 2443.96 -24.39 56.55 176.59 104.85 3 5 16 1844.0 -22.12 48.62 90.00 17 6 50 4409.09 6.74 183.70 173.12 62.43 18 20 19 3809.1 2.99 177.02
                   3 51 14 2164.34
18 22 49 4163.95
5 11 38 1912.76
19 18 55 3988.28
                                                                                                   106.33
                                                                                                               4 27 19
                                                                                                                                 1564.3
                                                                                                                                                 -22.91
                                                                                                                                                                 27.76
                                                     -25.39
                                                                    35.68
                                                                                  176.28
        100.00
                                                                               172.62
175.30
                                                                                                    61.01 19 32 13
                                                                                                                                 3563.9
                                                                                                                                                  3.72
                                                                                                                                                               158.59
                                                      7.65
                                                                    165.18
                                                                                                                5 43 31
                                                                                                                                 1312.8
                                                                                                                                                -25.00
                                                                                                                                                                 7.74
                                                    -28.03
                                                                    15.60
                                                                                                   110.41
                                                                                                    57.15 20 25 23
                                                                                                                                 3388.3
                                                                                                                                                  5.64
                                                                                                                                                                144.07
                                                 10.04
                                                                    150.40
                                                                                  171.18
        110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 4691.8 SGR 310.4 SG3 331.9

RRT -.5563 RRF -.5703 RTF .9371

SGB 4702.1 R23 .0571 R13 -.9372

SG1 4695.0 SG2 257.7 THA 177.89
                                                                                                                          ST 2075.3 SR 131.8 SS 843.9
CRT .9924 CRS -.9661 CST -.9754
      TOE 1.2572 TRA -.5336 TC3-5.8804 BAU .9687
      RDE .0797 RRA -.0375 RC3 .3918 FAU .06599
                                                                                                                          LSA 2237.5 MSA 172.8 SSA 16.1
EL1 2079.4 EL2 16.1 ALF 3.61
     FOE 1.1888 FRA .3643 FC3-4.6470 BSP 14770
BDE 1.2597 BRA .5350 BC3 5.8934 FSP -1093
```

FLIGHT TIME 150.00

```
LAUNCH DATE DEC 5 1965
                                                                                                                   FLIGHT TIME 158.00
                                                                                                                                                                                                              ARRIVAL DATE MAY 12 1966
    HELIOCENTRIC CONIC
                                                                                                                   DISTANCE 461.637
      RL 147.41 LAL .00 LOL 72.65 VL 27.200 GAL -2.13 A7L 86.85 MCA 222.87 SMA 125.11 ECC .18197 INC 3.1498 V1 30.223 RP 108.92 LAP -2.14 LOP 295.48 VP 37.098 GAP 7.41 A7P 92.31 TAL 189.67 TAP 52.54 RCA 102.35 APO 147.88 V2 34.793 RC 143.598 GL 25.18 GP 2.33 ZAL 102.60 ZAP 156.98 ETS 3.90 ZAE 130.89 ETE 178.43 ZAC 53.68 ETC 162.42 CLP-157.10
    PLANETOCENTRIC CONIC
       C3 12.319 VHL 3.510 DLA 11.73 RAL 322.16 RAD 6567.5 VEL 11.563 PTH 2.02 VHP 5.129 DPA -15.94 RAP 321.11 ECC 1.2027
      C3 12.319 VML 3.510 DLA 11.73 RAL 322.16 RAD 6567.5 VEL 11.563 PTM 2.02 VMP 5.129 DPA -15.94 RAP 321.11 ECC 1.2027 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 25 23 2477.83 -24.96 58.87 179.26 103.82 3 6 41 1877.8 -22.82 50.86 90.00 17 24 18 4376.07 5.69 181.83 175.49 62.21 18 37 14 3776.1 1.93 175.17 100.00 3 52 41 2196.29 -25.98 37.87 178.96 105.32 4 29 17 1596.3 -23.63 29.86 100.00 18 39 41 4132.84 6.62 163.44 174.99 60.78 19 48 34 3532.8 2.67 156.88 110.00 5 14 23 1940.64 -28.68 17.51 178.01 109.45 5 46 43 1340.6 -25.76 9.55 110.00 19 34 29 3961.26 9.04 148.95 173.51 56.89 20 40 30 3361.3 4.62 142.65
    DIFFERENTIAL CORRECTIONS
                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                        SGT 4787.3 SGR 318.6 SG3 318.7

RRT -.5082 RRF -.5232 RTF .9365

SGB 4797.9 R23 .0531 R13 -.9366

SGI 4790.0 SG2 274.2 THA 178.06
       TOE 1.3283 TRA -.4461 TC3-5.9870 BAU- .9881
                                                                                                                                                                                             ST 2183.5 5R 147.7 55 852.8 CRT .9922 CRS -.9596 CST -.9773
      RDE .0892 RRA -.0455 RC3 .3889 FAU .06233
FDE 1.1703 FRA .4251 FC3-4.3803 BSP 15114
BDE 1.3313 BRA .4484 BC3 5.9996 FSP -1054
                                                                                                                                                                                            LSA 2342.7 MSA 169.0 SSA 16.9
                                                                                                                                                                                             EL1 2188.4 EL2 18.3 ALF
                                                                                                                                                                                                                                                        3.84
LAUNCH DATE DEC 5 1965
                                                                                                                   FLIGHT TIME 160.00
                                                                                                                                                                                                               ARRIVAL CATE MAY 14 1966
    HELIOCENTRIC CONIC
                                                                                                                 DISTANCE 467.490
     RL 147.4] LAL .00 LOL 72.65 VL 27.156 GAL -1.82 AZL 86.83 MCA 226.03 SMA 124.83 ECC .18354 INC 3.1746 V1 30.223 RP 108.93 LAP -2.28 LOP 298.64 VP 37.063 GAP 7.65 AZP 92.20 TAL 188.14 TAP 54.17 RCA 101.92 APO 147.75 V2 34.790 RC 145.874 GL 25.29 GP 2.14 ZAL 100.07 ZAP 158.22 ETS 3.88 ZAE 130.59 ETE 178.53 ZAC 55.59 ETC 162.70 CLP-158.32
    PLANETOCENTRIC CONIC
     C3 12.382 VHL 3.519 DLA 12.73 RAL 324.55 RAD 6567.5 VEL 11.566 PTH 2.D2 VHP 5.261 DPA -15.56 RAP 323.09 ECC 1.2D38 LNCH AZHTH LNCH TIME I-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                           LNCH TIME 2 26 30 2512.47
17 42 14 4343.58
3 54 25 2228.95
18 57 0 4102.34
5 17 28 1969.09
19 50 27 3934.96
            90.00
                                                                                                      61.26
                                                                                                                        182.08
                                                                                                                                                     102.74
                                                                                                                                                                         3 8 23
                                                                                                                                                                                                   1912.5
                                                                               -25.51
                                                                                                                                                                                                                         -23.50
                                                                                                                                                                                                                                                   53.17
                                                                                                                                                     62.04 18 54 37
104.26 4 31 34
60.59 20 5 22
            90.00
                                                                                  4.66
                                                                                                      180.01
                                                                                                                            178.02
                                                                                                                                                                                                    3743.6
                                                                                                                                                                                                                               .88
                                                                                                                                                                                                                                                  173.36
          100.00
                                                                               -26.55
                                                                                                       40.13
                                                                                                                       181.80
177.51
                                                                                                                                                                                                    1629.0
                                                                                                                                                                                                                          -24.33
                                                                                                                                                                                                                                                    32.04
          100.00
                                                                                 5.60
                                                                                                      161.75
                                                                                                                                                                                                    3502.3
                                                                                                                                                                                                                           1.64
                                                                                                                                                                                                                                                  155.20
                                                                                                                                                     108.43 5 50 17
56.67 20 56 1
                                                                                                                                                                         5 50 17
                                                                                                        19.48
          110.00
                                                                               -29.31
                                                                                                                       180.88
                                                                                                                                                                                                    1369.1
                                                                                                                                                                                                                          -26.51
                                                                                                                                                                                                                                                   11.41
          110.00
                                                                                                      147.55
                                                                                8.06
                                                                                                                            176.00
                                                                                                                                                                                                    3335.0
                                                                                                                                                                                                                             3.61
                                                                                                                                                                                                                                                  141.27
    DIFFERENTIAL CORRECTIONS
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                           SGT 4877.5 SGR 327.2 SG3 306.2

RRT - .4620 RRF - .4784 RTF .9359

SGB 4888.4 R23 .0501 R13 - .9360

SGI 4879.8 SG2 290.1 THA 178.22
                                                                                                                                                                                            ST 2293.3 SR 163.0 S5 861.0
CRT .9904 CRS -.9525 CST -.9791
      TOE 1.4021 TRA -.3486 TC3-6.0685 BAU 1.0065
      RDE .0986 RRA -.0536 RC3 .3846 FAU .05883
FDE 1.1525 FRA .4849 FC3-4.1136 BSP 15426
                                                                                                                                                                                            LSA 2449.4 MSA 165.4 SSA 17.6
      BDE 1.4056 BRA .3527 BC3 6.0807 FSP -1016
                                                                                                                                                                                            EL1 2299.0 EL2 22.4 ALF 4.03
                                                                                                                                                                                                             ARRIVAL DATE MAY 16 1966
LAUNCH CATE CEC 5 1965
                                                                                                                 FLIGHT TIME 162.00
                                                                                                               DISTANCE 473.327
    HELIOCENTRIC CONIC
      RL 147.41 LAL .00 LOL 72.65 VL 27.113 GAL -1.49 AZL 86.80 HCA 229.20 SMA 124.56 ECC .18527 INC 3.1969 V1 30.223 RP 108.93 LAP -2.42 LOP 301.80 VP 37.029 GAP 7.90 AZP 92.09 TAL 186.59 TAP 55.79 RCA 101.48 APO 147.63 V2 34.787 RC 148.138 GL 25.32 GP 1.98 ZAL 97.47 ZAP 159.40 ETS 3.90 ZAE 130.33 ETE 178.62 ZAC 57.55 ETC 162.99 CLP-159.49
    PLANETOCENTRIC CONIC
      C3 12.488 VHL 3.534 DLA 13.70 RAL 327.03 RAD 6567.5 VEL 11.570 PTH 2.02 VHP 5.396 OPA -15.11 RAP 325.11 ECC 1.2055
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 27 53 2547.98 -26.01 63.74 185.05 101.60 3 10 21 1948.0 -24.15 55.56 90.00 18 0 36 4311.72 3.64 178.22 180.71 61.90 19 12 28 3711.7 -.15 171.58 100.00 3 56 26 2262.39 -27.09 42.47 184.78 103.14 4 34 9 1662.4 -25.01 34.29 100.00 19 14 44 4072.54 4.60 160.10 180.18 60.43 20 22 37 3472.5 .63 153.57 110.00 5 20 53 1998.10 -29.02 21 53 183.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 44 11 13.00 107.3 5 4
                                                                                                                                                     60.43 20 22 37 3472.5
107.36 5 54 11 1398.2
56.47 21 11 57 3309.5
                                                                                                                       183.90
178.64
                               5 20 53 1998.19
20 6 47 3909.50
                                                                                                                                                                                                                         -27.25
                                                                                                                                                                                                                                                  13.35
          110.00
                                                                             -29.92
                                                                                                       21.53
                                                                                                                                                                                                                        2.64
                         20 6 47
                                                                               7.10
                                                                                                    146.19
                                                                                                                                                                                                                                                139.94
                                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                          SCT 4965.2 SGR 336.0 SG3 294.3

RRT -.4181 RRF -.4358 RTF ..9358

SCB 4976.5 R23 ..0474 R13 -.9358

SG1 4967.2 SG2 305.1 THA 178.37
                                                                                                                                                                                            ST 2402.1 SR 178.1 SS 867.8
CRT .9875 CRS -.9453 CST -.9807
      TOE 1.4775 TRA -.2431 TC3-6.1266 BAU 1.0248
     ROE .1081 RRA -.0616 RC3 .3787 FAU .05555
FOE 1.1347 FRA .5398 FC3-3.8508 BSP 15747
BOE 1.4814 BRA .2508 BC3 6.1383 FSP -981
                                                                                                                                                                                           LSA 2555.1 MSA 161.7 SSA 18.3
                                                                                                                                                                                             EL1 2408.5 EL2 28.0 ALF
                                                                                                                  FLIGHT TIME 164.00
                                                                                                                                                                                                              ARRIVAL DATE MAY 18 1966
LAUNCH DATE DEC 5 1965
   HELIOCENTRIC CONIC
                                                                                                                DISTANCE 479.148
     RL 147.41 LAL .00 LOL 72.65 VL 27.069 GAL -1.15 AZL 86.78 MCA 232.36 SMA 124.28 ECC .18716 INC 3.2172 V1 30.223 RP 108.94 LAP -2.55 LOP 304.97 VP 36.995 GAP 8.15 AZP 91.97 TAL 185.02 TAP 57.38 RCA 101.02 APO 147.54 V2 34.786 RC 150.390 GL 25.29 GP 1.85 ZAL 94.81 ZAP 160.54 ETS 3.96 ZAE 130.11 ETE 178.68 ZAC 59.54 ETC 163.29 CLP-160.62
    PLANETOCENTRIC CONIC
     C3 12.644 VHL 3.556 DLA 14.67 RAL 329.59 RAD 6567.5 VEL 11.577 PTH 2.02 VHP 5.535 DPA -14.62 RAP 327.15 ECC 1.2081
     LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 29 31 2584.41 -26.49 66.30 188.17 100.40 3 12 35 1984.4 -24.78 58.05 90.00 18 19 25 4280.59 2.64 176.48 183.56 61.80 19 30 45 3680.6 -1.15 169.85
                            3 58 44 2296.65
19 32 52 4043.58
5 24 36 2027.97
                                                                                                                         187.92
                                                                                                                                                     101.97 4 37 1
                                                                                                                                                                                                   1696.7
                                                                                                                                                                                                                         -25.67
          100.00
                                                                               -27.60
                                                                                                      44.89
                                                                                                                                                                                                                                                  36.62
                                                                                                    158.50
                                                                                                                            183.01
                                                                                                                                                       60.31
                                                                                                                                                                      20 40 16
                                                                                                                                                                                                   3443.6
                                                                                                                                                                                                                             -.35
          100.00
                                                                                 3.63
                                                                                                                                                                                                                                                 151.98
                                                                                                                          187.09
                                                                                                                                                     106.23 5 58 24
56.31 21 28 14
                                                                                                                                                                                                                                                   15.37
                                                                               -30,50
                                                                                                       23.65
                                                                                                                                                                                                   1428.0
                                                                                                                                                                                                                        -27.98
          110.00
                             20 23 29
                                                     3885.02
                                                                            6.18
                                                                                                     144.90
                                                                                                                            181.43
                                                                                                                                                                                                   3285.0
                                                                                                                                                                                                                             1.71
                                                                                                                                                                                                                                                  138.66
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                     SGT 3D43.3 SGR 344.5 SG3 282.7 ST 2514.0 SR 192.7 SS 875.2 RRT -.3748 RRF -.3931 RTF .9350 CRT .9834 CRS -.9375 CST -.9822 SG8 5055.1 R23 .0445 R13 -.9351 LSA 2664.2 MSA 158.9 SSA 18.8 SG1 5045.0 SG2 319.3 THA 178.53 ELI 2521.2 ELZ 34.9 ALF 4.31
       TOE 1.5576 TRA -.1247 TC3-6.1441 BAU 1.0405
      ROE .1176 RRA -.0697 RC3 .3703 FAU .05220
      FOE 1.1195 FRA .5969 FC3-3.5744 BSP 15972
      BDE 1.5621 BRA .1429 BC3 6.1553 FSP -940
```

```
ARRIVAL DATE MAY 20 1966
                                                                                  FLIGHT TIME 166.00
LAUNCH DATE DEC 5 1965
                                                                                DISTANCE 484.953
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 27.026 GAL -.80 AZL 86.76 MCA 235.52 SMA 124.01 ECC .18921 INC 3.2358 V1 30.223
RP 108.94 LAP -2.67 LOP 308.13 VP 36.963 GAP 8.40 AZP 91.83 TAL 183.44 TAP 58.96 RCA 100.55 APO 147.47 V2 34.785
RC 152.629 GL 25.18 GP 1.73 ZAL 92.10 ZAP 161.63 ET5 4.05 ZAE 129.91 ETE 178.74 ZAC 61.57 ETC 163.58 CLP-161.71
   PLANETOCENTRIC CONIC
    C3 12.856 VML 3.586 DLA 15.61 RAL 332.23 RAD 6567.5 VEL 11.586 PTH 2.03 VMP 5.678 DPA -14.07 RAP 329.21 ECC 1.2116
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 31 23 2621.71

18 38 36 4250.41

4 1 19 2331.68

19 51 21 4015.67

5 28 40 2058.39

20 40 29 3861.73
                                                                                      191.44
                                                                                                                                                           -25.38
                                                                                                          99.14
                                                                                                                          3 15 5
                                                                                                                                           2021.7
                                                        -26.92
                                                                          68.95
                                                                                                                        19 49 26
                                                                                                                                             3650.4
                                                                                                                                                                               168.16
                                                           1.67
                                                                          174,79
                                                                                          186.55
                                                                                                             61.73
         90.00
                                                                                                          100.73 4 40 10
60.22 20 58 17
105.04 6 2 58
56.18 21 44 51
                                                                                                                                             1731.7
                                                                                                                                                              -26.30
                                                                                                                                                                               39.03
                                                                          47.39
                                                                                         191.21
                                                         -28.07
       100.00
                                                                                                                                             3415.7
                                                                                                                                                              -1.30
                                                           2.69
                                                                         156.97
                                                                                         185.99
       100.00
                                                                                                                                            1458.4 -28.69
3261.7 .82
                                                                                      190.42
                                                                                                                                                                                17.45
                                                   -31.06
                                                                          25.84
       110.00
                                                                                                                                                                  .82
       110.00
                                                        5.30
                                                                         143.67
                                                                                          184.36
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MIO-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5124.0 SGR 353.1 SG3 272.0

RRT -.3345 RRF -.3542 RTF ..9352

SGB 5136.2 R23 ..0425 R13 -.9353

SGI 5125.4 SG2 332.7 THA 178.67
                                                                                                                                        ST 2619.0 SR 207.4 55 878.9
CRT .9788 CRS -.9303 CST -.9836
     TOE 1.6369 TRA -.0015 TC3-6.1444 BAU 1.0578
     ROE .1274 RRA -.0774 RC3 .3602 FAU .04927
                                                                                                                                        LSA 2765.9 MSA 155.9 SSA 19.3
EL1 2626.9 EL2 42.3 ALF 4.43
    FOE 1.1020 FRA .6463 FC3-3.3182 BSP 16300
    BOE 1.6418 BRA .0774 BC3 6.1549 FSP -913
                                                                                                                                                     ARRIVAL CATE MAY 22 1966
LAUNCH DATE DEC 5 1965
                                                                                  FLIGHT TIME 168.00
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 490.741
    RL 147.41 LAL .00 LOL 72.65 VL 26.983 GAL -.44 A7L 86.75 MCA 238.68 SMA 123.74 ECC .19145 INC 3.2531 V1 30.223
RP 108.94 LAP -2.78 LOP 311.29 VP 36.931 GAP 8.66 A7P 91.69 TAL 181.85 TAP 60.53 RCA 100.05 APO 147.43 V2 34.784
RC 154.855 GL 25.00 GP 1.62 7AL 89.35 ZAP 162.70 ETS 4.17 ZAE 129.74 ETE 178.80 ZAC 63.62 ETC 163.87 CLP-162.77
   PLANETOCENTRIC CONIC
    C3 13.130 VHL 3.624 DLA 16.53 RAL 334.94 RAD 6567.5 VEL 11.598 PTH 2.03 VHP 5.826 DPA -13.48 RAP 331.30 ECC 1.2161
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 33 30 2659.84 -27.30 71.67 194.85 97.82 3 17 49 2059.8 -25.94 63.27
       90.00 2 33 30 2659.84

90.00 18 58 6 4221.38

100.00 4 4 10 2367.45

100.00 20 10 7 3989.00

110.00 5 33 2 2089.40

110.00 20 57 44 3839.82
                                                                                                            61.69 20 8 27
99.44 4 43 37
60.16 21 16 36
103.80 6 7 51
56.07 22 1 44
                                                                                                                                              3621.4
                                                                                                                                                                -3.06
                                                            .73
                                                                          173.17
                                                                                          189.70
                                                                                                                                                              -26.90
                                                                                                                                              1767.5
                                                         -28.49
                                                                          49.96
                                                                                         194.65
                                                                                                                                              3389.0
                                                                                                                                                                 -2.20
                                                           1.78
                                                                          155.50
                                                                                         189.12
                                                                                                                                              1489.4
                                                                                                                                                              -29.37
                                                                                                                                                                                19.60
                                                         -31.59
                                                                           28.11
                                                                                      193.91
187.44
                                                                                                                                              3239.8
                                                                                                                                                                - .02
                                                         4,47
                                                                          142.52
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ST 2722.5 SR 221.9 SS 882.2
CRT .9736 CRS -.9231 CST -.9850
                                                                              SGT 5200.2 SGR 361.3 SG3 261.9
RRT -.2954 RRF -.3161 RTF .9355
    TOE 1.7193 TRA .1331 TC3-6.1094 BAU 1.0742
     ROE .1377 RRA -. 0849 RC3 .3478 FAU .04645
                                                                           SGB 5212.7 R23 .0403 R13 -.9355
SG1 5201.3 SG2 345.1 THA 178.82
                                                                                                                                LSA 2866.3 MSA 100.0 300 ....
EL1 2731.1 EL2 50.4 ALF 4.54
                                                                                                                                        LSA 2866.3 MSA 153.6 SSA 19.7
    FOE 1.0860 FRA .6953 FC3-3.0630 BSP 16553
BDE 1.7248 BRA .1579 BC3 6.1193 FSP -880
                                                                                                                                                     ARRIVAL DATE MAY 24 1966
                                                                                  FLIGHT TIME 170.00
LAUNCH DATE DEC 5 1965
                                                                                 DISTANCE 496.510
   HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
     C3 13.475 VHL 3.671 OLA 17.41 RAL 337.71 RAO 6567.5 VEL 11.613 PTH 2.03 VHP 5.979 OPA -12.85 RAP 333.39 ECC 1.2218
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 35 52 2698.70 -27.63

19 17 51 4193.75 -16

4 7 18 2403.83 -28.87

20 29 6 3963.85 .93

5 37 44 2120.90 -32.08

21 15 9 3819.55 3.69
                                                                                                              96.46 3 20 50
61.68 20 27 44
98.10 4 47 22
                                                                                                                                              2098.7
                                                                                       198.40
                                                                                                                                                           -26.45
         90.00
                                                                          74.47
                                                                                                                                                                -3.95
                                                                                                                                                                               165.00
                                                                                                                                              3593.8
                                                                                          193.00
                                                                          171.63
          90.00
                                                                                                                                              1803.8
                                                                                                                                                              -27.45
                                                                                                                                                                                44.08
                                                                                         198.22
                                                                           52.60
                                                                                                            60.12 21 35 9
102.50 6 13 5
55.99 22 18 49
                                                                                                                                                               -3.05
                                                                                                                                                                               147.60
                                                                          154.12 192.39
30.44 197.55
                                                                                                                                              3363.8
                                                                                                                                                             -30.02
                                                                                                                                              1520.9
                                                                                                                                                                                21.82
        110.00
                                                                                                                                              3219.5
                                                                                                                                                                -.79
                                                                                                                                                                                135.25
                                                                          141.46
                                                                                          190.66
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 5259.0 SGR 368.8 SG3 248.6

RRT -.2563 RRF -.2767 RTF .9379

SGB 5272.0 R23 .0364 R13 -.9379

SGI 5259.9 SG2 356.5 THA 178.97
                                                                                                                                         ST 2799.9 SR 236.7 SS 869.3
CRT .9696 CRS -.9192 CST -.9865
      TOE 1.7900 TRA .2519 TC3-6.0428 BAU 1.0902
      RDE .1489 RRA -. 0912 RC3 .3331 FAU .04357
                                                                                                                                         LSA 2937.5 MSA 147.9 SSA 19.9
     FDE 1.0541 FRA .7103 FC3-2.7992 BSP 17112
BDE 1.7962 BRA .2679 BC3 6.0520 FSP -892
                                                                                                                                       EL1 2809.3 EL2 57.8 ALF 4.69
                                                                                                                                                      ARRIVAL DATE MAY 26 1966
                                                                                   FLIGHT TIME 172.00
 LAUNCH DATE DEC 5 1965
                                                                                 DISTANCE 502.262
    HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 26.897 GAL .34 AZL 86.72 HCA 245.00 SMA 123.21 ECC .19653 INC 3.2844 VI 30.223 RP 108.94 LAP -2.98 LOP 317.62 VP 36.870 GAP 9.20 AZP 91.39 TAL 178.62 TAP 63.62 RCA 99.00 APO 147.42 V2 34.786 RC 159.265 GL 24.42 GP 1.45 ZAL 83.75 ZAP 164.73 ETS 4.51 ZAE 129.49 ETE 178.89 ZAC 67.82 ETC 164.42 CLP-164.79
    PLANETOCENTRIC CONIC
     C3 13.897 VHL 3.728 DLA 18.26 RAL 340.53 RAD 6567.5 VEL 11.631 PTH 2.04 VHP 6.137 DPA -12.18 RAP 335.50 ECC 1.2287
     C3 13.897 VHL 3.728 DLA 18.26 RAL 340.53 RAD 6567.5 VEL 11.631 PTH 2.04 VMP 6.137 DPA -12.18 RAP 335.50 ECC 1.2267 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 19 37 45 4167.77 -1.00 170.18 196.43 61.70 20 47 12 3567.8 -4.78 163.54 100.00 4 10 44 2440.73 -29.20 55.29 201.93 96.72 4 51 25 1840.7 -27.96 46.71 100.00 20 48 11 3940.44 .14 152.84 195.79 60.11 21 53 52 3340.4 -3.84 146.31 110.00 5 42 45 2152.81 -32.52 32.82 201.32 101.16 6 18 38 1552.8 -30.64 24.10 110.00 21 32 39 3801.13 2.99 140.49 194.01 55.93 22 36 0 3201.1 -1.50 134.29
                    4 10 44 2440.73
20 48 11 3940.44
5 42 45 2152.81
21 32 39 3801.13
                                                          2.99
                                       3801.13
                                                                          MID-COURSE EXECUTION ACCURACY
SGT 5331.3 SGR 376.1 SG3 242.7
RRT - 2189 RRF - .2402 RTF .9350
SGB 5344.5 R23 .0354 R13 -.9350
SGI 5331.9 SGZ 367.0 THA 179.11

SGB 5346.1 SGZ 367.0 THA 179.11

SGB 5346.2 SGZ 367.0 THA 179.11

SGZ 367.0 THA 179.11
    DIFFERENTIAL CORRECTIONS
     TOE 1.8904 TRA .4368 TC3-5.9199 BAU 1.1014
RDE .1599 RRA -.0988 RC3 .3160 FAU .04086
FDE 1.0561 FRA .7946 FC3-2.5443 BSP 16952
      BDE 1.8971 BRA .4479 BC3 5.9284 FSP -810
```

```
ARRIVAL DATE HAY 28 1966
LAUNCH DATE DEC 5 1965
                                                                                      FLIGHT TIME 174.00
                                                                                     DISTANCE 507.992
   HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 26.854 GAL .75 AZL 86.70 HCA 248.16 SMA 122.95 ECC .19940 INC 3.2988 V1 30.223 RP 108.93 LAP -3.06 LOP 320.78 VP 36.840 GAP 9.48 AZP 91.23 TAL 176.99 TAP 65.15 RCA 98.43 APO 147.46 VZ 34.788 RC 161.449 GL 24.02 GP 1.37 ZAL 80.93 ZAP 165.70 ETS 4.73 ZAE 129.39 ETE 178.93 ZAC 69.96 ETC 164.68 CLP-165.76
   PLANETOCENTRIC CONIC
     C3 J4.407 VHL 3.796 OLA 19.06 RAL 343.40 RAD 6567.6 VEL 11.653 PTH 2.05 VHP 6.302 DPA -11.48 RAP 337.62 ECC 1.2371
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-1 11ME INJ LAT

2 41 25 2778.07 -28.11

19 57 41 4143.76 -1.78

4 14 29 2477.96 -29.46

21 7 18 3919.10 -.59

5 48 7 2184.99 -32.92

21 50 9 3784.84 2.37
                                                                                                              93.61 3 27 43
61.73 21 6 45
95.30 4 55 47
60.11 22 12 37
99.77 6 24 32
55.89 22 53 14
                                                                                                                                                                  -27.31
                                                                                          205.88
         90.00
                                                                                                                                                2178.1
                                                                             80.23
                                                                                                                                                                                       71.65
                                                                             168.84
                                                                                              199.99
                                                                                                                                                    3543.8
                                                                                                                                                                      -5.54
                                                                                                                                                                                       152.19
         90.00
                                                                             168.04
                                                                                                                                                   1878.0
3319.1
                                                                                              205.76
                                                                                                                                                                    -28.42
                                                                                                                                                                                        49.38
        100.00
        100.00
                                                                            151.67
                                                                                             199.32
                                                                                                                                                                      -4.56
                                                                                                                                                                                      145.13
                                                                                          205.23
                                                                                                                                               1585.0 -31.22
3184.8 -2.12
                                                                              35.24
                                                                                                                                                                                       26.43
        110.00
        110.00
                                                                            139.64
                                                                                              197.48
                                                                                                                                                                                       133.44
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5392.2 SGR 382.7 SG3 233.4
RRT -.1821 RRF -.2030 RTF .9353
SGB 5405.7 R23 .0324 R13 -.9354
                                                                                                                                               ST 2999.6 SR 264.8 SS 882.4
CRT .9568 CRS -.9028 CST -.9881
     TOE 1.9761 TRA .5994 TC3-5.7813 BAU 1.1150
    ROE - .1721 RRA - .1048 RC3 .2974 FAU .03827
    FDE 1.0397 FRA .8364 FC3-2.2997 BSP 17213
BDE 1.9835 BRA .6085 BC3 5.7890 FSP -784
                                                                                                                                               LSA 3134.1 MSA 151.4 SSA 19.9
                                                                                 SG1 5392.6 SG2 376.3 THA 179.26
                                                                                                                                               EL1 3010.2 EL2 76.7 ALF 4.83
LAUNCH DATE DEC 5 1965
                                                                                      FLIGHT TIME 176.00
                                                                                                                                                            ARRIVAL DATE MAY 30 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 513.700
    RL 147.4] LAL .00 LOL 72.65 VL 26.812 GAL 1.18 AZL 86.69 MCA 251.33 SMA 122.69 ECC .20252 INC 3.3126 V1 30.223 RP 108.92 LAP -3.14 LOP 323.95 VP 36.812 GAP 9.77 AZP 91.06 TAL 175.35 TAP 66.68 RCA 97.84 APO 147.54 V2 34.791 RC 163.619 GL 23.56 GP 1.31 ZAL 78.11 ZAP 166.65 ETS 4.98 ZAE 129.31 ETE 178.97 ZAC 72.12 ETC 164.93 CLP-166.71
   PLANETOCENTRIC CONIC
    C3 15.015 VHL 3.875 DLA 19.82 RAL 346.29 RAD 6567.6 VEL 11.679 PTH 2.05 VHP 6.474 DPA -10.74 RAP 339.75 ECC 1.2471 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 44 38 2818.23 -28.24 83.16 209.79 92.15 3 31 36 2218.2 -27.65 74.54
                                                                                                              92.15 3 31 36
61.78 21 26 15
93.86 5 0 28
60.13 22 31 19
98.36 6 30 47
55.86 23 10 23
                    20 17 33 4122.00
4 18 33 2515.37
21 26 19 3900.10
5 53 49 2217.30
22 7 32 3770.93
                                                                            167.63
                                                                                                                                                                                       160.96
                                                                                              203.66
                                                                                                                                                    3522.0
                                                                                                                                                                       -6.23
         90.00
                                                             -2.48
                                                                        60.79
150.63
                                                           -29.66
                                                                                              209.70
                                                                                                                                                    1915.4
                                                                                                                                                                      -28.81
                                                                                                                                                                                        52.09
        100.00
        100.00
                                                            -1.23
                                                                                              202.97
                                                                                                                                                    3300.1
                                                                                                                                                                       -5.20
                                                                                                                                                                                      144.08
                                                                                                                                                 1617.3
       110.00
                                                           -33.27
                                                                                            209.25
                                                                                                                                                                      -31.75
                                                                                                                                                                                        28.80
                                                                         138.91
       110.00
                                                           1.84
                                                                                             201.05
                                                                                                                                                    3170.9
                                                                                                                                                                      -2.65
                                                                                                                                                                                       132.71
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                              SGT 5450.7 SGR 388.8 SG3 224.8 ST 3074.8 SR 278.9 SS 878.5 SGRT -.1463 RRF -.1671 RTF .9358 CRT .9512 CRS -.8970 CST -.9890 SGB 5464.5 R23 .0298 R13 -.9359 LSA 3206.3 MSA 151.9 SSA 19.8 SGI 5451.0 SG2 384,6 THA 179.40 EL1 3086.3 EL2 85.7 ALF 4.93
    TOE 2.0629 TRA .7747 TC3-5.6131 BAU 1.1281

RDE .1852 RRA -.1102 RC3 .2772 FAU .03587

FDE 1.0240 FRA .8793 FC3-2.0683 BSP 17434

BDE 2.0712 BRA .7825 BC3 5.6200 FSP -757
                                                                                     FLIGHT TIME 178.00
                                                                                                                                                           ARRIVAL DATE JUN 1 1966
LAUNCH DATE DEC 5 1965
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 519.385
    RL 147.41 LAL .00 LOL 72.65 VL 26.770 GAL 1.63 A7L 86.67 HCA 254.49 SMA 122.43 ECC .20590 INC 3.3260 V1 30.223 RP 108.91 LAP -3.20 LOP 327.12 VP 36.785 GAP 10.07 AZP 90.89 TAL 173.70 TAP 68.19 RCA 97.23 APO 147.64 V2 34.794
    RC 165.775 GL 23.04 GP 1.25 7AL 75.30 7AP 167.58 ETS 5.27 7AE 129.25 ETE 179.01 7AC 74.30 ETC 165.16 CLP-167.64
   PLANFTOCENTRIC CONIC
    C3 15.732 VHL 3.966 DLA 20.52 RAL 349.20 RAD 6567.6 VEL 11.710 PTH 2.06 VHP 6.653 DPA -9.97 RAP 341.88 ECC 1.2589
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 48 11 2858.43 -28.31 86.09 213.78 90.67 3 35 49 2258.4 -27.92 77.48
                                                                                                            90.67 3 35 49
61.84 21 45 36
92.41 5 5 31
60.16 22 49 50
96.92 6 37 22
55.84 23 27 21
                                                       -28.31
                     20 37 13 4102.81 -3.09

4 22 58 2552.75 -29.80

21 45 6 3883.72 -1.79

5 59 52 2249.61 -33.56

22 24 42 3759.63 1.41
                                                                                                                                                   3502.8
                                                                                                                                                                      -6.84
                                                                            166.56
                                                                                             207.44
                                                                                                                                                                                       159.88
         90.00
                                                                                        213.74
206.71
213.38
204.71
                                                                            63.56
                                                                                                                                                   1952.8
                                                                                                                                                                    -29.15
                                                                                                                                                                                       54.82
        100.00
                                                                           149.73
                                                                                                                                                   3283.7
                                                                                                                                                                    -5.75
                                                                                                                                                                                      143.18
        100.00
                                                                                                                                              1649.6
                                                                                                                                                                -32.24
                                                                            40.18
                                                                                                                                                                                       31.19
        110.00
                                                                        138.32
                                                                                             204.71
                                                                                                                                                   3159.6
                                                                                                                                                                    -3.08
                                                                                                                                                                                       132.12
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 5503.4 SCR 394.3 SC3 216.5 ST 3140.4 SR 292.8 SS 871.9

RRT -.1108 RRF -.1316 RTF .9367 CRT .9459 CRS -.8917 CST -.9898

SCB 5517.5 R23 .0275 R13 -.9367 LSA 3268.6 MSA 153.0 S5A 19.5

SCI 5503.6 SC2 391.8 THA 179.54 EL1 3152.6 EL2 94.6 ALF 5.04
    TOE 2.1502 TRA .9610 TC3-5.4137 BAU 1.1399
    RDE .1993 RRA -.1148 RC3 .2559 FAU .03358
    FDE 1.0074 FRA .9200 FC3-1.8477 BSP 17649
BDE 2.1594 BRA .9679 BC3 5.4197 FSP -733
LAUNCH DATE DEC 5 1965
                                                                                      FLIGHT TIME 180.00
                                                                                                                                                            ARRIVAL DATE JUN 3 1966
                                                                                     DISTANCE 525.045
  HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 26.728 GAL 2.09 AZL 86.66 HCA 257.65 SMA 122.18 ECC .20957 INC 3.3389 V1 30.223
RP 108.90 LAP -3.26 LOP 330.28 VP 36.758 GAP 10.38 AZP 90.71 TAL 172.05 TAP 69.71 RCA 96.58 APO 147.79 V2 34.798
RC 167.915 GL 22.47 GP 1.20 ZAL 72.51 ZAP 168.49 ETS 5.61 ZAE 129.20 ETE 179.05 ZAC 76.49 ETC 165.38 CLP-168.55
  PLANETOCENTRIC CONIC
    C3 16.572 VHL 4.071 DLA 21.16 RAL 352.11 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 6.841 DPA -9.18 RAP 344.02 ECC 1.2727
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 52 5 2898.46 -28.31 89.02 217.86 89.21 3 40 23 2298.5 -28.12 80.36 90.00 20 56 33 4086.88 -3.62 165.64 211.30 61.90 22 4 39 3486.5 -7.35 158.95
                                                                                      217.86
211.30
217.86
210.54
217.60
                                                                                                                89.21 3 40 23 2298.5
61.90 22 4 39 3486.5
90.96 5 10 56 1989.9
60.18 23 8 3 3270.2
95.47 6 44 17 1681.8
55.83 23 44 4 3151.1
                     4 27 46 2589.94
22 3 33 3870.24
                                                           -29.88
                                                                              66.32
                                                                                                                                                                    -29.43
                                                                                                                                                                                       57.55
        100.00
                                                                         148.99
                                                                                                                                                                      -6.20
                                                                                                                                                                                       142.43
                                                           -2.24
       100.00
                                                                                                                                                  1681.8
                        6 6 15 2281.79
22 41 33 3751.15
                                                                              42.66
                                                                                                                                                                  -32.67
-3.41
                                                                                                                                                                                        33.61
                                                           -33.80
        110.00
                                                                       137.88
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                      131.68
                       22 41 33
                                                           1.08
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
SGT 5550.8 SGR 399.0 SG3 208.6 ST 3200.1 SR 306.3 SS 866.0
RRT -.0748 RRF -.0948 RTF .9372 CRT .9406 CRS -.8867 CST -.9906
SGB 5565.1 R23 .0245 R13 -.9372 LSA 3325.6 MSA 155.0 SSA 19.2
SG1 5550.9 SG2 397.9 THA 179.69 EL1 3213.0 EL2 103.6 ALF 5.15
   DIFFERENTIAL CORRECTIONS
    TOE 2.2409 TRA 1.1625 TC3-5.1798 BAU 1.1488
    ROE .2142 RRA -.1186 RC3 .2337 FAU .03123
FOE .9934 FRA .9627 FC3-1.6316 BSP 17765
    BDE 2.2511 BRA 1.1686 BC3 5.1850 FSP -704
```

ARRIVAL DATE JUN 5 1966

LAUNCH DATE DEC 5 1965

```
HELIOCENTRIC CONIC
                                                                        DISTANCE 530.675
    RL 147.41 LAL .00 LOL 72.65 VL 26.687 GAL 2.58 AZL 86.65 MCA 260.82 SMA 121.93 ECC .21356 INC 3.3515 V1 30.223
RP 108.89 LAP -3.31 LOP 333.45 VP 36.732 GAP 10.71 AZP 90.54 TAL 170.40 TAP 71.22 RCA 95.89 APO 147.97 VZ 34.803
RC 170.040 GL 21.84 GP 1.15 ZAL 69.76 ZAP 169.38 ETS 6.00 ZAE 129.16 ETE 179.09 ZAC 78.70 ETC 165.58 CLP-169.44
   PLANETOCENTRIC CONIC
    C3 17.551 VHL 4.189 DLA 21.75 RAL 355.01 RAC 6567.7 VEL 11.787 PTH 2.08 VMP 7.039 DPA -8.35 RAP 346.16 ECC 1.2888
                                                                           222.00
21*
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00 2 56 22 2938.08

90.00 21 15 24 4073.31

100.00 4 32 56 2626.71

100.00 22 21 31 3859.91

110.00 6 12 59 2313.70

110.00 22 57 58 3745.68
                                                                                            87.76
                                                                                                                         2338.1
                                                                                                                                         -28.25
                                                  -28.24
                                                                 91.92
                                                                                                           3 45 20
                                                                                                                                                           83.25
                                                                                                61.95 22 23 18
                                                                                                                            3473.3
                                                                                                                                           -7.76
                                                                                                                                                          158.20
                                                   -4.04
                                                                 164.90
                                                  -29.89
                                                                  69.06
                                                                               222.04
                                                                                                89.52
                                                                                                           5 16 43
                                                                                                                            2026.7
                                                                                                                                           -29.64
                                                                                                                                                           60.26
                                                                                                60.21 23 25 51
94.01 6 51 33
55.83 24 0 24
                                                                           214.43
                                                                                                                                                      141.86
                                                                                                                            3259.9
                                                                                                                                           -6.54
                                                   -2.59
                                                                 148.42
                                                                45.14 221.89
137.60 212.27
                                                                                                                            1713.7
                                                                                                                                          -33.05
                                                                                                                                                           36.02
                                                 -33.98
                                                                                                                                                         131.39
                                                                                                                          3145.7
                                                                                                                                          -3.61
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCUMANT
SCT 5594.8 SGR 403.1 SG3 201.0
RRT -.0400 RRF -.0597 RTF .9382
SGB 5609.3 R23 .0219 R13 -.9382
                                                                                                                       ST 3242.8 SR 319.5 SS 856.4
CRT .9355 CRS -.8822 CST -.9913
    TDE 2.3275 TRA 1.3723 TC3-4.9333 BAU 1.1586
    RDE .2303 RRA -.1214 RC3 .2112 FAU .02912
FDE .9771 FRA 1.0020 FC3-1.4364 BSP 17964
                                                                                                                       LSA 3365.4 MSA 157.4 SSA 18.7
                                                                    SG1 5594.8 SG2 402.8 THA 179.83
                                                                                                                        EL1 3256.6 EL2 112.4 ALF
    BOE 2.3389 BRA 1.3776 BC3 4.9378 FSP -681
                                                                                                                                                             5.27
                                                                        FLIGHT TIME 184.00
                                                                                                                                   ARRIVAL DATE JUN 7 1966
LAUNCH DATE DEC 5 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 536.274
   RL 147.41 LAL .00 LOL 72.65 VL 26.645 GAL 3.09 AZL 86.64 MCA 263.98 SMA 121.69 ECC .21788 INC 3.3639 V1 30.223
RP 108.87 LAP -3.35 LOP 336.62 VP 36.708 GAP 11.06 AZP 90.35 TAL 168.75 TAP 72.73 RCA 95.17 APO 148.20 V2 34.808
RC 172.148 GL 21.17 GP 1.11 ZAL 67.05 ZAP 170.26 ETS 6.45 ZAE 129.13 ETE 179.14 ZAC 80.93 ETC 165.77 CLP-170.32
  PLANETOCENTRIC CONIC
    C3 18.685 VHL 4.323 OLA 22.27 RAL 357.89 RAD 6567.8 VEL 11.835 PTH 2.10 VHP 7.247 OPA -7.51 RAP 348.30 ECC 1.3075
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 1 5 2977.06
21 33 40 4063.58
4 38 31 2662.88
22 38 55 3852.98
6 20 3 2345.24
23 13 52 3743.39
                                                                            226.18
                                                                                                                         2377.1
                                                  -28.10
                                                                94.76
                                                                                             86.34 3 50 42
                                                                                                                                        -28.31
                                                                                                                                                           86.10
       90.00
                                                                                                61.99 22 41 23
88.10 5 22 54
60.23 23 43 8
                                                                 164.36
                                                                                                                             3463.6
                                                                                                                                             -8.07
                                                                                                                                                           157.65
        90.00
                                                    -4.35
                                                                               219.23
                                                  -29.84
                                                                 71.74
                                                                               226.28
                                                                                                                             2062.9
                                                                                                                                           -29.78
                                                                                                                                                           62.94
      100.00
                                                                           218.38
      100.00
                                                   -2.83
                                                                148.04
                                                                                                                             3253.0
                                                                                                                                            -6.77
                                                                                                                                                          141.47
                                                                                                                                      -33.37
                                                                                                92.56 6 59 8
55.82 24 16 16
                                                 -34.10
                                                                 47.59
                                                                                                                            1745.2
                                                                                                                                                           38.43
      110.00
      110.00
                                                    .79
                                                                137.48
                                                                               216.13
                                                                                                                            3143.4
                                                                                                                                           -3.70
                                                                                                                                                          131.27
                                                                                                                ORBIT DETERMINATION ACCURACY
ST 3274.6 SR 332.2 SS 845.4
CRT .9307 CRS -.8780 CST -.9919
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5634.3 SGR 406.5 SG3 193.6
RRT -.0053 RRF -.0246 RTF .9393
    TDE 2.4141 TRA 1.5944 TC3-4.6686 BAU 1.1672
    RDE .2474 RRA -.1231 RC3 .1888 FAU .02710
                                                                SGB 5648.9 R23 .0196 R15 -.9393
SGB 5648.9 R23 .0196 R13 -.9393
SG1 5634.3 SG2 406.5 THA 179.98
           .9608 FRA 1.0408 FC3-1.2557 BSP 18148
                                                                                                                        LSA 3394.4 MSA 160.3 SSA 18.2
                                                                                                                      EL1 3289.2 EL2 120.9 ALF 5.40
    BDE 2.4268 BRA 1.5992 BC3 4.6724 FSP -659
                                                                                                                                  ARRIVAL CATE JUN 9 1966
LAUNCH DATE DEC 5 1965
                                                                        FLIGHT TIME 186.00
                                                                       DISTANCE 541.837
    PLANETOCENTRIC CONIC
                                                        .74 RAD 6567.8 VEL 11.890 PTH 2.11 VHP 7.467 DPA -6.64 RAP 350.45 ECC 1.3291
    C3 19.996 VHL 4.472 OLA 22.72 RAL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           84.96 3 56 29
62.02 22 58 49
86.73 5 29 29
60.24 23 59 45
                 3 6 14 3015.17
21 51 11 4057.54
4 44 31 2698.31
22 55 36 3849.64
6 27 26 2376.32
23 29 10 3744.38
                                                 -27.90
                                                                97.53 230.41
                                                                                                           3 56 29 2415.2 -28.31 88.89
                                                   -4.55
                                                                164.02
                                                                              223.25
                                                                                                                            3457.5
                                                                                                                                           -8.25
                                                                                                                                                         157.30
                                                                           230.56
      100.00
                                                 -29.73
                                                                 74.37
                                                                                                                            2098.3
                                                                                                                                          -29.87
                                                                                                                                                           65.57
                                                                                                                                                       141.28
                                                                147.86
                                                                              222.37
                                                                                                                            3249.6
                                                                                                                                           -6.88
      100.00
                                                   -2.94
                                                                 50.02 230.65
137.53 220.02
                                                                                                91.13 7 7 2
55.83 24 31 34
                                                                                                                            1776.3
                                                                                                                                          -33.63
                                                                                                                                                          40.81
      110.00
                                                 -34.17
                                                                137.53
                                                                                                                            3144.4
                                                                                                                                          -3.66
                                                                                                                                                          131.32
                                                   .83
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 3295.6 SR 344.1 SS 833.9
CRT .9261 CR5 -.8742 CST -.9925
                                                                   SGT 5668.5 SGR 409.2 SG3 186.6
RRT .0294 RRF .0109 RTF .9405
SGB 5683.2 R23 -.0169 R13 .9405
    TOE 2.5006 TRA 1.8303 TC3-4.3882 BAU 1.1740
    RDE .2655 RRA -.1236 RC3 .1668 FAU .D2512
FDE .9455 FRA 1.D794 FC3-1.D876 BSP 18318
BDE 2.5146 BRA 1.8344 BC3 4.3914 FSP -638
                                                                                                                       LSA 3412.9 MSA 163.6 SSA 17.7
                                                                                                                       EL1 3311.0 EL2 129.3 ALF 5.53
                                                                   SG1 5668.5 SG2 409.0 THA .12
                                                                        FLIGHT TIME 188.00
                                                                                                                                   ARRIVAL DATE JUN 11 1966
                                                                        DISTANCE 547.361
   RL 147.41 LAL .0D LOL 72.65 VL 26.564 GAL 4.20 AZL 86.61 HCA 270.31 SMA 121.21 ECC .22770 INC 3.3883 V1 30.223 RP 108.83 LAP -3.39 LOP 342.97 VP 36.661 GAP 11.81 AZP 89.98 TAL 165.45 TAP 75.76 RCA 93.61 APO 148.81 V2 34.821 RC 176.312 GL 19.73 GP 1.03 ZAL 61.81 ZAP 171.99 ETS 7.61 ZAE 129.10 ETE 179.22 ZAC 85.41 ETC 166.08 CLP-172.05
  PLANETOCENTRIC CONIC
                                                                                                  2.13 VHP 7.701 DPA -5.76 RAP 352.59 ECC 1.3540
    C3 21.508 VHL 4.638 DLA 23.11 RAL 3.53 RAD 6567.9 VEL 11.954 PTH
   ENCH A7MTH LNCH TIME LFI TIME IN LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 11 52 3052.22 -27.65 100.21 234.65 83.64 4 2 44 2452.2 -28.24 91.60 90.00 22 7 51 4055.40 -4.61 163.90 227.30 62.03 23 15 27 3455.4 -8.32 157.18
                 22 7 51 4055.40
4 50 55 2732.82
23 11 29 3850.03
6 35 6 2406.88
23 43 47 3748.74
                                                                                                85.39 5 36 28
60.24 24 15 39
                                                                                                                            2132.8
                                                                                                                                           -29.89
      100.00
                                                  -29.57
                                                                 76.93
                                                                               234.86
                                                                                                                                                            68.14
                                                                                                                                      -6.87
-33.84
                                                                            226.37
235.09
                                                                                                                            3250.0
                                                                                                                                                          141.30
      100.00
                                                   -2.93
                                                                147.88
                                                                                                                                           -6.87
      110.00
                                                 -34.18
                                                                 52.40
                                                                                                89.72
                                                                                                            7 15 13
                                                                                                                            1806.9
                                                                                                                                                            43.17
                                                                                                89:72 ...
55:83 24 46 16 3148.7 -3.30
ACCURACY ORBIT DETERMINATION ACCURACY
TT 3310.8 SR 355.2 SS 8
                                                   .99
                                                                                                                                                          131.55
      110.00
                                                                137.76
                                                                              223.93
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 3310.8 SR 355.2 SS 823.6

CRT .9215 CRS -8708 CST -.9931

LSA 3426.0 MSA 167.2 SSA 17.1

EL1 3326.9 EL2 137.3 ALF 5.66
                                                                  SCT 5699.1 SCR 411.2 SC3 179.9

RRT .0648 RRF .0475 RTF .9417

SCB 5713.9 R23 -.0139 R13 .9417

SCI 5699.2 SC2 410.4 THA .27
    TOE 2.5905 TRA 2.0837 TC3-4.0916 BAU 1.1772
   RDE .2847 RRA -.1227 RC3 .1455 FAU .02313
FDE .9327 FRA 1.1200 FC3 -.9311 BSP 18375
```

FLIGHT TIME 182.00

BDE 2.6061 BRA 2.0873 BC3 4.0942 FSP -612

ARRIVAL DATE JUN 13 1966

LAUNCH DATE DEC 5 1965

```
DISTANCE 552.840
    HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 26.524 GAL 4.79 AZL 86.60 HCA 273.48 SMA 120.97 ECC .23326 INC 3.4005 V1 30.223 RP 108.81 LAP -3.39 LOP 346.14 VP 36.639 GAP 12.21 AZP 89.79 TAL 163.81 TAP 77.29 RCA 92.75 APO 149.19 V2 34.828 RC 178.366 GL 18.98 GP 1.00 ZAL 59.29 ZAP 172.84 ETS 8.37 ZAE 129.08 ETE 179.26 ZAC 87.66 ETC 166.21 CLP-172.91
    PLANETOCENTRIC CONIC
     C3 23.248 VHL 4.822 DLA 23.44 RAL 6.27 RAD 6567.9 VEL 12.026 PTH 2.15 VHP 7.949 DPA -4.86 RAP 354.73 ECC 1.3826 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 17 59 3088.01 -27.35 102.79 238.91 82.38 4 9 27 2488.0 -28.13 94.21 90.00 22 23 34 4057.35 -4.55 164.01 231.36 62.02 23 31 11 3457.3 -8.26 157.29 100.00 4 57 45 2766.31 -29.36 79.39 239.18 84.11 5 43 52 2166.3 -29.86 70.63 100.00 23 26 28 3854.28 -2.78 148.11 230.38 60.23 24 30 43 3254.3 -6.73 141.54 110.00 6 43 4 2436.86 -34.15 54.74 239.55 88.33 7 23 40 1836.9 -34.00 45.50 110.00 D 1 35 3756.49 1.29 138.16 227.84 55.84 1 4 12 3156.5 -3.20 131.95
                                                                           6.27 RAD 6567.9 VEL 12.026 PTH 2.15 VHP 7.949 DPA
                                                                                                                                                                                  -4.86 RAP 354.73 ECC 1.3826
                                                                                               4.01 231.36 62.02 23 31 11

9.39 239.18 84.11 5 43 52

8.11 230.38 60.23 24 30 43

4.74 239.55 88.33 7 23 40

8.16 227.84 55.84 1 4 12

MID-COURSE EXECUTION ACCURACY
                                                              -34.15 5-..
1.29 138.16
MID-(
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                             MID-COURSE EXECUTION ACCUMALT
SCT 5724.6 SGR 412.6 SG3 173.4
RRT .0994 RRF .0827 RT .9431
SGB 5739.5 R23 -.0116 R13 .9431
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 3309.8 SR 365.3 SS 810.7
CRT .9171 CRS -.8675 CST -.9936
     TOE 2.6758 TRA 2.3482 TC3-3.7975 BAU 1.1809
     ROE .3049 RRA -.1204 RC3 .1254 FAU .02132
FDE .9180 FRA 1.1588 FC3 -.7939 BSP 18528
                                                                                                                                                                       LSA 3422.9 MSA 170.9 SSA 16.6
                                                                                                                                                                       EL1 3326.8 EL2 144.9 ALF 5.79
                                                                                              SG1 5724.8 SG2 410.5 THA .41
     BOE 2.6931 BRA 2.3513 BC3 3.7996 FSP -592
                                                                                                                                                                                        ARRIVAL CATE JUN 15 1966
                                                                                                      FLIGHT TIME 192.00
LAUNCH DATE DEC 5 1965
                                                                                                     DISTANCE 558.267
   HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 26.485 GAL 5.42 AZL 86.59 MCA 276.65 SMA 120.74 ECC .23933 INC 3.4128 VI 30.223
RP 108.78 LAP -3.39 LOP 349.32 VP 36.618 GAP 12.65 AZP 89.60 TAL 162.18 TAP 78.83 RCA 91.85 APO 149.64 VZ 34.836
RC 180.400 GL 18.20 GP .97 ZAL 56.84 ZAP 173.68 ETS 9.32 ZAE 129.07 ETE 179.30 ZAC 89.91 ETC 166.31 CLP-173.76
    PLANETOCENTRIC CONIC
     C3 25.249 VHL 5.025 DLA 23.71 RAL 8.93 RAD 6568.0 VEL 12.109 PTH 2.17 VHP 8.214 DPA
                                                                                                                                                                                   -3.95 RAP 356.87 ECC 1.4155
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 24 36 3122.38 -27.02 105.24 243.18 81.10 4 16 30 2822 4 -27 06 06 71
                                                                                               15.25 243.18 81.19 4 16 39
4.35 225.40 61.99 23 45 57
1.77 243.51 82.88 5 51 39
8.56 234.38 60.20 24 44 53
7.03 244.02 86.98 7 32 22
8.74 231.75 55.85 1 17 28
MID-COURSE EXECUTION ACCURACY
          90.00 3 24 36 3122.38 -27.02

90.00 22 38 13 4063.49 -4.36

100.00 5 5 0 2798.67 -29.11

100.00 23 40 30 3862.43 -2.51

110.00 6 51 16 2466.25 -34.07

110.00 0 14 40 3767.63 1.71
                                                                                                                                                                          2522.4
                                                                                                                                                                               3463.5
                                                                                           164.35
                                                                                           81.77 243.51
148.56 234.38
57.03 244.02
138.74 221
                                                                                                                                                                               2198.7
                                                                                                                                                                                                  -29.79
                                                                                                                                                                                                                          73.03
                                                                                                                                                                               3262.4
                                                                                          148.56
         100.00
                                                                                                                                                                                                 -34.11
-2.78
                                                                                                                                                                              1866.2
                                                                                                                                                                              3167.6
                                                                                          138.74
          110.00
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5745.4 SGR 413.2 SG3 167.2
RRT .1342 RRF .1181 RTF .9448
SGB 5760.3 R23 -0093 R13 .9448
                                                                                                                                                                        ST 3299.6 SR 374.3 SS 797.8
CRT .9127 CRS -.8644 CST -.9942
      TOE 2.7611 TRA 2.6283 TC3-3.5017 BAU 1.1826
                                                                                            RRT .1342 RRF .1181 RTF .9448 CRT .9127 CRS -.8644 CST -.9942
SGB 5760.3 R23 -.0093 R13 .9448 LSA 3410.8 MSA 174.7 SSA 16.0
SGI 5745.7 SG2 409.5 THA .56 ELI 3317.3 EL2 152.1 ALF 5.92
     ROE .3260 RRA -.1166 RC3 .1065 FAU .01958
FOE .9042 FRA 1.1980 FC3 -.6714 BSP 18660
BDE 2.7803 BRA 2.6308 BC3 3.5033 FSP -573
                                                                                                                                                                                       ARRIVAL DATE JUN 17 1966
                                                                                                     FLIGHT TIME 194.00
LAUNCH DATE OFC 5 1965
                                                                                                     DISTANCE 563.635
    HELIOCENTRIC CONIC
     RL 147.41 LAL .00 LOL 72.65 VL 26.445 GAL 6.08 A7L 86.57 HCA 279.82 SMA 120.51 ECC .24594 INC 3.4252 V1 30.223 RP 108.76 LAP -3.37 LOP 352.49 VP 36.597 GAP 13.11 A7P 89.41 TAL 160.56 TAP 80.38 RCA 90.87 APO 150.15 V2 34.845 RC 182.414 GL 17.42 GP .94 7AL 54.48 ZAP 174.52 ETS 10.54 ZAE 129.06 ETE 179.34 ZAC 92.17 ETC 166.40 CLP-174.60
    PLANETOCENTRIC CONIC
     C3 27.552 VHL 5.249 DLA 23.92 RAL 11.52 RAD 6568.1 VEL 12.204 PTH 2.19 VHP 8.498 DPA -3.03 RAP 359.01 ECC 1.4534
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  80.07 4 24 19
61.95 23 59 39
5 59 49
                         NCH TIME L-1 11ME 1 26.66
3 31 44 3155.24 -26.66
22 51 45 4073.89 -4.02
5 12 39 2829.87 -28.82
23 53 32 3874.49 -2.10
6 59 40 2495.03 -33.94
0 26 55 3782.10 2.27
                                                                                                          247.44
                                                                                                                                                                                                -27.76
                                                                                       107.59
                                                                                                                                                       4 24 19 2555.2
23 59 39 3473.9
           90.00
                                                                                                                                                                              3473.9
                                                                                                                                                                                                                       158.23
                                                                                                                                                                                                   -7.74
                                                                                                               239.43
                                                                                         164.94
           90.00
                                                                                                                                      81.72 5 59 49
60.17 24 58 6
                                                                                                                                                                                                                        75.34
                                                                                                               247.83
                                                                                                                                                                              2229.9
                                                                                                                                                                                                   -29.67
                                                                                           84.04
          100.00
                                                                                                                                                                          2229.9
3274.5
                                                                                                                                                                                                                        142.67
                                                                                                                                                                                                    -6.05
                                                                                         149.22
                                                                                                               238.36
          100.00
                                                                                                           248.49
                                                                                                                                      85.66 7 41 15
55.88 1 29 57
                                                                                                                                                                                                 -34.17
-2.23
                                                                                                                                                                                                                        50.04
                                                                                                                                                                             1895.0
                                                                                            59.27
          110.00
                                                                                                                                                                          3182.1
                                                                                         139.50
                                                                                                              235.64
                                                                                                                                                                                                                       133.29
          110.00
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 5761.9 SGR 413.2 SG3 161.2

RRT .1691 RRF .1537 RTF .9467

SGB 5776.7 R23 -.0073 R13 .9466

SGI 5762.3 SG2 407.2 THA .70
                                                                                                                                                                      ST 3281.6 SR 382.1 SS 785.3 CRT .9085 CRS -.8616 CST -.9947 LSA 3391.1 MSA 178.3 SSA 15.4 EL1 3300.0 EL2 158.8 ALF 6.05
      TOE 2.8474 TRA 2.9259 TC3-3.2067 BAU 1.1816
     ROE .3481 RRA -.1110 RC3 .0892 FAU .01789
FOE .8915 FRA 1.2382 FC3 -.5623 BSP 18771
BOE 2.8686 BRA 2.9280 BC3 3.2079 FSP -554
                                                                                                                                                                                        ARRIVAL DATE JUN 19 1966
                                                                                                      FLIGHT TIME 196.00
LAUNCH DATE DEC 5 1965
                                                                                                     DISTANCE 568.937
      RL 147.41 LAL .00 LOL 72.65 VL 26.407 GAL 6.79 AZL 86.56 MCA 283.00 SMA 120.29 ECC .25317 INC 3.4380 V1 30.223 RP 108.73 LAP -3.35 LOP 355.67 VP 36.578 GAP 13.61 AZP 89.23 TAL 158.96 TAP 81.95 RCA 89.84 APO 150.75 V2 34.854 RC 184.407 GL 16.63 GP .92 ZAL 52.20 ZAP 175.36 ETS 12.18 ZAE 129.04 ETE 179.39 ZAC 94.43 ETC 166.47 CLP-175.45
    PLANETOCENTRIC CONIC
      C3 30.203 VHL 5.496 DLA 24.07 RAL 14.03 RAD 6568.2 VEL 12.312 PTH 2.22 VHP 8.802 DPA -2.10 RAP
                                                                                                                                                                                                        1.14 ECC 1.4971
      ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            NJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 109.80 251.68 79.03 4 32 27 2586.5 -27.52 101.35 165.76 243.41 61.89 24 12 17 3488.5 -7.29 159.07 86.22 252.14 80.61 6 8 19 2259.9 -29.51 77.56 150.09 242.31 60.14 1 14 17 3290.4 -5.52 143.55 61.46 252.95 84.38 7 50 19 1923.2 -34.18 52.24 140.42 239.50 55.93 1 41 40 3199.8 -1.55 134.22 MIO-COURSE EXECUTION ACCURACY SGT 5775.6 SGR 412.5 SG3 155.6 SGR 412.5 SG3 155.6 SGR 204.7 RRF .1900 RTF .9486 CRT .9043 CRS -.8590 CST -.9952 SGB 5790.3 RZ3 -.0052 R13 .9486 LSA 3368.2 MSA 181.8 SSA 14.9 SG1 5776.2 SG2 403.8 THA .84 EL1 3278.8 EL2 164.9 ALF 6.17
                                                                                          109.80
                             3 39 21
                                               3186.51
                                                                       -26.27
           90.00
                                                                        -3.55
                                                                                           165.76
                          23 4 8 4088.54
           90.00
                            5 20 39 2859.87
0 9 27 3890.41
7 8 16 2523.22
                                                                       -28.51
          100.00
                                                                       -1.56
                                                                                          150.09
          100.00
                                                                      -33.77
          110.00
                                                                                         140.42
                                                                      2.94
                            0 38 20 3799.82
          110.00
    DIFFERENTIAL CORRECTIONS
      TOE 2.9379 TRA 3.2457 TC3-2.9115 BAU 1.1760
      ROE .3711 RRA -.1036 RC3 .0736 FAU .01619
FDE .8815 FRA 1.2811 FC3 -.4641 BSP 18776
       BDE 2.9613 BRA 3.2473 BC3 2.9125 FSP -532
```

FLIGHT TIME 190.00

ARRIVAL DATE JUN 21 1966

LAUNCH DATE DEC 5 1965

DISTANCE 574.158 HELIOCENTRIC CONIC RC 186.379 GL 15.83 GP .89 7AL 50.02 7AP 176.20 ETS 14.53 7AE 129.02 ETE 179.43 7AC 96.68 ETC 166.51 CLP-176.31 PLANETOCENTRIC CONIC C3 33.258 VHL 5.767 DLA 24.17 RAL 16.44 RAD 6568.3 VEL 12.435 PTH 2.25 VHP 9.131 DPA -1.16 RAP 3.27 ECC 1.5473 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 255.91 -27.26 3 47 26 3216.16 23 15 19 4107.36 -25.87 111.87 78.06 4 41 2 2616.2 103.48 90.00 61.82 24 23 47 3507.4 -6.69 160.13 247.35 -2.95 166.81 90.00 79.57 6 17 8 60.12 1 25 32 5 29 0 2888.68 0 20 22 3910.07 88.29 256.42 2288.7 -29.32 79.68 -28.17 100.00 246.21 144.64 3310.1 -4.86 151.17 100.00 - .89 257.38 83.13 7 59 30 56.00 1 52 33 1950.8 -34.15 54.40 7 16 59 2550.84 0 48 52 3820.68 -33.57 110.00 63.59 3220.7 -.75 243.32 135.31 3.74 141.51 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5782.7 SGR 411.2 SG3 150.1 RRT .2397 RRF .2255 RTF .9508 SG8 5797.3 R23 -.0036 R13 .9508 ST 3226.4 SR 393.4 SS 763.1 TDE 3.0252 TRA 3.5805 TC3-2.6304 BAU 1.1699 RDE .3947 RRA -.0943 RC3 .0596 FAU .01464 FDE .8708 FRA 1.3235 FC3 -.3811 BSP 18885 BDE 3.0508 BRA 3.5817 BC3 2.6311 FSP -515 CRT .9001 CRS -.8566 CST -.9956 LSA 3333.5 MSA 185.0 SSA 14.3 SG1 5783.6 SGZ 399.1 THA .98 EL1 3245.9 EL2 170.3 ALF FLIGHT TIME 200.00 ARRIVAL CATE JUN 23 1966 LAUNCH DATE DEC 5 1965 DISTANCE 579.288 HELIOCENTRIC CONIC RL 147.4] LAL .00 LOL 72.65 VL 26.331 GAL 8.34 AZL 86.54 HCA 289.35 SMA 119.86 ECC .26976 INC 3.4645 V1 30.223 RP 108.67 LAP -3.27 LOP 2.03 VP 36.542 GAP 14.73 AZP 88.85 TAL 155.82 TAP 85.17 RCA 87.52 APO 152.19 V2 34.873 RC 188.330 GL 15.04 GP .87 ZAL 47.92 ZAP 177.04 ETS 18.19 ZAE 128.99 ETE 179.47 ZAC 98.93 ETC 166.53 CLP-177.17 PLANETOCENTRIC CONIC C3 36.786 VHL 6.065 DLA 24.21 RAL 18.76 RAD 6568.4 VEL 12.576 PTH 2.28 VHP 9.486 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 105.49 77.17 4 50 0 2644.2 -26.97 3 55 56 3244.22 -25.46 113.83 260.11 90.00 3530.2 23 25 19 4130.22 -2.21 168.09 251.22 -5.97 161.42 90.00 5 37 38 2916.33 0 30 14 3933.34 7 25 48 2577.92 2316.3 -29.11 3333.3 -4.08 1977.9 -34.09 81.70 100.00 -27.82 90.27 260.68 250.05 261.78 145.92 100.00 -.10 152.45 -33.33 56.51 110.00 65.67 0 58 34 3844.52 4.64 142.76 247.10 3244.5 .16 136.55 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5785.8 SGR 409.2 SG3 144.8 RRT .2748 RRF .2610 RTF .9532 ST 3187.8 SR 396.8 SS 752.6 CRT .8960 CRS -.8543 CST -.9961 LSA 3294.0 MSA 187.7 SSA 13.8 TOE 3.1148 TRA 3.9375 TC3-2.3583 BAU 1.1601 ROE .4191 RRA -.0829 RC3 .0473 FAU .01313 FOE .8615 FRA 1.3679 FC3 -.3091 BSP 18966 BOE 3.1429 BRA 3.9384 BC3 2.3588 FSP -498 SGB 5800.2 R23 -.0023 R13 .9532 SG1 5786.9 SG2 393.4 THA 1.12 EL1 3207.7 EL2 175.1 ALF 6.38 ARRIVAL DATE JUN 25 1966 FLIGHT TIME 202.00 HELIOCENTRIC CONIC DISTANCE 584.308 RL 147.41 LAL .00 LOL 72.65 VL 26.294 GAL 9.19 A7L 86.52 HCA 292.53 SMA 119.65 ECC .27930 INC 3.4785 V1 30.223
RP 108.63 LAP -3.21 LOP 5.21 VP 36.525 GAP 15.36 A7P 88.67 TAL 154.30 TAP 86.83 RCA 86.23 APO 153.06 V2 34.884
RC 190.259 GL 14.26 GP .85 ZAL 45.92 ZAP 177.86 ETS 24.72 ZAE 128.94 ETE 179.52 ZAC 101.17 ETC 166.52 CLP-178.04 PLANETOCENTRIC CONIC C3 40.871 VML 6.393 OLA 24.21 RAL 20.98 RAD 6568.6 VEL 12.737 PTH 2.32 VMP 9.872 DPA .71 RAP 7.49 FCC 1.6726 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 264.28 76.34 4 59 19 61.71 24 43 25 4 4 48 3270.73 23 34 9 4156.91 4 59 19 2670.7 -26.68 107.37 90.00 -25.04 115.66 -1.35 169.58 255.04 3556.9 -5.12 162.93 90.00 77.66 6 35 33 60.12 1 45 4 80.76 8 18 4 56.23 2 11 55 5 46 30 2942.86 92.15 264.90 2342.9 -28.87 83.64 100.00 3360.0 -3.1R 147.39 100.00 0 39 4 3960.02 .80 153.91 253.84 2004.5 -33.98 58.57 7 34 39 2604.46 -33.06 67.69 266.14 110.00 1 7 24 3271.2 1.18 137.94 5.65 144.17 250.82 3871.18 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3144.9 SR 398.6 55 743.6 CRT .8920 CRS -.8523 CST -.9965 SCT 5784.4 SGR 406.6 SG3 139.8 RRT .3101 RRF .2967 RTF .9558 SCB 5798.6 R23 -.0012 R13 .9558 TOE 3.2075 TRA 4.3182 TC3-2.0971 BAU 1.1460 RDE .4442 RRA -.0693 RC3 .0368 FAU .01167 FDE .8540 FRA 1.4149 FC3 -.2471 BSP 19035 BDE 3.2381 BRA 4.3187 BC3 2.0974 FSP -481 LSA 3250.5 M5A 189.9 SSA 13.2 EL1 3165.0 EL2 179.0 ALF 6.47 SG1 5785.7 SG2 386.5 THA 1.25 FLIGHT TIME 204.00 ARRIVAL DATE JUN 27 1966 LAUNCH DATE DEC 5 1965 DISTANCE 589.200 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 26.257 GAL 10.11 AZL 86.51 HCA 295.71 SMA 119.44 ECC .28981 INC 3.4932 V1 30.223 RP 108.60 LAP -3.15 LOP 8.40 VP 36.510 GAP 16.04 AZP 88.48 TAL 152.82 TAP 88.53 RCA 84.82 APO 154.05 V2 34.895 RC 192.167 GL 13.49 GP .84 ZAL 44.02 ZAP 178.64 ETS 39.19 ZAE 128.88 ETE 179.56 ZAC 103.39 ETC 166.49 CLP-178.93 PLANETOCENTRIC CONIC C3 45.614 VHL 6.754 DLA 24.17 RAL 23.09 RAO 6568.7 VEL 12.922 PTH 2.36 VHP 10.293 DPA 1.64 RAP LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2695.8 -26.37 4 13 59 3295.77 -24.63 117.38 268.40 75.57 5 8 55 109.14 90.00 61.69 24 51 36 76.79 6 45 1 164.63 3587.2 -4.16 4187.18 -.38 171.27 258.78 23 41 49 2368.3 -28.61 85.49 5 55 33 2968.31 -27.06 93.95 269.07 100.00 60.16 1 53 22 79.63 8 27 22 -5.. -33.84 - 10 149.03 3389.9 -2.17 0 46 52 3989.88 1.81 155.55 257.56 100.00 270.44 60.59 7 43 32 2630.49 -32.75 69.66 2030.5 110.00 MID-COURSE EXECUTION ACCURACY 2.30 3300.5 139.47 1 15 23 3900.46 6.76 145.71 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGE 5782.8 SG2 378.5 THA 1.39 ST 3102.2 SR 399.0 SS 737.2 CRT .8883 CRS -.8508 CST -.9970 LSA 3207.7 MSA 191.5 SSA 12.7 EL1 3122.4 EL2 182.1 ALF 6.54 TOE 3.3085 TRA 4.7292 TC3-1.8444 BAU 1.1249 ROE .4700 RRA -.0531 RC3 .0280 FAU .01016 FOE .8498 FRA 1.4662 FC3 -.1928 BSP 18986

FLIGHT TIME 198.00

BOE 3.3417 BRA 4.7295 BC3 1.8446 FSP -462

ARRIVAL DATE JUN 29 1966

LAUNCH DATE DEC 5 1965

```
DISTANCE 593.937
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 26.221 GAL 11.10 A7L 86.49 MCA 298.89 SMA 119.24 ECC .30142 INC 3.5086 V1 30.223 RP 108.57 LAP -3.07 LOP 11.59 VP 36.495 GAP 16.80 A7P 88.30 TAL 151.39 TAP 90.28 RCA 83.30 APO 155.18 V2 34.906 RC 194.054 GL 12.72 GP .82 TAL 42.22 ZAP 179.16 ETS 79.78 ZAE 128.80 ETE 179.60 ZAC 105.59 ETC 166.43 CLP-179.83
    RC 194.054 GL 12.72 UP
PLANETOCENTRIC CONIC
C3 51.143 VHL 7.151 DLA 24.08 RAL 25.10 RAD 6568.9 VEL 13.134 PTH 2.40 VHP 10.754 DPA 2.57 RAP 11.67 ELC 1.0-1.

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 23 24 3319.39 -24.22 118.98 272.47 74.86 5 18 44 2719.4 -26.07 110.80
90.00 4 23 24 3319.39 -74.22 118.98 272.47 74.86 5 18 44 3620.8 -3.08 166.51
74 0A 6 54 37 2392.7 -28.34 87.25
   PLANETOCENTRIC CONTC
                                                                                                           75.98 6 54 37
60.24 2 0 43
78.54 8 36 38
56.64 2 28 4
                     6 4 44 2992.70
0 53 41 4022.69
                                                                                                                                          3422.7
                                                                                                                                                           -1.06
                                                                                                                                                                           150.83
                                                                                        261.21
                                                                       157.35
       100.00
                                                        2.92
                                                                                     274.68
258.10
                                                                                                                                          2056.0
                                                                                                                                                          -33.67
                                                                                                                                                                            62.56
                                                                         71.58
       110.00
                      7 52 22 2655.98
1 22 32 3932.18
                                                       -32.43
                                                                                                                                       3332.2
                                                                                                                                                           3.51
                                                                                                                                                                           141.13
                                                        7.95
                                                                       147.40
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
   TOE 3.4098 TRA 5.1664 TC3-1.6097 BAU 1.1007

RDE .4962 RRA -.0345 RC3 .0207 FAU .00876

FDE .8459 FRA 1.5195 FC3 -.1482 BSP 19017

BOE 3.4457 BRA 5.1666 BC3 1.6098 FSP -447
                                                                            SGT 5772.2 SGR 399.8 SG3 130.5
RRT .3816 RRF .3689 RTF .9616
SGB 5786.0 R23 .0005 R13 .9616
                                                                                                                                     ST 3052.5 SR 397.6 SS 731.3
CRT .8845 CRS -.8493 CST -.9974
                                                                                                                                     LSA 3158.1 MSA 192.4 SSA 12.2
EL1 3072.8 EL2 184.3 ALF 6.60
                                                                            SG1 5774.2 SG2 369.4 THA 1.52
                                                                                                                                                  ARRIVAL DATE JUL 1 1966
                                                                                 FLIGHT TIME 208.00
LAUNCH DATE DEC 5 1965
                                                                                DISTANCE 598.489
   HELIOCENTRIC CONIC
    RL 147.41 LAL .00 LOL 72.65 VL 26.186 GAL 12.18 A7L 86.47 MCA 302.07 SMA 119.04 ECC .31428 INC 3.5251 VI 30.223 RP 108.53 LAP -2.99 LOP 14.77 VP 36.481 GAP 17.63 A7P 88.13 TAL 150.02 TAP 92.09 RCA 81.63 APO 156.45 VZ 34.918 RC 195.918 GL 11.97 GP .81 ZAL 40.52 ZAP 178.89 ETS 134.95 ZAE 128.69 ETE 179.65 ZAC 107.77 ETC 166.35 CLP 179.24
   PLANETOCENTRIC CONIC
    C3 57.615 VML 7.590 DLA 23.95 RAL 26.99 RAD 6569.D VEL 13.378 PTH 2.45 VMP 11.261 DPA 3.49 RAP 13.73 ECC 1.9482 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 33 0 3341.65 -23.82 120.49 276.48 74.21 5 28 42 2741.6 -25.75 112.36
                                                                                                           61.74 25 4 50
75.21 7 4 15
60.37 2 7 9
                    23 53 52
        90.00
                                                                                        266.01
                                                                                                                                          3657.4
                                                                                                                                                            -1.90
                                                                                                                                                                           168.55
                                      4257.37
                                                           1.89
                                                                        175.18
                                                                                                                                                           -28.05
                                                                                                                                                                            88.93
                     6 13 59
                                                                                        277.22
                                                                                                                                          2415.1
                                     3016.06
                                                        -26.28
                                                                         97.28
       100.00
                                                                                                                                          3458.2
                                                                                                                                                                           152.78
                                                                       159.31
                                                                                        264.77
                                                                                                                                                             .14
       100.00
                     0 59 30 4058.19
                                                           4.12
                                                                         73.43 278.83 77.49 8 45 48
149.21 261.65 56.94 2 34 58
MIO-COURSE EXECUTION ACCURACY
                      8 1 7 2680.90
                                                        -32.07
                                                                         73.43
                                                                                                                                          2080.9
                                                                                                                                                        -33.46
                                                                                                                                                                            64.48
       110.00
                                                                                                                                                            4.80
                       1 28 52
                                      3966.11
                                                       9.22
                                                                       149.21
                                                                                                                                          3366.1
                                                                                                                                                                           142.91
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5757.0 SGR 395.5 SG3 126.1 ST 3000.5 SR 394.7 SS
RRT .4171 RRF .4046 RTF .9646 CRT .8810 CRS -.8481 CST
SGB 5770.5 R23 .0007 R13 .9646 LSA 3106.6 MSA 192.4 SSA
SGI 5759.3 SG2 359.3 THA 1.65 EL1 3020.7 EL2 185.5 ALF
                                                                                                                                     ST 3000.5 SR 394.7 SS 727.4
CRT .8810 CRS -.8481 CST -.9977
     TOE 3.5178 TRA 5.6333 TC3-1.3886 BAU 1.0697
    ROE .5229 RRA -.0132 RC3 .0149 FAU .00736
FOE .8444 FRA 1.5770 FC3 -.1106 85P 19081
BOE 3.5564 BRA 5.6333 BC3 1.3887 FSP -432
                                                                                                                                     LSA 3106.6 MSA 192.4 55A 11.7
                                                                                                                                                                              6.64
                                                                                                                                                 ARRIVAL DATE JUL 3 1966
                                                                                FLIGHT TIME 210.00
LAUNCH DATE DEC 5 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 602.814
    RL 147.41 LAL .00 LOL 72.65 VL 26.152 GAL 13.34 AZL 86.46 HCA 305.26 5MA 118.85 ECC .32857 INC 3.5428 V1 30.223 RP 108.49 LAP -2.89 LOP 17.96 VP 36.468 GAP 18.54 AZP 87.95 TAL 148.72 TAP 93.98 RCA 79.80 APO 157.90 V2 34.930
                                           .79 TAL 38.93 TAP 178.11 ETS 157.02 TAE 128.55 ETE 179.69 TAC 109.92 ETC 166.24 CLP 178.28
     RC 197.761 GL 11.23 GP
   PLANETOCENTRIC CONIC
                                                                                                                                              4.39 RAP 15.77 ECC 2.0735
    C3 65.231 VHL 8.077 OLA 23.78 RAL 28.76 RAO 6569.2 VEL 13.660 PTH 2.50 VHP 11.822 DPA
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      73.62 5 38 45
61.84 1 13 52
74.49 7 13 54
60.55 2 12 39
76.49 8 54 51
57.29 2 41 5
                                                                                                                                                        -25.45
                                                                                                                                         2762.6
                                                        -23.42
                                                                       121.90
                                                                                     280.41
        90.00 4 42 42 3362.57
                                                                                                                                                             -.63
                                                                                                                                          3696.7
                                      4296.66
                                                           3.15
                                                                       177.38
                                                                                        269.48
                      0 2 15
         90.00
                                                                                                                                                                            90.52
                                                                                                                                          2438.4
                                                                                                                                                          -27.76
                    6 23 16
                                     3038.35
                                                        -25.88
                                                                         98.82
                                                                                        281.18
        100.00
                                                                                                                                                            1.43
                                                                                                                                                                           154.86
                                                                                        268.25
                                                                                                                                          3496.1
                      1 4 23
                                      4096.11
                                                           5.39
                                                                       161.41
        100.00
                                                                                                                                                                            56.34
                                                                                                                                         2105.2
                                                                                                                                                          -33.23
                                    2705.17
                                                        -31.70
                                                                                        282.90
                      8 9 46
                                                                         75.23
       110.00
                                                                                                                                          3402.1
                                                                                                                                                             6.16
                                                                                        265.11
                       1 34 23
                                      4002.06
                                                        10.55
                                                                        151.15
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2947.9 SR 390.2 SS 726.0
CRT .8779 CRS -.8474 CST -.9981
                                                                            SGT 5739.1 SGR 39D.7 SG3 121.9
RRT .4527 RRF .4405 RTF .9678
SGB 5752.4 R23 .0009 R13 .9678
     TOE 3.6346 TRA 6.1391 TC3-1.1813 BAU 1.0302
    ROE .5501 RRA .0112 RC3 .0105 FAU .00594
FOE .8455 FRA 1.6399 FC3 -.0789 BSP 19095
BOE 3.6760 BRA 6.1391 BC3 1.1813 FSP -418
                                                                                                                                    LSA 3054.9 MSA 191.6 SSA 11.2
                                                                                                                                     EL1 2967.8 EL2 185.6 ALF
                                                                            SG1 5741.9 SG2 348.2 THA 1.77
                                                                                                                                                  ARRIVAL DATE JUL 5 1966
                                                                                 FLIGHT TIME 212.00
LAUNCH DATE DEC 5 1965
                                                                                DISTANCE 606.863
   HELIOCENTRIC CONIC
    RL 147.4] LAL .00 LOL 72.65 VL 26.119 GAL 14.62 AZL 86.44 MCA 308.45 SMA 118.66 ECC .34451 INC 3.5620 V1 30.223
RP 108.45 LAP -2.79 LOP 21.15 VP 36.456 GAP 19.56 AZP 87.78 TAL 147.50 TAP 95.95 RCA 77.78 APO 159.55 V2 34.942
RC 199.580 GL 10.50 GP .78 ZAL 37.45 ZAP 177.17 ETS 165.85 ZAE 128.37 ETE 179.73 ZAC 112.04 ETC 166.10 CLP 177.28
   PLANETOCENTRIC CONIC
    C3 74.243 VHL 8.616 DLA 23.57 RAL 30.41 RAD 6569.4 VEL 13.985 PTH 2.55 VHP 12.445 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          2782.2
                                                                                                           73.07
                                                                                                                       5 48 49
                                                                                                                                                                         115.17
                                     3382.15
                                                        -23.04
                                                                       123.21
                                                                                       284.24
         90.00
                      4 52 27
                                                                                                                         1 18 D
                                                                                                                                          3738.3
                                                                                                                                                              .71
                                                                                                                                                                           173.07
                                                                                        272.85
                                                                                                           62.01
                                                          4.49
                                                                        179.71
                     0 5 42 4338.34
         90.00
                                                                                                                                                           -27.46
                                                                                                                      7 23 30
                      6 32 30 3059.53
1 8 19 4136.20
                                                                                        285.03
                                                                                                                                          2459.5
                                                                                                                                                                             92.02
                                                        -25.49
                                                                        100.27
                                                                                                           73.83
        100.00
                                                                                                                       2 17 15
                                                                                                                                          3536.2
                                                                                                                                                             2.79
                                                                                                                                                                           157.06
                                                                                                           60.81
                                                          6.73
                                                                       163.63
                                                                                        271.63
        100.00
                                                                                                                         9 3 44
                                                                                                                                          2128.7
                                                                                                                                                           -32.98
                                                                                                                                                                             68.13
                      8 18 15 2728.70
1 39 4 4039.79
                                                        -31.31
                                                                         76.95
                                                                                        286.85
                                                                                                           75.53
        110.00
                                                                                                                         2 46 23
                                                                                                                                          3439.8
                                                                                                                                                             7.58
                                                                                                                                                                           146.80
                                                                                                           57.73
                                                                                        268.50
                                                                        153.20
        110.00
                                                       11.93
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
```

FLIGHT TIME 206.00

TOE 3.7661 TRA 6.6899 TC3 -.9860 BAU .9787
RDE .5780 RRA .0389 RC3 .0074 FAU .00444
FDE .8509 FRA 1.7102 FC3 -.0518 B5P 18998
BDE 3.8102 BRA 6.6901 BC3 .9860 FSP -402

SGT 5719.6 SGR 385.6 SG3 118.1 ST 2897.3 SR 384.4 55 728.2 RRT .4887 RRF .4769 RTF .9711 CRT .8752 CRS -.8473 C5T -.9984 SG8 5732.6 R23 .0008 R13 .9711 LSA 3006.0 MSA 189.9 SSA 10.6 SG1 5722.7 SG2 336.2 THA 1.89 EL1 2916.8 EL2 184.7 ALF 6.65

`\`

ARRIVAL CATE JUL 7 1966 FLIGHT TIME 214.00 LAUNCH DATE DEC 5 1965 DISTANCE 610.569 HELIOCENTRIC CONIC RL 147.41 LAL .00 LOL 72.65 VL 26.086 GAL 16.03 AZL 86.42 MCA 311.64 SMA 118.49 ECC .36234 INC 3.5829 VI 30.223 RP 108.41 LAP -2.68 LOP 24.35 VP 36.445 GAP 20.70 AZP 87.62 TAL 146.39 TAP 98.03 RCA 75.55 APO 161.42 V2 34.955 9.79 GP .77 ZAL 36.09 ZAP 176.16 ETS 170.42 ZAE 128.14 ETE 179.77 ZAC 114.10 ETC 165.93 CLP 176.23 RC 201.376 GL PLANETOCENTRIC CONIC C3 84.979 VHL 9.218 CLA 23.32 RAL 31.94 RAD 6569.7 VEL 14.364 PTH 2.61 VHP 13.141 CPA 6.14 RAP 19.75 ECC 2.3985

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 2 10 3400.30 -22.68 124.41 287.95 72.57 5 58 50 2800.3 -24.85 116.41
90.00 0 8 8 4382.12 5.88 182.17 276.11 62.25 1 21 10 3782.1 2.12 175.51
100.00 6 41 40 3079.47 -25.10 101.62 288.77 73.21 7 32 59 2479.5 -27.16 93.43
110.00 1 11 18 4178.19 8.12 165.98 274.90 61.13 2 20 57 3578.2 4.20 159.37
110.00 8 26 33 2751.32 -30.92 78.60 290.67 74.64 9 12 24 2151.3 -32.71 69.84
110.00 1 42 54 4079.10 13.34 155.36 271.79 58.23 2 50 54 3479.1 9.05 148.89 6.14 RAP 19.75 ECC 2.3985 C3 84.979 VHL 9.218 CLA 23.32 RAL 31.94 RAD 6569.7 VEL 14.364 PTH 2.61 VHP 13.141 CPA HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2842.5 SR 377.0 SS 732.2 CRT .8728 CRS -.8474 CST -.9987 SGT 5692.8 SGR 379.9 SG3 114.3 RRT .5240 RRF .5127 RTF .9744 SGB 5705.5 R23 .0005 R13 .9744 TDE 3.9052 TRA 7.2826 TC3 - .8081 BAU .9181 RDE .6062 RRA .0699 RC3 .0053 FAU .00294 LSA 2953.5 MSA 187.2 SSA 10.1 FDE .8580 FRA 1.7863 FC3 -.0300 BSP 19015 BDE 3.9519 BRA 7.2830 BC3 .8081 FSP -390 5G1 5696.3 SG2 323.3 THA 2.01 Fi 1 2861.6 EL2 182.8 ALF 6.63 ARRIVAL CATE JUL 9 1966 FLIGHT TIME 216.00 LAUNCH DATE DEC 5 1965 HELIOCENTRIC CONIC DISTANCE 613.849 RL 147.41 LAL .00 LOL 72.65 VL 26.055 GAL 17.58 AZL 86.39 HCA 314.83 SMA 118.32 ECC .38238 INC 3.6061 V1 30.223 RP 108.37 LAP -2.56 LOP 27.54 VP 36.435 GAP 21.98 AZP 87.46 TAL 145.40 TAP 100.23 RCA 73.07 APO 163.56 VZ 34.968 9.09 GP .76 ZAL 34.85 ZAP 175.07 ETS 173.22 ZAE 127.85 ETE 179.81 ZAC 116.11 ETC 165.74 CLP 175.13 RC 203.147 GL PLANE TOCENTRIC CONIC C3 97.861 VHL 9.892 DLA 23.04 RAL 33.32 RAD 6569.9 VEL 14.806 PTH 2.68 VHP 13.922 DPA 6.97 RAP 21.68 ECC 2.6105 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 11 47 3416.90 0 9 33 4427.72 6 50 41 3098.00 1 13 20 4221.84 8 34 37 2772.84 1 45 53 4119.77 2816.9 -24.57 117.55 6 8 44 -22.33 125.51 291.53 72.12 90.00 3827.7 3.59 178.06 1 23 21 184.75 279.23 62.57 90.00 7.32 2498.0 94.73 -26.87 100.00 -24.73 102.88 292.36 72.65 7 42 19 2 23 42 9 20 50 161.79 3621.8 5.67 100.00 9.54 168.43 278.04 61.54 71.46 -30.52 80.15 294.33 73.AO 2172.8 -32.43 110.00 MID-COURSE EXECUTION ACCURACY 151.08 14.79 157.62 3519.8 10.55 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5662.1 SGR 373.8 SG3 110.7 RRT .5592 RRF .5484 RTF .9777 SG8 5674.5 R23 .0001 R13 .9777 SG1 5666.0 SG2 309.7 THA 2.12 ST 2788.3 SR 368.4 55 739.9 CRT .8711 CRS -.8482 CST -.9989 TOE 4.0607 TRA 7.9294 TC3 -.6437 BAU .8422 RDE .6351 RRA .1047 RC3 .0042 FAU .00133 LSA 2902.4 MSA 183.6 SSA .8693 FRA 1.8713 FC3 -.0118 BSP 19009 9.6 EL1 2806.8 EL2 179.7 ALF 6.59 BDE 4.1101 BRA 7.9300 BC3 .6437 FSP -377 ARRIVAL DATE JUL 11 1966 FLIGHT TIME 218.00 LAUNCH DATE DEC 5 1965 DISTANCE 616.590 HELIOCENTRIC CONIC 147.41 LAL .00 LOL 72.65 VL 26.026 GAL 19.31 AZL 86.37 HCA 318.03 SMA 118.15 ECC .40499 INC 3.6320 VI 30.223 108.33 LAP -2.43 LOP 30.74 VP 36.426 GAP 23.44 AZP 87.30 TAL 144.56 TAP 102.58 RCA 70.30 APO 166.00 V2 34.981 204.893 GL 8.40 GP .75 ZAL 33.76 ZAP 173.91 ETS 175.11 ZAE 127.48 ETE 179.85 ZAC 118.05 ETC 165.52 CLP 173.95 RL 147.41 LAL RC 204.893 GL PLANETOCENTRIC CONIC 7.77 RAP 23.55 ECC 2.8670 C3 113.446 VHL 10.651 DLA 22.71 RAL 34.56 RAD 6570.2 VEL 15.323 PTH 2.74 VHP 14.806 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2831.7 118.56 71.73 6 18 28 -24.31 -22.02 126.48 294.95 5 21 16 3431.73 0 9 56 4474.87 90.00 1 24 31 3874.9 5.10 180.71 8.79 187.44 282.21 62.97 90.00 95.91 6 59 32 3114.91 1 14 22 4266.92 2514.9 -26.59 295.78 72.15 7 51 27 -24.38 104.01 100.00 2 25 29 9 28 58 2 57 19 164.29 7.17 281.05 62.03 3666.9 10.99 170.99 100.00 72.96 73.03 2193.0 -32.15 8 42 25 2793.01 -30.13 81.59 297.81 110.00 153.36 12.08 59.50 3561.6 1 47 57 4161.59 16.25 159.98 278.02 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5627.6 SGR 367.4 SG3 107.3 RRT .5941 RRF .5839 RTF .9808 SGB 5639.6 R23 -0005 R13 .9808 SGI 5631.9 SG2 295.3 THA 2.23 ST 2734.5 SR 358.5 S5 751.6 CRT .8700 CRS -.8496 CST -.9991 TOE 4.2362 TRA 8.6379 TC3 -.4930 BAU .7478 RDE .6648 RRA .1436 RC3 .0039 FAU-.00045 FDE .8852 FRA 1.9671 FC3 .0034 BSP 18977 LSA 2852.9 MSA 178.9 SSA 9.1 EL1 2752.3 EL2 175.6 ALF 6.53 BOE 4.2880 BRA 8.6391 BC3 .4930 FSP -366 ARRIVAL DATE JUL 13 1966 FLIGHT TIME 220.00 LAUNCH DATE DEC 5 1965 HELIOCENTRIC CONIC DISTANCE 618.648 .00 LOL 72.65 VL 25.998 GAL 21.26 AZL 86.34 HCA 321.23 SMA 118.00 ECC .43059 INC 3.6613 V1 30.223 -2.29 LOP 33.93 VP 36.419 GAP 25.09 AZP 87.14 TAL 143.90 TAP 105.13 RCA 67.19 APO 168.81 V2 34.994 7.73 GP .74 ZAL 32.82 ZAP 172.65 ETS 176.48 ZAE 127.03 ETE 179.90 ZAC 119.91 ETC 165.28 CLP 172.69 RL 147.41 LAL 108.29 LAP RC 206.614 GL PLANETOCENTRIC CONIC C3 132.471 VHL 11.510 DLA 22.35 RAL 35.63 RAD 6570.4 VEL 15.931 PTH 2.82 VHP 15.811 DPA 8.53 RAP 25.35 ECC 3.1801 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 30 34 3444.51 -21.74 127.32 298.16 71.40 6 27 59 2844.5 -24.08 119.43 90.00 0 9 13 4523.37 10.28 190.22 285.02 63.47 1 24 36 3923.4 6.63 183.44 -26.34 96.95 8 0 19 2529.9. 71.71 7 8 9 3129.88 1 14 20 4313.23 -24.07 105.01 299.01 100.00 2 26 13 8.69 166.89 3713.2 12.46 173.65 283.89 62.61 -31.88 74.33 9 36 46 2 59 7 2211.5 8 49 55 2811.49 -29.75 82.90 301.07 72.34 13.62 3604.4 110.00 1 49 3 4204.38 17.71 162.44 280.93 60.27 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5591.5 SGR 360.8 SG3 1D4.2 RRT .6288 RRF .6193 RTF .9839 SG8 5603.2 R23 -.0011 R13 .9839 SG1 5596.1 SG2 280.3 THA 2.33 ST 2683.5 SR 347.6 55 768.7 TOE 4.4405 TRA 9.4215 TC3 -.3542 BAU .6273 CRT .8699 CRS -.8519 CST -.9993 ROE .6956 RRA .1873 RC3 .0043 FAU-.00252 FDE .9078 FRA 2.0767 FC3 .0165 BSP 18817 BDE 4.4946 BRA 9.4233 BC3 .3542 FSP -352 LSA 2807.6 MSA 173.2 SSA 8.6 ELI 2700.6 ELZ 170.3 ALF 6.45

```
ARRIVAL DATE FEB 14 1966
                                                                                                         FLIGHT TIME 70.00
LAUNCH DATE DEC 6 1965
                                                                                                       DISTANCE 185.136
    HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 26.799 GAL -7.50 AZL 86.63 MCA 82.60 SMA 122.58 ECC .23937 INC 3.3696 V1 30.228
RP 107.55 LAP 3.34 LOP 156.25 VP 37.221 GAP -11.95 AZP 89.57 TAL 205.53 TAP 288.13 RCA 93.24 APO 151.92 VZ 35.236
RC 47.916 GL 17.57 GP -.75 ZAL 129.02 ZAP 8.60 ETS 3.86 ZAE 148.54 ETE 338.62 ZAC 63.43 ETC 162.57 CLP -8.57
    PLANETOCENTRIC CONIC
     C3 26.762 VHL 5.173 DLA -2.49 RAL 300.69 RAD 6568.1 VEL 12.171 PTH 2.18 VHP 7.899 OPA -16.01 RAP 331.26 ECC 1.4404 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 44 44 2207.99 -19.41 41.06 166.16 111.03 3 21 32 1608.0 -16.38 33.70 90.00 14 5 46 5006.67 22.86 220.04 167.55 72.83 15 29 12 4406.7 20.30 212.31 100.00 4 4 54 1949.35 -20.53 21.57 165.68 112.22 4 37 24 1349.3 -17.34 14.23 100.00 15 28 16 4740.55 24.01 200.07 167.15 71.64 16 47 17 4140.6 21.28 192.33 110.00 5 10 29 1744.06 -23.53 4.56 164.25 115.54 5 39 33 1144.1 -19.90 357.30 110.00 16 39 11 4518.61 27.10 181.97 165.90 68.32 17 54 29 3918.6 23.91 174.26
      C3 26.762 VHL 5.173 DLA -2.49 RAL 300.69 RAD 6568.1 VEL 12.171 PTH 2.18 VHP 7.899 DPA -16.01 RAP 331.26 ECC 1.4404
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                             ST 284.1 SR 364.1 SS 3D8.7
CRT .8628 CRS .9921 CST .8223
LSA 538.5 MSA 134.6 SSA 23.7
                                                                                                   SGT 686.1 SGR 402.0 SG3 118.2
RRT -.0438 RRF .0420 RTF -.6707
SGB 795.2 R23 .0026 R13 .6708
      TOE -.2286 TRA -.3854 TC3 .4575 BAU .1724
      ROE -.3282 RRA .0633 RC3 -.1513 FAU .03813
     FDE .4032 FRA -.1853 FC3-1.2334 BSP 1913
BOE .4000 BRA .3906 BC3 .4819 FSP -299
                                                                                                   SG1 686.5 SG2 401.4 THA 177.77
                                                                                                                                                                              EL1 446.8 EL2 117.1 ALF 53.10
LAUNCH DATE DEC 6 1965
                                                                                                         FLIGHT TIME 72.00
                                                                                                                                                                                              ARRIVAL DATE FEB 16 1966
   HELIOCENTRIC CONIC
                                                                                                        DISTANCE 191.951
     RL 147.39 LAL .00 LOL 73.67 VL 26.984 GAL -7.48 AZL 86.62 HCA 85.84 SMA 123.72 ECC .23012 INC 3.3788 VI 30.228
RP 107.56 LAP 3.37 LOP 159.50 VP 37.349 GAP -11.02 AZP 89.75 TAL 206.98 TAP 292.82 RCA 95.25 APO 152.19 V2 35.230
RC 49.420 GL 18.16 GP -.80 ZAL 130.34 ZAP 11.18 ETS 3.00 ZAE 147.90 ETE 339.29 ZAC 64.08 ETC 162.68 CLP -11.15
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 25.597 VHL 5.059 DLA -2.24 RAL 299.07 RAD 6568.0 VEL 12.123 PTH 2.17 VHP 7.392 DPA -15.84 RAP 331.93 ECC 1.4213
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 36 21 2204.98 -19.33 40.87 163.86 111.10 3 13 6 1605.0 -16.29 33.52
90.00 14 1 13 4987.65 22.48 218.78 165.07 72.31 15 24 21 4387.6 19.85 211.09
100.00 3 36 39 1945.94 -20.44 21.36 163.39 112.30 4 29 5 1345.9 -17.24 14.03
100.00 15 23 36 4721.91 23.61 198.83 164.67 71.11 16 42 18 4121.9 20.81 191.15
110.00 5 2 31 1739.79 -23.41 4.29 161.97 115.65 5 31 30 1139.8 -19.76 357.05
110.00 16 34 14 4500.83 26.65 180.79 163.41 67.75 17 49 15 3900.8 23.39 173.14
                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 702.7 SGR 401.6 SG3 134.2

RRT -.0464 RRF .0455 RTF -.6833

SGB 809.4 R23 .0016 R13 .6835

SG1 703.1 SG2 400.9 THA 177.75
                                                                                                                                                                             ST 290.6 SR 362.5 SS 333.6
CRT .8782 CRS .9896 CST .8246
LSA 555.2 MSA 135.4 SSA 24.4
      TOE -.2318 TRA -.3644 TC3 .4984 BAU .1791
      ROE - 3196 RRA .0570 RC3 - .1596 FAU .04204
     FOE .4537 FRA -.2453 FC3-1.4218 BSP 1974
BDE .3948 BRA .3689 BC3 .5233 FSP -346
                                                                                                                                                                             EL1 451.0 EL2 111.7 ALF 52.12
                                                                                                                                                                                             ARRIVAL DATE FEB 18 1966
                                                                                                       FLIGHT TIME 74.00
LAUNCH DATE DEC 6 1965
                                                                                                       DISTANCE 198.754
     RL 147.39 LAL .00 LOL 73.67 VL 27.149 GAL -7.48 AZL 86.61 MCA 89.08 SMA 124.76 ECC .22200 INC 3.3879 VI 30.228
RP 107.58 LAP 3.39 LOP 162.75 VP 37.462 GAP -10.13 AZP 89.95 TAL 208.41 TAP 297.49 RCA 97.06 APO 152.46 VZ 35.224
RC 51.018 GL 18.69 GP -.86 ZAL 131.57 ZAP 13.87 ETS 2.46 ZAE 147.52 ETE 339.81 ZAC 64.62 ETC 162.77 CLP -13.85
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 24.639 VHL 4.964 DLA -2.00 RAL 297.54 RAD 6568.0 VEL 12.084 PTH 2.16 VHP 6.914 DPA -15.71 RAP 332.48 ECC 1.4055
     C3 24.639 VHL 4.964 DLA -2.00 RAL 297.54 RAD 6568.0 VEL 12.084 PTH 2.16 VHP 6.914 DPA -15.71 RAP 332.48 ECC 1.4055
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 288 31 2202.81 -19.28 40.74 161.75 111.15 3 5 14 1602.8 -16.24 33.39
90.00 13 56 51 4971.01 22.13 217.68 162.81 71.87 15 19 42 4371.0 19.44 210.04
100.00 3 48 56 1943.45 -20.38 21.20 161.28 112.36 4 21 19 1343.4 -17.17 13.87
100.00 15 19 8 4705.63 23.25 197.76 162.40 70.66 16 37 33 4105.6 20.39 190.12
110.00 4 55 2 1736.49 -23.31 4.08 159.87 115.74 5 23 59 1136.5 -19.66 356.85
110.00 16 29 31 4485.33 26.24 179.76 161.13 67.27 17 44 16 3885.3 22.93 172.17
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 716.4 SGR 400.3 SG3 152.4

RRT -.0498 RRF .0498 RTF -.6935

SGB 820.6 R23 .0003 R13 .6937

SG1 716.8 SG2 399.5 THA 177.69
                                                                                                                                                                            ST 296.1 SR 360.0 SS 360.1
CRT .8918 CRS .9867 CST .8270
LSA 572.3 MSA 137.0 SSA 25.0
      TOE -.2343 TRA -.3443 TC3 .5348 BAU .1845
      ROE -.3114 RRA .0511 RC3 -.1670 FAU .04651
     FOE .5118 FRA -.3146 FC3-1.6341 BSP 2029
BOE .3898 BRA .3481 BC3 .5602 FSP -401
                                                                                                                                                                            EL1 453.8 EL2 106.2 ALF 51.22
      BOE .3898 BRA .3481 BC3 .5602 FSP
                                                                                                                                                                                             ARRIVAL DATE FEB 20 1966
                                                                                                         FLIGHT TIME 76.00
LAUNCH DATE DEC 6 1965
                                                                                                       DISTANCE 205.541
    HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 27.297 GAL -7.48 AZL 86.60 HCA 92.32 SMA 125.71 ECC .21491 INC 3.3970 V1 30.228
RP 107.61 LAP 3.39 LOP 165.99 VP 37.562 GAP -9.28 AZP 90.14 TAL 209.79 TAP 302.11 RCA 98.69 APO 152.72 VZ 35.216
RC 52.701 GL 19.17 GP -.92 TAL 132.72 ZAP 16.70 ETS 2.08 ZAE 147.42 ETE 340.18 ZAC 65.04 ETC 162.83 CLP -16.67
    PLANETOCENTRIC CONIC
      C3 23.851 VHL 4.884 DLA -1.79 RAL 296.11 RAD 6568.D VEL 12.051 PTH 2.15 VHP 6.465 DPA -15.63 RAP 332.91 ECC 1.3925
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                           2 21 16 2201.40 -19.25

13 52 44 4956.48 21.82

3 41 46 1941.70 -20.33

15 14 55 4691.41 22.92

4 48 6 1734.06 -23.24

16 25 4 4471.82 25.89
                                                                                                                                                            2 57 57
                                                                                                                                                                                                                                33.30
                                                                                              40.65
                                                                                                                  159.83
                                                                                                                                        111.18
                                                                                                                                                                                1601.4
           90.00
                                                                                                                   160.77
                                                                                                                                           71.49
                                                                                                                                                                                    4356.5
                                                                                                                                                                                                          19.09
                                                                                                                                                                                                                              209.12
                                                                                              216.73
            90.00
                                                                                                                                          112.40 4 14 8
70.27 16 33 6
                                                                                                                  159.37
                                                                                                                                         112.40
                                                                                                                                                                                   1341.7
                                                                                                                                                                                                          -17.12
                                                                                                                                                                                                                               13.77
                                                                                              21.09
          100.00
                                                                                                                                                                                   4091.4
                                                                                                                                                                                                         20.02
                                                                                             196.82
                                                                                                                  160.35
          100.00
                                                                                                                                        115.80 5 17 0
66.85 17 39 36
                                                                                                                                                                                   1134.1
                                                                                                                                                                                                                              356.70
                                                                                                                  157.97
                                                                                                 3.93
                                                                                                                  159.08
          110.00
                                                                                              178.88
                                                                                             MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
SCT 726.6 SGR 398.0 SG3 173.3 ST 300.5 SR 356.4 SS 38
     DIFFERENTIAL CORRECTIONS
      TDE -.2363 TRA -.3259 TC3 .5652 BAU .1885
                                                                                                                                                                             ST 300.5 SR 356.4 SS 388.7
CRT .9035 CRS .9835 CST .8292
                                                                                            ROE - 3035 RRA .0456 RC3 - 1737 FAU .05161
FDE .5793 FRA - 3945 FC3-1.8733 BSP 2068
BDE .3846 BRA .3291 BC3 .5912 FSP -464
```

ARRIVAL DATE FEB 22 1966

```
LAUNCH DATE CEC 6 1965
                                                                      DISTANCE 212.310
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.427 GAL -7.48 AZL 86.59 MCA 95.56 SMA 126.56 ECC .20874 INC 3.4061 VI 30.228 RP 107.63 LAP 3.39 LOP 169.24 VP 37.650 GAP -8.47 AZP 90.33 TAL 211.10 TAP 306.67 RCA 100.14 APO 152.98 V2 35.208 RC 54.462 GL 19.60 GP -1.00 ZAL 133.76 ZAP 19.66 ETS 1.81 ZAE 147.59 ETE 340.40 ZAC 65.32 ETC 162.85 CLP -19.64
  PLANETOCENTRIC CONIC
    C3 23.202 VML 4.817 CLA -1.60 RAL 294.80 RAO 6567.9 VEL 12.024 PTH 2.15 VMP 6.043 OPA -15.60 RAP 333.20 ECC 1.3819
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                2 14 36 2200.66
13 48 56 4943.75
3 35 12 1940.66
15 11 1 4678.97
4 41 44 1732.38
16 20 59 4460.02
                                                                                           111.20
                                                                                                                         1600.7
                                                                                                                                                      33.25
                                                                           158.11
                                                                                                       2 51 16
                                                                                                                                     -16.18
       90.00
                                                -19.23
                                                               40.60
                                                                                                                                                      20A.32
                                                                                                       15 11 20
                                                                                                                         4343.7
                                                                                                                                        18.77
                                                 21.54
                                                               215.90
                                                                             158.93
                                                                                             71.16
                                                                                                        4 7 32
                                                                                                                                                      13.71
                                                                                                                         1340.7
                                                                                                                                       -17.09
                                                                                            112.42
      100.00
                                                 -20.31
                                                               21.02
                                                                             157.65
                                                                          158.52
                                                                                            69.94 16 29 D
                                                                                                                         4079.0
                                                                                                                                        19.70
                                                                                                                                                      188.45
                                                 22.63
                                                               196.01
                                                                                                                                                    356.61
                                                                                                        5 10 36
                                                                                                                         1132.4
                                                                                                                                       -19.52
                                                                                            115.85
                                                 -23.19
                                                                3.82
                                                                            156.26
      110.00
                                                                                             66.50 17 35 19
                                                                                                                         3860.0
                                                                                                                                        22.17
                                                                                                                                                      170.60
                                                               178.11
                                                                            157.23
      110.00
                                                  25.57
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 301.1 SR 351.9 SS 418.2
CRT .9127 CRS .9799 CST .8294
LSA 607.1 MSA 142.0 SSA 25.4
                                                                  SCT 733.0 SCR 394.8 SC3 197.4
RRT -.0620 RRF .0621 RTF -.7073
SCB 832.6 R23 -.0005 R13 .7076
    TOE -.2352 TRA -.3076 TC3 .5918 BAU .1919
    ROE -. 2955 RRA . . 0405 RC3 -. 1797 FAU . 05753
   FOE .6551 FRA -.4877 FC3-2.1465 BSP 2136
BOE .3777 BRA .3102 BC3 .6185 FSP -540
                                                                   5G1 733.6 SG2 393.7 THA 177.31
                                                                                                                     EL1 453.1 EL2 95.5 ALF 49.87
    BOE .3777 BRA .3102 BC3 .6185 FSP
                                                                                                                                ARRIVAL DATE FEB 24 1966
                                                                      FLIGHT TIME 80.00
LAUNCH DATE DEC 6 1965
                                                                      DISTANCE 219.057
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.542 GAL -7.48 AZL 86.58 HCA 98.80 SMA 127.33 ECC .20338 INC 3.4153 V1 30.228
RP 107.66 LAP 3.38 LOP 172.48 VP 37.725 GAP -7.69 AZP 90.52 TAL 212.34 TAP 311.14 RCA 101.43 APO 153.23 V2 35.200
RC 56.291 GL 19.98 GP -1.08 ZAL 134.69 ZAP 22.80 ETS 1.59 ZAE 148.05 ETE 340.45 ZAC 65.44 ETC 162.83 CLP -22.77
  PLANETOCENTRIC CONIC
    C3 22.666 VHL 4.761 OLA -1.42 RAL 293.61 RAD 6567.9 VEL 12.002 PTH 2.14 VHP 5.649 OPA -15.65 RAP 333.33 ECC 1.3730
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                           111.20 2 45 11

70.88 15 7 44

112.43 4 1 32

69.64 16 25 19

115.87 5 4 47

66.19 17 31 26
                                                                           156.58
                                                                                                         2 45 11
                                                                                                                         1600.5
                                                                                                                                       -16.17
                                                                                                                                                       33.25
                    2 8 31 2200.52
                                                 -19.22
                                                               40.59
       90.00
                                                                                                                          4332.5
                                                                                                                                        18.49
                                                                                                                                                       207.62
                  13 45 31
                                 4932.50
                                                  21.29
                                                               215.17
                                                                             157.30
        90.00
                  3 29 12 1940.25
15 7 31 4667.99
                                                                                                                          1340.3
                                                                                                                                        -17.08
                                                                                                                                                       13.68
                                                 -20.29
                                                                21.00
                                                                             156.12
       100.00
                                                                                                                          4068.D
                                                                                                                                        19.40
                                                                                                                                                      187.77
                                                 22.38
                                                               195.30
                                                                            156.88
      100.00
                  4 35 56 1731.37
16 17 17 4449.64
                                                                                                                         1131.4
                                                                                                                                        -19.49
                                                                                                                                                      356.55
                                                 -23.16
                                                                 3.76
                                                                            154.74
      110.00
                                                                                                                          3849.6
                                                                                                                                         21.85
      110.00
                                                 25.28
                                                               177.43
                                                                             155.59
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 733.7 SGR 390.6 SG3 224.6
RRT -.0674 RRF .0694 RTF -.7074
                                                                                                                     ST 302.0 SR 346.2 SS 450.8
CRT .9199 CRS .9765 CST .8295
    TOE -.2345 TRA -.2935 TC3 .6068 BAU .1922
    ROE -.2875 RRA .0357 RC3 -.1850 FAU .06417
                                                                   SGB 831.2 R23 -.0031 R13 .7078
                                                                                                                     LSA 626.5 MSA 145.7 SSA 25.3
    FOE .7444 FRA -.5922 FC3-2.4511 BSP 2136
BOE .3710 BRA .2957 BC3 .6344 FSP -624
                                                                                                                     EL1 450.3 EL2 91.1 ALF 49.24
                                                                   SG1 734.4 SG2 389.3 THA 177.14
                                                                                                                               ARRIVAL DATE FEB 26 1966
                                                                      FLIGHT TIME 82.00
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                      DISTANCE 225.780
    RL 147.39 LAL .00 LOL 73.67 VL 27.643 GAL -7.49 AZL 86.58 HCA 102.04 SHA 128.01 ECC .19876 INC 3.4246 VI 30.228 RP 107.69 LAP 3.35 LOP 175.72 VP 37.791 GAP -6.95 AZP 90.72 TAL 213.48 TAP 315.52 RCA 102.57 APO 153.46 V2 35.191 RC 58.184 GL 20.32 GP -1.17 ZAL 135.52 ZAP 26.11 ETS 1.40 ZAE 148.81 ETE 340.31 ZAC 65.39 ETC 162.78 CLP -26.09
   PLANETOCENTRIC CONIC
    C3 22.219 VHL 4.714 DLA -1.25 RAL 292.55 RAD 6567.9 VEL 11.983 PTH 2.14 VHP 5.281 DPA -15.76 RAP 333.29 ECC 1.3657
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          155.22
                                                                                                                         1600.9
                                                                                                                                                       33.27
                                                                                          111.19 2 39 42
70.63 15 4 33
                                                                                                         2 39 42
                                                                40.62
                    2 3 1 2200.91
                                                 -19.23
       90.00
                                                                                                                          4322.4
                                                                                                                                                      206.99
                  13 42 31
                                 4922.45
                                                  21.06
                                                               214.52
                                                                             155.85
        90.00
                                                                                            112.43 3 56 7
69.39 16 22 4
                                                                                                                                                       13.69
                                                                                                                         1340.4
                                                                                                                                        -17.08
                    3 23 47 1940.40
                                                -20.30
                                                                21.01
                                                                            154,77
       100.00
                                                                                                                                                      187.16
                                                                                                                         4058.2
                                                                                                                                        19.14
                                                               194.66
                                                                            155.43
                  15 4 26
                                 4658.19
                                                  22.14
       100.00
                                                                                            115.89 4 59 32
65.92 17 28 1
                                                                                                                                       -19.47
                                                                                                                         1131.0
                                                                                                                                                      356.52
                    4 30 41 1730.95
                                                                 3.74
                                                                             153.40
                                                 -23.15
      110.00
                                                                                                                         3840.4
                                                                                                                                         21.56
                                                  25.03
                                                               176.84
                                                                             154.13
                  16 14 I
                                 4440.41
      110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 300.6 SR 339.5 SS 485.8
CRT .9244 CRS .9734 CST .8274
                                                                  SGT 728.3 SGR 385.4 SG3 255.4
RRT -.0737 RRF .0782 RTF -.7023
SGB 824.0 R23 -.0066 R13 .7028
    TDE -.2318 TRA -.2829 TC3 .6119 BAU
                                                      .1903
    RDE -.2791 RRA .0312 RC3 -.1898 FAU .07170
                                                                                                                     LSA 646.9 MSA 149.8 SSA 24.9
    FDE .8470 FRA -.7101 FC3-2.7935 BSP 2109
BDE .3628 BRA .2846 BC3 .6406 FSP -720
                                                                   SG1 729.1 SG2 384.0 THA 176.91
                                                                                                                      EL1 444.9 EL2 87.5 ALF 48.76
                                                                                                                                ARRIVAL DATE FEB 28 1966
                                                                       FLIGHT TIME 84.00
LAUNCH DATE DEC 6 1965
                                                                      DISTANCE 232.477
   HELIOCENTRIC CONIC
        147.39 LAL .00 LOL 73.67 VL 27.731 GAL -7.49 AZL 86.57 HCA 105.27 SMA 128.62 ECC .19477 INC 3.4342 V1 30.228 107.72 LAP 3.31 LOP 178.96 VP 37.846 GAP -6.25 AZP 90.91 TAL 214.51 TAP 319.79 RCA 103.57 APO 153.67 V2 35.181 60.133 GL 20.63 GP -1.27 ZAL 136.23 ZAP 29.63 ETS 1.24 ZAE 149.87 ETE 339.95 ZAC 65.15 ETC 162.67 CLP -29.61
    RL 147.39 LAL
    RP 107.72 LAP
   PLANETOCENTRIC CONIC
                                                                                                2.13 VHP 4.941 OPA -15.95 RAP 333.05 ECC 1.3595
    C3 21.844 VHL 4.674 DLA -1.09 RAL 291.61 RAD 6567.9 VEL 11.968 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 58 4 2201.80 -19.26 40.67 154.04 111.17 2 34 46 1601.8 -16.21 33.32
                                                                                              70.40
                                                                                                                          4313.3
                                                                                                                                         18.00
                                                                                                                                                       206.42
                                                                                                        15 1 51
                                                               213.93
                                                                              154.58
                   13 39 58 4913.32
                                                  20.86
        90.00
                                                                                                                                        -17.10
                                                                                                                                                       13.73
                                1941.05
                                                                             153.59
                                                                                             112.41
                                                                                                                          1341.0
                     3 18 54
                                                  -20.32
                                                                21.05
       100.00
                  15 1 49 4649.31
4 25 59 1731.06
16 11 13 4432.06
                                                                                              69.16 16 19 18
                                                                                                                                         18.90
                                                                                                                                                       186.61
                                                                                                                          4049.3
                                                                             154.16
                                                  21.93
                                                               194.09
       100.00
                                                                                            115.88
                                                                                                                          1131.1
                                                                                                                                        -19.48
                                                                                                                                                       356.53
                                                                             152.23
                                                 -23.15
                                                                  3.74
       110.00
                                                                                              65.68
                                                                                                                          3832.1
                                                                                                                                        21.30
                                                                                                                                                       168.90
                                                               176.30
                                                                             152.86
                                                  24.80
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 715.8 SGR 379.3 SG3 290.3
RRT -.0813 RRF .0891 RTF -.6909
SGB 810.1 R23 -.0113 R13 .6916
SG1 716.8 SG2 377.6 THA 176.58
    TOE -.2265 TRA -.2758 TC3 .6061 BAU .1859
                                                                                                                   ST 296.1 SR 331.6 SS 522.9
CRT .9259 CRS .9705 CST .8220
LSA 668.3 MSA 154.1 5SA 24.5
    ROE -.2703 RRA .0271 RC3 -.1942 FAU .08019
    FOE .9639 FRA -.8428 FC3-3.1781 BSP 2054
BOE .3527 BRA .2771 BC3 .6364 FSP -830
                                                                                                                   EL1 436.3 EL2 85.0 ALF 48.49
```

FLIGHT TIME 78.00

```
FLIGHT TIME 86.00
                                                                                                                                                ARRIVAL DATE MAR 2 1966
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                               01STANCE 239.148
    RL 147.39 LAL .00 LOL 73.67 VL 27.806 GAL -7.49 AZL 86.56 MCA 108.50 SMA 129.14 ECC .19134 INC 3.4441 V1 30.228 RP 107.75 LAP 3.27 LOP 182.20 VP 37.892 GAP -5.57 AZP 91.09 TAL 215.43 TAP 323.94 RCA 104.43 APO 153.85 VZ 35.171 RC 62.133 GL 20.91 GP -1.38 ZAL 136.84 ZAP 33.37 ETS 1.07 ZAE 151.25 ETE 339.31 ZAC 64.69 ETC 162.52 CLP -33.34
   PLANETOCENTRIC CONIC
                                            -.93 RAL 290.79 RAD 6567.9 VEL 11.954 PTH
                                                                                                            2.13 VHP 4.626 DPA -16.23 RAP 332.59 ECC 1.3543
     C3 21.525 VHL 4.640 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 53 39 2203.15 -19.29 40.76 153.03 111.14 2 30 22 1603.1 -16.25 33.41
                                                                                                     111.14 2 30 22
70.20 14 59 38
112.39 3 46 55
         90.00
                     13 37 53
                                   4904.87
                                                        20.66
                                                                       213.39
                                                                                       153.48
                                                                                                                                         4304.9
                                                                                                                                                        17.78
                                                                                                                                                                         205.90
                   3 14 33 1942.15 -20.34
14 59 39 4641.10 21.73
4 21 48 1731.64 -23.17
16 8 54 4424.38 24.58
        100.00
                                                                        21.12
                                                                                       152.58
                                                                                                                                        1342.2
                                                                                                                                                         -17.13
                                                                                                                                                                         13.80
                                                                                                   68.95 16 17 0
115.87 4 50 40
65.46 17 22 38
                                                                       193.56
                                                                                    153.06
                                                                                                                                        4041.1
                                                                                                                                                        18.67
                                                                                                                                                                         186.10
        100.00
                                                                                                                                                       -19.50
                                                                         3.78
                                                                                      151.22
                                                                                                                                        1131.6
                                                                                                                                                                         356.56
        110.00
                                                                                                                                     3824.4
                                                                                     151.75
                                                                       175.81
                                                                                                                                                        21.06
                                                                                                                                                                         168.43
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                           SGT 695.8 SGR 372.4 SG3 329.7
RRT -.0934 RRF .1035 RTF -.6721
SGB 789.2 R23 -.0160 R13 .6731
                                                                                                                                   ST 286.3 SR 322.6 SS 560.8
CRT .9235 CRS .9676 CST .8109
    TOE -.2166 TRA -.2719 TC3 .5901 BAU .1792
    ROE -.2611 RRA .0231 RC3 -.1985 FAU .08980
                                                                                                                                 LSA 689.1 MSA 158.2 SSA 24.0
    FOE 1.0932 FRA -.9928 FC3-3.6119 BSP 1996
BOE .3392 BRA .2729 BC3 .6226 FSP -959
                                                                            SG1 697.0 SG2 370.1 THA 176.01
                                                                                                                                    EL1 423.1 EL2 83.7 ALF 48.69
LAUNCH DATE DEC 6 1965
                                                                                FLIGHT TIME 88.00
                                                                                                                                                ARRIVAL DATE MAR 4 1966
                                                                               DISTANCE 245.790
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.870 GAL -7.88 AZL 86.55 HCA 111.74 SMA 129.59 ECC .18839 INC 3.4544 V1 30.228 RP 107.78 LAP 3.21 LOP 185.44 VP 37.929 GAP -4.92 AZP 91.28 TAL 216.23 TAP 327.97 RCA 105.18 APO 154.01 VZ 35.160 RC 64.180 GL 21.17 GP -1.51 ZAL 137.33 ZAP 37.34 ETS .91 ZAE 152.94 ETE 338.33 ZAC 64.02 ETC 162.30 CLP -37.32
   PLANETOCENTRIC CONIC
    C3 21.249 VHL 4.610 DLA -.77 RAL 290.10 RAD 6567.9 VEL 11.943 PTH 2.13 VHP 4.338 DPA -16.59 RAP 331.91 ECC 1.3497 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    152.16
                                                                                                                                                       -16.29
                                                                       40.87
                                                                                                      111.10
                                                                                                                      2 26 28
                                                                                                                                       1604.9
        90.00
                      1 49 43 2204.93
                                                       -19.33
                                                                                                                                                                          33.51
                                                                                                     70.00 14 57 54 4296.9
112.35 3 43 5 1343.7
68.75 16 15 13 4033.3
115.84 4 47 0 1132.7
65.26 17 20 41 3817.1
        90.00
                     13 36 18
                                     4896.85
                                                        20.48
                                                                       212.87
                                                                                       152.54
                                                                                                                                                          17.57
                                                                                                                                                                         205.40
                   3 10 42 1943.70
14 58 0 4633.32
4 18 7 1732.66
16 7 4 4417.12
                                                       -20.38
                                                                                    151.72
152.11
       100.00
                                                                        21.22
                                                                                                                                                        -17.18
                                                                                                                                                                          13.69
                                                                                                                                                                         185.62
       100.00
                                                       21.54
                                                                      193.06
                                                                                                                                                        18.46
                                                                         3.84
                                                                                                                                                      -19.53
                                                       -23.20
       110.00
                                                                                    150.36
                                                                                                                                                                         356.62
                                                      24.37
                                                                       175.35
                                                                                       150.80
       110.00
                                                                                                                                                          20.83
                                                                                                                                                                         167.99
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
    TDE -.2045 TRA -.2749 TC3 .5572 BAU .1684
RDE -.2512 RRA .0194 RC3 -.2026 FAU .10033
FDE 1.2410 FRA-1.1544 FC3-4.0877 BSP 1860
BDE .3239 BRA .2756 BC3 .5929 FSP -1098
                                                                          SGT 667.3 SGR 364.6 SG3 373.0 ST 274.5 SR 312.3 S5 601.8 RRT -.1022 RRF .1192 RTF -.6378 CRT .9159 CRS .9653 CST .7934 SGB 760.4 R23 -.0270 R13 .6395 LSA 712.8 MSA 162.4 SSA 23.4 SG1 668.8 SG2 361.9 THA 175.48 EL1 407.1 EL2 84.6 ALF 49.02
                                                                               FLIGHT TIME 90.00
                                                                                                                                               ARRIVAL DATE HAR 6 1966
LAUNCH DATE DEC 6 1965
                                                                               DISTANCE 252.402
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.925 CAL -7.47 AZL 86.53 MCA 114.96 SMA 129.98 ECC .18586 INC 3.4651 V1 30.228
RP 107.81 LAP 3.14 LOP 188.67 VP 37.559 CAP -4.31 AZP 91.46 TAL 216.91 TAP 331.87 RCA 105.82 APO 154.13 V2 35.149
RC 66.268 GL 21.42 GP -1.65 ZAL 137.72 ZAP 41.57 ETS .73 ZAE 154.94 ETE 336.88 ZAC 63.11 ETC 162.00 CLP -41.54
   PLANETOCENTRIC CONIC
                                             -.61 RAL 289.53 RAD 6567.9 VEL 11.932 PTH
                                                                                                           2.12 VHP 4.077 OPA -17.06 RAP 330.98 ECC 1.3457
    C3 21.003 VHL 4.583 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    111.05 2 23 1
69.82 14 56 42
112.30 3 39 43
68.57 16 13 56
115.80 4 43 47
65.06 17 19 14
                                                                                                                                    1607.1
                    1 46 14 2207.15
13 35 13 4889.06
                                                                                   151.44
151.73
                                                                                                                                                      -16.35
                                                                                                                                                                         33.65
                                                       -19.39
                                                                        41.01
        90.00
                                                       20.30
                                                                      212.37
                                                                                                                                        4289.1
                                                                                                                                                        17.37
                                                                                                                                                                        204.92
        90.00
                    3 7 18 1945.68
14 56 50 4625.76
                                                                                   150.99
151.30
                                                                                                                                     1345.7
4025.8
                                                                                                                                                                         14.01
                                                                        21.34
                                                                                                                                                        -17.23
                                                       -20.44
       100.00
                                                       21.35
                                                                      192.58
                                                                                                                                                                        185.16
       100.00
                                                                                   149.65
                                                                                                                                     1134.1
3610.1
                                                                                                                                                                        356.71
                    4 14 53 1734.10
16 5 44 4410.10
                                                                        3.93
                                                                                                                                                       -19.58
                                     4410.10
                                                      -23.24
       110.00
                                                                                                                                                       20.61
                                                      24.17
                                                                      174.90
                                                                                       149.99
                                                                                                                                                                        167.57
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 631.2 SGR 355.9 SG3 420.4
RRT -.1095 RRF .1376 RTF -.5830
SGB 724.7 R23 -.0449 R13 .5860
                                                                                                                                 ST 258.6 SR 300.8 SS 644.6
CRT .9000 CRS .9635 CST .7645
LSA 738.0 MSA 166.5 SSA 22.7
    TOE -.1881 TRA -.2840 TC3 .5083 BAU .1541
    ROE -.2405 RRA .0160 RG3 -.2066 FAU .11177
FDE 1.4048 FRA-1.3281 FC3-4.6071 BSP 1674
    BOE .3054 BRA .2845 BC3 .5486 FSP -1251
                                                                                                                                    EL1 386.9 EL2 87.7 ALF 49.79
                                                                           SGI 633.0 SG2 352.8 THA 174.87
                                                                                                                                               ARRIVAL DATE MAR 8 1966
LAUNCH DATE DEC 6.1965
                                                                               FLIGHT TIME 92.00
   HELIOCENTRIC CONIC
                                                                               DISTANCE 258.985
    RL 147.39 LAL .00 LOL 73.67 VL 27.969 GAL -7.45 A7L 86.52 MCA 118.19 SMA 130.29 ECC .18370 INC 3.4764 V1 30.228 RP 107.85 LAP 3.06 LOP 191.90 VP 37.981 GAP -3.71 AZP 91.64 TAL 217.45 TAP 335.64 RCA 106.36 APO 154.23 V2 35.138 RC 68.394 GL 21.65 GP -1.80 ZAL 138.00 ZAP 46.05 ETS .54 ZAE 157.23 ETE 334.78 ZAC 61.95 ETC 161.63 CLP -46.02
   PLANETOCENTRIC CONIC
                                           -.44 RAL 289.07 RAD 6567.8 VEL 11.923 PTH 2.12 VHP 3.843 OPA -17.61 RAP 329.79 ECC 1.3420
    C3 20.781 VHL 4.559 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     110.99 2 20 0
69.64 14 55 59
112.25 3 36 46
68.38 16 13 9
115.75 4 41 1
64.87 17 18 17
                                                                                    150.85
                                                                                                                                     1609.8
                                                                                                                                                      -16.43
                      1 43 10 2209.80
                                                                       41.18
                                                                                                                                                                         33.81
        90.00
                                                                       211.88
                                                                                       151.06
                                                                                                                                        4281.3
                                                                                                                                                         17.16
                                                                                                                                                                         204.45
        90.00
                    13 34 38
                                     4881.30
                                                        20.11
                                                                                    150.41
150.63
149.06
                                                                                       150.41
                                                                                                                                        1348.1
                                                                                                                                                       -17.30
                                                                                                                                                                         14.16
       100.00
                      3 4 18 1948.07
                                                       -20.50
                                                                        21.49
                     14 56 11 4618.25
4 12 5 1735.93
16 4 54 4403.16
                                                                      192.10
                                                                                                                                        4016.3
                                                                                                                                                        18.04
                                                                                                                                                                         184.70
       100.00
                    14 56 11
                                                        21.16
                                                                                                                                                      -19.64
       110.00
                                                       -23.29
                                                                         4.05
                                                                                                                                        1135.9
                                                                                                                                                                        356.82
       110.00
                                                       23.97
                                                                       174.46
                                                                                       149.32
                                                                                                                                        3803.2
                                                                                                                                                         20.39
                                                                                                                                                                        167.15
                                                                        #ID-COURSE EXECUTION ACCURACY
SGT 590.1 SGR 346.7 SG3 471.8
RRT -.1165 RRF .1606 RTF -.4990
SGB 684.4 R23 -.0731 R13 .5043
SGB 684.4 R23 -.0731 R13 .5043
SGI 592.2 SG2 343.1 THA 174.10
EL1 361.2 EL2 93.6 ALF 51.41
   DIFFERENTIAL CORRECTIONS
    TDE -.1655 TRA -.2987 TC3 .4442 BAU .1366
    ROE -.2293 RRA .0128 RC3 -.2107 FAU .12421
FDE 1.5779 FRA-1.5155 FC3-5.1748 BSP 1461
BOE .2828 BRA .2990 BC3 .4916 FSP -1426
```

ARRIVAL DATE MAR 10 1966

```
FLIGHT TIME 94.00
LAUNCH DATE DEC 6 1965
                                                                  DISTANCE 265.537
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.005 GAL -7.43 AZL 86.51 HCA 121.42 SHA 130.55 ECC .18184 INC 3.4884 V1 30.228 RP 107.89 LAP 2.98 LOP 195.13 VP 37.996 GAP -3.15 AZP 91.82 TAL 217.87 TAP 339.29 RCA 106.81 APO 154.29 V2 35.126 RC 70.553 GL 21.87 GP -1.97 TAL 138.19 ZAP 50.78 ETS .33 ZAE 159.79 ETE 331.72 ZAC 60.56 ETC 161.16 CLP -50.75
  PLANETOCENTRIC CONIC
                                     -.27 RAL 288.72 RAD 6567.8 VEL 11.914 PTH' 2.12 VHP 3.635 DPA -18.25 RAP 328.35 ECC 1.3386
   C3 20.573 VHL 4.536 DLA
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                 1612.9
                                                                                                                                              34.00
                                                                                                  2 17 21
                                                                       150.38
                                                                                      110.92
                   1 40 28 2212.90
                                              -19.53
                                                            41.37
       90.00
                                                                                                                                16.95
                                                                                                                                             203.96
                                                                                                                  4273.4
                                                           211.37
                                                                         150.51
                                                                                        69.45 14 55 48
                 13 34 34
                              4873.39
                                               19.92
       90.00
                                                                                                                                -17.38
                 3 1 42 1950.91
14 56 2 4610.61
                                                                                                                  1350.9
                                                                         149.94
                                                                                       112.18
                                                                                                   3 34 13
                                               -20.57
                                                            21.67
      100.00
                                                                                                                                17.83
                                                                                                                  4010.6
                                              20.97
                                                           191.62
                                                                         150.08
                                                                                        68.20 16 12 53
      100.00
                                                                                                                                -19.71
                 4 9 39 1738.18
16 4 34 4396.11
                                               -23.36
                                                              4.19
                                                                        148.61
                                                                                       115.70
                                                                                                  4 38 37
                                                                                                                  1138.2
      110.00
                                                                                        64.68 17 17 50
                                                                                                                                 20.16
                                                                                                                                              166.73
                                                                         148.76
                                                                                                                  3796.1
                                                            174.01
      110.00
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                              ST 213.9 SR 274.6 SS 731.1
CRT .8110 CRS .9605 CST .6309
                                                               SGT 549.7 SGR 336.7 SG3 525.3
RRT -.1095 RRF .1850 RTF -.3649
SGB 644.7 R23 -.1223 R13 .3735
   TOE -.1388 TRA -.3220 TC3 .3589 BAU .1150
   RDE - .2173 RRA .0098 RC3 - .2145 FAU .13703
                                                                                                              LSA 790.7 MSA 173.1 SSA
                                                                                                                                                21.2
   FOE 1.7660 FRA-1.7025 FC3-5.7661 BSP 1158
                                                                                                              EL1 332.3 EL2 103.4 ALF 53.64
   BOE .2579 BRA .3222 BC3 .4181 FSP -1601
                                                               SG1 551.7 SG2 333.5 THA 173.94
                                                                                                                         ARRIVAL DATE MAR 12 1966
                                                                   FLIGHT TIME 96.00
LAUNCH DATE DEC 6 1965
                                                                   01STANCE 272.058
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.033 GAL -7.39 AZL 86.50 MCA 124.64 SMA 130.75 ECC .18024 INC 3.5012 V1 30.228
RP 107.92 LAP 2.88 LOP 198.35 VP 38.006 GAP -2.60 AZP 91.99 TAL 218.17 TAP 342.81 RCA 107.19 APO 154.32 V2 35.114
RC 72.741 GL 22.09 GP -2.15 ZAL 138.27 ZAP 55.76 ETS .09 ZAE 162.54 ETE 327.20 ZAC 58.95 ETC 160.59 CLP -55.73
  PLANETOCENTRIC CONIC
                                      -.08 RAL 288.48 RAD 6567.8 VEL 11.906 PTH 2.12 VHP 3.455 DPA -18.98 RAP 326.65 ECC 1.3353
FINE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   C3 20.376 VHL 4.514 DLA
   LNCH AZHTH LNCH TIME L-I TIME
                                                                                      110.84 2 15 3
69.27 14 56 7
                                                                                                                                               34.22
                                                                      150.03
                                                                                                                  1616.5
                                                                                                                                -16.61
                   1 38 7 2216.48
                                              -19.61
                                                            41.60
       90.00
                                                                                                                                 16.73
                                                                         150.07
                                                                                                                   4265.2
       90.00
                  13 35
                                4865.19
                                               19.73
                                                            210.85
                                                                                                                   1354.2
                                                                                                                                 -17.48
                                                                                                                                               14.53
                                                                         149.60
                                                                                        112.10
                                                                                                   3 31 59
                   2 59 25 1954.21
                                               -20.66
                                                             21.88
      100.00
                                                                                         68.00 16 13 7
                                                                                                                                 17.60
                                                                                                                   4002.7
                                               20.77
                                                                         149.63
                 14 56 24
                                4602.70
                                                            191.11
      100.00
                                                                                       115.62 4 36 36
64.48 17 17 52
                                                                                                                  1140.8
                                                                                                                                -19.80
                                                                                                                                              357.11
                                                                         148.27
                   4 7 35 1740.85
                                               -23.44
                                                             4.35
      110.00
                                                                                                                                 19.93
                 16 4 44
                                                                                                                  3788.8
                                                                         148.31
                               4388.83
                                               23.56
                                                            173.56
      110.00
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 520.2 SGR 326.2 SG3 580.6
RRT -.0880 RRF .2142 RTF -.1690
                                                                                                               ST 189.2 SR 260.0 SS 772.6
CRT .6968 CRS .9592 CST .4809
    TOE -.1051 TRA -.3517 TC3 .2561 BAU .0917
    RDE -.2047 RRA .0072 RC3 -.2182 FAU .15028
                                                                                                               LSA 818.0 MSA 175.5 SSA
                                                               SGB 614.0 R23 -.1903 R13 .1799
                                                                                                                                                 20.5
    FDE 1.9535 FRA-1.8934 FC3-6.3852 BSP
                                                   823
                                                                                                               EL1 299.1 EL2 117.9 ALF 57.44
    BOE .2301 BRA .3518 BC3 .3365 FSP -1794
                                                               SG1 521.5 SG2 324.2 THA 174.84
                                                                                                                         ARRIVAL DATE MAR 14 1966
                                                                   FLIGHT TIME 98.00
LAUNCH DATE DEC 6 1965
                                                                  DISTANCE 278.549
   HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.054 GAL -7.36 AZL 86.48 MCA 127.86 SMA 130.90 ECC .17887 INC 3.5150 V1 30.228 RP 107.96 LAP 2.77 LOP 201.58 VP 38.010 GAP -2.08 AZP 92.16 TAL 218.35 TAP 346.21 RCA 107.49 APO 154.32 V2 35.101 RC 74.954 GL 22.32 GP -2.34 ZAL 138.27 ZAP 60.94 ETS 359.82 ZAE 165.36 ETE 320.29 ZAC 57.14 ETC 159.91 CLP -60.92
   PLANETOCENTRIC CONIC
                                       .13 RAL 288.35 RAD 6567.8 VEL 11.898 PTH 2.11 VMP 3.303 DPA -19.76 RAP 324.73 ECC 1.3322
    C3 20.183 VHL 4.493 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      110.75 2 13 3
69.07 14 56 56
                                                                                                                  1620.6
                                                                                                                               -16.72
                                                                                                                                               34.47
                                                            41.86
                                                                       149.79
                   1 36 2 2220.59
                                               -19.71
       90.00
                                                                                                                                              202.93
                                                                                                                   4256.5
                                                                                                                                 16.50
                  13 36 0
                                                            210.30
                                                                         149.73
                               4856.54
                                               19.52
        90.00
                                                                                       112.01 3 30 4
67.81 16 13 51
                                                                                                                   1358.0
                                                                                                                                 -17.58
                                                                                                                                               14.76
                   2 57 26 1958.02
                                               -20.75
                                                            22.12
                                                                         149.36
      100.00
                                                                                                                                17.37
                                                                                                                                              183.25
                                                                                                                   3994.4
                  14 57 17 4594.35
4 5 49 1743.96
                                                                         149.29
                                               20.56
                                                            190.59
      100.00
                                                                                                                                 -19.90
                                                                                                                                              357.29
                                                                                                                   1144.0
                                                                                       115.54 4 34 53
64.28 17 18 24
                  4 5 49
16 5 23
                                               -23.53
                                                              4.55
                                                                         148.03
      110.00
                                                                                                                  3781.2
                                                                                                                                  19.68
                                               23.33
                                                            173.08
                                                                         147.96
                               4381.17
      110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 171.9 SR 244.3 SS 814.6
CRT .4872 CRS .9588 CST .2347
                                                               SGT 518.4 SGR 315.1 SG3 634.3
RRT -.0350 RRF .2440 RTF .0900
SGB 606.7 R23 -.2491 R13 -.0849
    TOE -. 0666 TRA -. 3903 TC3 .1307 BAU .0694
    ROE - .1915 RRA .0049 RC3 - .2214 FAU .16296
                                                                                                               LSA 849.0 MSA 177.7 SSA 19.7
    FOE 2.1458 FRA-2.0675 FC3-6.9901 BSP 426
                                                                SG1 518.6 SG2 314.8 THA 178.07
                                                                                                               EL1 264.6 EL2 138.6 ALF 63.20
    BOE .2028 BRA .3903 BC3 .2571 FSP -1973
                                                                                                                         ARRIVAL DATE MAR 16 1966
                                                                   FLIGHT TIME 100.00
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                   DISTANCE 285.010
    RL 147.39 LAL .00 LOL 73.67 VL 28.068 GAL -7.31 AZL 86.47 HCA 131.08 SMA 131.01 ECC .17769 INC 3.5302 V1 30.228 RP 108.00 LAP 2.66 LOP 204.80 VP 38.008 GAP -1.58 AZP 92.32 TAL 218.41 TAP 349.49 RCA 107.73 APO 154.29 V2 35.089 RC 77.191 GL 22.54 GP -2.55 TAL 138.17 ZAP 66.31 ETS 359.52 ZAE 168.03 ETE 309.40 ZAC 55.18 ETC 159.10 CLP -66.28
   PLANETOCENTRIC CONIC
                                        .36 RAL 288.31 RAO 6567.8 VEL 11.890 PTH 2.11 VHP 3.177 OPA -20.60 RAP 322.61 ECC 1.3290
    C3 19.991 VHL 4.471 DLA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1625.3
                                                                                                                               -16.84
                                                                                                                                               34.76
                                                                                       110.64
                                                                                                    2 11 17
                                                                         149.65
                               2225.28
                                               -19.83
                                                             42.16
                    1 34 12
                                                                                                   14 58 17
                                                                                                                                  16.25
                                                                                                                                               202.37
                                                                                                                   4247.3
                                                                                         68.86
                                                                          149.48
                   13 37 30
                                4847.31
                                               19.29
                                                            209.72
                                                                                                                                 -17.71
                                                                                                                                               15.02
                                                                                        111.91
                                                                                                                   1362.4
                                                                          149.22
       100.00
                    2 55 43
                                1962.37
                                               -20.86
                                                             22.40
                                                                                                                                  17.11
                                                                                                                                               182.71
                                                                                                  16 15 6
                                                                                                                   3985.5
                                                                                         67.60
                  14 58 40
                                4585.46
                                                20.33
                                                            190.03
                                                                          149.04
       100.00
                                                                                        115.44
                                                                                                    4 33 28
                                                                                                                   1147.6
                                                                                                                                 -20.01
                                                                                                                                               357.51
                                                                          147.90
                   4 4 20
                              1747.57
                                               -23.64
                                                              4.78
       110.00
                                                                                         64.06 17 19 25
                                                                                                                   3773.0
                                                                                                                                 19.41
                                                                                                                                              165.36
                  16 6 32 4373.02
                                                            172.57
                                                                          147.71
                                               23.09
       110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 559.5 SGR 303.4 SG3 684.8

RRT .0399 RRF .2759 RTF .3593

SGB 636.5 R23 .2558 R13 .3636

SG1 559.7 SG2 303.0 THA 1.75
                                                                                                               ST 170.0 SR 228.0 SS 853.7
CRT .1616 CRS .9587 CST -.1110
    TOE -.0221 TRA -.4359 TC3 -.0143 BAU .0600
    ROE -.1779 RRA .0031 RC3 -.2239 FAU .17477
                                                                                                               LSA 881.5 MSA 179.5 SSA 18.8
    FOE 2.3282 FRA-2.2228 FC3-7.5684 BSP
                                                    324
                                                                                                               EL1 231.5 EL2 165.2 ALF 75.77
    BOE .1792 BRA .4359 BC3 .2243 FSP -2143
```

```
ARRIVAL CATE MAR 18 1966
LAUNCH DATE DEC 6 1965
                                                                               FLIGHT TIME 102.00
   HELIOCENTRIC CONIC
                                                                              DISTANCE 291.440
    RL 147.39 LAL .00 LOL 73.67 VL 28.076 GAL -7.25 A7L 86.45 HCA 134.29 SMA 131.06 ECC .17668 INC 3.5468 V1 30.228 RP 108.04 LAP 2.54 LOP 208.01 VP 38.002 GAP -1.10 A7P 92.48 TAL 218.36 TAP 352.65 RCA 107.91 APO 154.22 V2 35.076 RC 79.446 GL 22.78 GP -2.77 ZAL 137.99 ZAP 71.79 ETS 359.20 ZAE 170.11 ETE 292.27 ZAC 53.12 ETC 158.17 CLP -71.77
   PLANETOCENTRIC CONIC
    CS 19.799 VHL 4.450 DLA .60 RAL 288.36 RAD 6567.8 VEL 11.882 PTH 2.11 VHP 3.076 0PA -21.46 RAP 320.35 ECC 1.3258
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 34 2230.63 -19.95 42.50 149.60 110.52 2 9 45 1630.6 -16.98 35.08 90.00 13 39 31 4837.37 19.05 209.09 149.32 68.64 15 0 9 4237.4 15.98 201.76
                                                                                                   110.52 2 9 45

68.64 15 0 9

111.79 3 26 59

67.38 16 16 51

115.33 4 32 17

63.84 17 20 56
                  2 54 12 1967.35
15 0 35 4575.89
4 3 5 1751.73
16 8 11 4364.27
                                                                                                                                       1367.3
       100.00
                                                       -20.99
                                                                      22.71
                                                                                     149.17
                                                                                                                                                       -17.85
                                                                                                                                                                        15.33
       100.00
                                                      20.08
                                                                     189.42
                                                                                    148.88
                                                                                                                                      3975.9
                                                                                                                                                      16.84
                                                                                                                                                                       182.13
       110.00
                                                       -23.76
                                                                      5.04 147.87
172.02 147.54
                                                                                                                                   1151.7
3764.3
                                                                                                                                                     -20...
19.12
                                                                                                                                                                       357.76
       110.00
                                                    22.83
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        SGT 647.9 SGR 291.4 SG3 730.3
RRT .1181 RRF .3105 RTF .5755
SGB 710.4 R23 .2272 R13 .5824
SG1 649.0 SG2 288.8 THA 3.79
                                                                                                                                  ST 191.9 SR 211.3 SS 886.7
CRT -.1938 CRS .9586 CST -.4529
    TOE .0285 TRA -.4873 TC3 -.1763 BAU .0758
    ROE -: 1640 RRA .0018 RC3 -. 2256 FAU .18533
    FOE 2.4856 FRA-2.3537 FC3-8.1036 BSP 787
                                                                                                                                  LSA 913.7 MSA 180.4 SSA 18.0
    BOE .1665 BRA .4873 BC3 .2863 FSP -2306
                                                                                                                                  EL1 222.5 ELZ 178.7 ALF 121.77
LAUNCH DATE DEC 6 1965
                                                                                                                                               ARRIVAL DATE MAR 20 1966
                                                                              DISTANCE 297.841
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.078 GAL -7.19 AZL 86.43 MCA 137.50 SMA 131.08 ECC .17581 INC 3.5654 V1 30.228 RP 108.08 LAP 2.41 LOP 211.23 VP 37.992 GAP -.64 AZP 92.63 TAL 218.21 TAP 355.71 RCA 108.04 APO 154.13 V2 35.063 RC 81.719 GL 23.03 GP -3.01 ZAL 137.72 ZAP 77.33 ETS 358.84 ZAE 170.95 ETE 268.61 ZAC 51.03 ETC 157.13 CLP -77.31
   PLANETOCENTRIC CONIC
    C3 19.604 VHL 4.428 DLA .87 RAL 288.49 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 3.005 DPA -22.32 RAP 318.00 ECC 1.3226 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 31 6 2236.73

13 42 6 4826.57

2 52 51 1973.04

15 3 2 4565.50

4 2 2 1756.51

16 10 20 4354.79
                                                                                                   149.65
                                                                                                                                   1636.7
                                                                                                                                                    -17.15
                                                       -20.10
                                                                     42.89
                                                                                                                                                                        35.46
                                                                                     149.24
                                                                                                                                       4226.6
                                                        18.78
                                                                      208.42
                                                                                                                                                        15.68
                                                                                                                                                                       201.11
                                                                      23.07
                                                                                   149.22
                                                                                                                                       1373.0
                                                                                                                                                       -18.01
                                                       -21.13
                                                                                                                                                                        15.67
                                                       19.80
                                                                     188.77
                                                                                     148.80
                                                                                                                                       3965.5
                                                                                                                                                                       181.50
       100.00
                                                                                                                                                       16.54
                                                                       5.34
                                                      -23.90
                                                                                   147.93
                                                                                                                                       1156.5
                                                                                                                                                      -20.30
       110.00
                                                                                                                                                                       358.04
                                                                                                                                                                       164.29
                                                       22.54
                                                                      171.43
                                                                                      147.45
                                                                                                                                       3754.8
       110.00
                                                                                                                                                       18.81
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SCT 779.6 SCR 278.6 SC3 767.0

RRT .1898 RRF .3445 RTF .7195

SCB 827.9 R23 .1923 R13 .7250

SCI 781.6 SC2 272.8 THA 4.42
                                                                                                                                  ST 237.5 SR 194.0 SS 916.9
CRT -.4541 CRS .9593 CST -.6775
    TOE .0833 TRA -.5446 TC3 -.3560 BAU .1105
    ROE -.1498 RRA .0011 RC3 -.2259 FAU .19357
    FDE 2.6234 FRA-2.4421 FC3-8.5481 BSP 1393
BDE .1714 BRA .5446 BC3 .4217 FSP -2433
                                                                                                                                  LSA 949.6 MSA 181.2 SSA 17.0
                                                                                                                                  EL1 264.5 EL2 155.2 ALF 147.09
                                                                              FLIGHT TIME 106.00
                                                                                                                                             ARRIVAL DATE MAR 22 1966
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 304.213
    RL 147.39 LAL .00 LOL 73.67 VL 28.076 GAL -7.12 AZL 86.41 HCA 140.71 SMA 131.06 ECC .17507 INC 3.5864 V1 30.228
RP 108.12 LAP 2.27 LOP 214.44 VP 37.978 GAP -.20 AZP 92.78 TAL 217.95 TAP 358.67 RCA 108.12 APO 154.01 VZ 35.050
RC 84.008 GL 23.30 GP -3.26 ZAL 137.36 ZAP 82.86 ETS 358.46 ZAE 170.10 ETE 244.71 ZAC 48.96 ETC 155.97 CLP -82.84
   PLANETOCENTRIC CONIC
                                          1.18 RAL 288.71 RAD 6567.8 VEL 11.865 PTH 2.10 VHP 2.956 DPA -23.17 RAP 315.65 ECC 1.3194
    C3 19.407 VHL 4.405 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   110.21 2 7 8
68.16 15 5 28
111.49 3 24 37
66.89 16 21 55
115.05 4 30 30
63.34 17 25 24
                   1 29 45 2243.7.8

1 3 45 13 4814.80

2 51 38 1979.57

15 6 1 4554.17

4 1 8 1762.03

16 13 0 4344.48
                                                                                                                                  1643.7
                                                                                   149.78
                                                                                                                                                     -17.33
                                                                                                                                                                       35.89
                                                      -20.26
                                                                      43.33
        90.00
                                                                                                                                      4214.8
                                                                                                                                                       15.36
                                                                                                                                                                       200.40
                                                       18.48
                                                                     207.68
                                                                                     149.24
        90.00
                                                     -21.30
                                                                      23.49
                                                                                     149.36
                                                                                                                                      1379.6
                                                                                                                                                      -18.19
                                                                                                                                                                       16.07
       100.00
                                                                                    148.79
                                                                                                                                      3954.2
                                                                                                                                                                       180.83
       100.00
                                                       19.50
                                                                     188.07
                                                                                                                                                      16.21
                                    1762.03 -24.06
4344.48 22.23
       110.00
                                                                        5.69
                                                                                   148.07
                                                                                                                                      1162.0
                                                                                                                                                      -20.48
                                                                                                                                                                       358.37
                                                                     170.80
                                                                                     147.44
                                                                                                                                      3744.5
                                                                                                                                                       18.47
                                                                                                                                                                       163.68
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
   TOE .1421 TRA -.6052 TC3 -.5483 BAU .1538
RDE -.1357 RRA .0007 RC3 -.2253 FAU .19974
FDE 2.7191 FRA-2.4975 FC3-8.9105 BSP .2047
BDE .1965 BRA .6052 BC3 .5928 FSP .2546
                                                                                                                                  ST 300.3 SR 176.5 SS 938.9
CRT -.6148 CRS .9598 CST -.8038
                                                                         SCT 942.0 SCR 265.6 SC3 795.1
RRT .2500 RRF .3811 RTF .8079
SCB 978.7 R23 .1683 R13 .8115
                                                                                                                                  LSA 984.8 MSA 181.0 SSA 16.1
                                                                         SG1 944.5 SG2 256.5 THA 4.35
                                                                                                                                  EL1 323.4 EL2 129.2 ALF 156.07
                                                                                                                                              ARRIVAL DATE MAR 24 1966
LAUNCH DATE DEC 6 1965
                                                                              FLIGHT TIME 108.00
                                                                              DISTANCE 310.557
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.068 GAL -7.04 AZL 86.39 MCA 143.92 SMA 131.01 ECC .17443 INC 3.6105 VI 30.228 RP 108.16 LAP 2.13 LOP 217.64 VP 37.960 GAP .23 AZP 92.92 TAL 217.60 TAP 1.52 RCA 108.16 APO 153.86 V2 35.036 RC 86.309 GL 23.60 GP -3.53 ZAL 136.92 ZAP 88.29 ETS 358.05 ZAE 167.92 ETE 227.21 ZAC 47.01 ETC 154.73 CLP -88.29
   PLANETOCENTRIC CONIC
                                           1.52 RAL 289.01 RAO 6567.8 VEL 11.857 PTH 2.10 VHP 2.931 OPA -23.98 RAP 313.36 ECC 1.3161
   C3 19.207 VHL 4.383 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 28 26 2251.74
13 48 55 4801.86
                                                                                    150.00
                                                                                                      110.02
                                                                                                                     2 5 58
                                                                                                                                    1651.7
                                                                                                                                                     -17.54
                                                                                                                                                                        36.38
        90.00
                                                      -20.45
                                                                      43.85
                                                                                                        67.89 15 8 57
                                                       18.15
                                                                      206.87
                                                                                     149.31
                                                                                                                                       4201.9
                                                                                                                                                       14.99
                                                                                                                                                                       199.62
        90.00
                  2 50 29 1987.09
15 9 34 4541.74
4 0 21 1768.42
16 16 11 4333.17
                                                      -21.48
                                                                       23.97
                                                                                     149.58
                                                                                                      111.30
                                                                                                                   3 23 36
                                                                                                                                       1367.1
                                                                                                                                                      -18.40
                                                                                                                                                                        16.53
       100.00
                                                                                                       66.61 16 25 15
                                                                                                                                       3941.7
                                                                                                                                                      15.84
                                                                                                                                                                       180.08
                                                      19.17
                                                                    187.30
                                                                                     148.86
       100.00
                                                                                    148.31
                                                                        6.10
                                                                                                      114.87
                                                                                                      114.87 4 29 49
63.06 17 28 25
                                                                                                                                      1168.4
                                                                                                                                                      -20.68
                                                                                                                                                                       358.76
                                                      -24.24
       110.00
                                                                                                                                                     18.09
                                                                  170.10
                                                                                     147.50
                                                                                                                                      3733.2
                                                                                                                                                                      163.02
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                       SCT 1126.0 SGR 251.7 SG3 811.1 ST 374.2 SR 158.6 SS 958.6 RRT .3012 RRF .4164 RTF .8606 CRT -.7108 CRS .9614 CST -.8705 SGB 1153.8 R23 .1520 R13 .8630 LSA 1025.3 MSA 180.9 SSA 15.0 SG1 1128.6 SG2 239.5 THA 4.03 EL1 392.2 EL2 106.4 ALF 161.86
    TOE .2036 TRA -.6683 TC3 -.7507 BAU .2011
    ROE -.1212 RRA .0010 RC3 -.2232 FAU .20271
    FOE 2.7908 FRA-2.4987 FC3-9.1373 BSP 2738
BOE .2370 BRA .6683 BC3 .7832 FSP -2602
```

ARRIVAL DATE MAR 26 1966

LAUNCH DATE DEC 6 1965

```
DISTANCE 316.872
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.057 GAL -6.95 AZL 86.36 HCA 147.13 SMA 130.92 ECC .17389 INC 3.6385 V1 30.228
RP 108.20 LAP 1.97 LOP 220.85 VP 37.939 GAP .63 AZP 93.06 TAL 217.16 TAP 4.29 RCA 108.16 APO 153.69 V2 35.023
   RC 88.623 GL 23.92 GP -3.83 TAL 136.39 TAP 93.58 ETS 357.60 TAE 165.06 ETE 216.05 TAC 45.22 ETC 153.42 CLP -93.58
  PLANFTOCENTRIC CONIC
                                    1.90 RAL 289.39 RAD 6567.8 VEL 11.848 PTH 2.10 VMP 2.927 DPA -24.76 RAP 311.2; ECC 1.3128
   C3 19.005 VHL 4.359 DLA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            -17.78
                                                                                    109.80 2 4 48
                                                           44,45
                                                                      150.30
                                                                                                                1661.0
                                             -20.67
                  1 27 7 2261.04
       90.00
                13 53 15 4787.59 17.78
2 49 20 1995.82 -21.70
15 13 42 4528.04 18.80
3 59 37 1775.88 -24.45
16 19 56 4320.75 21.50
                                                                                                15 13 2
                                                                                                                 4187.6
                                                                                                                               14.59
                                                                                                                                            198.77
                                                           205.99
                                                                       149.45
                                                                                       67.60
       90.00
                                                                                      111.08 3 22 36
                                                                                                                                            17.07
                                                                                                                 1395.8
                                                                                                                             -18.64
                                                           24.53
                                                                       149.89
      100.00
                                                                     148.99
148.63
                                                                                     66.32 16 29 10
114.67 4 29 12
62.76 17 31 56
                                                                                                                 3928.0
                                                                                                                              15.43
                                                                                                                                            179.27
                                                           186.45
      100.00
                                                                                                                 1175.9
                                                                                                                          -20.92
                                                                                                                                            359.21
                                                            6.57
      110.00
                                                                        147.62
                                                                                                                 3720.7
                                                                                                                               17.67
                                                                                                                                            162.30
                                                           169.35
      110.00
                                                                                                         ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 1322.2 SGR 238.0 SG3 817.4
RRT .3484 RRF .4563 RTF .8934
SGB 1343.4 R23 .1450 R13 .8950
                                                                                                            ST 455.1 SR 140.4 SS 970.1
CRT -.7708 CRS .9629 CST -.9086
   TOE .2670 TRA -.7318 TC3 -.9589 BAU .2500
   ROE -.1067 RRA .0015 RC3 -.2205 FAU .20343
                                                                                                             LSA 1065.5 MSA 180.0 SSA 14.0
   FOE 2.8176 FRA-2.4664 FC3-9.2666 BSP 3447
BDE .2876 BRA .7318 BC3 .9839 FSP -2641
                                                             SG1 1324.9 SG2 222.6 THA 3.69
                                                                                                            EL1 468.3 EL2 86.9 ALF 166.14
                                                                  FLIGHT TIME 112.00
                                                                                                                        ARRIVAL DATE MAR 28 1966
LAUNCH DATE DEC 6 1965
                                                                 DISTANCE 323.162
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 28.041 GAL -6.85 AZL 86.33 HCA 150.33 SMA 130.81 ECC .17343 INC 3.6719 V1 30.228 RP 108.24 LAP 1.82 LOP 224.05 VP 37.916 GAP 1.03 AZP 93.19 TAL 216.63 TAP 6.96 RCA 108.13 APO 153.50 V2 35.010
                      24.28 GP -4.18 ZAL 135.78 ZAP 98.65 ETS 357.12 ZAE 161.94 ETE 208.99 ZAC 43.66 ETC 152.07 CLP -98.68
   RC 90.946 GL
  PLANETOCENTRIC CONIC
    C3 18.805 VHL 4.336 DLA 2.33 RAL 289.84 RAD 6567.8 VEL 11.840 PTH 2.10 VHP 2.942 DPA -25.52 RAP 309.27 ECC 1.3095
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    109.53 2 3 34

67.28 15 17 46

110.82 3 21 34

66.00 16 33 43

114.42 4 28 36

62.43 17 36 2
                                                                                                                             -18.06
                 1 25 42 2271.91
13 58 14 4771.72
                                                                                                                 1671.9
                                                                                                                                            37.63
       90.00
                                              -20.92
                                                            45.15
                                                                      150.70
                                                                                                                  4171.7
                                                                                                                                14.14
                                                                                                                                             197.82
                                                           205.01
                                                                        149.65
                                              17.37
       90.00
                2 48 8 2006.04
15 18 30 4512.82
                                                            25.19
                                                                        150.29
                                                                                                                 1406.0
                                                                                                                               -18.92
                                                                                                                                             17.70
                                             -21.95
      100.00
                                                                        149.19
                                                                                                                 3912.8
                                                                                                                               14.98
                                                                                                                                            17A.37
                                             18.38
                                                           185.51
      100.00
                                                                                                                 1184.7
                                                                                                                               -21.20
                                                                                                                                            359.74
                3 58 52 1784.66
16 24 15 4306.97
                                             -24.70
                                                             7.13
                                                                        149.04
      110.00
                                                                                                                 3707.0
                                                                                                                              17.21
                                                                                                                                            161.51
                                                           168.51
                                                                        147.82
                                             21.06
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 540.6 SR 121.4 SS 980.3
CRT -.8112 CRS .9652 CST -.9308
    TOE .3316 TRA -.7946 TC3-1.1699 BAU .2991
                                                               SGT 1525.0 SGR 223.9 SG3 812.4
                                                             RRT .3946 RRF .4987 RTF .9138
SGB 1541.3 R23 .1431 R13 .9150
SGI 1527.6 SG2 205.4 THA 3.38
    ROE -.0918 RRA .0022 RC3 -.2170 FAU .20116
                                                                                                             LSA 1111.6 MSA 179.5 SSA 12.8
   FOE 2.8239 FRA-2.3880 FC3-9.2612 BSP 4162
BOE .3441 BRA .7946 BC3 1.1899 FSP -2628
                                                                                                             ELI 549.7 ELZ 69.8 ALF 169.50
                                                                                                                       ARRIVAL DATE MAR 30 1966
                                                                  FLIGHT TIME 114.00
LAUNCH DATE DEC 6 1965
                                                                 DISTANCE 329.424
  HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 28.022 GAL -6.75 AZL 86.29 HCA 153.53 SMA 130.68 ECC .17305 INC 3.7124 V1 30.228 RP 108.29 LAP 1.65 LOP 227.25 VP 37.890 GAP 1.41 AZP 93.32 TAL 216.02 TAP 9.56 RCA 108.06 APO 153.29 V2 34.996
    RP 108.29 LAP
    RC 93.279 GL 24.69 GP -4.59 ZAL 135.07 ZAP 103.48 ETS 356.58 ZAE 158.79 ETE 204.41 ZAC 42.37 ETC 150.69 CLP-103.53
   PLANETOCENTRIC CONIC
    C3 18.610 VHL 4.314 DLA 2.82 RAL 290.36 RAO 6567.8 VEL 11.832 PTH 2.10 VHP 2.973 DPA -26.26 RAP 307.58 ECC 1.3063
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    INJ Acm...
109.21 2 2 1.
66.94 15 23 12
- K1 3 20 24
                                                                    151.18
                                                                                                                            -18.39
                                                                                                                                             38.44
                                                                                                  2 2 11
                                                                                                               1684.8
       90.00
                  1 24 6 2284.80
14 3 59 4753.94
                                             -21.21
                                                            45.98
                                                                        149.92
                                                                                                                 4153.9
                                                                                                                               13.63
                                                                                                                                            196.76
                                                           203.92
       90.00
                                              16.90
                                                                                   110.51
                 2 46 45 2018.19
15 24 0 4495.79
                                                                                                                 1418.2
                                                                                                                               -19.25
                                                                                                                                             18.45
                                                                        150.78
                                                            25.97
      100.00
                                             -22.24
                                                                                       65.65 16 38 56
                                                                                                                 3895.8
                                                                                                                              14.47
                                                                                                                                           177.36
                                                           184.47
                                                                        149.46
      100.00
                                             17.90
                                           -24.99
                                                                                    114.12 4 27 56
62.08 17 40 45
                                                                    149.55
148.07
                                                                                                                 1195.1
                                                                                                                             -21.52
                                                                                                                                              . 37
      110.00
                  3 58 1 1795.14
16 29 14 4291.59
                                                             7.80
                                                                                                              3691.6
                                                                                                                                            160.62
                                                                                                                              16.68
                                             20.58
                                                           167.58
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                             ST 629.2 SR 101.7 SS 984.5
CRT -.8399 CRS .9670 CST -.9452
                                                             SGT 1728.7 SGR 211.0 SG3 799.6
RRT .4452 RRF .5505 RTF .9273
SGB 1741.5 R23 .1481 R13 .9282
    TOE .3972 TRA -.8551 TC3-1.3798 BAU .3474
    RDE -.0764 RRA .0028 RC3 -.2144 FAU .19712
                                                                                                             LSA 1159.2 MSA 178.1 SSA 11.6
    FOE 2.7967 FRA-2.2862 FC3-9.1701 BSP 4872
BOE .4045 BRA .8551 BC3 1.3963 FSP -2603
                                                               SG1 1731.3 SG2 188.7 THA
                                                                                                3.15
                                                                                                              ELI 635.1 ELZ 54.7 ALF 172.21
                                                                                                                        ARRIVAL CATE APR 1 1966
                                                                  FLIGHT TIME 116.00
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                  DISTANCE 335.662
    RL 147.39 LAL .00 LOL 73.67 VL 28.000 GAL -6.63 A7L 86.24 MCA 156.73 SMA 130.52 ECC .17274 INC 3.7632 V1 30.228 RP 108.33 LAP 1.49 LOP 230.44 VP 37.861 GAP 1.77 A7P 93.46 TAL 215.34 TAP 12.07 RCA 107.97 APO 153.06 V2 34.983
    RC 95.621 GL 25.17 GP -5.09 ZAL 134.26 ZAP 108.04 ETS 355.96 ZAE 155.72 ETE 201.40 ZAC 41.38 ETC 149.30 CLP-108.11
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 22 8 2300.38 -21.55 46.99 151.76 108.82 2 0 28 1700 4
                                                                                                                                             195.57
                                                                                        66.56
                                                                                                  15 29 29
                                                                                                                  4133.7
                                                                                                                                13.05
                              4733.74
                                               16.36
                                                           202.68
                                                                         150.26
       90.00
                  14 10 35
                                                                                       110.12
                                                                                                  3 18 57
                                                                                                                  1432.9
                                                                                                                               -19.64
                                                                                                                                             19.37
      100.00
                   2 45 4 2032.89
                                              -22.59
                                                            26.93
                                                                       151.37
                                                                                       65.27 16 44 57
                 15 30 21 4476.45
3 56 57 1807.91
                                                                         149.80
                                                                                                                  3876.5
                                                                                                                               13.88
                                                                                                                                            176.23
                                               17.35
                                                           183.30
      100.00
                                                                      150.15
                                                                                    113.74 4 27 5
61.70 17 46 11
                                                                                                                              -21.92
                                              -25.35
                                                                                                                 1207.9
                                                                                                                                              1.15
      110.00
                  16 34 57
                               4274.20
                                              20.02
                                                           166.54
                                                                         148.39
                                                                                                                  3674.2
                                                                                                                                16.08
                                                                                                                                             159.63
      110.00
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SGT 1930.2 SGR 199.6 SG3 778.4 ST 720.9 SR 80.3 SS 989.7 RRT .5038 RRF .6119 RTF .9361 CRT -.8615 CRS .9688 CST -.9545 SGB 1940.5 R23 .1581 R13 .9368 LSA 1214.1 MSA 177.4 SSA 10.2 SG1 1932.8 SG2 172.2 THA 3.01 EL1 724.2 EL2 40.6 ALF 174.50
    TOE .4843 TRA -.9126 TC3-1.5854 BAU .3941
RDE -.D600 RRA .0031 RC3 -.2129 FAU .19090
    FDE 2.7613 FRA-2.1532 FC3-8.9685 BSP 5561
BDE .4681 BRA .9126 BC3 1.5996 FSP -2534
```

FLIGHT TIME 110.00

ARRIVAL CATE APR 3 1966

ARRIVAL CATE APR 11 1956

LAUNCH DATE DEC 6 1965

```
DISTANCE 366.500
  HELIOCENTRIC CONIC
                      .DD LOL 73.67 VL 27.853 GAL -5.93 AZL 85.36 MCA 172.69 SMA 129.47 ECC .17215 INC 4.6394 V1 30.228 .59 LOP 246.38 VP 37.694 GAP 3.41 AZP 94.60 TAL 210.96 TAP 23.65 RCA 107.18 APO 151.76 V2 34.920
   RL 147.39 LAL
   RP 108.52 LAP
   RC 107.406 GL 31.10 GP -13.76 ZAL 127.48 ZAP 125.72 ETS 347.27 ZAE 141.14 ETE 202.00 ZAC 43.78 ETC 139.01 CLP-126.95
  PLANETOCENTRIC CONIC
   C3 18.820 YHL 4.338 DLA 10.03 RAL 294.42 RAD 6567.8 VEL 11.841 PTH 2.10 VHP 3.476 CPA -36.09 RAP 304.88 ECC 1.3097
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           -23.57
                                                          61.54
                                                                     157.85
                                                                                    102.61
                                                                                                1 26 41
                                                                                                               1916.5
                                                                                                                                           53.44
                                             -25.57
                 0 44 45 2516.51
15 15 42 4527.51
       90.00
                                                                                                                                          183.67
                                                                                      63.52 16 31 10
                                                                                                               3927.5
                                                                                                                              6.76
                                                                       153.51
                                                          190.46
       90.00
                                             10.40
                                                                                                                                           32.65
                                                           40.77
                                                                       157.55
                                                                                     103.96
                                                                                                2 48 21
                                                                                                               1638.2
                                                                                                                             -24.52
                                             -26.70
                 2 11 3 2238.16
16 32 5 4281.08
      100.00
                                                                                      62.20 17 43 26
                                                                                                                                          165.08
                                                                                                               3681.1
                                                                                                                              7.64
                                                                      152.96
                                                          171.80
      100.00
                                             11.45
                                                                                                                                          12.76
                                                                                                4 3 43
                                                                                                               1389.3
                                                                                                                             -27.03
                                            -29.74
                                                           20.90
                                                                      156.57
                                                                                    107.69
      110.00
                  3 30 34 1989.34
                                                                                      58.57 18 37 27
                                                                                                                                          150.16
                                                                      151.37
                                                                                                               3502.7
                                                                                                                              9.92
                                                          156.67
      110.00
                 17 29 4
                              4102.67
                                             14.19
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                            MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 2861.1 SGR 332.7 SG3 602.7
RRT .8756 RRF .9732 RTF .9526
SGB 2880.4 R23 .2827 R13 .9542
                                                                                                           ST 1332.5 SR 128.5 SS 1071.4
CRT .9593 CRS -.9964 CST -.9794
   TOE .9421 TRA-1.1756 TC3-2.3485 BAU .5975
   RDE .0967 RRA -.0247 RC3 -.3520 FAU .14329
FDE 2.6634 FRA-1.4100 FC3-6.5914 BSP 8746
                                                                                                           LSA 1706.1 MSA 171.3 SSA 2.9
EL1 1338.2 EL2 36.1 ALF 5.29
   BOE .9470 BRA 1.1759 BC3 2.3747 FSP -2000
                                                             SG1 2876.0 SG2 159.9 THA
                                                                                               5.83
                                                                                                                      ARRIVAL DATE . APR 13 1966
                                                                 FLIGHT TIME 128.00
LAUNCH DATE DEC 6 1965
                                                                DISTANCE 372.602
  HELIOCENTRIC CONIC
                       .00 LOL 73.67 VL 27.818 GAL -5.77 AZL 84.39 HCA 175.87 SMA 129.22 ECC .17222 INC 5.6112 V1 30.228 .40 LOP 249.56 VP 37.657 GAP 3.71 AZP 95.60 TAL 209.92 TAP 25.79 RCA 106.97 APO 151.48 V2 34.909
   RL 147.39 LAL
   RP 108.56 LAP
                     36.15 GP -22.90 TAL 123.85 TAP 126.44 ETS 339.09 TAE 135.18 ETE 208.96 TAC 49.86 ETC 132.41 CLP-130.15
   RC 109.770 GL
  PLANETOCENTRIC CONIC
                                                                                        2.12 VHP 3.752 DPA -45.04 RAP 307.34 ECC 1.3464
   C3 21.048 VHL 4.588 DLA 15.25 RAL 294.78 RAD 6567.9 VEL 11.934 PTH
   LNCH AZATH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           67.61
                                                                      162.40
                                                                                      95.65
                                                                                                0 46 44
                                                                                                             2121.5
                                                                                                                            -26.72
                                             -27.79
                  0 1 23 2721.46
                                                          76.11
      90.00
                                                                                                17 14 56
                                                                                                                3775.8
                                                                                                                              1.92
                                                                                                                                          175.16
                 16 2 0
                                               5.68
                                                          181.82
                                                                       155.83
                                                                                       62.21
      90.00
                             4375.77
                1 31 2 2432.31
17 15 2 4140.15
2 57 49 2160.79
18 4 44 3984.44
                                                                                                2 11 34
                                                                                                                1832.3
                                                                                                                             -27.A5
                                                                                                                                           46.11
                                                                       162.23
                                                                                       97.04
                                             -29.13
                                                           54.68
      100.00
                                                                                       60.83
                                                                                               18 24 2
                                                                                                                3540.2
                                                                                                                              2.92
                                                                                                                                          157.28
                                              6.86
                                                          163.85
                                                                      155.19
      100.00
                                                                                     100.82 3 33 50
57.11 19 11 9
                                                                                                               1560.8
                                                                                                                             -30.79
                                                                                                                                           24.58
                                             -32.63
                                                           33.42
                                                                      161.59
      110:00
                                                                       153.34
                                                                                                                3384.4
                                                                                                                              5.49
                                                                                                                                          143.87
                                              9.90
                                                          150.19
     110.00
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ST 1643.0 SR 305.0 SS 1148.9
CRT .9743 CRS -.9983 CST -.9858
                                                             SGT 3048.1 SGR 554.1 SG3 519.6
RRT .9082 RRF .9901 RTF .9553
SGB 3098.0 R23 .2809 R13 .9588
   TOE 1.2529 TRA-1.2809 TC3-2.2049 BAU .6360
   RDE .2432 RRA -. 0633 RC3 -. 4972 FAU .12201
   FOE 2.8085 FRA-1.2618 FC3-5.0184 BSP 9471
BOE 1.2763 BRA 1.2825 BC3 2.2603 FSP -1741
                                                                                                            LSA 2021.0 MSA 166.9 55A
                                                                                                                                               1.6
                                                                                                            ELI 1669.7 EL2 67.6 ALF 10.27
                                                             SG1 3089.6 SG2 228.8 THA 9.43
                                                                                                                     ARRIVAL DATE APR 15 1966
                                                                FLIGHT TIME 130,00
LAUNCH DATE DEC' 6 1965
                                                                DISTANCE 378.675
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.781 GAL -5.59 AZL 76.97 HCA 179.04 SHA 128.97 ECC .17233 INC13.0209 VI 30.228
RP 108.59 LAP .22 LOP 252.73 VP 37.619 GAP 4.00 AZP 103.03 TAL 208.82 TAP 27.86 RCA 106,74 APO 151.19 V2 34.897
RC 112.133 GL 56.60 GP -62.97 ZAL 109.29 ZAP 110.07 ETS 307.91 ZAE 105.49 ETE 216.89 ZAC 80.27 ETC 111.43 CLP-139.02
  PLANETOCENTRIC CONIC
   C3 55.753 VHL 7.467 DLA 36.20 RAL 294.12 RAD 6569.0 VEL 13.308 PTH 2.43 VHP 7.055 DFA -82.45 RAP 355.64 ECC 1.9176
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       184.22
                                                                                   57.07 18 19 26
57.07 23 41 6
                                                                                                            3728.2
                                                                                                                             -20.18
                                                         190.95
                                                                     181.13
                 17 7 18
                             4328.23
                                             -15.96
       66.45
                                                                                      57.07
                                                                                                                2654.6
                                                                                                                             -20.17
                                                                                                                                          103.57
                                                                       181.12
                                                          110.30
      113.55
                 22 46 51
                               3254.64
                                             -15.94
                                                                                      57.07 18 19 26
                                                                                                                3728.2
                                                                                                                             -20.18
                                                                                                                                          184.22
                                                                      181.13
                 17 7 18
                             4328.23
                                            -15.96
                                                          190.95
       66.45
                                                                                      23 41 6
57.07 18 19 26
57.07 23 '
                                                                                                               2654.6
                                                                                                                             -20.17
                                                                                                                                          103.57
                             3254.64
                                                          110.30
                                                                       181.12
      113.55
                 22 46 51
                                            -15.94
                                                                                                                3728.2
                                                                                                                             -20.18
                                                                                                                                          184.22
                 17 7 18
                                                                      181.13
                             4328.23
                                            -15.96
                                                          190.95
                                                                                                               2654.6
                                                                                                                            -20.17
                                                                                                                                          103.57
                 22 46 51 3254.64
                                                                       181.12
                                            -15.94
                                                         110.30
      113.55
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 3447.0 SGR 738.6 SG3 173.2
RRT .8541 RRF .9445 RTF .9772
SGB 3525.2 R23 .1918 R13 .9812
SGI 3504.9 SG2 377.8 THA 10.49
                                                                                                          ST 2877.3 SR 650.9 SS 1087.5
CRT .9834 CRS -.9944 CST -.9971
    TOE 3.6908 TRA-1.7769 TC3 -.6716 BAU .5300
   RDE .8482 RRA .0118 RC3 -.2337 FAU .03088
   FOE 2.3131 FRA -.6269 FC3 -.4795 BSP 7608
BDE 3.7870 BRA 1.7770 BC3 .7111 FSP -444
                                                                                                           LSA 3141.2 MSA 134.4 SSA
                                                                                                            EL1 2947.8 EL2 115.2 ALF 12.56
                                                                                                                      ARRIVAL DATE APR 17 1966
                                                                 FLIGHT TIME 132.00
LAUNCH DATE DEC 6 1965
                                                                 DISTANCE 384.761
   HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.743 GAL -5.41 AZL 90.71 MCA 182.24 SMA 128.70 ECC .17257 INC .6967 V1 30.228 RP 108.63 LAP .03 LOP 255.91 VP 37.581 GAP 4.28 AZP 89.29 TAL 207.70 TAP 29.94 RCA 106.49 APO 150.91 VZ 34.886 RC 114.493 GL -5.51 GP 36.57 ZAL 132.08 ZAP 125.51 ETS 28.97 ZAE 129.91 ETE 145.41 ZAC 37.77 ETC 204.24 CLP-136.33
  PLANETOCENTRIC CONIC
   C3 12.568 VHL 3.545 DLA -25.24 RAL 304.92 RAD 6567.5 VEL 11.574 PTH 2.02 VHP 4.498 DPA 13.57 RAP 296.24 ECC 1.2068
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           334.05
                                                                                     115.79
                                                                                                 7 5 58
                                                                                                                 569.1
                                                                                                                              15.49
                                              12.11
                                                          341.10
                                                                       162.46
                              1169.13
                   6 46 29
       90.00
                                                                                                                                           260.34
                                                                                                                               28.25
                                                                       167.19
                                                                                      96.26
                                                                                                12 12 39
                                                                                                                5093.3
                                                          268.95
                  10 37 46
                               5693.29
                                              27.67
       90.00
                                                                                                                                           319.65
                                                                                      118.21
                                                                                                 8 D 32
                                                                                                                 383.0
                                                                                                                              14.01
                                              10.32
                                                           326.49
                                                                       161.53
      100.00
                   7 44 9
                                982.95
                                                                                                                                           235.44
                                                                                               13 52 2
8 23 8
                                                                                       93.75
                                                                                                                4754.7
                                                                                                                              29.88
                                                          244.24
                                                                       167.39
      100.00
                  12 22 47
                               5354.70
                                              29.68
                                                                                                                                           312.15
                                                                                     123.63
                                                                                                                 308.1
                                                                                                                              10.87
                                               6.50
                                                           318.51
                                                                       159.21
                  8 8 0
                                908.14
      110.00
                                                                                                                                           208.38
                                                                                      88.03 15 38 48
                                                                                                                4402.3
                                                                                                                               33.48
                  14 15 26
                                              34.13
                                                          217.56
                                                                       167.48
                               5002.27
      110.00
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ST 733.0 SR 152.3 SS 214.3
CRT -.9236 CRS .9987 CST -.9381
                                                             SGT 3244.0 SGR 1124.5 SG3 383.6
RRT -.9435 RRF -.9998 RTF .9466
SGB 3433.3 R23 .2894 R13 -.9571
    TDE -.3843 TRA -.7077 TC3-4.1213 BAU .7409
    RDE .0907 RRA .0447 RC3 1.5684 FAU .08994
                                                                                                          LSA 773.6 MSA 89.4 SSA 4.0
EL1 746.5 EL2 57.3 ALF 169.08
    FDE -.3241 FRA -.2087 FC3-6.1957 BSP 10548
                                                              SG1 3415.0 SG2 354.1 THA 161.69
    BOE .3949 BRA .7091 BC3 4.4097 FSP -1245
```

FLIGHT TIME 126.00

ARRIVAL CATE APR 19 1966

LAUNCH DATE DEC 6 1965

```
DISTANCE 390.804
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.704 GAL -5.22 AZL 88.30 HCA 185.42 SMA 128.43 ECC .17283 INC 1.6977 V1 30.228
RP 108.66 LAP .-.16 LOP 259.08 VP 37.542 GAP 4.56 AZP 91.69 TAL 206.52 TAP 31.93 RCA 106.24 APO 150.63 V2 34.875
RC 116.852 GL 13.18 GP 16.38 ZAL 129.42 ZAP 135.33 ETS 14.82 ZAE 137.35 ETE 164.09 ZAC 34.61 ETC 176.09 CLP-137.84
    PLANETOCENTRIC CONIC
                                                                                                                  2.03 VHP 3.932 DPA -6.10 RAP 301.04 ECC 1.2120
     C3 12.884 VHL 3.589 DLA -6.65 RAL 302.23 RAD 6567.5 VEL 11.588 PTH
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 22 14 1906.98
13 40 35 4966.08
4 40 24 1654.79
15 5 6 4693.50
                                                                                                             116.21 3 54 1
71.74 15 3 21
                                                                                                                                             1307.0
                                                           -11.11
                                                                            22.87
                                                                                           156.11
                                                                                                                                                                  -7.50
                                                                                                                                                                                    16.05
         90.00
                                                                                                                                                 4366.1
                                                                                                                                                                   19.32
                                                                                                                                                                                   209.73
                                                          22.02
                                                                           217.36
                                                                                            158.39
         90.00
                                                                                                              117.58 5 7 59 1054.8

70.33 16 23 19 4093.5

121.36 6 5 48 863.8

66.42 17 34 52 3857.2
                                                          -12.01
                                                                             3.87
                                                                                            155.65
                                                                                                                                                                   -8.22
                                                                                                                                                                                   357.12
        100.00
                                                                                                                                                                20.08
                                                                                                                                                                                   189.36
                                                                                           158.04
                                                          22.97
                                                                           196.96
       100.00
                                                                                          154.28
                     5 41 24 1463.81
16 20 35 4457.24
                                                      -14.37
25.49
                                                                                                                                                               -10.11
22.08
                                                                                                                                                                                   341.49
                                                                           348.00
       110.00
                                                                                                                                                                                  170.43
                                                                          177.93
                                                                                            156.94
       110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 3409.1 SCR 593.4 SC3 492.9 ST 686.4 SR 96.6 S5 445.6

RRT -.9552 RRF -.9971 RTF .9460 CRT -.9107 CRS .9911 CST -.8542

SCB 3460.4 R23 .3080 R13 -.9486 LSA 798.9 MSA 202.1 SSA 4.7
    TDE .3187 TRA -.9373 TC3-4.2007 BAU .7368
    RDE -.0569 RRA .0578 RC3 .8065 FAU .11417
FOE .8028 FRA -.4697 FC3-7.6714 85P 1D683
BDE .3237 BRA .9391 BC3 4.2775 FSP -1607
                                                                             SG1 3456.0 SG2 173.3 THA 170.54
                                                                                                                                            EL1 692.1 EL2 39.6 ALF 172.67
                                                                                                                                                         ARRIVAL DATE APR 21 1966
                                                                                    FLIGHT TIME 136.00
LAUNCH DATE DEC 6 1965
                                                                                    DISTANCE 396.832
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.664 GAL -5.01 AZL 87.67 HCA 188.59 SMA 128.16 ECC .17317 INC 2.3291 VI 3D.228
RP 108.69 LAP -.35 LOP 262.25 VP 37.503 GAP 4.83 AZP 92.30 TAL 205.30 TAP 33.89 RCA 105.97 APO 150.35 V2 34.865
                           17.93 GP 10.21 ZAL 126.77 ZAP 138.91 ETS 9.54 ZAE 137.34 ETE 171.01 ZAC 36.24 ETC 167.44 CLP-139.98
    RC 119.206 GL
   PLANETOCENTRIC CONIC
    C3 13.244 VHL 3.639 DLA -1.66 RAL 302.79 RAD 6567.5 VEL 11.603 PTH 2.03 VHP 3.949 DPA -12.00 RAP 303.13 ECC 1.2180
    C3 13.244 VML 3.639 OLA -1.66 RAL 302.79 RAD 6567.5 VEL 11.603 PTH 2.03 VMP 3.949 DPA -12.00 RAP 303.13 ECC 1.2180 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 46 52 2069.20 -15.80 32.48 157.53 113.81 3 21 21 1469.2 -12.44 25.41 90.00 14 20 23 4815.77 18.51 207.74 158.12 68.18 15 40 39 4215.8 15.38 200.46 100.00 4 7 27 1809.29 -16.69 12.94 157.11 115.16 4 37 36 1209.3 -13.16 5.93 100.00 15 42 30 4550.91 19.41 187.87 157.72 66.81 16 58 20 3950.9 16.11 180.63 110.00 5 13 55 1601.19 -19.07 355.87 155.83 118.92 5 40 37 1001.2 -15.07 349.04 110.00 16 52 30 4331.78 21.84 170.02 156.51 63.02 18 4 42 3731.8 18.04 162.94
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 3563.5 SGR 418.2 SG3 490.5
RRT -.9559 RRF -.9871 RTF .9460
                                                                                                                                          ST 959.1 SR 69.9 55 602.5
CRT -.9782 CRS .9780 CST -.9256
     TDE .5284 TRA -.9910 TC3-4.2503 BAU .7591
     ROE -.0415 RRA .0454 RC3 .5590 FAU .11252
FOE 1.1087 FRA -.4562 FC3-7.3552 BSP 11164
BOE .5300 BRA .9921 BC3 4.2869 FSP -1614
                                                                              LSA 1117.7 MSA 196.1 5SA 5.6
                                                                                                                                          EL1 961.5 EL2 14.5 ALF 175.92
                                                                                                                                                        ARRIVAL DATE APR 23 1966
                                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 402.844
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.623 GAL -4.80 AZL 87.38 HCA 191.77 SMA 127.88 ECC .17358 INC 2.6209 VI 30.228 RP 108.72 LAP -.53 LOP 265.42 VP 37.464 GAP 5.09 AZP 92.57 TAL 204.04 TAP 35.81 RCA 105.68 APO 150.08 V2 34.856 RC 121.557 GL 20.16 GP 7.30 TAL 124.61 ZAP 141.46 ETS 6.93 ZAE 136.56 ETE 174.20 ZAC 37.91 ETC 163.87 CLP-142.06
   PLANETOCENTRIC CONIC
    C3 13.336 VHL 3.652 DLA .90 RAL 303.89 RAD 6567.5 VEL 11.607 PTH 2.03 VHP 4.030 CPA -14.66 RAP 304.78 ECC 1.2195
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             1550.0
                                                                                                               112.27 3 8 8
66.64 16 2 42
                                                                                                                                                                -14.77
                     2 32 18 2149.97
14 43 44 4737.97
3 54 4 1886.24
16 4 39 4476.94
                                                                                          159.17
                                                                                                           112.27
                                                          -17.95
                                                                           37.43
                                                                                                                                                                 13.17
                                                                                                                                                4138.0
         90.00
                                                           16.47
                                                                           202.94
                                                                                           158.85
                                                                                                             66.0-

113.63 4 25 56

65.28 17 19 16

117.41 5 31 6

51.53 18 23 3
                                                                                                                                                                 -15.50
                                                                                                                                                1286.2
        100.00
                                                          -18.86
                                                                            17.63
                                                                                           158.76
                                                                                                                                                3876.9
                                                                                                                                                                 13.89
                                                           17.37
                                                                           183.32
                                                                                           158.43
       100.00
                                                                                        157.54
                                                                                                                                                                -17.43
15.81
                                                                                                                                                                                  352.94
                     5 3 17 1669.61
17 11 56 4266.34
                                                                                                                                                1069.6
                                                       -21.27
                                                                           359.96
       110.00
                                                                                                                                                3666.3
                                                          19.76
                                                                           166.07
                                                                                           157.16
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 3701.3 SCR 339.9 SC3 472.8

RRT -.9433 RRF -.9665 RTF .9451

SCB 3716.9 R23 .2235 R13 -.9457

SCI 3715.2 SC2 112.4 THA 175.04
                                                                                                                                          ST 1128.5 SR 39.7 SS 672.3
CRT -.9856 CRS .9254 CST -.9432
     TOE .6505 TRA-1.0028 TC3-4.3690 BAU .7832
    RDE -.0221 RRA .0352 RC3 .4567 FAU .10736
FDE 1.2215 FRA -.3816 FC3-6.9699 BSP 11598
BDE .6508 BRA 1.0034 BC3 4.3928 FSP -1558
                                                                                                                                          LSA 1299.8 MSA 194.1 SSA 6.7
                                                                                                                                           EL1 1129.2 EL2
                                                                                                                                                                      6.7 ALF 178.01
                                                                                                                                                        ARRIVAL DATE APR 25 1966
                                                                                    FLIGHT TIME 140.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 408.838
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.582 GAL -4.58 AZL 87.21 HCA 194.94 SMA 127.60 ECC .17407 INC 2.7894 VI 30.228
RP 108.75 LAP -.72 LOP 268.59 VP 37.425 GAP 5.34 AZP 92.70 TAL 202.75 TAP 37.69 RCA 105.39 APO 149.81 VZ 34.846
RC 123.903 GL 21.52 GP 5.62 ZAL 122.60 ZAP 143.64 ETS 5.42 ZAE 135.70 ETE 175.92 ZAC 39.49 ETC 162.14 CLP-144.02
   PLANETOCENTRIC CONIC
                                              2.64 RAL 305.23 RAO 6567.5 VEL 11.606 PTH 2.03 VHP 4.129 DPA -16.08 RAP 306.34 ECC 1.2190
    C3 13.305 VHL 3.648 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 24 46 2203.22
15 1 56 4683.71
3 47 21 1936.88
16 22 3 4425.28
4 58 25 1714.46
17 27 28 4220.47
                                                                                                                              3 1 30
                                                                                                                                              1603.2
                                                                                                                                                                                   33.41
                                                                                           160.83
                                                                                                             111.14
                                                                                                                                                                -16.25
                                                          -19,29
                                                                           40.76
         90.00
                                                                                                              65.68 16 19 59
112.51 4 19 37
64.33 17 35 48
116.31 5 26 59
60.58 18 37 48
                                                                                                                                                                                   192.64
                                                                                                                                                 4083.7
                                                                                                                                                                   11.57
                                                                           199.66
                                                                                            159.90
                                                           14.98
         90.00
                                                                            20.79
                                                                                            160.44
                                                                                                                                                 1336.9
                                                                                                                                                                 -16.98
                                                                                                                                                                                   13.48
                                                          -20.21
        100.00
                                                                                                                                                 3825.3
                                                                                                                                                                                   173.26
                                                                          180.22
                                                                                            159.47
                                                                                                                                                                  12.29
                                                           15.87
        100.00
                                                                                                                                                                                   355.55
                                                                                            159.25
                                                                                                                                                 1114.5
                                                                                                                                                                 -18.93
                                                         -22.65
                                                                              2.71
        110.00
                                                                                                                                                 3620.5
                                                                                                                                                                  14.20
                                                                                                                                                                                   156.61
                                                                          163.38
                                                                                            158.17
                                                     18.25
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 3834.3 SGR 301.0 SG3 453.7 ST 1257.0 SR 17.2 S5 708.2 RRT -.9170 RRF -.9345 RTF .9445 CRT -.7091 CR5 .5112 CST -.9516 SGB 3846.1 R23 .1691 R13 -.9449 LSA 1430.0 M5A 191.6 S5A 7.9 SGI 3844.3 SG2 119.7 THA 175.88 EL1 1257.0 EL2 12.1 ALF 179.44
     TOE .7394 TRA -.9969 TC3-4.5248 BAU .8081
     RDE -.0046 RRA .0270 RC3 .4084 FAU .10203
    FOE 1.2572 FRA -.2999 FC3-6.6390 BSP 12045
BDE .7394 BRA .9973 BC3 4.5431 FSP -1505
```

FLIGHT TIME 134.00

ARRIVAL DATE APR 27 1966

LAUNCH DATE DEC 6 1965

```
DISTANCE 414.817
  HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.539 GAL -4.36 AZL 87.10 HCA 198.11 SHA 127.31 ECC .17465 INC 2.9003 V1 30.228 RP 108.78 LAP -.90 LOP 271.76 VP 37.386 GAP 5.60 AZP 92.76 TAL 201.42 TAP 39.54 RCA 105.08 APO 149.55 V2 34.838
    RC 126.245 GL 22.47 GP 4.54 ZAL 120.64 ZAP 145.61 ETS 4.46 ZAE 134.88 ETE 176.96 ZAC 41.05 ETC 161.28 CLP-145.88
   PLANETOCENTRIC CONIC
    C3 13.216 VHL 3.635 DLA 4.00 RAL 306.72 RAD 6567.5 VEL 11.602 PTH 2.03 VHP 4.235 DPA -16.88 RAP 307.91 ECC 1.2175
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 20 30 2244.36
15 18 5 4639.68
3 43 43 1975.94
16 37 33 4383.33
                                                                            162.55
                                                                                             110.20
                                                                                                           2 57 54
                                                                                                                            1644.4
       90.00
                                                  -20.28
                                                                 43.38
                                                                                                64.99 16 35 25
                                                                                                                             4039.7
                                                   13.73
                                                                 197.03
                                                                               161.14
        90.00
                                                                                                                             1375.9
                                                                                                                                            -18.09
                                                                                                           4 16 39
                                                                                               111.58
       100.00
                                                  -21.21
                                                                  23.26
                                                                              162.17
                                                                                              111.58 4 16 39
63.63 17 50 37
115.41 5 25 25
59.88 18 51 13
                                                                                                                             3783.3
                                                                                                                                            10.96
       100.00
                                                   14.62
                                                                 177.73
                                                                              160.69
                                                                            161.01
                                                                                                                                           -20.06
                  4 56 16 1748.88
17 41 30 4183.15
                                                                                                                             1148.9
                                                                                                                                                         357.59
                                                -23.68
                                                                  4.86
      110.00
                                                                                                                                        12.86
                                                                                                                             3583.2
                                                   16.99
                                                                 161.22
                                                                               159.37
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 3979.1 SGR 283.2 SG3 437.0

RRT -.8798 RRF -.8944 RTF .9450

SGB 3989.2 R23 .1306 R13 -.9453

SG1 3986.9 SG2 134.4 THA 176.41
                                                                                                                        ST 1356.0 SR 22.0 SS 722.1
CRT .5829 CRS -.7603 CST -.9563
    TOE .8049 TRA -.9871 TC3-4.7229 BAU .8373
ROE .0114 RRA .0202 RC3 .3863 FAU .09754
                                                                                                                        LSA 1524.8 MSA 188.3 SSA
    FOE 1.2470 FRA -.2319 FC3-6.3898 BSP 12694
BCE .8049 BRA .9873 BC3 4.7387 FSP -1487
                                                                                                                         EL1 1356.0 EL2 17.9 ALF
                                                                                                                                    ARRIVAL DATE APR 29 1966
                                                                         FLIGHT TIME 144.00
LAUNCH DATE DEC 6 1965
                                                                         DISTANCE 420.784
  HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.496 GAL -4.12 A7L 87.02 HCA 201.28 SMA 127.02 ECC .17531 INC 2.9789 V1 30.228 RP 108.80 LAP -1.08 LOP 274.92 VP 37.347 GAP 5.84 AZP 92.78 TAL 200.06 TAP 41.35 RCA 104.76 APO 149.29 V2 34.830 RC 128.581 GL 23.19 GP 3.78 ZAL 118.65 ZAP 147.43 ETS 3.80 ZAE 134.14 ETE 177.61 ZAC 42.63 ETC 160.89 CLP-147.62
   PLANETOCENTRIC CONIC
                                        5.19 RAL 308.34 RAD 6567.5 VEL 11.597 PTH 2.03 VHP 4.346 DPA -17.31 RAP 309.53 ECC 1.2156
    C3 13.099 VHL 3.619 OLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 2 18 1 2279.63
15 33 30 4600.57
3 41 48 2009.37
16 52 24 4346.07
4 55 39 1778.23
17 55 2 4149.97
                                                                                                                                           -18.26
                                                                                                                           1679.6
                                                                                                            2 56 D
       90.00
                                                  -21.09
                                                                 45.64
                                                                              164.34
                                                                                               109.34
                                                                                                64.42 16 50 10
                                                                                                                             4000.6
                                                                                                                                               9.04
                                                                                                                                                           187.83
        90.00
                                                   12.59
                                                                 194.72
                                                                                162.53
                                                                                                                                             -19.01
                                                                                               110.74
                                                                                                            4 15 18
                                                                                                                             1409.4
      100.00
                                                  -22.03
                                                                  25.40
                                                                                163.97
                                                                                                63.07 18 4 50
                                                                            162.08
162.84
                                                                                                                             3746.1
                                                                                                                                               9.76
      100.00
                                                   13.48
                                                                 175.55
                                                                                                           5 25 18
                                                                                                                             1178.2
                                                                                                                                           -20.99
                                                                                               114.60
      110.00
                                                  -24.52
                                                                  6.72
                                                                                                59.31 19 4 12
                                                                                                                             3550.0
                                                                                                                                             11.66
                                                15.85
      110.00
                                                                 159.32
                                                                               160.73
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4031.4 SGR 267.0 SG3 407.8
RRT -.8261 RRF -.8314 RTF .9375
                                                                                                                         ST 1509.0 SR 36.1 55 783.8
CRT .8698 CR5 -.9498 CST -.9608
    TOE .9095 TRA -.9215 TC3-4.7922 BAU .8417
RDE .0221 RRA .0098 RC3 .3651 FAU .08851
    FOE 1.3160 FRA -.0650 FC3-5.8497 BSP 12239
                                                                   SGB 4040.2 R23 .0990 R13 -.9377
SG1 4037.4 SG2 150.3 THA 176.86
                                                                                                                        LSA 1689.6 MSA 194.5 SSA
                                                                                                                                                               9.8
                                                                                                                       ELI 1509.3 ELZ 17.8 ALF 1.19
    BOE .9098 BRA .9216 BC3 4.8061 FSP -1265
                                                                                                                                   ARRIVAL DATE MAY 1 1966
                                                                        FLIGHT TIME 146.00
LAUNCH DATE DEC 6 1965
                                                                        DISTANCE 426.730
   HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.453 GAL -3.87 AZL 86.96 HCA 204.45 SMA 126.74 ECC .17606 INC 3.0380 V1 30.228 RP 108.82 LAP -1.26 LOP 278.09 VP 37.308 GAP 6.09 AZP 92.77 TAL 198.68 TAP 43.13 RCA 104.42 APO 149.05 V2 34.822 RC 130.911 GL 23.76 GP 3.23 ZAL 116.63 ZAP 149.13 ETS 3.34 ZAE 133.48 ETE 178.05 ZAC 44.24 ETC 160.78 CLP-149.28
   PLANETOCENTRIC CONIC
    C3 12.978 VHL 3.602 OLA 6.27 RAL 310.06 RAD 6567.5 VEL 11.592 PTH 2.03 VHP 4.460 DPA -17.52 RAP 311.20 ECC 1.2136
    LNCH AZMTH' LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 2 16 38 2311.76
15 48 37 4564.43
3 40 58 2039.78
17 6 58 4311.64
4 56 2 1804.85
18 8 24 4119.33
                                                                            166.22
                                                                                              108.53 2 55 10
63.95 17 4 41
109.94 4 14 58
                                                                                                                          1711.8 -19.07
                                                  -21.80
                                                                 47.73
        90.00
                                                                                                                                              7.92
                                                                                                                                                          185.77
                                                                                                                             3964.4
        90.00
                                                   11.52
                                                                 192.60
                                                                               164.05
                                                                                                                             1439.8
                                                                                                                                            -19.82
                                                  -22.75
                                                                  27.37
                                                                              165.86
       100.00
                                                                                               62.59 18 18 50
113.83 5 26 7
58.82 19 17 3
                                                                                                                             3711.6
                                                                                                                                              8.64
                                                                                                                                                          166.80
      100.00
                                                  12.41
                                                                 173.56
                                                                               163.59
                                                                                                                             1204.9
                                                                                                                                            -21.82
      110.00
                                                  -25.26
                                                                   8.43
                                                                               164.76
                                                                                                                                             10.54
                                                                                                                             3519.3
                                               14.78
                                                                 157.60
                                                                               162.23
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4181.6 SGR 268.9 SG3 395.0
RRT -.7765 RRF -.7838 RTF ..9395
SGB 4190.2 R23 .0841 R13 -.9397
SG1 4186.8 SG2 169.2 THA 177.14
                                                                                                                       ST 1585.2 SR 57.5 SS 777.8
CRT .9318 CRS -.9797 CST -.9633
    TDE .9566 TRA -.9001 TC3-5.0229 BAU .8738 RDE .0358 RRA .0039 RC3 .3647 FAU .08537
    RDE .0358 RRA .0039 RC3 .3647 FAU .08537
FDE 1.2669 FRA -.0194 FC3-5.6952 BSP 13057
BDE .9572 BRA .9001 BC3 5.0362 FSP -1289
                                                                                                                        LSA 1756.5 MSA 189.0 SSA 11.2
                                                                                                                        EL1 1586.1 EL2 20.9 ALF 1.94
                                                                                                                                    ARRIVAL DATE MAY 3 1966
                                                                         FLIGHT TIME 148.00
LAUNCH DATE DEC 6 1965
                                                                        DISTANCE 432.663
   HELIOCENTRIC CONIC
   RL 147.39 LAL .00 LOL 73.67 VL 27.410 GAL -3.62 AZL 86.92 MCA 207.62 SMA 126.45 ECC .17692 INC 3.0840 V1 30.228
RP 108.85 LAP -1.43 LOP 281.25 VP 37.270 GAP 6.33 AZP 92.73 TAL 197.27 TAP 44.88 RCA 104.08 APO 148.82 V2 34.816
RC 133.236 GL 24.23 GP 2.80 ZAL 114.54 ZAP 150.73 ETS 3.02 ZAE 132.88 ETE 178.36 ZAC 45.89 ETC 160.84 CLP-150.85
   PLANETOCENTRIC CONIC
    C3 12.860 VHL 3.586 DLA 7.30 RAL 311.89 RAO 6567.5 VEL 11.586 PTH 2.03 VHP 4.576 DPA -17.56 RAP 312.93 ECC 1.2116
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             168.21
                                                                                               107.72 2 55 3
63.54 17 19 20
                                                                                                                             1742.5
                                                                                                                                            -19.82
                                                                                                                                                            42.07
                   2 16 1 2342.49
16 3 50 4529.76
       90.00
                                                   -22.45
                                                                  49.75
                                                                                                                              3929.8
                                                                                                                                               6.84
                                                                                                                                                           183.80
                                                   10.47
                                                                 190.59
                                                                                165.71
        90.00
                  3 40 51 2068.84
17 21 41 4278.64
                                                                                                109.14
                                                                                                             4 15 20
                                                                                                                              1468.8
                                                                                                                                             -20.58
                                                                                                                                                            21.62
                                                                  29.28
                                                                                167.86
      100.00
                                                  -23.41
                                                                                                62.17 18 33 0
113.07 5 27 36
58.39 19 30 6
                                                                             165.25
                                                                                                                              3678.6
                                                                                                                                              7.56
                                                                                                                                                           164.95
      100.00
                                                   11.37
                                                                 171.66
                                                                              166.78
                                                                                                                                                            2.53
                                                                                               113.07
                                                                                                                             1230.2
                                                                                                                                            -22.60
                    4 57 6 1830.23
                                                 -25.95
                                                                  10.08
      110.00
                                                                                                                                                           149.48
                   18 21 56
                                                                 155.96
                                                                                163.86
                                                                                                                             3490.0
                                                                                                                                              9.45
                                                   13.74
      110.00
                                  4090.01
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                       ST 1683.0 SR 76.1 SS 788.8

CRT .9603 CRS -.9863 CST -.9660

LSA 1850.8 MSA 186.2 SSA 12.3

EL1 1684.6 EL2 21.2 ALF 2.49
                                                                   SGT 4296.5 SGR 271.9 SG3 378.7
RRT -.7220 RRF -.7292 RTF .9388
SGB 4305.1 R23 .0724 R13 -.9389
    TOE 1.0188 TRA -.8537 TC3-5.2019 BAU .8965
    ROE .0413 RRA -.0034 RC3 .3641 FAU .08084
FOE 1.2464 FRA .0570 FC3-5.4420 BSP 13467
BOE 1.0199 BRA .8537 BC3 5.2146 FSP -1243
                                                                    SG1 4301.0 SG2 187.9 THA 177.38
```

FLIGHT TIME 142.00

ARRIVAL DATE MAY 5 1966

LAUNCH DATE DEC 6 1965

```
HELIOCENTRIC CONIC
                                                                                   DISTANCE 438.581
    RL 147.39 LAL .00 LOL 73.67 VL 27.366 GAL -3.35 AZL 86.88 HCA 210.78 SMA 126.16 ECC .17787 INC 3.1214 V1 30.228
RP 108.87 LAP -1.60 LOP 284.41 VP 37.232 GAP 6.57 AZP 92.68 TAL 195.83 TAP 46.61 RCA 103.72 APO 148.60 V2 34.809
RC 135.553 GL 24.62 GP 2.47 ZAL 112.38 ZAP 152.24 ETS 2.79 ZAE 132.35 ETE 178.57 ZAC 47.58 ETC 161.01 CLP-152.34
    PLANETOCENTRIC CONIC
     C3 12.753 VHL 3.571 DLA 8.30 RAL 313.82 RAD 6567.5 VEL 11.582 PTH 2.03 VHP 4.694 DPA -17.48 RAP 314.71 ECC 1.2099
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 15 55 2372.73
16 19 21 4495.96
3 41 17 2097.41
17 36 40 4246.51
                                                                                        170.32
                                                                                                          106.90 2 55 28
63.18 17 34 17
                                                                                                                                           1772.7
                                                                                                                                                             -20.53
                                                          -23.07
                                                                          51.76
                                                                                                                                               3896.0
                                                                                                                                                                                 181.89
                                                           9.44
                                                                          188.65
                                                                                           167.51
                                                                                                                                                                  5.77
                                                                                                            108.33 4 16 14
61.80 18 47 27
112.30 5 29 37
58.00 19 43 26
                                                                                                                                                                -21.30
                                                                                                                                                                                  23.44
                                                                                                                                               1497.4
                                                         -24.03
                                                                           31.17
                                                                                           169.98
       100.00
                     17 36 40
                                                           10.34
                                                                         169.83
                                                                                           167.04
                                                                                                                                               3646.5
                                                                                                                                                                  6.49
                                                                                                                                                                                 163.16
                       4 58 42 1855.15
18 35 45 4061.54
                                                                                        168.93
                                                                                                                                                                                   4.08
                                                                           11.72
                                                                                                                                               1255.1
                                                                                                                                                               -23.34
                                                        -26.61
      110.00
                                                                                                                                                                                 147.96
                                                                          154.39
                                                                                                                                                                  8.39
                                                       12.71
                                                                                           165.63
                                                                                                                                              3461.5
       110.00
                      18 35 45
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 4404.2 SCR 277.5 SC3 362.9
RRT -.6674 RRF -.6748 RTF .9377
SC8 4412.9 R23 .0640 R13 -.9378
                                                                                                                                          ST 1783.3 SR 93.5 S5 800.6
CRT .9760 CRS -.9861 CST -.9684
     TOE 1.0826 TRA -. 7967 TC3-5.3700 BAU
    RDE .0380 RRA -.0111 RC3 .3652 FAU .07639
FDE 1.2277 FRA .1339 FC3-5.1854 BSP 13826
BDE 1.0841 BRA .7968 BC3 5.3825 FSP -1194
                                                                                                                                          LSA 1948.4 MSA 183.5 55A 13.3
                                                                                                                                          EL1 1785.7 EL2 20.3 ALF
                                                                               SG1 4408.1 SG2 206.5 THA 177.59
                                                                                                                                                                                     2.93
                                                                                                                                                       ARRIVAL DATE MAY 7 1966
                                                                                    FLIGHT TIME 152.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 444.485
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.322 GAL -3.07 AZL 86.85 MCA 213.95 SMA 125.87 ECC .17894 INC 3.1524 VI 30.228 RP 108.88 LAP -1.76 LOP 287.58 VP 37.194 GAP 6.81 AZP 92.62 TAL 194.36 TAP 48.31 RCA 103.35 APO 148.40 V2 34.804 RC 137.863 GL 24.93 GP 2.21 ZAL 110.14 ZAP 153.67 ETS 2.64 ZAE 131.89 ETE 178.72 ZAC 49.33 ETC 161.25 CLP-153.76
   PLANE TOCENTRIC CONIC
    C3 12.667 VHL 3.559 DLA 9.29 RAL 315.85 RAD 6567.5 VEL 11.578 PTH 2.02 VHP 4.815 DPA -17.29 RAP 316.55 ECC 1.2085 ENCH AZMTH LNCH TIME L-I TIME INJ LAT 3NJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 16 14 2403.09 -23.65 53.79 172.55 106.04 2 56 17 1803.1 -21.23 45.96 90.00 16 35 15 4462.67 8.41 186.74 169.45 62.86 17 49 37 3862.7 4.71 180.02 100.00 3 42 8 2126.07 -24.63 33.09 172.23 107.49 4 17 34 1526.1 -22.01 25.28 100.00 17 52 2 4214.92 9.32 168.04 168.97 61.47 19 2 17 3614.9 5.44 161.40 110.00 5 0 43 1880.11 -27.24 13.39 171.20 111.50 5 32 3 1280.1 -24.07 5.65 110.00 18 49 56 4033.64 11.70 152.86 167.54 57.65 19 57 10 3433.6 7.35 146.47
    C3 12.667 VHL 3.559 DLA
                                               9.29 RAL 315.85 RAD 6567.5 VEL 11.578 PTH
                                                                                                                 2.02 VHP 4.815 DPA -17.29 RAP 316.55 ECC 1.2085
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 4509.3 SGR 285.1 SG3 348.1
RRT -.6145 RRF -.6227 RTF .9366
                                                                                                                                          ST 1884.1 SR 110.3 SS 811.4
CRT .9853 CRS -.9830 CST -.9705
     TOE 1.1466 TRA -.7322 TC3-5.5310 BAU .9387
     RDE .0681 RRA -.0188 RC3 .3672 FAU .07220
                                                                              SGB 4518.3 R23 .0579 R13 -.9367
SG1 4512.7 SG2 224.8 THA 177.77
     FDE 1.2081 FRA .2063 FC3-4.9351 BSP 14182
BDE 1.1486 BRA .7324 BC3 5.5432 FSP -1147
                                                                                                                                          LSA 2046.3 MSA 180.4 55A
                                                                                                                                          EL1 1887.2 EL2 18.8 ALF
                                                                                                                                                      ARRIVAL DATE MAY 9 1966
                                                                                   FLIGHT TIME 154.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 450.374
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.278 GAL -2.79 A7L 86.82 HCA 217.11 SMA 125.58 ECC .18013 INC 3.1786 VI 30.228
RP 108.90 LAP -1.92 LOP 290.74 VP 37.157 GAP 7.05 A7P 92.54 TAL 192.87 TAP 49.99 RCA 102.96 APO 148.21 V2 34.799
RC 140.164 GL 25.18 GP 1.99 7AL 107.83 7AP 155.04 ETS 2.54 7AE 131.48 ETE 178.83 7AC 51.12 ETC 161.54 CLP-155.11
   PLANETOCENTRIC CONIC
    C3 12.604 VHL 3.550 DLA 10.27 RAL 317.98 RAD 6567.5 VEL 11.575 PTH 2.02 VHP 4.938 DPA -17.02 RAP 318.44 ECC 1.2074
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         105.14 2 57 27 1834.0
62.59 18 5 26 3829.7
106.61 4 19 14 1555.2
61.18 19 17 35 3583.7
110.66 5 34 53 1305.5
57.34 20 11 19 3406.2
                                                                                                                                          1834.0 -21.90
                                                         -24.22
                                                                                       174.93
                                                                         55.87
        90.00
                        2 16 53 2433.97
                                                                         184.86
                                                                                          171.54
                                                                                                                                                                 3.65
                                                                                                                                                                                178.17
                      16 51 36 4429.69
3 43 19 2155.20
                                                            7.38
         90.00
                      16 51 36
                                                                                       174.62
                                                                                                                                                               -22.70
                                                                                                                                                                                 27.15
                                                                           35.06
                                                         -25.21
        100.00
                                                                                                                                                                 4.39
                                                                                                                                                                                 159.68
                                                                                         171.05
                     18 7 51 4183.69
5 3 7 1905.46
19 4 32 4006.19
                                                                       166.28
                                                           8.30
        100.00
                                                                                                                                                               -24.79
                                                                                                                                                                                  7.27
                                                         -27.86
                                                                            15.10
                                                                                         173.62
       110.00
                                                                                                                                                                                 145.02
                                                                                                                                                               6.32
                                                                         151.37
                                                                                           169.60
       110.00
                                                     10.70
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                              SCT 4610.1 SGR 293.9 SG3 334.2

RRI -.5638 RRF -.5735 RTF .9358

SGB 4619.4 R23 .0537 R13 -.9359

SGI 4613.0 SG2 242.6 THA 177.94
                                                                                                                                          ST 1936.1 SR 126.4 SS 820.8
CRT .9907 CRS -.9782 CST -.9726
     TOE 1.2118 TRA -.6588 TC3-5.6790 BAU .9590
    ROE .0778 RRA -.0268 RC3 .3691 FAU .06827
FOE 1.1875 FRA .2747 FC3-4.6892 BSP 14534
BOE 1.2143 BRA .6594 BC3 5.6910 FSP -1105
                                                                                                                                         LSA 2145.4 MSA 176.9 SSA 15.2
                                                                                                                                          ELI 1990.0 EL2 17.2 ALF 3.61
                                                                                                                                                       ARRIVAL DATE MAY II 1966
                                                                                   FLIGHT TIME 156.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 456.248
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.233 GAL -2.49 A7L 86.80 MCA 220.28 SMA 125.30 ECC .18143 INC 3.2013 V1 30.228 RP 108.91 LAP -2.07 LOP 293.90 VP 37.121 GAP 7.29 A7P 92.44 TAL 191.36 TAP 51.64 RCA 102.57 APO 148.03 V2 34.795 RC 142.456 GL 25.37 GP 1.81 7AL 105.44 ZAP 156.34 ETS 2.49 ZAE 131.12 ETE 178.92 ZAC 52.97 ETC 161.85 CLP-156.41
   PLANETOCENTRIC CONIC
     C3 12.572 VHL 3.546 DLA 11.24 RAL 320.21 RAC 6567.5 VEL 11.574 PTH 2.02 VHP 5.064 DPA -16.69 RAP 320.37 ECC 1.2069
     LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 17 48 2465.62
17 8 29 4396.95
3 44 48 2185.04
18 24 10 4152.76
                                                                                                                                           1865.6
                                                                                                                                                              -22.57
                                                                                          177.45
                                                                                                           104.19
                                                                                                                           2 58 53
                                                                                                                                                                                  50.05
                                                          -24.76
                                                                           58.03
         90.00
                                                                                                                                                                                 176.34
                                                                                          173.78
                                                                                                              62.35 18 21 46
                                                                                                                                               3797.0
                                                                                                                                                                  2.60
                                                            6.35
                                                                          183.01
         90.00
                                                                                                             105.68
                                                                                                                           4 21 13
                                                                                                                                               1585.0
                                                                                                                                                                -23.38
                                                                                                                                                                                  29.12
                                                          -25.78
                                                                            37.10
                                                                                           177.15
        100.00
                                                                                                               60.93 19 33 23
                                                                                                                                               3552.8
                                                                                                                                                                  3.35
                                                                                                                                                                                 157.97
                                                            7.28
                                                                          164.55
                                                                                           173.27
        100.00
                                                                                           176.18
                                                                                                             109.77
                                                                                                                           5 38 2
                                                                                                                                              1331.4
                                                                                                                                                                -25.51
                                                                                                                                                                                   8.94
                                                         -28.47
                                                                            16.87
                       5 5 51 1931.41
19 19 36 3979.15
        110.00
                                                                                                              57.06 20 25 55
                                                                                                                                             3379.2
                                                                                                                                                                                143.59
                                                         9.70
                                                                                           171.80
                                                                                                                                                                   5.29
                                                                          149.91
                      19 19 36
        110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                            SGT 4702.5 SGR 303.0 SG3 320.6

RRT --5144 RRF --5249 RTF -9346

SGB 4712.3 R23 .0497 R13 --9347

SG1 4705.1 SG2 259.7 THA 178.10
                                                                                                                                          ST 2094.0 SR 141.9 S5 832.4
CRT .9934 CRS -.9722 CST -.9747
                                                                                                                                   ST 2094.0 5...

CRT .9934 CRS -.9722 CST -.9747

LSA 2251.1 MSA 173.5 SSA 16.1

EL1 2098.7 EL2 16.3 ALF 3.85
     TOE 1.2816 TRA -.5743 TC3-5.8021 BAU .9772
     ROE .0870 RRA -.0350 RC3 .3697 FAU .06434
     FDE 1.1712 FRA .3435 FC3-4.4302 BSP 14813
     BDE 1.2846 BRA .5753 BC3 5.8138 FSP -1057
```

FLIGHT TIME 150.00

ARRIVAL DATE HAY 13 1966

JPL TM 33-99

```
LAUNCH DATE DEC 6 1965
                                                                          DISTANCE 462.107
  HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.189 GAL -2.18 A7L 86.78 MCA 223.44 SMA 125.01 ECC .18287 INC 3.2212 V1 30.228
RP 108.92 LAP -2.21 LOP 297.06 VP 37.085 GAP 7.53 A7P 92.34 TAL 189.83 TAP 53.27 RCA 102.15 APO 147.88 V2 34.791
RC 144.737 GL 25.50 GP 1.65 ZAL 102.97 ZAP 157.59 ETS 2.48 ZAE 130.80 ETE 178.98 ZAC 54.85 ETC 162.18 CLP-157.65
   PLANETOCENTRIC CONIC
    C3 12.576 VHL 3.546 DLA 12.21 RAL 322.54 RAD 6567.5 VEL 11.574 PTH 2.02 VHP 5.192 DPA -16.29 RAP 322.33 ECC 1.2070
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             -23.22
                                                                               180.12
                                                                                                                               1898.2
                                                                                                                                                                52.21
        90.00
                     2 18 58 2498.21
                                                    -25.29
                                                                   60.28
                                                                                                103.19
                                                                                                              3 0 36
                                                                                                                                                              174.53
                  17 25 52 4364.47
                                                                                 176.17
                                                                                                  62.15 18 38 36
104.69 4 23 28
                                                                                                                                3764.5
                                                                                                                                                 1.55
                                                      5.32
                                                                   181.18
        90.00
                                                                                                                                                                31.15
                     3 46 33 2215.74
                                                    -26.33
                                                                    39.21
                                                                                  179.84
                                                                                                                                1615.7
                                                                                                                                               -24.05
       100.00
                                                                                                 104.69 4 23 28
60.71 19 49 40
108.83 5 41 31
56.81 20 41 0
                                                                              175.66
                                                                                                                                                 2.31
                                                                                                                                                              156.29
                                                                                                                                3522.2
                  18 40 58 4122.18
                                                      6.26
                                                                   162.85
       100.00
                                                                                                                                                               10.69
                  5 8 53 1958.09
19 35 7 3952.59
                                                                                                                                              -26.23
                                                   -29.07
                                                                    18.72
                                                                                178.90
                                                                                                                                1358.1
       110.00
                                                                               174.16
                                                                                                                                                 4.29
                                                                                                                                                              142.20
                                                                                                                               3352.6
                                                    8.71
                                                                   148.49
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4795.9 SCR 312.8 SC3 308.2

RRT - .4684 RRF - .4805 RTF .9341

SCB 4806.1 R23 .0470 R13 -.9342

SCI 4798.1 SCZ 276.3 THA 178.24
                                                                                                                          ST 2200.2 SR 157.0 SS 841.2
CRT .9939 CRS -.9656 CST -.9766
    TOE 1.3514 TRA -.4837 TC3-5.9140 BAU .9962
    ROE .0961 RRA -.0432 RC3 .3694 FAU .06079
                                                                                                                          LSA 2354.6 MSA 169.6 SSA 16.9
EL1 2205.7 EL2 17.3 ALF 4.06
    FOE 1.1526 FRA .4050 FC3-4.1851 BSP 15137
    BOE 1.3548 BRA .4856 BC3 5.9255 FSP -1019
                                                                                                                                       ARRIVAL DATE MAY 15 1966
                                                                           FLIGHT TIME 160.00
LAUNCH DATE DEC 6 1965
                                                                           DISTANCE 467.952
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.145 GAL -1.86 AZL 86.76 HCA 226.60 SMA 124.73 ECC .18446 INC 3.2389 V1 30.228 RP 108.93 LAP -2.35 LOP 300.22 VP 37.050 GAP 7.77 AZP 92.23 TAL 188.28 TAP 54.89 RCA 101.72 APO 147.74 V2 34.788 RC 147.008 GL 25.56 GP 1.53 ZAL 100.43 ZAP 158.79 ETS 2.50 ZAE 130.52 ETE 179.03 ZAC 56.78 ETC 162.52 CLP-158.84
   PLANETOCENTRIC CONIC
    C3 12.620 VHL 3.552 OLA 13.17 RAL 324.96 RAD 6567.5 VEL 11.576 PTH 2.02 VHP 5.324 DPA -15.83 RAP 324.33 ECC 1.2077
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                               3 2 33
                                                                                                                               1931.8
                                                                                                                                                -23.86
                                                                                                                                                                54.47
                     2 20 21 2531.85
                                                    -25.79
                                                                   62.61
                                                                                182.95
                                                                                                102.12
                                                                                                                                                               172.73
                                                      4.30
                                                                   179.37
                                                                                  178.72
                                                                                                   61.98
                                                                                                              18 55 59
                                                                                                                                3732.3
                                                                                                                                                   .52
        90.00
                   17 43 47
                                   4332.32
                                                                                                 103.65 4 26 0
60.53 20 6 28
107.83 5 45 19
56.60 20 56 31
                    3 48 33 2247.40
18 58 16 4092.01
5 12 13 1985.58
                                                                                                                                                -24.71
                                                                                                                                                                33.27
                                                    -26.85
                                                                   41.42
                                                                                  182.67
                                                                                                                                1647.4
                                                                                                                                3492.0
                                                                                                                                                1.29
                                                                                                                                                               154.63
                                                      5.26
                                                                   161.18
                                                                                  178.19
       100.00
                                                                                                                                            -26.94
                                                                                                                                                                12.51
                                                    -29.66
                                                                   20.64
                                                                                 181.78
                                                                                                                                1385.6
                                                                                                                                                  3.30
                                                                                                                                                               140.83
       110.00
                    19 51 5
                                  3926.59
                                                     7.74
                                                                   147.10
                                                                                 176.66
                                                                                                                                3326.6
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 4886.3 SCR 322.8 SC3 296.6

RRT -.4250 RRF -.4392 RTF .9337

SCB 4896.9 R23 .0453 R13 -.9338

SCI 4888.2 SC2 292.1 THA 178.39
                                                                                                                            ST 2305.5 SR 171.9 SS 848.1
CRT .9927 CRS -.9585 CST -.9783
     TOE 1.4223 TRA -.3844 TC3-6.0059 BAU 1.0152
    ROE ... 1053 RRA -. 0513 RC3 .. 3675 FAU . 05749
                                                                                                                           LSA 2456.9 MSA 165.8 SSA 17.7
EL1 2311.8 EL2 20.7 ALF 4.23
    FOE 1.1329 FRA .4637 FC3-3.9441 BSP 15465
    BOE 1.4262 BRA .3878 BC3 6.0171 FSP -985
                                                                                                                                      ARRIVAL DATE MAY 17 1966
                                                                          FLIGHT TIME 162.00
LAUNCH DATE DEC 6 1965
                                                                          DISTANCE 473.781
    RL 147.39 LAL .00 LOL 73.67 VL 27.101 GAL -1.53 AZL 86.75 HCA 229.76 SMA 124.45 ECC .18619 INC 3.2548 V1 30.228 RP 108.94 LAP -2.48 LOP 303.39 VP 37.016 GAP 8.01 AZP 92.10 TAL 186.72 TAP 56.48 RCA 101.28 APO 147.62 V2 34.786 RC 149.266 GL 25.56 GP 1.41 ZAL 97.82 ZAP 159.94 ETS 2.55 ZAE 130.29 ETE 179.07 ZAC 58.75 ETC 162.86 CLP-159.99
   PLANETOCENTRIC CONIC
    C3 12.709 VHL 3.565 DLA 14.13 RAL 327.47 RAD 6567.5 VEL 11.580 PTH 2.03 VHP 5.459 DPA -15.32 RAP 326.36 ECC 1.2092
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 21 57 2566.59 -26.26 65.04 185.93 100.99 3 4 43 1966.6 -24.48 56.83
                                                                                               100.99 3 4 43
61.86 19 13 53
102.54 4 28 47
60.39 20 23 45
106.77 5 49 25
56.42 21 12 29
                                                                                                                                                 -.51
                                                                                                                                3700.6
         90.00
                    18 2 12
                                  4300.62
                                                      3.28
                                                                   177.60
                                                                                  181.43
                     18 2 12 4300.00
3 50 47 2280.06
19 16 2 4062.38
                                                                                                                                                                35.49
                                                                                                                                1680.1
                                                                                                                                                -25.36
       100.00
                                                    -27.36
                                                                   43.71
                                                                                  185.67
                                                                                                                                                              153.01
                                                                   159.54
                                                                                  180.89
                                                                                                                                3462.4
                                                                                                                                                  .29
       100.00
                    19 16 2
                                                      4.26
                                                                                                                                1413.9
                                                                                                                                              -27.64
                                                                                                                                                                14.41
                                                                                  184.81
       110.00
                      5 15 51
                                  2013.91
                                                    -30.23
                                                                    22.64
                                                                                                                                3301.3
                                                                                                                                                 2.33
                                                                                                                                                               139.51
                                                                   145.76
                                                                                  179.32
       110.00
                   20 7 28
                                   3901.30
                                                     6.79
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2412.5 SR 186.4 SS 854.9
CRT .9902 CRS -.9509 CST -.9800
                                                                     SGT 4971.D SGR 332.6 SG3 285.3

RRT -.3830 RRF -.3989 RTF .9333

SGB 4982.1 R23 .0433 R13 -.9333

SG1 4972.7 SG2 307.1 THA 178.53
    TOE 1.4965 TRA -.2753 TC3-6.0679 BAU 1.0329
    ROE .1144 RRA -. 0595 RC3 .3632 FAU .05426
                                                                                                                           L5A 2561.1 M5A 162.2 SSA 18.4
    FOE 1.1152 FRA .5208 FC3-3.6958 BSP 15769
BCE 1.5009 BRA .2817 BC3 6.0788 FSP -951
                                                                                                                            EL1 2419.6 EL2 26.0 ALF
                                                                                                                                                                  4.38
                                                                                                                                       ARRIVAL DATE MAY 19 1966
                                                                           FLIGHT TIME 164.00
LAUNCH DATE DEC 6 1965
                                                                          DISTANCE 479.594
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 27.057 GAL -1.19 A7L 86.73 HCA 232.93 SMA 124.17 ECC .18808 INC 3.2693 V1 30.228
RP 108.94 LAP -2.61 LOP 306.55 VP 36.982 GAP 8.26 A7P 91.97 TAL 185.14 TAP 58.06 RCA 100.82 APO 147.53 V2 34.785
RC 151.511 GL 25.49 GP 1.32 TAL 95.14 TAP 161.05 ETS 2.63 TAE 130.08 ETE 179.11 TAC 60.75 ETC 163.19 CLP-161.09
   PLANETOCENTRIC CONIC
                                                                                                      2.03 VHP 5.598 DPA -14.77 RAP 328.41 ECC 1.2115
    C3 12.851 VHL 3.585 OLA 15.08 RAL 330.06 RAO 6567.5 VEL 11.586 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 23 45 2602.43 -26.70 67.58 189.06 99.79 3 7 7 2002.4 -25.08 59.29
                                                                                                              19 32 15
                                                                                                                                 3669.5
                                                                                                                                                 -1.51
                                                                                                                                                               169.23
                                                                   175.86
                                                                                  184.30
                                                                                                    61.77
        90.00
                    18 21 5
                                  4269.53
                                                      2.28
                   3 53 17 2313.71
19 34 15 4033.48
5 19 47 2043.06
20 24 15 3876.89
                                                                                                  101.37
                                                                                                                4 31 50
                                                                                                                                 1713.7
                                                                                                                                                -25.98
                                                                                                                                                                37.79
       100.00
                                                    -27.83
                                                                    46.10
                                                                                  188.82
                                                                                                  60.27 20 41 29
105.65 5 53 50
56.26 21 28 51
                                                                                                                                 3433.5
                                                                                                                                                  -.69
                                                                                                                                                               151.42
                                                                                  183.74
                                                      3.29
                                                                   157.95
       100.00
                                                                                                                                 1443.1
       110.00
                                                    -30.79
                                                                    24.74
                                                                                 188.01
                                                                                                              21 28 51
                                                                                                                                 3276.9
                                                                                                                                                  1.40
                                                                   144.47
                                                                                  182.14
       110.00
                                                     5.87
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2522.8 SR 200.7 SS 862.4

CRT .9865 CRS -.9431 CST -.9816

LSA 2668.9 MSA 159.1 SSA 18.9

EL1 2530.6 EL2 32.7 ALF 4.49
                                                                       SGT 5048.6 SGR 341.9 SG3 274.3
RRT -.3417 RRF -.3585 RTF .9328
     TDE 1.5756 TRA -.1551 TC3-6.0926 BAU 1.0485
     RDE .1237 RRA -.0676 RC3 .3565 FAU .05105
                                                                      SGB 5060.2 R23 .0410 R13 -.9328
SG1 5049.9 SG2 321.3 THA 178.67
    FDE 1.1002 FRA .5768 FC3-3.4388 BSP 15977
BDE 1.5804 BRA .1692 BC3 6.1030 FSP -910
```

FLIGHT TIME 158.00

ARRIVAL DATE MAY 21 1966

LAUNCH DATE DEC 6 1965

```
DISTANCE 485.391
   HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 27.013 GAL -.83 A7L 86.72 HCA 236.09 SMA 123.90 ECC .19015 INC 3.2827 VI 30.228
RP 108.94 LAP -2.72 LOP 309.71 VP 36.949 GAP 8.51 A7P 91.83 TAL 183.54 TAP 59.62 RCA 100.34 APO 147.46 V2 34.784
RC 153.743 GL 25.35 GP 1.23 ZAL 92.41 ZAP 162.12 ETS 2.74 ZAE 129.90 ETE 179.14 ZAC 62.78 ETC 163.52 CLP-162.17
   PLANETOCENTRIC CONIC
     C3 13.050 VHL 3.613 DLA 16.00 RAL 332.74 RAD 6567.5 VEL 11.595 PTH 2.03 VHP 5.741 DPA -14.17 RAP 330.48 ECC 1.2148
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             98.53 3 9 46
         90.00
                        2 25 46 2639.32
                                                           -27.10
                                                                            70.20
                                                                                           192.35
                                                                                                                                              2039.3
                                                                                                                                                                 -25.64
                                                                                                                                                                                     61.84
                                                                                                              61.71 19 51 4
100.13 4 35 9
60.19 20 59 37
104.46 5 58 33
56.14 21 45 35
                                                                                             187.33
                                                                                                                                                  3639.3
                                                                                                                                                                   -2.49
                                                                                                                                                                                    167.54
                     18 40 25 4239.27
                                                            1.31
                                                                           174.17
         90.00
                    3 56 1 2348.30
19 52 51 4005.52
                                                           -28.27
                                                                             48.58
                                                                                             192.13
                                                                                                                                                  1748.3
                                                                                                                                                                   -26.58
                                                                                                                                                                                     40.18
        100.00
                                                                                                                                             3405.5
1473.0
3253.6
                                                                                             186.75
                                                                                                                                                                  -1.64
                                                                                                                                                                                    149.89
                                                            2.34
                                                                          156.41
        100.00
                     5 24 0 2072.99
20 41 21 3853.60
                                                                                             191.37
                                                                                                                                                                 -29.01
                                                                                                                                                                                     18.46
       110.00
                                                          -31.32
                                                                             26.91
                                       3853.60
                                                                                           185.10
                                                                                                                                                                      .51
                                                                                                                                                                                    137.02
                                                                          143.24
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 5126.0 SGR 351.1 SG3 264.2

RRT -.3031 RRF -.3217 RTF .9327

SGB 5138.0 R23 .0397 R13 -.9327

SGI 5127.1 SG2 334.5 THA 178.81
                                                                                                                                            ST 2626.4 SR 214.9 SS 866.3
CRT .9821 CRS -.9353 CST -.9830
     TOE 1.6538 TRA -.0273 TC3-6.0952 BAU 1.0652
     ROE .1334 RRA -.0754 RC3 .3476 FAU .04815
                                                                                                                                             LSA 2769.4 MSA 156.3 SSA 19.4
EL1 2634.9 EL2 40.4 ALF 4.60
    FOE 1.0827 FRA .6292 FC3-3.1943 BSP 16255
BOE 1.6592 BRA .0801 BC5 6.1051 FSP -879
                                                                                     FLIGHT TIME 168.00
                                                                                                                                                          ARRIVAL DATE MAY 23 1966
LAUNCH DATE DEC 6 1965
                                                                                    DISTANCE 491.171
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.969 GAL -.46 AZL 86.70 MCA 239.25 SMA 123.63 ECC .19240 INC 3.2951 V1 30.228 RP 108.94 LAP -2.83 LOP 312.87 VP 36.917 GAP 8.77 AZP 91.69 TAL 181.93 TAP 61.17 RCA 99.84 APO 147.41 V2 34.784 RC 155.962 GL 25.14 GP 1.16 ZAL 89.64 ZAP 163.16 ETS 2.86 ZAE 129.76 ETE 179.17 ZAC 64.85 ETC 163.84 CLP-163.20
   PLANETOCENTRIC CONIC
    C3 13.315 VHL 3.649 DLA 16.91 RAL 335.48 RAD 6567.5 VEL 11.606 PTH 2.03 VHP 5.888 DPA -13.53 RAP 332.57 ECC 1.2191
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            97.22 3 12 38
61.69 20 10 15
98.84 4 38 44
60.14 21 18 5
103.22 6 3 36
56.04 22 2 35
                                                                                          195.78
                                                                                                                                                 2077.2
                                                                                                                                                                  -26.17
                                                                                                                                                                                     64.49
                        2 28 1 2677.18
                                                           -27.46
                                                                            72.92
                                                                                                                                                  3610.1
                                                                                                                                                                                     165.91
                      19 0 5
                                        4210.08
                                                              .36
                                                                            172.54
                                                                                             190.51
                                                                                                                                                                     -3.42
         90.00
                                                                                                                                                  1783.7
                                                                                                                                                                   -27.15
                                                                                                                                                                                      42.67
                        3 59 0 2383.74
                                                           -28.67
                                                                            51.14
                                                                                             195.59
        100.00
                     20 11 46 3978.75
5 28 32 2103.61
20 58 44 3831.65
                                                                                                                                                  3378.8
                                                                                                                                                                                     148.42
                                                            1.44
                                                                           154.94
                                                                                            189.91
                                                                                                                                                                    -2.55
        100.00
                                                                                                                                                 1503.6
                                                                                                                                                                                      20.60
                                                          -31.81
                                                                            29.15
                                                                                           194.88
                                                                                                                                                                  -29.67
        110.00
                                                                                                                                                                                     135.88
                                                           4.16
                                                                                                                                                  3231.6
                                                                                                                                                                      -.33
        110.00
                                                                           142.09
                                                                                             188.22
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5197.9 SGR 359.8 SG3 254.1
RRT -.2652 RRF -.2844 RTF ..9330
SGB 5210.4 R23 ..0372 R13 -.9331
SGI 5198.8 SG2 346.8 THA 178.94
                                                                                                                                            ST 2726.0 SR 229.1 SS 868.3
CRT .9772 CRS -.9282 CST -.9844
     TOE 1.7337 TRA .1071 TC3-6.0629 BAU 1.0809
                                                                                                                                     CRT .9772 CR5 -.9202 C3. .....
LSA 2865.9 M5A 153.4 55A 19.8
EL1 2735.2 EL2 48.5 ALF 4.70
     RDE .1435 RRA -.0827 RC3 .3362 FAU .04531
     FDE 1.0654 FRA .6748 FC3-2.9461 BSP 16568
BDE 1.7396 BRA .1353 BC3 6.0722 FSP -854
                                                                                    FLIGHT TIME 170.00
                                                                                                                                                         ARRIVAL DATE MAY 25 1966
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 496.933
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.925 GAL -.07 AZL 86.69 HCA 242.41 SMA 123.36 ECC .19485 INC 3.3067 VI 30.228 RP 108.94 LAP -2.93 LOP 316.04 VP 36.886 GAP 9.03 AZP 91.53 TAL 180.30 TAP 62.71 RCA 99.32 APO 147.39 V2 34.785 RC 158.168 GL 24.86 GP 1.10 7AL 86.83 ZAP 164.17 ETS 3.02 ZAE 129.63 ETE 179.19 ZAC 66.95 ETC 164.14 CLP-164.21
   PLANETOCENTRIC CONIC
     C3 13.651 VHL 3.695 DLA 17.79 RAL 338.29 RAD 6567.5 VEL 11.621 PTH
                                                                                                                  2.04 VHP 6.041 DPA -12.86 RAP 334.67 ECC 1.2247
    C3 13.651 VHL 3.695 DLA 17.79 RAL 338.29 RAD 6567.5 VEL 11.621 PTH 2.04 VMP 6.041 DPA -12.86 RAP 334.67 ECC 1.2247 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 230 29 2715.89 -27.76 75.71 199.36 95.85 3 15.45 2115.9 -26.66 67.22 90.00 19 20 2 4182.23 -.54 170.99 193.84 61.69 20 29 44 3582.2 -4.32 164.35 100.00 4 2 16 2419.92 -29.02 53.77 199.19 97.50 4 42 36 1819.9 -27.68 45.22 100.00 20 30 56 3953.44 .58 153.55 193.22 60.11 21 36 49 3353.4 -3.40 147.03 110.00 5 33 24 2134.82 -32.28 31.47 198.54 101.92 6 8 58 1534.8 -30.30 22.81 110.00 21 16 18 3811.30 3.38 141.02 191.47 55.96 22 19 49 3211.3 -1.11 134.82
                     20 30 56 3953.44 .58
5 33 24 2134.82 -32.28
21 16 18 3811.30 3.38
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 5282.9 SGR 368.0 SG3 245.3

RRT - .2293 RRF - .2486 RTF .9372

SGB 5295.7 R23 .0336 R13 -.9373

SGI 5283.6 SG2 358.1 THA 179.08
                                                                                                                                             ST 2821.9 SR 243.2 SS 869.8
     TOE 1.8162 TRA .2362 TC3-6.0261 BAU 1.1014
                                                                                                                                             CRT .9726 CRS -.9240 CST -.9863
     RDE .1342 RRA - .0894 RC3 .3231 FAU .04326
FDE 1.0512 FRA .6978 FC3-2.7436 BSP 16902
BOE 1.8227 BRA .2525 BC3 6.0348 FSP -833
                                                                                                                                            LSA 2959.2 MSA 148.0 SSA 20.0
EL1 2831.8 EL2 56.3 ALF 4.79
                                                                                                                                                          ARRIVAL DATE MAY 27 1966
                                                                                     FLIGHT TIME 172.00
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 502.677
     RL 147.39 LAL .00 LOL 73.67 VL 26.882 GAL .33 AZL 86.68 HCA 245.57 SMA 123.09 ECC .19752 INC 3.3176 V1 30.228 RP 108.94 LAP -3.02 LOP 319.20 VP 36.856 GAP 9.30 AZP 91.37 TAL 178.67 TAP 64.24 RCA 98.78 APO 147.40 V2 34.787 RC 160.359 GL 24.51 GP 1.04 ZAL 83.99 ZAP 165.15 ETS 3.19 ZAE 129.53 ETE 179.22 ZAC 69.07 ETC 164.43 CLP-165.19
   PLANETOCENTRIC CONIC
     C3 14.068 VHL 3.751 OLA 18.63 RAL 341.16 RAD 6567.6 VEL 11.638 PTH 2.04 VHP 6.199 OPA -12.15 RAP 336.78 ECC 1.2315
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                 -27.09
                                                                                                                              3 19 8
                                                                                                                                                 2155.3
                                                                                                                                                                                     70.02
                                                                                           203.06
                                                                                                              94.43
                         2 33 13 2755.32
                                                           -28.00
                                                                            78.57
         90.00
                                                                                                                61.71 20 49 25
96.11 4 46 46
60.11 21 55 44
100.57 6 14 41
55.91 22 37 11
                                                                                                                                                  3556.0
                                                                                                                                                                    -5.15
                                                                                                                                                                                     162.88
                                                                                             197.31
                                                                           169.53
                      19 40 9
                                       4155.98
                                                            -1.38
         90.00
                                                                                                                                                  1856.7
                                                                                                                                                                   -28.16
                                                                                                                                                                                     47.85
                                                           -29.32
                                                                                             202.93
                        4 5 49 2456.69
                                                                             56.46
        100.00
                                                                                                                                                  3329.8
                                                                                                                                                                    -4.20
                                                                                                                                                                                    145.73
                      20 50 14 3929.85
5 38 34 2166.51
                                                                           152.26
                                                                                             196.66
                                                             -.22
        100.00
                                                                             33.85
                                                                                             202.35
                                                                                                               100.57
                                                                                                                                                 1566.5
                                                                                                                                                                 -30.90
                                                                                                                                                                                     25.09
                                                           -32.70
        110.00
                                                          2.67
                                                                           140.06
                                                                                             194.85
                                                                                                                                                3192.8
                                                                                                                                                                   -1.82
                                                                                                                                                                                     133.85
                      21 33 58 3792.79
                                                                                                                                   ORBIT DETERMINATION ACCURACY
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGI 5329.9 SGR 375.4 SG3 236.2 ST 2920.2 SR 257.2 SS 873.8 RRI -.1915 RRF -.2112 RTF .9322 CRI .9658 CRS -.9132 CSI -.9866 SGB 5343.1 R23 .0324 R13 -.9322 LSA 3055.2 MSA 151.9 SSA 20.1 SGI 5330.3 SG2 368.4 THA 179.22 EL1 2930.8 EL2 66.4 ALF 4.86
     TDE 1.9051 TRA .4180 TC3-5.8843 BAU 1.1082
     RDE .1655 RRA -.0966 RC3 .3062 FAU .03986
     FOE 1.0385 FRA .7778 FC3-2.4527 BSP 16919
BOE 1.9123 BRA .4290 BC3 5.8923 FSP -783
```

FLIGHT TIME 166.00

ARRIVAL CATE MAY 29 1966

```
LAUNCH DATE DEC 6 1965
                                                                                  DISTANCE 508.399
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.839 GAL .74 AZL 86.67 MCA 248.73 SMA 122.83 ECC .20042 INC 3.3281 VI 30.228 RP 108.93 LAP -3.10 LOP 322.37 VP 36.827 GAP 9.58 AZP 91.21 TAL 177.03 TAP 65.76 RCA 98.21 APO 147.44 V2 34.789 RC 162.536 GL 24.09 GP .99 ZAL 81.14 ZAP 166.11 ETS 3.39 ZAE 129.45 ETE 179.25 ZAC 71.22 ETC 164.70 CLP-166.15
   PLANETOCENTRIC CONIC
     C3 14.574 VHL 3.818 DLA 19.42 RAL 344.06 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 6.364 DPA -11.41 RAP 338.90 ECC 1.2399
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          92.98 3 22 48
                                                                                                                                           2195.3
                      2 36 13 2795.27
20 0 20 4131.69
                                                          -28.17
                                                                           81.48
                                                                                         206.89
         90.00
                                                                                                                                                                 -5.93
                                                                                                                                               3531.7
                                                                                           200.91
                                                                                                               61.76 21 9 12
                                                           -2.17
                                                                          168.17
         90.00
                     4 9 41 2493.88
21 9 33 3908.31
                                                                                                                                               1893.9
                                                                                                                                                                -28.59
                                                          -29.56
                                                                            59.20
                                                                                           206.79
                                                                                                               94.69
                                                                                                                           4 51 15
        100.00
                                                                                                                                             3308.3
1598.5
                                                                                                              60.12 22 14 42
99.18 6 20 43
55.87 22 54 35
                                                                                                                                                                -4.92
                                                                                           200.24
                                                                          151.08
                                                            -.95
        100.00
                                                                                                                                                               -31.45
                     5 44 5 2198.52
21 51 38 3776.43
                                                         -33.07
                                                                                          206.29
                                                                            36.27
        110.00
                                                                                        198.36
                                                                                                                                                                 -2.44
                                                                                                                                              3176.4
                                                                         139.20
                                                         2.05
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SG1 5390.8 SGR 382.4 SG3 227.5

RRT -.1564 RRF -.1768 RTF .9332

SGB 5404.3 R23 .0305 R13 -.9332

SGI 5391.1 SG2 377.7 THA 179.36
                                                                                                                                          ST 3000.8 SR 271.2 SS 870.2
CRT .9603 CRS -.9070 CST -.9877
    TOE 1.9889 TRA .5829 TC3-5.7523 BAU 1.1222
ROE .1777 RRA -.1025 RC3 .2884 FAU .03747
                                                                                                                                         LSA 3132.5 MSA 151.2 SSA 20.1
EL1 3012.1 EL2 75.4 ALF 4.96
    FDE 1.0212 FRA .8187 FC3-2.2260 BSP 17198
    BDE 1.9968 BRA .5919 BC3 5.7595 FSP -763
                                                                                                                                                       ARRIVAL DATE MAY 31 1966
                                                                                    FLIGHT TIME 176.00
LAUNCH DATE DEC 6 1965
                                                                                   DISTANCE 514.100
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.796 GAL 1.18 AZL 86.66 MCA 251.89 SMA 122.56 ECC .20356 INC 3.3381 V1 30.228
RP 108.92 LAP -3.17 LOP 325.53 VP 36.799 GAP 9.87 AZP 91.04 TAL 175.38 TAP 67.27 RCA 97.62 APO 147.51 V2 34.792
RC 164.699 GL 23.60 GP .94 ZAL 78.29 ZAP 167.05 ETS 3.62 ZAE 129.38 ETE 179.27 ZAC 73.38 ETC 164.96 CLP-167.08
    C3 15.181 VHL 3.896 DLA 20.17 RAL 347.00 RAO 6567.6 VEL 11.686 PTH 2.06 VHP 6.536 DPA -10.64 RAP 341.03 ECC 1.2498
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ-RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 20 39 31 2835.52 -28.28 84.42 210.83 91.51 3 26 46 2235.5 -27.77 75.79
90.00 20 20 28 4109.64 -2.88 166.94 204.63 61.82 21 28 57 3509.6 -6.62 160.26
100.00 4 13 52 2531.28 -29.73 61.97 210.76 93.24 4 56 3 1931.3 -28.97 53.25
100.00 21 28 48 3889.12 -1.60 150.02 203.93 60.15 22 33 37 3289.1 -5.56 143.48
110.00 5 49 56 2230.70 -33.39 38.73 210.34 97.76 6 27 7 1630.7 -31.96 29.79
110.00 22 9 12 3762.46 1.52 138.47 201.98 55.85 23 11 55 3162.5 -2.97 132.27
   PLANETOCENTRIC CONIC
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 3074.4 SR 285.1 SS 865.6
                                                                           SGT 5447.3 SGR 388.7 SG3 219.3

RRT -.1216 RRF -.1422 RTF .9339

SGB 5461.2 R23 .0284 R13 -.9340

SG1 5447.5 SG2 385.8 THA 179.50
     TOE 2.0746 TRA .7608 TC3-5.5858 BAU 1.1350
ROE .1908 RRA -.1078 RC3 .2689 FAU .03513
                                                                                                                                          CRT .9547 CRS -.9009 CST -.9886
                                                                                                                                          LSA 3202.9 MSA 151.6 SSA 19.9
     FOE 1.0049 FRA .8611 FC3-2.0035 BSP 17413
                                                                                                                                          EL1 3086.4 EL2 84.5 ALF
                                                                                                                                                                                      5.06
     BDE 2.0833 BRA .7684 BC3 5.5922 FSP -736
                                                                                                                                                       ARRIVAL DATE JUN 2 1966
                                                                                   FLIGHT TIME 178.00
LAUNCH DATE DEC 6 1965
    HELIOCENTRIC CONIC
                                                                                  DISTANCE 519.777
     RL 147.39 LAL .00 LOL 73.67 VL 26.754 GAL 1.63 AZL 86.65 MCA 255.06 SMA 122.31 ECC .20698 INC 3.3477 V1 30.228
RP 108.91 LAP -3.23 LOP 328.70 VP 36.771 GAP 10.18 AZP 90.86 TAL 173.72 TAP 68.78 RCA 96.99 APO 147.62 V2 34.796
RC 166.847 GL 23.06 GP .90 ZAL 75.45 ZAP 167.96 ETS 3.88 ZAE 129.33 ETE 179.30 ZAC 75.57 ETC 165.20 CLP-167.99
    PLANETOCENTRIC CONIC
     C3 15.900 VHL 3.987 DLA 20.87 RAL 349.95 RAD 6567.6 VEL 11.717 PTH 2.06 VHP 6.716 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                             -28.01
                    2 43 8 2875.87
20 40 23 4090.18
4 18 24 2568.69
21 47 48 3872.59
5 56 8 2262.90
22 26 33 3751.15
                                                                                       214.85
                                                                                                           90.03
                                                                                                                             3 31 4
                                                                                                                                               2275.9
                                                                           87.37
                                                          -28.32
         90.00
                                                                                                               61.88 21 48 33
                                                                                                                                                3490.2
                                                                                                                                                                 -7.23
                                                                                                                                                                               159.16
                                                            -3.50
                                                                           165.85
                                                                                           208.46
          90.00
                                                                                                                                                                                  55.99
                                                                                        214.83
                                                                                                                             5 1 13
                                                                                                                                               1968.7
                                                                                                                                                                -29.28
                                                        -29.84
                                                                            64.74
                                                                                                               91.79
                                                                                                               60.18 22 52 21
96.32 6 33 51
55.83 23 29 4
        100.00
                                                                                                                                                                                 142.56
                                                                                                                                               3272.6
                                                                                                                                                                 -6.12
                                                                           149.12
                                                                                           207.72
                                                            -2.16
        100.00
                                                                                        214.51
                                                                                                                                                                                  32.19
                                                                                                                                                1662.9
                                                                                                                                                               -32.42
                                                                            41.20
                                                     -33.66
        110.00
                                                                                                                                               3151.1
                                                                                                                                                                                 131.68
                                                                           137.88
                                                                                           205.69
                                                          1.08
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SCT 5499.8 SGR 394.4 SG3 211.3
RRT -.0873 RRF -.1082 RTF .9350
SGB 5514.0 R23 .0263 R13 -.9350
SGI 5500.0 SG2 392.9 THA 179.64
                                                                                                                                          ST 3136.9 SR 298.8 SS 858.9
CRT .9492 CRS -.8953 CST -.9895
     TOE 2.1599 TRA .9491 TC3-5.3913 BAU 1.1472
     ROE .2048 RRA -.1122 RC3 .2481 FAU .03293
FOE .9881 FRA .9015 FC3-1.7932 BSP 17652
BOE 2.1696 BRA .9557 BC3 5.3970 FSP -716
                                                                                                                                          LSA 3262.4 MSA 152.6 55A 19.6
                                                                                                                                           EL1 3149.7 EL2 93.7 ALF
                                                                                                                                                                                      5.17
                                                                                                                                                        ARRIVAL DATE JUN 4 1966
                                                                                    FLIGHT TIME 180.00
 LAUNCH DATE DEC 6 1965
                                                                                    DISTANCE 525.427
    HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 26.712 GAL 2.11 A7L 86.64 MCA 258.22 SMA 122.05 ECC .21069 INC 3.3570 V1 30.228
RP 108.89 LAP -3.29 LOP 331.87 VP 36.745 GAP 10.49 A7P 90.69 TAL 172.06 TAP 70.28 RCA 96.34 APO 147.77 V2 34.800
RC 168.980 GL 22.46 GP .86 7AL 72.64 ZAP 168.86 ETS 4.18 ZAE 129.29 ETE 179.33 ZAC 77.78 ETC 165.43 CLP-168.89
    PLANETOCENTRIC CONIC
                                                                                                                  2.07 VHP 6.905 OPA -9.01 RAP 345.31 ECC 1.2756
     C3 16.745 VHL 4.092 OLA 21.50 RAL 352.91 RAD 6567.7 VEL 11.753 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 47 7 2916.06 -28.28 90.31 218.96 88.56 3 35 43 2316.1 -28.18 81.65
                     2 47 7 2916.06

20 59 58 4073.62

4 23 18 2605.92

22 6 28 3859.00

6 2 41 2294.99

22 43 35 3742.70
                                                                                                                61.95 22 7 52
90.33 5 6 44
                                                                                                                                                3473.6
                                                                                                                                                                  -7.75
                                                                                                                                                                                   158.22
                                                                                            212.37
                                                            -4.03
                                                                           164.92
                                                                                                                                                2005.9
                                                                                                                                                                -29.52
                                                                                                                                                                                   58.73
                                                           -29.89
                                                                             67.51
                                                                                            218.98
        100.00
                                                                                        211.59
218.77
                                                                                                                60.21 23 10 47
94.87 6 40 56
55.82 23 45 57
                                                                                                                                                3259.0
                                                                                                                                                                  -6.57
                                                                                                                                                                                  141.80
                                                           -2.62
                                                                           148.37
                                                                                                                                                1695.0
                                                                                                                                                             -32.83
                                                                                                                                                                                   34.60
                                                          -33.88
                                                                            43.68
        110.00
                                                                                                                                                3142.7
                                                                                                                                                                 -3.73
                                                                                                                                                                                  131.23
                                                                             .76
                                                                                            209.48
                                                                           137.44
                                                                                                                                  ORBIT DETERMINATION ACCURACY

ST 3194.7 SR 312.2 SS 852.7

CRT .9437 CRS -.8899 CST -.9903

LSA 3317.6 MSA 154.7 SSA 19.2

EL1 3208.3 EL2 102.8 ALF 5.27
                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE 2.2493 TRA 1.1537 TC3-5.1580 BAU 1.1558
      ROE .2198 RRA -.1158 RC3 .2264 FAU .03063
                                                                             SGB 5559.9 R23 .0235 R13 -.9356
SG1 5545.6 SG2 398.7 THA 179.78
      FOE .9739 FRA .9448 FC3-1.5836 BSP 17768
```

FLIGHT TIME 174.00

BOE 2.2600 BRA 1.1595 BC3 5.1630 FSP -688

LAUNCH DATE DEC 6 1965

ARRIVAL DATE JUN 6 1966

```
HELIOCENTRIC CONIC
                                                                                       DISTANCE 531.049
     RL 147.39 LAL .00 LOL 73.67 VL 26.670 GAL 2.60 A7L 86.63 MCA 261.39 SMA 121.80 ECC .21472 INC 3.3662 V1 3D.228
RP 108.88 LAP -3.33 LOP 335.04 VP 36.719 GAP 10.82 A7P 90.50 TAL 170.39 TAP 71.78 RCA 95.65 APO 147.96 V2 34.805
RC 171.096 GL 21.81 GP .83 7AL 69.86 7AP 169.74 ETS 4.51 7AE 129.26 ETE 179.36 7AC 79.99 ETC 165.63 CLP-169.77
    PLANETOCENTRIC CONIC
     C3 17.732 VHL 4.211 DLA 22.08 RAL 355.85 RAD 6567.7 VEL 11.795 PTM 2.09 VHP 7.103 DPA -8.17 RAP 347.45 ECC 1.2918
    C3 17.732 VML 4.211 DLA 22.08 RAL 355.85 RAD 6567.7 VEL 11.795 PM 2.09 VMP 7.105 DPA -8.17 RAP 347.45 ECC 1.2918 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TJM INJ 2 LAT INJ 2 LONG 90.00 2 51 30 2955.85 -28.18 93.22 223.13 87.11 3 40 46 2355.8 -28.28 84.55 90.00 21 19 5 4060.30 -4.46 164.17 216.36 62.01 22 26 45 3460.3 -8.17 157.46 100.00 4 28 36 2642.72 -29.87 70.25 223.20 88.89 5 12 39 2042.7 -29.71 61.45 100.00 22 24 39 3848.65 -2.97 147.80 215.54 60.24 23 28 48 3248.6 -6.91 141.23 110.00 6 9 35 2326.81 -34.03 46.15 223.10 93.41 6 48 22 1726.8 -33.19 37.02 110.00 23 0 10 3737.33 .56 137.16 213.34 55.82 24 2 27 3137.3 -3.93 130.95
   DIFFERENTIAL CORRECTIONS
                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                               SGT 5588.9 SGR 403.5 SG3 196.4

RRT -.0183 RRF -.0382 RTF .9367

SGB 5603.5 R23 .0210 R13 -.9367

SGI 5588.9 SG2 403.5 THA 179.92
                                                                                                                                                ST 3236.1 SR 325.2 SS 843.5
CRT .9385 CRS -.8852 CST -.9910
     TOE 2.3350 TRA 1.3665 TC3-4.9124 BAU 1.1655
     RDE .2359 RRA -.1184 RC3 .2044 FAU .02857
     FDE .9581 FRA .9844 FC3-1.3952 BSP 17951
                                                                                                                                                LSA 3356.2 MSA 157.1 SSA 18.8
     BOE 2.3469 BRA 1.3716 BC3 4.9167 FSP -665
                                                                                                                                                EL1 3250.4 EL2 111.8 ALF
                                                                                       FLIGHT TIME 184.00
LAUNCH DATE DEC 6 1965
                                                                                                                                                             ARRIVAL DATE JUN 8 1966
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 536.638
    RL 147.39 LAL .00 LOL 73.67 VL 26.628 GAL 3.12 ATL 86.62 HCA 264.55 SNA 121.56 ECC .21909 INC 3.3752 V1 30.228
RP 108.86 LAP -3.36 LOP 338.21 VP 36.694 GAP '11.17 ATP 90.32 TAL 168.73 TAP 73.28 RCA 94.92 APO 148.19 V2 34.811
RC 173.196 GL 21.12 GP .80 TAL 67.12 ZAP 170.61 ETS 4.89 ZAE 129.24 ETE 179.39 ZAC 82.23 ETC 165.82 CLP-170.64
   PLANETOCENTRIC CONIC
    C3 18.878 VML 4.345 DLA 22.59 RAL 358.77 RAD 6567.8 VEL 11.843 PTH 2.10 VMP 7.312 DPA -7.30 RAP 349.60 ECC 1.3107 LNCH AZM7H LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZM7H INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 56 18 2994.97
21 37 34 4050.49
4 34 20 2678.92
22 42 14 3841.77
6 16 50 2358.25
23 16 13 3735.21
                                                                                                                                                                    -28.32
         90.00
                                                                                            227.35
                                                                                                                                                 2395.0
                                                                                                                                                                                         87.41
                                                            -28.01
                                                                              96.06
                                                                                                                85.69 3 46 13
         90.00
                                                             -4.77
                                                                              163.62
                                                                                               220.40
                                                                                                                    62.05
                                                                                                                                22 45 4
                                                                                                                                                     3450.5
                                                                                                                                                                        -8.47
                                                                                                                                                                                         156.90
                                                                                                                                5 18 59
        100.00
                                                            -29.80
                                                                              72.94
                                                                                               227.47
                                                                                                                    87.48
                                                                                                                                                     2078.9
                                                                                                                                                                       -29.83
                                                                                                                                                                                          64.13
                                                                                                                    60.26 23 46 15
        100.00
                                                            -3.21
                                                                              147.42
                                                                                             219.54
                                                                                                                                                     3241.8
                                                                                                                                                                       -7.14
                                                                                                                                                                                         140.84
                                                                                            227.50
                                                                                                                   91.97 6 56 8 1758.2 -33.48
55.82 24 18 28 3135.2 -4.01
        110.00
                                                           -34.13
                                                                              48.60
                                                                                                                                                                                         39.42
                                                                                                                                                                                         130.84
        110.00
                                                              .47
                                                                            137.05
                                                                                              217.24
                                                                                                                                                                       -4.01
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5626.8 SGR 407.0 SG3 189.4
RRT .0157 RRF -.0037 RTF .9378
SGB 5641.5 R23 -.0185 R13 .9378
                                                                                                                                                ST 3265.9 SR 337.6 SS 833.0
CRT .9335 CRS -.8807 CST -.9916
     TOE 2.4202 TRA 1.5920 TC3-4.6468 BAU 1.1737
    ROE .2550 RRA -.1198 RC3 .1824 FAU .02656
FOE .9425 FRA 1.0240 FC3-1.2182 BSP 18134
BOE 2.4334 BRA 1.5965 BC3 4.6504 FSP -644
                                                                                                                                                LSA 3383.5 MSA 160.1 SSA 18.3
                                                                                 SG1 5626.8 SG2 407.0 THA .07
                                                                                                                                                EL1 3281.1 EL2 120.5 ALF 5.52
                                                                                      FLIGHT TIME 186.00
                                                                                                                                                            ARRIVAL DATE JUN 10 1966
LAUNCH DATE DEC 6 1965
                                                                                     DISTANCE 542.192
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.587 GAL 3.67 AZL 86.62 HCA 267.72 SMA 121.31 ECC .22385 INC 3.3841 V1 30.228 RP 108.84 LAP -3.38 LOP 341.38 VP 36.671 GAP 11.53 AZP 90.13 TAL 167.07 TAP 74.79 RCA 94.16 APO 148.47 VZ 34.817 RC 175.278 GL 20.39 GP .77 ZAL 64.44 ZAP 171.47 ETS 5.34 ZAE 129.23 ETE 179.43 ZAC 84.47 ETC 165.99 CLP-171.50
   PLANETOCENTRIC CONIC
    C3 20.205 VHL 4.495 DLA 23.03 RAL 1.65 RAD 6567.8 VEL 11.899 PTH 2.11 VHP 7.534 DPA
                                                                                                                                                       -6.41 RAP 351.74 ECC 1.3325
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             84.32 3 52 8
62.09 23 2 41
86.11 5 25 43
60.27 24 3 3
90.54 7 4 13
55.82 24 33 55
                                                                                                                                                2433.2
                                                                                           231.60
                                                                                                                                                                   -28.28
         90.00
                                                                                                                                                                                        90.21
                      3 1 35 3033.18
21 55 17 4044.48
                                                            -27.79
                                                                             98.84
                                                                                                                                                    3444.5
                                                                                                                                                                      -8.66
                                                                                                                                                                                        156.56
         90.00
                                                            -4.96
                                                                             163.29
                                                                                              224.48
                                                                                                                                                2114.3
                     4 40 28 2714.32
22 59 4 3838.57
                                                                                              231.78
        100.00
                                                           -29.66
                                                                              75.56
                                                                                                                                                                      -29.89
                                                                                                                                                                                         66.76
        100.00
                                                           -3.31
                                                                           147.25
                                                                                              223.57
                                                                                                                                                                      -7.25
                                                                                                                                                                                        140.67
                      6 24 24 2389.20
23 31 39 3736.45
                                                                                                                                                1789.2
                                                                                                                                                                      -33.73
                                                                                                                                                                                         41.81
        110.00
                                                          -34.18
                                                                              51.02
                                                                                              231.94
                                                                                                                                                    3136.4
                                                                                                                                                                       -3.97
                                                                                                                                                                                        130.91
       110.00
                                                           .52
                                                                            137.12
                                                                                              221.18
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5660.4 SGR 409.9 SG3 182.6
RRT .0497 RRF .0309 RTF .9392
SGB 5675.3 R23 -.0161 R13 .9392
SGI 5660.5 SG2 409.4 THA .21
                                                                                                                                               5T 3285.1 SR 349.3 55 821.5
CRT .9286 CR5 -.8766 CST -.9923
    TOE 2.5054 TRA 1.8313 TC3-4.3663 BAU 1.1802
    ROE .2712 RRA -.1199 RC3 .1608 FAU .02464
FDE .9272 FRA 1.0633 FC3-1.0556 BSP 18292
BDE 2.5201 BRA 1.8352 BC3 4.3692 FSP -623
                                                                                                                                              LSA 3400.3 MSA 163.5 SSA 17.7
                                                                                                                                               EL1 3301.1 EL2 129.0 ALF 5.65
                                                                                      FLIGHT TIME 188.00
                                                                                                                                                             ARRIVAL DATE JUN 12 1966
LAUNCH DATE DEC 6 1965
                                                                                     DISTANCE 547.705
   HELTOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.546 GAL 4.24 A7L 86.61 MCA 270.89 SMA 121.07 ECC .22903 INC 3.3929 VI 30.228
RP 108.82 LAP -3.39 LOP 344.55 VP 36.648 GAP 11.92 A7P 89.95 TAL 165.41 TAP 76.30 RCA 93.34 APO 148.80 V2 34.824
RC 177.341 GL 19.64 GP .74 ZAL 61.83 ZAP 172.32 ETS 5.87 ZAE 129.22 ETE 179.46 ZAC 86.72 ETC 166.14 CLP-172.35
   PLANETOCENTRIC CONIC
    C3 21.737 VHL 4.662 DLA 23.42 RAL 4.48 RAD 6567.9 VEL 11.963 PTH 2.13 VHP 7.769 DPA -5.51 RAP 353.89 ECC 1.3577 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              83.00
                                                                                                                                                                    -28.19
                        3 7 21 3070.26
                                                                            101.51
                                                                                            235.88
                                                                                                                                 3 58 31
                                                                                                                                                 2470.3
        90.00
                                                           -27.51
                                                                                                                  62.10 23 19 29
84.78 5 32 52
60.27 24 19 4
89.13 7 12 36
55.82 24 48 43
                     22 12 6 4042.49
4 47 4 2748.76
23 15 5 3839.22
6 32 16 2419.62
23 46 22 3741.12
                                                                                                                                                     3442.5
                                                                                                                                                                        -8.72
                                                            -5.03
                                                                             163.17
                                                                                              228.58
                                                                                                                                                                                        156.44
         90.00
                                                            -29.47
                                                                              78.10
                                                                                              236.12
                                                                                                                                                     2148.8
                                                                                                                                                                      -29.89
                                                                                                                                                                                         69.32
       100.00
                                                           -3.29
                                                                             147.28
                                                                                              227.62
                                                                                                                                                    3239.2
                                                                                                                                                                       -7.23
                                                                                                                                                                                        140.70
       100.00
                                                                                                                                                                  -33.92
                                                                              53.40
                                                                                              236.42
                                                                                                                                                1819.6
                                                                                                                                                                                        44.16
       110.00
                                                            -34.17
                                                            .70
                                                                           137.36
                                                                                              225.13
                                                                                                                                                    3141.1
                                                                                                                                                                       -3.79
       110.00
                                                                              MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 5690.2 SGR 412.0 SG3 176.2 ST 3297.4 SR 360.1 S5 811.0
RRT .0843 RRF .0665 RTF .9405' CRT .9238 CR5 -.8728 CST -.9929
SGB 5705.1 R23 -.0133 R13 .9405 LSA 3410.6 MSA 167.2 S5A 17.1
SGT 5690.3 SG2 410.5 THA .35 EL1 3314.2 EL2 137.2 ALF 5.77
    TOE 2.5932 TRA 2.0882 TC3-4.0698 BAU 1.1834
    ROE .2905 RRA -.1187 RC3 .1400 FAU .02270 FDE .9143 FRA 1.1044 FC3 -.9041 BSP 18355 BDE 2.6094 BRA 2.0916 BC3 4.0722 FSP -599
```

FLIGHT TIME 182.00

ARRIVAL CATE JUN 14 1966

```
FLIGHT TIME 190.00
LAUNCH CATE DEC 6 1965
                                                                                    DISTANCE 553.173
   MELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.506 GAL 4.84 A7L 86.60 HCA 274.05 SMA 120.84 ECC .23467 INC 3.4018 VI 30.228
RP 108.79 LAP -3.39 LOP 347.73 VP 36.626 GAP 12.33 A7P 89.76 TAL 163.76 TAP 77.82 RCA 92.48 APO 149.19 V2 34.832
RC 179.385 GL 18.86 GP .72 ZAL 59.28 ZAP 173.16 ETS 6.50 ZAE 129.21 ETE 179.50 ZAC 88.98 ETC 166.26 CLP-173.20
   PLANETOCENTRIC CONIC
     C3 23.504 VHL 4.848 DLA 23.73 RAL 7.25 RAD 6568.0 VEL 12.037 PTH 2.15 VHP 8.019 DPA -4.60 RAP 356.03 ECC 1.3868
    C3 23.504 VHL 4.848 DLA 23.73 RAL 7.25 RAD 6568.0 VEL 12.037 PTH 2.15 VHP 8.019 DPA -4.60 RAP 356.03 ECC 1.3868 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 313 38 3105.99 -27.19 104.00 240.17 81.75 4 5 24 2506.0 -28.05 95.52 90.00 22 27 56 4044.72 -4.95 163.30 232.68 62.08 23 35 20 3444.7 -8.65 156.57 100.00 4 54 5 2782.10 -29.24 80.55 240.47 83.51 5 40 27 2182.1 -29.83 71.80 100.00 23 30 10 3843.83 -3.14 147.54 231.67 60.26 24 34 13 3243.8 -7.07 140.96 110.00 6 40 25 2449.42 -34.12 55.72 240.91 87.75 7 21 15 1849.4 -34.05 46.48 110.00 0 4 15 3749.28 1.01 137.78 229.09 55.83 1 6 44 3149.3 -3.48 131.58 216.00 EVERNITAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 3294.1 SR 369.9 SS 798.4
CRT .9192 CRS -.8692 CST -.9934
                                                                                SGT 5714.6 SGR 413.4 SG3 170.0
RRT .1182 RRF .1011 RTF .9421
     TOE 2.6766 TRA 2.3562 TC3-3.7749 BAU 1.1868
    ROE .3107 RRA -.1161 RC3 .1202 FAU .02092
FOE .8999 FRA 1.1437 FC3 -.7707 BSP 18499
BOE 2.6946 BRA 2.3591 BC3 3.7768 FSP -580
                                                                                568 5729.5 R23 -.0109 R13 .9421
                                                                                                                                             LSA 3405.3 MSA 171.0 SSA 16.6
                                                                             SGB 5729.5 RZ) - .... CUIU- .... SGB 5714.8 SGZ 410.4 THA ...49
                                                                                                                                            EL1 3311.7 EL2 145.0 ALF 5.90
                                                                                                                                                          ARRIVAL DATE JUN 16 1966
                                                                                     FLIGHT TIME 192.00
LAUNCH DATE DEC 6 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 558.587
    RL 147.39 LAL .00 LOL 73.67 VL 26.466 GAL 5.48 AZL 86.59 HCA 277.23 5MA 120.61 ECC .24081 INC 3.4108 V1 30.228
RP 108.77 LAP -3.38 LOP 350.90 VP 36.605 GAP 12.77 AZP 89.57 TAL 162.12 TAP 79.35 RCA 91.56 APO 149.65 V2 34.840
    RC 181.409 GL 18.07 GP .70 TAL 56.82 TAP 174.00 ETS 7.29 TAE 129.21 ETE 179.53 TAC 91.24 ETC 166.37 CLP-174.04
   PLANETOCENTRIC CONIC
    C3 25.539 VML 5.054 OLA 23.99 RAL 9.95 RAD 6568.0 VEL 12.121 PTH 2.17 VMP 8.286 DPA -3.67 RAP 358.17 ECC 1.4203 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-I TIME
3 20 27 3140.21
22 42 39 4051.29
5 1 33 2814.27
23 44 14 3852.47
6 48 50 2478.60
0 17 22 3760.90
                                                                                                               80.58 4 12 47
62.05 23 50 10
                                                                                                                                               2540.2
                                                                                                                                                                -27.86
                                                                                                                                                                                      98.01
         90.00
                                                           -26.83
                                                                            106.52
                                                                                           244.47
                                                                                                                                                  3451.3
                                                                                                                                                                     -8.45
                                                                                                                                                                                      156.95
                                                                            163.67
                                                                                             236.76
                                                            -4.74
         90.00
                                                                                                                 82.30 5 48 27
60.23 24 48 27
                                                                                             244.83
                                                                                                                                                  2214.3
                                                                                                                                                                    -29.74
                                                                                                                                                                                      74.18
                                                          -28.97
                                                                             82.91
        100.00
                                                                                            235.72
                                                                                                                                                  3252.5
                                                                                                                                                                     -6.79
                                                                                                                                                                                  141.44
                                                           -2.84
                                                                            148.01
       100.00
                                                                                                                 86.41 7 30 9
55.84 1 20 3
                                                                                                                                                                  -34.14
                                                                                                                                                                                      48.75
                                                                              58.00
                                                                                                                                                  1878.6
                                                          -34.02
                                                                                             245.42
       110.00
                                                                                                                                                  3160.9
                                                                                                                                                                   -3.03
                                                                                             233.03
                                                                                                                                                                                     132.19
                                                                            138.39
       110.00
                                                           1.46
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5734.5 SGR 414.0 SG3 163.9

RRT .1522 RRF .1357 RTF .9439

SGB 5749.5 R23 -.0088 R13 .9439
                                                                                                                                            ST 3281.7 SR 378.6 S5 785.6
CRT .9146 CRS -.8658 CST -.9940
     TOE 2.7601 TRA 2.6403 TC3-3.4780 BAU 1.1880
    ROE .3319 RRA -.1118 RC3 .1018 FAU .01921
FOE .8863 FRA 1.1837 FC3 -.6513 BSP 18632
                                                                                                                                             LSA 3391.1 MSA 174.9 SSA 16.0
EL1 3300.0 EL2 152.3 ALF 6.04
     BOE 2.7800 BRA 2.6427 BC3 3.4795 FSP -562
                                                                              SG1 5734.9 SG2 409.2 THA .63
                                                                                                                                                          ARRIVAL DATE JUN 18 1966
                                                                                     FLIGHT TIME 194.00
LAUNCH DATE DEC 6 1965
                                                                                    DISTANCE 563.942
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.427 GAL 6.15 AZL 86.58 MCA 280.40 SMA 120.38 ECC .24752 INC 3.4199 VI 30.228 RP 108.74 LAP -3.36 LOP 354.08 VP 36.585 GAP 13.23 AZP 89.38 TAL 160.50 TAP 80.89 RCA 90.58 APO 150.17 V2 34.849 RC 183.413 GL 17.27 GP .68 ZAL 54.43 ZAP 174.84 ETS 8.31 ZAE 129.20 ETE 179.57 ZAC 93.50 ETC 166.46 CLP-174.89
   PLANETOCENTRIC CONIC
     C3 27.883 VHL 5.280 DLA 24.18 RAL 12.57 RAD 6568.1 VEL 12.217 PTH
                                                                                                                   2.20 VHP 8.572 DPA -2.73 RAP
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         248.75
                     3 27 48 3172.80
22 56 12 4062.27
5 9 25 2845.19
0 1 12 3865.12
6 57 28 2507.16
0 29 39 3775.92
                                                                                                                                                                -27.63
                                                                                                                                                                                  100.36
                                                                                                             79.48
                                                                                                                                              2572.8
         90.00
                                                                                                                               4 20 41
                                                           -26.44
                                                                            108.83
                                                                                                                 62.00 24 3 54
                                                                                                                                                                    -8.11
                                                                                                                                                                                     157.57
                                                                                                                                                  3462.3
                                                                                             240.82
         90.00
                                                           -4.39
                                                                            164.29
                                                                                                                 81.15 5 56 50
60.20 1 5 37
                                                                                                                                                  2245.2
                                                                                                                                                                   -29.60
                                                                                                                                                                                      76.47
                                                                                             249.18
        100.00
                                                          -28.67
                                                                             85.15
                                                                                         239.73
                                                                                                                                                                                 142.14
                                                                                                                                                  3265.1
                                                                                                                                                                    -6.37
        100.00
                                                            -2.42
                                                                            148.71
                                                                                         249.92
                                                                                                                 85.11 7 39 15 1907.2
55.87 1 32 35 3175.9
                                                                                                                                                                   -34.18
                                                       -33.87
                                                                                                                                                                                      50.98
                                                                             60.21
        110.00
                                                                                                                                                                  -2.46
                                                                                                                                                                                     132.97
                                                                                             236.96
        110.00
                                                            2.03
                                                                            139.17
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                              SG1 5749.8 SGR 414.0 SG3 158.2

RRT .1864 RRF .1705 RTF .9459

SGB 5764.7 R23 -.0068 R13 .9459

SG1 5750.3 SG2 406.7 THA .77
                                                                                                                                            ST 3250.9 SR 386.0 SS 773.2
CRT .9100 CRS -.8626 CST -.9945
     TOE 2.8438 TRA 2.9418 TC3-3.1823 BAU 1.1867
    ROE 33540 RRA -1058 RC3 .0849 FAU .01756
FOE .8736 FRA 1.2245 FC3 -.5451 BSP 18738
BOE 2.8657 BRA 2.9437 BC3 3.1834 FSP -543
                                                                                                                                            LSA 3368.7 MSA 178.7 SSA 15.4
                                                                                                                                             EL1 3279.8 EL2 159.1 ALF 6.16
                                                                                                                                                          ARRIVAL DATE JUN 20 1966
                                                                                     FLIGHT TIME 196,00
LAUNCH DATE DEC 6 1965
                                                                                     DISTANCE 569.228
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.388 GAL 6.87 AZL 86.57 MCA 283.57 SMA 120.15 ECC .25485 INC 3.4292 VI 30.228
RP 108.71 LAP -3.33 LOP 357.26 VP 36.565 GAP 13.74 AZP 89.19 TAL 158.89 TAP 82.46 RCA 89.53 APO 150.78 V2 34.858
RC 185.395 GL 16.46 GP .66 ZAL 52.14 ZAP 175.68 ETS 9.69 ZAE 129.19 ETE 179.61 ZAC 95.76 ETC 166.52 CLP-175.73
   PLANETOCENTRIC CONIC
     C3 30.584 VHL 5.530 DLA 24.32 RAL 15.11 RAD 6568.2 VEL 12.327 PTH 2.22 VHP 8.880 DPA -1.79 RAP 2.44 ECC 1.5033
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 35 41 3203.70 -26.04 111.00 253.03 78.47 4 29 4 2603.7 -27.37 102.59 90.00 23 8 32 4077.64 -3.90 165.15 244.84 61.93 24 16 30 3477.6 -7.63 158.45 100.00 5 17 40 2874.85 -28.34 87.30 253.52 80.07 6 5 35 2274.9 -29.42 78.66
                      0 13 9 3881.73
7 6 16 2535.10
0 41 3 3794.25
                                                                                             243.71
                                                                                                                  60.16
                                                                                                                                1 17 51
                                                             -1.85
                                                                            149.62
        100.00
                                                                                                                                                                -34.18
                                                                                                                                                                                       53.17
                                                            -33.69
                                                                              62.38
                                                                                             254.40
                                                                                                                  83.84
                                                                                                                               7 48 31
                                                                                                                                                  1935.1
        110.00
                                                                                                                               1 44 17
                                                                            140.13
                                                                                             240.85
                                                                                                                  55.91
                                                                                                                                                  3194.2
                                                                                                                                                                     -1.76
                                                                                                                                                                                      133.93
        110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
ST 3236.4 SR 392.0 S9 762.6
CRT .9055 CRS -.8598 CST -.9950
LSA 3343.1 MSA 182.2 SSA 14.8
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5762.5 SGR 413.4 SG3 152.8

RRT .2212 RRF .2060 RTF .9479

SGB 5777.3 R23 -.0048 R13 .9479

SGI 5763.3 SG2 403.1 THA .91
     TOE 2.9316 TRA 3.2654 TC3-2.8874 BAU 1.1809
     ROE .3710 RRA -.0979 RC3 .0697 FAU .01589
FOE .8636 FRA 1.2682 FC3 -.4499 BSP 18753
                                                                                                                                           ELI 3255.9 EL2 165.3 ALF 6.28
     BOE 2.9557 BRA 3.2669 BC3 2.8882 FSP -522
```

ARRIVAL CATE JUN 22 1966

LAUNCH DATE DEC 6 1965

```
DISTANCE 574.432
    HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 26.349 GAL 7.63 AZL 86.56 HCA 286.75 SMA 119.93 ECC .26289 INC 3.4387 VI 30.228
RP 108.68 LAP -3.29 LOP .44 VP 36.547 GAP 14.28 AZP 89.01 TAL 157.30 TAP 84.05 RCA 88.40 APO 151.46 VZ 34.868
RC 187.357 GL 15.65 GP .65 ZAL 49.94 ZAP 176.52 ETS 11.70 ZAE 129.17 ETE 179.65 ZAC 98.02 ETC 166.55 CLP-176.58
    PLANETOCENTRIC CONIC
      C3 33.702 VHL 5.805 DLA 24.40 RAL 17.55 RAD 6568.3 VEL 12.453 PTH 2.25 VHP 9.212 CPA
      C3 33.702 VHL 5.805 OLA 24.40 RAL 17.55 RAD 6568.3 VEL 12.453 PTH 2.25 VHP 9.212 OPA -.84 RAP 4.57 ECC 1.5546
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 44 2 3232.89 -25.63 113.04 257.28 77.52 4 37.55 2632.9 -27.09 104.68
90.00 23 19 38 4097.32 -3.27 166.25 248.81 61.86 24 27.55 3497.3 -7.01 159.56
100.00 5 26 16 2903.26 -27.99 89.34 257.83 79.05 6 14 40 2303.3 -29.21 80.75
100.00 0 24 1 3902.18 -1.16 150.74 247.64 60.13 1 29 3 3302.2 -5.13 144.20
110.00 7 15 12 2562.45 -33.47 64.48 258.86 82.61 7 57.55 1962.4 -34.13 55.30
110.00 0 51 34 3815.76 3.55 141.26 244.70 55.98 1 55 10 3215.8 -.94 135.05
                                                                                                                                                                                                           -.84 RAP
                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 5768.8 SGR 412.0 SG3 147.5
RRT .2554 RRF .2408 RTF .9503
                                                                                                                                                                                             ST 3200.8 SR 396.5 SS 751.2
CRT .9011 CRS -.8570 CST -.9955
      TOE 3.0164 TRA 3.6051 TC3-2.6053 BAU 1.1741
      ROE .4007 RRA -.0881 RC3 .0561 FAU .01436
FOE .8531 FRA 1.3115 FC3 -.3689 BSP 18847
                                                                                                          SCB 5783.5 R23 -.0032 R13 .9503
SCI 5769.7 SC2 398.3 THA 1.05
                                                                                                                                                                                             LSA 3306.4 MSA 185.5 SSA 14.3
                                                                                                                                                                                             EL1 3220.7 EL2 170.9 ALF 6.39
      BOE 3.0429 BRA 3.6062 BC3 2.6059 FSP -505
                                                                                                                                                                                                                ARRIVAL CATE JUN 24 1966
                                                                                                                  FLIGHT TIME 200.00
LAUNCH DATE DEC 6 1965
    HELIOCENTRIC CONIC
                                                                                                                 DISTANCE 579.541
     RL 147.39 LAL .00 LOL 73.67 VL 26.311 GAL 8.44 AZL 86.55 HCA 289.92 SMA 119.72 ECC .27170 INC 3.4485 V1 30.228
RP 108.65 LAP -3.24 LOP 3.62 VP 36.529 GAP 14.87 AZP 88.82 TAL 155.75 TAP 85.67 RCA 87.19 APO 152.24 V2 34.878
RC 189.297 GL 14.85 GP .63 ZAL 47.83 ZAP 177.36 ETS 14.97 ZAE 129.14 ETE 179.69 ZAC 100.27 ETC 166.57 CLP-177.43
     C3 37.305 VHL 6.108 OLA 24.44 RAL 19.88 RAO 6568.5 VEL 12.597 PTH 2.28 VHP 9.572 DPA .10 RAP 6.69 ECC 1.6140 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TJM INJ 2 LAT INJ 2 LONG 90.00 3 52 50 3260.39 -25.21 114.95 261.51 76.66 4 47 11 2660.4 -26.80 106.64 90.00 23 29 30 4121.14 -2.51 167.58 252.71 61.78 24 38 11 3521.1 -6.26 160.91 100.00 5 35 10 2930.46 -27.62 91.27 262.11 78.09 6 24 0 2330.5 -28.98 82.74 100.00 0 33 47 3926.30 -.34 152.06 251.51 60.11 1 39 13 3326.3 -4.32 145.53 110.00 7 24 14 2589.23 -33.22 66.53 263.28 81.42 8 7 23 1989.2 -34.05 57.39 110.00 1 1 12 3840.29 4.48 142.54 248.50 56.08 2 5 13 3240.3 -.00 136.33
    PLANETOCENTRIC CONIC
                                                                                                        NJ LONG INJ RT ASC INJ AZMTH JNJ TIME PO

114.95 261.51 76.66 447 11

167.58 252.71 61.78 24 38 11

191.27 262.11 78.09 6 24 0

152.06 251.51 60.11 1 39 13

66.53 263.28 81.42 8 7 23

142.54 248.50 56.08 2 5 13

MID-COURSE EXECUTION ACCURACY ORB

SGT 5770.9 SGR 410.0 SG3 142 4
                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                           SGT 5770.9 SGR 410.0 SG3 142.4
RRT .2898 RRF .2756 RTF .9528
SGB 5785.5 R23 -.0019 R13 .9528
SGI 5772.1 SG2 392.3 THA 1.19
      TOE 3.1034 TRA 3.9670 TC3-2.3328 BAU 1.1637
                                                                                                                                                                                             ST 3160.1 SR 399.4 S5 741.1
      ROE .4251 RRA -.0762 RC3 .0443 FAU .01287
FDE .8440 FRA 1.3569 FC3 -.2988 BSP 18925
                                                                                                                                                                                               CRT .8966 CRS -.8544 CST -.9960
                                                                                                                                                                                             LSA 3264.9 MSA 188.3 SSA 13.7
EL1 3180.4 EL2 175.7 ALF 6.49
       BDE 3.1324 BRA 3.9678 BC3 2.3332 FSP -489
                                                                                                                                                                                                              ARRIVAL DATE JUN 26 1966
                                                                                                                  FLIGHT TIME 202.00
LAUNCH DATE DEC 6 1965
                                                                                                                  DISTANCE 584.538
    HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 26.274 GAL 9.31 AZL 86.54 MCA 293.10 SMA 119.51 ECC .28139 INC 3.4588 V1 30.228
RP : 108.62 LAP -3.18 LOP 6.81 VP 36.513 GAP 15.51 AZP 88.64 TAL 154.22 TAP 87.33 RCA 85.88 APO 153.13 V2 34.889
RC 191.216 GL 14.06 GP .62 ZAL 45.82 ZAP 178.19 ETS 21.28 ZAE 129.10 ETE 179.73 ZAC 102.51 ETC 166.56 CLP-178.30
     PLANETOCENTRIC CONIC
      C3 41.482 VHL 6.441 DLA 24.42 RAL 22.12 RAD 6568.6 VEL 12.761 PTH 2.32 VHP 9.963 DPA 1.05 RAP 8.80 ECC 1.6827 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        265.70
265.70
                            75.86 4 56 48
61.73 24 47 18
                                                                                                                                                                                                                       -26.49
            90.00
                                                                                                                                                                                              2686.3
                                                                                                     116.73
                                                                                                     169.13
                                                                                                                                                                                                    3548.9
                                                                                                                                                                                                                            -5.38
                                                                                                                                                                                                                                                   162.48
            90.00
                                                                                                                                                       77.20 6 33 35 2356.5 -28.73
60.11 1 48 23 3353.9 -3.39
80.28 8 16 54 2015.5 -33.92
56.21 2 14 26 3261.7 1.05
                                                                                                                                                                                                                                                    84.63
                                                                                                        93.12
                                                                                                                             266.35
          100.00
                                                                                                                         255.32
                                                                                                                                                                                                                                                  147.05
                                                                                                  153.58
           100.00
                                                                                                                                                                                                                                                   59.43
                                                                                                       68.53
                                                                                                                             267.66
                                                                                               143.98
                                                                                                                            252.26
           110.00
                                                                                                                                                                                                                                                  137.76
           110.00
                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                        SGT 5768.8 SGR 407.3 SG3 137.5

RRT .3244 RRF .3105 RTF .9555

SGB 5783.1 R23 -.0009 R13 .9555

SGI 5770.3 SG2 385.2 THA 1.32
                                                                                                                                                                                             ST 3115.4 SR 400.8 SS 732.3
CRT .8923 CRS -.8520 CST -.9964
      TOE 3.1936 TRA 4.3534 TC3-2.0712 BAU 1.1488
      RDE .4501 RRA -.0620 RC3 .0342 FAU .01142
FDE .8367 FRA 1.4050 FC3 -.2384 BSP 18981
                                                                                                                                                                                             LSA 3219.6 MSA 190.6 SSA 13.2
EL1 3135.9 EL2 179.7 ALF 6.57
      BDE 3.2252 BRA 4.3538 BC3 2.0715 FSP -473
                                                                                                                                                                                                               ARRIVAL DATE JUN 28 1966
                                                                                                                  FLIGHT TIME 204.00
LAUNCH DATE DEC 6 1965
     HELIOCENTRIC CONIC
                                                                                                                  DISTANCE 589.403
      RL 147.39 LAL .00 LOL 73.67 VL 26.237 GAL 10.24 AZL 86.53 HCA 296.28 SMA 119.30 ECC .29208 INC 3.4696 VI 30.228 RP 108.58 LAP -3.11 LOP 9.99 VP 36.497 GAP 16.20 AZP 88.46 TAL 152.74 TAP 89.03 RCA 84.45 APO 154.14 VZ 34.900 RC 193.113 GL 13.27 GP .61 ZAL 43.91 ZAP 178.99 ETS 38.06 ZAE 129.04 ETE 179.76 ZAC 104.73 ETC 166.52 CLP-179.19
      RC 193.113 GL 13.27 GP
     PLANETOCENTRIC CONIC
      C3 46.339 VHL 6.807 DLA 24.35 RAL 24.25 RAD 6568.7 VEL 12.950 PTH 2.36 VHP 10.390 DPA
      C3 46.339 VHL 6.807 DLA 24.36 RAL 24.25 RAD 6568.7 VEL 12.950 PTH 2.36 VHP 10.390 DPA 1.98 RAP 10.89 ECC 1.7626

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 11 31 3310.62 -24.38 118.39 269.85 75.13 5 6 42 2710.6 -26.18 110.19
90.00 25 45 37 4180.25 -.60 170.88 260.30 61.69 24 55 18 3580.2 -4.38 164.24
100.00 5 53 37 2981.42 -25.86 94.87 270.55 76.35 6 43 19 2381.4 -28.47 86.44
100.00 0 50 8 3984.68 1.64 155.27 259.06 60.15 1 56 33 3384.7 -2.35 148.75
110.00 7 42 22 2641.18 -32.62 70.47 271.99 79.17 8 26 24 2041.2 -33.77 61.42
110.00 1 17 52 3897.68 6.66 145.57 255.95 56.39 2 22 50 3297.7 2.19 139.32

DIEFFERNIIAL CORRECTIONS
                                                                                                                                                                                                         1.98 RAP 10.89 ECC 1.7626
                                                                                                       94.87 270.55 76.35 6 43 19 2381.4 -28.47
155.27 259.06 60.15 1 56 33 3384.7 -2.35
70.47 271.99 79.17 8 26 24 2041.2 -33.77
145.57 255.95 56.39 2 22 50 3297.7 2.19
MIO-COURSE EXECUTION ACCURACY ORBIT DETERMINATION A
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                   SCT 5765.0 SCR 404.1 SG3 133.0 ST 3070.3 SR 400.6 S5 726.0 RRT .3395 RRF .3461 RTF .9584 CRT .8882 CRS -.8501 CST -.9969 SGB 5779.1 R23 .0001 R13 .9584 LSA 3174.5 MSA 192.2 S5A 12.7 SG1 5766.8 SG2 377.0 TMA 1.45 EL1 3091.0 EL2 182.9 ALF 6.63
       TOE 3.2911 TRA 4.7703 TC3-1.8195 BAU 1.1273
      RDE .4757 RRA -.0454 RC3 .0258 FAU .00994
FDE .8324 FRA 1.4575 FC3 -.1858 BSP 18938
BDE 3.3253 BRA 4.7705 BC3 1.8197 FSP -454
```

FLIGHT TIME 198.00

ARRIVAL DATE JUN 30 1966 FLIGHT TIME 206.00 LAUNCH DATE DEC 6 1965 DISTANCE 594.107 HELIOCENTRIC CONIC RL 147.39 LAL .00 LOL 73.67 VL 26.201 GAL 11.25 A7L 86.52 MCA 299.47 SMA 119.10 ECC .30389 INC 3.4810 V1 30.228 RP 108.55 LAP -3.03 LOP 13.18 VP 36.482 GAP 16.97 A7P 88.29 TAL 151.31 TAP 90.78 RCA 82.90 APO 155.29 V2 34.912 RC 194.989 GL 12.50 GP .59 ZAL 42.10 ZAP 179.40 ETS 100.25 ZAE 128.95 ETE 179.80 ZAC 106.94 ETC 166.45 CLP 179.91 PLANETOCENTRIC CONIC C3 52.006 VHL 7.212 DLA 24.25 RAL 26.26 RAD 6568.9 VEL 13.167 PTH 2.40 VHP 10.858 DPA 2.92 RAP 12.98 ECC 1.8559
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 21 16 3533.51 -23.97 119.94 273.94 74.45 5 16.49 2733.5 -25.87 111.79
90.00 23 51 58 4214.96 .52 172.81 263.97 61.69 25 2 12 3615.0 -3.27 166.18
100.00 6 3 4 3005.26 -26.46 96.53 274.68 75.56 6 53 9 2405.3 -28.18 88.15
100.00 0 56 46 4018.44 2.78 157.12 262.71 60.23 2 3 44 3418.4 -1.20 150.60
110.00 7 51 24 2666.34 -32.28 72.35 276.24 78.10 8 35 50 2066.3 -33.58 63.36
110.00 1 24 56 3930.13 7.87 147.29 259.57 56.63 2 30 26 3330.1 3.43 141.02 C3 52.006 VHL 7.212 CLA 24.25 RAL 26.26 RAD 6568.9 VEL 13.167 PTH 2.40 VHP 10.858 CPA ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5759.8 SGR 400.3 SG3 128.5 RRT .3941 RRF .3816 RTF .9616 ST 3019.9 SR 398.7 SS 720.4 CRT .8839 CRS -.8484 CST -.9973 TOE 3.3895 TRA 5.2208 TC3-1.5848 BAU 1.1020 ROE .5018 RRA -.0259 RC3 .0189 FAU .00856 FOE .8286 FRA 1.5120 FC3 -.1424 BSP 19006 SGB 5773.7 R23 .0011 R13 .9616 LSA 3124.1 MSA 193.1 55A 12.1 SG1 5762.0 SG2 367.7 THA 1.58 EL1 3040.5 EL2 185.2 ALF 6.68 BOE 3.4265 BRA 5.2209 BC3 1.5850 FSP -440 FLIGHT TIME 208.00 ARRIVAL CATE JUL 2 1966 LAUNCH DATE DEC 6 1965 DISTANCE 598.620 HELIOCENTRIC CONIC RL 147.39 LAL .00 LOL 73.67 VL 26.166 GAL 12.34 AZL 86.51 MCA 302.65 SMA 118.90 ECC .31699 INC 3.4932 VI 30.228
RP 108.51 LAP -2.94 LOP 16.37 VP 36.469 GAP 17.81 AZP 88.11 TAL 149.94 TAP 92.59 RCA 81.21 APO 156.59 V2 34.924
RC 196.842 GL 11.73 GP .58 ZAL 40.40 ZAP 178.82 ETS 151.92 ZAE 128.84 ETE 179.84 ZAC 109.12 ETC 166.36 CLP 178.98 PLANETOCENTRIC CONIC C3 58.649 VHL 7.658 OLA 24.11 RAL 28.16 RAD 6569.1 VEL 13.417 PTH 2.45 VHP 11.373 DPA 3.83 RAP 15.04 ECC 1.9652 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.56 4 31 10 3355.03 0 1 8 4252.68 73.83 5 27 5 2755.0 113.29 90.00 -23.57 121.39 277.96 168.29 3652.7 -2.05 1.74 174.92 267.55 61.73 1 12 1 90.00 7 3 3 6 12 35 3028.06 1 2 25 4054.89 8 0 20 2690.93 -26.06 278.73 74.82 2428.1 -27.89 89.78 98.11 100.00 60.35 2 9 59 77.07 8 45 11 56.92 2 37 13 .03 266.29 3454.9 152.60 4.01 159.13 100.00 -33.37 74.18 2090.9 65.25 -31.92 280.41 110.00 3364.8 4.75 142.84 263.13 1 31 8 9.17 149.14 3964.79 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5738.6 SGR 395.8 SG3 124.2 TOE 3.4945 TRA 5.6873 TT3-1.3642 BAU 1.0697 ST 2965.6 SR 395.3 SS 716.9 ROE .5284 RRA -.0043 RC3 .0134 FAU .00717 FOE .8272 FRA 1.5710 FC3 -.1059 BSP 19032 RRT .4289 RRF .4161 RTF .9646 CRT .8803 CRS -.8469 CST -.9977 SGB 5752.3 R23 .0008 R13 .9646 SG1 5741.2 SG2 357.4 THA 1.70 LSA 3070.5 MSA 193.2 SSA 11.6 EL1 2986.1 EL2 186.3 ALF BOE 3.5342 BRA 5.6873 BC3 1.3643 FSP -426 6.72 ARRIVAL DATE JUL 4 1966 FLIGHT TIME 210.00 LAUNCH DATE DEC 6 1965 DISTANCE 602.898 HELIOCENTRIC CONIC RL 147.39 LAL .00 LOL 73.67 VL 26.132 GAL 13.53 A7L 86.49 HCA 305.84 SMA 118.71 ECC .33155 INC 3.5062 VI 30.228 RP 108.47 LAP -2.84 LOP 19.56 VP 36.456 GAP 18.74 A7P 87.95 TAL 148.64 TAP 94.48 RCA 79.35 APO 158.07 V2 34.936 RC 198.673 GL 10.99 GP .57 7AL 38.81 7AP 177.94 ETS 165.64 7AE 128.70 ETE 179.88 7AC 111.27 ETC 166.23 CLP 178.02 PLANETOCENTRIC CONIC 4.74 RAP 17.08 ECC 2.0940 C3 66.477 VHL 8.153 DLA 23.93 RAL 29.94 RAD 6569.3 VEL 13.705 PTH 2.50 VHP 11.943 DPA ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.25 90.00 4 41 9 3375.21 90.00 0 5 20 4293.09 100.00 6 22 5 3049.78 100.00 1 7 5 4093.75 114.69 281.90 73.26 5 37 24 2775.2 -23.18 122.74 1 16 53 3693.1 170.55 271.02 61.83 -.75 177.18 3.04 2449.8 -27.60 91.33 282.70 74.13 7 12 55 99.60 100.00 -25.67 74.13 7 12 55 60.54 2 15 19 76.09 8 54 23 57.29 2 43 13 3493.7 1.35 154.73 161.27 269.77 100.00 5.31 2114.9 3401.4 -33.13 67.08 284.48 110.00 8 9 8 2714.85 1 36 31 4001.44 75.94 -31.55 266.60 6.14 144.77 151.11 110.00 10.52 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5719.8 SGR 390.9 SG3 120.2 RRT .4656 RRF .4512 RTF .9679 SGB 5733.1 R23 .0009 R13 .9679 SGI 5722.7 SG2 346.2 THA 1.82 ST 2911.8 SR 390.3 SS 715.9 CRT .8768 CRS -.8458 CST -.9980 TOE 3.6085 TRA 6.2004 TC3-1.1576 BAU 1.0289 ROE .5554 RRA .0206 RC3 .0093 FAU .00576 FOE .8286 FRA 1.6355 FC3 -.0751 BSP 19048 LSA 3017.6 MSA 192.4 SSA 11.1 EL1 2931.9 EL2 186.4 ALF 6.73 BOE 3.6509 BRA 6.2004 BC3 1.1577 FSP -412 ARRIVAL DATE JUL 6 1966 FLIGHT TIME 212.00 LAUNCH DATE DEC 6 1965 DISTANCE 606.890 HELIOCENTRIC CONIC RL 147.39 LAL .00 LOL 73.67 VL 26.099 GAL 14.83 AZL 86.48 HCA 309.03 SMA 118.53 ECC .34780 INC 3.5204 V1 30.228 RP 108.43 LAP -2.73 LOP 22.75 VP 36.444 GAP 19.78 AZP 87.78 TAL 147.43 TAP 96.46 RCA 77.30 APO 159.75 VZ 34.948 RC 200.481 GL 10.25 GP .56 ZAL 37.33 ZAP 176.96 ETS 171.18 ZAE 128.52 ETE 179.92 ZAC 113.37 ETC 166.08 CLP 177.01 PLANETOCENTRIC CONIC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 51 10 3394.03 -22.80 124.00 285.74 72.74 5 47 44 2794.0 -24.95 115.98 C3 75.754 VHL 8.704 OLA 23.70 RAL 31.59 RAD 6569.5 VEL 14.039 PTH 2.56 VHP 12.578 OPA 5.62 RAP 19.09 ECC 2.2467 0 8 31 4335.83 6 31 33 3070.38 1 10 49 4134.72 8 17 47 2738.02 1 20 46 179.57 274.39 62.00 4.41 90.00 -27.30 7 22 43 2470.4 92.79 -25.28 101.01 286.56 73.49 100.00 2 19 43 3534.7 2.74 156.98 6.68 163.55 273.15 60.80 100.00 -32.87 68.83 -31.15 77.63 288.43 75.16 9 3 25 2138.0 110.00 4039.84 11.93 153.20 269.99 57.73 2 48 24 3439.8 7.58 146.80 1 41 4 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2860.2 SR 384.0 SS 718.5 SCT 5699.6 SGR 385.6 SG3 116.4 RRT .4988 RRF .4868 RTF .9713 SGB 5712.6 R23 .0008 R13 .9713 TOE 3.7372 TRA 6.7600 TC3 -.9634 BAU .9757 CRT .8738 CRS -.8455 CST -.9983 RDE .5830 RRA .0489 RC3 .0065 FAU .00427 LSA 2967.8 MSA 190.6 SSA 10.6 FOE .8341 FRA 1.7076 FC3 -.0488 BSP 18946 EL1 2879.9 EL2 185.4 ALF 6.72 BDE 3.7824 BRA 6.7602 BC3 .9634 FSP -396 SG1 5702.9 SG2 334.0 THA 1.94

ARRIVAL CATE JUL 8 1966

LAUNCH DATE DEC 6 1965

```
HELIOCENTRIC CONIC
                                                                                          DISTANCE 610.526
     RL 147.39 LAL .00 LOL 73.67 VL 26.066 GAL 16.27 AZL 86.46 MCA 312.22 SMA 118.35 ECC .36601 INC 3.5359 V1 3D.228 RP 108.39 LAP -2.62 LOP 25.94 VP 36.433 GAP 20.95 AZP 87.62 TAL 146.33 TAP 98.55 RCA 75.03 APO 161.66 V2 34.961 RC 202.264 GL 9.53 GP .56 ZAL 35.98 ZAP 175.92 ETS 174.15 ZAE 128.28 ETE 179.96 ZAC 115.44 ETC 165.90 CLP 175.96
   PLANETOCENTRIC CONIC
                                                                                                                                                                  5.48 RAP 21.06 ECC 2.4289
     C3 86.822 VHL 9.318 CLA 23.44 RAL 33.11 RAD 6569.7 VEL 14.428 PTH 2.62 VHP 13.287 CPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         2811.4
                                                                                                                                                                              -24.66
                       3411.43
U 10 41 4380.62
6 40 54 3089.73
I 13 35 4177.56
8 26 13 2760.26
I 44 46 4079.30
CORRECTY
                                                                                                 289.46
                                                                                                                      12.21 5 51 59
                                                                                                                                                                                                   117.18
         90.00 5 1 7 3411.43
                                                               -22.45
                                                                                 125.15
                                                                                                                                         1 23 41
                                                                                                                                                              3780.6
                                                                                                                                                                                  2.07
                                                                                                                                                                                                   175.43
                                                                  5.84
                                                                                  182.09
                                                                                                     277.64
                                                                                                                           62.24
          90.00
                                                                                                                          72.90 7 32 24
61.13 2 23 13
74.29 9 12 13
                                                                                                                                                              2489.7
                                                                                                                                                                                 -27.00
                                                                                                                                                                                                    94.15
                                                                -24.90
                                                                                  102.32
                                                                                                     290.30
        100.00
                                                                 8.10
                                                                                 165.94
                                                                                                   276.41
                                                                                                                                                              3577.6
                                                                                                                                                                                   4.18
                                                                                                                                                                                                   159.34
        100.00
                                                                                                                                                              2160.3 -32.60
                                                                                                 292.25
                                                                                                                                                                                                    70.51
                                                               -30.75
                                                                                    79.24
        110.00
                                                           13.37
                                                                                 155.40
                                                                                                     273.28
                                                                                                                           58.24
                                                                                                                                         2 52 46
                                                                                                                                                              3479.8
                                                                                                                                                                                  9.07
                                                                                                                                                                                                   148.93
        110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 5671.8 SGR 379.7 SG3 112.7
RRT .5332 RRF .5218 RTF .9746
SGB 5684.5 R23 .D005 R13 .9746
SGI 5675.4 SG2 321.0 THA 2.05
                                                                                                                                                        ST 2804.6 SR 376.1 SS 723.0
CRT .8711 CRS -.8453 CST -.9986
     TOE 3.8733 TRA 7.3623 TC3 -.7864 BAU .9128
     RCE .6110 RRA .0805 RC3 .0047 FAU .00277 FDE .8415 FRA 1.7857 FC3 -.0276 BSP 18966 BDE 3.9212 BRA 7.3627 BC3 .7864 FSP -384
                                                                                                                                                         LSA 2914.6 MSA 187.8 55A 10.0
                                                                                                                                                         EL1 2823.8 EL2 183.4 ALF 6.69
                                                                                            FLIGHT TIME 216.00
                                                                                                                                                                       ARRIVAL DATE JUL 10 1966
LAUNCH DATE DEC 6 1965
                                                                                            DISTANCE 613.717
   HELIOCENTRIC CONIC
    RL 147.39 LAL .00 LOL 73.67 VL 26.035 CAL 17.85 A7L 86.45 MCA 315.42 SMA 118.18 ECC .38648 INC 3.5531 V1 30.228 RP 108.35 LAP -2.49 LOP 29.14 VP 36.423 GAP 22.26 A7P 87.47 TAL 145.36 TAP 100.77 RCA 72.50 APO 163.85 V2 34.974
                                                    .55 ZAL 34.75 ZAP 174.82 ETS 176.02 ZAE 127.98 ETE 179.99 ZAC 117.44 ETC 165.70 CLP 174.85
                                 8.83 GP
     RC 204.023 GL
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

(3 100.126 VHL 10.006 DLA 23.15 RAL 34.49 RAD 6569.9 VEL 14.882 PTH 2.69 VHP 14.085 DPA 7.31 RAP 22.98 ECC 2.6478

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 5 10 58 3427.28 -22.11 126.19 293.04 71.85 6 8 6 2827.3 -24.39 118.26

90.00 0 11 50 4427.15 7.30 184.72 280.76 62.57 1 25 37 3827.1 3.57 178.03

100.00 6 50 6 3107.66 -24.53 103.53 293.89 72.36 7 41 54 2507.7 -26.71 95.40

100.00 1 15 23 4222.00 9.55 168.44 279.55 61.54 2 25 45 3622.0 5.67 161.80

110.00 8 34 23 2781.38 -30.36 80.76 295.90 73.47 9 20 45 2181.4 -32.32 72.09

110.00 1 47 35 4121.04 14.84 157.69 276.46 58.85 2 56 16 3521.0 10.60 151.15
                                                                                      58.44 279.55 61.54 2 25 45

10.76 295.90 73.47 9 20 45

17.69 276.46 58.85 2 56 16

MIO-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                      SGT 5640.6 SGR 373.3 SG3 109.3
RRT .5675 RRF .5567 RTF .9780
SGB 5652.9 R23 .0000 R13 .9780
SGI 5644.6 SG2 307.2 THA 2.16
                                                                                                                                                        ST 2750.0 SR 366.9 SS 731.2
CRT .8691 CRS -.8458 CST -.9989
     TOE 4.0267 TRA 8.0204 TC3 -.6231 BAU .8340
  ROE .6396 RRA .1158 RC3 .0038 FAU .00114
FOE .8530 FRA 1.8733 FC3 -.0098 BSP 18950
BDE 4.0772 BRA 8.0213 BC3 .6231 FSP -372
                                                                                                                                                 CRT .8691 CRS -.8458 CST
LSA 2863.2 MSA 184.1 SSA
EL1 2768.5 EL2 180.3 ALF
                                                                                                                                                        LSA 2863.2 MSA 184.1 SSA
                                                                                                                                                                                                          9.5
                                                                                                                                                                                                         5.54
                                                                                                                                                                      ARRIVAL DATE JUL 12 1966
                                                                                           FILIGHT TIME 218.00
LAUNCH DATE DEC 6 1965
                                                                                           DISTANCE 616.346
   HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 26.006 GAL 19.62 AZL 86.43 HCA 318.61 SMA 118.02 ECC .40959 INC 3.5724 V1 30.228 RP 108.31 LAP -2.36 LOP 32.33 VP 36.415 GAP 23.74 AZP 87.32 TAL 144.54 TAP 103.15 RCA 69.68 APO 166.36 V2 34.987
                                                 .54 ZAL 33.67 ZAP 173.64 ETS 177.31 ZAE 127.61 ETE 180.03 ZAC 119.37 ETC 165.47 CLP 173.66
     RC 205.757 GL 8.14 GP
    PLANETOCENTRIC CONIC
                                                                                                                            2.75 VHP 14.988 DPA
                                                                                                                                                                  8.10 RAP 24.85 ECC 2.9132
     C3 116.250 VHL 10.782 DLA 22.81 RAL 35.72 RAD 6570.2 VEL 15.414 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       5 20 39 3441.35 -21.81 127.11
0 11 56 4475.16 8.80 187.46
6 59 5 3123.94 -24.19 104.62
1 16 11 4267.81 11.02 171.04
8 42 17 2801.11 -29.97 82.16
1 49 29 4163.40 16.31 160.09
                                                                                                                      71.48
                                                                                                                                       6 18 0
                                                                                                                                                         2841.4
                                                                                                  296.44
          90.00
                                                                                                                                        1 26 31
                                                                                                                                                              3875.2
                                                                                                                                                                                    5.11
                                                                                                    283.72
                                                                                                                          62.98
                                                                                                                          71.88 7 51 9
                                                                                                                                                              2523.9
                                                                                                                                                                                                     96.54
                                                                                                    297.30
                                                                                                                          62.04 2 27 18
72.72 9 28 58
                                                                                                                                                              3667.8
                                                                                                                                                                                   7.20
                                                                                                                                                                                                   164.34
                                                                                                   282.54
                                                                                                                                                         2201.1
                                                                                                   299.37
                                                                                                                                                                               -32.03
                                                                                                                                                                                                    73.56
                                                                                                                                                                               12.15
                                                                                                                                         2 58 52
                                                                                                                                                              3563.4
                                                                                                    279.50
                                                                                                                          59.54
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE 4.1998 TRA 8.7410 TC3 -.4737 BAU .7363
                                                                                                                                                        ST 2695.7 SR 356.5 SS 743.6
CRT .8678 CRS -.8470 CST -.9991
                                                                                       SGT 5605.0 SGR 366.6 SG3 106.0
RRT .6015 RRF .5913 RTF .9812
     ROE .6689 RRA .1552 RC3 .0037 FAU-.00066
FOE .8693 FRA 1.9717 FC3 .0049 BSP 18921
BOE 4.2527 BRA 8.7424 BC3 .4738 FSP -361
                                                                                       SGB 5617.0 R23 -.0006 R13 .9812
SG1 5609.4 SG2 292.7 THA 2.26
                                                                                                                                                         LSA 2813.3 MSA 179.3 SSA 9.0
                                                                                                                                                         EL1 2713.5 EL2 176.0 ALF 6.57
                                                                                            FLIGHT TIME 220.00
                                                                                                                                                                       ARRIVAL DATE JUL 14 1966
LAUNCH DATE DEC 6 1965
                                                                                           DISTANCE 618.260
   HELIOCENTRIC CONIC
     RL 147.39 LAL .00 LOL 73.67 VL 25.978 GAL 21.61 A7L 86.41 HCA 321.81 SMA 117.87 ECC .43578 INC 3.5942 V1 30.228
RP 108.27 LAP -2.22 LOP 35.53 VP 36.408 GAP 25.44 AZP 87.17 TAL 143.92 TAP 105.73 RCA 66.50 APO 169.23 V2 35.000
RC 207.465 GL 7.46 GP .53 ZAL 32.74 ZAP 172.37 ETS 178.27 ZAE 127.14 ETE 180.07 ZAC 121.21 ETC 165.21 CLP 172.39
    PLANETOCENTRIC CONIC
     C3 135.974 VHL 11.661 DLA 22.43 RAL 36.78 RAD 6570.5 VEL 16.041 PTH 2.83 VHP 16.017 DPA
     C3 135.974 VHL 11.661 DLA 22.43 RAL 36.78 RAD 6570.5 VEL 16.041 PTH 2.83 VHP 16.017 DPA 8.85 RAP 26.64 ECC 3.2378 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 30 6 3453.36 -21.55 127.89 299.65 71.17 6 27 39 2853.4 -23.92 120.03 90.00 0 10 56 4524.44 10.31 190.29 286.50 63.48 1 26 20 3924.4 6.67 183.50 100.00 7 7 49 3138.26 -23.89 105.57 300.50 71.47 8 0 8 2538.3 -26.19 97.53 100.00 1 15 53 4314.76 12.51 173.74 285.36 62.63 2 27 48 3714.8 8.74 166.97 110.00 8 49 50 2819.12 -29.59 83.43 302.61 72.06 9 36 49 2219.1 -31.76 74.89 110.00 1 50 22 4206.67 17.79 162.57 282.39 60.32 3 0 29 3606.7 13.70 155.84
                                                                                                                                                                   8.85 RAP 26.64 ECC 3.2378
                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                     HID-COURSE EXECUTION ACCURACY
SGT 5568.3 SGR 359.7 SG3 103.0 ST 2644.6 SR 345.1 S5 761.4
RRT .6353 RRF .6259 RTF .9842 CRT .8674 CRS -.8491 CST -.9943
SGB 5579.9 R23 -.0012 R13 .9842 L5A 2768.2 MSA 173.5 SSA 8.5
SGI 5573.0 SG2 277.6 THA 2.36 ELI 2661.6 EL2 170.6 ALF 6.48
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE 4.4025 TRA 9.5393 TC3 -.3362 BAU .6112
     ROE .6993 RRA .1993 RC3 .0043 FAU-.00277
FOE .8923 FRA 2.0844 FC3 .0177 8SP 18751
     BDE 4.4577 BRA 9.5413 BC3 .3362 FSP -348
```

FLIGHT TIME 214.00

ARRIVAL CATE FEB 15 1966

LAUNCH DATE DEC 7 1965

DISTANCE 186.100 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 26.930 GAL -7.82 A7L 86.62 MCA 83.21 SMA 123.36 ECC .23604 INC 3.3808 VI 30.232
RP 107.55 LAP 3.36 LOP 157.88 VP 37.310 GAP -11.53 A7P 89.60 TAL 207.39 TAP 290.59 RCA 94.24 APO 152.47 VZ 35.234
RC 48.656 GL 17.56 GP -.48 ZAL 131.17 ZAP 9.93 ETS 1.69 ZAE 148.36 ETE 339.37 ZAC 63.62 ETC 162.75 CLP -9.92 PLANETOCENTRIC CONIC C3 27.209 VHL 5.216 DLA -2.77 RAL 299.46 RAD 6568.1 VEL 12.190 PTH 2.19 VHP 7.680 CPA -15.67 RAP 331.43 ECC 1.4478 C3 27.209 VHL 5.216 DLA -2.77 RAL 299.46 RAD 6568.1 VEL 12.190 PTH 2.19 VMP 7.680 DPA -15.67 RAP 331.43 ECC 1.4478 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 37 58 2203.50 -19.30 40.78 165.15 111.13 3 14 42 1603.5 -16.25 33.43 90.00 13 54 53 5019.39 23.12 220.89 166.71 73.18 15 18 32 4419.4 20.59 213.12 100.00 3 58 1 1945.27 -20.43 21.31 164.67 112.31 4 30 27 1345.3 -17.22 13.99 100.00 15 17 31 4752.85 24.28 200.89 166.31 72.00 16 36 44 4152.9 21.59 193.12 110.00 5 3 18 1740.92 -23.44 4.36 163.23 115.62 5 32 19 1140.9 -19.80 357.11 110.00 16 28 44 4529.97 27.38 182.73 165.08 68.69 17 44 14 3930.0 24.24 174.98 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 675.6 SGR 400.7 SG3 122.7 RRT -.0350 RRF .0336 RTF -.6636 SGB 785.5 R23 .0022 R13 .6637 ST 277.0 SR 365.2 SS 305.4 CRT .8682 CRS .9887 CST .8089 LSA 533.8 MSA 133.8 SSA 24.0 TOE - .2256 TRA - .3727 TC3 .4567 BAU .1744 ROE -.3320 RRA .0607 RC3 -.1458 FAU .03982 FDE .4115 FRA -.2332 FC3-1.2671 BSP 1846 BDE .4014 BRA .3776 BC3 .4794 FSP -311 SG1 675.8 SG2 400.3 THA 178.17 EL1 444.2 EL2 113.0 ALF 53.94 FLIGHT TIME 72.00 ARRIVAL DATE FEB 17 1966 LAUNCH DATE DEC 7 1965 DISTANCE 192.914 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.107 GAL -7.80 A7L 86.61 HCA 86.45 SMA 124.46 ECC .22734 INC 3.3865 V1 30.232 RP 107.57 LAP 3.38 LOP 161.12 VP 37.431 GAP -10.61 A7P 89.79 TAL 208.86 TAP 295.31 RCA 96.17 APO 152.76 V2 35.227 18.09 GP -.52 ZAL 132.43 ZAP 12.59 ETS 1.28 ZAE 147.87 ETE 339.98 ZAC 64.19 ETC 162.86 CLP -12.58 RC 50.208 GL PLANETOCENTRIC CONIC C3 26.115 VHL 5.110 DLA -2.55 RAL 297.90 RAD 6568.1 VEL 12.145 PTH 2.18 VHP 7.183 DPA -15.50 RAP 332.02 ECC 1.4298 C3 26.115 VML 5.110 DLA -2.55 RAL 297.90 RAD 6568.1 VEL 12.145 PTH 2.18 VMP 7.183 DPA -15.50 RAP 332.02 ECC 1.4298 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 30 6 2200.24 -19.22 40.58 162.95 111.21 3 6 46 1600.2 -16.17 33.23 90.00 13 50 19 5002.30 22.78 219.75 164.36 72.71 15 13 42 4402.3 20.20 212.03 100.00 3 50 15 1941.68 -20.33 21.09 162.48 112.40 4 22 37 1341.7 -17.12 13.77 100.00 15 12 51 4736.09 23.92 199.77 163.96 71.51 16 31 47 4136.1 21.17 192.05 110.00 4 55 46 1736.57 -23.31 4.09 161.05 115.74 5 24 43 1136.6 -19.66 356.85 110.00 16 23 49 4513.96 26.98 181.66 162.71 68.17 17 39 3 3914.0 23.78 173.96 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 690.3 SGR 400.2 SG3 139.6 RRT -.0401 RRF .0368 RTF -.6775 ST 280.5 SR 363.8 SS 329.1 CRT .8821 CRS .9853 CST .8098 TOE -.2266 TRA -.3508 TC3 .4959 BAU .1812 ROE -.3241 RRA .0548 RC3 -.1528 FAU .04405 FOE .4626 FRA -.3005 FC3-1.4603 BSP 1942 BDE .3954 BRA .3551 BC3 .5189 FSP -363 SGB 797.9 R23 .0040 R13 .6775 LSA 548.3 MSA 134.9 SSA 24.8 EL1 446.7 EL2 107.6 ALF 53.30 5G1 690.5 SG2 399.7 THA 178.00 ARRIVAL DATE FEB 19 1966 FLIGHT TIME 74.00 LAUNCH DATE DEC 7 1965 DISTANCE 199.714 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.264 CAL -7.79 A7L 86.61 HCA 89.69 SMA 125.47 ECC .21973 INC 3.3922 V1 30.232 RP 107.60 LAP 3.39 LOP 164.37 VP 37.539 CAP -9.73 A7P 89.98 TAL 210.29 TAP 299.98 RCA 97.90 APO 153.04 V2 35.220 RC 51.850 GL 18.56 GP -.56 TAL 133.61 ZAP 15.37 ETS 1.01 TAE 147.65 ETE 340.44 TAC 64.64 ETC 162.93 CLP -15.36 PLANETOCENTRIC CONIC C3 25.215 VHL 5.021 DLA -2.35 RAL 296.45 RAD 6568.0 VEL 12.108 PTH 2.17 VHP 6.716 DPA -15.39 RAP 332.48 ECC 1.4150 C3 25.215 VHL 5.021 0LA -2.35 RAL 296.45 RAO 6568.0 VEL 12.108 PTH 2.17 VHP 6.716 DPA -15.39 RAP 332.48 ECC 1.4150 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 22 48 2197.78 -19.16 40.42 160.96 111.26 2 59 25 1597.8 -16.10 33.08 100.00 3 45 0 4987.42 22.47 218.76 162.22 72.30 15 9 7 4387.4 19.84 211.08 100.00 3 43 3 1938.91 -20.26 20.91 160.49 112.46 4 15 21 1338.9 -17.04 13.60 100.00 15 8 26 4721.52 23.60 198.80 161.82 71.10 16 27 7 4121.5 20.80 191.12 110.00 4 48 47 1733.14 -23.21 3.87 159.06 115.83 5 17 40 1133.1 -19.55 356.65 110.00 16 19 11 4500.06 26.63 180.74 160.56 67.73 17 34 11 3900.1 23.37 173.09 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 701.8 SGR 398.7 SG3 158.8 RRT -.0420 RRF .0395 RTF -.6859 SGB 807.1 R23 .0031 R13 .6860 SG1 702.1 SG2 398.2 THA 177.98 ST 284.9 SR 361.5 SS 355.3 CRT .8946 CRS .9817 CST .8118 LSA 564.5 MSA 137.2 SSA 25.2 TDE -.2285 TRA -.3321 TC3 .5275 BAU .1857 ROE -.3164 RRA .0494 RC3 -.1588 FAU .04883 FDE .5228 FRA -.3766 FC3-1.6767 BSP 1986 BDE .39D3 BRA .3358 BC3 .5509 FSP -421 EL1 448.7 EL2 102.6 ALF 52.52 ARRIVAL DATE FEB 21 1966 FLIGHT TIME 76.00 LAUNCH DATE DEC 7 1965 DISTANCE 206.497 RL 147.37 LAL .00 LOL 74.68 VL 27.404 GAL -7.78 A7L 86.60 HCA 92.93 SMA 126.38 ECC .21310 INC 3.3979 VI 30.232 RP 107.62 LAP 3.39 LOP 167.62 VP 37.633 GAP -8.89 A7P 90.17 TAL 211.67 TAP 304.60 RCA 99.45 APO 153.31 V2 35.212 RC 53.572 GL 18.98 GP -.60 ZAL 134.69 ZAP 18.29 ETS .81 ZAE 147.71 ETE 340.77 ZAC 64.96 ETC 162.97 CLP -18.28 PLANETOCENTRIC CONIC C3 24.473 VHL 4.947 DLA -2.17 RAL 295.10 RAD 6568.0 VEL 12.077 PTH 2.16 VHP 6.277 DPA -15.32 RAP 332.81 ECC 1.4028 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 16 4 2196.02 -19.11 40.31 159.16 111.30 2 52.41 1596.0 -16.05 32.97 90.00 13 41 57 4974.48 22.20 217.91 160.31 71.96 15 4 52 4374.5 19.53 210.26 100.00 3 36 25 1935.88 -20.21 20.79 158.69 112.51 4 8 41 1336.9 -16.98 13.48 100.00 15 4 18 4708.85 23.32 197.97 159.90 70.75 16 22 47 4108.8 20.48 190.32 110.00 4 42 20 1730.50 -23.13 3.71 157.27 115.90 5 11 11 1130.5 -19.46 356.49 110.00 16 14 52 4487.99 26.31 179.94 158.63 67.35 17 29 40 3888.0 23.01 172.33 C3 24.473 VHL 4.947 DLA -2.17 RAL 295.10 RAD 6568.0 VEL 12.077 PTH 2.16 VHP 6.277 DPA -15.32 RAP 332.81 ECC 1.4028 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 288.1 SR 358.2 SS 383.4 CRT .9050 CRS .9780 CST .8134 SGT 709.6 SGR 396.3 SG3 180.7 TOE -.2296 TRA -.3151 TC3 .5531 BAU .1887 SGT 709.6 SGR 390.3 RRT -.D443 RRF .D426 RTF -.6914 SGB 812.8 R23 .DD18 R13 .6915 FOE -.3090 RRA -.0444 RC3 -.1641 FAU .05430 FOE .5923 FRA -.4642 FC3-1.9210 89P 2014 BDE .3850 BRA .3182 BC3 .5769 FSP -487 LSA 581.4 MSA 140.2 SSA 25.4 SG1 709.9 SG2 395.7 THA 177.94 EL1 449.2 EL2 97.7 ALF 51.81

FLIGHT TIME 70.00

ARRIVAL CATE FEB 23 1966

```
LAUNCH DATE DEC 7 1965
                                                                                                                    CISTANCE 213.259
      RL 147.37 LAL .00 LOL 74.68 VL 27.527 GAL -7.78 A7L 86.60 MCA 96.17 SMA 127.20 ECC .20736 INC 3.4036 V1 30.232 RP 107.64 LAP 3.38 LOP 170.86 VP 37.715 GAP -8.10 A7P 90.37 TAL 212.96 TAP 309.13 RCA 100.83 APO 153.58 V2 35.204 RC 55.368 GL 19.36 GP -.65 7AL 135.67 ZAP 21.36 ETS .66 ZAE 148.06 ETE 340.94 ZAC 65.13 ETC 162.99 CLP -21.35
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.859 VHL 4.885 CLA -2.00 RAL 293.87 RAC 6568.0 VEL 12.051 PTH 2.15 VHP 5.866 CPA -15.31 RAP 332.99 ECC 1.3927 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 9 57 2194.88 -19.09 40.24 157.54 111.32 2 46.32 1594.9 -16.02 32.90 90.00 13 38 16 4963.16 21.96 217.17 158.59 71.66 15 0.59 4363.2 19.25 209.54 100.00 3 30.22 1935.49 -20.17 20.70 157.08 112.54 4 2.37 1355.5 -16.94 13.39 100.00 15 0.32 4697.78 23.07 197.24 158.18 70.44 16.18.50 4097.8 20.19 189.63 110.00 4 36.28 1728.56 -23.08 3.59 155.67 115.95 5 5 16 1128.6 -19.40 356.38 110.00 16.10.56 4477.47 26.04 179.25 156.91 67.03 17.25 33 3877.5 22.70 171.68
      C3 23.859 VML 4.885 CLA -2.00 RAL 293.87 RAD 6568.0 VEL 12.051 PTH 2.15 VMP 5.866 CPA -15.31 RAP 332.99 ECC 1.3927
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                ST 289.4 SR 353.9 SS 413.3
CRT .9130 CRS .9743 CST .8136
LSA 598.7 MSA 143.9 SSA 25.4
                                                                                                              SGT 712.7 SGR 392.8 SG3 205.7
RRT -.0475 RRF .0466 RTF -.6932
SGB 813.8 R23 .0006 R13 .6934
      TDE -.2292 TRA -.3003 TC3 .5712 BAU .1900
      ROE -.3014 RRA .0398 RC3 -.1685 FAU .06054
      FCE .6721 FRA -.5645 FC3-2.1968 BSP 2028
BDE .3787 BRA .3029 BC3 .5956 FSP -564
                                                                                                              SG1 713.0 SG2 392.2 THA 177.85
                                                                                                                                                                                                EL1 447.5 EL2 93.4 ALF 51.26
                                                                                                                                                                                                                   ARRIVAL CATE FEB 25 1966
LAUNCH DATE DEC 7 1965
                                                                                                                    FLIGHT TIME 80.00
    HELIOCENTRIC CONIC
                                                                                                                   CISTANCE 219.999
     RL 147.37 LAL .00 LOL 74.68 VL 27.636 GAL -7.77 AZL 86.59 MCA 99.41 SMA 127.93 ECC .20239 INC 3.4094 VI 30.232 RP 107.67 LAP 3.36 LOP 174.10 VP 37.786 GAP -7.33 AZP 90.56 TAL 214.17 TAP 313.57 RCA 102.04 APO 153.82 VZ 35.195 RC 57.230 GL 19.69 GP -.70 ZAL 136.53 ZAP 24.61 ETS .54 ZAE 148.71 ETE 340.95 ZAC 65.13 ETC 162.96 CLP -Z4.60
    PLANETOCENTRIC CONIC
     C3 23.348 VHL 4.832 DLA -1.85 RAL 292.76 RAD 6567.9 VEL 12.030 PTH 2.15 VHP 5.483 DPA -15.36 RAP 332.99 ECC 1.3843 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 4 25 2194.28 -19.07 40.20 156.12 111.34 2 40 59 1594.3 -16.00 32.87 90.00 13 34 58 4953.17 21.75 216.52 157.07 71.40 14 57 32 4355.2 19.01 208.91 100.00 3 24 53 1934.67 -20.15 20.65 155.65 112.56 3 57 8 1334.7 -16.92 13.35 100.00 14 57 11 4688.02 22.84 196.60 156.66 70.18 16 15 19 4088.0 19.93 189.01 110.00 4 31 9 1727.24 -23.04 3.50 154.25 115.98 4 59 57 1127.2 -19.55 356.30 110.00 16 7 24 4468.22 25.79 178.64 155.38 66.74 17 21 52 3868.2 22.42 171.11
      C3 23.348 VHL 4.832 DLA -1.85 RAL 292.76 RAD 6567.9 VEL 12.030 PTH 2.15 VMP 5.483 DPA -15.36 RAP 332.99 ECC 1.3843
                                                                                                            MIC-COURSE EXECUTION ACCURACY
                                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SGT 710.8 SGR 388.5 SG3 234.3
RRT -.0546 RRF .0526 RTF -.6924
                                                                                                                                                                                                 ST 286.8 SR 348.7 SS 444.3
CRT .9181 CRS .9705 CST .8107
LSA 615.4 MSA 147.8 SSA 25.3
      TOE -.2256 TRA -.2870 TC3 .5833 BAU .1899
ROE -.2938 RRA .0356 RC3 -.1724 FAU .06772
                                                                                                              SGB 810.0 R23 .0012 R13 .6925
SG1 711.2 SG2 387.6 THA 177.57
      FDE .7617 FRA -.6802 FC3-2.5108 BSP 2052
BDE .3704 BRA .2892 BC3 .6082 FSP -656
                                                                                                                                                                                                EL1 442.5 EL2 89.6 ALF 51.04
                                                                                                                                                                                                                 ARRIVAL DATE FEB 27 1966
                                                                                                                  FLIGHT TIME 82.00
LAUNCH DATE DEC 7 1965
                                                                                                                  DISTANCE 226.713
      RL 147.37 LAL .00 LOL 74.68 VL 27.730 GAL -7.77 A7L 86.58 HCA 102.64 SMA 128.58 ECC .19810 INC 3.4152 VI 30.232
RP 107.70 LAP 3.33 LOP 177.34 VP 37.846 GAP -6.60 A7P 90.75 TAL 215.27 TAP 317.91 RCA 103.11 APO 154.05 V2 35.186
RC 59.152 GL 19.99 GP -.76 ZAL 137.29 ZAP 28.05 ETS .42 ZAE 149.65 ETE 340.76 ZAC 64.95 ETC 162.89 CLP -28.04
    PLANETOCENTRIC CONIC
      C3 22.919 VHL 4.787 DLA -1.71 RAL 291.78 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 5.126 DPA -15.48 RAP 332.81 ECC 1.3772
     C3 22.919 VHL 4.787 CLA -1.71 RAL 291.78 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 5.126 DPA -15.48 RAP 332.81 ECC 1.3772 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 59 26 2194.19 -19.07 40.19 154.86 111.34 2 36 0 1594.2 -16.00 32.86 90.00 13 32 7 4944.23 21.55 215.93 155.73 71.17 14 54 31 4344.2 18.78 208.35 100.00 3 19 59 1934.36 -20.14 20.63 154.40 112.57 3 52 13 1334.4 -16.91 13.33 100.00 14 54 15 4679.29 22.64 196.03 155.32 69.94 16 12 15 4079.3 19.70 188.47 110.00 4 26 24 1726.45 -23.01 3.45 153.01 116.00 4 55 11 1126.4 -19.33 356.25 110.00 16 4 20 4459.96 25.57 178.10 154.04 66.50 17 18 40 3860.0 22.17 170.60
                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                             SGT 701.9 SGR 383.0 SG3 266.5
RRT -.0584 RRF .0581 RTF -.6830
SGB 799.6 R23 -.0014 R13 .6833
SG1 702.4 SG2 382.1 THA 177.41
                                                                                                                                                                                                ST 283.9 SR 342.3 S5 478.4

CRT .9206 CRS .9674 CST .8063

LSA 634.7 MSA 152.4 SSA 24.9
      TOE -.2215 TRA -.2790 TC3 .5822 BAU .1863
      ROE - . 2858 RRA . . 0318 RC3 - . 1755 FAU . 07572
      FOE .8666 FRA -.8080 FC3-2.8601 BSP 2009
BOE .3616 BRA .2808 BC3 .6081 FSP -757
                                                                                                                                                                                                EL1 436.1 EL2 87.1 ALF 50.77
                                                                                                                                                                                                                   ARRIVAL DATE MAR 1 1966
                                                                                                                    FLIGHT TIME 84.00
LAUNCH DATE DEC 7 1965
    HELIOCENTRIC CONIC
                                                                                                                   DISTANCE 233.401
      RL 147.37 LAL .00 LOL 74.68 VL 27.811 GAL -7.76 AZL 86.58 HCA 105.88 SMA 129.15 ECC .19442 INC 3.4213 V1 30.232 RP 107.73 LAP 3.29 LOP 180.58 VP 37.897 GAP -5.91 AZP 90.94 TAL 216.25 TAP 322.13 RCA 104.04 APO 154.26 V2 35.176 RC 61.127 GL 20.26 GP -.82 ZAL 137.94 ZAP 31.70 ETS .31 ZAE 150.92 ETE 340.35 ZAC 64.57 ETC 162.78 CLP -31.70
    PLANETOCENTRIC CONIC
      C3 22.554 VHL 4.749 DLA -1.57 RAL 290.92 RAO 6567.9 VEL 11.997 PTH 2.14 VHP 4.797 DPA -15.69 RAP 332.43 ECC 1.3712
     C3 22.554 VHL 4.749 DLA -1.57 RAL 290.92 RAO 6567.9 VEL 11.997 PTH 2.14 VMP 4.797 DPA -15.69 RAP 332.43 ECC 1.3712 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 55 0 2194.54 -19.08 40.22 153.77 111.33 2 31 35 1594.5 -16.01 32.88 90.00 13 29 43 4936.07 21.37 215.40 154.57 70.97 14 51 59 4336.1 18.58 207.84 100.00 3 15 37 1934.50 -20.15 20.64 153.32 112.56 3 47 52 1334.5 -16.91 13.34 100.00 14 51 48 4671.34 22.45 195.52 154.15 69.73 16 9 39 4071.3 19.49 187.97 110.00 4 22 11 1726.13 -23.00 3.43 151.93 116.01 4 50 57 1126.1 -19.32 356.24 110.00 16 1 43 4452.47 25.36 177.62 152.87 66.27 17 15 56 3852.5 21.94 170.14
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
       TOE -.2145 TRA -.2751 TC3 .5700 BAU .1801
                                                                                                              SGT 685.8 SGR 376.6 SG3 302.6
RRT -. 0634 RRF . 0650 RTF -. 6655
                                                                                                                                                                                               ST 277.8 SR 334.9 55 514.3
CRT .9193 CRS .9646 CST .7973
                                                                                                                                                                                      CRT .9193 CRS .9646 CST .7973
LSA 654.7 MSA 157.0 SSA 24.4
EL1 426.6 EL2 85.8 ALF 50.78
       ROE -.2774 RRA .0283 RC3 -.1782 FAU .08471
                                                                                                         SGB 782.4 R23 -.0048 R13 .6659
SG1 686.3 SG2 375.6 THA 177.15
      FOE .9852 FRA -.9510 FC3-3.2518 BSP 1935
BDE .3507 BRA .2765 BC3 .5972 FSP -871
```

FLIGHT TIME 78.00

```
LAUNCH DATE DEC 7 1965
                                                                        FLIGHT TIME 86.00
                                                                                                                                 ARRIVAL DATE MAR 3 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 240.060
    RL 147.37 LAL .00 LOL 74.68 VL 27.881 GAL -7.75 A7L 86.57 HCA 109.11 SMA 129.64 ECC .19126 INC 3.4275 V1 30.232
RP 107.76 LAP 3.24 LOP 183.82 VP 37.939 GAP -5.24 A7P 91.12 TAL 217.11 TAP 326.22 RCA 104.84 APO 154.43 V2 35.166
RC 63.151 GL 20.50 GP -.90 7AL 138.48 7AP 35.59 ETS .19 7AE 152.50 ETE 339.65 7AC 63.96 ETC 162.61 CLP -35.58
    PLANETOCENTRIC CONIC
     C3 22.238 VHL 4.716 DLA -1.44 RAL 290.19 RAD 6567.9 VEL 11.984 PTH 2.14 VHP 4.495 DPA -15.98 RAP 331.82 ECC 1.3660
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 51 5 2195.29
13 27 48 4928.47
3 11 46 1935.06
14 49 49 4663.94
4 18 28 1726.24
15 59 35 4445.53
         90.00
                                                                                            111.31 2 27 40
                                                                40.26
                                                  -19.10
                                                                            152.84
                                                                                                                        1595.3
                                                                                                                                       -16.03
                                                                                                                                                        32.93
                                                                                             70.78 14 49 56
112.55 3 44 1
69.54 16 7 33
116.01 4 47 14
         90.00
                                                   21.20
                                                                214.91
                                                                              153.56
                                                                                                                          4328.5
                                                                                                                                                       207.37
                                                                                                                                         18.38
        100.00
                                                  -20.16
                                                                 20.67
                                                                              152.39
                                                                                                                          1335.1
                                                                                                                                         -16.93
                                                                                                                                                        13.57
       100.00
                                                   22.28
                                                               195.04
                                                                             153.14
                                                                                                                          4063.9
                                                                                                                                        19.29
                                                                                                                                                       187.51
                                                                  3.44
       110.00
                                                  -23.01
                                                                              151.01
                                                                                                                          1126.2
                                                                                                                                        -19.32
                                                                                                                                                       356.24
                                                                                               66.07 17 13 41
       110.00
                                                  25.17
                                                                177.17
                                                                              151.86
                                                                                                                          3845.5
                                                                                                                                          21.72
                                                                                                                                                       169.72
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
     TOE -.2029 TRA -.2750 TC3 .5470 BAU .1713
                                                                   SGT 662.3 SGR 369.3 SG3 343.3
RRT -.0721 RRF .0745 RTF -.6381
SGB 758.3 R23 -.0080 R13 .6387
                                                                                                                     ST 266.5. SR 326.5 SS 551.0
CRT .9128 CRS .9619 CST .7804
     RDE -.2686 RRA .0251 RC3 -.1805 FAU .09484
    FOE 1.1157 FRA-1.1114 FC3-3.6921 BSP 1852
BOE .3366 BRA .2761 BC3 .5760 FSP -1006
                                                                                                                      LSA 674.2 MSA 161.4 SSA
                                                                                                                                                           24.0
                                                                   SG1 663.1 SG2 367.9 THA 176.67
                                                                                                                      EL1 412.6 EL2 86.2 ALF 51.31
LAUNCH DATE DEC 7 1965
                                                                        FLIGHT TIME 88.00
                                                                                                                                 ARRIVAL DATE MAR 5 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 246.690
    RL 147.37 LAL .00 LOL 74.68 VL 27.940 GAL -7.74 AZL 86.57 HCA 112.34 SMA 130.05 ECC .18854 INC 3.4339 V1 30.232 RP 107.80 LAP 3.18 LOP 187.05 VP 37.972 GAP -4.61 AZP 91.31 TAL 217.85 TAP 330.19 RCA 105.53 APO 154.57 V2 35.155
    RC 65.219 GL 20.72 GP -.98 TAL 138.91 TAP 39.71 ETS
                                                                                   .06 ZAE 154.40 ETE 338.58 ZAC 63.13 ETC 162.38 CLP -39.70
   PLANETOCENTRIC CONIC
    C3 21.959 VML 4.686 DLA -1.30 RAL 289.58 RAD 6567.9 VEL 11.972 PTH 2.13 VMP 4.219 DPA -16.35 RAP 330.97 ECC 1.3614 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                2.13 VHP 4.219 DPA -16.35 RAP 330.97 ECC 1.3614
                  1 47 38 2196.45
13 26 22 4921.20
3 8 22 1936.01
14 48 19 4656.87
4 15 14 1726.74
15 57 57 4438.91
        90.00
                                                  -19.12
                                                                40.34
                                                                             152.06
                                                                                                          2 24 15
                                                                                                                                                        33.00
                                                                                             111.29
                                                                                                                        1596.4
                                                                                                                                        -16.06
                                                                                                       14 48 23
        90.00
                                                   21.04
                                                                214.44
                                                                              152.70
                                                                                               70.60
                                                                                                                           4321.2
                                                                                                                                         18.20
                                                                                                                                                       206.91
                                                                                             112.53 3 40 38
69.35 16 5 56
       100.00
                                                  -20.18
                                                                 20.73
                                                                             151.60
                                                                                                                          1336.0
                                                                                                                                        -16.96
                                                                                                                                                        13.43
       100.00
                                                  22.11
                                                               194.58
                                                                             152.28
                                                                                                                          4056.9
                                                                                                                                        19.10
                                                                                                                                                       187.08
       110.00
                                                  -23.02
                                                                  3.47
                                                                                             116.00 4 44 0
65.88 17 11 56
                                                                             150.23
                                                                                                                          1126.7
                                                                                                                                                       356.27
                                                                                                                                        -19.34
       110.00
                                                  24.99
                                                                176.74
                                                                              150.99
                                                                                                                          3838.9
                                                                                                                                         21.52
                                                                                                                                                       169.31
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TOE -.1888 TRA -.2822 TC3 .5069 BAU .1582
ROE -.2591 RRA .0223 RC3 -.1824 FAU .10581
                                                                   SCT 631.0 SGR 361.0 SG3 387.7
RRT -.0769 RRF .0841 RTF -.5908
SGB 727.0 R23 -.0169 R13 .5918
                                                                                                                     ST 253.4 SR 317.0 SS 590.3
CRT .8991 CRS .9600 CST .7544
LSA 696.4 MSA 165.8 SSA 23.3
    FDE 1.2634 FRA-1.2824 FC3-4.1716 BSP 1690
BDE .3206 BRA .2831 BC3 .5387 FSP -1149
                                                                   5G1 631.9 SG2 359.4 THA 176.27
                                                                                                                      EL1 395.9 EL2 88.8 ALF 52.05
LAUNCH DATE DEC 7 1965
                                                                       FLIGHT TIME 90.00
                                                                                                                                ARRIVAL DATE MAR 7 1966
   HELIOCENTRIC CONIC
                                                                      01STANCE 253.290
    RL 147.37 LAL .00 LOL 74.68 VL 27.989 GAL -7.72 AZL 86.56 HCA 115.56 SMA 130.40 ECC .18621 INC 3.4407 V1 30.232 RP 107.83 LAP 3.10 LOP 190.29 VP 37.997 GAP -4.00 AZP 91.49 TAL 218.46 TAP 334.02 RCA 106.12 APO 154.69 V2 35.143
    RC 67.327 GL 20.93 GP -1.06 ZAL 139.24 ZAP 44.09 ETS 359.92 ZAE 156.61 ETE 337.00 ZAC 62.05 ETC 162.08 CLP -44.08
   PLANETOCENTRIC CONIC
    C3 21.706 VHL 4.659 DLA -1.16 RAL 289.08 RAD 6567.9 VEL 11.962 PTH 2.13 VHP 3.971 DPA -16.81 RAP 329.86 ECC 1.3572
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 44 38 2197.98
13 25 26 4914.07
3 5 26 1937.34
14 47 19 4649.95
4 12 26 1727.60
15 56 48 4432.46
                                                                                           111.26
                                                                                                         2 21 15
                                                                                                                       1598.0
       90.00
                                                  -19.16
                                                                40.43
                                                                            151.40
                                                                                                                                      -16.10
                                                                                                                                                        33.09
        90.00
                                                 20.87
                                                               213.98
                                                                              151.98
                                                                                              70.42
                                                                                                       14 47 20
                                                                                                                          4314.1
                                                                                                                                        18.02
                                                                                                                                                      206.47
       100.00
                                                 -20.22
                                                                20.82
                                                                              150.95
                                                                                             112.50
                                                                                                         3 37 43
                                                                                                                         1337.3
                                                                                            112.50 3 37 43
69.18 16 4 49
115.97 4 41 13
65.69 17 10 40
                                                                                                                                        -16.99
                                                                                                                                                        13.51
       100.00
                                                 21.94
                                                               194.13
                                                                             151.56
                                                                                                                          4050.0
                                                                                                                                        18.92
                                                                                                                                                      186.65
                                               -23.05
      110.00
                                                                 3.53
                                                                              149.58
                                                                                                                          1127.6
                                                                                                                                                      356.32
                                                                                                                                        -19.37
      110.00
                                               24.81
                                                               176.33
                                                                             150.26
                                                                                                                          3832.5
                                                                                                                                         21.31
                                                                                                                                                      168.92
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   SCT 594.1 SCR 351.8 SC3 435.8

RRT -.0802 RRF .0951 RTF -.5168

SCB 690.5 R23 -.0317 R13 .5186
                                                                                                                    ST 236.5 SR 306.4 SS 630.8

CRT .8730 CRS .9586 CST .7120

LSA 720.0 MSA 170.0 SSA 22.7
    TOE -.1703 TRA -.2960 TC3 .4509 BAU .1413
    ROE -.2490 RRA .0198 RC3 -.1839 FAU .11767
    FOE 1.4251 FRA-1.4641 FC3-4.6931 BSP 1474
                                                                   SG1 595.2 SG2 350.0 THA 175.84
    BOE .3017 BRA .2967 BC3 .4870 FSP -1305
                                                                                                                     EL1 375.4 EL2 94.1 ALF 53.34
LAUNCH DATE DEC 7 1965
                                                                       FLIGHT TIME 92.00
                                                                                                                                ARRIVAL DATE MAR 9 1966
  HELIOCENTRIC CONIC
                                                                       DISTANCE 259.859
   RL 147.37 LAL .00 LOL 74.68 VL 28.029 GAL -7.70 AZL 86.55 HCA 118.79 SMA 130.69 ECC .18421 INC 3.4478 VI 30.232
RP 107.87 LAP 3.02 LOP 193.52 VP 38.016 GAP -3.41 AZP 91.66 TAL 218.94 TAP 337.73 RCA 106.62 APO 154.76 V2 35.132
RC 69.470 GL 21.13 GP -1.16 ZAL 139.48 ZAP 48.72 ETS 359.77 ZAE 159.11 ETE 334.67 ZAC 60.74 ETC 161.70 CLP -48.71
  PLANETOCENTRIC CONIC
   C3 21.472 VHL 4.634 OLA -1.02 RAL 288.70 RAD 6567.9 VEL 11.952 PTH 2.13 VHP 3.750 OPA -17.35 RAP 328.50 ECC 1.3534
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                  1 42 1 2199.90
13 24 59 4906.92
                                                                                           111.21
                                                 -19.21
                                                                40.55
                                                                            150.88
                                                                                                        2 18 41
                                                                                                                        1599.9
                                                                                                                                      -16.16
                                                                                                                                                        33.21
       90.00
                                                 20.71
                                                               213.52
                                                                              151.38
                                                                                                        14 46 46
                                                                                              70.25
                                                                                                                          4306.9
                                                                                                                                         17.83
                                                                                                                                                      206.03
                  3 2 53 1939.03
14 46 48 4643.02
      100.00
                                                -20.26
                                                                20.92
                                                                              150.43
                                                                                                        3 35 12
                                                                                             112.46
                                                                                                                          1339.0
                                                                                                                                        -17.04
                                                                                                                                                        13.61
      100.00
                                                 21.78
                                                               193.69
                                                                             150.95
                                                                                              69.00
                                                                                                        16 4 11
                                                                                                                          4043.0
                                                                                                                                        18.73
                                                                                                                                                      186.22
                  4 10 2 1728.80
15 56 7 4426.01
      110.00
                                                -23.08
                                                                 3.60
                                                                             149.06
                                                                                             115.94
                                                                                                       4 38 51
                                                                                                                         1128.8
                                                                                                                                                      356.39
      110.00
                                                 24.63
                                                               175.91
                                                                             149.65
                                                                                             65.51
                                                                                                        17 9 53
                                                                                                                         3826.0
                                                                                                                                         21.11
                                                                                                                                                      168.53
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   TOE -.1455 TRA -.3157 TC3 .3797 BAU .1213
                                                                  SGT 555.6 SGR 341.7 SG3 487.4
RRT -.0834 RRF .1091 RTF -.4049
SGB 652.3 R23 -.0553 R13 .4081
                                                                                                                     ST 215.0 SR 294.9 SS 670.3

CRT .8238 CRS .9572 CST .6386

LSA 742.9 MSA 173.3 SSA 22.0
   ROE -.2384 RRA .0177 RC3 -.1851 FAU .13040
FOE 1.5930 FRA-1.6571 FC3-5.2578 BSP 1231
BOE .2793 BRA .3162 BC3 .4224 FSP -1481
```

SG1 556.7 SG2 339.8 THA 175.32

EL1 350.2 EL2 102.6 ALF 55.65

ARRIVAL DATE MAR 11 1966

```
FLIGHT TIME 94.00
LAUNCH DATE DEC 7 1965
    RL 147.37 LAL .00 LOL 74.68 VL 28.060 GAL -7.66 A7L 86.54 HCA 122.01 SMA 130.92 ECC .18249 INC 3.4554 V1 30.232 RP 107.90 LAP 2.93 LOP 196.74 VP 38.028 GAP -2.85 A7P 91.83 TAL 219.29 TAP 341.31 RCA 107.03 APO 154.81 V2 35.120 RC 71.643 GL 21.32 GP -1.27 7AL 139.61 7AP 53.60 ETS 359.59 7AE 161.85 ETE 331.20 7AC 59.19 ETC 161.23 CLP -53.59
                                                                              DISTANCE 266.397
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                           -.86 RAL 288.42 RAD 6567.9 VEL 11.943 PTH 2.13 VHP 3.557 DPA -17.98 RAP 326.89 ECC 1.3497
    C3 21.248 VHL 4.610 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                     -16.22
                                                                                                      111.16 2 16 27
                                                                                    150.47
                      1 39 45 2202.20
13 25 7 4899.58
                                                       -19.27
                                                                       40.70
        90.00
                                                                                                      70.07 14 46 42
112.41 3 33 3
68.82 16 4 2
115.90 4 36 52
65.32 17 9 36
                                                                                                                                        4299.6
                                                                                                                                                        17.64
                                                                                      150.89
                                                                       213.05
                                                        20.54
                    13 25 2
        90.00
                                                                                                                                                                        13.73
                                                                                                                                                      -17.10
                                                                                                                                        1341.1
                   3 0 42 1941.10
14 46 46 4635.91
                                                                                      150.02
                                                       -20.32
                                                                       21.05
       100.00
                                                                                                                                                                       185.78
                                                                                                                                        4035.9
                                                                                                                                                        18.53
                                                                                      150.46
                                                                       193.23
                                                        21.60
       100.00
                                                                                                                                                                        356.49
                                                                                                                                        1130.4
                                                                                                                                                     -19.46
                      4 8 1 1730.36
15 55 56 4419.42
                                                                                      148.66
                                                      -23.13
                                                                        3.70
       110.00
                                                                                                                                                        20.90
                                                                                                                                                                        168.13
                                                                                                                                        3819.4
                                                                                      149.16
                                                                       175.49
                     15 55 56
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 194.1 SR 282.4 S5 711.3
CRT .7335 CRS .9568 CST .5186
LSA 769.2 M5A 176.5 SSA 21.3
                                                                        SGT 523.9 SGR 330.7 SG3 540.1
RRT -.0737 RRF .1224 RTF -.2326
    TDE -.1168 TRA -.3445 TC3 .2871 BAU .0971
    RDE - .2271 RRA .D159 RC3 - .1856 FAU .14325
                                                                           SGB 619.6 R23 -.0942 R13 .2374
SG1 524.9 SG2 329.2 THA 175.61
    FDE 1.7732 FRA-1.8457 FC3-5.8364 BSP 893
                                                                                                                                EL1 322.6 EL2 115.5 ALF 58.82
    BDE .2554 BRA .3448 BC3 .3419 FSP -1655
                                                                                                                                               ARRIVAL DATE MAR 13 1966
                                                                               FLIGHT TIME 96.00
LAUNCH DATE DEC 7 1965
                                                                              DISTANCE 272.904
    RL 147.37 LAL .00 LOL 74.68 VL 28.084 GAL -7.63 AZL 86.54 HCA 125.23 SMA 131.09 ECC .18101 INC 3.4636 V1 30.232 RP 107.94 LAP 2.83 LOP 199.97 VP 38.034 GAP -2.32 AZP 92.00 TAL 219.52 TAP 344.76 RCA 107.36 APO 154.82 V2 35.108 RC 73.845 GL 21.51 GP -1.38 ZAL 139.66 ZAP 58.70 ETS 359.39 ZAE 164.76 ETE 325.88 ZAC 57.43 ETC 160.67 CLP -58.69
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 21.031 VHL 4.586 DLA -.69 RAL 288.25 RAD 6567.9 VEL 11.934 PTH 2.12 VHP 3.391 DPA -18.66 RAP 325.04 ECC 1.3461 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       111.10
                                                                                                                     2 14 34
                                                                        40.87
                                                                                      150.16
                       1 37 49 2204.92
                                                       -19.33
                                                                                                                                        4291.9
                                                                                                                                                         17.44
                                                                                                                                                                         205.10
                     13 25 35 4891.91
2 58 50 1943.57
14 47 15 4628.49
4 6 21 1732.26
15 56 14 4412.56
                                                                                                          69.89
                                                                                                                    14 47 7
                                                                                       150.50
                                                                       212.56
                                                       20.36
         90.00
                                                                                                                                                         -17.17
                                                                                                                                        1343.6
                                                                                       149.72
                                                                                                        112.35
                                                                                                                      3 31 14
                                                                        21.21
                                                       -20.38
        100.00
                                                                                                                                                         18.33
                                                                                                                                        4028.5
                                                                       192.76
                                                                                       150.07
                                                                                                          68.63 16 4 23
                                                       21.42
        100.00
                                                                                                                                                         -19.52
                                                                                                        115.85
                                                                                                                     4 35 13
                                                                                                                                        1132.3
                                                                          3.82
                                                                                       148.37
                                                       -23.19
                                                                                                         65.13 17 9 46
                                                                                                                                        3812.6
                                                                                                                                                          20.69
                                                                       175.06
                                                                                       148.76
        110.00
                                                      24.24
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 176.1 SR 269.2 SS 750.8
CRT .5677 CRS .9569 CST .3186
LSA 796.6 MSA 179.3 SSA 20.5
                                                                           SGT 512.6 SGR 318.9 SG3 592.9
RRT -.0510 RRF .1367 RTF .0019
SGB 603.7 R23 -.1370 R13 .0024
     TOE -.0824 TRA -.3807 TC3 .1753 BAU .0718
     RDE -.2154 RRA .0146 RC3 -.1855 FAU .15604
     FOE 1.9538 FRA-2.0282 FC3-6.4234 BSP 499
BOE .2306 BRA .3810 BC3 .2552 FSP -1831
                                                                                                                                    EL1 292.7 EL2 133.3 ALF 63.81
                                                                           SG1 513.0 SG2 318.2 THA 177.05
                                                                                                                                               ARRIVAL CATE MAR 15 1966
                                                                               FLIGHT TIME 98.00
LAUNCH DATE DEC 7 1965
     RL 147.37 LAL .00 LOL 74.68 VL 28.100 GAL -7.58 A7L 86.53 HCA 128.45 SMA 131.21 ECC .17974 INC 3.4723 VI 30.232 RP 107.98 LAP 2.72 LOP 203.19 VP 38.035 CAP -1.81 A7P 92.16 TAL 219.63 TAP 348.09 RCA 107.63 APO 154.79 V2 35.095 RC 76.070 GL 21.70 CP -1.50 7AL 139.62 7AP 64.00 ETS 359.18 7AE 167.67 ETE 317.33 7AC 55.49 ETC 160.00 CLP -63.99
                                                                                DISTANCE 279.381
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 20.815 VHL 4.562 DLA -.51 RAL 288.17 RAD 6567.8 VEL 11.925 PTH 2.12 VHP 3.252 DPA -19.40 RAP 322.98 ECC 1.3426
     COLUMB 7 WHL 4.362 ULA -.31 MAL 288.17 MAU 6367.8 VEL 11.925 PTH 2.12 VHP 3.252 DPA -19.40 RAP 322.98 ECC 1.3426

LNCH A7MTH LNCH TIME L-I TIME INJ. LAT INJ. LONG INJ. RT ASC INJ. A7MTH INJ. TIME PO. CST. TIM. INJ. 2 LAT. INJ. 2 LONG

90.00 1 36 10 2208.07 -19.41 41.07 149.96 111.03 2 12.58 1608.1 -16.38 35.71

90.00 13 26 37 4883.80 20.17 212.04 150.21 69.70 14 48 1 4283.8 17.23 204.60

100.00 2 57 16 1946.45 -20.46 21.39 149.52 112.29 3 29.43 1346.5 -17.26 14.06

100.00 14 48 12 4620.66 21.22 192.26 149.78 68.44 16 5 13 4020.7 18.11 184.85
                                                                                                        115.79
                                   1734.54
4405.33
                                                                                       148.18
                                                                          3.96
                                                      -23.25
        110.00
                                                                                                         64.93 17 10 25
                                                                                                                                        3805.3
                                                                                                                                                         20.46
                                                                                                                                                                        167.28
                                                                       174-.60
                                                                                       148.47
                                                        24.04
                      15 56 59
        110.00
                                                                                                                                   ORBIT CETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 157.9 SR 255.3 SS 786.0
CRT .2912 CRS .9569 CST .0149
LSA 823.4 M5A 181.0 SSA 19.8
                                                                            SGT 536.2 SGR 306.3 SG3 644.4
RRT -.0179 RRF .1529 RTF .2655
SGB 617.5 R23 -.1600 R13 -.2642
      TOE -.0416 TRA -.4236 TC3 .0461 BAU .0529
     ROE -.2032 RRA .0137 RC3 -.1846 FAU .16848
FOE 2.1218 FRA-2.2003 FC3-7.0074 8SP 161
                                                                                                                                    EL1 262.7 EL2 156.1 ALF 72.99
                                                                            SG1 536.2 SG2 306.2 THA 179.13
     BDE .2074 BRA .4238 BC3 .1903 FSP -2013
                                                                                                                                                ARRIVAL DATE MAR 17 1966
                                                                                FLIGHT TIME 100.00
 LAUNCH DATE DEC 7 1965
     RL 147.37 LAL .00 LOL 74.68 VL 28.111 GAL -7.53 A7L 86.52 HCA 131.67 SMA 131.28 ECC .17863 INC 3.4820 VI 30.232
RP 108.02 LAP 2.60 LOP 206.40 VP 38.031 GAP -1.32 A7P 92.32 TAL 219.63 TAP 351.30 RCA 107.83 APO 154.74 V2 35.082
RC 78.316 GL 21.90 GP -1.63 7AL 139.49 7AP 69.43 ETS 358.94 7AE 170.27 ETE 303.02 7AC 53.43 ETC 159.23 CLP -69.43
                                                                                DISTANCE 285.826
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                            -.31 RAL 288.19 RAD 6567.8 VEL 11.915 PTH 2.12 VHP 3.140 DPA -20.16 RAP 320.76 ECC 1.3390
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCM 11ME L-1 TIME
1 34 46 2211.71
13 28 9 4875.13
2 55 57 1949.80
14 49 39 4612.28
4 3 52 1737.22
15 58 13 4397.62
                                                                                      149.85
                                                         -19.50
                                                                         41.30
                                                                                                                                                                          204.07
                                                                                                                     14 49 24
                                                                                                                                         4275.1
                                                                                                                                                          17.00
                                                                        211.48
                                                                                        150.00
                                                                                                          69.49
                                                         19.97
          90.00
                                                                                                                       3 28 27
                                                                                                                                         1349.8
                                                                                                                                                         -17.35
                                                                                                                                                                          14.26
                                                                                                         112.21
                                                                                        149.42
                                                         -20.54
                                                                          21.60
         100.00
                                                                                                                     16 6 31
                                                                                                                                                         17.87
                                                                                                                                                                          184.34
                                                                                                                                         4012.3
                                                                                        149.57
                                                                                                          68.24
                                                        21.01
                                                                        191.72
                                                                                                                                                         -19.68
                                                                                                                                                                          356.89
                                                                                                                       4 32 49
                                                                                                                                         1137.2
                                                                                                         115.72
                                                         -23.33
                                                                           4.13
                                                                                        148.08
         110.00
                                                                                                                    17 11 31
                                                                                                                                                        20.21
                                                                                                                                                                         166.82
                                                                                                                                         3797.6
                                                        23.81
                                                                        174.11
                                                                                        148.25
                                                                                                          64.72
         110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                            SCT 606.0 SGR 292.8 SG3 690.7
RRT .0245 RRF .1669 RTF .5008
SGB 673.0 R23 .1510 R13 .5019
                                                                                                                                    ST 179.7 SR 240.9 SS 819.7
CRT -.0462 CRS .9579 CST -.3187
       TOE .0036 TRA -.4742 TC3 -.1035 BAU .0578
      ROE -.1907 RRA .0134 RC3 -.1825 FAU .17945
FOE 2.2816 FRA-2.3414 FC3-7.5427 BSP 539
                                                                                                                                    LSA 853.5 MSA 182.6 SSA 18.9
                                                                                                                                    EL1 241.2 EL2 179.2 ALF 94.41
                                                                           SG1 606.1 SG2 292.6 THA
```

.88

BOE .1908 BRA .4744 BC3 .2098 FSP -2170

ARRIVAL DATE MAR 19 1966

LAUNCH DATE DEC 7 1965

```
CISTANCE 292.242
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 28.115 GAL -7.46 AZL 86.51 HCA 134.88 SMA 131.32 ECC .17768 INC 3.4926 VI 30.232 RP 108.06 LAP 2.47 LOP 209.62 VP 38.022 GAP -.84 AZP 92.47 TAL 219.51 TAP 354.40 RCA 107.98 APO 154.65 V2 35.069 RC 80.581 GL 22.10 GP -1.76 ZAL 139.27 ZAP 74.95 ETS 358.68 ZAE 171.91 ETE 279.95 ZAC 51.30 ETC 158.35 CLP -74.95
   PLANETOCENTRIC CONIC
    C3 20.376 VML 4.514 CLA -.10 RAL 288.29 RAD 6567.8 VEL 11.906 PTH 2.12 VMP 3.055 CPA -20.92 RAP 318.44 ECC 1.3353 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      110.86 2 10 30
69.28 14 51 17
                                                                                    149.84
                                                                                                                                     1615.9
        90.00
                     1 33 34 2215.89
13 30 11 4865.79
                                                       -19.60
                                                                       41.56
                                                                                                                                                                         203.50
                                                                                                                                                         16.75
                                                        19.74
                                                                       210.89
                                                                                      149.88
         90.00
                                                                                                       112.12 3 27 25
68.02 16 8 18
115.64 4 32 0
64.49 17 13 5
                                                                                                                                         1353.6
                                                                                                                                                         -17.46
                                                                                                                                                                          14.49
                     2 54 52 1953.64
14 51 34 4603.26
                                                                                      149.40
       100.00
                                                       -20.64
                                                                       21.84
                                                                                                                                                                          183.79
       100.00 14 51 34
110.00 4 3 0
                                                                                                                                         4003.3
                                                                                                                                                        17.62
                                                       20.78
                                                                      191.15
                                                                                      149.45
                                                                                                                                                                          357.08
                  4 3 0 1740.34
15 59 55 4389.33
                                                                         4.32
                                                                                                                                        1140.3
                                                                                                                                                        -19.78
                                                      -23.42
                                                                                      148.07
                                                                                                                                     3789.3
                                                                                                                                                        19.94
                                                       23.57
                                                                       173.59
                                                                                      148.12
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 718.4 SGR 278.5 SG3 731.1
RRT .0611 RRF .1814 RTF .6685
SGB 770.5 R23 .1335 R13 .6700
SG1 718.6 SG2 277.9 THA 1.60
                                                                                                                                    ST 213.3 SR 226.1 SS 847.1
CRT -.3419 CRS .9590 CST -.5845
    TOE .0540 TRA -.5300 TC3 -.2687 BAU .0880
    RDE -.1781 RRA .0135 RC3 -.1793 FAU .18891
    FCE 2.4124 FRA-2.4547 FC3-8.0267 BSP 1105
BDE .1861 BRA .5302 BC3 .3230 FSP -2318
                                                                                                                                    LSA 883.3 MSA 183.3 SSA 18.1
                                                                                                                                    EL1 255.0 EL2 177.7 ALF 130.14
                                                                                                                                                 ARRIVAL CATE MAR 21 1966
                                                                                FLIGHT TIME 104.00
                                                                                DISTANCE 298.628
    RL 147.37 LAL .00 LOL 74.68 VL 28.114 GAL -7.39 AZL 86.50 HCA 138.10 SMA 131.31 ECC .17686 INC 3.5044 V1 30.232
RP 108.10 LAP 2.34 LOP 212.83 VP 38.009 GAP -.39 AZP 92.61 TAL 219.30 TAP 357.39 RCA 108.08 APO 154.53 V2 35.056
          82.862 GL 22.31 GP -1.91 7AL 138.98 7AP 80.49 ETS 358.41 7AE 171.82 ETE 251.64 7AC 49.18 ETC 157.38 CLP -80.48
   PLANETOCENTRIC CONIC
                                                                                                            2.11 VHP 2.995 OPA -21.67 RAP 316.07 ECC 1.3316
                                               .15 RAL 288.48 RAD 6567.8 VEL 11.897 PTH
    C3 20.149 VHL 4.489 DLA
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       110.75
                                                                                                                       2 9 33
                                                                                                                                                       -16.72
                                                                                                                                      1620.7
                                                                                                                                                                          34.47
                                                                                      149.90
        90.00
                      1 32 32 2220.67
                                                       -19.72
                                                                       41.87
                   13 32 43 4855.66
2 53 57 1956.07
14 54 0 4593.50
4 2 21 1743.97
16 2 5 4360.37
                                                                                                         69.05 14 53 39
112.01 3 26 35
                                                                                                                                                                          202.88
                                                                                       149.83
                                                                                                                                          4255.7
                                                                                                                                                           16.48
        90.00
                                                        19.50
                                                                       210.25
                                                                                                                                         1358.1
                                                                                                                                                         -17.59
                                                                                                                                                                          14.76
                                                                                      149.47
       100.00
                                                       -20.75
                                                                         22.12
                                                                                                         67.79 16 10 33
115.54 4 31 25
64.26 17 15 6
                                                                      190.53
                                                                                    149.40
                                                                                                                                         3993.5
                                                                                                                                                           17.34
                                                                                                                                                                          183.19
       100.00
                                                       20.53
                                                                                                                                                      -19.90
                                                                                                                                                                          357.29
                                                                                                                                         1144.0
                                                                         4.55
       110.00
                                                       -23.53
                                                                                                                                         3780.4
                                                                                                                                                         19.65
                                                                                                                                                                          165.79
       110.00
                                                     23.31
                                                                       173.03
                                                                                       148.07
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SCT 866.2 SGR 263.3 SG3 761.8

RRT .0904 RRF .1925 RTF .7745

SGB 905.3 R23 .1159 R13 .7756

SG1 866.5 SG2 262.1 THA 1.73
                                                                                                                                     ST 264.9 SR 210.9 SS 871.4
CRT -.5389 CRS .9610 CST -.7431
    TOE .1075 TRA -.5907 TC3 -.4495 BAU .1299
     RDE -.1652 RRA .0142 RC3 -.1746 FAU .19578
                                                                                                                                     LSA 916.4 MSA 183.9 SSA 17.2
    FOE 2.3209 FRA-2.5202 FC3-8.4119 BSP 1739
BDE .1971 BRA .5909 BC3 .4822 FSP -2424
                                                                                                                                     EL1 300.1 EL2 156.8 ALF 146.54
                                                                                                                                                ARRIVAL DATE MAR 23 1966
                                                                                FLIGHT TIME 106.00
LAUNCH DATE DEC 7 1965
                                                                               DISTANCE 304.984
   HELLOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 28.108 GAL -7.32 AZL 86.48 MCA 141.31 SMA 131,26 ECC .17615 INC 3.5179 VI 30.232
RP 108.14 LAP 2.20 LOP 216.04 VP 37.992 GAP .04 AZP 92.75 TAL 218.98 TAP .28 RCA 108.14 APO 154.38 V2 35.043
RC 85.157 GL 22.54 GP -2.06 ZAL 138.60 ZAP 85.96 ETS 358.13 ZAE 169.99 ETE 229.13 ZAC 47.12 ETC 156.33 CLP -85.96
   PLANETOCENTRIC CONIC
                                              .41 RAL 288.75 RAD 6567.8 VEL 11.887 PTH 2.11 VHP 2.959 OPA -22.38 RAP 313.75 ECC 1.3278
     C3 19.916 VHL 4.463 DLA
     ENCH AZMTH ENCH TIME L-I TIME. INJ. LAT. INJ. LONG. INJ. RT ASC. INJ. AZMTH. INJ. TIME. PO. CST. TIM. INJ. 2. LAT. INJ. 2. LONG
                    1 31 38 2226.16
13 35 47 4844.64
2 53 10 1963.16
14 56 56 4582.87
4 1 51 1748.17
16 4 44 4370.63
                                                                                     150.05 110.62 2 8 44
149.86 68.80 14 56 31
                                                                                                                                     1626.2 -16.86
                                                                                                                                                                          34.81
                                                                       42.22
        90.00
                                                       -19.85
                                                                                                                                         4244.6
                                                                                                                                                          16.18
                                                                                                                                                                          202.21
                                                                       209.55
         90.00
                                                        19.23
                                                                                                      111.89 3 25 53
67.54 16 13 18
115.43 4 30 59
64.00 17 17 35
                                                                                                                                                        -17.73
                                                                                     149.62
                                                                                                                                      1363.2
                                                                                                                                                                           15.07
                                                                        22.45
        100.00
                                                       -20.88
                                                                                                                                                          17.04
                                                                                                                                                                          182.55
                                                                                                                                         3982.9
                                                                    189.86
                                                                                       149.42
        100.00
                                                       20.26
                                                                                                                                     1148.2
                                                                                                                                                       -20.03
19.33
                                                                                                                                                                          357.54
                                                       -23.65
                                                                          4.61
                                                                                      148.31
        110.00
                                                                                                                                         3770.6
                                                                                                                                                                          155.22
                                                                                        148.08
       110.00
                                                    23.02
                                                                       172.42
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 1038.4 SGR 247.2 SG3 781.3

RRT .1105 RRF .1998 RTF .8385

SGB 1067.4 R23 .1023 R13 .8392

SG1 1038.8 SG2 245.6 THA 1.60
                                                                                                                                    ST 328.7 SR 195.4 SS 892.7
CRT -.6614 CRS .9641 CST -.8305
LSA 953.4 MSA 184.5 SSA 16.1
     TDE .1638 TRA -.6544 TC3 -.6419 BAU .1767
     RDE -.1521 RRA .0155 RC3 -.1684 FAU .19966
     FOE 2.6050 FRA-2.5336 FC3-8.6789 BSP 2410
BOE .2235 BRA .6546 BC3 .6636 FSP -2480
                                                                                                                                     EL1 357.9 ELZ 134.6 ALF 154.72
                                                                                                                                                 ARRIVAL DATE MAR 25 1966
                                                                                FLIGHT TIME 108.00
LAUNCH DATE DEC 7 1965
                                                                                DISTANCE 311.313
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 28.097 GAL -7.23 A7L 86.47 HCA 144.51 SMA 131.19 ECC .17553 INC 3.5333 VI 30.232 RP 108.18 LAP 2.05 LOP 219.25 VP 37.972 GAP .46 A7P 92.88 TAL 218.57 TAP 3.08 RCA 108.16 APO 154.22 VZ 35.030 RC 87.465 GL 22.78 GP -2.23 ZAL 138.15 ZAP 91.31 ETS 357.83 ZAE 167.21 ETE 215.23 ZAC 45.19 ETC 155.22 CLP -91.31
   PLANETOCENTRIC CONIC
                                                                                                             2.11 VHP 2.945 DPA -23.05 RAP 311.53 ECC 1.3239
                                               .71 RAL 289.10 RAD 6567.8 VEL 11.877 PTH
     C3 19.678 VHL 4.436 DLA
    C3 19.678 VHL 4.436 OLA .71 RAL 289.10 RAD 6567.8 VEL 11.877 PH 2.11 VHP 2.94 OF A -23.05 RAP 311.53 ECC 1.3259 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 39 21 4832.63 18.93 208.80 149.94 68.54 14 59 53 4232.6 15.85 201.48 100.00 2 52 30 1969.02 -21.03 22.82 149.85 111.75 3 25 19 1369.0 -17.89 15.43 100.00 15 0 22 4571.31 19.96 189.14 149.50 67.27 16 16 33 3971.3 16.70 181.85 110.00 4 1 30 1753.04 -23.80 5.12 148.55 115.30 4 30 43 1153.0 -20.19 357.83 110.00 16 7 51 4360.05 22.70 171.76 148.16 63.73 17 20 31 3760.0 18.99 164.59
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 400.4 SR 179.8 SS 901.6
CRT -.7394 CRS .9662 CST -.8828
                                                                            SGT 1225.0 SGR 230.8 SG3 793.6
RRT .1246 RRF .2114 RTF .8788
     TOE .2220 TRA -.7186 TC3 -.8409 BAU .2253
     ROE -.1391 RRA .0168 RC3 -.1614 FAU .20199
                                                                                                                                    LSA 985.8 MSA 183.2 SSA 15.2
EL1 423.7 EL2 114.4 ALF 160.12
                                                                           SGB 1246.5 R23 .D987 R13 .8793
SG1 1225.3 SG2 228.9 THA 1.39
     FOE 2.6301 FRA-2.5283 FC3-8.8866 BSP 3093
     BOE .2620 BRA .7188 BC3 .8563 FSP -2552
```

FLIGHT TIME 102.00

```
FLIGHT TIME 110.00
                                                                                                                                                    ARRIVAL DATE MAR 27 1966
LAUNCH DATE DEC 7 1965
                                                                                 DISTANCE 317.614
   HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 28.083 GAL -7.13 AZL 86.45 HCA 147.72 SNA 131.08 ECC .17501 INC 3.5514 V1 30.232
RP 108.22 LAP 1.90 LOP 222.45 VP 37.949 GAP .86 AZP 93.00 TAL 218.07 TAP 5.79 RCA 108.14 APO 154.02 V2 35.016
     RC 89.783 GL 23.03 GP -2.42 7AL 137.62 7AP 96.48 ETS 357.52 7AE 164.07 ETE 206.88 7AC 43.46 ETC 154.08 CLP -96.48
   PLANETOCENTRIC CONTC
                                             1.04 RAL 289.52 RAO 6567.8 VEL 11.867 PTH 2.11 VHP 2.951 OPA -23.67 RAP 309.48 ECC 1.3199
     C3 19.435 VHL 4.409 DLA
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                    1 30 4 2239.73
13 43 28 4819.47
2 51 53 1975.80
15 4 20 4558.64
4 1 14 1758.72
16 11 28 4348.47
                                                                                      150.58
                                                                                                            110.31 2 7 24
68.26 15 3 48
                                                                                                         110.31
                                                                                                                                           1639.7
                                                         -20.17
                                                                          43.08
                                                                                                                                                           -17.23
                                                                                                                                                                               35.64
         90.00
                                                                                                                                                             15.49
                                                                                                                                            4219.5
         90.00
                                                         18.60
                                                                         207.97
                                                                                         150.10
                                                                                                                          3 24 49
                                                                          23.25
                                                                                                           111.58
                                                                                                                                            1375.8
                                                                                                                                                            -18.08
                                                                                                                                                                               15.84
                                                        -21.20
                                                                                        150.15
       100.00
                                                                                      149.65
                                                                                                           66.99 16 20 18
115.14 4 30 33
63.44 17 23 57
                                                                                                                                                            16.34
                                                                                                                                                                             181.09
       100.00
                                                        19.62
                                                                         188.35
                                                                                                                                            3958.6
                                                                                     148.86
                                                       -23.96
                                                                                                                                            1158.7
                                                                                                                                                            -20.37
                                                                                                                                                                             358.17
       110.00
                                                                           5.48
                                                        22.35
                                                                         171.04
                                                                                         148.30
                                                                                                                                            3748.5
                                                                                                                                                              18.60
                                                                                                                                                                             163.91
       110:00
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             SGT 1420.6 SGR 213.6 SG3 794.8

RRT .1343 RRF .2207 RTF .9039

SGB 1436.6 R23 .0975 R13 .9042

SGI 1420.9 SG2 211.6 THA 1.18
                                                                                                                                       ST 476.7 SR 163.8 SS 908.5
CRT -.7915 CRS .9693 CST -.9128
     TOE .2809 TRA -.7827 TC3-1.0455 BAU .2746
    ROE -.1259 RRA .0183 RC3 -.1534 FAU .20141
FOE 2.6330 FRA-2.4739 FC3-8.9717 BSP 3791
BOE .3078 BRA .7829 BC3 1.0567 FSP -2572
                                                                                                                                       LSA 1022.7 MSA 182.1 55A 14.2
                                                                                                                                        EL1 494.7 EL2 96.5 ALF 164.17
                                                                                  FLIGHT TIME 112.00
                                                                                                                                                    ARRIVAL DATE MAR 29 1966
LAUNCH DATE DEC 7 1965
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 323.888
    RL 147.37 LAL .00 LOL 74.68 VL 28.065 GAL -7.03 A7L 86.43 MCA 150.92 SMA 130.95 ECC .17456 INC 3.5729 VI 30.232 RP 108.26 LAP 1.74 LOP 225.65 VP 37.924 GAP 1.25 A7P 93.12 TAL 217.49 TAP 8.41 RCA 108.09 APO 153.81 VZ 35.003 RC 92.112 GL 23.34 GP -2.63 ZAL 137.00 ZAP 101.42 ETS 357.18 ZAE 160.87 ETE 201.62 ZAC 41.96 ETC 152.94 CLP-101.43
   PLANETOCENTRIC CONIC
                                                                                                               2.10 VHP 2.974 OPA -24.25 RAP 307.67 ECC 1.3158
                                              1.41 RAL 290.01 RAD 6567.8 VEL 11.856 PTH
    C3 19.189 VHL 4.381 OLA 1.41 RAL 290.01 RAO 6567.8 VEL 11.856 PTH 2.10 VMP 2.974 OPA -24.25 RAP 307.67 ECC 1.3158 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 17 2248.20 -20.37 43.62 150.96 110.11 2 6 45 1648.2 -17.45 36.17 90.00 13 48 11 4804.97 18.23 207.07 150.31 67.95 15 8 16 4205.0 15.08 199.81 100.00 2 51 17 1983.71 -21.40 23.75 150.54 111.38 3 24 20 1383.7 -18.30 16.33 100.00 15 8 52 4544.69 19.25 187.48 149.87 66.68 16 24 37 3944.7 15.93 180.26 110.00 4 1 2 1765.40 -24.15 5.90 149.26 114.96 4 30 27 1165.4 -20.59 358.58 110.00 16 15 37 4335.77 21.96 170.26 148.51 63.12 17 27 52 3755.8 18.18 163.17
     C3 19.189 VHL 4.381 OLA
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                           SGT 1619.5 SGR 195.8 SG3 785.7

RRT .1416 RRF .2298 RTF .9199

SGB 1631.3 R23 .D987 R13 .9201

SGI 1619.8 SG2 193.8 THA 1.00
                                                                                                                                       ST 555.9 SR 147.1 SS 914.0
CRT -.8292 CR5 .9733 CST -.9309
     TOE .3401 TRA -.8450 TC3-1.2517 BAU .3233
     RDE -.1123 RRA .0200 RC3 -.1448 FAU .19807
    FDE 2.6180 FRA-2.3763 FC3-8.9364 BSP 4487
BDE .3582 BRA .8452 BC3 1.2601 FSP -2544
                                                                                                                                        LSA 1064.4 MSA 181.4 SSA
                                                                                                                                       EL1 569.4 EL2 80.3 ALF 167.37
                                                                                                                                                   ARRIVAL DATE MAR 31 1966
                                                                                 FLIGHT TIME 114.00
LAUNCH DATE DEC 7 1965
                                                                                DISTANCE 330.136
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 28.043 GAL -6.92 AZL 86.40 HCA 154.12 SMA 130.79 ECC .17418 INC 3.5993 V1 30.232 RP 108.31 LAP 1.57 LOP 228.84 VP 37.896 GAP 1.62 AZP 93.24 TAL 216.84 TAP 10.95 RCA 108.01 APO 153.58 V2 34.990 RC 94.449 GL 23.68 GP -2.89 ZAL 136.30 ZAP 106.09 ETS 356.81 ZAE 157.75 ETE 198.17 ZAC 40.73 ETC 151.82 CLP-106.11
   PLANETOCENTRIC CONIC
    C3 18.943 VHL 4.352 OLA 1.83 RAL 290.57 RAO 6567.8 VEL 11.846 PTH 2.10 VHP 3.013 DPA -24.80 RAP 306.13 ECC 1.3118
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 28 24 2258.17
13 53 32 4788.91
2 50 36 1993.05
15 14 1 4529.26
4 0 47 1773.34
16 20 19 4321.74
                                                                                                                                       1658.2
                                                                                     151.42
                                                                                                                                                         -17.71
                                                                                                       109.87 2 6 2
                                                                                                                                                                            36.78
        90.00
                                                        -20.60
                                                         17.82
                                                                         206.07
                                                                                        150.59
                                                                                                            67.62
                                                                                                                       15 13 21
                                                                                                                                           4188.9
                                                                                                                                                             14.63
                                                                                                                                                                             198.84
         90.00
                                                                                      151.00
                                                       -21.63
                                                                          24.35
                                                                                                           111.15
                                                                                                                       3 23 49
                                                                                                                                            1393.1
                                                                                                                                                           -18.56
                                                                                                                                                                              16.90
       100.00
                                                                                                           66.34 16 29 31
114.74 4 30 21
62.78 17 32 21
                                                                                        150.14
                                                                                                                                           3929.3
                                                                                                                                                             15.47
                                                                                                                                                                             179.34
                                                        18.83
                                                                        186.52
       100.00
                                                                                                                                           1173.3
                                                                                                                                                            -20.84
                                                                                                                                                                             359.05
       110.00
                                                       -24.38
                                                                           6.41
                                                                                        149.74
                                                                                         148.77
                                                                                                                                          3721.7
                                                                                                                                                             17.71
                                                                                                                                                                             162.36
                                                        21.53
                                                                         169.41
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .3987 TRA -.9049 TC3-1.4581 BAU .3709
RDE -.0984 RRA .0214 RC3 -.1366 FAU .19331
FDE 2.5728 FRA-2.2615 FC3-8.8345 BSP 5183
                                                                                                                                       ST 636.2 SR 129.8 SS 913.8
CRT -.8578 CRS .9772 CST -.9429
                                                                             SGT 1818.5 SGR 178.0 SG3 770.3
                                                                             RRT .1528 RRF .2471 RTF .9307
SGB 1827.2 R23 .1048 R13 .9308
                                                                                                                                       LSA 1106.4 MSA 180.2 SSA 11.7
                                                                             SG1 1818.7 SG2 175.9 THA
    BOE .4106 BRA .9051 BC3 1.4645 FSP -2510
                                                                                                                                       EL1 646.0 EL2 65.7 ALF 169.97
                                                                                  FLIGHT TIME 116.00
                                                                                                                                                    ARRIVAL DATE APR 2 1966
LAUNCH DATE DEC 7 1965
                                                                                 DISTANCE 336.360
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 28.019 GAL -6.80 AZL 86.37 HCA 157.32 SHA 130.62 ECC .17387 INC 3.6325 V1 30.232 RP 108.35 LAP 1.40 LOP 232.04 VP 37.865 GAP 1.98 AZP 93.35 TAL 216.11 TAP 13.42 RCA 107.91 APO 153.33 V2 34.977
          96.794 GL 24.05 GP -3.21 ZAL 135.51 ZAP 110.49 ETS 356.39 ZAE 154.78 ETE 195.85 ZAC 39.79 ETC 150.72 CLP-110.52
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 27 19 2270.12 -20.88 45.03 151.96 109.58 2 5 9 1670.1 -18.02 37.52 90.00 13 59 36 4770.93 17.35 204.96 150.93 67.26 15 19 7 4170.9 14.12 197.77 100.00 2 49 44 2004.27 -21.90 25.07 151.56 110.87 3 23 8 1404.3 -18.87 17.59 100.00 15 19 52 4512.00 18.35 185.46 150.47 65.98 16 35 4 3912.0 14.95 178.32
                                             2.31 RAL 291.20 RAD 6567.8 VEL 11.836 PTH 2.10 VHP 3.065 DPA -25.34 RAP 304.89 ECC 1.3078
                    4 0 27 1782.94
16 25 39 4306.10
                                                       -24.65
                                                                           7.02
                                                                                         150.31
                                                                                                           114.47
                                                                                                                       4 30 10
                                                                                                                                           1182.9
                                                                                                                                                            -21.14
                                                                                                                                                                            359.63
       110.00
                                                                                                                      17 37 25
                                                                         168.46
                                                                                         149.09
                                                                                                            62.41
                                                                                                                                           3706.1
                                                                                                                                                             17.18
                                                                                                                                                                             161.46
       110.00
                                                       21.04
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                          SGT 2012.9 SGR 160.3 SG3 747.8

RRT .1718 RRF .2750 RTF .9377

SGB 2019.3 R23 .1146 R13 .9378

SG1 2013.1 SG2 157.9 THA .79
                                                                                                                                       ST 718.6 SR 111.3 SS 915.1
CRT -.8825 CRS .9817 CST -.9510
     TOE .4582 TRA -.9603 TC3-1.6602 BAU .4163
     RDE -. 0837 RRA . 0224 RC3 -. 1293 FAU . 18665
                                                                                                                                      LSA 1155.0 MSA 179.5 SSA 10.4
EL1 725.3 EL2 51.9 ALF 172.17
    FDE 2.5236 FRA-2.1176 FC3-8.6405 BSP 5845
BDE .4658 BRA .9606 BC3 1.6652 FSP -2437
```

```
LAUNCH DATE DEC 7 1965
                                                                          FLIGHT TIME 118.00
                                                                                                                                     ARRIVAL CATE APR 4 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 342.559
    RL 147.37 LAL .00 LOL 74.68 VL 27.992 GAL -6.67 A7L 86.32 MCA 160.51 SMA 130.42 ECC .17362 INC 3.6759 V1 30.232 RP 108.39 LAP 1.23 LOP 235.23 VP 37.833 GAP 2.32 A7P 93.47 TAL 215.31 TAP 15.82 RCA 107.78 APO 153.07 V2 34.964 RC 99.145 GL 24.50 GP -3.63 ZAL 134.62 ZAP 114.60 ETS 355.89 ZAE 151.99 ETE 194.32 ZAC 39.15 ETC 149.65 CLP-114.65
    PLANETOCENTRIC CONIC
    C3 18.473 VHL 4.298 DLA 2.87 RAL 291.89 RAD 6567.7 VEL 11.826 PTH
                                                                                                    2.09 VHP 3.130 CPA -25.93 RAP 303.96 ECC 1.3040
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    1 25 51 2284.78
14 6 33 4750.49
                                                                              152.60
                                                                                              109.22
                                                   -21.21
                                                                   45.98
                                                                                                                                           -18.39
                                                                                                             2 3 56
                                                                                                                           1684.8
                                                                                                                                                             38.43
        90.00
                                                                  203.70
                                                     16.81
                                                                                 151.33
                                                                                                  66.87
                                                                                                            15 25 43
                                                                                                                               4150.5
                                                                                                                                              13.53
                                                                                                                                                            196.56
                    2 48 32 2018.08
15 26 33 4492.42
       100.00
                                                                                                 110.51
                                                    -22.24
                                                                   25.96
                                                                               152.20
                                                                                                              3 22 10
                                                                                                                              1418.1
                                                                                                                                             -19.24
                                                                                                                                                              18.45
                                                                              150.87
150.97
                                                                                              65.59 16 41 26
114.12 4 29 46
62.01 17 43 12
       100.00
                                                    17.81
                                                                  184.27
                                                                                                                               3892.4
                                                                                                                                            14.36
                                                                                                                                                            177.17
                   3 59 51 1794.85
16 31 43 4288.41
       110.00
                                                   -24.99
                                                                    7.79
                                                                                                                             1194.9
                                                                                                                                            -21.51
                                                                                                                                                                . 36
       110.00
                                                  20.47
                                                                  167.39
                                                                                 149.48
                                                                                                                              3688.4
                                                                                                                                              16.57
                                                                                                                                                            160.44
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 2203.0 SGR 143.6 SG3 722.0

RRT .2124 RRF .3290 RTF .9426

SGB 2207.7 R23 .1310 R13 .9427

SGI 2203.2 SG2 140.3 THA .80
                                                                                                                          ST 802.2 SR 91.4 SS 914.1

CRT -.9042 CRS .9858 CST -.9570

LSA 1206.5 MSA 178.3 SSA 9.0

ELI 806.5 EL2 38.8 ALF 174.10
    TOE .5181 TRA-1.0122 TC3-1.8581 BAU .4599
    ROE -.0682 RRA .0227 RC3 -.1245 FAU .17927
FDE 2.4608 FRA-1.9692 FC3-8.4015 BSP 6498
BDE .5225 BRA 1.0124 BC3 1.8623 FSP -2364
                                                                                                         .80
LAUNCH DATE DEC 7 1965
                                                                          FLIGHT TIME 120.00
                                                                                                                                     ARRIVAL DATE APR 6 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 348.735
    RL 147.37 LAL .00 LOL 74.68 VL 27.962 GAL -6.53 AZL 86.26 HCA 163.70 SMA 130.21 ECC .17343 INC 3.7356 V1 30.232
RP 108.43 LAP 1.05 LOP 238.42 VP 37.800 GAP 2.66 AZP 93.59 TAL 214.45 TAP 18.15 RCA 107.63 APO 152.79 V2 34.951
    RC 101.502 GL 25.05 GP -4.21 7AL 133.62 7AP 118.42 ETS 355.24 7AE 149.38 ETE 193.44 7AC 38.86 ETC 148.56 CLP-118.50
   PLANETOCENTRIC CONIC
    C3 18.269 VHL 4.274 DLA 3.56 RAL 292.63 RAD 6567.7 VEL 11.817 PTH 2.09 VHP 3.204 UPA -20.02 RAF 303.55 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG 103.74 2 2 6 1703.5 -18.86 39.60
                                                                                               66.43 15 33 23
110.04 3 20 39
        90.00
                    14 14 37 4726.62
                                                    16.16
                                                                  202.25
                                                                                151.79
                                                                                                                               4126.6
                                                                                                                                              12.84
                                                                                                                                                            195.15
                    2 46 43 2035.72
       100.00
                                                   -22.65
                                                                   27.11
                                                                                152.97
                                                                                                                               1435.7
                                                                                                                                             -19.72
                                                                                                                                                             19.54
                                                                                              65.14 16 48 47
113.67 4 28 57
                  15 34 17 4469.59
3 58 47 1810.18
16 38 43 4267.89
       100.00
                                                                              151.33
                                                   17.16
                                                                  182.88
                                                                                                                               3869.6
                                                                                                                                              13.67
                                                                                                                                                            175.83
                                                                                                                                            -21.99
      110.00
                                                   -25.41
                                                                            151.76
149.92
                                                                   8.78
                                                                                                                              1210.2
                                                                                                                                                              1.29
                                                                                                  61.56 17 49 51
      110.00
                                                   19.81
                                                                  166.17
                                                                                                                              3667.9
                                                                                                                                              15.86
                                                                                                                                                            159.27
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
    TDE .5806 TRA-1.0598 TC3-2.0484 BAU .5012
                                                                   SGT 2387.0 SGR 129.4 SG3 692.5
RRT .2907 RRF .4242 RTF .9457
SGB 2390.5 R23 .1552 R13 .9458
                                                                                                                          ST 889.3 SR 69.1 SS 916.5
CRT -.9261 CRS .9898 CST -.9614
    ROE -.0510 RRA .0221 RC3 -.1238 FAU .17093
    FOE 2.4045 FRA-1.8097 FC3-8.1002 BSP 7122
BOE .5829 BRA 1.0600 BC3 2.0521 FSP -2268
                                                                                                                         LSA 1266.5 HSA 178.0 SSA 7.5
                                                                     SG1 2387.3 SG2 123.8 THA
                                                                                                          .91
                                                                                                                          EL1 891.6 EL2 26.0 ALF 175.88
LAUNCH DATE DEC 7 1965
                                                                         FLIGHT TIME 122.00
                                                                                                                                     ARRIVAL DATE APR 8 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 354.889
                         .0D LOL 74.68 VL 27.930 GAL -6.38 AZL 86.18 HGA 166.89 SMA 129.98 ECC .17330 INC 3.8230 V1 30.232 .87 LOP 241.60 VP 37.765 GAP 2.98 AZP 93.72 TAL 213.53 TAP 20.42 RCA 107.46 APO 152.51 V2 34.939
    RL 147.37 LAL
    RP 108.46 LAP
    RC 103.862 GL 25.77 GP -5.08 ZAL 132.48 ZAP 121.94 ETS 354.33 ZAE 146.93 ETE 193.20 ZAC 38.94 ETC 147.34 CLP-122.08
   PLANETOCENTRIC CONIC
    C3 18.117 VHL 4.256 DLA
                                        4.43 RAL 293.41 RAD 6567.7 VEL 11.811 PTH
                                                                                                   2.09 VMP 3.288 DPA -27.54 RAP 303.10 ECC 1.2982
    LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              108.09 1 59 8
65.92 15 42 34
109.40 3 18 4
64.63 16 57 34
113.05 4 27 16
61.04 17 57 44
       90.00
                    1 20 19 2328.65
                                                   -22.16
                                                                             154.26
152.33
                                                                                                                           1728.6
                                                                                                                                           -19.48
                                                                  48.84
                                                                                                                                                             41.19
                                                                 200.49
        90.00
                   14 24 16
                                  4697.52
                                                   15.36
                                                                                                                              4097.5
                                                                                                                                             11.98
                                                                                                                                                            193.44
       100.00
                    2 43 45 2059.58
                                                   -23.20
                                                                  28.67
                                                                               153.88
                                                                                                                              1459.6
                                                                                                                                                             21.04
                                                                                                                                            -20.34
                  15 43 32 4441.83
3 56 45 1831.07
16 47 1 4243.09
                                                                            151.86
      100.00
                                                   16.36
                                                                 181.21
                                                                                                                             3841.8
                                                                                                                                            12.81
                                                                                                                                                            174.22
                                                                              152.70
150.43
      110.00
                                                   -25.97
                                                                                                                                                             2.58
                                                                  10.14
                                                                                                                             1231.1
                                                                                                                                            -22.63
                                                                 164.70
      110.00
                                                  19.00
                                                                                                                                              15.00
                                                                                                                              3643.1
                                                                                                                                                            157.88
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
    TOE .6495 TRA-1.1037 TC3-2.2255 BAU .5400 ROE -.0312 RRA .0198 RC3 -.1311 FAU .16230
                                                                     SGT 2564.0 SGR 122.2 SG3 661.5
RRT .4301 RRF .5811 RTF .9479
SGB 2566.9 R23 .1913 R13 .9480
                                                                                                                        ST 983.6 SR 42.9 55 921.7
CRT -.9510 CRS .9901 CST -.9654
    FOE 2.3540 FRA-1.6550 FC3-7.7558 BSP 7719
BOE .6502 BRA 1.1039 BC3 2.2294 FSP -2177
                                                                                                                        LSA 1336.9 MSA 177.0 SSA 5.9
                                                                     SG1 2564.6 SG2 110.3 THA 1.18
                                                                                                                         EL1 984.4 EL2 13.3 ALF 177.62
LAUNCH DATE DEC 7 1965
                                                                         FLIGHT TIME 124.00
                                                                                                                                     ARRIVAL DATE APR 10 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 361.020
   RL 147.37 LAL .00 LOL 74.68 VL 27.897 GAL -6.23 AZL 86.03 HCA 170.08 SMA 129.74 ECC .17324 INC 3.9657 V1 30.232
RP 108.50 LAP .68 LOP 244.79 VP 37.728 GAP 3.29 AZP 93.91 TAL 212.55 TAP 22.63 RCA 107.27 APO 152.22 V2 34.926
RC 106.225 GL 26.82 GP -6.49 ZAL 131.11 ZAP 125.15 ETS 352.89 ZAE 144.53 ETE 193.80 ZAC 39.55 ETC 145.73 CLP-125.42
  PLANETOCENTRIC CONIC
   C3 18.076 VHL 4.252 DLA
                                        5.63 RAL 294.22 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 3.382 DPA -28.96 RAP 303.22 ECC 1.2975
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 14 26 2365.98
14 36 37 4659.13
       90.00
                                                                             155.41
                                                   -22.93
                                                                                               107.08
                                                                  51.31
                                                                                                             1 53 52
                                                                                                                          1766.0
                                                                                                                                           -20.38
       90.00
                                                                                               65.29 15 54 16
108.40 3 13 21
63.99 17 8 43
112.07 4 23 49
60.40 18 7 37
                                                   14.28
                                                                 198.18
                                                                                152.96
                                                                                                                              4059.1
                                                                                                                                              10.83
                                                                                                                                                            191.21
                 2 38 26 2095.02
15 55 18 4405.32
3 52 47 1862.35
16 57 26 4210.76
                                                                             155.04
      100.00
                                                   -23.98
                                                                  31.01
                                                                                                                              1495.0
      100.00
                                                   15.28
                                                                 179.03
                                                                               152.48
                                                                                                                              3805.3
                                                                              153.90
                                                   -26.79
                                                                  12.20
                                                                                                                              1262.3
                                                   17.93
                                                                 162.81
                                                                                151.02
                                                                                                                              3610.8
                                                                                                                                              13.85
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                   SGT 2734.8 SGR 132.1 SG3 627.9 ST 1092.8 SR 10.4 SS 937.4 RRT .6217 RRF .7776 RTF .9491 CRT -.8773 CRS .7929 CST -.9692 SGB 2738.0 R23 .2384 R13 .9494 LSA 1428.9 MSA 176.7 SSA 4.4 SG1 2736.0 SG2 103.4 THA 1.72 ELI 1092.8 EL2 5.0 ALF 179.52
                                                                                                                       ST 1092.8 SR 10.4 SS 937.4
CRT -.8773 CRS .7929 CST -.9692
   TOE .7322 TRA-1.1461 TC3-2.3803 BAU .5764
   ROE -.0036 RRA .0151 RC3 -.1532 FAU .15296
FOE 2.3330 FRA-1.5002 FC3-7.3259 BSP 8283
BOE .7322 BRA 1.1462 BC3 2.3853 FSP -2066
```

ARRIVAL DATE APR 12 1966

```
FLIGHT TIME 126.00
LAUNCH DATE DEC 7 1965
    RL 147.37 LAL .00 LOL 74.68 VL 27.861 GAT -6.07 AZL 85.76 HCA 173.27 SMA 129.49 ECC .17323 INC 4.2413 V1 30.232 RP 108.54 LAP .50 LOP 247.97 VP 37.691 GAP 3.59 AZP 94.21 TAL 211.52 TAP 24.79 RCA 107.06 APO 151.93 V2 34.914 RC 108.588 GL 28.60 GP -9.24 ZAL 129.32 ZAP 127.94 ETS 350.19 ZAE 141.92 ETE 195.97 ZAC 41.11 ETC 143.06 CLP-128.53
                                                                                     DISTANCE 367.131
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 18.327 VHL 4.281 DLA 7.59 RAL 294.99 RAD 6567.7 VEL 11.820 PTH 2.09 VHP 3.495 DPA -51.65 RAP 303.88 ECC 1.3016

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 2 26 2451.37 -24.17 55.70 157.07 105.22 1 42 57 1851.4 -21.85 47.80

90.00 14 54 45 4600.17 12.58 194.70 153.77 64.42 16 11 25 4000.2 9.03 187.81

100.00 2 27 25 2157.25 -25.25 35.20 156.73 106.55 3 3 22 1557.2 -22.75 27.30

100.00 16 12 26 4349.54 13.59 175.76 153.26 63.12 17 24 56 3749.5 9.87 168.93

110.00 3 44 0 1917.59 -28.15 15.92 155.65 110.25 4 15 58 1317.6 -25.13 8.05

110.00 17 12 21 4161.95 16.26 160.01 151.75 59.51 18 21 43 3562.0 12.09 153.38
   PLANETOCENTRIC CONIC
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 1237.9 SR 47.1 SS 970.1
CRT .9035 CRS -.9762 CST -.9740
                                                                                SCT 2901.7 SCR 185.4 SC3 590.6
RRT .7901 RRF .9251 RTF .9503
SCB 2907.6 R23 .2824 R13 .9508
    TDE .8501 TRA-1.1944 TC3-2.4844 BAU .6109
     RDE .0349 RRA .0044 RC3 -.2094 FAU .14281
                                                                                                                                             LSA 1563.7 MSA 174.9 SSA 2.8
EL1 1238.7 EL2 20.2 ALF 1.97
     FDE 2.3607 FRA-1.3636 FC3-6.7460 BSP 8834
BDE .8508 BRA 1.1944 BC3 2.4932 FSP -1952
                                                                                 SG1 2905.4 SG2 113.5 THA 2.89
                                                                                                                                                           ARRIVAL DATE APR 14 1966
                                                                                      FLIGHT TIME 128.00
LAUNCH DATE DEC 7 1965
                                                                                     DISTANCE 373.222
    RL 147.37 LAL .00 LOL 74.68 VL 27.824 GAL -5.89 AZL 84.99 HCA 176.45 SHA 129.24 ECC .17328 INC 5.0084 V1 30.232 RP 108.58 LAP .31 LOP 251.15 VP 37.653 GAP 3.88 AZP 95.00 TAL 210.44 TAP 26.89 RCA 106.84 APO 151.63 V2 34.903 RC 110.951 GL 32.89 GP -16.70 ZAL 126.15 ZAP 129.41 ETS 343.12 ZAE 137.54 ETE 202.62 ZAC 45.81 ETC 136.89 CLP-131.51
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 19.805 VHL 4.450 DLA 12.06 RAL 295.47 RAD 6567.8 VEL 11.882 PTH 2.11 VHP 3.694 DPA -38.93 RAP 305.87 ECC 1.3259 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     0 28 17 2595.99
15 32 43 4472.17
1 55 47 2313.81
16 47 54 4229.58
3 17 55 2056.78
17 42 15 4059.37
                                                                                             160.62
                                                                                                               100.01
                                                            -26.63
                                                                              67.12
         90.00
                                                                                                                                                                                      180.55
                                                                                                                                                   3872.2
                                                                                                                                                                       5.01
                                                                                                                  62.95 16 47 15
                                                              8.71
                                                                             187.28
                                                                                              155.34
          90.00
                                                                                                                101.36 2 34 21
61.62 17 58 24
105.11 3 52 12
                                                                                                                                                                                       37.80
                                                                                                                                                   1713.8
                                                                                                                                                                      -25.98
                                                                              46.11
                                                                                             160.36
                                                            -27.83
                                                                                                                                                                       5.93
                                                                                                                                                                                      162.22
                                                                                                                                                   3629.6
                                                             9.79
                                                                             168.87
                                                                                             154.77
        100.00
                                                                                                                                                                                       17.34
                                                                                                                                                   1456.8
                                                                                                                                                                     -28.65
                                                                                             159.50
                                                            -31.03
                                                                              25.73
        110.00
                                                                                                                            18 49 54
                                                                                                                                                                                       147.84
                                                                                           153.08
                                                                                                                                                   3459.4
                                                                                                                                                                       8.31
                                                                                                                  57.97
                                                                             154.27
                                                           12.64
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SCT 3075.6 SGR 367.9 SG3 530.8

RRT .8822 RRF .9822 RTF .9520

SGB 3097.6 R23 .2967 R13 .9538

SGI 3092.8 SG2 172.3 THA 6.04
                                                                                                                                             ST 1505.2 SR 179.6 SS 1053.8
CRT .9597 CRS -.9958 CST -.9813
      TOE 1.0999 TRA-1.2816 TC3-2.4116 BAU .6456
     ROE .1391 RRA -.0265 RC3 -.3590 FAU .12700
FDE 2.5337 FRA-1.2434 FC3-5.5515 BSP 9470
                                                                                                                                              TSA 1838.2 MSA 171.4 SSA 1.4
                                                                                                                                             ELI 1515.1 EL2 50.1 ALF
     BOE 1.1087 BRA 1.2819 BC3 2.4382 FSP -1767
                                                                                                                                                           ARRIVAL DATE APR 16 1966
                                                                                      FLIGHT TIME 130.00
 LAUNCH DATE DEC 7 1965
                                                                                      DISTANCE 379.281
     RL 147.37 LAL .00 LOL 74.68 VL 27.786 GAL -5.71 AZL 71.31 HCA 179.62 SMA 128.97 ECC .17338 INC18.6262 VI 30.232 RP 108.61 LAP .12 LOP 254.32 VP 37.614 GAP 4.16 AZP 108.69 TAL 209.31 TAP 28.93 RCA 106.61 APO 151.33 V2 34.892 RC 113.313 GL 61.75 GP -73.94 ZAL 104.58 ZAP 104.23 ETS 286.26 ZAE 95.09 ETE 200.02 ZAC 88.77 ETC 93.73 CLP-152.68
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 101.201 VHL 10.060 DLA 42.03 RAL 295.51 RAD 6570.0 VEL 14.918 PTH 2.69 VHP 10.302 DPA -81.48 RAP 89.88 ECC 2.6655
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              49.46 17 42 42
49.45 24 25 42
49.46 17 42 42
49.45 24 25 42
49.45 17 42 42
49.45 24 25 42
                                                                                                                                                   3988.6
                                                                                                                                                                 -17.28 203.79
         10. AZMTH LNCH 11ME L-1 11ME

57.55 16 26 13 4588.62

122.45 23 31 12 3270.37

57.55 16 26 13 4588.62

122.45 23 31 12 3270.37

57.55 16 26 13 4588.62

122.45 23 31 12 3270.37
                                                                                          191.69
191.68
                                                                             209.73
                                                           -12.16
                                                                                                                                                                                      102.75
                                                                                                                                                                    -17.27
                                                                                                                                                   2670.4
                                                                             108.69
                                                           -12.15
                                                                                                                                                                                      203.79
                                                                                                                                                    3988.6
                                                                             209.73
                                                                                             191.69
                                                           -12.16
                                                                                                                                                                                      102.75
                                                                                           191.68
                                                                                                                                                   2670.4
                                                                                                                                                                    -17.27
                                                                             108.69
                                                           -12.15
        .122.45
                                                                                                                                                   3988.6
                                                                                                                                                                                      203.79
                                                                                           191.69
191.68
                                                                             209.73
                                                           -12.16
                                                                                                                                                                    -17.27
                                                                                                                                                                                       102.75
                                                                                                                                                   2670.4
                                                                             108.69
                                                           -12.15
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 3951.8 SR 521.6 55 1204.4
CRT -.9786 CRS ..9712 CST -.9994
                                                                                SGT 4036.1 SGR 704.6 SG3 117.6
RRT -.8297 RRF -.7567 RTF .9928
SGB 4097.1 R23 -.1339 R13 -.9910
SG1 4078.6 SG2 389.2 TMA 171.68
       TOE 6.9518 TRA -.5939 TC3 .3167 BAU .4626
      RDE -.8891 RRA .5423 RC3 -.1288 FAU-.00856
                                                                                                                                              LSA 4172.0 MSA 114.6 SSA
      FOE 2.3758 FRA -. 0071 FC3 .0732 BSP 28686
                                                                                                                                              EL1 3994.6 EL2 106.5 ALF 172.65
                                                                    724
      BDE 7.0084 BRA .8043 BC3 .3419 FSP
                                                                                                                                                            ARRIVAL DATE APR 18 1966
                                                                                       FI IGHT TIME 132.00
 LAUNCH DATE DEC 7 1965
      RL 147.37 LAL .00 LOL 74.68 VL 27.746 GAL -5.52 A7L 88.65 MCA 182.81 SMA 128.69 ECC .17359 INC 1.3503 V1 30.232 RP 108.64 LAP -.07 LOP 257.50 VP 37.575 GAP 4.45 A7P 91.35 TAL 208.15 TAP 30.97 RCA 106.35 APO 151.03 V2 34.881 RC 115.673 GL 10.33 GP 19.66 7AL 132.08 ZAP 133.33 ETS 17.15 ZAE 137.00 ETE 160.43 ZAC 34.17 ETC 180.99 CLP-136.77
                                                                                       01STANCE 385.350
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 13.248 VHL 3.640 DLA -9.69 RAL 301.67 RAD 6567.5 VEL 11.603 PTH 2.03 VHP 3.966 OPA -2.95 RAP 300.00 ECC 1.2180
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                117.17 4 10 10
74.62 14 35 2
                                                              -8.31
                                                                                             155.87
                          3 39 55
                                         1815.22
                                                                                                                                                                        21.73
                                                                                                                                                                                        216.39
                                                                                               159.20
                                                              24.07
                                                                              224.28
                        13 10 33
                                         5069.86
                                                                                                                                5 22 38
                                                                                                                                                      968.2
                                                                                                                                                                        -5.35
                                                                                                                                                                                        352.30
                                                                                                                 118.56 5 22 38
73.17 15 56 31
                                                                                               155.37
                                                               -9.23
                                                                              358.93
                          4 56 30
                                         1568.18
                                                                                                                                                                        22.53
                                                                                                                                                                                        195.66
                                                                                                                                                     4192.1
                                                                              203.53
                                                                                               158.88
                        14 36 39 4792.13
5 53 53 1388.45
15 55 45 4544.64
                                                              25.08
                                                                                                                                                                        -7.31
                                                                                                                                                                                        337.46
                                                                                                                                6 17 2
                                                                                                                                                     788.4
                                                                                                                 122.36 6 17 2
69.18 17 11 29
                                                             -11.66
                                                                              343.84
                                                                                              153.92
          110.00
                                                                                                                                                                                       175.91
                                                                                                                                                                       24.66
                                                            27.74
                                                                              183.72
                                                                                               157.86
          110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                DIFFERENTIAL CORRECTIONS
       TOE .1963 TRA -.9525 TC3-3.9956 BAU .7256
      RDE -.0571 RRA .0720 RC3 .9063 FAU .11298
FDE .5934 FRA -.5161 FC3-7.3832 BSP 10332
BDE .2044 BRA .9552 BC3 4.0970 FSP -1546
```

ARRIVAL DATE APR 20 1966 FLIGHT TIME 134.00 LAUNCH DATE DEC 7 1965 DISTANCE 391.384 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.706 GAL -5.33 AZL 87.56 HCA 185.99 SMA 128.41 ECC .17384 INC 2.4379 VI 30.232
RP 108.68 LAP -.25 LOP 260.67 VP 37.535 GAP 4.72 AZP 92.42 TAL 206.94 TAP 32.93 RCA 106.09 APO 150.74 V2 34.870
RC 118.029 GL 18.29 GP 9.24 ZAL 128.74 ZAP 138.04 ETS 8.03 ZAE 138.01 ETE 172.01 ZAC 35.94 ETC 166.08 CLP-138.88 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC

C3 13.981 VHL 3.739 DLA -1.56 RAL 301.57 RAD 6567.6 VEL 11.635 PTH 2.04 VHP 3.903 DPA -13.04 RAP 302.82 ECC 1.2301

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 37 23 2083.89 -16.20 33.37 157.09 113.55 3 12 7 1483.9 -12.88 26.27

90.00 14 12 16 4824.71 18.73 208.30 157.67 68.37 15 32 41 4224.7 15.63 201.00

100.00 3 58 0 1823.84 -17.11 13.82 156.67 114.89 4 28 24 1223.8 -13.61 6.78

100.00 15 34 20 4559.99 19.66 188.43 157.27 67.02 16 50 20 3960.0 16.38 181.17

110.00 5 4 35 1615.44 -19.54 356.71 155.37 118.62 5 31 30 1015.4 -15.57 349.84

110.00 16 44 15 434.16 22.13 170.59 156.04 63.25 17 56 36 3741.2 18.36 163.49 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 943.3 SR 77.5 SS 598.7 CRT -.9777 CRS .9816 CST -.9244 LSA 1102.7 MSA 195.9 SSA 3.9 SGT 3464.3 SGR 386.9 SG3 492.9 RRT -.9623 RRF -.9908 RTF ..9448 TOE .5241 TRA-1.0587 TC3-3.9494 BAU .7440 RDE -.0472 RRA .0553 RC3 .4954 FAU .11568 5G8 3485.9 R23 .2968 R13 -.9458 FDE 1.1405 FRA -.5824 FC3-7.1633 BSP 10844 EL1 946.4 EL2 16.2 ALF 175.41 BDE .5262 BRA 1.0601 BC3 3.9803 FSP -1623 5G1 3484.3 SG2 104.6 THA 173.86 ARRIVAL CATE APR 22 1966 LAUNCH DATE DEC 7 1965 FLIGHT TIME 136.00 HELIOCENTRIC CONIC DISTANCE 397.402 RL 147.37 LAL .00 LOL 74.68 VL 27.664 GAL -5.12 AZL 87.23 HCA 189.17 SMA 128.13 ECC .17417 INC 2.7714 V1 30.232 RP 108.71 LAP -.44 LOP 263.84 VP 37.496 GAP 4.98 AZP 92.74 TAL 205.70 TAP 34.86 RCA 105.81 APO 150.44 V2 34.860 RC 120.382 GL 20.77 GP 5.91 ZAL 126.53 ZAP 140.64 ETS 4.91 ZAE 137.15 ETE 175.69 ZAC 37.73 ETC 162.00 CLP-141.02 PLANETOCENTRIC CONIC C3 14.119 VHL 3.758 DLA 1.21 RAL 302.57 RAD 6567.6 VEL 11.641 PTH 2.04 VHP 3.982 DPA -16.13 RAP 304.49 ECC 1.2324 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 20 49 2171.96 14 36 48 4740.95 3 42 43 1907.77 15 57 34 4480.38 4 52 16 1690.12 17 4 32 4270.80 1572.0 2 57 1 111.82 -18.51 38.80 158.74 90.00 66.69 15 55 49 113.17 4 14 31 4141.0 13.26 195.99 16.55 203.12 158.29 1307.8 -16.14 -19.44 18.97 158.33 113.17 65.35 17 12 15 116.92 5 20 26 61.62 18 15 42 157.86 3880.4 14.00 17.47 183.53 1090.1 -18.12 354.13 -21.91 1.21 157.10 110.00 3670.8 15.96 19.91 166.34 156.58 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3601.5 SGR 298.4 SG3 475.4 RRT -.9540 RRF -.9704 RTF ..9443 SGB 3613.9 R23 ..2300 R13 -.9448 SG1 3612.8 SG2 89.2 THA 175.48 ST 1119.8 SR 43.6 SS 673.0 CRT -.9926 CRS .9271 CST -.9437 TOE .6564 TRA-1.0794 TC3-4.0490 BAU .7677 ROE -.0247 RRA .0438 RC3 .3837 FAU .11048 LSA 1292.9 MSA 192.9 SSA 5.1 FOE 1.2695 FRA -.5113 FC3-6.7744 BSP 11252 EL1 1120.6 EL2 5.3 ALF 177.79 BOE .6568 BRA 1.0803 BC3 4.0671 FSP -1569 ARRIVAL DATE APR 24 1966 FLIGHT TIME 138.00 LAUNCH DATE DEC 7 1965 DISTANCE 403.403 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.622 GAL -4.90 A7L 87.07 HCA 192.34 SMA 127.84 ECC .17457 INC 2.9345 V1 30.232 RP 108.74 LAP -.63 LOP 267.01 VP 37.456 GAP 5.24 A7P 92.87 TAL 204.41 TAP 36.75 RCA 105.52 APO 150.16 V2 34.851 RC 122.731 GL 22.07 GP 4.29 7AL 124.60 7AP 142.83 ETS 3.39 7AE 136.19 ETE 177.34 7AC 39.29 ETC 160.41 CLP-143.04 PLANETOCENTRIC CONIC 2.86 RAL 303.85 RAD 6567.6 VEL 11.638 PTH 2.04 VHP 4.082 DPA -17.50 RAP 305.99 ECC 1.2314 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG C3 14.061 VHL 3.750 OLA 2 13 42 2222.19 14 54 9 4688.93 3 36 22 1955.51 16 14 9 4430.83 -16.76 160.32 110.71 2 50 44 1622.2 34.57 -19.75 41.96 90.00 65.77 16 12 18 11.72 192.94 15.12 199.97 159.27 4088.9 90.00 14.61 112.07 4 8 58 1355.5 -17.51 -20.69 21.96 159.93 100.00 158.83 64.43 17 28 0 115.85 5 16 33 60.71 18 29 47 173.58 3830.8 12.46 16.03 180.55 100.00 -19.52 356.60 4 47 40 1732.34 17 19 20 4226.77 158.73 157.51 1132.3 -23.19 3.82 110.00 156.96 3626.8 14.42 17 19 20 18.46 163.74 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3732.5 SGR 261.5 SG3 454.7
RRT --9281 RRF --9364 RTF .9432
SGB 3741.7 R23 .1623 R13 --9435
SGI 3740.4 SG2 97.2 THA 176.28 ST 1241.9 SR 20.5 SS 708.7 CRT -.7866 CRS .5837 CST -.9510 TOE .7430 TRA-1.0773 TC3-4.2010 BAU .7923 ROE -.0065 RRA .0353 RC3 .3409 FAU .10457 FDE 1.3057 FRA -.4167 FC3-6.4381 BSP 11670 LSA 1417.0 MSA 192.4 SSA 6.4 EL1 1242.0 EL2 12.7 ALF 179.26 BDE .7431 BRA 1.0779 BC3 4.2148 FSP -1500 FLIGHT TIME 140.00 ARRIVAL DATE APR 26 1966 LAUNCH DATE DEC 7 1965 DISTANCE 409.388 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.579 GAL -4.68 AZL 86.97 HCA 195.51 SMA 127.55 ECC .17505 INC 3.0318 V1 30.232 RP 108.76 LAP -.81 LOP 270.17 VP 37.416 GAP 5.49 AZP 92.92 TAL 203.09 TAP 38.61 RCA 105.22 APO 149.88 V2 34.842 RC 125.075 GL 22.93 GP 3.34 ZAL 122.74 ZAP 144.81 ET5 2.51 ZAE 135.31 ETE 178.21 ZAC 40.79 ETC 159.75 CLP-144.95 PLANETOCENTRIC CONIC C3 13.927 VHL 3.732 DLA 4.10 RAL 305.29 RAD 6567.5 VEL 11.632 PTH 2.04 VHP 4.189 DPA -18.19 RAP 307.49 ECC 1.2292 C3 13.927 VHL 3.732 DLA 4.10 RAL 305.29 RAD 6567.5 VEL 11.632 PTH 2.04 VHP 4.189 DPA -18.19 RAP 307.49 ECC 1.2292
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 10 8 2258.85 -20.62 44.30 161.92 109.85 2 47.46 1658.8 -17.73 36.82
90.00 15 9 11 4648.05 13.97 197.52 160.42 65.11 16 26.39 40.48.1 10.50 190.57
100.00 3 33 23 1990.28 -21.56 24.17 161.54 111.22 4 6.34 1390.3 -18.49 16.73
100.00 16 28 36 4391.85 14.88 178.24 159.97 63.77 17.41 48 3791.9 11.23 171.34
110.00 4 46 3 1762.89 -24.08 5.74 160.38 115.03 5 15.26 1162.9 -20.51 358.42
110.00 17 32 26 4192.01 17.29 161.73 158.63 60.04 18.42 18 3592.0 13.18 155.03 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1339.8 SR 20.5 SS 726.2 DIFFERENTIAL CORRECTIONS SGT 3865.8 SGR 246.6 SG3 435.8 ST 1339.8 SR 20.5 SS 726.2 RRT -.8884 RRF -.8922 RTF ..9425 CRT ..3766 CRS -.6099 CST -.9551 SG8 3873.7 R23 .1180 R13 -.9427 LSA 1512.0 MSA 191.3 SSA 7.8 SG1 3872.1 SG2 113.1 THA 176.75 ELI 1339.8 EL2 19.0 ALF ..33

TDE .8092 TRA-1.0657 TC3-4.3847 BAU .8187 RDE .0092 RRA .0282 RC3 .3247 FAU .09924 FOE 1.3002 FRA -.3282 FC3-6.1687 BSP 12170 BOE .8092 BRA 1.0661 BC3 4.3968 FSP -1452 LAUNCH DATE DEC 7 1965

ARRIVAL DATE APR 28 1966

```
DISTANCE 415.356
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 27.536 GAL -4.45 AZL 86.90 MCA 198.68 SMA 127.26 ECC .17561 INC 3.0965 V1 30.232
RP 108.79 LAP -.99 LOP 273.34 VP 37.376 GAP 5.74 AZP 92.93 TAL 201.74 TAP 40.43 RCA 10*.91 APO 149.60 V2 34.834
RC 127.413 GL 23.56 GP 2.71 ZAL 120.86 ZAP 146.64 ETS 1.95 ZAE 134.52 ETE 178.71 ZAC 42.28 ETC 159.55 CLP-146.74
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 13.762 VML 3.710 DLA 5.17 RAL 306.84 RAD 6567.5 VEL 11.625 PTH 2.04 VMP 4.299 DPA -18.51 RAP 309.05 ECC .1.2265
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 8 18 2289.62 -21.32 46.29 163.58 109.09 2 46 28 1689.6 -18.52 38.74
90.00 15 23 26 4612.05 12.92 195.39 161.71 64.58 16 40 18 4012.1 9.40 188.49
100.00 3 32 5 2019.40 -22.27 26.05 163.21 110.48 4 5 44 1419.4 -19.28 18.53
100.00 16 42 20 4357.51 13.83 176.22 161.26 63.23 17 54 58 3757.5 10.13 169.39
110.00 4 45 55 1788.34 -24.80 7.37 162.07 114.31 5 15 43 1188.3 -21.31 359.96
110.00 17 45 0 4161.33 16.24 159.89 59.50 18 54 21 3561.3 12.07 153.34
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                                 SCT 4001.0 SGR 243.1 SG3 418.8 ST 1425.1 SR 37.9 SS 733.1 RRT = .8402 RRF - .8432 RTF .9425 CRT .7812 CRS -.9132 CST -.9582 SG8 4008.3 R23 .0930 R13 -.9427 LSA 1591.9 MSA 188.8 SSA 9.1 SG1 4006.2 SG2 131.7 THA 177.07 EL1 1425.4 EL2 23.6 ALF 1.19
    TOE .8646 TRA-1.0475 TC3-4.5876 BAU .8461
ROE .0232 RRA .0217 RC3 .3209 FAU .09457
    FOE 1.2729 FRA -.2503 FC3-5.9486 BSP 12739
BDE .8649 BRA 1.0477 BC3 4.5989 FSP -1422
LAUNCH DATE DEC 7 1965
                                                                                          FLIGHT TIME 144.00
                                                                                                                                                                   ARRIVAL DATE APR 30 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 421.312
    RL 147.37 LAL .00 LOL 74.68 VL 27.492 GAL -4.20 AZL 86.86 MCA 201.85 SMA 126.96 ECC .17626 INC 3.1429 VI 30.232 RP 108.81 LAP -1.17 LOP 276.51 VP 37.336 GAP 5.98 AZP 92.92 TAL 200.36 TAP 42.21 RCA 104.58 APO 149.34 V2 34.826 RC 129.747 GL 24.07 GP 2.27 ZAL 118.93 ZAP 148.36 ETS 1.59 ZAE 133.82 ETE 179.02 ZAC 43.82 ETC 159.61 CLP-148.43
    C3 13.586 VML 3.686 DLA 6.15 RAL 308.51 RAO 6567.5 VEL 11.618 PTH 2.04 VHP 4.411 DPA -18.62 RAP 310.67 ECC 1.2236 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 29 2517.79 -21.93 48.13 165.33 108.37 2 46 6 1717.8 -19.22 40.50 90.00 15 37 34 4578.25 11.93 193.41 163.13 64.13 16 53 52 3978 2 8 32 1078 2
   PLANETOCENTRIC CONIC
                                                                                                                  64.13 16 53 52
109.77 4 5 50
62.77 18 8 5
113.64 5 16 52
59.03 19 6 26
                     3 31 44 2046.01
16 55 59 4325.26
4 46 40 1811.52
17 57 33 4132.52
        100.00
                                                              -22.89
                                                                                 27.78
                                                                                                  164.97
                                                                                                                                                          1446.0
                                                                                                                                                                           -19.99
                                                                                                                                                                                                20.19
                                                              12.84
                                                                            174.34
                                                                                                162.67
                                                                                                                                                          3725.3
                                                                                                                                                                              9.09
                                                                                                                                                                                               167.56
                                                                                               163.85
                                                              -25.45
                                                                                  8.86
                                                                                                                                                        1211.5 -22.03
3532.5 11.02
                                                                                                                                                                                                1.34
        110.00
                                                             15.24
                                                                                158.34
                                                                                                 161.29
                                                                                                                                                                                              151.77
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 4074.5 SGR 240.8 SG3 394.4 ST 1547.9 SR 53.6 SS 772.6
RRT -.7806 RRF -.7765 RTF .9371 CRT .8941 CR5 -.9719 CST -.9612
SGB 4081.6 R23 .0705 R13 -.9372 LSA 1720.0 MSA 192.8 SSA 9.9
SGI 4078.8 SG2 150.4 THA 177.35 EL1 1548.6 EL2 24.0 ALF 1.77
                                                                                                                                                   ST 1547.9 SR 53.6 SS 772.6
CRT .8941 CR5 -.9719 CST -.9612
    TDE .9476 TRA -.9897 TC3-4.7064 BAU .8568
RDE .0340 RRA .0131 RC3 .3175 FAU .08703
    FDE 1.3014 FRA -11094 FC3-5.5458 83P 12563
BDE .9482 BRA .9898 BC3 4.7171 FSP -1260
                                                                                                                                                                 ARRIVAL DATE MAY 2 1966
                                                                                        FLIGHT TIME 146.00
LAUNCH DATE DEC 7 1965
                                                                                         DISTANCE 427.250
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                 7.09 RAL 310.28 RAD 6567.5 VEL 11.610 PTH 2.03 VHP 4.525 OPA -18.58 RAP 312.35 ECC 1.2208
    C3 13.415 VHL 3.663 DLA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1744.8
                                                                                                                                                                         -19.88
                                                                                             167.17
164.68
                      2 7 18 2344.84
15 51 50 4545.68
                                                                                                                                                                                               42.22
                                                              -22.50
                                                                                49.91
         90.00
                                                                                                                                                                                              184.70
                                                              10.95
                                                                               191.52
                                                                                                                                                         3945.7
                                                                                                                                                                              7.34
         90.00
                      3 32 2 2071.54
17 9 47 4294.21
                                                                                                                                                                                               21.79
                                                                                                 166.82
                                                                                                                                                         1471.5
                                                                                                                                                                           -20.65
                                                              -23.47
                                                                                 29.46
        100.00
                                                                                            166.82
                                                                                                                                                     3694.2 8.07
                                                                                                                                                                                              165.82
                                                             11.86
                                                                           172.55
        100.00
                       4 48 2 1833.70 -26.04
18 10 16 4104.82 14.26
                                                                                              165.74
162.81
                                                                                                                                                        1233.7
                                                                                                                                                                          -22.70
                                                                                                                                                                                                2.74
                                                                                 10.31
        110.00
                                                                                                                                                      3504.8
                                                                                                                                                                           10.00
                                                                              156.79
                                                                                                                                                                                              150.28
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 4200.4 SGR 247.5 SG3 379.5

RRT -.7260 RRF -.7239 RTF .9371

SGB 4207.7 R23 .0618 R13 -.9372

SG1 4204.3 SG2 170.0 THA 177.55
                                                                                                                                               ST 1629.9 SR 72.0 SS 775.3

CRT .9353 CRS -.9862 CST -.9634

LSA 1796.3 MSA 189.7 SSA 11.1

EL1 1631.3 EL2 25.5 ALF 2.37
    TOE .9989 TRA -.9532 TC3-4.9114 BAU .8828
    RDE .0457 RRA .0063 RC3 .3231 FAU .08293
FDE 1.2654 FRA -.0382 FC3-5.3522 BSP 13100
    BOE .9999 BRA .9532 BC3 4.9221 FSP -1237
                                                                                                                                                                  ARRIVAL DATE MAY 4 1966
                                                                                         FLIGHT TIME 148.00
LAUNCH DATE DEC 7 1965
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 433.173
    RL 147.37 LAL .00 LOL 74.68 VL 27.403 GAL -3.69 AZL 86.79 MCA 208.19 SMA 126.37 ECC .17785 INC 3.2058 V1 30.232 RP 108.86 LAP -1.51 LOP 282.83 VP 37.258 GAP 6.46 AZP 92.83 TAL 197.52 TAP 45.71 RCA 103.90 APO 148.85 V2 34.812 RC 134.395 GL 24.84 GP 1.70 ZAL 114.88 ZAP 151.52 ETS 1.18 ZAE 132.63 ETE 179.33 ZAC 47.05 ETC 160.09 CLP-151.56
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 33 2371.74 -23.05 51.69 169.13 106.92 2 47 5 1771 7 -20.51
                                                8.01 RAL 312.14 RAD 6567.5 VEL 11.604 PTH 2.03 VHP 4.642 DPA -18.43 RAP 314.09 ECC 1.2181
                                                                                                                   182.89
                                                                                                                                                                              6.33
                       16 6 27
                                                                                189.66
                                                                                                  166.35
         90.00
                                          4513.59
                                                                9.98
                       3 32 46 2096.91
17 23 55 4263.65
4 49 50 1855.71
18 23 20 4077.61
                                                                                                                                                                                               23.41
                                                              -24.02
                                                                                                                                                                            -21.29
                                                                                 31.14
                                                                                                  168.80
        100.00
                                                                               170.80
                                                                                                  165.87
                                                                                                                                                                              7.06
                                                                                                                                                                                              164.11
        100.00
                                                              10.89
                                                                                                                                                                            -23.36
                                                                                                                                                                                                4.12
                                                              -26.62
                                                                                 11.76
                                                                                                167.73
        110.00
                                                                                                                                                                                               148.81
                                                            13.29
                                                                               155.28
                                                                                                 164.46
                                                                                                                                                                              8.99
        110.00
                                                                                MID-COURSE EXECUTION ACCURACY
SGT 4314.4 SGR 255.7 SG3 364.4
RRT -.6714 RRF -.6710 RTF .9363
SGB 4322.0 R23 .0556 R13 -.9364
SGB 4317.9 SGZ 189.4 THA 177.72

EL1 1721.2 EL2 25.3 ALF 2.85
   DIFFERENTIAL CORRECTIONS
     TOE 1.0551 TRA -.9043 TC3-5.1003 BAU .9057
     ROE .0565 RRA - .0010 RC3 .3293 FAU .07863
    FOE 1.2382 FRA .0381 FC3-5.1357 BSP 13522
BOE 1.0566 BRA .9043 BC3 5.1109 FSP -1197
```

FLIGHT TIME 142.00

ARRIVAL DATE MAY 6 1966

LAUNCH DATE DEC 7 1965

DISTANCE 439.082 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.358 GAL -3.42 A7L 86.77 HCA 211.35 SMA 126.08 ECC .17880 INC 3.2283 VI 30.232 RP 108.87 LAP -1.68 LOP 286.00 VP 37.220 GAP 6.70 A7P 92.76 TAL 196.06 TAP 47.41 RCA 103.54 APO 148.62 VZ 34.806 RC 136.709 GL 25.13 GP 1.50 7AL 112.73 ZAP 152.97 ETS 1.08 ZAE 132.14 ETE 179.41 ZAC 48.74 ETC 160.43 CLP-153.01 PLANETOCENTRIC CONIC 8.93 RAL 314.10 RAD 6567.5 VEL 11.597 PTH 2.03 VHP 4.760 DPA -18.19 RAP 315.89 ECC 1.2158 C3 13.114 VHL 3.621 DLA LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 8 9 2399.04 -23.58 16 21 31 4481.64 9.00 3 33 51 2122.64 -24.56 17 38 30 4233.27 9.91 4 52 1 1876.02 -27:19 18 36 49 4050.65 12.32 -21.13 171.22 1799.0 106.16 45.69 53.52 2 48 8 63.04 17 36 12 107.59 4 9 13 181.09 187.83 168.16 3881.6 5.31 25.05 32.86 170.90 1522.6 -21.92 167.67 169.86 61.65 18 49 3 111.57 5 23 19 57.86 19 44 20 6.05 162.42 169.08 3633.3 1278.0 -24.01 5.52 110.00 13.25 166.24 3450.7 147.38 153.79 7.99 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY SGT 4421.4 SGR 265.3 SG3 349.7 RRT -.6184 RRF -.6197 RTF .9352 SGB 4429.3 R23 .0509 R13 -.9353 SG1 4424.4 SG2 208.3 THA 177.87 ST 1811.6 SR 105.5 SS 791.7 CRT .9739 CRS -.9899 CST -.9677 TDE 1.1135 TRA -.8452 TC3-5.2780 BAU .9272 RDE .0665 RRA -.0086 RC3 .3357 FAU .07440 LSA 1971.2 MSA 184.3 SSA 13.3 ELI 1814.5 EL2 23.9 ALF 3.25 FOE 1.2143 FRA .1143 FC3-4.9117 BSP 13896 BDE 1.1155 BRA .8452 BC3 5.2887 FSP -1152 ARRIVAL DATE MAY 8 1966 FLIGHT TIME 152.00 LAUNCH DATE DEC 7 1965 DISTANCE 444.977 HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.313 GAL -3.14 AZL 86.75 MCA 214.52 SMA 125.79 ECC .17987 INC 3.2470 V1 30.232
RP 108.89 LAP -1.84 LOP 289.16 VP 37.182 GAP 6.93 AZP 92.68 TAL 194.57 TAP 49.09 RCA 103.16 APO 148.41 V2 34.801
RC 139.015 GL 25.37 GP 1.34 ZAL 110.51 ZAP 154.36 ETS 1.02 ZAE 131.71 ETE 179.45 ZAC 50.49 ETC 160.81 CLP-154.39 PLANETOCENTRIC CONIC C3 12.996 VHL 3.605 DLA 9.86 RAL 316.17 RAD 6567.5 VEL 11.592 PTH 2.03 VHP 4.881 DPA -17.88 RAP 317.75 ECC 1.2139 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 9 0 2427.09 16 37 6 4449.69 3 35 12 2149.06 17 53 35 4202.95 4 54 30 1900.92 18 50 47 4023.85 105.34 2 49 27 62.75 17 51 16 173.45 1827.1 -21.75 47.52 90.00 -24.09 55.41 3849.7 179.29 90.00 8.01 186.00 170.11 4.29 106.80 4 11 2 61.35 19 3 38 110.81 5 26 11 57.54 19 57 51 1549.1 -22.55 26.77 100.00 -25.09 34.64 173.13 3602.9 5.04 160.74 100.00 8.93 167.37 169.62 172.12 1300.9 -24.67 110.00 -27.75 14.79 6.98 110.00 11.34 152.33 168.17 3423.8 6.98 145.95 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4523.2 SGR 275.7 SG3 335.7 RRT --5677 RRF --5709 RTF .9342 SGB 4531.6 R23 .0477 R13 -.9343 SGJ 4525.9 SG2 226.8 THA 178.01 ST 1907.7 SR 121.3 55 801.0 CRT .9837 CRS -.9870 CST -.9698 TOE 1.1744 TRA -.7772 TC3-5.4435 BAU .9476 ROE .0760 RRA -.0165 RC3 .3416 FAU .07036 FOE 1.1920 FRA .1872 FC3-4.6871 8SP 14239 80E 1.1769 BRA .7774 BC3 5.4542 FSP -1109 LSA 2064.6 MSA 181.2 SSA 14.3 EL1 1911.5 EL2 21.8 ALF 3.58 ARRIVAL DATE MAY 10 1966 FLIGHT TIME 154.00 LAUNCH DATE DEC 7 1965 DISTANCE 450.857 RL 147.37 LAL .00 LOL 74.68 VL 27.268 GAL -2.84 AZL 86.74 HCA 217.68 SMA 125.49 ECC .18105 INC 3.2631 V1 30.232 RP 108.90 LAP -1.99 LOP 292.32 VP 37.145 GAP 7.17 AZP 92.58 TAL 193.06 TAP 50.75 RCA 102.77 APO 148.21 V2 34.797 RC 141.312 GL 25.56 GP 1.21 ZAL 108.20 ZAP 155.68 ETS 1.00 ZAE 131.33 ETE 179.48 ZAC 52.29 ETC 161.20 CLP-155.71 PLANETOCENTRIC CONIC C3 12.906 VHL 3.593 CLA 10.78 RAL 318.33 RAO 6567.5 VEL 11.588 PTH 2.03 VMP 5.003 DPA -17.51 RAP 319.65 ECC 1.2124 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 10 5 2456.13 16 53 16 4417.67 3 36 49 2176.40 18 9 13 4172.63 4 57 16 1924.62 19 5 15 3997.18 1856.1 -22.37 104.48 2 51 1 62.49 18 6 54 57.38 175.81 49.42 -24.60 177.50 7.01 184.18 172.21 3617.7 3.27 90.00 105.95 4 13 5 61.09 19 18 46 110.01 5 29 21 57.24 20 11 52 -25.62 36.50 175.51 1576.4 -23.18 28.55 100.00 171.71 3572.6 4.02 159.07 100.00 7.93 165.66 8.50 1324.6 -25.33 110.00 -28.31 16.40 174.53 144.54 170.24 3397.2 5.9A 10.37 150.88 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2005.0 SR 136.7 55 809.3 CRT .9899 CRS -.9825 CST -.9718 SGT 4622.2 SGR 286.6 SG3 322.6 TOE 1.2365 TRA -.7015 TC3-5.5982 BAU .9678 RRT -.5198 RRF -.5252 RTF .9334 SGB 4631.1 R23 .0453 R13 -.9334 RDE .0852 RRA -.0246 RC3 .3467 FAU .06655 FDE 1.1697 FRA .2556 FC3-4.4640 BSP 14584 BDE 1.2394 BRA .7019 BC3 5.6089 FSP -1068 LSA 2159.1 MSA 177.7 SSA 15.3 EL1 2009.6 EL2 19.3 ALF 3.86 SG1 4624.6 SG2 244.7 THA 178.15 FLIGHT TIME 156.00 ARRIVAL DATE MAY 12 1966 LAUNCH DATE DEC 7 1965 **DISTANCE 456.723** HELIOCENTRIC CONIC RL 147.37 LAL .00 LOL 74.68 VL 27.223 GAL -2.54 AZL 86.72 MCA 220.85 SMA 125.20 ECC .18235 INC 3.2769 V1 30.232 RP 108.92 LAP -2.14 LOP 295.48 VP 37.108 GAP 7.41 AZP 92.48 TAL 191.54 TAP 52.38 RCA 102.37 APO 148.03 V2 34.793 RC 143.598 GL 25.70 GP 1.10 ZAL 105.80 ZAP 156.95 ETS 1.01 ZAE 131.00 ETE 179.50 ZAC 54.14 ETC 161.60 CLP-156.97 PLANETOCENTRIC CONIC C3 12.850 VHL 3.585 DLA 11.72 RAL 320.58 RAD 6567.5 VEL 11.586 PTH 2.03 VHP 5.129 DPA -17.08 RAP 321.59 ECC 1.2115 C3 12.850 VHL 3.585 DLA 11.72 RAL 320.58 RAD 6567.5 VEL 11.586 PTH 2.03 VHP 5.129 DPA -17.08 RAP 321.59 ECC 1.2115 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 11 21 2486.33 -25.10 59.46 178.33 103.56 2 52 47 1886.3 -22.99 51.42 90.00 17 10 1 4385.59 5.99 182.37 174.46 62.27 18 23 6 3785.6 2.24 175.71 100.00 3 38 38 2204.82 -26.14 38.46 178.04 105.05 4 15 23 1604.8 -23.81 30.43 100.00 18 25 25 4142.33 6.93 163.97 173.95 60.85 19 34 27 3542.3 3.00 157.40 110.00 5 0 19 1949.23 -28.87 18.10 177.09 109.15 5 32 48 1349.2 -25.99 10.11 110.00 19 20 13 3970.69 9.39 149.46 172.45 56.98 20 26 24 3370.7 4.97 143.15 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4712.5 SGR 297.4 SG3 309.9 RRT -.4730 RRF -.4798 RTF .9321 SGB 4721.9 R23 .0426 R13 -.9322 SG1 4714.6 SG2 261.9 THA 178.28 ST 2110.7 SR 151.4 SS 820.9 CRT .9935 CRS -.9766 CST -.9739 LSA 2263.0 MSA 174.3 SSA 16.1 EL1 2116.0 EL2 17.2 ALF 4.08 TOE 1.3048 TRA -.6137 TC3-5.7264 BAU .9856 ROE .0941 RRA -.0329 RC3 .3500 FAU .06274 FOE 1.1533 FRA .3252 FC3-4.2270 BSP 14836 BDE 1.3082 BRA .6146 BC3 5.7371 FSP -1021

FLIGHT TIME 150.00

ARRIVAL DATE MAY 14 1966

LAUNCH DATE DEC 7 1965

```
DISTANCE 462.574
    HELIOCENTRIC CONIC
     RL 147.37 LAL ...00 LOL 74.68 VL 27.178 GAL -2.23 AZL 86.71 MCA 224.01 SMA 124.91 ECC .18380 INC 3.2890 VI 30.232 RP 108.93 LAP -2.28 LOP 298.64 VP 37.072 GAP 7.64 AZP 92.37 TAL 189.99 TAP 54.00 RCA 101.96 APO 147.87 V2 34.790 RC 145.874 GL 25.78 GP 1.01 ZAL 103.33 ZAP 158.16 ETS 1.05 ZAE 130.71 ETE 179.51 ZAC 56.03 ETC 161.99 CLP-158.19
    PLANETOCENTRIC CONIC
     C3 12.832 VHL 3.582 DLA 12.66 RAL 322.94 RAD 6567.5 VEL 11.585 PTH 2.03 VHP 5.257 DPA -16.60 RAP 323.57 ECC 1.2112 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                   1917.8
                                                                                                                           102.57
                                                                                                                                                                                         -23.60
                         2 12 48 2517.76
17 27 21 4353.55
                                                                                        61.63
                                                                                                        181.00
                                                                                                                                                2 54 46
                                                                                                                                                                                                              53.52
          90.00
                                                                    -25.58
                                                                                                                              62.09 18 39 54 3753.5
104.08 4 17 54 1634.4
60.65 19 50 42 3512.2
108.22 5 36 32 1374.8
56.75 20 41 27 3344.5
                                                                                                                                                                                             1.20
                                                                                                                                                                                                               173.92
                                                                                                         176.87
                                                                                       180.57
          90.00
                                                                     4.98
                         3 40 40 2234.38
18 42 10 4112.16
                                                                                        40.51
                                                                                                          180.72
                                                                                                                                                                                           -24.44
                                                                                                                                                                                                                32.40
                                                                   -26.64
         100.00
                                                                                                                                                                       3512.2
                                                                                                       176.34
                                                                                                                                                                                           1.97
                                                                                                                                                                                                               155.74
                                                                                       162.29
                                                                      5.93
         100.00
                                                                                                       179.81
                           5 3 37 1974.82
19 35 42 3944.49
                                                                                                                                                                                          -26.66
                                                                                                                                                                                                                11.79
                                                                   -29.43
                                                                                        19.88
         110.00
                                                                                                                                                                                             1.98
                                                                                                                                                                                                              141.77
                                                                                      148.05
                                                                                                           174.82
         110.00
                         19 35 42
                                                                   8.41
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 2212.4 SR 166.0 SS 828.4
CRT .9947 CRS -.9702 CST -.9757
                                                                                            SCT 4804.8 SGR 308.6 SG3 298.2
RRT -.4300 RRF -.4392 RTF ..9316
SGB 4814.7 R23 ..0413 R13 -.9316
     TOE 1.3716 TRA -.5210 TC3-5.8464 BAU 1.0048
     ROE .1029 RRA -.0411 RC3 .3520 FAU .05935
FOE 1.1328 FRA .3864 FC3-4.0042 BSP 15173
BOE 1.3755 BRA .5227 BC3 5.8570 FSP -987
                                                                                                                                                                 LSA 2362.0 MSA 170.3 SSA 17.0
EL1 2218.5 EL2 17.0 ALF 4.27
                                                                                            SG1 4806.7 SG2 278.5 THA 178.41
                                                                                                                                                                                 APRIVAL DATE MAY 16 1966
                                                                                                  FLIGHT TIME 160.00
LAUNCH DATE DEC 7 1965
                                                                                                 DISTANCE 468.411
   HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 27.133 GAL -1.90 A7L 86.70 HCA 227.17 SMA 124.63 ECC .18538 INC 3.2999 VI 30.232 RP 108.93 LAP -2.42 LOP 301.80 VP 37.037 GAP 7.88 AZP 92.24 TAL 188.42 TAP 55.59 RCA 101.52 APO 147.73 V2 34.787 RC 148.138 GL 25.81 GP .93 ZAL 100.78 ZAP 159.33 ETS 1.11 ZAE 130.46 ETE 179.51 ZAC 57.97 ETC 162.38 CLP-159.35
    PLANETOCENTRIC CONIC
     C3 12.857 VHL 3.586 OLA 13.60 RAL 325.39 RAO 6567.5 VEL 11.586 PTH 2.03 VHP 5.388 OPA -16.07 RAP 325.58 ECC 1.2116
ENCH AZMTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 14 25 2550.51 -26.05 63.92 183.83 101.51 2 56 56 1950.5 -24.20 55.73
                       17 45 16 4321.64
3 42 54 2265.15
16 59 28 4082.23
5 7 11 2001.43
19 51 41 3918.71
                                                                                                           179.44
                                                                                                                                  61.94
                                                                                                                                                18 57 18
                                                                       3.96
                                                                                       178.77
          90.00
                                                                                                                                103.05 4 20 39
60.48 20 7 30
                                                                                                                                                                       1665.1 -25.07
3482.2 .96
                                                                                                                                                                                                                 34.47
                                                                                                           183.56
                                                                     -27.13
                                                                                         42.66
         100.00
                                                                                                                                                                                                              154.10
                                                                                       160.64
                                                                                                           178.90
         100.00
                                                                      4.93
                                                                                                                                                                    1401.4 -27.33
3318.7 3.00
                                                                                                                               107.24 5 40 32
56.54 20 56 59
                                                                                                                                                                                                                 13.57
                                                                    -29.98
                                                                                        21.76
                                                                                                       182.69
         110.00
                                                                                       146.58
                                                                                                           177.35
         110.00
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 4892.5 SGR 319.5 SG3 287.1
RRT -.3888 RRF -.4002 RTF .9312
SGB 4903.0 R23 .0401 R13 -.9312
SG1 4894.1 SG2 294.3 THA 178.54
                                                                                                                                                                 ST 2315.9 SR 180.3 SS 835.6
CRT .9942 CRS -.9631 CST -.9776
      TOE 1.4413 TRA -.4191 TC3-5.9421 BAU 1.0231
      ROE .1117 RRA -. 0494 RC3 .3517 FAU .05610
     FOE 1.1137 FRA .4451 FC3-3.7775 BSP 15485
BDE 1.4456 BRA .4220 BC3 5.9525 FSP -953
                                                                                                                                                                 LSA 2462.9 MSA 166.4 55A 17.7
                                                                                                                                                                 EL1 2322.8 EL2 19.3 ALF
                                                                                                                                                                                ARRIVAL DATE MAY 18 1956
                                                                                                 FLIGHT TIME 162.00
LAUNCH DATE DEC 7 1965
                                                                                                DISTANCE 474.232
    HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 27.089 GAL -1.57 AZL 86.69 HCA 230.33 SHA 124.34 ECC .18712 INC 3.3097 V1 30.232 RP 108.94 LAP -2.55 LOP 304.97 VP 37.002 GAP 8.12 AZP 92.11 TAL 186.84 TAP 57.17 RCA 101.08 APO 147.61 V2 34.786
      RC 150.390 GL 25.77 GP .87 ZAL 98.15 ZAP 160.46 ETS 1.18 ZAE 130.24 ETE 179.51 ZAC 59.95 ETC 162.76 CLP-160.48
    PLANETOCENTRIC CONIC
      C3 12.930 VML 3.596 DLA 14.54 RAL 327.93 RAO 6567.5 VEL 11.589 PTH 2.03 VHP 5.522 DPA -15.50 RAP 327.61 ECC 1.2128
     C3 12.930 VHL 3.596 DLA 14.54 RAL 327.93 RAO 6567.5 VEL 11.589 PTH 2.03 VHP 5.522 DPA -15.50 RAP 327.61 ECC 1.2128 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 16 13 2584.56 -26.49 66.31 186.82 100.39 2 59 17 1984.6 -24.79 58.06 90.00 18 3 45 4290.03 2.94 1.77.00 182.17 61.82 19 15 15 3690.0 -.85 170.38 100.00 3 45 21 2297.10 -27.60 44.92 186.57 101.95 4 23 38 1697.1 -25.68 36.65 100.00 19 17 18 4052.72 3.94 159.01 181.62 60.34 20 24 50 3452.7 -.04 152.48 110.00 5 11 1 2029.05 -30.53 23.73 185.73 106.19 5 44 50 1429.1 -28.01 15.44 110.00 20 8 7 3893.53 6.50 145.35 180.03 56.37 21 13 0 3293.5 2.03 139.11
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 4977.2 SGR 330.1 SG3 276.6

RRT - .3493 RRF - .3633 RTF .9309

SGB 4988.1 R23 .0393 R13 - .9310

SG1 4978.5 SG2 309.2 THA 178.67
                                                                                                                                                                 ST 2420.2 SR 194.5 SS 841.8
CRT .9922 CRS -.9555 CST -.9793
      TOE 1.5137 TRA -. 3077 TC3-6.0127 BAU 1.0411
      RDE .1206 RRA -.0576 RC3 .3491 FAU .05303
FDE 1.0953 FRA .5019 FC3-3.3510 83P 15790
BDE 1.5185 BRA .3131 BC3 6.0229 FSP -922
                                                                                                                                                                 LSA 2564.6 MSA 162.6 53A 18.4
                                                                                                                                                                  EL1 2427.9 EL2 24.1 ALF 4.56
                                                                                                                                                                                 ARRIVAL DATE MAY 20 1966
                                                                                                  ELIGHT TIME 164.00
LAUNCH DATE DEC 7 1965
                                                                                                 DISTANCE 480.038
    HELIOCENTRIC CONIC
     RC 147.37 LAL .00 LOL 74.68 VL 27.044 GAL -1.22 AZL 86.68 HCA 233.49 SHA 124.06 ECC .18903 INC 3.3186 V1 30.232 RP 108.94 LAP -2.67 LOP 308.13 VP 36.969 GAP 8.37 AZP 91.98 TAL 185.24 TAP 58.73 RCA 100.61 APO 147.51 V2 34.785 RC 152.629 GL 25.67 GP .81 ZAL 95.46 ZAP 161.54 ETS 1.28 ZAE 130.06 ETE 179.52 ZAC 61.96 ETC 163.13 CLP-161.56
    PLANETOCENTRIC CONIC
                                                                                                                                    2.03 VHP 5.661 DPA -14.89 RAP 329.67 ECC 1.2149
      C3 13.057 VHL 3.613 DLA 15.47 RAL 330.56 RAD 6567.5 VEL 11.595 PTH
     C3 13.057 VML 3.613 ULA 13.47 MAL 33U.36 MAU 6367.9 VEL 11.393 PIM 2.03 VMP 3.661 UPA -14.89 MAP 329.67 ECC 1.2149 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 18 22 45 4258.91 1.94 175.27 185.06 61.74 19 33 44 3658.9 -1.85 168.64 100.00 18 34 0 2330.22 -28.05 47.28 189.73 100.78 4 26 51 1730.2 -26.27 38.93 100.00 19 35 36 4023.81 2.96 157.42 184.49 60.24 20 42 40 3423.8 -1.02 150.89 110.00 5 15 7 2037.64 -31.05 25.79 188.94 105.07 5 49 25 1457.6 -28.67 17.40
                                                                                                                                60.24 20 42 40
105.07 5 49 25
56.22 21 29 28
                                                                                       144.06
                                                                                                           182.87
                                                                                                                                                                       3269.2
                                                                                                                                                                                              1.10
                                                                                                                                                                                                               137.83
                                                                   5.58
                          20 24 59 3869.15
         110.00
                                                                                          MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SCT 5053.0 SGR 340.1 SG3 266.3 ST 2528.6 SR 208.4 S5 849.2

RRT - .3100 RRF - .3253 RTF .9304 CRT .9890 CRS -.9476 CST -.9809

SCB 5064.5 R23 .0376 R13 -.9304 LSA 2670.7 MSA 159.4 SSA 19.0

SCI 5054.1 SG2 323.3 THA 178.80 EL1 2537.0 EL2 30.8 ALF 4.66
      TDE 1.5915 TRA -.1847 TC3-6.0430 BAU 1.0566
      ROE .1297 RRA -.0657 RC3 .3437 FAU .04992
FOE 1.0802 FRA .5585 FC3-3.3098 BSP 16009
BOE 1.5968 BRA .1960 BC3 6.0528 FSP -885
```

FLIGHT TIME 158.00

ARRIVAL DATE MAY 22 1966

```
FLIGHT TIME 166.00
LAUNCH DATE DEC 7 1965
                                                                           DISTANCE 485.827
   RL 147.37 LAL .00 LOL 74.68 VL 26.999 GAL -.86 A7L 86.67 HCA 236.65 SHA 123.78 ECC .19110 INC 3.3269 VI 30.232 RP 108.94 LAP -2.78 LOP 311.29 VP 36.936 GAP 8.62 A7P 91.83 TAL 183.63 TAP 60.28 RCA 100.13 APO 147.44 V2 34.784 RC 154.855 GL 25.50 GP .76 TAL 92.71 TAP 162.59 ETS 1.39 TAE 129.90 ETE 179.52 TAC 64.01 ETC 163.49 CLP-162.61
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 13.244 VHL 3.639 DLA 16.38 RAL 333.27 RAD 6567.5 VEL 11.603 PTH 2.03 VHP 5.803 DPA -14.24 RAP 331.75 ECC 1.2180
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 20 20 2656.44 -27.27

18 42 12 4228.51 .96

3 50 53 2364.43 -28.46

19 54 20 3995.76 2.01

5 19 31 2087.13 -31.55

20 42 12 3845.82 4.69
                                                                                                   97.94
                                                                                 193.27
                                                                     71.43
        90.00
                                                                                                                19 52 41
                                                                                                                                                    -2.83
                                                                                                                                   3628.5
                                                                                                      61.70
                                                                                   188.12
                                                                    173.57
        90.00
                                                                                                    99.55 4 30 18
60.17 21 0 56
103.89 5 54 18
56.10 21 46 18
                                                                                                                                                  -26.85
                                                                                                                                                                    41.31
                                                                                                                                   1764.4
                                                                                   193.06
                                                                     49.74
       100.00
                                                                                                                                                                  149.35
                                                                                187.53
192.32
                                                                                                                                                   -1.97
                                                                                                                                   3395.8
                                                                     155.87
       100.00
                                                                                                                                                                    19.45
                                                                                                                                                  -29.32
                                                                                                                                   1487.1
                                                                     27.94
       110.00
                                                                                                                                                      .21
                                                                                   185.86
                                                                                                                                   3245.8
                                                                    142.83
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2631.8 SR 222.3 SS 854.2
CRT .9848 CRS -.9398 CST -.9824
                                                                        SGT 5129.1 SGR 349.8 SG3 256.7
RRT -.2729 RRF -.2897 RTF .9302
     TDE 1.6694 TRA -. 0544 TC3-6.0502 BAU 1.0729
     RDE .1392 RRA -.0735 RC3 .3359 FAU .04707
                                                                      SGB 5141.0 R23 .0361 R13 -.9303
SG1 5130.0 SG2 336.4 THA 178.93
                                                                                                                               LSA 2771.4 MSA 156.4 5SA 19.5
    FDE 1.0642 FRA .6109 FC3-3.0769 BSP 16284
BOE 1.6752 BRA .0914 BC3 6.0595 FSP -855
                                                                                                                              EL1 2640.9 EL2 38.4 ALF 4.76
                                                                                                                                           ARRIVAL DATE MAY 24 1966
                                                                             FLIGHT TIME 168.00
LAUNCH DATE DEC 7 1965
                                                                            DISTANCE 491.599
    RL 147.37 LAL .00 LOL 74.68 VL 26.955 GAL -.48 AZL 86.67 MCA 239.82 SMA 123.51 ECC .19337 INC 3.3345 V1 30.232 RP 108.94 LAP -2.88 LOP 314.45 VP 36.904 GAP 8.88 AZP 91.68 TAL 182.00 TAP 61.82 RCA 99.63 APO 147.39 V2 34.785 RC 157.067 GL 25.26 GP .71 ZAL 89.91 ZAP 163.61 ETS 1.52 ZAE 129.77 ETE 179.53 ZAC 66.08 ETC 163.83 CLP-163.63
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 13.498 VHL 3.674 DLA 17.28 RAL 336.05 RAD 6567.5 VEL 11.614 PTH 2.04 VHP 5.951 OPA -13.56 RAP 333.84 ECC 1.2221
     LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    96.62 3 7 36
61.68 20 12 2
98.26 4 34 0
60.13 21 19 34
102.65 5 59 30
56.01 22 3 27
                                                                                                                                                  -26.39 65.68
                                                                                  196.72
                                                    -27.59
                                                                     74.14
         90.00 2 22 41 2694.09
                   19 2 3
                                                                                                                                    3599.1
                                                                                                                                                      -3.78
                                                                                                                                                                   165.30
                                                                                    191.33
                                                                     171.93
                                    4199.11
                                                         .01
         90.00
                   3 54 1 2399.60
20 13 25 3968.83
5 24 12 2117.41
20 59 43 3823.78
                                                                                                                                                    -27.39
                                                                                                                                                                     43.78
                                                                                                                                    1799.6
                                                                                    196.54
                                                     -28.83
                                                                      52.29
                                                                                                                                                      -2.88
                                                                                                                                                                   147.87
                                                                                                                                    3368.8
                                                                                   190.72
                                                                     154.40
                                                        1.10
        100.00
                                                                                 195.85
                                                                                                                                                    -29.95
                                                                                                                                                                     21.58
                                                                                                                                    1517.4
                                                                      30.18
                                                     -32.03
                                                                                                                                                       -.63
                                                                                                                                    3223.8
                                                                                    189.00
                                                                     141.68
       110.00
                                    3823.78
                                                       3.86
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2729.6 SR 236.2 SS 855.6

CRT .9801 CRS -.9323 CST -.9838

LSA 2866.1 MSA 153.6 SSA 19.9

EL1 2739.4 EL2 46.7 ALF 4.85
                                                                        SGT 5202.3 SGR 358.9 SG3 247.4
     TOE 1.7480 TRA .0834 TC3-6.0273 BAU 1.0892
                                                                       RRT -.2372 RRF -.2560 RTF .9308
SGB 5214.7 R23 .0352 R13 -.9309
SGI 5203.0 SG2 348.6 THA 179.06
     ROE .1492 RRA -.0809 RC3 .3255 FAU .04443
FDE 1.0461 FRA .6579 FC3-2.8496 BSP 16591
BOE 1.7544 BRA .1162 BC3 6.0360 FSP -832
                                                                                                                              EL1 2739.4 EL2 46.7 ALF
                                                                                                                                           ARRIVAL DATE MAY 26 1966
                                                                             FLIGHT TIME 170.00
 LAUNCH DATE DEC 7 1965
                                                                            DISTANCE 497.353
     RL 147.37 LAL .0D LOL 74.68 VL 26.911 GAL -.09 AZL 86.66 HCA 242.98 SHA 123.24 ECC .19584 INC 3.3417 V1 30.232 RP 108.94 LAP -2.98 LOP 317.62 VP 36.873 GAP 9.14 AZP 91.52 TAL 180.36 TAP 63.34 RCA 99.10 APO 147.37 V2 34.786 RC 159.265 GL 24.95 GP .68 ZAL 87.08 ZAP 164.60 ETS 1.67 ZAE 129.66 ETE 179.53 ZAC 68.19 ETC 164.15 CLP-164.62
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                        2.04 VHP 6.103 DPA -12.84 RAP 335.95 ECC 1.2275
     C3 13.826 VHL 3.718 DLA 18.15 RAL 358.90 RAD 6567.5 VEL 11.628 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  95.25 3 10 48
61.70 20 31 43
96.91 4 37 59
60.11 21 38 29
101.35 6 5 0
55.94 22 20 50
                                                                                200.32
                                                                                                                                 2132.7
                                                                                                                                                  -26.85
                    2 25 16 2732.70
19 22 12 4171.00
3 57 23 2435.61
20 32 46 3943.32
                                                     -27.87
                                                                      76.93
         90.00
                                                                                                                                                                   163.72
                                                                                                                                                     -4.67
                                                                                    194.70
                                                                                                                                    3571.0
                                                                     170.36
                                                        - .90
          90.00
                                                                                                                                                    -27.89
                                                                                                                                                                     46.34
                                                                                                                                    1835.6
                                                                                    200.16
                                                                      54.92
        100.00
                                                    -29.15
                                                                                 194.07
                                                                                                                                                    -3.74
                                                                                                                                                                   146.47
                                                                                                                                    3343.3
                                                                     153.00
                                                        .23
        100.00
                                                                               199.54
                                                                                                                                                  -30.56
                                                                                                                                                                     23.78
                                                                                                                                    1548.4
                      5 29 12 2148.37
21 17 27 3803.33
                                                   -32.46
                                                                      32.48
        110.00
                                                                                                                                                                    134.40
                                                                                                                                                      -1.41
                                                                                                                                    3203.3
                                                                     140.61
                                                                                    192.29
                                                     3.08
        110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 5275.2 SGR 367.7 SG3 238.3

RRT -.2042 RRF -.2277 RTF .9328

SGB 5288.0 R23 .0371 R13 -.9328

SGI 5275.7 SG2 359.9 THA 179.18
                                                                                                                               ST 2812.6 SR 250.3 SS 848.1
CRT .9751 CRS -.9252 CST -.9850
LSA 2944.4 MSA 150.8 SSA 20.1
      TOE 1.8218 TRA .2259 TC3-5.9854 BAU 1.1079
     ROE .1600 RRA -.0878 RC3 .3129 FAU .04220
FOE 1.0195 FRA .6968 FC3-2.6424 BSP 16980
BOE 1.8289 BRA .2424 BC3 5.9936 FSP -822
                                                                                                                                EL1 2823.2 EL2 55.3 ALF
                                                                                                                                            ARRIVAL DATE MAY 28 1966
                                                                              FLIGHT TIME 172.00
     RL 147.37 LAL .00 LOL 74.68 VL 26.867 GAL .32 A7L 86.65 MCA 246.14 SMA 122.97 ECC .19853 INC 3.3484 V1 30.232 RP 108.93 LAP -3.06 LOP 320.78 VP 36.843 GAP 9.41 A7P 91.36 TAL 178.72 TAP 64.86 RCA 98.56 APO 147.38 V2 34.788 RC 161.449 GL 24.58 GP .64 ZAL 84.21 ZAP 165.57 ETS 1.83 ZAE 129.57 ETE 179.54 ZAC 70.32 ETC 164.45 CLP-165.58
                                                                             DISTANCE 503.089
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 14.237 VHL 3.773 DLA 18.98 RAL 341.80 RAD 6567.6 VEL 11.646 PTH 2.04 VHP 6.262 DPA -12.10 RAP 338.06 ECC 1.2343
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     93.82
                       2 28 4 2772.14
                                                                      79.79
                                                                                     204.05
                                                       -28.08
          90.00
                                                                                                                                     3544.4
                                                                                                                                                      -5.52
                                                                                                                                                                    162.23
                      19 42 34 4144.45
4 1 3 2472.31
                                                                                                                   20 51 39
                                                                                      198.21
                                                                                                       61.73
                                                        -1.75
                                                                      168.88
          90.00
                                                                                                       95.52 4 42 15
60.11 21 57 36
                                                                                                                                     1872.3
                                                                                                                                                     -28.35
                                                                                                                                                                     48.97
                                                                                      203.93
                                                       -29.43
                                                                       57.61
         100.00
                                                                                                                                                      -4.55
                                                                                                                                                                    145.16
                                                                                                                                     3319.5
                     20 52 17 3919.51
5 34 31 2179.87
21 35 18 3784.71
                                                                                      197.55
                                                         -.57
                                                                     151.69
         100.00
                                                                                                                                                   -31.13
                                                                                                                                                                     26.06
                                                                                                                                     1579.9
                                                                                                     100.00 6 10 51
55.89 22 38 22
                                                       -32.86
                                                                       34.86
                                                                                      203.38
         110.00
                                                                                                                                                    -2.13
                                                                                                                                                                    133.43
                                                                                                                                     3184.7
                                                        2.37
                                                                      139.63
                                                                                     195.72
        110.00
                     21 35 18
                                     3784.71
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                          SGT 5331.6 SGR 375.2 SG3 230.3
RRT -.1657 RRF -.1847 RTF .9305
SGB 5344.8 R23 .0301 R13 -.9305
                                                                                                                                 ST 2921.3 SR 263:8 SS 861.7
      TOE 1.9177 TRA .3966 TC3-5.8577 BAU 1.1164
RDE .1710 RRA -.0945 RC3 .2971 FAU .03912
                                                                                                                          CRT .9691 CR5 -.9175 CST -.9862
LSA 3053.4 MSA 151.4 SSA 20.2
EL1 2932.5 EL2 64.8 ALF 5.00
      FDE 1.0204 FRA .7575 FC3-2.3788 BSP 16945
BDE 1.9254 BRA .4077 BC3 5.8653 FSP -765
                                                                          SG1 5332.0 SG2 369.9 THA 179.33
```

```
LAUNCH DATE DEC 7 1965
                                                                                   FLIGHT TIME 174.00
                                                                                                                                                      ARRIVAL DATE MAY 30 1966
    HELIOCENTRIC CONIC
                                                                                   DISTANCE 508.804
     RL 147.37 LAL .00 LOL 74.68 VL 86.824 GAL .74 ATL 86.65 MCA 249.30 SMA 122.70 ECC .20145 INC 3.3549 V1 30.232
RP 108.92 LAP -3.14 LOP 323.95 VP 36.814 GAP 9.69 ATP 91.19 TAL 177.06 TAP 66.36 RCA 97.98 APO 147.42 V2 34.791
RC 163.619 GL 24.13 GP .61 ZAL 81.34 ZAP 166.51 ETS 2.01 ZAE 129.51 ETE 179.55 ZAC 72.48 ETC 164.74 CLP-166.52
    PLANETOCENTRIC CONIC
     C3 14.740 VHL 3.839 DLA 19.77 RAL 344.75 RAD 6567.6 VEL 11.667 PTH 2.05 VHP 6.427 DPA -11.32 RAP 340.19 ECC 1.2426
     LNCH AZMTH LNCH TIME L-1 TIME INJLAT INJLONG INJRT ASC INJAZMTH INJTIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 31 8 2812.16 -28.23 82.71 207.91 92.37 3-18 1 2212.2 -27.60 74.10
                                                                                                          92.37 3-18 1
61.79 21 11 40
94.09 4 46 50
60.13 22 16 47
98.60 6 17 2
55.86 22 55 57
                                                                                                                                           2212.2
                                                                                                                                                             -27.60
                    20 3 0
         90.00
                                       4119.83
                                                          -2.55
                                                                          167.51
                                                                                           201.86
                                                                                                                                               3519.8
                                                                                                                                                                -6.30
                                                                                                                                                                                 160.84
                        4 5 0 2509.48
        100.00
                                                          -29.64
                                                                           60.35
                                                                                           207.82
                                                                                                                                               1909.5
                                                                                                                                                               -28.76
                                                                                                                                                                                 51.66
                    21 11 50 3897.75
5 40 10 2211.74
                                                                                        201.17
207.35
                                                                                                                                          34.
1611.1
3168.3
"T DETE!
        100.00
                                                                                                                                              3297.7
                                                          -1.31
                                                                         150.50
                                                                                                                                                               -5.28
                                                                                                                                                                                 143.95
                                                         -33.21
                                                                                                                                                              -31.67
        110.00
                                                                           37.28
                                                                                                                                                                                 28.39
                                       3768.25
                                                         1.74
                     21 53 9
                                                                                                                                                               -2.75
        110.00
                                                                         138.77
                                                                                           199.26
                                                                                                                                                                               132.57
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            SGT 5388.7 SGR 582.4 SG3 221.8 ST 3000.3 SR 277.6 SS 857.1 RRT -.1317 RRF -.1520 RTF .9312 CRT .9634 CRS -.9105 CST -.9872 SGB 5402.3 R23 .0290 R13 -.9312 LSA 3129.0 MSA 151.0 SSA 20.2 SG1 5389.0 SG2 379.0 TMA 179.46 EL1 3012.2 EL2 74.1 ALF 5.10
     TDE 2.0004 TRA .5674 TC3-5.7239 BAU 1.1293 ROE .1832 RRA -.1004 RC3 .2798 FAU .03670
     FOE 1.0017 FRA .8015 FC3-2.1554 BSP 17191
BOE 2.0087 BRA .5762 BC3 5.7307 FSP -743
LAUNCH DATE DEC 7 1965
                                                                                   FLIGHT TIME 176.00
                                                                                                                                                      ARRIVAL DATE JUN 1 1966
   HELIOCENTRIC CONTC
                                                                                  DISTANCE 514.497
    RL 147.37 LAL .00 LOL 74.68 VL 26.780 GAL 1.18 AZL 86.64 MCA 252.46 SMA 122.44 ECC .20462 INC 3.3611 V1 30.232
RP 108.91 LAP -3.20 LOP 327.12 VP 36.785 GAP 9.98 AZP 91.01 TAL 175.40 TAP 67.86 RCA 97.39 APO 147.49 V2 34.794
RC 165.775 GL 23.62 GP .58 ZAL 78.46 ZAP 167.43 ETS 2.21 ZAE 129.45 ETE 179.57 ZAC 74.65 ETC 165.01 CLP-167.44
   PLANETOCENTRIC CONIC
    C3 15.346 VHL 3.917 DLA 20.51 RAL 347.73 RAD 6567.6 VEL 11.693 PTH 2.D6 VHP 6.599 DPA -10.52 RAP 342.32 ECC 1.2526 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 34 30 2852.56
20 23 24 4097.47
4 9 18 2546.91
21 31 17 3878.35
5 46 10 2243.81
22 10 54 3754.22
                                                                                                            90.89 3 22 3
61.86 21 31 41
92.64 4 51 44
60.17 22 35 56
97.18 6 23 34
55.84 23 13 28
                                                                                        211.87
         90.00
                                                          -28.30
                                                                           85.67
                                                                                                                                           2252.6
                                                                                                                                                              -27.88
                                                                                                                                                                                 77.03
         90.00
                                                           -3.27
                                                                          166.26
                                                                                           205.62
                                                                                                                                               3497.5
                                                                                                                                                                 -7.01
                                                                                                                                                                                 159.57
        100.00
                                                          -29.79
                                                                           63.13
                                                                                          211.82
                                                                                                                                               1946.9
                                                                                                                                                              -29.10
                                                                                                                                                                                 54.39
                                                                                       204.90
211.45
                                                          -1.97
                                                                         149.43
                                                                                                                                               3278.4
                                                                                                                                                               -5.92
                                                                                                                                                                                142.88
        110.00
                                                          -33.51
                                                                            39.73
                                                                                                                                          1643.8 -32.16
                                                                                                                                                                                  30.76
                                                          1.20
                                                                         138.04
                                                                                           202.92
                                                                                                                                              3154.2
                                                                                                                                                                 -3.29
                                                                                                                                                                                 131.84
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TOE 2.0847 TRA .7475 TC3-5.5615 BAU 1.1423
                                                                            SGT 5444.8 SGR 388.9 SG3 213.9
RRT -.0980 RRF -.1186 RTF .9322
SGB 5458.7 R23 .0269 R13 -.9322
                                                                                                                                          ST 3071.9 SR 291.3 SS 852.8 CRT .9577 CRS -.9044 CST -.9882
    ROE .1962 RRA -.1055 RC3 .2608 FAU .03445
FOE .9859 FRA .8434 FC3-1.9432 BSP 17409
BOE 2.0939 BRA .7549 BC3 5.5676 FSP -718
                                                                             RRT -.0980 RRF -.1186 RTF .9322 CRT .9577 CRS -.9044 CST -.9882
SGB 5458.7 R23 .0269 R13 -.9322 LSA 3197.7 MSA 151.2 SSA 20.0
SG1 5444.9 SG2 387.0 THA 179.60 EL1 3084.6 EL2 83.5 ALF 5.19
LAUNCH DATE DEC 7 1965
                                                                                  FLIGHT TIME 178.00
                                                                                                                                                     ARRIVAL DATE JUN 3 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 520.165
    RL 147.37 LAL .00 LOL 74.68 VL 26.737 GAL 1.64 ATL 86.63 MCA 255.63 SMA 122.18 ECC .20807 INC 3.3671 V1 30.232
RP 108.90 LAP -3.26 LOP 330.28 VP 36.758 GAP 10.28 AZP 90.84 TAL 173.73 TAP 69.35 RCA 96.76 APO 147.60 V2 34.798
RC 167.915 GL 23.05 GP .56 ZAL 75.59 ZAP 168.33 ETS 2.43 ZAE 129.41 ETE 179.59 ZAC 76.85 ETC 165.25 CLP-168.34
   PLANETOCENTRIC CONIC
     C3 16.067 VHL 4.008 DLA 21.20 RAL 350.72 RAD 6567.6 VEL 11.724 PTH 2.07 VHP 6.779 DPA -9.69 RAP 344.46 ECC 1.2644
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 38 12 2893.09 -28.31
20 43 35 4077.72 -3.90
4 13 56 2584.38 -29.87
21 50 32 3861.65 -2.53
5 52 31 2275.93 -33.76
22 28 26 3742.87 .77
                                                                                                         89.40 3 26 25
61.93 21 51 33
91.17 4 57 D
                                                                                                                                          2293.1
        90.00
                                                                          88.63
                                                                                        215.93
                                                                                                                          3 26 25
                                                                                                                                                             -28.09
                                                                                                                                                               -7.62
         90.00
                                                                         165.15
                                                                                          209.50
                                                                                                                                              3477.7
                                                                                                                                                                               158.45
        100.00
                                                                           65.91
                                                                                          215.92
                                                                                                                                             1984.4
                                                                                                                                                                                 57.14
                                                                                                                                                               -29.39
                                                                                                             91.17 4 57 0 1984.4
60.21 22 54 54 3261.7
95.73 6 30 27 1675.9
55.82 23 30 49 3142.9
                                                                      148.52 208.74
                                                                                                                                          3261.7
        100.00
                                                                                                                                                               -6.48
                                                                                         215.65
                                                                                                                                                             -32.60
-3.72
        110.00
                                                                           42.21
                                                                                                                                                                                 33.17
                                                                                       206.68
       110.00
                                                                        137.45
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                             SCT 5495.8 SGR 394.7 SG3 206.3

RRT -.0647 RRF -.0858 RTF .9333

SGB 5509.9 RZ3 .0252 R13 -.9333

SGI 5495.8 SG2 393.9 THA 179.73
     TOE 2.1687 TRA .9388 TC3-5.3684 BAU 1.1543
                                                                                                                                        ST 3132.6 SR 304.8 S5 845.7
    ROE .2102 RRA -1098 RC3 .2405 FAU .03229
FOE .9688 FRA .8843 FC3-1.7396 BSP 17641
BOE 2.1789 BRA .9452 BC3 5.3737 FSP -698
                                                                                                                                        CRT .9521 CRS -.8984 CST -.9891
                                                                                                                                        LSA 3255.4 MSA 152.3 SSA 19.7
EL1 3146.0 EL2 92.8 ALF 5.30
LAUNCH DATE DEC 7 1965
                                                                                   FLIGHT TIME 180.00
                                                                                                                                                     ARRIVAL DATE JUN 5 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 525.807
    RL 147.37 LAL .00 LOL 74.68 VL 26.695 GAL 2.12 AZL 86.63 MCA 258.79 SMA 121.92 ECC .21182 INC 3.3729 VI 30.232 RP 108.89 LAP -3.31 LOP 333.45 VP 36.731 GAP 10.60 AZP 90.66 TAL 172.05 TAP 70.85 RCA 96.10 APO 147.75 VZ 34.803 RC 170.040 GL 22.43 GP .53 ZAL 72.75 ZAP 169.22 ETS 2.67 ZAE 129.38 ETE 179.61 ZAC 79.06 ETC 165.48 CLP-169.23
   PLANETOCENTRIC CONIC
    C3 16.917 VHL 4.113 DLA 21.83 RAL 353.72 RAD 6567.7 VEL 11.760 PTH 2.08 VMP 6.968 DPA -8.84 RAP 346.60 ECC 1.2784
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 42 15 2933.49 -28.25
21 3 27 4060.91 -4.44
4 18 57 2621.67 -29.89
22 9 26 3847.95 -3.00
5 59 14 2307.94 -33.95
22 45 38 3734.45 .45
                                                                                                          87.92 3 31 8
62.00 22 11 8
89.72 5 2 39
60.24 23 13 34
                                                                                        220.07
                                                                                                                                          2333.5
                                                                                                                                                             -28.24
        90.00
                                                                          91.58
                                                                                                                                                                                82.92
         90.00
                                                                         164.21
                                                                                          213.46
                                                                                                                                              3460.9
                                                                                                                                                               -8.15
                                                                                                                                                                               157.50
       100.00
                                                                          68.68
                                                                                         220.11
                                                                                                                                              2021.7
                                                                                                                                                              -29.61
                                                                                                                                                                                59.89
       100.00
                                                                         147.76
                                                                                         212.67
                                                                                                                                              3248.0
                                                                                                                                                               -6.94
                                                                                                                                                                               141.19
                                                                                                             94.28 6 37 42
55.82 23 47 53
       110.00
                                                                           44.69
                                                                                         219.94
                                                                                                                                             1707.9
                                                                                                                                                           -32.98
                                                                                                                                                                                35.58
       110.00
                                                                        137.01
                                                                                         210.52
                                                                                                                                             3134.5
                                                                                                                                                               -4.04
                                                                                                                                                                               130.80
                                                                         MID-COURSE EXECUTION ACCURACY
SGT 5540.6 SGR 399.8 SG3 199.1
RRT -.0304 RRF -.0509 RTF .9340
SGB 5555.0 R23 .0223 R13 -.9340
SGB 5555.0 R23 .0223 R13 -.9340
SGI 5540.6 SG2 399.6 THA 179.87
EL1 3203.1 EL2 102.1 ALF 5.40
   DIFFERENTIAL CORRECTIONS
    TOE 2.2572 TRA 1.1459 TC3-5.1366 BAU 1.1628
    ROE .2253 RRA -.1131 RC3 .2193 FAU .03005
FDE .9554 FRA .9276 FC3-1.5377 BSP 17759
    BDE 2.2684 BRA 1.1515 BC3 5.1413 FSP -671
```

```
ARRIVAL DATE JUN 7 1966
                                                                    FLIGHT TIME 182.00
LAUNCH DATE DEC 7 1965
                                                                   01STANCE 531.420
  HELIOCENTRIC CONIC
   RL 147.37 LAL .00 LOL 74.68 VL 26.652 GAL 2.62 A7L 86.62 HCA 261.96 SMA 121.67 ECC .21589 INC 3.3786 V1 30.232 RP 108.87 LAP -3.35 LOP 336.62 VP 36.706 GAP 10.93 A7P 90.47 TAL 170.38 TAP 72.34 RCA 95.40 APO 147.94 V2 34.808 RC 172.148 GL 21.76 GP .51 TAL 69.94 ZAP 170.09 ETS 2.95 ZAE 129.36 ETE 179.63 ZAC 81.29 ETC 165.69 CLP-170.10
  PLANETOCENTRIC CONIC
    C3 17.912 VML 4.232 DLA 22.40 RAL 356.70 RAD 6567.7 VEL 11.802 PTH 2.09 VMP 7.168 CPA -7.97 RAP 348.75 ECC 1.2948
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                2 46 42 2973.46
21 22 48 4047.40
4 24 23 2658.54
22 27 49 3837.55
6 6 18 2339.67
23 2 23 3729.18
                                                                                                                                -28.31
                                                                                        86.47
                                                                                                                 2373.5
                                                                                                                                                85.84
                                                                        224.27
                                                                                                    3 36 16
      90.00
                                               -26.11
                                                            94.50
                                                                                                                    3447.4
                                                                                                                                   -8.57
                                                                                                                                                156.73
                                                                          217.50
                                                                                          62.07
                                                                                                   22 30 16
       90.00
                                               -4.87
                                                            163.45
                                                                                          88.27
                                                                                                                    2058.5
                                                                                                                                  -29.77
                                                                                                                                                62.62
                                                                                                     5 8 41
      100.00
                                                             71.42
                                                                          224.36
                                               -29.85
                                                                                          60.28 23 31 47
92.82 6 45 18
                                                                                                                                   -7.28
                                                                                                                    3237.6
                                                                                                                                                140.61
                                                            147.19
                                                                          216.66
      100.00
                                               -3.35
                                                                                                                                 -33.31
                                                                                                                                                38.00
                                                                                                                    1739.7
                                                                          224.32
      110.00
                                               -34.08
                                                             47.16
                                                                                          55.82 24 4 32
                                                .24
                                                                                                                    3129.2
                                                                                                                                   -4.24
                                                                                                                                                130.52
                                                                          214.42
                                                            136.74
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 3228.7 SR 330.7 SS 831.1
CRT .9412 CRS -.8878 CST -.9907
                                                              SGT 5582.5 SGR 404.1 SG3 192.1
RRT .0028 RRF -.0173 RTF .9351
    TOE 2.3418 TRA 1.3623 TC3-4.8903 BAU 1.1720
    ROE .2414 RRA -.1154 RC3 .1977 FAU .02801
                                                               5GB 5597.1 R23 -.0199 R13 .9351
                                                                                                                LSA 3346.6 MSA 156.9 SSA 18.8
    FOE .9399 FRA .9683 FC3-1.3537 BSP 17937
                                                                                                               EL1 3243.7 EL2 111.2 ALF 5.51
                                                               SG1 5582.5 SG2 404.1 THA .01
    BOE 2.3542 BRA 1.3672 BC3 4.8943 FSP -650
                                                                                                                           ARRIVAL CATE JUN 9 1966
LAUNCH DATE DEC 7 1965
                                                                    FLIGHT TIME 184.00
                                                                   DISTANCE 537.000
  HELIOCENTRIC CONIC
   RL 147.37 LAL .00 LOL 74.68 VL 26.611 GAL 3.15 AZL 86.62 MCA 265.12 SMA 121.42 ECC .22032 INC 3.3842 V1 30.232 RP 108.85 LAP -3.37 LOP 339.79 VP 36.681 GAP 11.28 AZP 90.29 TAL 168.71 TAP 73.83 RCA 94.67 APO 148.18 V2 34.814 RC 174.239 GL 21.05 GP .49 ZAL 67.18 ZAP 170.95 ETS 3.25 ZAE 129.35 ETE 179.65 ZAC 83.53 ETC 165.88 CLP-170.96
   PLANETOCENTRIC CONIC
  DIFFERENTIAL CORRECTIONS
                                                               SCT 5619.8 SGR 407.8 SG3 185.3
RRT .0359 RRF .0162 RTF .9365
SGB 5634.6 R23 -.0176 R13 .9365
                                                                                                                 ST 3256.2 SR 342.9 55 820.5
    TOE 2.4254 TRA 1.5909 TC3-4.6256 BAU 1.1802
    ROE .2586 RRA -.1165 RC3 .1761 FAU .02606
FOE .9242 FRA 1.0079 FC3-1.1850 B3P 18117
B0E 2.4392 BRA 1.5952 BC3 4.6290 FSP -630
                                                                                                                 CRT .9360 CRS -.8831 CST -.9914
                                                                                                                LSA 3371.6 MSA 159.9 SSA 18.3
Fil 3272.0 EL2 120.1 ALF 5.64
                                                                SG1 5619.8 SG2 407.5 THA .15
                                                                                                                           ARRIVAL DATE JUN 11 1966
                                                                   FLIGHT TIME 186.00
LAUNCH DATE DEC 7 1965
   HELIOCENTRIC CONIC
                                                                   DISTANCE 542.544
    RL 147.37 LAL -.00 LOL 74.68 VL 26.569 GAL 3.70 AZL 86.61 MCA 268.29 SMA 121.18 ECC .22514 INC 3.3898 V1 30.232 RP 108.83 LAP -3.39 LOP 342.97 VP 36.657 GAP 11.64 AZP 90.10 TAL 167.03 TAP 75.32 RCA 93.90 APO 148.46 V2 34.821 RC 176.312 GL 20.30 GP .48 ZAL 64.47 ZAP 171.80 ETS 3.60 ZAE 129.35 ETE 179.68 ZAC 85.78 ETC 166.05 CLP-171.81
   PLANETOCENTRIC CONIC
    C3 20.414 VHL 4.518 DLA 23.34 RAL 2.58 RAD 6567.8 VEL 11.908 PTH 2.12 VHP 7.601 OPA -6.17 RAP 353.04 ECC 1.3360
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         83.68 3 47 51
62.16 23 6 37
                                                                      232.81
                                                                                                                                 -28.25
                                                                                                                    2451.1
                                                                                                                                                  91.52
                 2 57 0 3051.07
21 59 26 4031.51
                                                                                                     3 47 51
                                               -27.66
                                                            100.13
                                                                                                                                    -9.06
                                                                                                                     3431.5
                                                -5.37
                                                             162.56
                                                                          225.72
                                                                                          62.10

85.49 5 22 -

60.31 24 6 22 7 1 30 76 17
                                                                                                                     2130.1
                                                                                                                                  -29.89
                                                                                                                                                  67.94
                   4 36 32 2730.14
                                               -29.58
                                                             76.73
                                                                          233.02
                                                                                                                     3227.7
                                                                                                                                                 140.06
                 23 2 35
                                3827.67
                                               -3.68
                                                             146.65
                                                                          224.79
       100.00
                                                                                                                                  -33.81
                                                                                                                     1801.9
                                                                                                                                                  42.79
                                                                                          89.95 7 1 30
55.82 24 36 17
                   6 21 28 2401.85
                                              -34.18
                                                              52.01
                                                                         233.23
                                                                                                                     3128.7
                                                                                                                                   -4.26
                                                                                                                                                130.50
                 23 34 8
                                3728.73
                                                .23
                                                             136.71
                                                                          222.35
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SCT 5652.2 SGR 410.6 SG3 178.8
RRT .0691 RRF .0500 RTF .9379
SGB 5667.1 R23 -.0152 R13 .9379
                                                                                                                 ST 3272.7 SR 354.3 SS 809.1
    TOE 2.5086 TRA 1.8337 TC3-4.3448 BAU 1.1865
                                                                                                                 CRT .9309 CRS -.8786 CST -.9920
    ROE .2768 RRA -.1164 RC3 .1549 FAU .02417
FDE .9090 FRA 1.0479 FC3-1.0249 BSP 18270
BDE 2.5238 BRA 1.8374 BC3 4.3475 FSP -610
                                                                                                                LSA 3385.8 MSA 163.4 SSA 17.7
                                                                SG1 5652.3 SG2 409.7 THA
                                                                                                                 EL1 3289.3 EL2 128.8 ALF
                                                                                                    .29
                                                                                                                            ARRIVAL DATE JUN 13 1966
                                                                    FLIGHT TIME 188.00
LAUNCH DATE DEC 7 1965
                                                                   DISTANCE 548.047
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 26.528 GAL 4.28 AZL 86.60 MCA 271.46 SMA 120.94 ECC .23038 INC 3.3953 V1 30.232 RP 108.81 LAP -3.39 LOP 346.14 VP 36.635 GAP 12.03 AZP 89.91 TAL 165.37 TAP 76.82 RCA 93.08 APO 148.80 V2 34.828 RC 178.366 GL 19.53 GP .46 ZAL 61.83 ZAP 172.64 ETS 4.00 ZAE 129.35 ETE 179.71 ZAC 88.04 ETC 166.20 CLP-172.65
   PLANETOCENTRIC CONIC
                                                                                             2.13 VHP 7.837 DPA -5.25 RAP 355.18 ECC 1.3615
    C3 21.969 VHL 4.687 DLA 23.71 RAL 5.45 RAD 6567.9 VEL 11.973 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      3 54 22
                                                                                                                     2488.2
                                                                                                                                   -28.13
                                                                                                                                                 94.22
                                                             102.80
                                                                         237.12
                                                                                          82.37
       90.00
                    3 2 54
                               3088 . 19
                                               -27.35
                                                                                                                     3429.7
                                                                                                                                    -9.12
                                                                                                                                                 155.71
                                                                           229.87
                                                                                           62.17
                                                                                                     23 23 34
                                4029.67
                                                -5.43
                                                             162.45
        90.00
                   22 16 25
                                                                                           84.18
                                                                                                                                                  70.49
                                               -29.37
                                                              79.26
                                                                           237.39
                                                                                                      5 29 22
                                                                                                                     2164.5
                                                                                                                                   -29.87
       100.00
                    4 43 18
                                2764.51
                                                                                                                                    -7.58
                                                                                                                                                 140.11
                                                                           228.89
                                                                                           60.31 24 22 31
                                                                                                                     3228.6
                                                             146.70
       100.00
                   23 18 42
                               3828.59
                                               -3.65
                                                              54.37
                                                                          237.75
                                                                                           88.55
                                                                                                      7 10 4
                                                                                                                     1832.1
                                                                                                                                   -33.98
                                                                                                                                                  45.13
                    6 29 32 2432.12
       110.00
                                               -34.16
                                                                                           55.82
                                                             136.97
                                                                           226.35
                                                                                                     24 51 11
                                                                                                                     3133.7
                                                                                                                                   -4.07
                                                                                                                                                 130.76
                                3733.74
                 23 48 57
                                                  .42
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SGT 5680.7 SGR 412.8 SG3 172.6
RRT .1030 RRF .0849 RTF .9393
                                                                                                              ST 3282.9 SR 364.9 SS 798.6
CRT .9259 CRS -.8746 CST -.9927
LSA 3394.1 MSA 167.2 SSA 17.2
    TOE 2.5948 TRA 2.0938 TC3-4.0475 BAU 1.1894
    ROE .2961 RRA -.1148 RC3 .1345 FAU .02226
FOE .8962 FRA 1.0893 FC3 -.8774 BSP 18334
                                                                SGB 5695.7 R23 -.0124 R13 .9393
                                                                                                               EL1 3300.2 EL2 137.1 ALF 5.89
    BOE 2.6116 BRA 2.0969 BC3 4.0497 FSP -587
                                                                SG1 5680.9 SG2 410.6 THA .43
```

ARRIVAL DATE JUN 15 1966

LAUNCH DATE DEC 7 1965

```
DISTANCE 553.502
    HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 26.487 GAL 4.89 A7L 86.60 HCA 274.63 SMA 120.70 ECC .23609 INC 3.4009 V1 30.232 RP 108.78 LAP -5.39 LOP 349.32 VP 36.613 GAP 12.44 A7P 89.73 TAL 163.71 TAP 78.34 RCA 92.21 APO 149.20 VZ 34.836 RC 180.400 GL 18.73 GP .45 7AL 59.27 7AP 173.48 ETS 4.48 7AE 129.34 ETE 179.73 7AC 90.30 ETC 166.53 CLP-173.49
    PLANETOCENTRIC CONIC
     C3 23.763 VHL 4.875 DLA 24.01 RAL 8.26 RAD 6568.0 VEL 12.047 PTH 2.15 VHP 8.089 DPA -4.32 RAP 357.33 ECC 1.3911 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 9 22 3123.86 -27.00 105.36 241.44 81.14 4 1 25 2523.9 -27.95 96.82 90.00 22.32 20 4032.20 -5.35 162.60 234.01 62.15 23 39 33 3432.2 -9.04 155.86
                                                                                 162.60 234.01 62.15 23 39 33 81.70 241.77 82.92 5 37 9 146.97 232.98 60.29 24 37 46 56.68 242.28 87.19 7 18 56 137.42 230.35 55.82 1 9 16 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            -29.79
         100.00
                          4 50 31
                                         2797.71
                                                              -29.12
                                                                                                                                                         2197.7
                                                                                                                                                                                               72.96
                      23 33 52 3833.59
6 37 54 2461.75
0 6 54 3742.31
                                                                                                                                                    3233.6
1861.7
                                                                                                                                                                          -7.41
                                                                                                                                                                                             140.39
                                                               -3.48
                                                                               146.97
                                                                                                                                                                        -34.10
                                                                                                                                                                                              47.44
                                                              -34.08
                                                                                                                                              131.21

ORBIT DETERMINATION ACCURACY

ST 3277.2 SR 374.4 SS 786.0

CRT .9210 CRS -.8706 CST -.9932

LSA 3386.5 MSA 171.1 Sec
                                                                                                                                                                             -3.74
                                                                                                                                                                                             131.21
                                                                               137.42
                                                                                                                                                        3142.3
    DIFFERENTIAL CORRECTIONS
                                                                                  SCT 5704.4 SGR 414.2 SG3 166.6

RRT .1362 RRF .1186 RTF .9411

SGB 5719.4 R23 -.0103 R13 .9411

SG1 5704.6 SG2 410.4 THA .57
     TOE 2.6762 TRA 2.3655 TC3-3.7520 BAU 1.1925
     ROE .3164 RRA -.1117 RC3 .1151 FAU .02053
FDE .8818 FRA 1.1294 FC3 -.7479 BSP 18476
                                                                                                                                                   LSA 3386.5 MSA 171.1 SSA 16.6
EL1 3295.4 EL2 145.1 ALF 6.02
     BDE 2.6949 BRA 2.3681 BC3 3.7538 FSP -569
                                                                                                                                                                  ARRIVAL DATE JUN 17 1966
                                                                                          FLIGHT TIME 192.00
LAUNCH DATE DEC 7 1965
                                                                                         DISTANCE 558.904
    HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 26.447 GAL 5.54 AZL 86.59 HCA 277.80 SMA 120.47 ECC .24232 INC 3.4065 V1 30.232 RP 108.76 LAP -3.37 LOP 352.49 VP 36.592 GAP 12.89 AZP 89.54 TAL 162.06 TAP 79.86 RCA 91.28 APO 149.66 V2 34.845 RC 182.414 GL 17.92 GP .44 ZAL 56.78 ZAP 174.31 ETS 5.06 ZAE 129.34 ETE 179.77 ZAC 92.56 ETC 166.43 CLP-174.33
    PLANETOCENTRIC CONIC
     C3 25.832 VHL 5.083 DLA 24.26 RAL 10.99 RAD 6568.D VEL 12.133 PTH 2.17 VHP 8.359 DPA -3.38 RAP 359.47 ECC 1.4251
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 16 23 3157.92 -26.62 107.78 245.76 79.98 4 9 1 2557.9 -27.74 99.29
                                                                                                                     79.98
62.11 23 54 26
81.73 5 45 21 2225
60.26 24 52 2 3242.7
85.86 7 28 2 1890.7
45.84 1 22 39 3154.4
ORBIT OETEI
ST 3261.9
                                                                                                                                                                             -8.82
                                                                                162.99
                                                                                                  238.14
          90.00
                       22 47 7
                                         4039.23
                                                               -5.13
                       4 58 11 2829.66
23 47 59 3842.73
6 46 32 2490.72
0 20 5 3754.42
                                                                                                                                                                           -29.67
                                                                                                                                                                                               75.32
                                                                                 84.03
                                                                                              246.16
237.06
                                                                                                  246.16
        100.00
                                                              -28.83
                                                                                                                                                                            -7.11
                                                              -3.17
                                                                               147.47
        100.00
                                                                                              246.81
                                                                                                                                                                         -34.16
-3.28
                                                              -33.96
                                                                                 58.94
        110.00
                                                              1.21
                                                                               138.05
                                                                                                  234.33
        110.00
    DIFFERENTIAL CORRECTIONS
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5723.0 SGR 414.9 SG3 160.8
RRT .1694 RRF .1525 RTF .9430
SGB 5738.0 R23 -.0082 R13 .9430
                                                                                                                                                    ST 3261.9 SR 382.7 SS 773.4
     TOE 2.7571 TRA 2.6532 TC3-3.4543 BAU 1.1934
                                                                                 RRT .1694 RRF .1525 RTF .9430 CRT .9161 CRS -.8669 CST -.9938 SGB 5738.0 R23 -.0082 R13 .9430 LSA 3369.5 MSA 175.1 SSA 16.0 SG1 5723.4 SG2 408.9 THA .71 EL1 3280.8 EL2 152.5 ALF 6.15
                                                                                                                                                    CRT .9161 CRS -.8669 CST -.9938
     ROE .3377 RRA -.1070 RC3 .0971 FAU .01884
FOE .8683 FRA 1.1699 FC3 -.6316 BSP 18604
BOE 2.7777 BRA 2.6554 BC3 3.4557 FSP -550
                                                                                                                                                                ARRIVAL DATE JUN 19 1966
                                                                                        FLIGHT TIME 194.00
LAUNCH DATE DEC 7 1965
                                                                                        DISTANCE 564.245
    HELIOCENTRIC CONIC
    RL 147.37 LAL __.00 LOL 74.68 VL 26.408 GAL 6.22 A7L 86.59 MCA 280.97 SMA 120.24 ECC .24912 INC 3.4122 V1 30.232
RP 108.73 LAP -3.35 LOP 355.67 VP 36.572 GAP 13.36 A7P 89.35 TAL 160.43 TAP 81.40 RCA 90.29 APO 150.20 V2 34.854
RC 184.407 GL 17.11 GP .42 TAL 54.38 ZAP 175.15 ETS 5.82 ZAE 129.34 ETE 179.80 ZAC 94.83 ETC 166.51 CLP-175.16
    PLANETOCENTRIC CONIC
     C3 28.219 VHL 5.312 DLA 24.44 RAL 13.64 RAD 6568.1 VEL 12.231 PTH 2.20 VHP 8.648 DPA -2.43 RAP
                                                                                                               78.91 4 17 8
62.05 24 8 11
80.60 5 53 58
60.22 1 9 13
44.57 7 37 21
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              250.08
                                                                                                                                                    2590.2
                                                                                                                                                                        -27.49
                       3 23 58 3190.22
23 0 40 4050.83
                                                                                                                                                                                          101.62
                                                              -26.22
                                                                               110.06
         90.00
                                                                                                                                                        3450.8
                                                                                                                                                                                             156.92
                                                                              163.64
                                                                                                 242.24
                                                                                                                                                                           -8.46
                                                              -4.76
          90.00
                                                                                                250.54
                                                                                                                                                        2260.3
                                                                                                                                                                           -29.51
                                                                                                                                                                                              77.59
                          5 6 18 2860.29
                                                              -28.51
                                                                                 86.25
        100.00
                                                                                                                                                                        -6.67
                                                                              148.20 241.12
                                                                                                                                                                                             141.64
                                                                                                                                                        3256.0
                         0 4 57 3656.00
                                                              -2.73
        100.00
                                                                                                                                                                         -34.18
                                                                          61.13 251.35
138.87 238.29
                                                                                 51.91
                                                                                                                                                        1919.0
                         6 55 22 2519.04
0 32 22 3770.01
                                                             -33.80
        110.00
                                                                                                                                                      3170.0
                                                                                                                                                                          -2.69
                                                                                                                                                                                             132.66
                                                             1.80
        110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 3238.3 SR 389.7 SS 761.0
CRT .9113 CRS -.8654 CST -.9943
                                                                                  SGT 5737.4 SGR 414.9 SG3 155.2

RRT .2028 RRF .1865 RTF .9451

SGB 5752.4 R23 -.0063 R13 .9451

SGI 5738.0 SG2 406.2 THA .84
     TOE 2.8381 TRA 2.9585 TC3-3.1587 BAU 1.1920
     RDE .3598 RRA -.1006 RC3 .0806 FAU .01723
FDE .8556 FRA 1.2114 FC3 -.5286 BSP .18716
BDE 2.8608 BRA 2.9603 BC3 3.1597 FSP -533
                                                                                                                                                   LSA 3344.4 MSA 179.0 SSA 15.4
EL1 3257.7 EL2 159.5 ALF 6.27
                                                                                                                                                                 ARRIVAL DATE JUN 21 1966
                                                                                         FLIGHT TIME 196.00
LAUNCH DATE DEC. 7 1965
                                                                                         DISTANCE 569.515
    HELTOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 26.368 GAL 6.95 AZL 86.58 MCA.284.15 SMA 120.02 ECC .25656 INC 3.4180 V1 30.232
RP 108.70 LAP -3.31 LOP 358.85 VP 36.553 GAP 13.87 AZP 89.16 TAL 158.82 TAP 82.96 RCA 89.22 APO 150.81 V2 34.863
RC 186.379 GL 16.28 GP .41 ZAL 52.07 ZAP 175.98 ETS 6.84 ZAE 129.33 ETE 179.83 ZAC 97.10 ETC 166.57 CLP-176.00
    PLANETOCENTRIC CONIC
     C3 30.973 VHL 5.565 OLA 24.56 RAL 16.20 RAD 6568.2 VEL 12.343 PTH 2.23 VHP 8.959 DPA -1.48 RAP
                                                                                                                                                                               3.74 ECC 1.5097
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 32 6 3220.73 -25.80 112.19 254.38 77.91 4 25 47 2620.7 -27.21 103.81
                                                                                                                      61.98 24 20 44
79.54 6 2 58
60.18 1 21 25
83.32 7 46 50
55.90 1 46 55
                                                                                                                                                                             -7.96
                                                                                                                                                                                             157.84
                                                                                164.55
                                                                                                                                                         3467.0
                       23 12 57
                                                               -4.24
                                                                                                  246.29
          90.00
                                          4066.96
                                                                                                                                                         2289.6
                                                                                                                                                                          -29.32
                                                                                                                                                                                               79.74
                                                              -28.16
                                                                                 88.36
                                                                                                  254.91
         100.00
                        5 14 48 2889.59
                                                                                                                                                                                             142.60
                                                                                                                                                         3273.3
                                                                                                                                                                           -6.09
                                         3873.33
                                                              -2.14
                                                                               149.16
                                                                                                245.13
         100.00
                         0 16 52
                                                                                                                                                         1946.7
                                                                                                                                                                                               54.07
                                                                                                                                                                         -34.16
                        7 4 24 2546.72
                                                              -33.60
                                                                                 63.27
                                                                                                  255.86
        110.00
                                                                                                                                                         3189.0
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                          0 43 46
                                         3788.96
                                                             2.53
                                                                               139.86
                                                                                                  242.22
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGI 5749.3 SGR 414.2 SG3 150.0 ST 3211.8 SR 395.4 SS 750.6

RRT .2369 RRF .2214 RTF .9472 CRT .9065 CRS -.8602 CST -.9949

SGB 5764.2 R23 -.0042 R13 .9472 LSA 3316.9 MSA 182.7 65A 14.8

SGI 5750.1 SG2 402.4 THA .98 EL1 3231.8 EL2 165.9 ALF 6.38
     TOE 2.9238 TRA 3.2871 TC3-2.8622 BAU 1.1855
     ROE .3828 RRA -.0922 RC3 .0659 FAU .01558
FOE .8459 FRA 1.2559 FC3 -.4356 BSP 18716
BDE 2.9488 BRA 3.2884 BC3 2.8630 FSP -512
```

FLIGHT TIME 190.00

APPIVAL DATE JUN 23 1966

```
LAUNCH DATE DEC 7 1965
     RL 147.37 LAL .00 LOL 74.68 VL 26.330 GAL 7.72 AZL 86.58 MCA 287.32 SMA 119.80 ECC .26472 INC 3.4240 VI 30.232 RP 108.67 LAP -3.27 LOP 2.03 VP 36.534 GAP 14.42 AZP 88.98 TAL 157.23 TAP 84.55 RCA 88.08 APO 151.51 V2 34.873 RC 188.330 GL 15.46 GP .40 ZAL 49.85 ZAP 176.82 ETS 8.36 ZAE 129.32 ETE 179.86 ZAC 99.36 ETC 166.60 CLP-176.85
                                                                                                               DISTANCE 574.700
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 34.154 VHL 5.844 OLA 24.63 RAL 18.66 RAD 6568.3 VEL 12.471 PTH 2.26 VMP 9.294 DPA -.52 RAP 5.87 ECC 1,5621 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      258.66
                                                                                                                                                 77.00 4 34 54
                                3 40 45 3249.40
                                                                             -25.38
                                                                                                   114.19
            90.00
                                                                                                                                                                                                                                              159.01
                                                                                                                                                                                                3487.5
                                                                                                                                                     61.89
                                                                                                                                                                     24 32 4
                                                                                                                          250.29
                                                                               -3.58
                                                                                                    165.70
                                                                                                                                                                  6 12 18
                             23 23 56 4087.54
            90.00
                                                                                                                                                                                                                                              81.80
                                                                                                                                                                                                2317.6
                                                                                                                                                                                                                       -29.10
                                                                                                                                                     78.55
                                                                                                                          259.25
                                5 23 40 2917.57
                                                                              -27.80
                                                                                                     90.36
                                                                                                                    249.08
          100.00
                                                                                                                                                                                                                       -5.38
                                                                                                                                                                                                                                             143.78
                                                                                                                                                                                                3294.6
                                                                                                                                                     60.14
                                                                                                                                                                      1 32 33
                               0 27 38 3894.60
7 13 33 2573.79
                                                                                                    150.32
                                                                              -1.42
          100.00
                                                                                                                                                                                                                     -34.10
                                                                                                                                                                                                                                                56.19
                                                                                                                                                                   7 56 27
                                                                                                                                                                                                1973.8
                                                                                                                         260.35
                                                                                                                                                     82.11
                                                                             -33.37
                                                                                                      65.35
          110.00
                                                                                                                                                                                                                         -1.12
                                                                               3.37
                                                                                                                          246.10
                                                                                                                                                     55.96
                                                                                                                                                                      1 57 46
                                                                                                                                                                                                3211.1
                                                                                                    141.02
                               0 54 15 3811.15
          110.00
                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                       HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                          ST 3173.9 SR 399.4 S5 739.4
CRT .9018 CRS -.8571 CST -.9954
                                                                                                       SGT 5754.6 SGR 412.8 SG3 144.9
RRT .2705 RRF .2554 RTF .9497
       TDE 3.0060 TRA 3.6313 TC3-2.5799 BAU 1.1782
      RDE .4065 RRA -.0819 RC3 .0527 FAU .01408
FDE .8354 FRA 1.3001 FC3 -.3569 BSP 18810
                                                                                                                                                                                         L5A 3278.0 MSA 186.1 SSA 14.2
E11 3104.3 EL2 171.5 ALF 6.49
                                                                                                         SGB 5769.4 R23 -. 0028 R13 .9497
                                                                                                                                                                                       EL1 3194.3 EL2 171.5 ALF
                                                                                                         SG1 5755.7 SG2 397.4 THA 1.12
       BDE 3.0333 BRA 3.6322 BC3 2.5804 FSP -496
                                                                                                                                                                                                            ARRIVAL DATE JUN 25 1966
                                                                                                                 FLIGHT TIME 200.00
 LAUNCH DATE DEC 7 1965
                                                                                                                DISTANCE 579.789
      RL 147.37 LAL .00 LOL 74.68 VL 26.292 GAL 8.54 AZL 86.57 HCA 290.50 SHA 119.58 ECC .27367 INC 3.4302 VI 30.232 RP 108.63 LAP -3.21 LOP 5.21 VP 36.517 GAP 15.01 AZP 88.80 TAL 155.67 TAP 86.17 RCA 86.85 APO 152.30 V2 34.884 RC 190.259 GL 14.65 GP .39 ZAL 47.73 ZAP 177.67 ETS 10.92 ZAE 129.29 ETE 179.90 ZAC 101.61 ETC 166.61 CLP-177.70
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
       C3 37.836 VHL 6.151 DLA 24.65 RAL 21.02 RAD 6568.5 VEL 12.618 PTH 2.29 VMP 9.658 DPA .43 RAP 7.99 ECC 1.6227 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                             2676.3
                                                                                                                                                                                                                     -26.61 107.77
                                                                                                                                                    76.16
                                 3 49 52 3276.30
23 33 39 4112.37
                                                                             -24.95
                                                                                                    116.04
                                                                                                                          262.91
                                                                                                                                                                                                                                                160.42
                                                                                                                                                                                                                           -6.54
                                                                                                                                                                                                  3512.4
                                                                                                                                                      61.81
                                                                                                                                                                      24 42 12
                                                                                                                            254.21
                                                                                                     167.09
                                                                                -2.79
             90.00
                               23 33 39
                                                                                                                                                                      6 21 55
                                                                                                                                                                                                                         -28.85
                                                                                                                                                                                                                                                 83.74
                                                                                                                                                                                                 2344.3
                                                                                                          7.37 264.80 80.94 8 6 8
2.34 249.93 56.06 2 7 46
MID-COURSE EXECUTION ACCURACY
SGT 5755.8 SGR 410.7
                               5 32 50 2944.29
0 37 18 3919.61
7 22 48 2600.27
1 3 49 3836.39
                                                                                                                            263.55
                                                                                                                                                      77.61
                                                                                                       92.26
                                                                             -27.42
           100.00
                                                                                                                                                                                                  3319.6
                                                                                                                                                                                                                           -4.54
                                                                                                                                                                                                                                               145.16
                                                                                                     151.70
                                                                                 -.57
           100.00
                                                                                                                                                                                                                         -34.00
                                                                                                                                                                                                                                                 58.25
                                                                                                                                                                                                 2000.3
                                                                                                       67.37
                                                                              -33.10
           110.00
                                                                                                                                                                                                                             -.15
                                                                                                                                                                                                                                                136.13
                                                                                                                                                                                                 3236.4
                                                                                                     142.34
           110.00
                                                                                 4.34
                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                           ST 3130.9 SR 401.9 55 729.4
CRT .8970 CRS -.8542 CST -.9959
                                                                                                          SGT 5755.8 SGR 410.7 SG3 139.9

RRT .3041 RRF .2895 RTF .9524

SGB 5770.5 R23 -.0016 R13 .9524

SG1 5757.2 SG2 391.2 THA 1.25
        TDE 3.0900 TRA 3.9981 TC3-2.3073 BAU 1.1673
        RDE .4308 RRA -.0695 RC3 .0413 FAU .01262
                                                                                                                                                                                          LSA 3234.2 MSA 189.0 SSA 13.7
EL1 3151.6 EL2 176.5 ALF 6.59
        FDE .8264 FRA 1.3465 FC3 -.2888 83P 18889
        BOE 3.1199 BRA 3.9987 BC3 2.3076 FSP -480
                                                                                                                                                                                                            ARRIVAL DATE JUN 27 1966
                                                                                                                 FLIGHT TIME 202.00
 LAUNCH DATE DEC 7 1965
                                                                                                                DISTANCE 584.762
       RELIGIONNE TO CONTE T
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
                                                                                                                                                                                                      1.38 RAP 10.10 ECC 1.6930
        C3 42.109 VML 6.489 DLA 24.62 RAL 23.27 RAD 6568.6 VEL 12.786 PTH 2.33 VHP 10.055 DPA
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 59 22 3301.50 -24.53 117.77 267.13 75.40 4 54 24 2701.5 -26.30 109.55 90.00 23 42 7 4141.20 -1.86 168.70 258.06 61.74 24 51 8 3541.2 -5.62 162.04 100.00 5 42 15 2969.81 -27.04 94.05 267.62 76.74 6 31 45 2369.8 -28.59 85.60 100.00 0 45 51 3448.13 .40 153.26 248.81 60.11 5 51 34 34 348.11 -3.58 146.73
                                                                                                                                                                                                 3348.1
                                 0 45 51 3948.13
7 32 5 2626.20
                                                                                   .40
                                                                                                      153.26
            100.00
                                                                                                                                                                                                                        -33.86
                                                                                                                                                                                                                                                  60.26
                                                                                                                                                                                                 2026.2
                                                                                                                                                                         8 15 51
                                                                                                                                                       79.81
                                                                                                                                                                      8 15 51
2 16 55
                                                                                                                            269.20
                                 7 32 5
                                                                              -32.81
                                                                                                        69.34
            110.00
                                                                                                                                                                                                                               .92
                                                                                                                                                                                                                                                137.59
                                                                                                     143.82
                                                                                                                                                       56.20
                                                                                                                                                                                                 3264.5
                                                                                                                            253.70
                                  1 12 31
                                                                                 5.40
                                                       3864.50
            110.00
                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                            MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                          ST 3084.3 SR 402.7 SS 720.9
CRT .8924 CRS -.8515 CST -.9963
                                                                                                           RET .3380 RRF .3237 RTF .9552
SGB 5767.4 R23 -.0006 R13 .9552
SGI 5754.6 SGZ 383.9 THA 1.38
        TOE 3.1774 TRA 4.3899 TC3-2.0456 BAU 1.1517
        ROE .4558 RRA -.0548 RC3 .0316 FAU .01119
FOE .8192 FRA 1.3957 FC3 -.2301 BSP 18947
                                                                                                                                                                                            LSA 3187.2 MSA 191.4 SSA 13.1
                                                                                                                                                                                           EL1 3105.3 ELZ 180.5 ALF
        BOE 3.2099 BRA 4.3902 BC3 2.0459 FSP -465
                                                                                                                                                                                                             ARRIVAL DATE JUN 29 1966
                                                                                                                   FLIGHT TIME 204.00
  LAUNCH DATE DEC 7 1965
        RL 147.37 LAL .00 LOL 74.68 VL 26.217 GAL 10.38 AZL 86.56 HCA 296.86 SMA 119.16 ECC .29439 INC 3.4435 V1 30.232 RP 108.37 LAP -3.07 LOP 11.59 VP 36.485 GAP 16.37 AZP 88.44 TAL 152.66 TAP 89.52 RCA 84.08 APO 154.24 V2 34.906 RC 194.054 GL 13.05 GP .38 ZAL 43.79 ZAP 179.33 ETS 35.79 ZAE 129.19 ETE 179.97 ZAC 106.08 ETC 166.54 CLP-179.45
                                                                                                                  DISTANCE 589.598
       HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC
                                                                                                                                                                                                        2.33 RAP 12.20 ECC 1.7749
         C3 47.083 VHL 6.862 DLA 24.54 RAL 25.41 RAD 6568.8 VEL 12.979 PTH 2.37 VHP 10.487 DPA
        C3 47.083 VHL 6.862 DLA 24.54 RAL 25.41 RAD 6568.8 VEL 12.979 PTH 2.37 VHP 10.487 DPA 2.33 RAP 12.20 ECC 1.7749

LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 4 9 12 3325.12 -24.12 119.37 271.30 74.70 5 4 37 2725.1 -25.99 111.20

90.00 23 49 22 4173.72 -.81 170.52 261.83 61.69 24 58 56 3573.7 -4.59 163.87

100.00 5 5 15 1 2994.19 -26.65 95.76 272.03 75.93 6 41 45 2394.2 -28.32 87.36

100.00 0 55 20 3979.90 1.47 155.00 260.56 60.14 1 59 40 3379.9 -2.51 148.48

110.00 7 41 21 2651.59 -32.48 71.25 273.54 78.72 8 25 32 2051.6 -33.70 62.22

110.00 1 20 19 3895.26 6.56 145.4 257.41 56.38 2 25 15 3295.3 2.10 139.20
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                            SCT 5747.8 SGR 404.7 SG3 150.8 ST 3037.4 SR 402.1 S5 714.9 RRT .3723 RRF .3585 RTF .9582 CRT .8879 CRS -.8493 CST -.9968 SGB 5762.0 R23 .0003 R13 .9582 LSA 3140.2 MSA 193.0 SSA 12.6 RSG 5749.8 SG2 375.5 THA 1.51 EL1 3058.4 EL2 183.7 ALF 6.73
       DIFFERENTIAL CORRECTIONS
         TDE 3.2719 TRA 4.8123 TC3-1.7938 BAU 1.1292
         ROE .4813 RRA -.0376 RC3 .0236 FAU .00973
FDE .8150 FRA 1.4492 FC3 -.1789 BSP 18914
BDE 3.3071 BRA 4.8124 BC3 1.7940 FSP -447
```

FLIGHT TIME 198.00

```
LAUNCH DATE DEC 7 1965
                                                                                 FLIGHT TIME 206.00
                                                                                                                                                  ARRIVAL DATE JUL 1 1966
     HELIOCENTRIC CONIC
                                                                                 DISTANCE 594.270
      RL 147.37 LAL .00 LOL 74.68 VL 26.181 GAL 11.40 A7L 86.55 MCA 300.05 SMA 118.96 ECC .30641 INC 3.4507 V1 30.232
RP 108.53 LAP -2.99 LOP 14.77 VP 36.470 GAP 17.14 AZP 88.27 TAL 151.23 TAP 91.27 RCA 82.51 APO 155.41 V2 34.918
RC 195.918 GL 12.26 GP .37 ZAL 41.98 ZAP 179.49 ETS 135.10 ZAE 129.11 ETE 180.00 ZAC 108.28 ETC 166.47 CLP 179.65
     PLANETOCENTRIC CONTC
      C3 52.894 VHL 7.273 OLA 24.42 RAL 27.44 RAD 6568.9 VEL 13.201 PTH 2.41 VHP 10.963 DPA
                                                                                                                                               3.26 RAP 14.28 ECC 1.8705
      LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT [NJ 2 LONG 90.00 4 19 16 3347.27 -23.71 120.67 275.41 74.05 5 15 3 2747.3 -25.67 112.75
                     4 19 16 3347.27
23 55 28 4209.61
6 1 33 3017.47
0 59 47 4014.64
7 50 34 2676.42
1 27 16 3928.45
          90.00
                                                           .35
                                                                        172.52
                                                                                         265.51
                                                                                                            61.68 25 5 37
                                                                                                                                           3609.6
                                                                                                                                                            -3.44
                                                                                                                                                                            165.88
                                                                                                           75.16 6 51 50
60.21 2 6 42
77.68 8 35 10
56.62 2 32 45
         100.00
                                                         -26.25
                                                                          97.38
                                                                                         276.18
                                                                                                                                          2417.5
                                                                                                                                                           -28.03
                                                                                                                                                                             89.03
                                                                                                                                       2417.5
3414.6
2076.4
3328.5
                                                          2.65
        100.00
                                                                        156.91
                                                                                         264.23
                                                                                                                                                           -1.33
                                                                                                                                                                            150.39
        110.00
                                                         -32.14
                                                                                         277.81
                                                                          73.10
                                                                                                                                                          -33.50
                                                                                                                                                                            64.14
        110.00
                                                                        147.20
                                                                                        261.05
                                                                                                                                          3328.5
                                                                                                                                                                            140.93
                                                                                                                                                             3.37
    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                           SGT 5735.9 SGR 400.7 SG3 126.5
RRT .4061 RRF .3927 RTF .9614
SGB 5749.9 R23 .0007 R13 .9614
SGI 5738.2 SG2 366.0 THA 1.63
      TOE 3.3672 TRA 5.2607 TC3-1.5595 BAU 1.1029
                                                                                                                                     5T 2984,3 SR 399.7 S5 709.6
                                                                                                                                   CRT .8835 CRS -.8471 CST -.9972
LSA 3087.4 MSA 193.9 SSA 12.1
     ROE .5073 RRA -.0178 RC3 .0171 FAU .00836
     FOE .8114 FRA 1.5050 FC3 -.1368 BSP 18961
     BOE 3.4052 BRA 5.2607 BC3 1.5596 FSP -433
                                                                                                                                     EL1 3005.2 EL2 185.9 ALF 6.77
 LAUNCH DATE DEC 7 1965
                                                                                 FLIGHT TIME 208.00
                                                                                                                                                  ARRIVAL DATE JUL 3 1966
    HELIOCENTRIC CONIC
                                                                                 DISTANCE 598.742
     RL 147.37 LAL .00 LOL 74.68 VL 26.146 GAL 12.51 AZL 86.54 MCA 303.23 SMA 118.76 ECC .31975 INC 3.4584 V1 30.232
RP 108.49 LAP -2.89 LOP 17.96 VP 36.456 GAP 18.00 AZP 88.10 TAL 149.86 TAP 93.09 RCA 80.79 APO 156.74 V2 34.930
RC 197.761 GL 11.49 GP .36 ZAL 40.28 ZAP 178.67 ETS 165.89 ZAE 129.00 ETE 180.04 ZAC 110.46 ETC 166.36 CLP 178.72
    PLANETOCENTRIC CONIC
     C3 59.715 VML 7.728 DLA 24.26 RAL 29.34 RAD 6569.1 VEL 13.456 PTH 2.46 VMP 11.486 DPA
                                                                                                                                               4.18 RAP 16.35 ECC 1.9828
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    A 29 28 3368.01 -23.32

0 4 23 4248.49 1.60

6 11 18 3039.69 -25.85

1 5 14 4052.05 3.91

7 59 40 2700.66 -31.77

1 33 22 3963.84 9.13
         90.00
                                                                       122.26
                                                                                      279.45
                                                                                                        73.46 5 25 36 2768.0
                                                                                                                                                         -25.36
                                                                                                                                                                        114.19
                                                                           14.68 269.09 61.72 1 15 12 18.91 280.25 74.45 7 1 58 18.97 267.81 60.34 2 12 46 4.90 281.99 76.67 8 44 41 9.09 264.61 56.92 2 39 26 MID-COURSE EXECUTION ACCURACY SGT 572D.2 SGR 304 4 22 7
         90.00
                                                                        174.68
                                                                                                                                                            -2.19
                                                                                                                                           3648.5
                                                                                                                                                                            168.06
        100.00
                                                                         98.91
                                                                                                                                           2439.7
                                                                                                                                                                             90.61
                                                                                                                                                           -27.74
        100.00
                                                                       158.97
                                                                                                                                          3452.0
                                                                                                                                                              -.06
                                                                                                                                                                           152.44
        110.00
                                                                         74.90
                                                                                                                                          2100.7
                                                                                                                                                                            65.99
        110.00
                                                                        149.09
                                                                                                                                          3363.8
                                                                                                                                                             4.71
                                                                                                                                                                           142.79
    DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                            SGT 5720.2 SGR 396.1 SG3 122.4 ST 2930.0 SR 395.7 S5 706.5
RRT .4401 RRF .4270 RTF .9647 CRT .8793 CRS -.8453 CST -.9976
SGB 5733.9 R23 .0009 R13 .9647 LSA 3033.6 MSA 194.0 SSA 11.5
SGI 5722.9 SG2 355.6 THA 1.75 ELI 2950.7 ELZ 187.1 ALF 6.80
     TOE 3.4695 TRA 5.7433 TC3-1.3395 BAU 1.0694
     RDE .5337 RRA .0046 RC3 .0120 FAU .00698
FDE .8101 FRA 1.5656 FC3 -.1012 BSP 18989
BDE 3.5103 BRA 5.7433 BC3 1.3395 FSP -419
LAUNCH DATE DEC 7 1965
                                                                                FLIGHT TIME 210.00
                                                                                                                                                ARRIVAL DATE JUL 5 1966
   HELIOCENTRIC CONIC
                                                                               015TANCE 602.972
    RL 147.37 LAL .QO LOL 74.68 VL 26.112 GAL 13.72 ATL 86.53 MCA 306.42 SMA 118.57 ECC .33460 INC 3.4667 V1 30.232
RP 108.45 LAP -2.79 LOP 21.15 VP 36.444 GAP 18.95 ATP 87.94 TAL 148.57 TAP 94.99 RCA 78.90 APO 158.24 VZ 34.942
RC 199.580 GL 10.74 GP .36 ZAL 38.68 ZAP 177.73 ETS 172.79 ZAE 128.85 ETE 180.07 ZAC 112.61 ETC 166.23 CLP 177.75
   PLANETOCENTRIC CONIC
     C3 67.763 VML 8.232 DLA 24.06 RAL 31.12 RAD 6569.3 VEL 13.752 PTH 2.51 VMP 12.067 DPA 5.08 RAP 18.39 ECC 2.1152 LNCH AZMTH LNCH TIME L-I TIME INJUAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      72.92 5 36 13
61.82 1 19 49
                                                                                                                                                                     115.53
                      4 39 46 3387.42
0 8 19 4290.02
                                                       -22.94
         90.00
                                                                       123.56
                                                                                       283.40
                                                                                                                                     2787.4
3690.0
                                                                                                                                                         -25.06
                                                                                       272.57
         90.00
                                                         2.94
                                                                       177.00
                                                                                                                                                           - .85
                                                                                                                                                                          170.37
                      6 21 3 3060.83
                                                                                                                     7 12 4
2 17 54
                                                                                                                                        2460.8
3491.8
       100.00
                                                      -25.46
                                                                       100.35
                                                                                       284.23
                                                                                                          73.78
                                                                                                                                                         -27.44
                                                                                                                                                                           92.11
                                                         5.25
       100.00
                                                                       161.17
                                                                                       271.30
                                                                                                          60.53
                                                                                                                                                           1.29
                                                                                                                                                                          154.63
                                                    -31.39
                      8 8 38 2724.24
1 38 37 4001.20
       110.00
                                                                                                          75.71
                                                                                                                    8 54 3
2 45 18
                                                                                                                                        2124.2
3401.2
                                                                        76.63
                                                                                       286.06
                                                                                                                                                         -33.03
                                                                                                                                                                          67.79
       110.00
                                                      10.51
                                                                       151.10
                                                                                       268.10
                                                                                                         57.29
                                                                                                                                                         6.13
                                                                                                                                                                          144 75
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5700.4 SGR 391.0 SG3 118.5

RRT .4740 RRF .4613 RTF .9680

SGB 5713.7 R23 .D009 R13 .9680

SGI 5703.4 SG2 344.1 THA 1.87
                                                                                                                                    ST 2874.9 SR 390.2 SS 705.8
CRT .8754 CRS -.8440 CST -.9980
    TOE 3.5802 TRA 6.2640 TC3-1.1338 BAU 1.0272
    RDE .5605 RRA .0301 RC3 .0002 FAU .00559
FDE .8116 FRA 1.6317 FC3 -.0714 85P 18997
80E 3.6238 BRA 6.2640 BC3 1.1338 FSP -406
                                                                                                                                    LSA 2979.6 MSA 193.2 SSA 11.0
                                                                                                                                    EL1 2895.2 ELZ 187.3 ALF 6.80
LAUNCH DATE DEC 7 1965
                                                                                FLIGHT TIME 212.00
                                                                                                                                                 ARRIVAL DATE JUL 7 1966
   HELIOCENTRIC CONIC
                                                                               DISTANCE 606.904
    RL 147.37 LAL .00 LOL 74.68 VL 26.078 GAL 15.05 AZL 86.52 MCA 309.61 SMA 118.39 ECC .35117 INC 3.4757 V1 30.232
RP 108.41 LAP -2.68 LOP 24.35 VP 36.432 GAP 20.01 AZP 87.78 TAL 147.37 TAP 96.98 RCA 76.81 APO 159.96 V2 34.955
RC 201.376 GL 10.00 GP .35 ZAL 37.21 ZAP 176.73 ETS 175.77 ZAE 128.66 ETE 180.11 ZAC 114.71 ETC 166.07 CLP 176.75
   PLANETOCENTRIC CONIC
   2 50 21
                                                                                                                                         3440.3
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                        MID-COURBE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5679.2 SGR 385.5 SG3 114.8 ST 2822.2 SR 383.3 SS 708.8 RRT .5082 RRF .4961 RTF .9715 CRT .8721 CRS -.8433 CST -.9983 SGB 5692.3 R23 .0008 R13 .9715 LSA 2928.8 MSA 191.3 SSA 10.5 SGI 5682.6 SG2 331.8 THA 1.98 ELI 2842.1 EL2 186.2 ALF 6.78
    TOE 3.7057 TRA 6.8322 TC3 -.9406 BAU .9723
    RDE .5879 RRA .0589 RC3 .0057 FAU .00409
    FDE .8172 FRA 1.7056 FC3 -.0458 BSP 18898
    BOE 3.7521 BRA 6.8325 BC3 .9406 FSP -391
```

ARRIVAL DATE JUL 9 1966

```
LAUNCH DATE DEC 7 1965
                                                                               DISTANCE 610.466
   HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 26.046 GAL 16.51 AZL 86.51 HCA 312.81 SMA 118.21 ECC .36976 INC 3.4856 VI 30.232 RP 108.37 LAP -2.56 LOP 27.54 VP 36.421 GAP 21.19 AZP 87.63 TAL 146.28 TAP 99.08 RCA 74.50 APO 161.92 V2 34.968
                            9.28 GP .35 ZAL 35.86 ZAP 175.68 ETS 177.45 ZAE 128.42 ETE 180.14 ZAC 116.77 ETC 165.88 CLP 175.69
    RC 203.147 GL
   PLANETOCENTRIC CONIC
                                                                                                                                            6.82 RAP 22.37 ECC 2.4603
    C3 88.730 VHL 9.420 DLA 23.56 RAL 34.29 RAD 6569.7 VEL 14.494 PTH 2.63 VMP 13.436 DPA
    UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH' INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 0 15 3422.12 -22.22 125.85 290.97 71.98 5 57 17 2822.1 -24.48 117.91 90.00 0 13 7 4379.63 5.80 182.03 279.18 62.24 1 26 7 3779.6 2.04 175.37
                                                                                                                      7 31 56
                      6 40 17 3099.59
1 15 46 4177.39
                                                                                                                                        2499.6
                                                                                                                                                          -26.84
                                                                                                                                                                          94.84
                                                       -24.70
                                                                       102.98
                                                                                       291.84
                                                                                                          72.60
       100.00
                                                                                                                                        3577.4
                                                                                                                                                           4.18
                                                                                                                                                                         159.33
                                                                                                         61.13 2 25 23
73.95 9 12 7
                                                                       165.93
                                                                                       277.94
                                                         8.09
       100.00
                     8 25 59 2768.90
1 46 33 4080.85
                                                                                                                                        2168.9
                                                                                                                                                         -32.49
                                                                        79.87
                                                                                       293.83
                                                      -30.59
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                        3480.8
                                                                                                                                                            9.11
                                                                       155.45
                                                      13.41
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5651.0 SGR 379.3 SG3 111.3
RRT .5419 RRF .5303 RTF .9749
SGB 5663.7 R23 .D004 R13 .9749
SGI 5654.7 SG2 318.6 THA 2.09
                                                                                                                                   ST 2766.3 SR 374.8 SS 713.9
CRT .8691 CRS -.8429 CST -.9986
    TOE 3.8395 TRA 7.4449 TC3 -.7646 BAU .9070
    ROE .6155 RRA .0910 RC3 .0041 FAU .00259
FDE .8249 FRA 1.7860 FC3 -.0252 BSP 18907
                                                                                                                                   LSA 2875.2 MSA 188.5 SSA 10.0
EL1 2785.5 EL2 184.1 ALF 6.75
    BOE 5.8886 BRA 7.4455 BC3 .7646 FSP -379
                                                                                                                                                ARRIVAL DATE JUL 11 1966
                                                                                FLIGHT TIME 216.00
LAUNCH DATE DEC 7 1965
                                                                               DISTANCE 613.565
   HELIOCENTRIC CONIC
                          .DD LOL 74.68 VL 26.015 GAL 18.13 AZL 86.50 HCA 316.00 SNA 118.04 ECC .39067 INC 3.4965 V1 30.232

-2.43 LOP 30.74 VP 36.411 GAP 22.53 AZP 87.48 TAL 145.32 TAP 101.32 RCA 71.93 APO 164.16 V2 34.981

8.57 GP .34 ZAL 34.65 ZAP 174.56 ETS 178.54 ZAE 128.12 ETE 180.17 ZAC 118.76 ETC 165.66 CLP 174.57
    RL 147.37 LAL
RP 108.33 LAP
                                           .34 ZAL 34.65 ZAP 174.56 ETS 178.54 ZAE 128.12 ETE 180.17 ZAC 118.76 ETC 165.66 CLP 174.57
                             8.57 GP
    RC 204.893 GL
   PLANETOCENTRIC CONIC
                                                                                                                                             7.64 RAP 24.29 ECC 2.6865
    C3 102.475 VHL 10.123 OLA 23.24 RAL 35.66 RAD 6570.0 VEL 14.960 PTH 2.70 VHP 14.251 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 10 18 3437.21 -21.90 126.84 294.55 71.59 6 7 36 2837.2 -24.22 118.93 90.00 0 13 59 4427.09 7.30 184.72 282.28 62.56 1 27 46 3827.1 3.57 178.03
                                                                                                                     7 41 35
2 27 43
                      6 49 39 3116.92
1 17 20 4222.61
                                                                                                                                         2516.9
                                                                                                                                                          -26.56
                                                                                                                                                                           96.05
                                                                                                          72.09
                                                        -24.34
                                                                       104.15
                                                                                       295.42
       100.00
                                                                                                                                         3622.6
                                                                                                                                                            5.69
                                                                                                                                                                          161.83
                                                                                                          61.55
                                                         9.57
                                                                      168.48
                                                                                       281.06
       100.00
                                                                                                                     9 20 45
                                                                                                                                        3522.7
                                                                                                                                                          -32.20
                                                                                                                                                                           72.71
                      8 34 16 2789.61
1 49 12 4122.68
                                                       -30.19
                                                                        81.35
                                                                                       297.48
                                                                                                          73.16
       110.00
                                                                                                                                                           10.66
                                                                       157.79
                                                                                                                      2 57 55
                                                        14.89
                                                                                       277.95
                                                                                                          58.87
       110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5618.8 SGR 372.7 SG3 107.9
RRT .5753 RRF .5644 RTF .9783
SGB 5631.2 R23 -.0001 R13 .9783
SGI 5622.9 SG2 304.6 THA 2.19
                                                                                                                                     ST 2711.1 SR 365.1 SS 722.7
     TOE 3.9901 TRA 8.1140 TC3 -.6026 BAU .8256
                                                                                                                                     CRT .8668 CRS -.8432 CST -.9989
     ROE .6438 RRA .1268 RC3 .0035 FAU .00095
    FOE .8367 FRA 1.8759 FC3 -.0080 BSP 18893
BDE 4.0417 BRA 8.1150 BC3 .6026 FSP -368
                                                                                                                                     LSA 2823.4 MSA 184.6 SSA 9.4
                                                                                                                                    EL1 2729.6 EL2 180.8 ALF 6.69
                                                                                                                                                APRIVAL DATE JUL 13 1966
                                                                               FLIGHT TIME 218.00
LAUNCH D'ATE DEC 7 1965
                                                                               DISTANCE 616.078
    HELIOCENTRIC CONIC
    RL 147.37 LAL .00 LOL 74.68 VL 25.986 GAL 19.94 AZL 86.49 HCA 319.20 SMA 117.88 ECC .41430 INC 3.5088 V1 30.232 RP 108.29 LAP -2.29 LOP 33.93 VP 36.403 GAP 24.05 AZP 87.34 TAL 144.53 TAP 103.73 RCA 69.04 APO 166.72 V2 34.994
                                            .34 ZAL 33.58 ZAP 173.36 ETS 179.33 ZAE 127.73 ETE 180.21 ZAC 120.68 ETC 165.41 CLP 173.37
     RC 206.614 GL
                             7.87 GP
    PLANFTOCENTRIC CONIC
     CHICH ATMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 20 10 3450.52 -21.61 127.71 297.95 71.25 6 17 41 2850.5 -23.98 119.83 100.00 0 13 49 4475.95 8.82 187.50 285.22 62.98 1 28 25 3875.9 5.13 180.77 100.00 6 58 46 3132.58 -24.01 105.19 298.82 71.63 7 50 59 2532.6 -26.29 97.14 100.00 1 17 53 4269.13 11.06 171.12 284.04 62.05 2 29 2 3669.1 7.24 164.42
     C3 119.165 VHL 10.916 DLA 22.89 RAL 36.88 RAD 6570.2 VEL 15.508 PTH 2.77 VHP 15.175 DPA
                                                                                                                     9 29 3
                       8 42 14 2808.90
1 50 55 4165.57
                                                                                                                                         2208.9
                                                                                                                                                         -31.92
                                                                                       300.93
                                                                                                          72.43
                                                       -29.81
                                                                        82.71
        110.00
                                                                                                                        3 0 21
                                                                                                                                                         12.23
                                                                                                                                                                         153.58
                                                                                                          59.57
                                                                                                                                         3565.6
                                                                        160.21
                                                                                       280.98
                                                        16.39
        110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            SGT 5582.6 SGR 365.7 SG3 104.7
RRT .6084 RRF .5982 RTF .9815
SGB 5594.6 R23 -.0007 R13 .9815
SGI 5587.0 SG2 290.0 THA 2.29
                                                                                                                                    ST 2656.7 SR 354.2 SS 735.6
CRT .8652 CRS -.8441 CST -.9991
     TOE 4.1611 TRA 8.8477 TC3 -.4544 BAU .7240
     ROE .6727 RRA .1667 RC3 .0036 FAU-.00088
FDE .8533 FRA 1.9771 FC3 .0064 BSP 18852
BDE 4.2152 BRA 8.8493 BC3 .4544 FSP -357
                                                                                                                                    LSA 2773.5 MSA 179.7 SSA 8.9
EL1 2674.4 EL2 176.4 ALF 6.61
                                                                                                                                                 ARRIVAL DATE JUL 15 1966
                                                                                 FLIGHT TIME 220.00
LAUNCH DATE DEC 7 1965
                                                                               DISTANCE 617.842
    HELIOCENTRIC CONIC
     RL 147.37 LAL .00 LOL 74.68 VL 25.958 GAL 21.98 AZL 86.48 HCA 322.40 SMA 117.73 ECC .44111 INC 3.5229 VI 30.232 RP 108.25 LAP -2.15 LOP 37.13 VP 36.396 GAP 25.79 AZP 87.21 TAL 143.93 TAP 106.33 RCA 65.80 APO 169.66 V2 35.007 RC 208.309 GL 7.19 GP .33 ZAL 32.67 ZAP 172.07 ETS 179.92 ZAE 127.25 ETE 180.24 ZAC 122.50 ETC 165.14 CLP 172.08
    PLANETOCENTRIC CONIC
                                                                                                                                             9.17 RAP 27.92 ECC 3.2978
                                                                                                            2.84 VHP 16.228 DPA
     C3 139.621 VHL 11.816 DLA 22.50 RAL 37.92 RAD 6570.5 VEL 16.154 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 29 46 3461.76 -21.37 128.44 301.13 70.96 6 27 28 2861.8 -23.77 120.59
                                                                                                                       1 27 57
                                                                                                                                          3926.0
                                                                                                           63.50
                       0 12 31 4525.97
7 7 37 3146.25
                                                                        190.37
                                                                                        287.98
                                                         10.36
          90.00
                                                                                                                      8 0 3
                                                                                                                                          2546.2
                                                                                                                                                          -26.05
                                                                                                                                                                            98.08
                                                                        106.10
                                                                                        302.00
                                                                                                           71.24
                                                        -23.71
        100.00
                                                                                                                      2 29 18
9 36 57
3 1 46
                                                                                                                                          3716.7
                                                                                                                                                            8.81
                                                                                                                                                                           167.08
                      1 17 21 4316.72
8 49 51 2826.43
1 51 37 4209.30
                                                                                        286.84
                                                                                                           62.65
                                                                        173.85
                                                         12.57
        100.00
                                                                                                                                                                            75.43
                                                                                        304.14
                                                                                                           71.79
                                                                                                                                          2226.4
                                                                                                                                                          -31.64
                                                        -29.44
                                                                         83.95
        110.00
                                                                                        283.85
                                                                                                           60.37
                                                                                                                                          3609.3
                                                                                                                                                          13.80
                                                                                                                                                                           155.99
                                                                        162.73
                                                         17.88
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 5544.5 SGR 358.5 SG3 101.8 ST 2603.0 SR 342.4 S5 754.1 RRT .6413 RRF .6319 RTF .9846 CRT .8646 CRS -.8461 CST -.9993 SGB 5556.1 R23 -.0014 R13 .9846 LSA 2727.9 MSA 173.7 SSA 8.4 SGI 5549.3 SG2 274.8 THA 2.38 EL1 2621.8 EL2 170.9 ALF 6.51
     TOE 4.3612 TRA 9.6597 TC3 -.3186 BAU .5947
     ROE .7027 RRA .2111 RC3 .0043 FAU-.00303
FOE .8766 FRA 2.0929 FC3 .0188 BSP 18701
BDE 4.4175 BRA 9.6620 BC3 .3186 FSP -344
```

FLIGHT TIME 214.00

```
FLIGHT TIME 70.00
                                                                                                                                                                              ARRIVAL DATE FEB 16 1966
LAUNCH DATE DEC 8 1965
                                                                                                DISTANCE 187.070
    HELIOCENTRIC CONIC
     RL 147.35 LAP 3.37 LOP 159.50 VP 37.398 GAP -11.11 AZP 89.63 TAL 209.30 TAP 283.11 RCA 95.21 APO 153.08 V2 35.230 RC 49.420 GL 17.50 GP -.20 ZAL 133.27 ZAP 11.33 ETS 359.94 ZAE 148.27 ETE 340.09 ZAC 63.74 ETC 162.93 CLP -11.33
    PLANETOCENTRIC CONIC
                                                                                                                                  2.19 VHP 7.465 DPA -15.33 RAP 331.54 ECC 1.4567
      C3 27.750 VHL 5.268 DLA -3.07 RAL 298.29 RAD 6568.1 VEL 12.21% PTH
     C3 27.750 VML 5.268 DLA -3.07 RAL 298.29 RAD 6568.1 VEL 12.212 PTM 2.19 VMP 7.465 DPA -19.53 RAP 331.34 ECC 1.4367 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INLA AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 31 36 2199.09 -19.19 40.50 164.24 111.23 3 8 15 1599.1 -16.13 33.16 90.00 13 44 2 5033.62 23.39 221.84 165.99 73.58 15 7 56 4433.6 20.92 214.04 100.00 3 51 30 1941.31 -20.32 21.07 163.76 112.41 4 23 52 1341.3 -17.11 13.75 100.00 15 6 49 4766.62 24.56 201.81 165.59 72.40 16 26 16 4166.6 21.92 194.01 110.00 4 56 28 1737.97 -23.35 4.17 162.30 115.70 5 25 26 1138.0 -19.70 356.94 110.00 16 18 21 4542.73 27.70 183.59 164.38 69.12 17 34 4 3942.7 24.60 175.79
                                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 664.2 SGR 399.5 SG3 127.6

RRT -.0287 RRF .0251 RTF -.6575

SGB 775.0 R23 .0045 R13 .6575

SGI 664.3 SG2 399.2 THA 178.45
                                                                                                                                                              ST 267.8 SR 366.4 SS 301.3
CRT .8721 CRS .9839 CST .7928
      TOE -.2209 TRA -.3596 TC3 .4551 BAU .1766
      ROE -.3364 RRA .0586 RC3 -.1396 FAU .04168
                                                                                                                                                               LSA 527.7 MSA 133.2 SSA
     FOE .4192 FRA -.2849 FC3-1.3005 BSP 1812
BDE .4024 BRA .3644 BC3 .4760 FSP -326
                                                                                                                                                                                                                 24.4
                                                                                                                                                               EL1 440.6 EL2 109.0 ALF 55.03
                                                                                                FLIGHT TIME 72.00
                                                                                                                                                                               ARRIVAL CATE FEB 18 1966
LAUNCH DATE DEC 8 1965
    HELIOCENTRIC CONIC
                                                                                               DISTANCE 193.883
     RL 147.35 LAL .00 LOL 75.70 VL 27.230 GAL -8.12 AZL 86.61 HCA 87.06 SMA 125.21 ECC .22488 INC 3.3919 V1 30.236
RP 107.58 LAP 3.39 LOP 162.75 VP 37.514 GAP -10.20 AZP 89.83 TAL 210.78 TAP 297.84 RCA 97.06 APO 153.37 VZ 35.224
RC 51.018 GL 17.97 GP -.22 ZAL 134.48 ZAP 14.08 ETS 359.83 ZAE 147.95 ETE 340.64 ZAC 64.22 ETC 163.02 CLP -14.07
    PLANETOCENTRIC CONIC

C3 26.720 VHL 5.169 DLA -2.88 RAL 296.80 RAD 6568.1 VEL 12.169 PTH 2.18 VHP 6.979 DPA -15.18 RAP 332.04 ECC 1.4397
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 24 14 2195.58 -19.10 40.28 162.16 111.31 3 0 50 1595.6 -16.04 32.95
100.00 13 39 31 5018.31 23.10 220.81 163.76 73.15 15 3 9 4418.3 20.57 213.05
100.00 3 44 14 1937.92 -20.22 20.83 161.68 112.49 4 16 32 1537.5 -17.00 13.52
100.00 15 2 12 4751.60 24.25 200.80 163.37 71.96 16 21 24 4151.6 21.56 193.04
110.00 4 49 24 1733.54 -23.22 3.90 160.23 115.82 5 18 17 1133.5 -19.56 356.67
110.00 16 13 32 4528.35 27.34 182.62 162.14 68.64 17 29 0 3928.4 24.19 174.87
    PLANETOCENTRIC CONIC
                                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         SGT 676.7 SGR 398.8 SG3 145.2
RRT -.0296 RRF .0260 RTF -.6675
SGB 785.5 R23 .0043 R13 .6676
                                                                                                                                                              ST 272.0 SR 365.2 SS 325.3
CRT .8852 CRS .9800 CST .7943
LSA 542.5 MSA 135.3 SSA 24.9
     TOE -.2227 TRA -.3405 TC3 .4877 BAU .1818
     RDE -.3291 RRA .0533 RC3 -.1452 FAU .04616
     FDE .4729 FRA -.3576 FC3-1.4957 BSP 1863
BDE .5973 BRA .3446 BC3 .5088 FSP -379
                                                                                           SG1 676.8 SG2 398.6 THA 178.47
                                                                                                                                                              EL1 443.3 EL2 104.2 ALF 54.33
                                                                                                                                                                             ARRIVAL DATE FEB 20 1966
                                                                                                FLIGHT TIME 74.00
LAUNCH DATE DEC 8 1965
                                                                                                DISTANCE 200.680
    HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 27.379 GAL -8.10 A7L 86.61 MCA 90.30 SMA 126.19 ECC .21777 INC 3.3942 V1 30.236 RP 107.61 LAP 3.39 LOP 165.99 VP 37.615 GAP -9.34 A7P 90.02 TAL 212.21 TAP 302.51 RCA 98.71 APO 153.66 V2 35.216 RC 52.701 GL 18.39 GP -.23 ZAL 135.59 ZAP 16.95 ETS 359.75 ZAE 147.89 ETE 341.06 ZAC 64.58 ETC 163.08 CLP -16.95
    PLANETOCENTRIC CONIC
     C3 25.871 VHL 5.086 DLA -2.71 RAL 295.42 RAD 6568.0 VEL 12.135 PTH 2.17 VHP 6.521 DPA -15.07 RAP 332.40 ECC 1.4258
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                          111.37 2 54 1

72.78 14 58 40

112.56 4 9 47

71.59 16 16 50

115.91 5 11 43

68.24 17 24 16
                                                                                                                                                                1592.8
                        2 17 28 2192.82
13 35 15 5005.07
3 37 33 1934.50
14 57 51 4738.62
                                                                                                                                                                                     -15.96
                                                                                                                                                                                                             32.78
                                                                   -19.03
                                                                                      40.11
                                                                                                       160.27
          90.00
                                                                                                                                                                                                            212.20
                                                                  22.83
                                                                                     219.93
                                                                                                         161.76
                                                                                                                                                                    4405.1
                                                                                                                                                                                        20.26
           90.00
                                                                                                                                                                    1334.5
                                                                                                                                                                                        -16.91
                                                                                                                                                                                                             13.34
                                                                   -20.15
                                                                                       20.64
                                                                                                         159.80
         100.00
                                                                                                                                                                     4138.6
                                                                                                                                                                                       21.23
                                                                                                                                                                                                            192.21
         100.00
                                                                  23.97
                                                                                     199.94
                                                                                                         161.36
                          4 42 53 1729.95
                                                                                                                                                                     1130.0
                                                                                                                                                                                       -19.44
                                                                                                                                                                                                            356.46
                                                                 -23.12
                                                                                         3.67
                                                                                                         158.36
         110.00
                                                             -23...
27.03
                                                                                                                                                                  3915.9
                                                                                                                                                                                      23.84
                         16 9 D
                                                                                                         160.12
                                                                                                                                                                                                           174.09
         110.00
                                             4515.94
                                                                                     181.79
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 273.5 SR 363.1 SS 350.4

CRT .8961 CRS .9756 CST .7946

LSA 556.6 MSA 138.0 SSA 25.4

EL1 443.6 EL2 99.4 ALF 53.88
                                                                                          SCT 686.2 SCR 397.2 SC3 165.4

RRT -.D335 RRF .0279 RTF -.6768

SCB 792.9 R23 .0062 R13 .6768
     TOE -.2224 TRA -.3215 TC3 .5171 BAU .1862
     ROE -. 3220 RRA .0483 RC3 -. 1499 FAU .05134
     FOE .5339 FRA -.4425 FC3-1.7179 BSP 1937
BOE .3913 BRA .3251 BC3 .5384 FSP -442
                                                                                           SG1 686.4 SG2 396.9 THA 178.33
                                                                                                FLIGHT TIME 76.00
                                                                                                                                                                              ARRIVAL DATE FEB 22 1966
LAUNCH DATE DEC 8 1965
                                                                                                DISTANCE 207.457
   HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 27.511 GAL -8.08 AZL 86.60 MCA 93.54 SMA 127.06 ECC .21160 INC 3.3965 VI 30.236
RP 107.63 LAP 3.39 LOP 169.24 VP 37.704 GAP -8.51 AZP 90.21 TAL 213.57 TAP 307.11 RCA 100.17 APO 153.95 VZ 35.208
RC 54.462 GL 18.76 GP -.25 ZAL 136.61 ZAP 19.97 ETS 359.69 ZAE 148.13 ETE 341.34 ZAC 64.80 ETC 163.12 CLP -19.97
    PLANETOCENTRIC CONIC
     C3 25.168 VHL 5.017.0LA -2.56 RAL 294.15 RAO 6568.0 VEL 12.106 PTH 2.17 VHP 6.093 DPA -15.01 RAP 332.62 ECC 1.4142
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 11 17 2190.71 -18.98 39.98 158.58 111.41 2 47 48 1590.7 -15.91 32.65 90.00 13 31 19 4993.58 22.60 219.17 159.96 72.47 14 54 33 4393.6 19.99 211.47
                                                                                                                           111.41 2 47 48
72.47 14 54 33
112.62 4 3 38
71.27 16 12 38
                                                                                                                                                                  1332.2
412
                         3 31 26 1932.17
14 53 51 4727.36
4 36 56 1727.11
16 4 50 4505.18
                                                                                                                                                                                        -16.85
                                                                                                                                                                                                             13.19
                                                                  -20.08
                                                                                       20.49
                                                                                                         158.11
                                                                    23.73
                                                                                      199.19
                                                                                                         159.56
                                                                                                                                                                                        20.95
                                                                                                                                                                                                            191.50
         100.00
                                                                                                       156.68
                                                                                                                             115.99 5 5 43
67.89 17 19 55
                                                                                                                                                                  1127.1
         110.00
                                                                  -23.03
                                                                                        3.50
                                                                                                                                                                                       -19.35
                                                                                                                                                                                                            356.29
                                                                   26.76
                                                                                      181.08
                                                                                                         158.31
                                                                                                                                                                     3905.2
                                                                                                                                                                                         23.52
                                                                                                                                                                                                            173.41
        110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SGT 691.5 SGR 394.6 SG3 188.4 ST 275.4 SR 360.1 S5 377.9 RRT -.0344 RRF .0292 RTF -.6798 CRT .9050 CRS .9716 CST '.7950 SG8 796.2 R23 .0055 R13 .6798 LSA 572.4 MSA 141.7 SSA 25.5 SG1 691.7 SG2 394.3 THA 178.33 EL1 443.2 EL2 95.2 ALF 53.34
      TOE -.2225 TRA -.3063 TC3 .5376 BAU .1882
     RDE - 3150 RRA .0439 RC3 - .1538 FAU .05719
FDE .6051 FRA - .5384 FC3-1.9673 BSP 1954
BDE .3856 BRA .3094 BC3 .5592 FSP -512
```

ARRIVAL DATE FEB 24 1966

LAUNCH DATE DEC 8 1965

```
DISTANCE 214.213
   RL 147.35 LAL .00 LOL 75.70 VL 27.627 GAL -8.07 AZL 86.60 HCA 96.77 SHA 127.84 ECC .20626 INC 3.3988 VI 30.236 RP 107.66 LAP 3.38 LOP 172.48 VP 37.781 GAP -7.72 AZP 90.40 TAL 214.84 TAP 311.61 RCA 101.47 APO 154.21 V2 35.200
  HELIOCENTRIC CONIC
                       19.09 CP -.27 TAL 137.51 ZAP 23.15 ETS 359.63 ZAE 148.66 ETE 341.48 ZAC 64.85 ETC 163.12 CLP -23.15
    RC 56.291 GL
  PLANETOCENTRIC CONTC
    C3 24.584 VHL 4.958 DLA -2.43 RAL 293.00 RAD 6568.0 VEL 12.081 PTH 2.16 VHP 5.694 DPA -15.01 RAP 332.68 ECC 1.4046 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            -15.86
                                                                                                                              1589.2
                                                                   39.88
                                                                               157.08
                                                                                              111.45
                                                                                                             2 42 11
                   2 5 42 2189.17
13 27 46 4983.55
                                                   -18.94
       90.00
                                                                                                                                              19.75
                                                                                                 72.20 14 50 49
                                                                                                                              4383.5
                                                                  218.51
                                                                                158.37
                                                   22.39
       90.00
                                                                                                                                              -16.80
                 3 25 55 1930.42
14 50 14 4717.53
                                                                                                                              1330.4
                                                                   20.38
                                                                                156.61
                                                                                                 112.66
                                                                                                             3 58 5
                                                   -20.04
      100.00
                                                                                                 70.99 16 8 52
116.04 5 0 19
                                                                                                                              4117.5
                                                                                                                                              20.70
                                                                              157.96
                                                                  198.54
                                                   23.51
      100.00
                                                                                                                                             -19.28
                                                                                155.19
                                                                                                116.04
                                                                                                                              1124.9
                                                   -22.97
                                                                    3.36
      110.00
                    4 31 34 1724.90
                                                                                                 116.04 5 0 19
67.59 17 16 0
                                                                                                                                               23.25
                                                                                                                              3895.8
                                                                  180.46
                                                                              156.71
                                                    26.52
      110.00
                   16 1 4
                                  4495.82
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 275.5 SR 356.1 SS 407.2
CRT .9113 CRS .9677 CST .7936
                                                                     SGT 691.6 SGR 391.0 SG3 214.5
RRT -.0357 RRF .0305 RTF -.6786
SGB 794.5 R23 .0050 R13 .6786
   LSA 588.7 MSA 146.0 SSA
                                                                                                                                                                 25.4
                                                                                                                          EL1 440.8 EL2 91.7 ALF 52.95
                                                                      SG1 691.8 SGZ 390.6 THA 178.30
    BOE .3790 BRA .2963 BC3 .5722 FSP
                                                                                                                                      ARRIVAL DATE FEB 26 1966
                                                                          FLIGHT TIME 80.00
LAUNCH DATE DEC 8 1965
                                                                         DISTANCE 220.944
  HELIOCENTRIC CONIC
                         .00 LOL 75.70 VL 27.728 GAL -8.06 AZL 86.60 MCA 100.01 SMA 128.54 ECC .20166 INC 3.4011 V1 30.236 3.55 LOP 175.72 VP 37.847 GAP -6.97 AZP 90.59 TAL 216.00 TAP 316.01 RCA 102.62 APO 154.46 V2 35.191 19.38 GP -.29 ZAL 138.31 ZAP 26.52 ETS 359.58 ZAE 149.49 ETE 341.45 ZAC 64.73 ETC 163.08 CLP -26.52
    RL 147.35 LAL
       107.69 LAP
                        19.38 GP
    RC 58.184 GL
  PLANETOCENTRIC CONIC
    C3 24.093 VHL 4.908 DLA -2.30 RAL 291.98 RAD 6568.0 VEL 12.061 PTH 2.16 VHP 5.322 DPA -15.08 RAP 332.56 ECC 1.3965 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               111.47
                                                                                                             2 37 9
                                                   -18.92
                                                                               155.76
                     2 0 41 2188.14
                                                                  39.81
       90.00
                                                                                                71.96 14 47 32
112.69 3 53 7
70.75 16 5 31
116.09 4 55 28
67.34 17 12 32
                                                                                                                                               19.53
                                                                                                                               4374.7
                                  4974.69
                                                    22.21
                                                                  217.93
                                                                                 156.96
        90.00
                   13 24 38
                                                                                                                                               -16.76
                                                                                                                                                               13.02
                                                                                                                               1329.2
                                                                                 155.29
                                                    -20.01
                                                                   20.30
                     3 20 57
                                  1929.20
      100.00
                                                                                                                                              20.48
                                                                                                                               4108.9
                                                                                 156.56
                   14 47 2
                                 4708.86
                                                    23.32
                                                                  197.97
      100.00
                                                                                                                                              -19.22
                                                                                                                                                              356.07
                    4 26 45 1723.26
                                                                              153.67
                                                                                                                               1123.3
                                                    -22.92
                                                                    3.26
      110.00
                                                                                                                                               23.00
                                                                                                                               3887.6
                   15 57 44
                                                    26.30
                                                                  179.91
                                                                                 155.30
                                   4487.57
      110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 273.5 SR 351.1 SS 438.5
CRT .9146 CRS .9643 CST .7898
LSA 605.8 NSA 150.7 SSA 25.1
                                                                     SGT 686.0 SGR 386.4 SG3 244.1
RRT -.0371 RRF .0321 RTF -.6717
SGB 787.3 R23 .0043 R13 .6717
    TOE - .2177 TRX - .2843 TC3 .5539 BAU .1856
    RDE - .3006 RRA .0364 RC3 - .1590 FAU .07139
    FOE .7809 FRA -.7707 FC3-2.5651 BSP 1925
BOE .3712 BRA .2867 BC3 .5763 FSP -685
                                                                                                                           EL1 436.1 EL2 89.0 ALF 52.72
                                                                      SG1 686.2 SG2 386.0 THA 178.25
                                                                                                                                     ARRIVAL DATE FEB 28 1966
                                                                         FLIGHT TIME 82.00
LAUNCH DATE DEC 8 1965
                                                                         DISTANCE 227.649
   RL 147.35 LAL .0D LOL 75.70 VL 27.816 GAL -8.05 AZL 86.60 MCA 103.25 SHA 129.15 ECC .19771 INC 3.4034 VI 30.236 RP 107.72 LAP 3.31 LOP 178.96 VP 37.902 GAP -6.26 AZP 90.78 TAL 217.05 TAP 320.30 RCA 103.62 APO 154.68 V2 35.181 RC 60.133 GL 19.64 GP -.32 ZAL 139.00 ZAP 30.10 ETS 359.52 ZAE 150.64 ETE 341.23 ZAC 64.41 ETC 163.01 CLP -30.10
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.677 VHL 4.866 DLA -2.18 RAL 291.09 RAD 6568.0 VEL 12.044 PTH 2.15 VMP 4.977 DPA -15.22 RAP 332.23 ECC 1.3897
    LO 23.077 VML 4.800 ULA -2.18 MAL 291.U9 MAU 0568.U VEL 12.U44 PIM 2.15 VMP 4.977 DPA -15.22 MAP 332.23 ECC 1.3897 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 56 14 2187.55 -18.90 39.78 154.60 111.48 2 32 41 1587.5 -15.82 32.46 90.00 13 21 56 4966.74 22.04 217.40 155.73 71.75 14 44 43 4366.7 19.34 209.77
                                                                                                              3 48 42
                                                                                                                               1328.4
                                                                                                                                              -16.74
                     3 16 33 1928.43
                                                   -19.99
                                                                   20.26
                                                                                 154.13
                                                                                                 112.70
                                                                                                  112.70 3 48 42
70.53 16 2 38
       100.00
                                                                                                                                                             189.83
                                                                                                                               4101.1
                                                                                                                                              20.28
                                                                                 155.32
                                                   23.14
                                                                  197.46
                                  4701.09
                    14 44 17
       100.00
                                                                                                 116.12 4 51 10
67.11 17 9 32
                                                                                                                                                             356.00
                                                                                                                                              -19.18
                                                                                                                               1122.1
                                                                                 152.72
                                                   -22.88
                                                                    3.18
                     A 22 28
                                  1722.09
       110.00
                                                                                                                               3860.2
                                                                                                                                              22.78
                                                                                                                                                             171.85
                                                                  179.43
                                                                                 154.06
                                  4480.19
                                                    26.11
       110.00
                    15 54 52
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 257.1 SR 345.2 55 470.6
CRT .9141 CRS .9609 CST .7805
                                                                      SGT 674.1 SGR 380.8 SG3 277.8
RRT -.0422 RRF .0352 RTF -.6591
SGB 774.3 R23 .0056 R13 .6591
    TOE - 2105 TRA - 2778 TC3 .5494 BAU .1812
    RDE - . 2930 RRA . . 0332 RC3 - . 1606 FAU . 07997
                                                                                                                           LSA 622.3 MSA 155.4 SSA
                                                                                                                                                                24.8
    FOE .8853 FRA -.9108 FC3-2.9243 BSP 1900
BDE .3608 BRA .2798 BC3 .5724 FSP -794
                                                                      SG1 674.4 SG2 380.3 THA 178.00
                                                                                                                           EL1 427.7 EL2 87.4 ALF 52.92
                                                                                                                                       ARRIVAL DATE HAR 2 1966
                                                                           FLIGHT TIME 84.00
LAUNCH DATE DEC 8 1965
                                                                          01STANCE 234.326
                         .00 LOL 75.70 VL 27.892 GAL -8.04 A7L 86.59 MCA 106.48 SMA 129.68 ECC .19431 INC 3.4058 V1 30.236 3.27 LOP 182.20 VP 37.948 GAP -5.57 A7P 90.97 TAL 217.98 TAP 324.46 RCA 104.48 APO 154.88 V2 35.171 19.86 GP -.34 ZAL 139.58 ZAP 33.89 ETS 359.45 ZAE 152.10 ETE 340.77 ZAC 63.88 ETC 162.88 CLP -33.89
   HELIOCENTRIC CONIC
    RL 147.35 LAL
RP 107.75 LAP
    RC 62.133 GL 19.86 GP
   PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 52 18 2187.36 -18.90 39.77 153.60 111.49 2 28 45 1587.4 -18.81 39.45
    C3 23.317 VHL 4.829 DLA -2.07 RAL 290.31 RAO 6567.9 VEL 12.029 PTH 2.15 VHP 4.660 DPA -15.43 RAP 331.69 ECC 1.3837
                                                                                                   71.56
                                                                                                             14 42 22
                                                                   216.93
                                                                                  154.66
                                 4959.44
                                                    21.88
                     13 19 42
        90.00
                    3 12 41 1928.07
14 42 0 4693.97
4 18 43 1721.35
15 52 27 4473.46
                                                                                                                                1328.1
                                                                                                                                               -16.73
                                                                                                                                                               12.95
                                                                                                  112.71
                                                    -19.98
                                                                    20.23
                                                                                  153.14
       100.00
                                                                                                             16 0 14
                                                                                                                                4094.0
                                                                                                                                               20.09
                                                                                                                                                              189.39
                                                                                                   70.34
                                                                                  154.25
                                                    22.98
                                                                   196.99
       100.00
                                                                                                                                                              355.95
                                                                                                 116.14
                                                                                                               4 47 24
                                                                                                                                1121.3
                                                                                                                                               -19.16
                                                                                 151.73
                                                   -22.86
                                                                     3.14
       110.00
                                                                                                   66.90
                                                                                                             17 7 1
                                                                                                                                3873.5
                                                                                                                                               22.58
                                                                                                                                                              171.43
                                                                                  152.99
                                                                   178.98
                                                     25.93
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 259.7 SR 338.3 S5 505.4
CRT .9092 CRS .9584 CST .7666
LSA 641.1 MSA 160.3 SSA 24.3
                                                                      SGT 654.7 SGR 374.1 SG3 315.1
RRT -.0442 RRF .0374 RTF -.6337
     TOE -.2020 TRA -.2775 TC3 .5306 BAU .1729
     ROE - . 2850 RRA . 0305 RC3 - . 1615 FAU . 08944
                                                                       SGB 754.0 R23
                                                                                             .0041 R13 .6338
     FOE 1.0054 FRA-1.0635 FC3-3.3209 BSP 1802
BDE .3493 BRA .2792 BC3 .5546 FSP -912
                                                                                                                         EL1 417.4 EL2 87.6 ALF 53.20
                                                                       SG1 655.0 SG2 373.6 THA 177.86
     BDE .3493 BRA .2792 BC3 .5546 FSP
```

FLIGHT TIME 78.00

```
FLIGHT TIME 86.00
                                                                                                                                         ARRIVAL DATE MAR 4 1966
LAUNCH DATE DEC 8 1965
   HELIOCENTRIC CONIC
                                                                            DISTANCE 240.974
    RL 147.35 LAL .00 LOL 75.70 VL 27.956 GAL -8.02 AZL 86.59 HCA 109.71 SMA 130.13 ECC .19139 INC 3.4083 V1 30.236 RP 107.78 LAP 3.21 LOP 185.44 VP 37.985 GAP -4.91 AZP 91.15 TAL 218.78 TAP 328.49 RCA 105.23 APO 155.04 VZ 35.160 RC 64.180 GL 20.07 GP -.37 ZAL 140.06 ZAP 37.92 ETS 359.38 ZAE 153.89 ETE 340.01 ZAC 63.12 ETC 162.71 CLP -37.92
   PLANETOCENTRIC CONIC
     C3 23.000 VHL 4.796 OLA -1.95 RAL 289.66 RAD 6567.9 YEL 12.016 PTH 2.14 VHP 4.370 OPA -15.72 RAP 330.92 ECC 1.3785
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  90.00
                    1 48 51 2187.54
13 17 57 4952.59
                                                                                                                               1587.5
                                                                                                                                                -15.82
                                                     -18.90
                                                                    39.78
                                                                                 152.75
                                                                                                                                                                  32.46
         90.00
                                                     21.73
                                                                    216.48
                                                                                   153.75
                                                                                                                                  4352.6
                                                                                                                                                 18.99
                                                                                                                                                                 208.88
                   3 9 18 1928.08
14 40 12 4687.29
4 15 27 1720.98
15 50 32 4467.15
        100.00
                                                     -19.98
                                                                     20.23
                                                                                   152.29
                                                                                                                                  1328.1
                                                                                                                                                 -16.73
                                                                                                                                                                 12.95
                                                     22.83
                                                                    196.55
                                                                                  153.34
                                                                                                                                  4087.3
        100.00
                                                                                                                                                 19.92
                                                                                                                                                                 188.97
                                               -22.85
25.76
                                                                                  150.89
                                                                                                                                  1121.0
                                                                                                                                                 -19.15
                                                                                                                                                                 355.93
       110.00
                                                                      3.11
                                                                                                                                3867.2
                                                                    178.57
                                                                                 152.06
                                                                                                                                                22.39
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    TDE -.1898 TRA -.2829 TC3 .4987 BAU .1612
RDE -.2765 RRA .0282 RC3 -.1617 FAU .09992
                                                                        SCT 628.2 SGR 366.5 SG3 356.6
RRT -. D464 RRF .. D399 RTF -. 5928
SGB 727.2 R23 .. D017 R13 .. 5929
                                                                                                                             ST 248.9 SR 330.5 SS 541.7
CRT .8975 CRS .9564 CST .7434
    FOE 1.1391 FRA-1.2304 FC3-3.7611 BSP 1663
                                                                                                                            LSA 660.9 MSA 165.2 SSA 23.8
                                                                        SG1 628.5 SG2 365.9 THA 177.65
    BOE .3354 BRA .2843 BC3 .5242 FSP -1045
                                                                                                                             EL1 403.9 EL2 89.8 ALF 53.88
LAUNCH DATE DEC 8 1965
                                                                            FLIGHT TIME 88.00
                                                                                                                                          ARRIVAL DATE MAR 6 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 247.591
    RL 147.35 LAL .00 LOL 75.70 VL 28.009 GAL -8.00 A7L 86.59 HCA 112.94 SMA 130.52 ECC .18889 INC 3.4109 V1 30.236 RP 107.81 LAP 3.14 LOP 188.67 VP 38.014 GAP -4.29 AZP 91.33 TAL 219.45 TAP 332.39 RCA 105.86 APO 155.17 V2 35.149 RC 66.268 GL 20.26 GP -.41 ZAL 140.44 ZAP 42.20 ETS 359.29 ZAE 156.00 ETE 338.85 ZAC 62.12 ETC 162.47 CLP -42.20
   PLANETOCENTRIC CONIC
    C3 22.715 VHL 4.766 DLA -1.84 RAL 289.13 RAD 6567.9 VEL 12.004 PTH 2.14 VHP 4.108 DPA -16.10 RAP 329.90 ECC 1.3738 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 111.47 2 22 21
71.22 14 39 6
112.70 3 38 30
69.99 15 56 53
116.15 4 41 20
66.53 17 3 25
                                                                                 152.04
        90.00
                   1 45 52 2188.06
13 16 40 4945.99
                                                                                                                               1588.1
                                                                                                                                                -15.83
                                                    -18.92
                                                                    39.81
                                                                                                                                                                  32.49
        90.00
                                                      21.59
                                                                    216.05
                                                                                   152.97
                                                                                                                                  4346.0
                                                                                                                                                  18.83
                                                                                                                                                                 208.46
                   3 6 22 1928.43 -19.99
14 38 52 4680.86 22.68
4 12 39 1720.94 -22.85
15 49 4 4461.11 25.60
       100.00
                                                                    20.26
                                                                                  151.58
                                                                                                                                  1328.4
                                                                                                                                                 -16.74
                                                                                                                                                                  12.97
       100.00
                                                                    196.14
                                                                                  152.56
                                                                                                                                  4080.9
                                                                                                                                                 19.75
                                                                                                                                                                 188.57
       110.00
                                                                      3.11
                                                                                  150.18
                                                                                                                                  1120.9
                                                                                                                                                -19.15
                                                                                                                                                                 355.93
                                                                                                                                                                 170.67
       110.00
                                                                    178.18
                                                                                   151.28
                                                                                                                                  3861.1
                                                                                                                                                  22.20
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 233.0 SR 321.7 SS 577.8
CRT .8745 CRS .9544 CST .7038
                                                                       SGT 595.6 SGR 357.9 SG3 402.2
RRT -.0523 RRF .0441 RTF -.5314
SGB 694.9 R23 -.0007 R13 .5316
    TOE -.1724 TRA -.2932 TC3 .4542 BAU .1464
    ROE -.2679 RRA .0264 RC3 -.1614 FAU .11148
FOE 1.2821 FRA-1.4135 FC3-4.2488 BSP 1508
BOE .3182 BRA .2944 BC3 .4820 FSP -1199
                                                                                                                             LSA 680.0 MSA 169.5 55A
                                                                                                                                                                    23.3
                                                                       SG1 596.1 SG2 357.1 THA 177.19
                                                                                                                            EL1 385.9 EL2 94.2 ALF 55.29
                                                                           FLIGHT TIME 90.00
                                                                                                                                        ARRIVAL DATE MAR 8 1966
LAUNCH DATE DEC 8 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 254.178
                           .00 LOL 75.70 VL 28.053 GAL -7.97 AZL 86.59 MCA 116.16 SMA 130.83 ECC .18674 INC 3.4137 V1 30.236 3.06 LOP 191.90 VP 38.036 GAP -3.69 AZP 91.51 TAL 219.99 TAP 336.16 RCA 106.40 APO 155.26 V2 35.138
    RL 147.35 LAL .00 LOL 75.70 VL 28.053 GAL -7.97 AZL 86.59 HCA 116.16 SHA 130.83 ECC .18674 INC 3.4137 VI 30.236 RP 107.85 LAP 3.06 LOP 191.90 VP 38.036 GAP -3.69 AZP 91.51 TAL 219.99 TAP 336.16 RCA 106.40 APO 155.26 V2 35.138 RC 68.394 GL 20.43 GP -.44 ZAL 140.72 ZAP 46.73 ETS 359.18 ZAE 158.42 ETE 337.12 ZAC 60.88 ETC 162.17 CLP -46.73
   PLANETOCENTRIC CONIC
    C3 22.450 VHL 4.738 DLA -1.72 RAL 288.71 RAD 6567.9 VEL 11.993 PTH 2.14 VHP 3.873 DPA -16.56 RAP 328.63 ECC 1.3695
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                              1588.9
4***
                   1 43 19 2188-91
13 15 52 4939-46
3 3 51 1929-10
14 38 1 4674-51
4 10 16 1721-21
15 48 6 4455-16
                                                                                 151.45
                                                                                                 111.45
                                                                                                               2 19 48
                                                                                                                                                                 32.54
        90.00
                                                    -18.94
                                                                    39.86
                                                                                                    71.05 14 38 12
                                                                   215.62
                                                                                  152.32
                                                                                                                                                 18.66
                                                    21.45
        90.00
                                                    -20.00
                                                                    20.30
                                                                                  150.99
                                                                                                  112.69
                                                                                                                3 36 0
                                                                                                                                 1329.1
                                                                                                                                                 -16.76
                                                                                                                                                                 13.01
       100.00
                                                                                                    69.82 15 55 55
                                                    22.53
                                                                   195.72
                                                                                  151.90
                                                                                                                                 4074.5
       100.00
                                                                                                  116.14 4 38 57
66.35 17 2 21
                                                                                                                                                                355.95
                                                                                  149.60
                                                                                                                                 1121.2
       110.00
                                                  -22.86
                                                                      3.13
       110.00
                                                    25.44
                                                                   177.79
                                                                                  150.62
                                                                                                                                 3855.2
                                                                                                                                                22.02
                                                                                                                                                               170.30
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 560.0 3GR 348.2 SG3 450.5
RRT -.0532 RRF .0465 RTF -.4324
SGB 659.4 R23 -.0091 R13 .4329
                                                                                                                            5T 216.1 SR 312.0 SS 616.0 CRT .8337 CRS .9536 CST .6426 LSA 702.1 MSA 173.7 SSA 22.6
    TOE -.1519 TRA -.3121 TC3 .3910 BAU .1268
    ROE -.2519 RRA .0249 RC3 -.1603 FAU .12362
FOE 1.4403 FRA-1.6010 FC3-4.7670 B3P 1263
B0E .2993 BRA .3131 BC3 .4226 FSP -1357
                                                                       SG1 560.5 SG2 347.4 THA 176.92
                                                                                                                             EL1 365.7 EL2 101.8 ALF 57.13
                                                                           FLIGHT TIME 92.00
                                                                                                                                        ARRIVAL DATE MAR 10 1966
LAUNCH DATE DEC 8 1965
  HELIOCENTRIC CONIC
                                                                           DISTANCE 260.733
   RL 147.35 LAL .00 LOL 75.70 VL 28.088 GAL -7.94 AZL 86.38 HCA 119.39 SHA 131.09 ECC .18489 INC 3.4166 VI 30.236
RP 107.89 LAP 2.98 LOP 195.13 VP 38.051 GAP -3.12 AZP 91.68 TAL 220.40 TAP 339.79 RCA 106.85 APO 155.32 VZ 35.126
RC 70.553 GL 20.60 GP -.48 ZAL 140.90 ZAP 51.51 ETS 359.07 ZAE 161.12 ETE 334.52 ZAC 59.40 ETC 161.80 GLP -51.51
  PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 8 2190.09 -18.97 39.94 150.98 111.43 2 17 38 1590.1 -15.89 32.61
                                                                                                             14 37 46
3 33 54
                                                                                                                                  4332.8
                                                                                                                                                 18.50
                                                                                                                                                                207.64
                   13 15 33 4932.85
                                                     21.30
                                                                   215.19
                                                                                  151.78
                                                                                                    70.89
        90.00
                     3 1 44 1930.09
                                                                                                                                                 -16.79
                                                                                                                                                                 13.07
       100.00
                                                     -20.03
                                                                     20.36
                                                                                  150.53
                                                                                                   112.66
                                                                                                                                 1330.1
                                                                                                              15 55 26
                                                                                                                                 4068.1
                                                                                                                                                 19.41
                                                                                                                                                                187.77
                   14 37 38
                                  4668.08
                                                     22.38
                                                                   195.31
                                                                                  151.36
                                                                                                    69.65
       100.00
                                                                                                    116.12 4 36 58
66.18 17 1 44
                     4 8 17 1721.78
                                                     -22.87
                                                                      3.16
                                                                                                                                 1121.8
                                                                                                                                                -19.17
                                                                                                                                                                355.98
       110.00
                   15 47 35
                                                    25.27
                                                                   177.40
                                                                                   150.08
                                                                                                                                 3849.2
                                                                                                                                                 21.83
                                                                                                                                                                169.94
                                   4449.15
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 197.4 SR 301.5 SS 654.3
CRT .7597 CRS .9534 CST .5419
LSA 725.3 MSA 177.4 SSA 21.9
    TOE -.1264 TRA -.3383 TC3 .3104 BAU .1034
                                                                       SGT 527.8 SGR 337.6 SG3 501.1
    ROE -.2478 RRA .0240 RC3 -.1584 FAU .13625
FOE 1.6066 FRA-1.7919 FC3-5.3133 BSP 958
BOE .2782 BRA .3392 BC3 .3485 FSP -1523
```

ARRIVAL DATE MAR 12 1966

EL1 260.7 EL2 185.9 ALF 109.71

LAUNCH DATE DEC 8 1965

FLIGHT TIME 94.00

SG1 667.1 SG2 285.8 THA 179.04

FDE 2.2201 FRA-2.4429 FC3-7.4737 BSP 863

BDE .2054 BRA .5170 BC3 .2377 FSP -2184

ARRIVAL DATE MAR 20 1966

```
LAUNCH DATE DEC 8 1965
                                                                                 DISTANCE 293.041
  HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                            -.80 RAL 288.28 RAD 6567.9 VEL 11.931 PTH
                                                                                                              2.12 VMP 3.042 DPA -20.33 RAP 316.50 ECC 1.3452
    C3 20.975 VHL 4.580 OLA -.80 RAL 288.28 RAD 6567.9 VEL 11.931 PTH 2.12 VHP 3.042 DPA -20.33 RAP 316.50 ECC 1.3452
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 134 46 2201.14 -19.24 40.63 150.13 111.19 2 11 27 1601.1 -16.19 33.28
90.00 13 21 2 4894.42 20.42 212.72 150.52 69.95 14 42 36 4294.4 17.51 205.25
100.00 2 55 45 1939.95 -20.29 20.98 149.69 112.44 3 28 5 1339.9 -17.07 13.66
100.00 14 42 44 4630.85 21.48 192.91 150.09 68.69 15 59 55 4030.9 18.39 185.47
110.00 4 3 8 1728.98 -23.09 3.61 148.33 115.94 4 31 57 1129.0 -19.41 356.40
110.00 15 51 50 4414.58 24.30 175.16 148.78 65.19 17 5 25 3814.6 20.75 167.84
    C3 20.975 VHL 4.580 OLA
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 237.1 SR 240.2 SS 805.6
CRT -.4457 CRS .9589 CST -.6734
                                                                             SGT 797.9 SGR 271.1 SG3 727.5
RRT -.0340 RRF .0340 RTF .7362
    TOE .0775 TRA -.5760 TC3 -.3587 BAU .1073
RDE -.1918 RRA .0267 RC3 -.1328 FAU .19145
                                                                            SGB 842.7 R23 -.0624 R13 -.7359
SG1 798.0 SG2 270.9 THA 179.25
                                                                                                                                        LSA 853.1 MSA 186.5 SSA 18.3
    FDE 2.3224 FRA-2.5356 FC3-7.9020 BSP 1456
                                                                                                                                        EL1 287.0 EL2 177.7 ALF 134.18
    BOE .2068 BRA .5766 BC3 .3825 FSP -2315
                                                                                                                                                     ARRIVAL DATE HAR 22 1966
                                                                                  FLIGHT TIME 104.00
LAUNCH DATE DEC 8 1965
                                                                                  DISTANCE 299.411
  HELIOCENTRIC CONIC
   RL 147.35 LAL .00 LOL 75.70 VL 28.149 GAL -7.60 AZL 86.56 MCA 138.69 SMA 131.53 ECC .17800 INC 3.4396 VI 30.236 RP 108.12 LAP 2.27 LOP 214.44 VP 38.025 GAP -.14 AZP 92.58 TAL 220.36 TAP 359.04 RCA 108.12 APO 154.94 V2 35.050 RC 84.008 GL 21.58 GP -.77 ZAL 140.21 ZAP 83.64 ETS 358.11 ZAE 171.88 ETE 232.58 ZAC 47.32 ETC 157.73 CLP -83.64
  PLANETOCENTRIC CONIC
    C3 20.714 VHL 4.551 DLA -.59 RAL 288.52 RAD 6567.8 VEL 11.920 PTH 2.12 VHP 2.995 DPA -20.96 RAP 314.15 ECC-1.3409 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 34 11 2204.57
13 23 31 4884.99
2 55 15 1943.06
14 45 8 4621.73
4 2 52 1731.40
15 54 0 4406.15
                                                                                       150.21
                                                                                                                                                           -16.28
                                                                                                                           2 10 56
                                                                                                                                          1604.6
                                                                          40.85
                                                                                                          111.11
                                                        -19.32
        90.00
                                                                                                             69.72
                                                                                                                        14 44 56
                                                                                                                                              4285.0
                                                                                                                                                              17.26
                                                                                                                                                                               204.67
                                                                         212.11
                                                                                          150.50
                                                          20.20
                                                                                      149.77
150.07
148.43
                                                                                                           112.36
                                                                                                                          3 27 38
                                                                                                                                             1343.1
                                                                                                                                                              -17.16
                                                                                                                                                                                13.85
                                                                          21.18
                                                        -20.37
       100.00
                                                                                                           68.47 16 2 10
115.87 4 31 44
64.95 17 7 26
                                                                                                                                             4021.7
                                                                                                                                                              18.14
                                                                                                                                                                              184.91
                                                                         192.32
                                                        21.25
       100.00
                                                                                                                                                          -19.49
                                                                                                                                             1131.4
                                                                                                                                                                               356.55
                                                                            3.76
                                                        -23.16
                                                                                                                                             3806.2
                                                                                                                                                              20.48
                                                                                                                                                                               167.33
                                                                         174.65
                                                                                          148.76
                                                      24.06
       110.00
                                                                                                                                 ST 291.6 SR 226.7 SS 823.9

CRT -.5958 CRS .9618 CST -.7864

LSA 883.2 MSA 186.7 SSA 17.4

EL1 333.2 FL2 186.7
                                                                              HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 957.0 SGR 255.4 SG3 752.2
RRT -.0437 RRF .0185 RTF .8141
SGB 990.5 R23 -.0569 R13 -.8139
    TDE .1291 TRA -.6396 TC3 -.5392 BAU .1532
    RDE -.1799 RRA .0287 RC3 -.1236 FAU .19691
FDE 2.4012 FRA-2.5783 FC3-8.2297 BSP 2098
BDE .2214 BRA .6403 BC3 .5532 FSP -2403
                                                                              SG1 957.0 SG2 255.1 THA 179.28
                                                                                                                                                    ARRIVAL DATE MAR 24 1966
                                                                                FLIGHT TIME 106.00
LAUNCH DATE DEC 8 1965
                                                                                 DISTANCE 305.753
    RL 147.35 LAL .00 LOL 75.70 VL 28.139 GAL -7.51 AZL 86.55 MCA 141.90 SMA 131.46 ECC .17731 INC 3.4451 VI 30.236 RP 108.16 LAP 2.13 LOP 217.64 VP 38.006 GAP .28 AZP 92.71 TAL 219.98 TAP 1.88 RCA 108.15 APO 154.77 V2 35.036 RC 86.309 GL 21.76 GP -.83 ZAL 139.82 ZAP 89.04 ETS 357.93 ZAE 169.22 ETE 214.85 ZAC 45.30 ETC 156.80 CLP -89.04
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                              -.36 RAL 288.84 RAD 6567,8 VEL 11.909 PTH 2.12 VHP 2.971 OPA -21.54 RAP 311.88 ECC 1.3365
    C3 20.444 VHL 4.522 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     1 33 45 2208.50
13 26 28 4874.79
2 54 56 1946.65
14 47 59 4611.87
                                                                                       150.37
                                                                                                        111.02
                                                                                                                                         1608.5
                                                                                                                         2 10 34
                                                                          41.10
                                                         -19.42
                                                                                                            69.49 14 47 43
                                                                                                                                             4274.8
                                                                                                                                                              16.99
                                                                                                                                                                              204.05
                                                                         211.46
                                                                                         150.54
                                                         19.96
         90.00
                                                                                                                                          1346.7 -17.26
4011.9 17.86
1134.2 -19.58
                                                                                                            112.28 3 27 23
                                                                           21.40
                                                                                         149.93
                                                         -20.46
       100.00
                                                                                                          68.23 16 4 50
115.80 4 31 42
64.70 17 9 53
                                                                         191.70
                                                                                      150.11
                                                        21.00
       100.00
                                                                                       148.60
148.80
                     4 2 48 1734.23 -23.24
15 56 36 4397.05 23.80
                                                                            3.94
       110.00
                                                                                                                                            3797.1
                                                                                                                                                               20.19
                                                                         174.07
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 354.6 SR 212.9 SS 838.1
CRT -.6924 CRS .9655 CST -.8512
                                                                              SGT 1134.3 SGR 239.1 SG3 766.6
RRT -.0622 RRF -.0034 RTF .8618
SGB 1159.2 R23 -.0528 R13 -.8617
     TOE .1826 TRA -. 7050 TC3 -. 7292 BAU .2017
    ROE -.1678 RRA .0310 RC3 -.1130 FAU .19963
FOE 2.4513 FRA-2.5735 FC3-8.4534 BSP 2766
                                                                                                                                        LSA 915.6 MSA 186.7 SSA 16.4
                                                                                                                                        EL1 389.2 EL2 140.0 ALF 153.78
     BOE .2480 BRA .7057 BC3 .7379 FSP -2451
                                                                              SG1 1134.4 SG2 238.6 THA 179.21
                                                                                                                                                     ARRIVAL DATE MAR 26 1966
                                                                                  FLIGHT TIME 108.00
LAUNCH DATE DEC 8 1965
                                                                                  DISTANCE 312.066
   HELIOCENTRIC CONIC
    RL 147.35 LAL .00 LOL 75.70 VL 28.126 GAL -7.42 AZL 86.55 MCA 145.10 SMA 131.36 ECC .17671 INC 3.4515 VI 30.236 RP 108.20 LAP 1.97 LOP 220.85 VP 37.984 GAP .69 AZP 92.83 TAL 219.51 TAP 4.61 RCA 108.15 APO 154.58 V2 35.023 RC 88.623 GL 21.96 GP -.90 ZAL 139.36 ZAP 94.28 ETS 357.75 ZAE 166.06 ETE 204.93 ZAC 43.43 ETC 155.85 CLP -94.28
    C3 20.166 VHL 4.491 DLA -.11 RAL 289.23 RAD 6567.8 VEL 11.897 PTH 2.11 VHP 2.968 DPA -22.06 RAP 309.76 ECC 1.3319
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 33 28 2212.99 -19.53 41.38 150.60 110.92 2 10.21 1613 0
    PLANETOCENTRIC CONIC
                                                                                                              69.23 14 50 57
                     13 29 53 4863.75
2 54 45 1950.77
14 51 17 4601.20
4 2 53 1737.52
15 50 38 4387.99
                                                                          210.76
         90.00
                                                                                                            112.18 3 27 16
67.97 16 7 58
                                                                                                                                                                               14.32
                                                                                                                                              1350.8
                                                                                                                                                              -17.38
                                                                          21.66
                                                                                          150.17
                                                         -20.57
        100.00
                                                                                                                                                                              183.66
                                                                                                                                              4001.2
                                                                                                                                                              17.56
                                                         20.73
                                                                          191.02
                                                                                          150.22
        100.00
                                                                                                            115.71 4 31 50
64.44 17 12 46
                                                                                                                          4 31 50
                                                                                                                                                                               356.91
                                                                                        148.84
                                                                                                                                             1137.5
                                                                                                                                                              -19.69
                                                         -23.34
                                                                            4.15
        110.00
                                                                                                                                                             19.87
                                                                                                                                                                              166.20
                                                                                                                                             3787.2
                                       4387.22
                                                         23.51
                                                                          173.46
                                                                                          148.90
                      15 59 38
       110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 1322.4 SGR 222.4 SG3 772.4

RRT -.0888 RRF -.0292 RTF .8922

SGB 1341.0 R23 -.0526 R13 -.8921

SGI 1322.5 SG2 221.5 THA 179.12
                                                                                                                                        ST 422.7 SR 198.9 SS 844.0
CRT -.7564 CRS .9688 CST -.8903
     TOE .2365 TRA -.7706 TC3 -.9256 BAU .2510
     RDE -.1556 RRA .0334 RC3 -.1013 FAU .20023
                                                                                                                                        LSA 946.5 MSA 185.8 SSA 15.4
     FOE 2.4583 FRA-2.5376 FC3-8.5957 BSP 3449
BOE .2831 BRA .7713 BCJ .9311 FSP -2486
                                                                                                                                        EL1 451.0 EL2 121.9 ALF 158.78
```

FLIGHT TIME 102.00

ARRIVAL DATE MAR 28 1966

EL1 721.8 EL2 62.8 ALF 170.16

```
FLIGHT TIME 110.00
LAUNCH DATE DEC 8 1965
                                                                    DISTANCE 318.352
  HELIOCENTRIC CONIC
   RL 147.35 LAL .00 LOL 75.70 VL 28.109 GAL -7.32 ATL 86.54 MCA 148.31 SMA 131.24 ECC .17619 INC 3.4589 VI 30.236
RP 108.24 LAP 1.82 LOP 224.05 VP 37.959 GAP 1.09 AZP 92.94 TAL 218.96 TAP 7.27 RCA 108.11 APO 154.36 V2 35.010
RC 90.946 GL 22.16 GP -.97 ZAL 138.82 ZAP 99.31 ETS 357.58 ZAE 162.79 ETE 199.00 ZAC 41.76 ETC 154.91 CLP -99.31
   PLANFTOCENTRIC CONIC
                                        .17 RAL 289.69 RAD 6567.8 VEL 11.885 PTH
                                                                                             2.11 VHP 2.983 DPA -22.52 RAP 307.85 ECC 1.3272
    C3 19.879 VHL 4.459 DLA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 33 16 2218.14
13 33 47 4851.78
2 54 41 1955.51
14 55 3 4589.65
4 3 7 1741.33
16 3 7 4376.59
                                                                                        110.80 2 10 14
                                                                                                                                                  34.32
                                                                         150.90
                                                                                                                   1618.1
       90.00
                                               -19.65
                                                             41.71
                                                                                           68.96
                                                                                                    14 54 39
                                                                                                                      4251.8
                                                                                                                                                  202.54
                                                                           150.82
       90.00
                                                19.40
                                                             210.00
                                                                                          112.07 3 27 17
                                                                                                                      1355.5
                                                                                                                                                  14.51
                                                              21.96
                                                                           150.47
      100.00
                                                -20.69
                                                                                          67.70 16 11 33
115.61 4 32 8
64.16 17 16 3
                                                                                                                      3989.6
                                                                                                                                    17.23
                                                                                                                                                  182.96
                                                             190.29
                                                                        150.39
149.15
      100.00
                                               20.43
                                                                                                                      1141.3
      110.00
                                               -23.45
                                                               4.38
                                                             172.79
                                                                                                                      3776.6
                                                                                                                                     19.53
                                            23.19
                                                                           149.06
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .2907 TRA -.8345 TC3-1.1255 BAU .3001
                                                                 SGT 1515.5 SGR 205.4 SG3 767.7
RRT -.1246 RRF -.0637 RTF .9114
                                                                                                                  ST 493.9 SR 184.4 55 848.7
CRT -.8022 CR5 .9731 CST -.9139
    ROE - .1431 RRA .0358 RC3 - .0886 FAU .19799
    FOE 2.4481 FRA-2.4537 FC3-8.6224 BSP 4128
BOE .3240 BRA .8352 BC3 1.1290 FSP -2475
                                                                 SGB 1529.4 R23 -. 0523 R13 -. 9113
                                                                                                                  LSA 981.8 MSA 185.1 SSA 14.3
                                                                 SG1 1515.7 SG2 203.8 THA 179.02
                                                                                                                  EL1 516.6 EL2 105.3 ALF 162.58
                                                                                                                             ARRIVAL DATE HAR 30 1966
LAUNCH DATE DEC 8 1965
                                                                     FLIGHT TIME 112.00
                                                                    DISTANCE 324.611
  HELIOCENTRIC CONIC
   RL 147.35 LAL .00 LOL 75.70 VL 28.088 GAL -7.21 ATL 86.53 HCA 151.51 SHA 131.09 ECC .17575 INC 3.4678 V1 30.236 RP 108.29 LAP 1.65 LOP 227.25 VP 37.931 GAP 1.47 AZP 93.05 TAL 218.33 TAP 9.84 RCA 108.05 APO 154.12 V2 34.996
    RC 93.279 GL 22.39 GP -1.06 ZAL 138.21 ZAP 104.10 ETS 357.40 ZAE 159.59 ETE 195.19 ZAC 40.34 ETC 154.00 CLP-104.10
   PLANETOCENTRIC CONIC
                                                                                             2.11 VHP 3.014 DPA -22.92 RAP 306.19 ECC 1.3223
                                        .47 RAL 290.23 RAD 6567.8 VEL 11.873 PTH
    C3 19.586 VHL 4.426 DLA
    ENCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 LNCH TIME L-1 TIME
1 33 8 2224.06
13 38 10 4838.79
2 54 42 1960.97
14 59 18 4577.12
4 3 27 1745.78
16 7 2 4365.07
                                                                         151.27
                                                                                                                     1624.1
       90.00
                                                -19.80
                                                              42.08
                                                                                         110.67
                                                                                                      2 10 12
                                                              209.18
                                                                           151.05
                                                                                           68.67
                                                                                                     14 58 49
                                                                                                                      4238.8
                                                                                                                                                  201.85
                                                19.08
       90.00
                                                                                          111.94
                                                                                                       3 27 23
                                                                                                                      1361.0
                                                                                                                                    -17.67
                                                                                                                                                   14.94
                                                -20.83
                                                              22.31
                                                                           150.84
      100.00
                                                                         150.61
                                                              189.50
                                                                                           67.40 16 15 35
                                                                                                                      3977.1
                                                                                                                                                  182.20
                                               20.11
      100.00
                                                                         149.53
                                                                                                                                   -19.96
                                                               4.66
                                                                                          115.49
                                                                                                       4 32 33
                                                                                                                      1145.8
                                                                                                                                                  357.40
                                               -23.58
      110.00
                                                                                           63.86 17 19 47
                                                                                                                    3765.1
                                                              172.07
      110.00
                                              22.85
                                                                           149.28
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 1709.8 SGR 188.2 SG3 756.3
RRT -.1680 RRF -.1030 RTF .9243
SGB 1720.1 R23 -.0549 R13 -.9241
                                                                                                                  ST 566.2 SR 169.6 S5 847.9
CRT -.8363 CRS .9773 CST -.9294
    TOE .3439 TRA -.8958 TC3-1.3271 BAU .3481
ROE -.1305 RRA .0381 RC3 -.0754 FAU .19411
                                                                                                                  LSA 1017.0 MSA 183.7 SSA 13.2
    FOE 2.4076 FRA-2.3468 FC3-8.5800 BSP 4805
                                                                                                                 EL1 584.1 ELZ 90.1 ALF 165.59
    BDE .3678 BRA .8966 BC3 1.3293 FSP -2450
                                                                 5G1 1710.1 SG2 185.5 THA 178.93
                                                                    FLIGHT TIME 114.00
                                                                                                                            ARRIVAL CATE APR 1 1966
LAUNCH DATE DEC 8 1965
                                                                    DISTANCE 330.845
  HELIOCENTRIC CONIC
   RL 147.35 LAL .00 LOL 75.70 VL 28.064 GAL -7.09 AZL 86.52 MCA 154.70 SMA 130.91 ECC .17537 INC 3.4788 VI 30.236 RP 108.33 LAP 1.49 LOP 230.44 VP 37.901 GAP 1.83 AZP 93.15 TAL 217.62 TAP 12.33 RCA 107.95 APO 153.87 V2 34.983
    RC 95.621 GL 22.63 GP -1.16 TAL 137.52 TAP 108.61 ETS 357.22 TAE 156.55 ETE 192.60 TAC 39.18 ETC 153.16 CLP-108.61
   PLANETOCENTRIC CONIC
                                       .81 RAL 290.83 RAO 6567.8 VEL 11.860 PTH 2.10 VMP 3.060 DPA -23.27 RAP 304.80 ECC 1.3174
    C3 19.286 VHL 4.392 DLA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        151.71
151.77
                 1 33 2 2230.89
13 43 5 4824.67
2 54 45 1967.30
15 4 3 4563.49
                                                                                        110.51 2 10 13
68.37 15 3 30
                                                                                                                     1630.9
                                                                                                      2 10 13
       90.00
                                               -19.96
                                                              42.52
                                                                                                                                                  200.99
                                                                                                                      4224.7
                                                                                                                                    15.63
                                                             208.30
       90.00
                                                18.73
                                                                                                      3 27 33
                                                                                                                                                  15.32
                                                                                          111.79
                                                                                                                      1367.3
                                                                                                                                    -17.85
                                                              22.71
                                                                           151.28
      100.00
                                               -20.99
                                                                                         67.09 16 20 6 3963.5
115.35 4 33 3 1151.0
63.54 17 23 58 3752.6
                                                                                                                                   16.48
                                                                                                                                                  181.38
                                                                           150.89
      100.00
                                                19.75
                                                             188.65
                                                                         149.99
                                                                                                                                  -20.12
18.74
                                                                                                                                                  357.71
                   4 3 52 1750.98
16 11 26 4352.58
                                               -23.74
                                                               4.99
      110.00
                                                             171.30
                                                                           149.55
                                                                                                                                                 164.16
      110.00
                  16 11 26
                                               22.47
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 638.3 SR 154.1 55 843.8
CRT -.8632 CR5 .9816 CST -:9396
                                                                 $6T 1902.4 $6R 170.9 $63 738.7

RRT -.2190 RRF -.1482 RTF .9329

$6B 1910.1 R23 -.0591 R13 -.9328
    TOE .3956 TRA -.9539 TC3-1.5291 BAU .3946
   ROE -.1175 RRA .0401 RC3 -.0619 FAU .18867
FDE 2.3478 FRA-2.2187 FC3-8.4690 BSP 5477
                                                                                                                  LSA 1053.5 MSA 182.4 SSA 11.9
    BDE .4127 BRA .9548 BC3 1.5303 FSP -2407
                                                                 SG1 1902.8 SG2 166.7 THA 178.86
                                                                                                                  EL1 652.2 EL2 76.2 ALF 168.06
                                                                                                                            ARRIVAL DATE APR 3 1966
                                                                     FLIGHT TIME 116.00
LAUNCH DATE DEC 8 1965
                                                                     DISTANCE 337.054
  HELTOCENTRIC CONTC
   RL 147.35 LAL .00 LOL 75.70 VL 28.037 GAL -6.96 AZL 86.51 MCA 157.90 SMA 130.72 ECC .17505 INC 3.4926 VI 30.236
RP 108.37 LAP 1.31 LOP 233.63 VP 37.869 GAP 2.18 AZP 93.24 TAL 216.85 TAP 14.75 RCA 107.83 APO 153.60 VZ 34.970
RC 97.969 GL 22.90 GP -1.29 ZAL 136.76 ZAP 112.84 ETS 357.02 ZAE 153.70 ETE 190.78 ZAC 38.29 ETC 152.40 CLP-112.85
   PLANETOCENTRIC CONIC
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 54 2238.88 -20.15 43.03 152.21 110.33 2 10 13 1638.9 -17.20 35.59
                                      1.19 RAL 291.50 RAD 6567.8 VEL 11.848 PTH 2.10 VHP 3.118 DPA -23.59 RAP 303.72 ECC 1.3124
                 13 48 33 4809.21
2 54 48 1974.72
15 9 21 4548.60
4 4 19 1757.14
16 16 19 4338.95
                                                                                            68.04
                                                                                                     15 8 43
                                                18.34
                                                              207.33
                                                                           151.68
       90.00
                                                                                                     3 27 43
                                                                                                                      1374.7
                                                                                                                                    -18.05
                                                                                                                                                   15.78
      100.00
                                                -21.17
                                                              23.18
                                                                           151.80
                                                                                          111.61
                                                                                            66.76 16 25 9
                                                                                                                      3948.6
                                                                                                                                     16.04
                                                                                                                                                  180.49
      100.00
                                                19.35
                                                              187.72
                                                                           151.23
                                                                                          115.19 4 33 36
63.20 17 28 38
                                                                                                                                                  358.08
                                               -23.92
                                                                5.38
                                                                           150.51
                                                                                                                      1157.1
                                                                                                                                    -20.32
      110.00
                  16 16 19
                                4338.95
                                              22.06
                                                             170.46
                                                                           149.88
                                                                                                                      3739.0
                                                                                                                                     18.28
                                                                                                                                                  163.36
      110.00
                                                               MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .4473 TRA-1.0069 TC3-1.7280 BAU .4387
                                                                 SGT 2089.8 SGR 153.6 SG3 715.2
RRT -.2782 RRF -.2005 RTF .9385
                                                                                                                 ST 711.2 SR 138.0 SS 841.4
CRT -.8870 CRS .9864 CST -.9464
                                                               SGB 2095.4 R23 -.0645 R13 -.9384
SG1 2090.2 SG2 147.5 THA 178.82
    RDE - .1042 RRA .0417 RC3 - .0487 FAU .18164
                                                                                                                  LSA 1095.3 HSA 181.7 SSA 10.6
    FOE 2.2871 FRA-2.0652 FC3-8.2837 BSP 6110
BDE .4593 BRA 1.0077 BC3 1.7287 FSP -2329
```

ARRIVAL DATE APR 5 1966

```
LAUNCH DATE DEC 8 1965
                                                                                                 DISTANCE 343.239
    HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 28.007 GAL -6.82 AZL 86.49 MCA 161.09 SMA 130.50 ECC .17479 INC 3.5110 V1 30.236
RP 108.41 LAP 1.14 LOP 236.82 VP 37.836 GAP 2.52 AZP 93.32 TAL 216.01 TAP 17.10 RCA 107.69 APO 153.31 V2 34.957
                                23.20 CP -1.47 ZAL 135.91 ZAP 116.79 ETS 356.80 ZAE 151.07 ETE 189.49 ZAC 37.68 ETC 151.73 CLP-116.80
     RC 100.323 GL
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 39 2248.36 -20.37 43.63 152.80 110.10 2 10 8 1648.4 -17.44 34 18
                        13 54 39 4792.19
2 54 45 1983.56
15 15 14 4532.22
4 4 43 1764.55
16 21 46 4324.00
                                                                                                            152.07
                                                                                                                                  67.69
                                                                                                                                                15 14 31
                                                                     17.90
                                                                                        206.27
          90.00
                                                                                                                                 111.39 3 27 49
66.41 16 30 47
                                                                                                                                                                                                                  16.32
                                                                                                                                                                                           -18.30
                                                                                                                                                                         1383.6
                                                                                         23.74
                                                                                                           152.38
                                                                    -21.40
        100.00
                                                                                                                                                                                                                179.52
                                                                   18.91
                                                                                        186.71
                                                                                                           151.62
                                                                                                                                                                         3932.2
                                                                                                                                                                                             15.56
        100.00
                                                                                                                                 114.98 4 34 8
62.84 17 33 50
                                                                                                        151.11
                                                                                                                                                                                                                358.52
                                                                                                                                                                        1164.6
                                                                                                                                                                                           -20.56
                                                                   -24.13
                                                                                          5.85
        110.00
                                                                   21.60
                                                                                        169.54
                                                                                                           150.27
                                                                                                                                                                        3724.0
                                                                                                                                                                                              17.78
                                                                                                                                                                                                                 162.49
        110.00
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 782.9 SR 121.1 SS 835.4
CRT -.9077 CR5 .9906 CST -.9514
LSA 1137.0 MSA 180.8 SSA 9.1
                                                                                             SGT 2273.6 SGR 136.3 SG3 689.9
RRT -.3417 RRF -.2533 RTF .9425
     TDE .4969 TRA-1.0561 TC3-1.9267 BAU .4813
RDE -.0905 RRA .0426 RC3 -.0363 FAU .17428
     FOE 2.2110 FRA-1.9129 FC3-8.0763 BSP 6750
BOE .5051 BRA 1.0570 BC3 1.9270 FSP -2260
                                                                                             SGB 2277.7 R23 -.0742 R13 -.9424
                                                                                                                                                                   EL1 790.6 EL2 50.3 ALF 171.97
                                                                                            SG1 2274.1 SG2 128.0 THA 178.82
                                                                                                   FLIGHT TIME 120.00
                                                                                                                                                                                   ARRIVAL DATE APR 7 1966
LAUNCH DATE DEC 8 1965
                                                                                                  01STANCE 349.402
   HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 27.975 GAL -6.68 AZL 86.46 HCA 164.29 SHA 130.28 ECC .17459 INC 3.5364 V1 30.236 RP 108.44 LAP .96 LOP 240.01 VP 37.801 GAP 2.85 AZP 93.40 TAL 215.10 TAP 19.39 RCA 107.53 APO 153.02 V2 34.945
    C3 18.387 VHL 4.288 DLA 2.11 RAL 293.03 RAD 6567.7 VEL 11.822 PTH 2.09 VHP 3.262 OPA -24.23 RAP 302.45 ECC 1.3026 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 9 2259.96 -20.64 44.38 153.47 109.82 2 9 49 1660.0 -17.76 36.89 90.00 14 1 29 4773.12 17.41 205.09 152.53 67.31 15 21 2 4173.1 14.18 197.90 100.00 2 54 29 1994.42 -21.66 24.44 153.06 111.12 3 27 43 1394.4 -18.60 16.98 100.00 15 21 51 4513.90 18.41 185.58 152.08 66.02 16 37 5 3913.9 15.01 178.43 110.00 4 4 59 1773.75 -24.39 6.43 151.80 114.73 4 34 33 1173.8 -20.85 339.08 DIFFERENTIAL CORRECTIONS
    PLANETOCENTRIC CONIC
                                                                                          HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                  ST 856.7 SR 103.1 SS 833.2
CRT -.9285 CRS .9946 CST -.9550
                                                                                         SGT 2449.0 SGR 118.8 SG3 661.3
RRT -.4074 RRF -.3046 RTF ..9448
SGB 2451.8 R23 -.0888 R13 -.9447
      TOE .5482 TRA-1.0990 TC3-2.1187 BAU .5209
      ROE -.0761 RRA .0429 RC3 -.0258 FAU .16599
                                                                                                                                                                  LSA 1185.8 MSA 180.7 SSA
                                                                                                                                                                                                                        7.6
     FOE 2.1443 FRA-1.7473 FC3-7.8154 BSP 7334
BDE .5535 BRA 1.0998 BC3 2.1188 FSP -2164
                                                                                                                                                                  EL1 862.1 EL2 38.1 ALF 173.61
                                                                                           SG1 2449.4 SG2 108.5 THA 178.87
                                                                                                                                                                                  ARRIVAL DATE APR 9 1966
                                                                                                  FLIGHT TIME 122.00
LAUNCH DATE DEC 8 1965
                                                                                                 DISTANCE 355.541
    HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 27.942 GAL -6.53 AZL 86.43 HCA 167.48 SHA 130.03 ECC .17445 INC 3.5741 VI 30.236 RP 108.48 LAP .77 LOP 243.20 VP 37.764 GAP 3.17 AZP 93.49 TAL 214.14 TAP 21.62 RCA 107.35 APO 152.72 V2 34.932 RC 105.043 GL 24.00 GP -2.08 ZAL 133.94 ZAP 123.88 ETS 356.11 ZAE 146.43 ETE 188.11 ZAC 37.31 ETC 150.54 CLP-123.91
    PLANETOCENTRIC CONIC
      C3 18.111 VML 4.256 DLA 2.70 RAL 293.88 RAD 6567.7 VEL 11.811 PTH 2.09 VMP 3.345 DPA -24.63 RAP 302.26 ECC 1.2981
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 31 8 2274.85 -20.98 45.34 154.23 109.46 2 9 3 1674.9 -18.14 37.82 90.00 14 9 18 4751.16 16.82 203.74 153.05 66.88 15 28 29 4151.2 13.55 196.60 100.00 2 53 44 2008.42 -22.00 25.34 153.83 110.76 3 27 13 1408.4 -18.98 17.85 100.00 15 29 23 4492.83 17.82 184.29 152.59 65.59 16 44 15 3892.8 14.38 177.19
                                                                                                                                 114.39 4 34 38
62.01 17 46 12
                                                                                                           152.59
                            4 4 53 1785.76
16 34 44 4288.25
                                                                  -24.73
                                                                                           7.20
         110.00
                                                                                                                                                                                                                 160.43
                                                                                                                                                                         3668.3
                                                                                                                                                                                               16.57
                                                                                                          151.21
                         16 34 44
                                                                    20.47
                                                                                        167.38
         110.00
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                   ST 932,7 SR 83.5 SS 831.1
CRT - 9496 CRS .9971 CST - 9582
LSA 1239.0 MSA 180.0 SSA 6.1
                                                                                             SGT 2618.7 SGR 100.8 SG3 632.8

RRT -.4601 RRF -.3339 RTF .9464

SGB 2620.7 R23 -.1148 R13 -.9463

SGI 2619.1 SG2 89.5 THA 178.98
      TOE .6011 TRA-1.1374 TC3-2.3061 BAU .5584
      RDE -.0607 RRA .0421 RC3 -.0190 FAU .15782
FDE 2.0767 FRA-1.5901 FC3-7.5442 BSP 7901
                                                                                                                                                                   EL1 936.0 EL2 26.1 ALF 175.13
      BOE .6041 BRA 1.1382 BC3 2.3062 FSP -2077
                                                                                                                                                                                  ARRIVAL DATE APR 11 1966
                                                                                                   FLIGHT TIME 124.00
LAUNCH DATE DEC 8 1965
                                                                                                  DISTANCE 361.660
    HELIOCENTRIC CONIC
     RL 147.35 LAL .00 LOL 75.70 VL 27.906 GAL -6.37 AZL 86.36 MCA 170.66 SMA 129.78 ECC .17436 INC 3.6375 V1 30.236 RP 108.52 LAP .59 LOP 246.38 VP 37.726 GAP 3.47 AZP 93.59 TAL 213.13 TAP 23.79 RCA 107.15 APO 152.41 V2 34.920 RC 107.406 GL 24.59 GP -2.71 ZAL 132.77 ZAP 127.04 ETS 355.46 ZAE 144.37 ETE 188.07 ZAC 37.60 ETC 149.82 CLP-127.09
    PLANETOCENTRIC CONIC
     C3 17.880 VHL 4.228 DLA 3.47 RAL 294.77 RAO 6567.7 VEL 11.801 PTH 2.09 VHP 3.435 OPA -25.25 RAP 302.39 ECC 1.2943 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 28 58 2295.77 -21.45 46.69 155.13 108.94 2 7 14 1695.8 -18.67 39.12 90.00 14 18 36 4724.24 16.10 202.10 153.63 66.39 15 37 20 4124.2 12.77 195.01 100.00 2 51 56 2028.17 -22.47 26.62 154.74 110.24 3 25 45 1428.2 -19.52 19.07 100.00 15 38 19 4467.08 17.09 182.73 153.16 65.09 16 52 76 3867.1 13.59 175.68 110.00 4 3 54 1802.92 -25.21 8.31 153.55 113.89 4 35 77 1202.9 -21.76 .85 110.00 16 42 51 4265.10 19.72 166.00 151176 61.50 17 53 56 3665.1 15.76 159.12
                                                       3.47 RAL 294.77 RAD 6567.7 VEL 11.801 PTH 2.09 VHP 3.435 OPA -25.25 RAP 302.39 ECC 1.2943
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 2781.7 SGR 81.5 SG3 603.0

RRT -.4580 RRF -.2909 RTF .9471

SGB 2782.9 R23 -.1611 R13 -.9470

SG1 2781.9 SG2 72.5 THA 179.23
      TOE .6599 TRA-1.1714 TC3-2.4830 BAU .5936

RDE -.0453 RRA .0399 RC3 -.0195 FAU .14930

FDE 2.0285 FRA-1.4317 FC3-7.2292 BSP 8438

BDE .6613 BRA 1.1721 BC3 2.4831 FSP -1977
                                                                                                                                                                  ST 1015.4 SR 60.9 55 835.7
CRT -.9735 CRS .9955 CST -.9609
                                                                                                                                                                  LSA 1304.1 MSA 180.5 SSA
                                                                                                                                                                  EL1 1017.1 EL2 13.9 ALF 176.66
```

FLIGHT TIME 118.00

ARRIVAL DATE APR 13 1966 FLIGHT TIME 126.00 LAUNCH DATE DEC 8 1965 DISTANCE 367.759 HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 75.70 VL 27.869 GAL -6.20 AZL 86.23 MCA 173.85 SMA 129.52 ECC .17434 INC 3.7651 V1 30.236 RP 108.56 LAP .40 LOP 249.56 VP 37.688 GAP 3.77 AZP 93.74 TAL 212.06 TAP 25.91 RCA 106.94 APO 152.10 V2 34.909 RC 109.770 GL 25.57 GP -3.98 ZAL 131.35 ZAP 129.93 ETS 354.17 ZAE 142.39 ETE 188.90 ZAC 38.40 ETC 148.53 CLP-130.05 PLANETOCENTRIC CONIC C8 17.772 VHL 4.216 DLA 4.64 RAL 295.68 RAD 6567.7 VEL 11.796 PTH 2.09 VHP 3.533 DPA -26.46 RAP 302.88 ECC 1.2925 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 23 48 2330.91 14 31 0 4686.30 2 47 20 2061.51 15 50 9 4430.94 4 0 35 1832.27 16 53 24 4232.94 156.28 -19.54 108.03 1730.9 41.33 2 2 39 -22.21 48.99 90.00 15 49 6 4086.3 11.65 199.81 154.28 65.73 15.05 90.00 109.34 3 21 41 64.43 17 4 0 113.01 4 51 7 60.83 18 3 57 1461.5 -20.39 21.16 28.80 155.90 -23.24 100.00 173.59 12.47 3830.9 15.04 180.56 153.80 100.00 -22.66 154.73 1232.3 -26.01 10.22 110.00 14.64 3632.9 110.00 164.10 152.38 MID-COURSE EXECUTION ACCURACY ORBIT-DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1116.6 SR 31.2 SS 850.1 CRT -.9957 CRS .9565 CST -.9647 SGT 2939.0 SGR 64.1 SG3 573.4 RRT -.1697 RRF .0762 RTF .9476 SGB 2939.7 R23 -.2406 R13 -.9476 TOE .7356 TRA-1.2048 TC3-2.6359 BAU .6264 ROE -.0205 RRA .0347 RC3 -.0392 FAU .14092 FOE 2.0081 FRA-1.2903 FC3-6.8648 BSP 8943 LSA 1392.2 MSA 179.6 SSA 2.8 BDE .7359 BRA 1.2053 BC3 2.6362 FSP -1886 EL1 1117.1 EL2 2.9 ALF 178.41 SG1 2939.0 SG2 63.1 THA 179.79 ARRIVAL DATE APR 15 1966 FLIGHT TIME 128.00 LAUNCH DATE DEC 8 1965 HELIOCENTRIC CONIC DISTANCE 373.837 RL 147.35 LAL .00 LOL 75.70 VL 27.830 GAL -6.02 ATL 85.83 HCA 177.03 SMA 129.25 ECC .17437 INC 4.1671 V1 30.236 RP 108.59 LAP .22 LOP 252.73 VP 37.649 GAP 4.06 AZP 94.16 TAL 210.95 TAP 27.98 RCA 106.71 APO 151.78 V2 34.897 28.09 GP -7.97 ZAL 129.14 ZAP 132.31 ETS 350.18 ZAE 139.91 ETE 192.81 ZAC 40.80 ETC 144.68 CLP RC 112.133 GL PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC

C3 18.233 VHL 4.270 DLA 7.36 RAL 296.42 RAD 6567.7 VEL 11.816 PTH 2.09 VHP 3.654 DPA -30.31 RAP 304.15 ECC 1.3001

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 6 1 2422.76 -24.02 55.11 158.33 105.47 1 46.23 1822.8 -21.66 47.23

90.00 14 54 43 4606.39 12.76 195.06 155.15 64.51 16.11 30 4006.4 9.22 188.17

100.00 2 30 53 2149.01 -25.09 34.64 157.99 106.80 3 6.42 1549.0 -22.55 26.76

100.00 16 12 32 4355.37 13.77 176.10 154.64 63.20 17.25 7 3755.4 10.06 169.27

110.00 3 47 12 1910.20 -27.97 15.42 156.90 110.50 4 19.2 1310.2 -24.93 7.57

110.00 17 12 43 4166.95 16.43 160.29 153.13 59.60 18.22 10 3566.9 12.28 153.65 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1285.4 SR 39.5 SS 903.0 CRT .8229 CRS -.9346 CST -.9710 SGT 3107.5 SGR 121.8 SG3 539.3 RRT .6946 RRF .8806 RTF .9483 TOE .8768 TRA-1.2641 TC3-2.7077 BAU .6508 .0288 RRA .0187 RC3 -.1320 FAU .13157 ROE LSA 1561.2 MSA 178.8 SSA FDE 2.0976 FRA-1.1870 FC3-6.2470 BSP 9628 BDE .8773 BRA 1.2643 BC3 2.7109 FSP -1797 1.3 SGB 3109.9 R23 .3077 R13 .9486 SG1 3108.7 SG2 87.6 THA 1.56 EL1 1285.9 EL2 22.4 ALF ARRIVAL DATE APR 17 1966 FLIGHT TIME 130.00 LAUNCH DATE DEC 8 1965 **DISTANCE 379.901** HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 75.70 VL 27.790 GAL -5.83 AZL 97.41 HCA 180.21 SMA 128.97 ECC .17448 INC 6.8981 VI 30.236 RP 108.63 LAP .03 LOP 255.91 VP 37.609 GAP 4.34 AZP 82.59 TAL 209.80 TAP 30.01 RCA 106.46 APO 151.47 V2 34.886 RC 114.493 GL -43.06 GP 64.76 TAL 119.89 ZAP 109.92 ET5 44.30 ZAE 109.92 ETE 135.69 ZAC 53.92 ETC 230.46 CLP-143.04 PLANETOCENTRIC CONIC C3 27.254 VHL 5.221 DLA -60.58 RAL 323.46 RAD 6568.1 VEL 12.191 PTH -2.19 VHP 7.773 DPA 40.80 RAP 286.68 ECC 1.4485 C3 27.224 VML 5.221 DLA -60.58 RAL 323.46 RAD 6568.1 VEL 12.191 PTH -2.19 VMP 7.773 DPA 40.80 RAP 286.68 ECC 1.4485
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
33.91 4 59 43 1805.28 34.01 51.86 211.09 143.66 5 29 48 1205.3 40.30 46.07
146.09 14 36 44 5418.44 34.02 252.13 211.10 143.66 16 7 2 4818.4 40.31 246.34
33.91 4 59 43 1805.28 34.01 51.86 211.09 143.66 16 7 2 4818.4 40.31 246.34
33.91 4 59 43 1805.28 34.01 51.86 211.09 143.66 5 29 48 1205.3 40.30 46.07 143.66 16 7 2 143.66 5 29 48 143.66 16 7 2 34.02 4818.4 40.31 246.34 5418.44 252.13 211.10 146.09 14 36 44 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT12422.7 SGR 3308.2 SG3 464.8 RRT -.9935 RRF -.9991 RTF ..9975 SGB12855.6 R23 ..0635 R13 -.9980 SG112850.5 SG2 365.1 THA 165.17 ST 4154.9 SR 1122.4 S5 1216.2 TOE 2.3588 TRA 4.8415 TC3 5.2965 BAU 1.9698 CRT -.9986 CRS .9999 CST -.9993 LSA 4471.8 MSA 69.4 33A 1.2 RDE -.5955 RRA-1.3602 RC3-1.0832 FAU-.06195 FDE .9795 FRA 2.1721 FC3 1.9680 8SP 110127 EL1 4303.4 EL2 56.6 ALF 164.90 BDE 2.4328 BRA 5.0289 BC3 5.4061 FSP 3710 ARRIVAL DATE APR 19 1966 FLIGHT TIME 132.00 LAUNCH DATE DEC 8 1965 DISTANCE 385.939 HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 75.70 VL 27.749 GAL -5.64 AZL 87.28 HCA 183.39 SMA 128.68 ECC .17464 INC 2.7120 VI 30.236
RP 108.66 LAP -.16 LOP 259.08 VP 37.369 GAP 4.61 AZP 92.71 TAL 208.60 TAP 31.98 RCA 106.21 APO 151.15 V2 34.875
RC 116.852 GL 19.75 GP 6.61 ZAL 130.24 ZAP 137.34 ETS 4.82 ZAE 138.80 ETE 174.95 ZAC 36.10 ETC 162.47 CLP-137.76 PLANETOCENTRIC CONIC -.36 RAL 300.24 RAD 6567.6 VEL 11.679 PTH 2.05 VHP 3.848 DPA -15.71 RAP 302.83 ECC 1.2470 C3 15.008 VHL 3.874 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 54 51 -14.40 29.41 157.00 1536.8 2 19 15 2136.83 14 11 56 4803.20 112.54 90.00 36.62 -17.61 15 31 59 4203.2 15.03 199.70 206.96 157.14 67.91 90.00 18.19 113.87 4 11 40 1275.0 -15.16 9.78 3 40 25 1874.99 15 33 27 4540.28 156.57 16.94 100.00 -18.55 66.58 16 49 7 3940.3 15.80 180.00 156.72 100.00 19.13 187.21 4 48 17 1662.57 16 42 4 4325.46 5 15 59 1062.6 -17.19 352.53 117.57 155.29 110.00 359.53 -21.05 62.87 17 54 10 17.83 162.57 3725.5 110.00 16 42 4 21.64 169.63 155.45 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SG1 3323.9 SGR 307.5 SG3 492.2 RRI -.9720 RRF -.9903 RTF ..9430 SGB 3338.1 R23 .3119 R13 -.9436 SG1 3337.3 SG2 72.0 THA 174.86 5T 1005.3 SR 78.8 SS 643.9 CRT -.9843 CRS .9837 CST -.9379 TOE .5887 TRA-1.1172 TC3-3.5487 BAU .7159 RDE -.0499 RRA .0591 RC3 .3684 FAU .11786 FDE 1.2879 FRA -.7016 FC3-6.7988 BSP 9999 BDE .5908 BRA 1.1188 BC3 3.5678 FSP -1574 CRT -.9843 CRS .9837 CST -.9379 LSA 1181.1 MSA 190.7 SSA 2.0 EL1 1008.3 EL2 13.9 ALF 175.59

```
ARRIVAL DATE APR 21 1966
                                                                                            FLIGHT TIME 134.00
LAUNCH DATE DEC 8 1965
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 391.962
     RL 147.35 LAL .00 LOL 75.70 VL 27.707 GAL -5.43 AZL 86.95 HCA 186.57 SMA 128.39 ECC .17488 INC 3.0464 VI 30.236 RP 108.69 LAP -.35 LOP 262.25 VP 37.528 GAP 4.87 AZP 93.03 TAL 207.36 TAP 33.92 RCA 105.94 APO 150.84 VZ 34.865 RC 119.206 GL 22.11 GP 3.33 ZAL 128.07 ZAP 139.85 ETS 1.60 ZAE 137.70 ETE 178.55 ZAC 37.99 ETC 158.65 CLP-139.97
    PLANETOCENTRIC CONIC
     C3 15.157 VHL 3.893 OLA 2.27 RAL 301.20 RAD 6567.6 VEL 11.685 PTH 2.06 VHP 3.935 OPA -18.76 RAP 304.44 ECC 1.2494
     C3 13.137 WHL 3.893 OLA Z.Z7 RAL 301.ZU RAD 0307.6 VEL 11.083 PIR Z.U6 VMP 3.935 DPA -18.76 RAP 304.44 ECC 1.2494 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 2 5 33 2220.72 -19.72 41.87 158.67 110.75 2 40 34 1620.7 -16.72 34.48 90.00 14 35 18 4723.74 16.08 202.07 157.78 66.38 15 54 2 4123.7 12.75 194.98 100.00 3 25 57 1954.93 -20.67 21.92 158.27 112.08 3 58 32 1354.9 -17.50 14.57 100.00 15 55 36 4464.76 17.02 182.59 157.34 65.05 17 10 0 3864.8 13.52 175.55 110.00 4 36 37 1733.72 -23.23 3.91 157.04 115.61 5 5 31 1133.7 -19.57 356.69 110.00 17 1 24 4258.74 19.52 165.02 156.01 61.36 18 12 23 3658.7 15.54 158.76
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 3509.8 SGR 227.5 SG3 477.9
RRT -.9672 RRF -.9646 RTF ..9435
SGB 3517.1 R23 ..2038 R13 -.9438
                                                                                                                                                        5T 1147.1 SR 39.3 SS 696.8

CRT -.9887 CRS .8989 CST -.9480

LSA 1328.9 MSA 191.7 SSA 3.5
      TOE .6938 TRA-1.1667 TC3-3.7052 BAU .7529
     ROE -.0219 RRA .0489 RC3 .2740 FAU .11368
     FOE 1.3745 FRA -.6579 FC3-6.4929 BSP 10984
                                                                                                                                                       ELI 1147.7 EL2 5.9 ALF 178.06
     BDE .6941 BRA 1.1677 BC3 3.7153 FSP -1582
                                                                                       SG1 3516.7 SG2 57.7 THA 176.41
LAUNCH DATE DEC 8 1965
                                                                                            FLIGHT TIME 136.00
                                                                                                                                                                       ARRIVAL DATE APR 23 1966
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 397.969
     RL 147.35 LAL .00 LOL 75.70 VL 27.664 GAL -5.22 AZL 86.84 HCA 189.74 SMA 128.10 ECC .17519 INC 3.1603 V1 30.236
RP 108.72 LAP -.53 LOP 265.42 VP 37.488 GAP 5.13 AZP 93.12 TAL 206.08 TAP 35.82 RCA 105.66 APO 150.54 V2 34.856
     RC 121.557 GL 23.08 GP 2.19 ZAL 126.31 ZAP 141.99 ETS .50 ZAE 136.64 ETE 179.61 ZAC 39.40 ETC 157.76 CLP-142.05
   PLANETOCENTRIC CONIC
     C3 15.014 VHL 3.875 DLA 3.56 RAL 302.47 RAD 6567.6 VEL 11.679 PTH 2.05 WHP 4.039 DPA -19.68 RAP 305.81 ECC 1.2471 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 1 59 1 2258.67

90.00 14 50 0 4681.53

100.00 3 22 2 1990.92

100.00 16 9 40 4424.50

110.00 4 34 6 1765.37

110.00 17 14 6 4222.82
                                                                                                  160.11
                                                                                                                     109.86 2 36 40
65.65 16 8 1
                                                                                                                                                            1658.7
                                                                                                                                                                              -17.72
                                                                -20.61
                                                                                   44.29
                                                                                                                                                                                                      36.81
                                                                                  199.52
                                                                                                     158.74
                                                                                                                                                               4081.5
                                                                                                                                                                                  11.50
                                                                                                                                                                                                   192.51
                                                                 14.92
                                                                                                                                       3 55 13
                                                                                                                                                               1390.9
                                                                                                    159.72
                                                                                                                                                                                 -18.50
                                                                                                                                                                                                     16.77
                                                                -21.58
                                                                                    24.22
                                                                                                                         111.20
                                                                                                                         64.32 17 23 25
114.96 5 3 31
60.63 18 24 28
                                                                                  180.17
                                                                                                                                                               3824.5
                                                                                                                                                                                 12.26
                                                                                                                                                                                                   173.22
                                                               15.85
                                                                                                    158.29
                                                                                                                                                               1165.4
                                                                -24.15
                                                                                    5.90
                                                                                                    154.53
                                                                                                                                                                              -20.59
                                                                                                                                                                                                    358.57
                                                             18.33
                                                                                  163.51
                                                                                                    156.93
                                                                                                                                                               3622.8
                                                                                                                                                                                  14.28
                                                                                                                                                                                                    156.74
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 1250.7 SR 20.4 55 719.5
CRT -.6848 CRS .4448 CST -.9532
                                                                                       SGT 3636.9 SGR 205.3 SG3 456.2
RRT -.9369 RRF -.9256 RTF .9426
     TOE .7677 TRA-1.1635 TC3-3.8640 BAU .7772
     RDE -.0044 RRA .0415 RC3 .2526 FAU .10743
FDE 1.3811 FRA -.5515 FC3-6.1948 BSP 11353
BDE .7677 BRA 1.1643 BC3 3.8722 FSP -1510
                                                                                      SGB 3642.6 R23 .1205 R13 -.9427
SGB 3641.9 SG2 71.6 THA 176.97
                                                                                                                                                       LSA 1430.4 MSA 190.9 SSA 4.9
EL1 1250.8 EL2 14.9 ALF 179.36
                                                                                                                                                                      ARRIVAL DATE APR 25 1966
                                                                                            FLIGHT TIME 138.00
LAUNCH DATE DEC 8 1965
                                                                                            DISTANCE 403.959
   HELTOCENTRIC CONTC.
    RL 147.35 LAL .00 LOL 75.70 VL 27.620 GAL -5.00 AZL 86.78 HCA 192.91 SMA 127.80 ECC .17557 INC 3.2189 V1 30.236
RP 108.75 LAP -.72 LOP 268.59 VP 37.447 GAP 5.38 AZP 93.14 TAL 204.77 TAP 37.68 RCA 105.36 APO 150.24 VZ 34.846
RC 123.903 GL 23.69 GP 1.62 ZAL 124.61 ZAP 143.97 ETS 359.96 ZAE 135.70 ETE 180.04 ZAC 40.74 ETC 157.62 CLP-144.00
   PLANETOCENTRIC CONIC
     C3 14.795 VHL 3.846 OLA 4.53 RAL 303.89 RAD 6567.6 VEL 11.670 PTH 2.05 VMP 4.146 DPA -20.00 RAP 307.20 ECC 1.2435
   C3 14.795 VML 3.846 DLA 4.53 RAL 303.89 RAD 6567.6 VEL 11.670 PTH 2.05 VMP 4.146 DPA -20.00 RAP 307.20 ECC 1.2435 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 7 23 2285.63 -21.23 46.03 161.55 109.19 2 35 29 1685.6 -18.41 38.49 90.00 15 2 54 4648.02 13.97 197.52 159.83 65.11 16 20 22 4048.0 10.50 190.56 100.00 3 20 51 2016.40 -22.20 25.86 161.18 110.55 3 54 28 1416.4 -19.20 18.34 100.00 16 22 6 4392.48 14.89 178.27 159.37 63.78 17 35 19 3792.5 11.25 171.38 110.00 4 33 59 1787.54 -24.78 7.32 160.01 114.33 5 3 46 1187.5 -21.29 359.91 110.00 17 25 28 4194.11 17.36 161.85 158.00 60.08 18 35 22 3594.1 13.26 155.15 DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                    SG1 3761.7 SGR 200.6 SG3 435.4

RRT -.8915 RRF -.8763 RTF .9412

SG8 3767.0 R23 .0613 R13 -.9413

SG1 3765.9 SG2 90.8 THA 177.28
                                                                                                                                                        ST 1337.6 SR 22.3 SS 733.0
CRT .3186 CRS -.5704 CST -.9558
     TOE .8263 TRA-1.1495 TC3-4.0454 BAU .8017
     RDE .0099 RRA .0351 RC3 .2510 FAU .10140
                                                                                                                                                        LSA 1513.3 MSA 191.4 SSA 6.3
EL1 1337.6 EL2 21.2 ALF .30
     FDE 1.3642 FRA -.4431 FC3-5.9332 BSP 11741
     BOE .8263 BRA 1.1500 BC3 4.0532 FSP -1438
                                                                                                                                                                       ARRIVAL DATE APR 27 1966
LAUNCH DATE DEC 8 1965
                                                                                            FLIGHT TIME 140.00
                                                                                           DISTANCE 409.934
   HELIOCENTRIC CONIC
    RL 147.35 LAL .00 LOL 75.70 VL 27.576 GAL -4.77 AZL 86.74 HCA 196.09 SMA 127.50 ECC .17604 INC 3.2550 V1 30.236
RP 108.78 LAP -.90 LOP 271.76 VP 37.406 GAP 5.63 AZP 93.13 TAL 203.43 TAP 39.51 RCA 105.06 APO 149.95 V2 34.838
RC 126.245 GL 24.14 GP 1.27 ZAL 122.87 ZAP 145.83 ETS 359.67 ZAE 134.87 ETE 180.21 ZAC 42.11 ETC 157.79 CLP-145.85
   PLANETOCENTRIC CONIC
     C3 14.554 VHL 3.815 DLA 5.39 RAL 305.40 RAD 8567.6 VEL 11.659 PTH 2.05 VHP 4.255 OPA -20.07 RAP 308.66 ECC 1.2395
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 56 57 2308.90
15 15 26 4617.45
3 20 51 2038.33
16 34 14 4363.25
4 34 55 1806.50
17 36 39 4167.84
                                                                                                  163.06
                                                                                                                                        2 35 26
                                                                                                                        108.60
                                                                                                                                                             1708.9
                                                                                                                                                                               -19.00
                                                                                  47.55
         90.00
                                                                -21.74
                                                                                                                                       16 32 23
                                                                                                                                                               4017.4
                                                                                                                                                                                   9.56
                                                                                  195.71
                                                                                                    161.03
                                                                                                                          64.66
          90.00
                                                                13.08
                                                                                                                                                              1438.3
                                                                                                                                                                                                    19.71
                                                                                                    162.69
                                                                                                                        109.97
                                                                                                                                         3 54 49
                                                                                                                                                                                 -19.79
                                                                                   27.28
        100.00
                                                              -22.71
                                                                                                                                                                                                   169.71
                                                                                                                          63.32 17 46 57
                                                                                                                                                              3763.3
                                                                                                                                                                                 10.32
                                                               14.01
                                                                                  176.56
                                                                                                    160.57
        100.00
                                                                                                                        113.78
                                                                                                                                          5
                                                                                                                                                              1206.5
                                                                                    8.54
                                                                                                    161.55
                                                                                                                                                                              -21.88
                                                               -25.31
                                                                                                                          59.61 18 46 6
                                                                                  160.34
                                                                                                                                                              3567.8
                                                                                                                                                                                  12.31
        110.00
                                                               16.47
                                                                                                     159.18
                                                                                    MID-COURSE EXECUTION ACCURACY
SGT 3891.1 SGR 204.2 SG3 417.2
RRT -.8387 RRF -.8236 RTF .9403
SG8 3896.5 R23 .0631 R13 -.9404
SG1 3894.9 SG2 111.1 THA 177.48

SG1 3894.9 SG2 111.1 THA 177.48
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE .8747 TRA-1.1310 TC3-4.2478 BAU .8280
     ROE .0229 RRA .0290 RC3 .2575 FAU .09619
FOE 1.3295 FRA -.3487 FC3-5.7214 BSP 12236
     BOE .8750 BRA 1.1313 BC3 4.2556 FSP -1391
```

ARRIVAL DATE APR 29 1966

```
LAUNCH DATE DEC 8 1965
                                                                                       DISTANCE 415.892
    RL 147.35 LAL .00 LOL 75.70 VL 27.532 GAL -4.53 A7L 86.72 MCA 199.26 SMA 127.20 ECC .17659 INC 3.2792 VI 30.236 RP 108.80 LAP -1.08 LOP 274.92 VP 37.366 GAP 5.88 AZP 93.10 TAL 202.05 TAP 41.31 RCA 104.74 APO 149.66 V2 34.830 RC 128.581 GL 24.52 GP 1.04 ZAL 121.07 ZAP 147.57 ETS 359.50 ZAE 134.13 ETE 180.28 ZAC 43.53 ETC 158.12 CLP-147.59
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 14.311 VHL 3.783 DLA 6.21 RAL 307.02 RAD 6567.6 VEL 11.649 PTH 2.04 VMP 4.366 DPA -19.98 RAP 310.20 ECC 1.2355 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             164.65
                                                                                                                                                                      -19.54
                      1 57 9 2330.98
15 28 6 4587.89
3 21 27 2059.11
16 46 30 4334.99
4 36 26 1824.42
17 48 0 4142.45
                                                                                                                                                  1731.0
                                                                               48.99
                                                                                                                108.03
                                                                                                                                 2 36 D
                                                             -22.21
                                                                                                                                                                           8.65
                                                                                                                    64.25
                                                                                                                                 16 44 34
                                                                                                                                                      3987.9
                                                                                               162.35
                                                                              193.98
                                                             12.21
                                                                                                                                                                        -20.33
                                                                                               164.29
                                                                                                                   109.41
                                                                                                                                  3 55 46
                                                                                                                                                      1459.1
                                                                                28.64
                                                           -23.19
                                                                                                                                                     3735.0
1224.4
                                                                                                                  62.91 17 58 45
113.25 5 6 50
59.18 18 57 2
                                                                                                                                                                                         168.11
                                                                                                                                                                          9.40
                                                                                               161.88
                                                                              174.91
        100.00
                                                            13.14
                                                                                                                                                                        -22.42
                                                                                 9.70
                                                                                              163.17
                                                           -25.80
       110.00
                                                                                                                                                      3542.4
                                                                                                                                                                          11.38
                                                                                               160.48
                                                                              158.90
                                                            15.59
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 1484.8 SR 54.1 SS 738.6
CRT .8405 CRS -.9517 CST -.9594
                                                                                   SGT 4020.8 SGR 212.2 SG3 400.9

RRT -.7839 RRF -.7719 RTF .9400

SGB 4026.4 R23 .0552 R13 -.9401

SGI 4024.2 SG2 131.6 THA 177.63
     TOE .9193 TRA-1.1065 TC3-4.4599 BAU .8548
ROE .0348 RRA .0229 RC3 .2677 FAU .09157
                                                                                                                                                  LSA 1648.4 MSA 189.4 SSA 9.0
EL1 1485.5 EL2 29.3 ALF 1.76
    FOE 1.2876 FRA -.2647 FC3-5.5395 BSP 12771
BOE .9200 BRA 1.1067 BC3 4.4679 FSP -1358
                                                                                                                                                                ARRIVAL DATE MAY 1 1966
                                                                                        FLIGHT TIME 144.00
                                                                                       DISTANCE 421.838
   HELIOCENTRIC CONIC
    RL 147.35 LAL .00 LOL 75.70 VL 27.487 GAL -4.28 A7L 86.70 MCA 202.42 SMA 126.90 ECC .17723 INC 3.2968 V1 30.236 RP 108.82 LAP -1.26 LOP 278.09 VP 37.326 GAP 6.12 A7P 93.05 TAL 200.65 TAP 43.07 RCA 104.41 APO 149.39 V2 34.822 RC 130.911 GL 24.85 GP .87 ZAL 119.20 ZAP 149.21 ETS 359.40 ZAE 133.48 ETE 180.29 ZAC 45.02 ETC 158.53 CLP-149.23
    C3 14.074 VHL 3.752 DLA 7.02 RAL 308.73 RAD 6567.6 VEL 11.639 PTH 2.04 VHP 4.479 DPA -19.80 RAP 311.82 ECC 1.2316 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 44 2353.09 -22.67 50.45 166.34 107.44 2 36 57 1753.1 -20.07 42.74 90.00 15 41 10 4558.41 11.34 192.25 163.78 63.88 16 57 9 3958.4 7.73 185.43 100.00 3 22 25 2079.91 -23.65 30.01 165.99 108.83 3 57 6 1479.9 -20.86 22.32 100.00 16 59 10 4306.83 12.26 173.28 163.31 62.52 18 10 56 3706.8 8.48 166.53 110.00 4 38 21 1842.32 -26.27 10.88 164.90 112.70 5 9 3 1242.3 -22.96 3.28 DIFFERENTIAL CORRECTIONS
   PLANETOCENTRIC CONIC
                                                                                10.88 164.90 112.70 5 9 3
157.48 161.90 58.79 19 8 21
MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ST 1594.8 SR 69.0 SS 770.6
                                                                                 SGT 4094.3 SGR 219.1 SG3 378.4

RRT -.7209 RRF -.7036 RTF .9346

SGB 4100.2 R23 .0416 R13 -.9347

SG1 4097.4 SG2 151.8 THA 177.79
     TOE .9929 TRA-1.0453 TC3-4.5931 BAU .8658
ROE .0447 RRA .0151 RC3 .2758 FAU .08446
FOE 1.3010 FRA -.1263 FC3-5.1953 BSP 12611
BDE .9939 BRA 1.0454 BC3 4.6014 FSP -1208
                                                                                                                                                   CRT .9057 CRS -.9804 CST -.9615
                                                                                                                                                  LSA 1761.9 MSA 193.2 SSA 9.8
                                                                                                                                                 EL1 1596.0 EL2 29.2 ALF
                                                                                                                                                               ARRIVAL DATE MAY 3 1966
                                                                                        FLIGHT TIME 146.00
LAUNCH DATE DEC 8 1965
                                                                                        DISTANCE 427.766
     RL 147.35 LAL .00 LOL 75.70 VL 27.441 GAL -4.03 AZL 86.69 MCA 205.59 SMA 126.60 ECC .17796 INC 3.3103 VI 30.236 RP 108.85 LAP -1.43 LOP 281.25 VP 37.286 GAP 6.35 AZP 92.99 TAL 199.22 TAP 44.81 RCA 104.07 APO 149.13 V2 34.816 RC 133.236 GL 25.13 GP .75 ZAL 117.25 ZAP 150.77 ETS 359.36 ZAE 132.90 ETE 180.26 ZAC 46.58 ETC 158.99 CLP-150.78
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 13.853 VHL 3.722 DLA 7.84 RAL 310.53 RAD 6567.5 VEL 11.629 PTH 2.04 VMP 4.593 DPA -19.54 RAP 313.51 ECC 1.2280
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 106.81 2 38 10 1775.7
63.53 17 10 11 3928.9
                      1 58 34 2375.69
15 54 42 4528.87
3 23 41 2101.15
17 12 16 4278.64
4 40 33 1860.60
18 11 53 4091.94
                                                                                            168.15
                                                                               51.95
                                                             -23.12
                                                                                                                                                                            6.81
                                                                               190.54
                                                                                                165.34
                                                              10.45
                                                                                                                                                                                             23.68
                                                                                                                                                                         -21.40
                                                                                                                    108.22 3 58 43
62.17 18 23 34
                                                                                                                                                        1501.2
                                                                                31.42
                                                                                             167.81
                                                             -24.11
                                                                                                                                                                            7.56
                                                                                                                                                                                           164.95
                                                                                                                                                        3678.6
                                                                                                164.85
                                                                               171.66
                                                              11.37
                                                                                                                    112.13 5 11 34
58.41 19 20 5
                                                                                                                                                        1260.6
                                                                                                                                                                         -23.51
                                                                                 12.09
                                                                                               166.74
                                                             -26.75
         110.00
                                                                                                                                                                            9.53
                                                                                                                                                        3491.9
                                                                                156.07
                                                                                                 163.43
                                                          13.80
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 1667.8 SR 85.6 35 770.0
CRT .9361 CRS -.9894 CST -.9632
                                                                                   SGT 4218.4 SGR 231.1 SG3 364.5

RRT -.6682 RRF -.6558 RTF .9346

SGB 4224.8 R23 .0407 R13 -.9347

SG1 4221.3 SG2 171.8 THA 177.90
      TOE 1.0374 TRA-1.0060 TC3-4.8064 BAU .8918
      ROE .0554 RRA .0084 RC3 .2881 FAU .08056
                                                                                                                                                   LSA 1829.1 MSA 190.3 SSA 11.1
      FOE 1.2581 FRA -.0551 FC3-5.0344 BSP 13150
BOE 1.0388 BRA 1.0060 BC3 4.8151 FSP -1188
                                                                                                                                                   EL1 1669.7 EL2 30.1 ALF
                                                                                                                                                                APRIVAL DATE HAY 5 1966
                                                                                         FLIGHT TIME 148.00
 LAUNCH DATE DEC 8 1965
                                                                                         DISTANCE 433.680
     RL 147.35 LAL .00 LOL 75.70 VL 27.396 GAL -3.76 AZL 86.68 MCA 208.76 SMA 126.30 ECC .17880 INC 3.3210 V1 30.236 RP 108.87 LAP -1.60 LOP 284.41 VP 37.247 GAP 6.59 AZP 92.91 TAL 197.76 TAP 46.52 RCA 103.72 APO 148.88 V2 34.809 RC 135.553 GL 25.38 GP .66 ZAL 115.21 ZAP 152.26 ETS 359.34 ZAE 132.39 ETE 180.23 ZAC 48.21 ETC 159.47 CLP-152.26
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                        2.04 VHP 4.709 OPA -19.21 RAP 315.27 ECC 1.2247
      C3 13.651 VHL 3.695 DLA 8.67 RAL 312.42 RAD 6567.5 VEL 11.621 PTH
      LNCH AZMTH LNCH TIME LEI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              170.08
                                                                                                                                    2 39 36
                                                                                                                                                         1799.2
                        1 59 37 2399.20
16 8 47 4498.93
                                                               -23.58
                                                                                 53.53
                                                                                                                 106.15
           90.00
                                                                                                                      63.21 17 23 46
107.56 4 0 33
                                                                                                                                                                                             182.06
                                                                                                                                                         3898.9
                                                                                                                                                                             5.86
                                                                                                  167.02
                                                                 9.53
                                                                                188.82
           90.00
                                                                                                                                                                           -21.94
                                                                                                                                                                                              25.10
                                                                                                                                                         1523.3
                                                                                                  169.75
                                                                                                                     107.58
                          3 25 10 2123.26
                                                              -24.58
                                                                                  32.90
         100.00
                                                                                                                    61.84 18 36 45
111.51 5 14 21
58.06 19 32 19
                                                                                                                                                                              6.61
                                                                                                                                                                                             163.36
                                                                                                                                                         3650.1
                                                                                170.03
                                                                                                  166.53
                        17 25 55 4250.10
                                                              10.46
         100.00
                                                                                                                                                         1279.6
                                                                                                                                                                           -24.06
                                                                                                                                                                                              5.62
                        4 43 1 1879.64
18 24 33 4066.49
                                                                                  13.36
                                                                                                168.70
                                                              -27.23
          110.00
                                                                                                                                                         3466.5
                                                                                                                                                                             8.58
                                                                                                                                                                                             148.22
                                                                                                 165.09
                                                                                154.66
         110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                  SGT 4330.6 SGR 243.4 SG3 350.4

RRT -.6167 RRF -.6080 RTF ..9338

SGB 4337.4 R23 .0394 R13 -.9338

SGI 4333.2 SG2 191.5 THA 178.01
                                                                                                                                                ST 1749.9 SR 101.4 SS 775.2

CRT .9569 CRS -.9926 CST -.9651

LSA 1907.3 MSA 187.9 SSA 12.2

EL1 1752.6 EL2 29.4 ALF 3.18
       TOE 1.0883 TRA -.9539 TC3-5.0028 BAU .9147
       RDE .0653 RRA .0011 RC3 .2995 FAU .07644
      FDE 1.2265 FRA .0219 FC3-4.8473 BSP 13570
       BDE 1.0903 BRA .9539 BC3 5.0117 FSP -1151
```

FLIGHT TIME 142.00

```
LAUNCH DATE DEC 8 1965
                                                                                     FLIGHT TIME 150.00
                                                                                                                                                          ARRIVAL DATE MAY 7 1966
                                                                                     DISTANCE 439.581
     UISTANCE 439.581

RL 147.35 LAL .00 LOL 75.70 VL 27.350 GAL -3.48 AZL 86.67 HCA 211.92 SMA 126.00 ECC .17975 INC 3.3297 V1 30.236

RP 108.88 LAP -1.76 LOP 287.58 VP 37.208 GAP 6.82 AZP 92.83 TAL 196.28 TAP 48.20 RCA 103.35 APO 148.65 VZ 34.804

RC 137.863 GL 25.59 GP .58 ZAL 113.08 ZAP 153.66 ETS 359.36 ZAE 131.94 ETE 180.18 ZAC 49.90 ETC 159.96 CLP-143 AZ
    PLANETOCENTRIC CONIC
     13.474 VPL 3.871 DLA 9.52 RAL 314.42 RAD 6567.5 VEL 11.613 PTH 2.03 VPP 4.827 OPA -18.84 RAP 317.08 ECC 1.2217 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 0 48 2423.87 -24.04 55.19 172.15 105.44 2 41 12 1823.9 -21.68 47.31 90.00 16 23 29 4468.56 8.59 187.08 168.83 62.92 17 37 57 3868.6 4.90 180.35 100.00 3 26 49 2146.45 -25.04 34.77 171.83 106.88 4 2 36 1546.4 -22.49 26.60 100.00 17 40 9 4221.21 9.52 168.40 168.34 61.53 18 50 30 3621.2 5.65 161.75 110.00 4 45 42 1849.82 -27.72
      C3 13.474 VHL 3.671 DLA 9.52 RAL 314.42 RAD 6567.5 VEL 11.613 PTH 2.03 VHP 4.827 DPA -18.84 RAP 317.08 ECC 1.2217
                                                                                                               106.88 4 2 36
61.53 18 50 30
110.85 5 17 22
57.74 19 45 6
                        4 45 42 1899.62
                                                                                           170.81
        110.00
                                                          -27.72
                                                                             14.70
                                                                                                                                                 1299.6
                                                                                                                                                                   -24.63
                                                                                                                                                                                      6.49
        110.00
                      18 37 45
                                        4040.81
                                                           11.96
                                                                            153.25
                                                                                             166.88
                                                                                                                                                 3440.8
                                                                                                                                                                    7.62
                                                                                                                                                                                    146.85
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                SGT 4435.6 SGR 255.9 SG3 336.7
RRT 4-5675 RRF --5620 RTF .9327
SGB 4443.0 R23 .0383 R13 -.9327
SG1 4438.0 SG2 210.6 THA 178.12
                                                                                                                                            ST 1836.8 SR 116.8 SS 782.3
CRT .9715 CRS -.9923 CST -.9670
      TOE 1.1427 TRA -.8922 TC3-5.1868 BAU .9360
      ROE .0747 RRA -.0065 RC3 .3100 FAU .07239
     FOE 1.1995 FRA .0979 FC3-4.6513 BSP 13941
BDE 1.1451 BRA .8922 BC3 5.1961 FSP -1110
                                                                                                                                             LSA 1991.3 MSA 185.3 SSA 13.3
                                                                                                                                             EL1 1840.3 EL2 27.6 ALF 3.54
LAUNCH DATE DEC 8 1965
                                                                                     FLIGHT TIME 152.00
                                                                                                                                                          ARRIVAL DATE MAY 9 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 445.466
    RL 147.35 LAL .00 LOL 75.70 VL 27.304 GAL -3.20 A7L 86.66 MCA 215.09 SMA 125.70 ECC .18080 INC 3.3369 V1 30.236
RP 108.90 LAP -1.92 LOP 290.74 VP 37.170 GAP 7.06 A7P 92.73 TAL 194.77 TAP 49.86 RCA 102.97 APO 148.43 V2 34.799
RC 140.184 GL 25.77 GP .52 ZAL 110.86 ZAP 155.01 ETS 359.40 ZAE 131.54 ETE 180.13 ZAC 51.65 ETC 160.44 CLP-155.01
   PLANETOCENTRIC CONIC
     C3 13.324 VHL 3.650 DLA 10.38 RAL 316.50 RAD 6567.5 VEL 11.606 PTH
                                                        RAL 316.50 RAD 6567.5 VEL 11.606 PTH 2.03 VHP 4.947 OPA -18.41 RAP 318.95 ECC 1.2193 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 13.324 VHL 3.650 DLA 10.38

LNCH A7MTH LNCH TIME L-I TIME

90.00 2 2 8 2449.85

90.00 16 38 49 4457.73

100.00 3 28 39 2170.86

100.00 17 55 0 4191.95

110.00 4 48 36 1920.66

110.00 18 51 31 4014.92
                                                           -24.49
                                                                             56.95
                                                                                           174.35
                                                                                                              104.67
                                                                                                                             2 42 58
                                                                                                                                                 1849.8
                                                                                                                                                                 -22.24
                                                                                                                                                                                      49.01
                                                              7.63
                                                                            185.32
                                                                                             170.79
                                                                                                                 62.65
                                                                                                                            17 52 46
                                                                                                                                                  3837.7
                                                                                                                                                                      3.91
                                                                                                                                                                                    178.62
                                                           -25.52
                                                                             36.13
                                                                                           174.04
                                                                                                               106.13 4 4 49
                                                                                                                                                  1570.9
                                                                                                                                                                   -23.06
                                                                                                                                                                                     28.19
                                                                                                               61.25 19 4 51
110.14 5 20 37
57.43 19 58 26
                                                                                         170.29
173.05
                                                             8.57
                                                                            166.75
                                                                                                                                                 3591.9
                                                                                                                                                                     4.67
                                                                                                                                                                                   160.13
                                                          -28.22
                                                                             16.13
                                                                                                                                                 1320.7
                                                                                                                                                                   -25.22
                                                                                                                                                                                     8.25
                                                         11.02
                                                                            151.84
                                                                                             168.82
                                                                                                                                                 3414.9
                                                                                                                                                                      6.65
                                                                                                                                                                                    145.48
    DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                $6T 4536.1 $6R 268.5 $63 323.8

RRT -.5206 RRF -.5184 RTF .9317

$6B 4544.1 R23 .0376 R13 -.9317
     TOE 1.2002 TRA -.8214 TC3-5.3594 BAU .9564
                                                                                                                                            ST 1928.1 SR 131.7 SS 790.3
CRT .9818 CRS -.9897 CST -.9690
     ROE .0837 RRA -.0145 RC3 .3192 FAU .06853
     FOE 1.1750 FRA .1705 FC3-4.4525 BSP 14276
                                                                                                                                            LSA 2079.9 MSA 182.1 SSA 14.3
                                                                                                                                                                                      3.84
                                                                               5G1 4538.3 SG2 229.2 THA 178.23
     BOE 1.2032 BRA .8216 BC3 5.3689 FSP -1068
                                                                                                                                            EL1 1932.5 EL2 24.9 ALF
                                                                                    FLIGHT TIME 154.00
                                                                                                                                                        ARRIVAL DATE MAY 11 1966
LAUNCH DATE DEC 8 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 451.338
    RL 147.35 LAL .00 LOL 75.70 VL 27.259 GAL -2.90 AZL 86.66 HCA 218.25 SMA 125.40 ECC .18198 INC 3.3432 V1 30.236 RP 108.91 LAP -2.07 LOP 293.90 VP 37.132 GAP 7.29 AZP 92.63 TAL 193.25 TAP 51.50 RCA 102.58 APO 148.22 VZ 34.795 RC 142.456 GL 25.90 GP .47 ZAL 108.55 ZAP 156.30 ETS 359.45 ZAE 131.20 ETE 180.09 ZAC 53.46 ETC 160.92 CLP-156.30
    PLANETOCENTRIC CONIC
     C3 13.207 VHL 3.634 DLA 11.27 RAL 318.69 RAD 6567.5 VEL 11.601 PTH 2.03 VHP 5.070 DPA -17.94 RAP 320.87 ECC 1.2174
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 3 36 2477.24
16 54 48 4406.51
3 30 37 2196.60
18 10 28 4162.38
                                                                                         176.71
                                                                                                           103.84 2 44 53
62.41 18 8 14
                                                                                                                                            1877.2 -22.81
         90.00
                                                           -24.95
                                                                           58.83
                                                                                                                                                                                   50.82
         90.00
                                                            6.65
                                                                          183.55
                                                                                           172.90
                                                                                                                                                 3806.5
                                                                                                                                                                   2.91
                                                                                                                                                                                   176.87
                                                                                                              105.31 4 7 14 1596.6
61.00 19 19 50 3562.4
109.37 5 24 5 1342.9
57.16 20 12 21 3388.9
        100.00
                                                          -25.99
                                                                            37.89
                                                                                         176.41
                                                                                                                                                                 -23.64
                                                                                                                                                                                   29.88
        100.00
                      18 10 28
                                                            7.60
                                                                          165.09
                                                                                           172.39
                                                                                                                                                                    3.67
                                                                                                                                                                                   158.50
                      4 51 43 1942.85
19 5 52 3988.90
                                                                                          175.45
                                                          -28.73
                                                                                                                                                                                     9.69
        110.00
                                                                             17.66
                                                                                                                                                                  -25.82
       110.00
                                                                           150.43
                                                         10.06
                                                                                            170..90
                                                                                                                                                                                   144.10
                                                                                                                                                                   5.66
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SGT 4632.8 SGR 281.1 SG3 311.4
RRT -.4763 RRF -.4773 RTF .9308
SGB 4641.4 R23 .0372 R13 -.9308
                                                                                                                                            ST 2021.7 SR 146.3 SS 797.8
CRT .9888 CRS -.9855 CST -.9709
     TDE 1.2597 TRA -.7428 TC3-5.5193 BAU .9762
    RDE .0925 RRA -.0226 RC3 .3269 FAU .06486
FDE 1.1514 FRA .2392 FC3-4.2516 89P 14617
BDE 1.2631 BRA .7431 BC3 5.5289 FSP -1031
                                                                                                                                          LSA 2171.0 MSA 178.6 SSA 15.3
EL1 2026.9 EL2 21.8 ALF 4.09
                                                                                SG1 4634.8 SG2 247.1 THA 178.34
LAUNCH DATE DEC 8 1965
                                                                                    FLIGHT TIME 156.00
                                                                                                                                                         ARRIVAL DATE MAY 13 1966
                                                                                    DISTANCE 457.196
   HELIOCENTRIC CONIC
    RL 147.35 LAL .00 LOL 75.70 VL 27.213 GAL -2.59 AZL 86.65 MCA 221.41 SMA 125.11 ECC .18329 INC 3.3486 V1 30.236 RP 108.92 LAP -2.21 LOP 297.06 VP 37.096 GAP 7.52 AZP 92.51 TAL 191.70 TAP 53.12 RCA 102.18 APO 148.04 VZ 34.791 RC 144.737 GL 25.99 GP .43 ZAL 106.16 ZAP 157.53 ETS 359.52 ZAE 130.89 ETE 180.04 ZAC 55.31 ETC 161.39 CLP-157.53
   PLANETOCENTRIC CONIC
    C3 13.126 VHL 3.623 DLA 12.17 RAL 320.98 RAD 6567.5 VEL 11.598 PTH 2.03 VHP 5.194 DPA -17.42 RAP 322.82 ECC 1.2160
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 5 11 2506.13 -25.41 60.82 179.22 102.94 2 46 57 1906.1 -23.38 52.74
         90.00
                     17 11 27 4374.97
                                                            5.66
                                                                           181.77
                                                                                           175.16
                                                                                                               62.21 18 24 22
                                                                                                                                                 3775.0
                                                                                                                                                                    1.89
                                                                                                                                                                                   175.11
                    3 32 45 2223.73
18 26 34 4132.60
4 55 2 1966.25
19 20 46 3962.85
       100.00
                                                          -26.46
                                                                            39.77
                                                                                           178.94
                                                                                                               104.43
                                                                                                                             4 9 49
                                                                                                                                                 1623.7
                                                                                                                                                                  -24.22
                                                                                                                                                                                    31.69
                                                                                                              60.78 19 35 27
108.54 5 27 48
56.91 20 26 49
       100.00
                                                            6.61
                                                                           163.43
                                                                                           174.64
                                                                                                                                                 3532.6
                                                                                                                                                                   2.67
                                                                                                                                                                                   156.86
                                                                                                                                               1366.2
                                                          -29.25
                                                                            19.28
                                                                                           178.00
                                                                                                                                                                 -26.44
                                                                                                                                                                                    11.23
       110.00
                                                         9.10
                                                                          149.03
                                                                                           173.13
                                                                                                                                               3362.8
                                                                                                                                                                    4.68
                                                                                                                                                                                  142.73
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4722.7 SGR 293.3 SG3 299.6 ST 2123.0 SR 160.5 SS 808.2 RRT -.4331 RRF -.4363 RTF .9296 CRT .9931 CRS -.9800 CST -.9730 SGB 4731.8 R23 .0360 R13 -.9296 LSA 2270.6 MSA 175.0 SSA 16.1 SG1 4724.4 SG2 264.3 THA 178.45 EL1 2129.0 EL2 18.7 ALF 4.29
    TOE 1.3252 TRA -.6530 TC3-5.6558 BAU .9942
    RDE .1010 RRA -.0309 RC3 .3325 FAU .06123
FDE 1.1335 FRA .3077 FC3-4.0384 BSP 14878
BDE 1.3290 BRA .6538 BC3 5.6656 FSP -988
```

```
ARRIVAL DATE MAY 15 1966
                                                                                          FLIGHT TIME 158.00
LAUNCH DATE DEC 8 1965
                                                                                          DISTANCE 463.039
   HELIOCENTRIC CONTC
    RL 147.35 LAL .00 LOL 75.70 VL 27.167 GAL -2.28 AZL 86.65 HCA 224.58 SMA 124.81 ECC .18473 INC 3.3533 V1 30.236 RP 108.93 LAP -2.35 LOP 300.22 VP 37.059 GAP 7.76 AZP 92.39 TAL 190.14 TAP 54.71 RCA 101.76 APO 147.87 V2 34.788 RC 147.008 GL 26.04 GP .40 ZAL 103.68 ZAP 158.71 ETS 359.60 ZAE 130.63 ETE 180.00 ZAC 57.22 ETC 161.85 CLP-158.72
   PLANETOCENTRIC CONIC
     C3 13.087 VML 3.618 DLA 13.08 RAL 323.36 RAD 6567.5 VEL 11.596 PTH 2.03 VHP 5.322 DPA -16.87 RAP 324.81 ECC 1.2154
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       2 6 53 2536.53
17 28 45 4343.25
3 35 2 2252.27
18 43 18 4102.75
4 58 35 1990.85
19 36 14 3936.93
                                                                                                                                                                           -23.95
                                                                                                                                      2 49 10
                                                                                                                                                        1936.5
                                                                                                                     101.97
                                                                                                 181.89
                                                               -25.86
                                                                                 62.94
                                                                                                                                     18 41 8
                                                                                                                                                           3743.3
                                                                                                                                                                                  .87
                                                                                                                                                                                                 173.34
                                                                                                                        62.04
                                                                                                   177.58
                                                                 4.65
                                                                                 179.99
                                                                                                                                                           1652.3
                                                                                                                                                                              -24.81
                                                                                                                                                                                                 33.60
                                                                                                                                     4 12 34
                                                                                                                       103.48
        100.00
                                                               -26.93
                                                                                  41.76
                                                                                                   181.62
                                                                                                                       60.59 19 51 40
107.63 5 31 46
                                                                                                                                                           3502.7
                                                                                                                                                                                1.66
                                                                                                                                                                                                 155.22
                                                                                                  177.05
                                                                5.62
                                                                                 161.77
        100.00
                                                                                                                                                           1390.9
                                                                                                                                                                              -27.07
                                                                                                                                                                                                  12.86
                                                                                                  180.72
        110.00
                                                               -29.77
                                                                                 21.01
                                                                                                                        56.68 20 41 51
                                                                                                                                                           3336.9
                                                                                                                                                                                 3.69
                                                                                                                                                                                                 141.38
                                                                                                  175.51
                                                              8.13
                                                                                 147.65
        110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 4813.1 SGR 305.5 SG3 288.7
RRT -.3929 RRF -.3993 RTF .9291
                                                                                                                                                       ST 2222.6 SR 174.6 SS 815.4
CRT .9951 CRS -.9737 CST -.9749
     TDE 1.3905 TRA -.5573 TC3-5.7811 BAU 1.0131
     RDE .1095 RRA -.0393 RC3 .3362 FAU .05796
                                                                                      5GB 4822.8 R23 .D36D R13 -.9291
                                                                                                                                                       LSA 2367.6 MSA 170.9 SSA 17.0
     FDE 1.1127 FRA .3693 FC3-3.8342 BSP 15200
BDE 1.3948 BRA .5587 BC3 5.7909 FSP -955
                                                                                                                                                      EL1 2229.3 EL2 17.2 ALF 4.47
                                                                                      5G1 4814.6 SG2 280.8 THA 178.57
                                                                                                                                                                     ARRIVAL DATE NAY 17 1966
                                                                                           FLIGHT TIME 160.00
LAUNCH DATE DEC 8 1965
   HELIOCENTRIC CONIC
                                                                                          DISTANCE 468.867
    RL 147.35 LAL .00 LOL 75.70 VL 27.121 GAL -1.95 A7L 86.64 MCA 227.74 SNA 124.52 ECC .18632 INC 3.3576 V1 30.236 RP 108.94 LAP -2.48 LOP 303.39 VP 37.024 GAP 8.00 A7P 92.26 TAL 188.55 TAP 56.29 RCA 101.32 APO 147.73 V2 34.786
     RC 149.266 GL 26.02 GP .37 ZAL 101.11 ZAP 159.85 ETS 359.69 ZAE 130.40 ETE 179.97 ZAC 59.16 ETC 162.28 CLP-159.86
   PLANETOCENTRIC CONIC
    C3 13.092 VHL 3.618 DLA 14.00 RAL 325.84 RAD 6567.5 VEL 11.596 PTH 2.03 VHP 5.452 DPA -16.28 RAP 326.83 ECC 1.2155 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                184.72
                                                                                                                                       2 51 32
                                                                                                                                                           1968.5
                                                                                                                                                                            -24.51
                                                                                                                                                                                                   56.96
                                                                                                                       100.92
                          2 8 43 2568.47
                                                               -26.29
                                                                                  65.18
          90.00
                                                                                                                                                                                 -.16
                                                                                                                                                                                                  171.57
                                                                                                                         61.90
                                                                                                                                     18 58 33
                                                                                                                                                             3711.5
                                                                                                    180.17
                       17 46 42
                                        4311.50
                                                                  3.63
                                                                                  178.21
          90.00
                       3 37 29 2282.22
19 0 37 4072.98
                                                                                                                                        4 15 31
                                                                                                                                                            1682.2
                                                                                                                                                                               -25.40
                                                                                                                                                                                                   35.63
                                                                                                    184.47
                                                                                                                       102.46
                                                               -27.39
                                                                                  43.87
        100.00
                                                                                                                         60.43 20 8 30
                                                                                                                                                            3473.0
                                                                                                                                                                                  .65
                                                                                                                                                                                               153.59
                                                                                                   179.62
                                                                 4.62
                                                                                  160.13
        100.00
                                                                                                 183.61
                                                                                                                                                                               -27.71
                                                                                                                                                                                                   14.60
                       5 2 21 2016.67
19 52 14 3911.30
                                                                                                                       106.66 5 35 58
56.49 20 57 26
                                                                                                                                                            1416.7
                                                               -30.29
                                                                                  22.84
                                                                                                                                                            3311.3
                                                                                                                                                                                 2.71
                                                                                                                                                                                                  140.03
        110.00
                                                                7.17
                                                                                  146.29
                                                                                                   178.05
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SGT 4898.9 SGR 317.1 SGS 278.1
RRT -.3542 RRF -.3634 RTF .9287
SGB 4909.2 R23 .0356 R13 -.9287
                                                                                                                                                      ST 2323.8 SR 188.5 55 822.3
CRT .9952 CRS -.9668 CST -.9767
      TOE 1.4586 TRA -.4527 TC3-5.8821 BAU 1.0312
     ROE .1180 RRA -.0476 RC3 .3374 FAU .05480
                                                                                                                                                      LSA 2466.5 MSA 166.9 SSA 17.8
EL1 2331.3 EL2 18.4 ALF 4.62
     FOE 1.0933 FRA .4281 FC3-3.6236 BSP 15505
                                                                                     5G1 4900.2 SG2 296.5 THA 178.68
     BOE 1.4634 BRA .4552 BC3 5.8917 FSP -923
                                                                                                                                                                    ARRIVAL DATE MAY 19 1966
                                                                                          FLIGHT TIME 162.00
LAUNCH DATE DEC 8 1965
                                                                                          DISTANCE 474.680
    HELIOCENTRIC CONIC
     RL 147.35 LAL .DD LOL 75.70 VL 27.076 GAL -1.60 AZL 86.64 HCA 230.90 SMA 124.24 ECC .18807 INC 3.3614 VI 30.236 RP 108.94 LAP -2.61 LOP 306.55 VP 36.989 GAP 8.24 AZP 92.12 TAL 186.95 TAP 57.85 RCA 100.87 APO 147.60 V2 34.785
                              25.95 GP .34 ZAL 98.47 ZAP 160.95 ETS 359.79 ZAE 130.21 ETE 179.94 ZAC 61.15 ETC 162.70 CLP-160.95
     RC 151.511 GL
    PLANETOCENTRIC CONIC
     C3 13.149 VML 3.626 DLA 14.92 RAL 328.41 RAD 6567.5 VEL 11.599 PTH 2.03 VMP 5.586 DPA -15.65 RAP 328.87 ECC 1.2164
     LNCH AYNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT SC INJ AYNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LAT
                                                                                                                       60.31 20 25 54
105.62 5 40 26
56.32 21 13 31
                                                                  3.63
                        19 18 31
                                          4043.50
         100.00
                                                                                                                                                                               -28.35
                                                                                                                                                                                                  16.44
                                                                                                                                                            1443.7
                                                                                  24.78
                                                                                                   186.66
                           5 6 22 2043.65
                                                                -30.80
         110.00
                                                                                                                                                          3286.2
                                                                                                                                                                                  1.75
                                                                                                                                                                                                 138.72
                       20 8 44
                                                                                  144.96
                                                                                                   180.75
                                           3886.17
                                                                6.22
         110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 4981.6 SGR 328.4 SG3 268.2

RRT -.3168 RRF -.3285 RTF .9283

SGB 4992.4 R23 .0350 R13 -.9284

SG1 4982.7 SG2 311.4 THA 178.80
                                                                                                                                                       ST 2426.7 SR 202.2 SS 829.3
     TOE 1.5300 TRA -.3390 TC3-5.9572 BAU 1.0489
                                                                                                                                                       CRT .9937 CRS -.9593 CST -.9785
     ROE .1267 RRA - .0559 RC3 .3360 FAU .05179
                                                                                                                                                      LSA 2567.2 MSA 163.0 SSA 18.5
EL1 2435.0 EL2 22.5 ALF 4.73
     FOE 1.0759 FRA .4848 FC3-3.4102 BSP 15789
BOE 1.5352 BRA .3436 BC3 5.9667 FSP -891
                                                                                                                                                                      ARRIVAL DATE MAY 21 1966
                                                                                            ELICHT TIME 164.00
LAUNCH DATE DEC 8 1965
                                                                                          DISTANCE 480.478
     RL 147.35 LAL .00 LOL 75.70 VL 27.031 GAL -1.25 AZL 86.64 MCA 234.06 SMA 123.95 ECC .18998 INC 3.3650 V1 30.236 RP 108.94 LAP -2.72 LOP 309.71 VP 36.956 GAP 8.48 AZP 91.98 TAL 185.34 TAP 59.40 RCA 100.40 APO 147.50 V2 34.784 RC 153.743 GL 25.82 GP .32 ZAL 95.77 ZAP 162.01 ETS 359.90 ZAE 130.04 ETE 179.91 ZAC: 63.17 ETC 163.10 CLP-162.02
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                            2.03 VHP 5.724 OPA -14.99 RAP 330.93 ECC 1.2182
     C3 13.261 VHL 3.642 DLA 15.84 RAL 331.07 RAD 6567.5 VEL 11.604 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 12 48 2636.82 -27.08 70.02 190.88 98.62 2 56 45 2036.8 -25.61 61.66
                       18 24 21 4248.69
3 42 55 2346.21
19 36 56 4014.53
5 10 38 2071.74
                                                                                                                          61.73 19 35 10
                                                                                                                                                             3648.7
                                                                                  174.70
                                                                                                    185.84
                                                                  1.61
                                                                                                                                                                                                   40.04
                                                                                                                                                             1746.2
                                                                                                                                                                                -26.55
                                                                                                    190.66
                                                                                                                        100.21
                                                                                                                                        4 22 1
                                                                -28.25
                                                                                   48.43
         100.00
                                                                                                                          60.21 20 43 50
                                                                                                                                                             3414.5
                                                                                                                                                                                -1.34
                                                                                                                                                                                                   150.38
                                                                                  156.91
                                                                                                    185.26
                                                                  2.65
                                                                                                                                        5 45 10
                                                                                                                                                                                                    18.37
                                                                                                                        104.51
                                                                                                                                                             1471.7
                                                                                                                                                                                -28.99
                                                                -31.29
                                                                                   26.82
                                                                                                    189.89
         110.00
                                                                                                                          56.18 21 30 4
                                                                                                                                                             3261.8
                                                                                                                                                                                    .82
                                                                                                    183.61
                                                                                  143.67
                        20 25 42 3861.77
                                                                5.30
         110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5036.6 SGR 338.9 SG3 258.5

RRT -.2796 RRF -.2932 RTF .9279

SGB 5068.0 R23 .0340 R13 -.9279

SGI 5057.5 SG2 325.3 THA 178.92
                                                                                                                                                     ST 2532.7 SR 215.8 SS 836.1
CRT .9909 CRS -.9514 CST -.9802
LSA 2671.0 MSA 159.6 SSA 19.1
      TDE 1.6062 TRA -.2133 TC3-5.9946 BAU 1.0644
      ROE .1356 RRA -.0640 RC3 .3318 FAU .04880
      FOE 1.0602 FRA .5412 FC3-3.1856 BSP 16013
BOE 1.6119 BRA .2227 BC3 6.0038 FSP -857
                                                                                                                                                     EL1 2541.7 EL2 28.9 ALF 4.83
```

```
FLIGHT TIME 166.00
                                                                                                                                                                                                                                    ARRIVAL DATE MAY 23 1966
LAUNCH DATE DEC 8 1965
                                                                                                                             DISTANCE 486.26D
     HELIOCENTRIC CONIC
       RL 147.35 LAL .00 LOL 75.70 VL 26.986 GAL -.88 A7L 86.63 MCA 237.22 SMA 123.67 ECC .19207 INC 3.3682 V1 30.236
RP 108.94 LAP -2.83 LOP 312.87 VP 36.923 GAP 8.73 AZP 91.82 TAL 183.71 TAP 60.93 RCA 99.92 APO 147.42 V2 34.784
RC 155.962 GL 25.63 GP .30 ZAL 93.00 ZAP 163.04 ETS .02 ZAE 129.90 ETE 179.89 ZAC 65.23 ETC 163.48 CLP-163.05
      PLANETOCENTRIC CONIC
       C3 13.436 VHL 3.665 DLA 16.75 RAL 333.81 RAD 6567.5 VEL 11.611 PTH 2.03 VMP 5.866 DPA -14.29 RAP 333.02 ECC 1.2211
      C3 13.436 VHL 3.665 DLA 16.75 RAL 333.81 RAD 6567.5 VEL 11.611 PTM 2.D3 VHP 5.866 DPA -14.29 RAP 333.02 ECC 1.2211

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 15 4 2673.07 -27.42 72.62 194.20 97.36 2 59 38 2073.1 -26.12 64.20

90.00 18 43 58 4218.12 .62 172.99 188.92 61.69 19 54 17 3618.1 -3.17 166.36

100.00 3 45 56 2380.08 -28.63 50.87 194.00 98.98 4 25 36 1780.1 -27.09 42.41

100.00 19 55 48 3986.35 1.69 155.36 188.33 60.15 21 2 15 3386.3 -2.29 148.84

110.00 5 15 11 2100.84 -31.77 28.95 193.28 103.33 5 50 12 1500.8 -29.61 20.41

110.00 20 43 3 3838.36 4.41 142.44 186.64 56.07 21 47 1 3238.4 -.07 136.22
                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                                     2632.6 SR 229.4 SS 839.7
CRT .9871 CRS -.9436 CST -.9817
LSA 2768.2 MSA 156.4 SEA
                                                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                     SGT 5131.9 SGR 349.0 SG3 249.4

RRT -.2446 RRF -.2606 RTF .9260

SGB 5143.7 R23 .0337 R13 -.9260

SGI 51,32.6.SG2 338.4 THA 179.04
        TOE 1.6819 TRA -. 0811 TC3-6.0092 BAU 1.0810
        ROE .1450 RRA -.0718 RC3 .3249 FAU .04608
       FOE 1.0426 FRA .5928 FC3-2.9690 BSP 16300
BOE 1.6881 BRA .1083 BC3 6.0180 FSP -831
LAUNCH DATE DEC 8 1965
                                                                                                                               FLIGHT TIME 168.00
                                                                                                                                                                                                                                     ARRIVAL DATE HAY 25 1966
                                                                                                                             DISTANCE 492.025
     HELIOCENTRIC CONIC
      RL 147.35 LAL .00 LOL 75.70 VL 26.941 GAL -.50 AZL 86.63 MCA 240.38 SMA 123.39 ECC .19435 INC 3.3712 VI 30.236
RP 108.94 LAP -2.93 LOP 316.04 VP 36.891 GAP 8.98 AZP 91.67 TAL 182.07 TAP 62.45 RCA 99.41 APO 147.37 VZ 34.785
RC 158.168 GL 25.36 GP .28 ZAL 90.18 ZAP 164.04 ETS .15 ZAE 129.79 ETE 179.88 ZAC 67.32 ETC 163.83 CLP-164.05
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC
C3 13.680 VML 3.699 DLA 17.64 RAL 336.63 RAD 6567.5 VEL 11.622 PTH 2.04 VMP 6.014 DPA -13.56 RAP 335.11 ECC 1.2251
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 17 32 2710.57 -27.72 75.33 197.67 96.04 3 2 42 2110.6 -26.59 66.84
90.00 19 4 1 4188.47 -.33 171.34 192.17 61.68 20 13 49 3588.5 -4.12 164.70
100.00 3 49 10 2415.04 -28.98 53.41 197.50 97.68 4 29 25 1815.0 -27.61 44.88
100.00 20 15 4 3959.25 .77 153.87 191.55 60.12 21 21 3 3359.2 -3.21 147.35
110.00 5 20 1 2130.82 -32.22 31.17 196.84 102.09 5 55 31 1550.8 -30.22 22.53
110.00 21 0 42 3816.21 3.57 141.28 189.81 55.98 22 4 19 3216.2 -.92 135.07
                                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                   MID-COURSE EXECUTION ACCUMALY

SGT 5203.1 SGR 358.5 SG3 240.6 ST 2730.4 SR 243.0 SS 642.0

RRT -.2101 RRF -.2282 RTF .9285 CRT .9825 CRS -.9359 CST -.9832

SGB 5215.5 R23 .0330 R13 -.9286 LSA 2863.5 MSA 153.6 SSA 20.0

EL1 2740.9 EL2 45.0 ALF 5.00
                                                                                                                    HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
        TOE 1.7604 TRA .0602 TC3-5.9890 BAU 1.0968
        ROE .1548 RRA -.0792 RC3 .3153 FAU .04348
       FOE 1.0257 FRA .6410 FC3-2.7519 BSP 16575
BOE 1.7672 BRA .0994 BC3 5.9972 FSP -806
                                                                                                                                                                                                                                   ARRIVAL DATE MAY 27 1966
                                                                                                                            FLIGHT TIME 170.00
LAUNCH DATE DEC 8 1965
                                                                                                                            DISTANCE 497.771
     HELIOCENTRIC CONIC
      RL 147.35 LAL .00 LOL 75.70 VL 26.896 GAL -.10 A7L 86.63 MCA 243.54 SMA 123.12 ECC .19684 INC 3.3740 VI 30.236
RP 108.94 LAP -3.02 LOP 319.20 VP 36.860 GAP 9.25 A7P 91.50 TAL 180.42 TAP 63.96 RCA 98.88 APO 147.35 V2 34.787
RC 160.359 GL 25.03 GP .27 ZAL 87.32 ZAP 165.02 ETS .29 ZAE 129.70 ETE 179.86 ZAC 69.43 ETC 164.17 CLP-165.02
      PLANETOCENTRIC CONIC
       C3 14.000 VHL 3.742 OLA 18.50 RAL 339.52 RAO 6567.6 VEL 11.636 PTH 2.04 VMP 6.166 OPA -12.81 RAP 337.22 ECC 1.2304
      C3 14,000 VML 3.742 OLA 18.50 RAL 339.52 RAO 6567.6 VEL 11.636 P1M 2.04 VMP 6.166 DPA -12.81 RAP 337.22 ECC 1.2304 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 19 24 23 4160.06 -1.25 169.75 195.57 61.71 20 33 43 3560.1 -5.02 163.10 100.00 3 52 39 2450.92 -29.27 56.04 201.15 96.33 4 35 50.1 -5.02 163.10 100.00 20 34 36 3933.49 -.10 152.46 194.93 60.11 21 40 9 3333.5 -4.08 145.93 110.00 5 25 9 2161.55 -32.64 33.47 200.56 100.78 6 1 10 1561.5 -30.60 24.73 110.00 21 18 36 3795.63 2.78 140.20 193.13 55.92 22 21 51 3195.6 -1.71 134.00 DIFFERENTIAL CORRECTIONS
                                                                                                      35.47 200.56
140.20 101.15
                                                                                                                                                                                                        328.00

CREATER TO THE TERMINATION ACCURACY

ST 2810.5 SR 256.9 SS 834.8

CREAT .9776 CRS -.9283 CST -.9843

LSA 2939.2 MSA 151.1 SEA ---
                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                   SCT 5270.9 SGR 367.4 SG3 231.9

RRT -.1783 RRF -.2015 RTF .9300

SGB 5283.7 R23 .0354 R13 -.9301

SGI 5271.3 SG2 361.5 THA 179.28
       TOE 1.8322 TRA .2065 TC3-5.9462 BAU 1.1144
       ROE .1654 RRA -.0861 RC3 .3033 FAU .04125
FOE .9996 FRA .6828 FC3-2.5510 BSP 17087
BDE 1.8396 BRA .2237 BC3 5.9539 FSP -812
                                                                                                                                                                                                              LSA 2939.2 MSA 151.1 SSA 20.2
EL1 2821.7 EL2 53.8 ALF 5.11
                                                                                                                                                                                                                                    ARRIVAL DATE MAY 29 1966
                                                                                                                              FLIGHT TIME 172.00
LAUNCH DATE DEC 8 1965
                                                                                                                            DISTANCE 503.499
     HELIOCENTRIC CONIC
      RL 147.35 LAL .00 LOL 75.70 VL 26.852 GAL .31 AZL 86.62 MCA 246.71 SMA 122.85 ECC .19955 INC 3.3768 V1 30.236
RP 108.93 LAP -3.10 LOP 322.37 VP 36.829 GAP 9.52 AZP 91.34 TAL 178.76 TAP 65.47 RCA 98.33 APO 147.36 V2 34.789
RC 162.536 GL 24.63 GP .25 ZAL 84.43 ZAP 163.97 ETS .43 ZAE 129.62 ETE 179.86 ZAC 71.58 ETC 164.49 CLP-165.97
     PLANETOCENTRIC CONIC
       C3 14.405 VHL 3.795 DLA 19.32 RAL 342.46 RAD 6567.6 VEL 11.653 PTH 2.05 VHP 6.324 DPA -12.03 RAP 339.34 ECC 1.2371
      C3 14.405 VHL 3.795 OLA 19.32 RAL 342.46 RAD 6567.6 VEL 11.653 PTM 2.05 VHP 6.324 DPA -12.03 RAP 339.34 ECC 1.2371
LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 19 44 59 4153.16 -2.12 168.25 199.13 61.76 20 53 53 3533.2 -5.88 161.59
100.00 3 56 24 2287.38 -29.52 58.74 204.94 94.93 4 37 52 1887.6 -28.52 50.08
100.00 20 54 19 3909.43 -.92 151.14 198.46 60.12 21 59 29 3309.4 -4.88 144.60
110.00 5 30 36 2192.89 -33.01 35.84 204.43 99.43 6 7 9 1592.9 -31.36 27.01
110.00 21 36 37 3776.88 2.07 139.22 196.59 55.87 22 39 34 3176.9 -2.42 133.02
                                                                                                                 MID-COURSE EXECUTION ACCURACY
SGT 5328.7 SGR 375.3 SG3 223.9
RRT -.1417 RRF -.1609 RTF .9289
SGB 5341.9 R23 .0289 R13 -.9289
SGB 5342.9 SG2 371.5 THA 179.43
SG1 5329.0 SG2 371.5 THA 179.43
SG1 5329.0 SG2 371.5 THA 179.43
     DIFFERENTIAL CORRECTIONS
        TOE 1.9251 TRA .3764 TC3-5.8304 BAU 1.1242
       ROE .1765 RRA -.0926 RC3 .2883 FAU .03836
FDE .9972 FRA .7369 FC3-2.3055 BSP 17009
BDE 1.9332 BRA .3876 BC3 5.8375 FSP -750
```

ARRIVAL DATE HAY 31 1966

```
FLIGHT TIME 174.00
LAUNCH DATE DEC 8 1965
                                                                                     DISTANCE 509.206
    RL 147.35 LAL .00 LOL 75.70 VL 26.808 GAL .74 A7L 86.62 MCA 249.87 SMA 122.58 ECC .20249 INC 3.3793 V1 30.236 RP 108.92 LAP -3.17 LOP 325.53 VP 36.800 GAP 9.80 A7P 91.16 TAL 177.09 TAP 66.96 RCA 97.76 APO 147.40 VZ 34.792 RC 164.699 GL 24.16 GP .24 TAL 81.53 ZAP 166.89 ETS .59 ZAE 129.57 ETE 179.86 ZAC 73.74 ETC 164.79 CLP-166.89
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 14.905 VHL 3.861 DLA 20.11 RAL 345.45 RAD 6567.6 VEL 11.674 PTH 2.05 VHP 6.490 DPA -11.22 RAP 341.47 ECC 1.2453
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                    -27.72
                    H LNCH TIME L-I TIME
2 26 11 2828.77
20 5 42 4108.18
4 0 27 2524.77
21 14 6 3807.41
5 36 23 2224.65
21 54 40 3760.30
                                                                                                               91.76
                                                                                            208.94
                                                            -28.27
                                                                            83.93
         90.00
                                                                                                                                                                       -6.67
                                                                                                                   61.82 21 14 10
                                                                                                                                                    3508.2
                                                                                              202.82
                                                             -2.92
                                                                             166.86
                                                                                                                  93.50 4 42 32
60.15 22 18 54
98.03 6 13 28
55.84 22 57 20
         90.00
                                                                                                                                                                     -28.90
                                                                                                                                                                                         52.77
                                                                                                                                                    1924.8
                                                                                              208.86
                                                            -29.71
                                                                              61.49
        100.00
                                                                                           202.12
                                                                                                                                                                                       143.38
                                                                                                                                                                     -5.62
                                                                                                                                                    3287.4
                                                                            149.93
                                                                                                                                             1624.6
                                                                                                                                                                   -31.87
                                                            -1.66
        100.00
                                                                                                                                                                                         29.34
                                                                              38.26
                                                           -33.34
        110.00
                                                                                                                                                                       -3.06
                                                                                              200.18
                                                                         138.36
                                                           1.43
                                                                                                                                               ORBIT DETERMINATION ACCURACY
        110.00
                                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 2995.5 SR 283.8 55 842.9
                                                                                 SGT 5387.6 SGR 382.7 SG3 216.3
RRT -.1086 RRF -.1293 RTF .9296
     TOE 2.0088 TRA .5506 TC3-5.7016 BAU 1.1374
                                                                                                                                               CRT .9662 CRS -.9138 CST -.9868
     RDE .1886 RRA -.0983 RC3 .2715 FAU .03606
FDE .9810 FRA .7828 FC3-2.0942 BSP 17218
BDE 2.0176 BRA .5593 BC3 5.7081 FSP -726
                                                                                                                                               LSA 3121.0 MSA 150.5 SSA 20.3
EL1 3008.0 EL2 72.9 ALF 5.23
                                                                                 SGB 5401.1 R23 .0280 R13 -.9296
SG1 5387.7 SG2 380.4 THA 179.56
                                                                                                                                                             ARRIVAL DATE JUN 2 1966
                                                                                      FLIGHT TIME 176.00
LAUNCH DATE DEC 8 1965
                                                                                      DISTANCE 514.890
     RL 147.35 LAL .00 LOL 75.70 VL 26.764 GAL 1.19 AZL 86.62 MCA 253.03 SMA 122.31 ECC .20570 INC 3.3818 V1 30.236 RP 108.91 LAP -3.23 LOP 328.70 VP 36.772 GAP 10.09 AZP 90.99 TAL 175.41 TAP 68.44 RCA 97.15 APO 147.47 V2 34.796 RC 166.847 GL 23.63 GP .23 ZAL 78.62 ZAP 167.80 ETS .75 ZAE 129.52 ETE 179.86 ZAC 75.93 ETC 165.06 CLP-167.80
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 15.510 VML 3.938 DLA 20.84 RAL 348.47 RAD 6567.6 VEL 11.700 PTH 2.06 VMP 6.662 DPA -10.38 RAP 343.61 ECC 1.2553 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 2269.4
                                                                                                                                                                    -27.98
                      2 29 36 2869.35
20 26 21 4085.47
4 4 50 2562.27
21 33 49 3867.79
5 42 32 2256.64
22 12 37 3746.18
                                                                                            212.93
                                                                                                                  90.27
                                                                                                                                 3 17 26
                                                                              86.89
                                                            -28.32
          90.00
                                                                                                                                                                         -7.38
                                                                                                                                                     3485.5
                                                                                                                    61.90 21 34 27
                                                                                               206.63
                                                                              165.59
                                                             -3.65
          90.00
                                                                                                                                                                       -29.23
                                                                                                                                                     1962.3
                                                                                               212.90
                                                                                                                    92.04
                                                                                                                                 4 47 33
                                                                               64.27
                                                            -29.83
         100.00
                                                                                                                                                                                      142.29
                                                                                           205.90
212.56
                                                                                                                    60.19 22 38 16
96.60 6 20 8
55.83 23 15 3
                                                                                                                                                                         -6.28
                                                                                                                                                     3267.8
                                                                              148.85
                                                             -2.33
        100.00
                                                                                                                                                                       -32.34
                                                                                                                                                                                         31.72
                                                                                                                                                     1656.6
                                                                               40.72
                                                           -33.62
        110.00
                                                                                                                                                                         -3.60
                                                                                                                                                     3146.2
                                                               .89
                                                                                               203.88
                                                                              137.62
         110.00
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 3066.7 SR 297.3 SS 839.2
CRT .9605 CRS -.9074 CST -.9878
                                                                                  SGT 5441.1 SGR 389.4 SG3 208.6
RRT -.0756 RRF -.0961 RTF .9303
      TOE 2.0928 TRA .7340 TC3-5.5383 BAU 1.1496
      RDE .2016 RRA - .1033 RC3 .2530 FAU .03377
                                                                                                                                               LSA 3189.7 MSA 150.8 SSA 20.1
EL1 3080.0 EL2 82.4 ALF 5.32
                                                                                 SGB 5455.0 R23 .0256 R13 -.9304
SG1 5441.2 SG2 388.2 THA 179.69
      FOE .9659 FRA .8257 FC3-1.8848 BSP 17433
      BDE 2.1025 BRA .7412 BC3 5.5441 FSP -704
                                                                                                                                                             ARRIVAL DATE JUN 4 1966
                                                                                       FLIGHT TIME 178.00
 LAUNCH DATE DEC 8 1965
     RL 147.35 LAL .00 LOL 75.70 VL 26.721 GAL 1.65 A7L 86.62 HCA 256.19 SMA 122.05 ECC .20918 INC 3.3842 VI 30.236
RP 108.89 LAP -3.29 LOP 331.87 VP 36.744 GAP 10.39 A7P 90.81 TAL 173.73 TAP 69.93 RCA 96.52 APO 147.58 V2 34.800
RC 168.980 GL 23.04 GP .22 ZAL 75.72 ZAP 168.69 ETS ... 92 ZAE 129.50 ETE 179.87 ZAC 78.13 ETC 165.32 CLP-168.69
                                                                                      DISTANCE 520.551
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                                        -9.53 RAP 345.75 ECC 1.2672
      C3 16.234 VML 4.029 DLA 21.53 RAL 351.50 RAD 6567.7 VEL 11.731 PTH 2.07 VMP 6.843 DPA
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           217.02
210
                                                                                                                                                                   -28.16 81.21
                                                                                                                88.78 3 21 51
                                                                                                                                                     2310.1
                         2 33 21 2910.10
20 46 50 4065.40
4 9 34 2599.83
21 53 18 3850.90
                                                                               89.87
                                                             -28.29
           90.00
                                                                                                                    61.98 21 54 35
90.57 4 52 54
                                                                                                                                                                                         157.75
                                                                                                                                                                         -8.01
                                                                                                                                                     3465.4
                                                                              164.46
                        20 46 50
                                                             -4.29
           90.00
                                                                                                                                                     1999.8
                                                                                                                                                                       -29.49
                                                                                                                                                                                         58.28
                                                                                67.06
                                                                                               217.03
                                                           -29.89
         100.00
                                                                                           217.03
209.78
                                                                                                                  60.24 22 57 29
95.15 6 27 10
55.82 23 32 35
                                                                                                                                                                                      141.35
                                                                                                                                                     3250.9
                                                                                                                                                                        -6.84
                                                                              147.92
                                                             -2.90
                       21 53 16
         100.00
                                                                                                                                                    1688.7
                                                                                                                                                                      -32.76
                                                                                                                                                                                         34.13
                                                                                            216.80
207.69
                       5 49 2 2288.69 -33.84
22 30 20 3734.80 .46
                                                                                43.20
         110.00
                                                                                                                                                     3134.8
                                                                                                                                                                        -4.03
                                                                                                                                                                                         130.82
                                                                              137.03
         110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 3127.9 SR 310.6 S5 833.6
CRT .9548 CRS -.9012 CST -.9888
                                                                                 SG1 5490.9 SGR 395.3 SG3 201.4
RRT - .0428 RRF - .0637 RTF .9314
SGB 5505.1 R23 .0236 R13 -.9314
SGI 5490.9 SG2 394.9 THA 179.82
       TDE 2.1771 TRA .9295 TC3-5.3442 BAU 1.1609
      ROE .2156 RRA -.1074 RC3 .2331 FAU .03162
FOE .9507 FRA .8683 FC3-1.6864 BSP 17623
BDE 2.1878 BRA .9357 BC3 5.3493 FSP -680
                                                                                                                                                LSA 3248.3 MSA 152.0 55A 19.8
                                                                                                                                               ELI 3141.9 EL2 92.0 ALF 5.42
                                                                                                                                                              ARRIVAL DATE JUN 6 1966
                                                                                        FLIGHT TIME 180.00
  LAUNCH DATE DEC 8 1965
      RL 147.35 LAL .00 LOL 75.70 VL 26.678 GAL 2.14 AZL 86.61 MCA 259.36 SMA 121.80 ECC .21297 INC 3.3865 VI 30.236
RP 108.88 LAP -3.33 LOP 335.04 VP 36.718 GAP 10.70 AZP 90.63 TAL 172.05 TAP 71.41 RCA 95.86 APO 147.73 V2 34.805
RC 171.096 GL 22.39 GP .21 TAL 72.85 ZAP 169.56 ETS 1.10 ZAE 129.48 ETE 179.88 ZAC 80.35 ETC 165.55 CLP-169.56
                                                                                        DISTANCE 526.185
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC

C3 17.089 VHL 4.134 DLA 22.15 RAL 354.54 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 7.033 DPA -8.65 RAP 347.89 ECC 1.2812

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 37 28 2950.73 -28.20 92.84 221.19 87.29 3 26 39 2350.7 -28.28 84.18

90.00 21 6 58 4048.32 -4.84 163.50 214.57 62.07 22 14 26 3448.3 -8.54 156.78

100.00 4 14 42 2637.21 -29.88 69.84 221.25 89.11 4 58 39 2037.2 -29.68 61.04

100.00 22 12 25 3637.07 -3.36 147.16 213.76 60.28 23 16 22 3237.1 -7.30 140.58

110.00 5 55 53 2320.64 -34.01 45.67 221.13 93.70 6 34 34 1720.6 -33.12 36.55

110.00 22 47 43 3726.41 .14 136.59 213.37 55.82 23 49 49 3126.4 -4.35 130.38
     PLANETOCENTRIC CONIC
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY

ST 3182.1 SR 323.6 SS 827.7

CRT .9491 CR5 -.8954 CST -.9896

LSA 3300.2 MSA 154.1 SSA 19.4

EL1 3196.9 EL2 101.5 ALF 5.52
     DIFFERENTIAL CORRECTIONS
                                                                              SGT 5535.3 SGR 400.5 SG3 194.6

RRT -,0096 RRF -,0300 RTF .9322

SGB 5549.8 R23 .0211 R13 -,9322

SGI 5535.3 SG2 400.4 THA 179.96
        TOE 2.2641 TRA 1.1400 TC3-5.1146 BAU 1.1695
       RDE .2307 RRA -.1105 RC3 .2123 FAU .02945
       FOE .9370 FRA .9120 FG3-1.4922 BSP 17738
BOE 2.2758 BRA 1.1454 BC3 5.1190 FSP -655
```

```
LAUNCH DATE DEC 8 1965
                                                                                                               FLIGHT TIME 182.00
                                                                                                                                                                                                      ARRIVAL DATE JUN 8 1966
      HELIOCENTRIC CONIC
                                                                                                               DISTANCE 531.788
       RL 147.35 LAL .00 LOL 75.70 VL 26.635 GAL 2.65 AZL 86.61 MCA 262.52 SMA 121.54 ECC .21709 INC 3.3888 V1 30.236
RP 108.86 LAP -3.36 LOP 338.21 VP 36.692 GAP 11.04 AZP 90.44 TAL 170.36 TAP 72.89 RCA 95.16 APO 147.93 V2 34.811
RC 173.196 GL 21.70 GP .21 ZAL 70.02 ZAP 170.42 ETS 1.30 ZAE 129.47 ETE 179.89 ZAC 82.59 ETC 165.76 CLP-170.42
       PLANETOCENTRIC CONIC
       C3 18.093 VHL 4.254 OLA 22.71 RAL 357.57 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 7.233 DPA -7.76 RAP 350.04 ECC 1.2978
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 42 0 2990.93 -28.03 95.77 225.42 85.83 3 31 51 2390.9 -28.32 87.12
90.00 21 26 35 4034.61 -5.28 162.73 218.66 62.14 22 33 49 3434.6 -8.96 155.99
100.00 4 20 15 2674.15 -29.81 72.58 225.54 87.67 5 4 49 2074.1 -29.81 63.78
100.00 22 31 1 3826.63 -3.72 146.59 217.80 60.32 23 34 47 3226.6 -7.64 140.00
110.00 6 3 7 2352.30 -34.12 48.14 225.54 92.24 6 42 20 1752.3 -33.43 38.97
110.00 23 4 38 3721.24 -.06 136.32 215.52 55.82 24 6 39 3121.2 -4.54 130.11
        C3 18.093 VHL 4.254 DLA 22.71 RAL 357.57 RAD 6567.7 VEL 11.810 PTH
                                                                                                                                                    2.09 VHP 7.233 DPA -7.76 RAP 350.04 ECC 1.2978
                                                                                                    MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                        SGT 5575.8 SGR 404.9 SG3 187.8
RRT .0228 RRF .0024 RTF .9336
                                                                                                                                                                                    ST 3218.8 SR 336.1 SS 818.1
CRT .9436 CRS -.8901 CST -.9904
        TOE 2.3466 TRA 1.3585 TC3-4.8699 BAU 1.1789
                                                                                                  RDE .2468 RRA -.1125 RC3 .1911 FAU .02748
                                                                                                                                                                                     L5A 3334.3 MSA 156.7 S5A 18.9
EL1 3234.4 EL2 110.7 ALF 5.63
                 .9209 FRA .9523 FC3-1.3148 BSP 17931
       BOE 2.3595 BRA 1.3632 BC3 4.8737 FSP -636
 LAUNCH DATE DEC 8 1965
                                                                                                              FLIGHT TIME 184.00
                                                                                                                                                                                                       ARRIVAL DATE JUN 10 1966
     HELIOCENTRIC CONIC
                                                                                                             DISTANCE 537.359
       RL 147.35 LAL .00 LOL 75.70 VL 26.593 GAL 3.18 A7L 86.61 HCA 265.69 SMA 121.29 ECC .22157 INC 3.3910 V1 30.236
RP 108.84 LAP -3.38 LOP 341.38 VP 36.668 GAP 11.38 A7P 90.25 TAL 168.68 TAP 74.37 RCA 94.42 APO 148.17 V2 34.817
RC 175.278 GL 20.97 GP .20 ZAL 67.23 ZAP 171.27 ETS 1.51 ZAE 129.46 ETE 179.91 ZAC 84.83 ETC 165.95 CLP-171.27
      PLANETOCENTRIC CONIC
      PLANETOCENTRIC CONIC

C3 19.264 VHL 4.389 DLA 23.20 RAL .57 RAD 6567.8 VEL 11.859 PTH 2.10 VHP 7.444 DPA -6.85 RAP 352.18 ECC 1.3170

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 48 59 3030.41 -27.81 98.64 229.71 84.41 3 37 30 2430.4 -28.29 90.00

$J.00 21 45 31 4024.61 -5.59 162.17 222.80 62.20 22 52 36 3424.6 -9.27 155.42

100.00 4 26 14 2710.41 -29.68 75.27 229.88 86.26 5 11 25 2110.4 -29.88 66.47

100.00 22 48 58 3819.84 -3.95 146.21 221.90 60.35 23 52 37 3219.8 -7.87 139.62

110.00 6 10 43 2383.55 -34.17 50.58 230.02 90.80 6 50 26 1785.5 -33.69 41.37

110.00 23 20 58 3719.47 -.13 136.23 219.52 55.82 24 22 58 3119.5 -4.61 130.01
     DIFFERENTIAL CORRECTIONS
                                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                   SGT 5612.1 SGR 408.6 SG3 181.3
RRT .0553 RRF .0355 RTF .9350
SGB 5626.9 R23 -.0165 R13 .9350
       TOE 2.4295 TRA 1.5911 TC3-4.6036 BAU 1.1864
                                                                                                                                                                                     ST 3245.4 SR 348.1 SS 808.2
       RDE .2640 RRA -.1133 RC3 .1699 FAU .02555
                                                                                                                                                                                     CRT .9382 CRS -.8851 CST -.9911
       FOE .9061 FRA .9928 FC3-1.1481 BSP 18097
                                                                                                                                                                                     LSA 3358.7 MSA 159.8 SSA 18.4
       BOE 2.4438 BRA 1.5951 BC3 4.6067 FSP -616
                                                                                                       SG1 5612.1 SG2 4D8.0 THA .23
                                                                                                                                                                                     EL1 3261.8 EL2 119.8 ALF 5.75
LAUNCH DATE DEC & 1965
                                                                                                            FLIGHT TIME 186.00
                                                                                                                                                                                                    ARRIVAL DATE JUN 12 1966
    HELIOCENTRIC CONIC
                                                                                                            DISTANCE 542.893
      RL 147.35 LAL .00 LOL 75.70 VL 26.551 GAL 3.74 AZL 86.61 MCA 268.86 SMA 121.05 ECC .22644 INC 3.3932 V1 30.236
RP 108.82 LAP -3.39 LOP 344.55 VP 36.644 GAP 11.75 AZP 90.07 TAL 167.00 TAP 75.86 RCA 93.64 APO 148.46 VZ 34.824
RC 177.341 GL 20.20 GP .19 ZAL 64.50 ZAP 172.11 ETS 1.74 ZAE 129.47 ETE 179.93 ZAC 87.09 ETC 166.12 CLP-172.12
    PLANETOCENTRIC CONIC
      C3 20.625 VHL 4.542 OLA 23.63 RAL 3.53 RAD 6567.8 VEL 11.917 PTH 2.12 VHP 7.668 DPA -5.92 RAP 354.33 ECC 1.3394
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         2 52 29 3068.86 -27.52
22 3 38 4018.64 -5.78
4 32 42 2745.78 -29.49
23 6 7 3816.95 -4.04
6 18 39 2414.27 -34.18
23 36 38 3721.22 -.06
                                                                                                                                                                                    2468.9
3418 -
                                                                                                                                       83.05 3 43.38 2468.9
62.23 23 10 36 3418.6
84.89 5 18 27 2145.8
60.36 24 9 44 3217.0
89.38 6 58 54 1814.3
55.82 24 38 40 3121.2
           90.00
                                                                           -27.52
                                                                                                101.41
                                                                                                                   234.02
                                                                                                                                                                                                             -28.20
                                                                                                                                                                                                                                       92.81
            90.00
                                                                                                161.83
                                                                                                                      226.98
                                                                                                                                                                                                                 -9.46
          100.00
                                                                                                   77.88
                                                                                                                      234.26
                                                                                                                                                                                                                -29.89
                                                                                                                                                                                    2145.8
3217.0
                                                                                                                 226.02
                                                                                         146.06
52.98
136.32
          100.00
                                                                           -4.04
                                                                                                                                                                                                                 -7.96
          110.00
                                                                                                                      234.53
                                                                                                                                                                                                             -33.89
-4.54
                                                                                                                   223.54
         110.00
                                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 5643.5 SGR 411.5 SG3 175.0 ST 3259.5 SR 359.3 S5 796.7
RRT .D877 RRF .D683 RTF .9366 CRT .9330 CRS -.8804 CST -.9918
SGB 5658.5 R23 -.0144 R13 .9366 LSA 3370.6 MSA 163.4 SSA 17.8
SGI 5643.7 SG2 409.9 THA .37 EL1 3276.7 EL2 128.7 ALF 5.88
      TDE 2.5109 TRA 1.8370 TC3-4.3227 BAU 1.1927
      RDE .2823 RRA -.1128 RC3 .1490 FAU .02371
FDE .8908 FRA 1.0330 FC3 -.9950 BSP 18249
BDE 2.5267 BRA 1.8404 BC3 4.3253 FSP -597
LAUNCH DATE DEC 8 1965
                                                                                                            FLIGHT TIME 188.00
                                                                                                                                                                                                     ARRIVAL DATE JUN 14 1966
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 548.385
      RL 147.35 LAL .00 LOL 75.70 VL 26.510 GAL 4.33 AZL 86.60 MCA 272.03 SMA 120.80 ECC .23175 INC 3.3954 V1 30.236 RP 108.79 LAP -3.39 LOP 347.73 VP 36.622 GAP 12.15 AZP 89.88 TAL 165.32 TAP 77.35 RCA 92.81 APO 148.80 V2 34.832 RC 179.385 GL 19.41 GP .19 ZAL 61.83 ZAP 172.95 ETS 1.99 ZAE 129.47 ETE 179.95 ZAC 89.35 ETC 166.27 CLP-172.95
      RC 179.385 GL
    PLANETOCENTRIC CONIC
     C3 22.202 VML 4.712 DLA 23.99 RAL 6.43 RAD 6567.9 VEL 11.983 PTH 2.14 VMP 7.906 DPA -4.98 RAP 356.48 ECC 1.3654 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 58 32 3108.02 -27.18 104.08 238.36 81.75 3 50 18 2506.0 -28.05 95.52 90.00 22 20 46 4016.96 -5.84 161.74 231.18 62.24 23 27 43 3417.0 -9.51 154.98 100.00 4 39 38 2780.07 -29.26 80.40 238.66 83.59 5 25 58 2180.1 -29.84 71.65 100.00 23 22 22 3818.14 -4.00 146.12 230.17 60.35 24 26 0 3218.1 -7.92 139.52 110.00 6 26 55 2444.39 -34.13 55.33 239.08 87.99 7 7 40 1844.4 -34.03 46.09 110.00 23 51 33 3726.59 .14 136.60 227.58 55.82 24 53 40 3126.6 -4.34 130.39
                                                                                                  MID-COURSE EXECUTION ACCURACY
SGT 5671.0 3GR 413.7 SG3 169.1 ST 3266.8 SR 369.6 SS 786.3
RRT .1209 RRF .1025 RTF .9381 CRT .9277 CRS -.8760 CST -.9924
3GB 5686.1 R23 -.0116 R13 .9381 LSA 3376.1 MSA 167.2 SSA 17.2
SG1 5671.2 SG2 410.7 THA .51 EL1 3284.7 EL2 137.2 ALF 6.00
    DIFFERENTIAL CORRECTIONS
      TOE 2.5948 TRA 2.1006 TC3-4.0251 BAU 1.1954
      ROE .3017 RRA -.1109 RC3 .1291 FAU .02184
FOE .8781 FRA 1.0749 FC3 -.8516 BSP 18307
BOE 2.6123 BRA 2.1035 BC3 4.0272 FSP -574
```

ARRIVAL DATE JUN 16 1966

FLIGHT TIME 190.00 LAUNCH DATE DEC 8 1965 DISTANCE 553.828 RL 147.35 LAL .00 LOL 75.70 VL 26.469 GAL 4.95 A7L 86.60 MCA 275.20 SMA 120.57 ECC .23754 INC 3.3976 V1 30.236 RP 108.77 LAP -3.38 LOP 350.90 VP 36.600 GAP 12.56 A7P 89.69 TAL 163.66 TAP 78.85 RCA 91.93 APO 149.21 V2 34.840 RC 181.409 GL 18.59 GP .18 ZAL 59.24 ZAP 173.78 ETS 2.28 ZAE 129.48 ETE 179.97 ZAC 91.62 ETC 166.40 CLP-173.78 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 9.27 RAD 6568.0 VEL 12.058 PTH 2.16 VMP 8.160 DPA -4.04 RAP 358.62 ECC 1.3954 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 5 10 3141.63 -26.81 106.62 242.71 80.53 3 57 31 2541.6 -27.85 98.11 80.53 3 57 31 62.22 23 43 48 82.34 5 33 56 60.33 24 41 19 3419.8 235.37 -5.75 161.90 90.00 22 36 48 4019.81 74.10 2213.1 -29.74 243.08 82.82 4 47 3 2813.12 -28.98 100.00 23 37 36 3823.55 6 35 30 2473.84 0 9 34 3735.60 234.31 243.65 -7.74 139.83 3223.5 -3.82 146.42 100.00 86.63 7 16 44 55.82 1 11 50 -34.13 48.38 1873.8 -34.04 57.63 110.00 -4.00 130.86 3135.6 .49 137.07 231.62 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3258.8 SR 378.8 SS 773.7 CRT .9226 CRS -.8718 CST -.9930 SGT 5693.6 SGR 415.2 SG3 163.3 RRT .1534 RRF .1355 RTF .9400 SGB 5708.7 R23 -.0096 R13 .9400 TOE 2.6743 TRA 2.3760 TC3-3.7287 BAU 1.1981 ROE .3221 RRA -.1074 RC3 .1101 FAU .02013 FOE .8638 FRA 1.1156 FC3 -.7256 BSP 18448 9400 - 94 LSA 3366.3 MSA 171.3 SSA 16.6 EL1 3277.5 EL2 145.3 ALF BDE 2.6936 BRA 2.3784 BC3 3.7303 FSP -557 ARRIVAL DATE JUN 18 1966 FLIGHT TIME 192.00 LAUNCH DATE DEC 8 1965 DISTANCE 559.218 HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 75.70 VL 26.428 GAL 5.60 AZL 86.60 MCA 278.37 SHA 120.33 ECC .24385 INC 3.3999 V1 30.236 RP 108.74 LAP -3.36 LOP 354.08 VP 36.579 GAP 13.01 AZP 89.50 TAL 162.00 TAP 80.37 RCA 90.99 APO 149.68 V2 34.849 RC 183.413 GL 17.77 GP .17 ZAL 56.74 ZAP 174.61 ETS 2.62 ZAE 129.48 ETE 180.00 ZAC 93.89 ETC 166.50 CLP-174.61 PLANETOCENTRIC CONIC C3 26.130 VHL 5.112 DLA 24.51 RAL 12.04 RAD 6568.1 VEL 12.145 PTH 2.18 VHP 8.432 DPA -3.08 RAP .77 ECC 1.4300 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 12 23 3175.50 -26.41 109.02 247.06 79.39 4 5 19 2575.5 -27.61 100.56 90.00 22 51 37 4027.32 -5.51 162.32 239.54 62.18 23 58 45 3427.3 -9.19 155.58 100.00 4 54 57 2844.83 -28.67 85.13 247.50 81.17 5 42 22 2244.8 -29.60 76.45 100.00 23 51 45 3833.22 -3.49 146.95 238.43 60.29 24 55 38 3233.2 -7.42 140.37 110.00 6 44 20 2502.60 -33.90 59.86 248.22 85.31 7 26 3 1902.6 -34.18 50.63 110.00 0 22 47 3748.22 .97 137.73 235.65 55.83 1 25 15 3148.2 -3.52 131.52 DIEFFERNTIAL CORRECTIONS C3 26.130 VHL 5.112 DLA 24.51 RAL 12.04 RAD 6568.1 VEL 12.145 PTH 2.18 VHP 8.432 DPA -3.08 RAP MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGI 5711.5 SGR 415.9 SG3 157.7 RRT .1860 RRF .1687 RTF .9420 SGB 5726.6 R23 -.0076 R13 .9420 SGI 5712.0 SG2 408.6 THA .78 ST 3241.2 SR 386.7 SS 761.1 CRT .9175 CRS -.8678 CST -.9936 TOE 2.7531 TRA 2.6678 TC3-3.4301 BAU 1.1987 ROE .3434 RRA -.1023 RG3 .0925 FAU .01848 FDE .8504 FRA 1.1568 FC3 -.6124 BSP 18571 LSA 3347.1 MSA 175.4 SSA 16.0 EL1 3260.6 EL2 152.9 ALF 6.26 BDE 2.7744 BRA 2.6698 BC3 3.4314 FSP -540 ARRIVAL DATE JUN 20 1966 FLIGHT TIME 194.00 LAUNCH D'ATE DEC 8 1965 DISTANCE 564.544 RL 147.35 LAL .00 LOL 75.70 VL 26.388 GAL 6.30 AZL 86.60 MCA 281.54 SMA 120.10 ECC .25075 INC 3.4022 VI 30.236 RP 108.71 LAP -3.33 LOP 357.26 VP 36.559 GAP 13.48 AZP 89.32 TAL 160.36 TAP 81.91 RCA 89.99 APO 150.22 VZ 34.858 RC 185.395 GL 16.93 GP .17 ZAL 54.32 ZAP 175.44 ETS 3.03 ZAE 129.48 ETE 180.02 ZAC 96.16 ETC 166.57 CLP-175.44 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 28.561 VHL 5.344 DLA 24.68 RAL 14.72 RAD 6568.1 VEL 12.245 PTH 2.20 VHP 8.724 DPA -2.12 RAP 2.91 ECC 1.4700 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 20 13 3207.50 -25.99 111.27 251.41 78.34 4 13 40 2607.5 -27.34 102.86 3 20 13 3207.50 23 5 10 4039.57 5 3 18 2875.15 0 8 42 3847.15 6 53 24 2530.67 0 35 5 3764.39 62.11 24 12 29 80.06 5 51 13 -8.81 156.28 3439.6 -5.12 163.01 243.67 90.00 2275.2 -29.42 78.68 87.32 251.91 -28.34 100.00 1 12 49 7 35 35 3247.1 -6.96 141.14 242.52 60.25 147.72 -3.02 100.00 1930.7 -34.18 52.82 62.03 252.79 84.04 -33.72 110.00 1 37 49 3164.4 -2.90 132.37 55.85 1.59 138.57 239.64 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5725.1 SGR 415.8 SG3 152.3 RRT .2187 RRF .2020 RTF .9443 SGB 5740.2 R23 -.0057 R13 .9443 SGI 5725.8 SG2 405.7 THA .91 ST 3215.5 SR 393.3 SS 749.0 CRT .9124 CRS -.8639 CST -.9942 TOE 2.8320 TRA 2.9777 TC3-3.1332 BAU 1.1967 RDE .3655 RRA -.0954 RC3 .0765 FAU .01689 FDE .8380 FRA 1.1992 FC3 -.5121 BSP 18673 LSA 3320.0 MSA 179.5 SSA 15.4 EL1 3235.5 ELZ 160.0 ALF 6.38 BDE 2.8555 BRA 2.9792 BC3 3.1341 FSP -522 ARRIVAL DATE JUN 22 1966 FLIGHT TIME 196.00 LAUNCH DATE DEC 8 1965 DISTANCE 569.797 HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 75.70 VL 26.349 GAL 7.03 AZL 86.60 HCA 284.72 SHA 119.88 ECC .25830 INC 3.4045 V1 30.236
RP 108.68 LAP -3.29 LOP .44 VP 36.540 GAP 14.00 AZP 89.13 TAL 158.74 TAP 83.46 RCA 88.91 APO 150.84 V2 34.868
RC 187.357 GL 16.10 GP .17 ZAL 51.99 ZAP 176.27 ETS 3.57 ZAE 129.48 ETE 180.05 ZAC 98.43 ETC 166.63 CLP-176.28 PLANETOCENTRIC CONIC C3 31.369 VHL 5.601 DLA 24.79 RAL 17.30 RAD 6568.2 VEL 12.359 PTH 2.23 VHP 9.038 DPA -1.16 RAP C3 31.369 VHL 5.601 DLA 24.79 RAL 17.30 RAD 6568.2 VEL 12.359 PTH 2.23 VHP 9.038 DPA -1.16 RAP 5.04 ECC 1.5163 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 28 37 3237.56 -25.56 113.36 255.74 77.38 4 22 35 2637.6 -27.04 105.01 90.00 23 17 22 4056.52 -4.58 163.96 247.76 62.03 24 28 59 3456.5 -8.29 157.25 100.00 5 12 4 2904.07 -27.98 89.39 256.30 79.02 6 0 28 2304.1 -29.21 80.81 100.00 0 20 33 3865.24 -2.41 148.71 246.56 60.20 1 24 58 3265.2 -6.36 142.15 110.00 7 2 39 2558.09 -33.51 64.15 257.33 82.81 7 45 17 1958.1 -34.14 54.96 110.00 0 46 27 3783.99 2.34 139.60 243.60 55.89 1 49 31 3184.0 -2.15 133.39 5.04 ECC 1.5163 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5735.7 SGR 415.1 SG3 147.3 RRT .2521 RRF .2361 RTF .9466 SGB 5750.7 R23 -.0038 R13 .9466 SGI 5736.6 SG2 401.7 THA 1.05 ST 3186.1 SR 398.5 55 738.6 TOE 2.9146 TRA 3.3098 TC3-2.8369 BAU 1.1900 CRT .9074 CRS -.8604 CST -.9947 ROE .3885 RRA -.0865 RC3 .0621 FAU .01528 FOE .8280 FRA 1.2441 FC3 -.4218 BSP 18684 LSA 3289.6 MSA 183.3 SSA 14.8 EL1 3206.6 EL2 166.5 ALF 6.49 BDE 2.9404 BRA 3.3109 BC3 2.8376 FSP -503

```
LAUNCH DATE DEC 8 1965
                                                                                                                                         FLIGHT TIME 198.00
                                                                                                                                                                                                                                                      ARRIVAL DATE JUN 24 1966
      HELIOCENTRIC CONIC
                                                                                                                                        DISTANCE 574.964
        RL 147.35 LAL .00 LOL 75.70 VL -26.310 GAL 7.81 AZL 86.59 HCA 287.90 SMA 119.66 ECC .26658 INC 3.4069 V1 30.236
RP 108.65 LAP -3.24 LOP 3.62 VP 36.522 GAP 14.55 AZP 88.95 TAL 157.15 TAP 85.04 RCA 87.76 APO 151.55 VZ 34.878
RC 189.297 GL 15.26 GP .16 ZAL 49.76 ZAP 177.11 ETS 4.37 ZAE 129.47 ETE 180.08 ZAC 100.70 ETC 166.65 CLP-177.12
       PLANETOCENTRIC CONIC
         C3 34.617 VHL 5.884 DLA 24.85 RAL 19.79 RAD 6568.4 VEL 12.489 PTH 2.26 VHP 9.378 DPA
                                                                                                                                                                                                                                                -.19 RAP
        C3 34.817 VML 3.884 DLA 24.85 KAL 19.79 KAO 6508.4 VEL 12.489 PM 2.26 VMP 9.578 DPA -.19 KAP 7.17 ECC 15.867 LNCH A7MTH LNCH TINE L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 28 14 4078.05 -3.89 165.17 251.78 61.93 24 36 12 3478.0 -7.61 158.47 100.00 5 21 12 2931.60 -27.61 91.36 260.67 78.05 6 10 3 2331.6 -28.97 82.82 100.00 0 31 14 3887.56 -1.66 149.93 250.54 60.15 1 36 1 3287.4 -5.62 143.38 110.00 7 12 1 2584.86 -33.26 66.20 261.84 81.62 7 55 6 1984.9 -34.06 57.05 110.00 0 56 54 3806.87 3.21 140.79 247.51 55.95 2 0 21 3206.9 -1.28 154.59
                                                                                                                           91.36 260.67 78.05 6 10 3
149.93 250.54 60.15 1 36 1
66.20 261.84 81.62 7 55 6
140.79 247.51 55.95 2 0 21
MIO-COURSE EXECUTION ACCURACY
                                                                                                                           MID-COURSE EXECUTION ACCUMACT
SGT 5740.5 SGR 413.7 SG3 142.3
RRT .2849 RRF .2694 RTF .9492
SGB 5755.4 R23 -.D024 R13 .9492
                                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
ST 3146.1 SR 402.1 SS 727.7
CRT .9023 CRS -.8570 CST -.9952
      DIFFERENTIAL CORRECTIONS
         TOE 2.9942 TRA 3.6591 TC3-2.5540 BAU 1.1822
        RDE .4122 RRA -.0757 RC3 .0494 FAU .01380
        FOE .8178 FRA 1.2894 FC3 -.3452 BSP 18771
BDE 3.0224 BRA 3.6599 BC3 2.5544 FSP -487
                                                                                                                                                                                                                                  LSA 3248.7 MSA 186.7 SSA 14.2
                                                                                                                           SG1 5741.7 SG2 396.4 THA 1.18
                                                                                                                                                                                                                                EL1 3167.0 EL2 172.2 ALF 6.60
                                                                                                                                                                                                                                                       ARRIVAL DATE JUN 26 1966
 LAUNCH DATE DEC 8 1965
                                                                                                                                         FLIGHT TIME 200.00
      HELIOCENTRIC CONIC
                                                                                                                                        DISTANCE 580.032
        RL 147.35 LAL .00 LOL 75.70 VL 26.272 GAL 8.65 AZL 86.59 MCA 291.08 SMA 119.44 ECC .27568 INC 3.4094 V1 30.236
RP 108.62 LAP -3.18 LOP 6.81 VP 36.504 GAP 15.16 AZP 88.77 TAL 155.58 TAP 86.66 RCA 86.51 APO 152.37 V2 34.889
RC 191.216 GL 14.44 GP .16 ZAL 47.63 ZAP 177.96 ETS 5.72 ZAE 129.44 ETE 180.11 ZAC 102.95 ETC 166.65 CLP-177.96
      PLANETOCENTRIC CONIC
       PLANETOCENTRIC CONIC
C3 38.380 VML 6.195 OLA 24.85 RAL 22.16 RAO 6568.5 VEL 12.639 PTH 2.29 VMP 9.746 OPA .77 RAP 9.29 ECC 1.6316
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 47 1 3291.93 -24.70 117.11 264.32 75.69 4 41 53 2691.9 -26.42 108.87
90,00 23 37 47 4103.95 -3.06 166.62 255.73 61.84 24 46 11 3503.9 -6.80 159.94
100.00 5 30 39 2957.82 -27.22 93.21 265.00 77.15 6 19 56 2357.8 -28.72 84.73
100.00 0 40 46 3913.29 -.78 151.35 254.46 60.12 1 45 59 3313.3 -4.76 144.81
110.00 7 21 29 2611.04 -32.98 68.19 266.32 80.47 8 5 0 2011.0 -33.95 59.08
110.00 1 6 25 3832.84 4.20 142.15 251.35 56.04 2 10 18 3232.8 -.29 135.94
                                                                                                                           93.21 265.00 77.15 6 19 56
151.35 254.46 60.12 1 45 59
68.19 266.32 80.47 8 5 0
142.15 251.36 56.04 2 10 18
MIO-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                           ### MID-COURSE EXECUTION ACCURACY

SGT 5740.5 SGR 411.5 SG3 137.6

RRT .3178 RRF .3028 RTF .9520

SGB 5755,2 R23 -.0013 R13 .9520

SGB 5755,2 R23 -.0013 R13 .9520

SGB 5742.0 SG2 390.0 THA 1.31

ELI 3122.I ELZ 177.3 ALF 6.69
       TOE 3.0754 TRA 4.0306 TC3-2.2810 BAU 1.1706
RDE .4365 RRA -.0628 RC3 .0384 FAU .01236
FDE .8089 FRA 1.3367 FC3 -.2789 BSP 18850
BDE 3.1062 BRA 4.0311 BC3 2.2813 FSP -472
                                                                                                                                       FLIGHT TIME 202.00
                                                                                                                                                                                                                                                     ARRIVAL DATE JUN 28 1966
LAUNCH DATE DEC 8 1965
                                                                                                                                      01STANCE 584.980
      HELIOCENTRIC CONIC
       RL 147.35 LAL .00 LOL 75.70 VL 26.234 GAL 9.55 A7L 86.59 HCA 294.26 SMA 119.23 ECC .28569 INC 3.4121 V1 30.236 RP 108.58 LAP -3.11 LOP 9.99 VP 36.488 GAP 15.81 A7P 88.60 TAL 154.06 TAP 88.31 RCA 85.16 APO 153.29 V2 34.900 RC 193.113 GL 13.62 GP .15 ZAL 45.60 ZAP 178.82 ETS 8.92 ZAE 129.41 ETE 180.14 ZAC 105.20 ETC 166.63 CLP-178.83
      PLANETOCENTRIC CONIC
                                                                                                                                                                                       2.33 VHP 10.148 0PA
                                                                                                                                                                                                                                               1.72 RAP 11.41 ECC 1.7036
        C3 42.752 VHL 6.538 DLA 24.80 RAL 24.43 RAD 6568.6 VEL 12.811 PTH
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 56 52 3316.42 -24.27 118.78 268.56 74.95 4 52 8 2716.4 -26.11 110.59
                                 NCH TIME L-1 TIME AND LATE AND
                                                                                                                                                                                     61.75 24 54 56
                                                                                                                                                    259.60
                                                                                                                                                                                                                                         3533.9
                                                                                                                                                                                                                                                                       -5.85
                                                                                                                                                                                                                                                                                                 161.63
               90.00
                                                                                                                         168.30
                                                                                                                          94.96 269.29 76.31 6 30 3
152.97 258.31 60.11 1 54 53
70.13 270.74 79.36 8 14 55
143.67 255.15 56.18 2 19 23
MID-COURSE EXECUTION ACCURACY ORI
                                                                                                                                                                                                                                        2382.8
                                                                                                                                                                                                                                                                    -28.45
                                                                                                                                                                                                                                                                                                 86.53
            100.00
                                                                                                                                                                                                                                        3342.8 -3.76
2036.6 -33.80
.82
                                                                                                                        152.97
                                                                                                                                                                                                                                                                                                146,44
            100.00
                                                                                                                                                                                                                                                                                                 61.07
            110.00
                                                                                                                          70.13
                                                                                                                                                                                                                                        3261.7
                                                                                                                        143.67
                                                                                                                                                                                                                                                                                                 137.45
            110.00
                                                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                             SGT 5736.7 SGR 408.6 SG3 133.0

RRT .3508 RRF .3362 RTF .9549

SGB 5751.2 R23 -.0003 R13 .9549

SGI 5738.5 SG2 382.5 THA 1.44
                                                                                                                                                                                                                               ST 3052.1 SR 404.5 SS 709.6
CRT .8922 CRS -.8507 CST -.9962
        TOE 3.1594 TRA 4.4279 TC3-2.0194 BAU 1.1543
        ROE .4613 RRA -.0475 RC3 .0291 FAU .01095
FOE .8018 FRA 1.3869 FC3 -.2218 BSP 18908
BDE 3.1929 BRA 4.4282 BC3 2.0196 FSP -457
                                                                                                                                                                                                                               LSA 3153.6 MSA 192.2 SSA 13.1
EL1 3073.5 EL2 181.4 ALF 6.77
                                                                                                                                       FLIGHT TIME 204.00
                                                                                                                                                                                                                                                      ARRIVAL DATE JUN 30 1966
LAUNCH DATE DEC 8 1965
                                                                                                                                      01STANCE 589.787
     HELIOCENTRIC CONIC
       RL 147.35 LAL .00 LOL 75.70 VL 26.197 GAL 10.51 AZL 86.59 HCA 297.44 SMA 119.02 ECC .29675 INC 3.4148 VI 30.236
RP 108.55 LAP -3,03 LOP 13.18 VP 36.472 GAP 16.53 AZP 88.42 TAL 152.57 TAP 90.01 RCA 83.70 APO 154.34 VZ 34.912
RC 194.989 GL 12.81 GP .15 ZAL 43.67 ZAP 179.67 ETS 28.91 ZAE 129.35 ETE 180.17 ZAC 107.42 ETC 166.57 CLP-179.71
     PLANETOCENTRIC CONIC
       C3 47.847 VHL 6.917 DLA 24.71 RAL 26.59 RAD 6568.8 VEL 13.008 PTH 2.37 VHP 10.587 DPA 2.67 RAP 13.51 ECC 1.7874
LNCH AZHTH LNCH TIME L-I TIME INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
           NCM AZMTH LNCH TIME L-I TIME 90.00 4 7 1 3339.27 90.00 23 53 3 4167.64 100.00 5 50 12 3006.60 100.00 0 56 29 3975.54 110.00 7 40 27 2661.70 110.00 1 22 44 3893.21
                                                                                                                                                272.75
                                                                                                                                                                                     74.28 5 2 41
61.70 25 2 30
                                                                                                                                                                                                                                                                 -25.79
                                                                                              -23.86
                                                                                                                         120.33
                                                                                                                                                                                   74.28
                                                                                                                                                                                                                                       2739.3
                                                                                                                                                                                                                                                                                              112.19
                                                                                                                                                                                                                                         3567.6
                                                                                                                                                                                                                                                                        -4.78
                                                                                               -1.01
                                                                                                                         170.18
                                                                                                                                                    263.38
                                                                                                                                                                                    75.52 6 40 19 2406.6
60.13 2 2 44 3375.5
78.29 8 24 48 2061.7
56.36 2 27 37 3293.2
                                                                                                                                                    273.52
                                                                                                                                                                                                                                                                    -28.17
                                                                                              -26.44
                                                                                                                           96.62
                                                                                                1.33
                                                                                                                        154.77
                                                                                                                                                    262.08
                                                                                                                                                                                                                                                                      -2.66
                                                                                                                                                                                                                                                                -33.62
                                                                                              -32.35
                                                                                                                           72.01
                                                                                                                                                    275.10
                                                                                                                        145.33
                                                                                              6.49
                                                                                                                                                    258.88
                                                                                                                                                                                                                                                                         2.02
                                                                3893.21
                                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
ST 3003.5 SR 403.3 SS 703.8
     DIFFERENTIAL CORRECTIONS
                                                                                                                                SGT 5730.9 SGR 405.2 SG3 128.8
        TOE 3.2509 TRA 4.8560 TC3-1.7686 BAU 1.1314
        ROE .4868 RRA -.0298 RC3 .0215 FAU .00952
FOE .7975 FRA 1.4415 FC3 -.1722 BSP 16874
                                                                                                                             BOE 3.2871 BRA 4.8561 BC3 1.7687 FSP
                                                                                                    -440
```

ARRIVAL DATE JUL 2 1966

```
FLIGHT TIME 206.00
LAUNCH DATE DEC 8 1965
                                                                    DISTANCE 594.424
  HELIOCENTRIC CONIC
    RL 147.35 LAL .00 LOL 75.70 VL 26.161 GAL 11.55 AZL 86.58 HCA 300.63 SHA 118.82 ECC .30899 INC 3.4177 VI 30.236
RP 108.51 LAP -2.94 LOP 16.37 VP 36.458 GAP 17.32 AZP 88.26 TAL 151.14 TAP 91.77 RCA 82.11 APO 155.53 VZ 34.924
    RC 196.842 GL 12.02 GP .15 ZAL 41.86 ZAP 179.37 ETS 168.02 ZAE 129.27 ETE 180.20 ZAC 109.63 ETC 166.49 CLP 179.39
   PLANETOCENTRIC CONIC
    C3 53.808 VML 7.335 DLA 24.58 RAL 28.62 RAD 6568.9 VEL 13.235 PTM 2.42 VMP 11.069 DPA
                                                                                                                           3.61 RAP 15.59 ECC 1.8855
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           276.88
                                                              121.77
                    4 17 25 3360.62
                                                 -23.46
        90.00
                                                                                                                                                     165.61
                                                                                                                                        -3.60
                                                                                                         1 12 54
                                                                                                                        3604.7
                                                                             267.06
                                                                                             61.68
                                                              172.24
                                                    .19
                    0 2 49
                                4204.73
        90.00
                                                                                                                        2429.3
                                                                                                                                       -27.88
                                                                                                                                                      89.87
                                                                                             74.78 6 50 40
60.21 2 9 36
                                                                                                         6 50 40
                                                                             277.69
                                                 -26.04
                                                                98.19
                    6 0 11 3029.30
1 2 44 4011.28
7 49 51 2686.20
       100.00
                                                                                                                                      -1.45
                                                                                                                                                     150.21
                                                                                                                        3411.3
                                                              156.73
                                                                            265.76
                                                  2.54
      100.00
                                                                                             77.27 8 34 37
                                                                                                                        2086.2
                                                                                                                                     -33.41
3.32
                                                                                                                                                      64.89
                                                                            279.38
                                                 -31.99
                                                                73.83
                                                                                                                        3327.2
                                                                                                                                                     140.86
                                                                                                         2 35 1
                    1 29 34 3927.15
                                                              147.13
                                                                             262.53
                                                                                              56.61
                                                7.76
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2949.2 SR 400.4 SS 698.8
CRT .8826 CRS -.8456 CST -.9971
                                                                  SGT 5718.1 SGR 401.1 SG3 124.6
RRT .4175 RRF .4037 RTF .9613
SGB 5732.2 R23 .0008 R13 .9613
    TOE 3.3435 TRA 5.3110 TC3-1.5344 BAU 1.1038
    ROE .5126 RRA -.0095 RC3 .0154 FAU .00816
FDE .7940 FRA 1.4988 FC3 -.1313 85P 18898
BOE 3.3826 BRA 5.3110 BC3 1.5345 FSP -426
                                                                                                                    LSA 3051.0 MSA 194.8 SSA 12.0
EL1 2970.4 EL2 186.9 ALF 6.86
                                                                   SG1 5720.6 SG2 364.3 THA 1.68
                                                                                                                                ARRIVAL DATE JUL 4 1966
                                                                       FLIGHT TIME 208.00
LAUNCH DATE DEC 8 1965
    RL 147.35 LAL .00 LOL 75.70 VL 26.125 GAL 12.69 A7L 86.58 HCA 303.81 SMA 118.62 ECC .32257 INC 3.4208 VI 30.236 RP 108.47 LAP -2.84 LOP 19.56 VP 36.444 GAP 18.19 A7P 88.09 TAL 149.78 TAP 93.59 RCA 80.36 APO 156.89 V2 34.936 RC 198.673 GL 11.25 GP .15 ZAL 40.15 ZAP 178.45 ETS 176.39 ZAE 129.15 ETE 180.23 ZAC 111.81 ETC 166.37 CLP 178.46
                                                                      DISTANCE 598.855
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 60.813 VHL 7.798 DLA 24.41 RAL 30.53 RAD 6569.1 VEL 13.497 PTH 2.47 VHP 11.602 DPA 4.53 RAP 17.66 ECC 2.0008
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   115.06
                                                 -23.07
                                                               123.10
                                                                            280.94
        90.00
                   4 27 57 3380.57
0 7 32 4244.80
                                                                                                         1 18 17
                                                                                                                          3644.8
                                                                                                                                        -2.31
                                                                                                                                                     167.85
                                                                                              61.72
                                                    1.48
                                                                             270.65
        90.00
                                                                                                                         2450.9
                                                                                                                                        -27.58
                                                                                                                                                       91.41
                                                                                                          7 1 2
                                                                                              74.09
                   6 10 11 3050.93
1 7 59 4049.67
                                                 -25.65
                                                                 99.68
                                                                             281.77
       100.00
                                                                                                        2 15 29
8 44 18
                                                                                                                                                      152.31
                                                                                                                                          -.14
                                                                                               60.33
                                                                                                                         3449.7
                                                   3.83
                                                               158.84
                                                                             269.35
       100.00
                                                                                                                                        -33.1A
                                                                                                                                                       66.71
                                                                                                                         2110.1
                    7 59 8 2710.09
1 35 32 3963.28
                                                                 75.59
                                                                             283.57
                                                                                              76.29
                                                  -31.62
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                         4.69
                                                                                                                                                      142.76
                                                                                                                         3363.3
                                                                149.06
                                                  9.11
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2893.4 SR 395.9 SS 696.0
CRT .8781 CRS -.8435 CST -.9975
                                                                   SGT 5701.5 SGR 396.4 SG3 120.6
RRT .4506 RRF .4373 RTF .9647
     TDE 3.4422 TRA 5.8010 TC3-1.3149 BAU 1.0690
     ROE .5386 RRA .0136 RC3 .0106 FAU .00680
FOE .7929 FRA 1.5608 FC3 -.0968 B9P 18930
                                                                                                                     LSA 2995.8 MSA 194.9 SSA 11.5
                                                                   SGB 5715.3 R23 .0010 R13 .9647
SG1 5704.3 SG2 353.7 THA 1.80
                                                                                                                     EL1 2914.3 EL2 188.1 ALF 6.88
     BDE 3.4841 BRA 5.8010 BC3 1.3149 FSP -413
                                                                                                                                ARRIVAL DATE JUL 6 1966
                                                                       FLIGHT TIME 210.00
 LAUNCH DATE DEC 8 1965
                                                                       DISTANCE 603.034
     RL 147.35 LAL .0D LOL 75.70 VL 26.091 GAL 13.92 A7L 86.58 HCA 307.0D SHA 118.43 ECC .33770 INC 3.4242 V1 30.236
RP 108.43 LAP -2.73 LOP 22.75 VP 36.431 GAP 19.16 A7P 87.94 TAL 148.50 TAP 95.50 RCA 78.44 APO 158.43 V2 34.948
RC 200.481 GL 10.49 GP .14 ZAL 38.56 ZAP 177.49 ETS 178.63 ZAE 129.00 ETE 180.26 ZAC 113.95 ETC 166.23 CLP 177.49
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                             5.43 RAP 19.70 ECC 2.1371
     C3 69.091 VHL 8.312 DLA 24.19 RAL 32.32 RAD 6569.3 VEL 13.800 PTH
                                                                                                2.52 VHP 12.192 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          5 35 11
                    4 38 32 3399.18
0 11 12 4287.47
6 20 10 3071.48
1 12 14 4090.41
                                                                                               72.60
                                                  -22.70
                                                                124.34
                                                                             284.91
         90.00
                                                                                                                                           - .93
                                                                                                                                                       170.23
                                                                                                          1 22 39
                                                                                                                          3687.5
                                                                                               61.82
                                                                              274.13
                                                    2.86
                                                                176.86
         90.00
                                                                                                                                        -27.28
                                                                                                                                                        92.87
                                                                                                        7 11 22
2 20 25
8 53 49
                                                                                               73.45
                                                                                                                         2471.5
                                                                              285.76
                                                                101.08
                                                  -25.26
        100.00
                                                                                                                                                      154.55
                                                                                                                                          1.24
                                                                                                                          3490.4
                                                                                               60.52
                                                                             272.63
                                                                161.09
                                                    5.20
        100.00
                                                                                                                                        -32.93
                                                                                               75.35
                                                                                                                          2133.3
                     8 8 15 2733.31
1 40 38 4001.34
                                                                 77.29
                                                                             287.65
                                                  -31.24
        110.00
                                                                                                                                          6.13
                                                                              269.60
                                                                                               57.29
                                                                                                          2 47 20
                                                                                                                          3401.3
                                                                151.11
        110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2837.5 SR 389.8 SS 695.9
                                                                  SGT 5681.1 SGR 391.0 SG3 116.8
RRT .4838 RRF .4709 RTF .9682
SGB 5694.5 R23 .0009 R13 .9682
      TOE 3.5503 TRA 6.3301 TC3-1.1098 BAU 1.0251
                                                                                                                      CRT .8739 CRS -.8418 CST -.9979
     ROE .5654 RRA .0396 RC3 .0072 FAU .00541
FOE .7946 FRA 1.6286 FC3 -.0677 BSP 18943
                                                                                                                      LSA 2941.1 MSA 194.1 SSA 10.9
                                                                                                                      EL1 2858.0 EL2 188.2 ALF 6.88
                                                                   5G1 5684.2 SG2 342.0 THA 1.91
      BOE 3.5950 BRA 6.3302 BC3 1.1098 FSP
                                                       -400
                                                                                                                                 APRIVAL DATE JUL 8 1966
                                                                        FLIGHT TIME 212.00
  LAUNCH DATE DEC 8 1965
                                                                       DISTANCE 606.905
         147.35 LAL .00 LOL 75.70 VL 26.058 GAL 15.27 AZL 86.57 HCA 310.20 SMA 118.25 ECC .35461 INC 3.4278 V1 30.236
108.39 LAP -2.62 LOP 25.94 VP 36.420 GAP 20.24 AZP 87.79 TAL 147.30 TAP 97.50 RCA 76.32 APO 160.18 V2 34.961
202.264 GL 9.74 GP .14 ZAL 37.09 ZAP 176.48 ETS 179.71 ZAE 128.81 ETE 180.29 ZAC 116.05 ETC 166.05 CLP 176.48
    HELIOCENTRIC CONIC
     RL 147.35 LAL
      RC 202.264 GL
    PLANETOCENTRIC CONIC
                                                                                                                              6.31 RAP 21.71 ECC 2.2990
      C3 78.930 VHL 8.884 DLA 23.94 RAL 33.97 RAD 6569.5 VEL 14.152 PTH 2.58 VHP 12.851 DPA
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 49 5 3416.46 -22.34 125.48 288.76 72.14 5 46 1 2816.5 -24.58 117.52
                                                                                                           1 26 2
                                                                               277.49
                                                                                                61.98
                                                                 179.38
                                   4332.38
                                                     4.30
                      0 13 49
          90.00
                                                                                                                                                         94.23
                                                                                                                                         -26.98
                                                                                                                           2490.9
                                                                               289.64
                                                                                                72.86
                                                                                                           7 21 34
                                                                 102.40
                      6 30 3 3090.89
                                                   -24.87
         100.00
                                                                                                                                                        156.90
                                                                                                                                           2.69
                                                                                                                           3533.2
                                                                                                60.79
                                                                                                          2 24 25
                                                                               276.21
                                                     6.63
                                                                 163.46
                      1 15 32 4133.18
         100.00
                                                                                                                                                         70.17
                                                                                                                           2155.7
                                                                                                                                         -32.66
                                                                                                74.46
                                                                                                           9 3 6
                                                                               291.61
                                                                   78.92
                       8 17 11 2755.75
                                                  -30.84
                                                                    MID-COURSE EXECUTION ACCURACY
         110.00
                                                                                                                                                        146.87
                                                                                                                                           7.63
                                                                                                                           3441.1
                                   4041.09
                                                   11.97
                                                                 153.27
         110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                       5T 2783.9 SR 382.4 SS 699.2
                                                                     SGT 5659.0 SGR 385.3 SG3 113.3
      TOE 3.6725 TRA 6.9073 TC3 -.9175 BAU .9682
                                                                                                                     CRT .8702 CRS -.8409 CST -.9983
      ROE .5925 RRA .0689 RC3 .0080 FAU .00392
FOE .8003 FRA 1.7043 FC3 -.0430 BSP 18841
BDE 3.7200 BRA 6.9077 BC3 .9175 FSP -385
                                                                                        .5049 RTF .9717
                                                                     RRT .5172 RRF
                                                                                                                    LSA 2889.3 M5A 192.1 55A 10.4
ELI 2803.8 EL2 187.1 ALF 6.85
                                                                   SGB 5672.1 R23 .0008 R13 .9717
SG1 5662.5 SG2 329.5 THA 2.02
```

```
LAUNCH DATE DEC 8 1965
                                                                                               FLIGHT TIME 214.00
                                                                                                                                                                           ARRIVAL DATE JUL 10 1966
      HELIOCENTRIC CONIC
                                                                                               DISTANCE 610.390
       RL 147.35 LAL .00 LOL 75.70 VL 26.025 GAL 16.76 ATL 86.57 HCA 313.39 SMA 118.07 ECC .37359 INC 3.4318 V1 30.236 RP 108.35 LAP -2.49 LOP 29.14 VP 36.409 GAP 21.45 ATP 87.64 TAL 146.25 TAP 99.62 RCA 73.96 APO 162.18 V2 34.974 RC 204.023 GL 9.01 GP .14 ZAL 35.75 ZAP 175.42 ETS 180.37 ZAE 128.56 ETE 180.32 ZAC 118.10 ETC 165.84 CLP 175.42
      PLANETOCENTRIC CONIC
       C3 90.708 VML 9.524 DLA 23.66 RAL 35.48 RAD 6569.8 VEL 14.562 PTM 2.64 VMP 13.589 DPA 7.16 RAP 23.67 ECC 2.4928 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          A 59 31 3432.34

0 15 26 4379.17

6 39 48 3109.05

1 17 51 4177.70

8 25 51 2777.23

1 48 17 4082.28
            90.00
                                                                                                                                          5 56 44
                                                                  -22.01
                                                                                     126.52
                                                                                                      292.49
                                                                                                                           71.72
                                                                                                                                                               2832.3
                                                                                                                                                                                   -24.30
            90.00
                                                                     5.79
                                                                                      182.01
                                                                                                        280.72
                                                                                                                              62.23
                                                                                                                                             1 28 25
                                                                                                                                                                  3779.2
                                                                                                                                                                                        2.03
                                                                                                                              72.32 7 31 37
61.13 2 27 29
73.63 9 12 8
          100.00
                                                                  -24.50
                                                                                      103.62
                                                                                                        293.37
                                                                                                                                                                  2509.0
                                                                                                                                                                                      -26.69
          100.00
                                                                    8.10
                                                                                     165.95
                                                                                                       279.46
                                                                                                                                                                  3577.7
                                                                                                                                                                                        4.19
                                                                                                                                                                                                        159.35
          110.00
                                                                  -30.44
                                                                                      80.46
                                                                                                       295.42
                                                                                                                                                                  2177.2
                                                                                                                                                                                     -32.38
          110.00
                                                                   13.46
                                                                                     155.53
                                                                                                       276.28
                                                                                                                              58.28
                                                                                                                                             2 56 19
                                                                                                                                                                  3482.3
                                                                                                                                                                                        9.17
                                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
      TOE 3.8035 TRA 7.5300 TC3 -.7427 BAU .9007

RDE .6198 RRA .1015 RC3 .0036 FAU .00240

FDE .6082 FRA 1.7868 FC3 -.0229 BSP 18847

BOE 3.8537 BRA 7.5307 BC3 .7427 FSP -374
                                                                                          SGT 5629.9 SGR 378.9 SG3 109.8
RRT .5500 RRF .5384 RTF .9752
SGB 5642.7 R23 .0003 R13 .9752
                                                                                                                                                           ST 2727.4 SR 373.4 SS 704.8
CRT .8669 CRS -.8402 CST -.9986
                                                                                                                                                             LSA 2835.3 MSA 189.2 SSA
                                                                                          SG1 5633.8 SG2 316.2 THA 2.13
                                                                                                                                                             EL1 2746.6 ELZ 184.9 ALF 6.80
LAUNCH DATE DEC 8 1965
                                                                                               FLIGHT TIME 216.00
                                                                                                                                                                           ARRIVAL DATE JUL 12 1966
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 613.393
     RL 147.35 LAL .00 LOL 75.70 VL 25.995 GAL 18.42 AZL 86.56 MCA 316.59 SMA 117.90 ECC .39496 INC 3.4363 V1 30.236 RP 108.31 LAP -2.36 LOP 32.33 VP 36.400 GAP 22.82 AZP 87.50 TAL 145.29 TAP 101.88 RCA 71.34 APO 164.47 V2 34.987 RC 205.757 GL 8.30 GP .14 ZAL 34.54 ZAP 174.29 ETS 180.83 ZAE 128.25 ETE 180.35 ZAC 120.08 ETC 165.61 CLP 174.29
     PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 104.914 VML 10.243 DLA 23.33 RAL 36.84 RAD 6570.0 VEL 15.042 PTH 2.71 VMP 14.421 DPA 7.98 RAP 25.59 ECC 2.7266
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 9 48 3446.67 -21.70 127.46 296.06 71.35 6 7 14 2846.7 -24.05 119.57
90.00 0 16 2 4427.55 7.32 184.74 283.80 62.57 1 29 49 3827.5 3.58 178.05
100.00 6 49 19 3125.77 -24.15 104.74 296.95 71.83 7 41 25 2525.8 -26.41 96.66
100.00 1 19 11 4223.68 9.60 168.54 282.58 61.56 2 29 35 3623.7 5.73 161.89
110.00 8 34 14 2797.53 -30.04 81.91 299.05 72.86 9 20 52 2197.5 -32.09 73.30
110.00 1 50 45 4124.69 14.96 157.90 279.44 58.90 2 59 30 3524.7 10.73 151.35
                                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5596.9 SGR 372.0 SG3 106.6
RRT .5826 RRF .5716 RTF .9786
      TOE 3.9512 TRA 8.2106 TC3 -.5820 BAU .8163
                                                                                                                                                           5T 2671.7 SR 363.2 SS 714.1
CRT .8642 CRS -.8402 CST -.9989
      RDE .6477 RRA .1378 RC3 .0032 FAU .00075
              .8202 FRA 1.8792 FC3 -.0062 BSP 18830
4 0030 RRA 8.2118 BC3 .5820 FSP -363
                                                                                        SGB 5609.3 R23 -.0002 R13 .9786
SGI 5601.1 SG2 302.1 THA 2.22
                                                                                                                                                           LSA 2783.1 MSA 185.2 SSA
EL1 2690.2 EL2 181.5 ALF
                                                                                                                                                                                                               9.4
      BOE 4.0039 BRA 8.2118 BC3 .5820 FSP
LAUNCH DATE DEC 8 1965
                                                                                             FLIGHT TIME 218.00
                                                                                                                                                                         ARRIVAL DATE JUL 14 1966
    HELIOCENTRIC CONIC
                                                                                             DISTANCE 615.783
     RL 147.35 LAL .00 LOL 75.70 VL 25.965 GAL 20.27 AZL 86.56 HCA 319.79 SMA 117.74 ECC .41912 INC 3.4414 VI 30.236
RP 108.27 LAP -2.22 LOP 35.53 VP 36.391 GAP 24.37 AZP 87.37 TAL 144.52 TAP 104.31 RCA 68.39 APO 167.09 VZ 35.000
RC 207.465 GL 7.60 GP .14 ZAL 33.49 ZAP 173.08 ETS 181.17 ZAE 127.85 ETE 180.38 ZAC 121.99 ETC 165.35 CLP 173.08
    PLANETOCENTRIC CONIC
     C3 122.196 VHL 11.054 DLA 22.97 RAL 38.04 RAD 6570.3 VEL 15.605 PTH 2.78 VHP 15.366 DPA
     LOCA AZATTA LACAT TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATTA INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 19 50 3459.23 -21.42 128.28 299.45 71.03 6 17 29 2859.2 -23.82 120.42 90.00 0 15 34 4477.25 8.86 187.57 286.73 63.00 1 30 11 3877.2 5.17 180.84 100.00 6 58 35 3140.81 -23.83 103.74 300.34 71.40 7 50 56 2540.8 -26.15 97.71 100.00 1 19 30 4270.89 11.12 171.22 285.54 62.07 2 30 41 3670.9 7.30 164.51 110.00 8 42 17 2816.38 -29.65 83.24 302.48 72.16 9 29 14 2216.4 -31.80 74.69
                                                                                                                                                                    8.76 RAP 27.44 ECC 3.0110
        110.00
                           1 52 17
                                                                                   160.35
                                            4168.08
                                                               16.47
                                                                                                      282.46
                                                                                                                                           3 1 45
                                                                                                                            59.62
                                                                                                                                                                3568.1
                                                                                                                                                                                    12.32
                                                                                                                                                                                                      153.71
                                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5560.0 SGR 364.7 SG3 103.5

RRT .6149 RRF .6047 RTF .9819

SGB 5571.9 R23 -.0008 R13 .9819

SGI 5564.5 SG2 287.3 THA 2.32
                                                                                                                                                           ST 2617.3 SR 351.8 SS 727.8
CRT .8624 CRS -.8410 CST -.9991
      TOE 4.1202 TRA 8.9575 TC3 -.4351 BAU .7108
     ROE .6763 RRA .1781 RC3 .0035 FAU-.00111
FOE .8373 FRA 1.9833 FC3 .0079 B3P 18786
B0E 4.1754 BRA 8.9593 BC3 .4351 FSP -352
                                                                                                                                                           LSA 2733.3 MSA 180.2 SSA
                                                                                                                                                                                                            8.8
                                                                                                                                                           EL1 2634.9 EL2 176.9 ALF
                                                                                                                                                                                                           6.64
LAUNCH DATE DEC 8 1965
                                                                                             FLIGHT TIME 220.00
                                                                                                                                                                         ARRIVAL DATE JUL 16 1966
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 617.390
     RL 147.35 LAL .00 LOL 75.70 VL 25.938 GAL 22.35 AZL 86.55 MCA 322.99 SMA 117.60 ECC .44656 INC 3.4471 V1 30.236
RP 108.23 LAP -2.07 LOP 38.73 VP 36.385 GAP 26.15 AZP 87.25 TAL 143.96 TAP 106.94 RCA 65.08 APO 170.11 V2 35.014
RC 209.146 GL 6.92 GP .13 ZAL 32.60 ZAP 171.77 ETS 181.44 ZAE 127.35 ETE 180.41 ZAC 123.80 ETC 165.07 CLP 171.77
     C3 143.421 VHL 11.976 DLA 22.56 RAL 39.06 RAD 6570.6 VEL 16.271 PTH
                                                                                                                              2.85 VHP 16.445 DPA
                                                                                                                                                                    9.49 RAP 29.21 ECC 3.3603
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 29 34 3469.70 -21.19 128.96 302.62 70.76 6 27 24 2869.7 -23.62 121.13
          90.00
                           O 13 59
                                          4527.99
                                                                 10.42
                                                                                   190.49
                                                                                                      289.46
                                                                                                                            63.52
                                                                                                                                           1 29 27
                                                                                                                                                                 3928.0
                                                                                                                                                                                      6.78
                                                                                                                                                                                                       183.70
                        7 7 32 3153.83
1 18 42 4319.10
8 49 57 2833.43
1 52 47 4212.26
        100.00
                                                                -23.54
                                                                                   106.60
                                                                                                      303.50
                                                                                                                            71.03
                                                                                                                                         8 0 6
                                                                                                                                                                2553.8
                                                                                                                                                                                   -25.92
                                                                                                                                                                                                        98.60
                                                                                                                                         2 30 41
        100.00
                                                                12.64
                                                                                 173.99
                                                                                                     288.31
                                                                                                                            52.69
                                                                                                                                                                3719.1
                                                                                                                                                                                     8.88
                                                                                                                                                                                                      167.22
                                                                                                                                           9 37 10
        110.00
                                                                -29.29
                                                                                     84.44
                                                                                                     305.67
                                                                                                                            71.53
                                                                                                                                                                2233.4
                                                                                                                                                                                   -31.53
                                                                                                                                                                                                       75.95
                                                                                                                                                                3612.3
                                                                17.98
                                                                                  162.90
                                                                                                     285.31
                                                                                                                            60.42
                                                                                                                                           3 2 59
                                                                                                                                                                                    13.90
                                                                                                                                                                                                      156.15
   DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                      SGT 5520.9 SGR 357.0 SG3 100.7
RRT .6469 RRF .6376 RTF .9850
SGB 5532.4 R23 -.0015 R13 .9849
SG1 5525.7 SG2 272.0 THA 2.40
     TOE 4.3181 TRA 9.7840 TC3 -.3008 BAU .5768
                                                                                                                                                           ST 2565.3 SR 339.5 SS 747.0
    ROE .7058 RRA .2228 RC3 .0044 FAU-.00330
FOE .8609 FRA 2.1023 FC3 .0199 89P 18632
                                                                                                                                                           CRT .8616 CRS -.8427 CST -.9993
                                                                                                                                                 CRT .8616 CRS -.8427 CST -.9993
LSA 2687.7 MSA 174.0 SSA 8.3
EL1 2582.0 EL2 171.2 ALF 6.53
     BOE 4.3754 BRA 9.7866 BC3 .3008 FSP -340
                                                                                                                                                          EL1 2582.0 EL2 171.2 ALF 6.53
```

ARRIVAL DATE FEB 17 1966

```
FLIGHT TIME 70.00
LAUNCH DATE DEC 9 1965
                                                                      DISTANCE 188.047
  HELIOCENTRIC CONIC
   RL 147.33 LAL .00 LOL 76.71 VL 27.192 GAL -8.47 AZL 86.60 MCA 84.42 SMA 124.95 ECC .23040 INC 3.3961 VI 30.240 RP 107.57 LAP 3.38 LOP 161.12 VP 37.487 GAP -10.69 AZP 89.67 TAL 211.26 TAP 295.68 RCA 96.16 APO 153.73 VZ 35.227 RC 50.208 GL 17.40 GP .10 ZAL 135.32 ZAP 12.81 ETS 358.51 ZAE 148.29 ETE 340.78 ZAC 63.79 ETC 163.10 CLP -12.81
   PLANETOCENTRIC CONIC
    C3. 28.386 VHL 5.328 DLA -3.59 RAL 297.18 RAD 6568.1 VEL 12.238 PTH 2.20 VMP 7.254 DPA -15.00 RAP 331.58 ECC 1.4672
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          INJ A4m..
111.53 3 & ...
74.02 14 57 26
4 17 39
                                                                                                                                     -16.02
                                                                           163.43
                                                                                                                        1594.8
                                                                                                       3 2 11
                                                 -19.08
                                                               40.23
        90.00
                   2 25 36 2194.78
                                                                                                                                       21.27
                                                                                                                         4449.2
                                                                             165.39
                                                               222.88
                   13 33 17 5049.21
                                                 23.69
        90.00
                                                                                          112.49 4 17 39
72.86 16 15 54
115.77 5 18 54
69.59 17 24 2
                 3 45 22 1937.49
14 56 12 4781.73
4 49 59 1735.23
16 8 5 4556.76
                                                                                                                                       -17.00
                                                                                                                                                      13.52
                                                                                                                        1537.5
                                                                             162.95
                                                 -20.22
                                                                20.83
       100.00
                                                                                                                                                      194.98
                                                                                                                                      22.29
                                                               202.83
                                                                            165.00
                                                                                                                         4161.7
                                                 24.87
       100.00
                                                                          161.48
                                                                                                                                                      356.77
                                                                                                                                     -19.61
                                                                4.00
                                                                                                                        1135.2
                                                 -23.27
       110.00
                                                                                                                                        25.00
                                                               184.55
                                                                             163.80
                                                                                                                        3956.8
                                                28.03
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 258.2 SR 367.7 SS 297.0
CRT .8748 CRS .9779 CBT .7744
LSA 521.3 MSA 133.1 SSA 24.6
                                                                   SGT 652.1 SGR 398.3 SG3 132.8
RRT -.0223 RRF .0159 RTF -.6503
SGB 764.1 R23 .0072 R13 .6502
    TOE -.2157 TRA -.3479 TC3 .4509 BAU .1784
RDE -.3415 RRA .0571 RC3 -.1327 FAU .04370
    FDE .4268 FRA -.3398 FC3-1.3328 BSP 1778
BDE .4039 BRA .3526 BC3 .4700 FSP -342
                                                                   561 652.2 862 398.1 THA 178.76
                                                                                                                     EL1 436.8 ELZ 105.3 ALF 56.21
                                                                                                                                ARRIVAL DATE FEB 19 1966
                                                                       FLIGHT TIME 72.00
LAUNCH DATE DEC 9 1965
                                                                      DISTANCE 194.858
    RL 147.33 LAL .00 LOL 76.71 VL 27.351 GAL -8.43 A7L 86.60 MCA 87.66 SMA 125.96 ECC .22276 INC 3.3950 V1 30.240 RP 107.60 LAP 3.39 LOP 164.37 VP 37.596 GAP -9.80 A7P 89.86 TAL 212.74 TAP 300.40 RCA 97.91 APO 154.04 V2 35.220 RC 51.850 GL 17.82 GP .11 ZAL 136.47 ZAP 15.64 ETS 358.59 ZAE 148.13 ETE 341.29 ZAC 64.19 ETC 163.18 CLP -15.64
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 27.412 VHL 5.236 DLA -3.23 RAL 295.76 RAD 6568.1 VEL 12.198 PTH 2.19 VHP 6.778 DPA -14.86 RAP 331.97 ECC 1.4511 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -15.91
                   2 18 46 2191.03
13 28 49 5035.57
3 38 36 1933.51
14 51 40 4768.33
                                                                           161.47
                                                                                                                        1591.0
                                                                                           111.41
                                                                                                        2 55 17
        90.00
                                                 -18.99
                                                                40.00
                                                                                                                                                      214.16
                                                                                                                                         20.97
                                                                                                        14 52 45
                                                                                                                         4435.6
                                                               221.97
                                                                             163.29
                                                                                              73.63
                                                 23.43
        90.00
                                                                                                                                        -16.88
                                                                                                                                                       13.28
                                                                20.57
                                                                             160.98
                                                                                            112.59
                                                                                                         4 10 50
                                                                                                                         1333.5
                                                 -20.12
       100.00
                                                                                                                                                      194.12
                                                                           162.91
                                                                                                                         4168.3
                                                                                                                                        21.96
                                                               201.92
                                                                                              72.46 16 11 8
                                                 24.60
       100.00
                                                                            159.52
                                                                                            115.89 5 12 14
69.15 17 19 6
                                                                                                                                                      356.51
                                                                                                                         1130.7
                                                                                                                                        -19.47
                                                                  3.72
                    4 43 23 1730.70
16 3 23 4543.90
                                                 -23.14
       110.00
                                                                             161.69
                                                                                                                         3943.9
                                                                                                                                         24.64
                                                               183.67
       110.00
                                                 27.73
                   16 3 23
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 261.6 SR 366.7 SS 320.8
CRT .8868 CRS .9734 CST .7756
    TOE -.2170 TRA -.3302 TC3 .4790 BAU .1826
                                                                   SGT 662.6 SGR 397.5 SG3 151.2
    ROE -.3347 RRA .0522 RC3 -.1370 FAU .04848
                                                                   RRT -.0217 RRF .0150 RTF -.6584
                                                                                                                     LSA 535.4 MSA 136.0 SSA
                                                                                                                                                          25.1
    FOE .4824 FRA -.4195 FC3-1.5311 BSP 1818
BOE .3989 BRA .3343 BC3 .4982 FSP -397
                                                                   SGB 772.6 R23 .0073 R13 .6583
                                                                                                                     EL1 438.9 EL2 101.0 ALF 55.61
                                                                   SG1 662.6 SG2 397.4 THA 178.84
                                                                                                                               ARRIVAL DATE FEB 21 1966
                                                                       FLIGHT TIME 74.00
LAUNCH DATE DEC 9 1965
                                                                       DISTANCE 201.651
    RL 147.33 LAL .00 LOL 76.71 VL 27.493 GAL -8.41 AZL 86.61 HCA 90.90 SMA 126.91 ECC .21614 INC 3.3939 V1 30.240 RP 107.62 LAP 3.39 LOP 167.62 VP 37.691 GAP -8.94 AZP 90.05 TAL 214.16 TAP 305.06 RCA 99.48 APO 154.34 V2 35.212 RC 53.572 GL 18.19 GP .11 ZAL 137.51 ZAP 18.61 ET5 358.64 ZAE 148.25 ETE 341.67 ZAC 64.44 ETC 163.24 CLP -18.61
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 26.607 VHL 5.158 DLA -3.09 RAL 294.46 RAD 6568.1 VEL 12.165 PTH 2.18 VHP 6.332 DPA -14.76 RAP 332.24 ECC 1.4379
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           159.70
                                                                                                                                     -15.83
                                                                                          111.47
                                                                                                                      1588.0
                   2 12 32 2187.98
13 24 40 5023.81
3 32 26 1930.23
14 47 27 4756.79
                                                                                                         2 49 D
                                                                 39.80
                                                  -18.91
                                                                                                                                                      213.41
                                                                                             73.30 14 48 23
                                                                                                                         4423.8
                                                                                                                                        20.70
                                                                221.18
                                                  23.20
         90.00
                                                                                            -16.79
                                                                                                                         1330.2
                                                                 20.37
                                                                             159.22
       100.00
                                                 -20.03
                                                                                                                        4156.8
                                                                                                                                     21.
-19.34
                                                                201.15
                                                                             161.02
                                                 24.36
       100.00
                                                                                                                                                      346.29
                                                                                                                         1127.0
                   4 37 22 1726.96
15 59 0 4532.83
                                             -23.03
27.45
                                                                             157.76
                                                                  3.49
                                                                                                                                         24.32
                                                                                                                         3932.8
                                                               182.93
                                                                              159.80
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 263.7 SR 364.8 55 346.0
CRT .8965 CRS .9689 CST .7760
                                                                   SGT 669.3 SGR 395.7 SG3 172.2
RRT -. 0211 RRF .0141 RTF -. 6631
     TOE -.2173 TRA -.3143 TC3 .5014 BAU .1852
     RDE -.3281 RRA .0479 RC3 -.1404 FAU .05396
                                                                                                                      LSA 549.7 MSA 139.7 SSA
                                                                   SGB 777.6 R23 .0074 R13 .6631
     FOE .5461 FRA -.5110 FC3-1.7558 BSP 1844
                                                                                                                      EL1 439.5 EL2 96.9 ALF 55.11
                                                                    5G1 669.4 5G2 395.6 THA 178.90
     BDE .3935 BRA .3179 BC3 .5206 FSP -461
                                                                                                                                 ARRIVAL DATE FEB 23 1966
                                                                       FLIGHT TIME 76.00
 LAUNCH DATE DEC 9 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 208.422
    RL 147.33 LAL .00 LOL 76.71 VL 27.617 GAL -8.39 ATL 86.61 MCA 94.14 SMA 127.75 ECC .21040 INC 3.3927 V1 30.240 RP 107.84 LAP 3.38 LOP 170.86 VP 37.775 GAP -8.13 ATP 90.25 TAL 215.49 TAP 309.63 RCA 100.87 APO 154.63 V2 35.204 RC 55.368 GL 18.51 GP .12 ZAL 138.46 ZAP 21.74 ETS 358.68 ZAE 148.66 ETE 341.92 ZAC 64.55 ETC 163.26 CLP -21.74
    PLANETOCENTRIC CONIC
     C3 25'.938 VHL 5.093 DLA -2.97 RAL 293.27 RAD 6568.0 VEL 12.137 PTH 2.18 VHP 5.915 DPA -14.71 RAP 332.34 ECC 1.4269
     LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 6 53 2185.52
13 20 52 5013.65
3 26 50 1927.59
14 43 35 4746.82
4 31 54 1723.89
15 55 1 4323.27
                                                                                                         2 43 18
                                                                                                                          1585.5
                                                                            158.12
                                                  -18.85
                                                                                            111.53
                                                                 39.65
         90.00
                                                                                                                          4413.7
                                                                                                                                                       212.75
                                                                                               73.02 14 44 25
                                                                              159.74
                                                   23.00
                                                                220.50
         90.00
                                                                                             112.72 3 58 58
71.82 16 2 42
116.07 5 0 38
68.47 17 10 24
                                                                                                                                        -16.71
                                                                                                                                                        12.92
                                                                                                                          1327.6
                                                                            157.64
                                                  -19.96
                                                                 20.20
        100.00
                                                                                                                                        21.44
                                                                                                                                                     192.73
                                                                                                                          4146.8
                                                                              159.35
                                                  24.15
                                                                200.48
        100.00
                                                                                                                                        -19.24
                                                                                                                                                       356.10
                                                                                                                          1123.9
                                                  -22.94
                                                                  3.30
                                                                              156.19
        110.00
                                                                                                                          3923.3
                                                                                                                                          24.05
                                                  27.22
                                                                182.28
                                                                               158.12
                                  4523.27
                    15 55 1
       110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 262.6 SR 362.0 SS 372.3
CRT .9034 CRS .9643 CST .7737
                                                                    SGT 672.2 SGR 393.0 SG3 196.4
RRT -.0236 RRF .0136 RTF -.6659
     TOE - 2149 TRA - 2994 TC3 .5191 BAU .1867
     RDE -.3215 RRA .0440 RC3 -.1429 FAU .06027
                                                                   SGB 778.6 R23 .0101 R13 .6658
                                                                                                                     LSA 563.3 MSA 143.7 SSA 25.4
     FOE .6180 FRA -.6167 FC3-2.0117 BSP 1888
BOE .3867 BRA .3026 BC3 .5384 FSP -538
                                                                                                                     EL1 437.4 EL2 93.2 ALF 54.94
                                                                  5G1 672.3 SG2 392.9 THA 178.80
```

```
FLIGHT TIME 78.00
                                                                                                                                                                                                  ARRIVAL DATE FEB 25 1966
 LAUNCH DATE DEC 9 1965
                                                                                                           DISTANCE 215.171
     HELIOCENTRIC CONIC
      RL 147.33 LAL .00 LOL 76.71 VL 27.726 GAL -8.37 AZL 86.61 MCA 97.38 SMA 128.49 ECC .20546 INC 3.3916 V1 30.240 RP 107.67 LAP 3.36 LOP 174.10 VP 37.846 GAP -7.36 AZP 90.44 TAL 216.72 TAP 314.10 RCA 102.09 APO 154.89 VZ 35.195 RC 57.230 GL 18.79 GP .13 ZAL 139.30 ZAP 25.04 ETS 358.70 ZAE 149.38 ETE 342.02 ZAC 64.48 ETC 163.25 CLP -25.04
     PLANETOCENTRIC CONIC
       C3 25.377 VHL 5.038 DLA -2.86 RAL 292.21 RAD 6568.0 VEL 12.114 PTM 2.17 VMP 5.527 DPA -14.73 RAP 332.27 ECC 1.4176
      C3 25.377 VML 5.038 0LA -2.86 RAL 292.21 RAD 6568.D VEL 12.114 PTM 2.17 VMP 5.327 DPA -14.73 RAP 332.27 ECC 1.4176
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 1 49 2183.58 -18.80 39.53 156.72 111.57 2 38 13 1583.6 -15.71 32.22
90.00 13 17 28 5004.78 22.83 219.91 158.27 72.77 14 40 52 4404.8 20.25 212.18
100.00 3 21 50 1925.48 -19.91 20.07 156.24 112.77 3 53 55 1325.5 -16.65 12.79
100.00 14 40 8 4738.11 23.96 199.90 157.87 71.57 15 59 6 4138.1 21.22 192.18
110.00 4 27 1 1721.42 -22.86 3.14 154.80 116.13 4 55 43 1121.4 -19.16 355.96
110.00 15 51 26 4514.94 27.01 181.73 156.63 68.20 17 6 41 3914.9 23.81 174.02
                                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                  8T 261.5 SR 358.3 SS 400.9
CRT .9076 CRS .9604 CST .7702
                                                                                                     SGT 669.4 SGR 389.3 SG3 223.6
RRT -.0230 RRF .0124 RTF -.6608
SGB 774.4 R23 .0105 R13 .6607
       TOE -.2124 TRA -.2893 TC3 .5263 BAU .1852
       RDE -.3148 RRA .0407 RC3 -.1445 FAU .06737
      FOE .7016 FRA -.7350 FC3-2.2982 BSP 1872
BOE .3797 BRA .2921 BC3 .5458 FSP -623
                                                                                                                                                                                  LSA 578.6 MSA 148.6 SSA
                                                                                                                                                                                                                                         25.3
                                                                                                     SG1 669.5 SG2 389.1 THA 178.84
                                                                                                                                                                                  EL1 434.2 EL2 90.6 ALF 54.72
                                                                                                            FLIGHT TIME 80.00
                                                                                                                                                                                                   ARRIVAL DATE FEB 27 1966
LAUNCH DATE DEC 9 1965
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 221.893
     RL 147.33 LAL .00 LOL 76.71 VL 27.820 GAL -8.35 AZL 86.61 MCA 100.61 SHA 129.15 ECC .20121 INC 3.3904 V1 30.240 RP 107.70 LAP 3.33 LOP 177.34 VP 37.907 GAP -6.62 AZP 90.63 TAL 217.84 TAP 318.46 RCA 103.16 APO 155.14 V2 35.186
                                    19.04 GP .15 ZAL 140.03 ZAP 28.54 ETS 358.71 ZAE 150.40 ETE 341.96 ZAC 64.22 ETC 163.21 CLP -28.54
              59.152 GL
    PLANETOCENTRIC CONIC
      C3 24.901 VHL 4.990 DLA -2.75 RAL 291.28 RAD 6568.0 VEL 12.095 PTH 2.16 VHP 5.167 DPA -14.80 RAP 332.01 ECC 1.4098
     C3 24.90] VHL 4.990 OLA -2.75 RAL 291.28 RAD 6568.0 VEL 12.095 PTM 2.16 VMP 5.167 OPA -14.80 RAP 332.01 ECC 1.4098 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 19 2182.10 -18.77 39.44 155.49 111.60 2 33 42 1582.1 -15.67 32.13 90.00 13 14 30 4996.93 22.67 219.39 156.97 72.56 14 37 47 4396.9 20.07 211.68 100.00 3 17 23 1923.85 -19.87 19.97 155.02 112.81 3 49 27 1323.9 -16.60 12.69 100.00 14 37 7 4730.41 23.80 199.39 156.57 71.35 15 55 58 4130.4 21.03 191.69 110.00 4 22 41 1719.44 -22.80 3.02 153.58 116.18 4 51 20 1119.4 -19.10 355.84 110.00 15 48 19 4507.59 26.82 181.24 155.33 67.97 17 3 26 3907.6 23.59 173.56
    DIFFERENTIAL CORRECTIONS
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                     SGT 660.7 SGR 384.5 SG3 254.4
RRT -.0223 RRF .0105 RTF -.6488
                                                                                                                                                                                 ST 258.2 SR 353.7 SS 431.4
CRT .9084 CRS .9571 CST .7632
       TDE -.2078 TRA -.2830 TC3 .5242 BAU .1811
      RDE -.3079 RRA .0379 RC3 -.1452 FAU .07537
      SGB 764.4 R23 .0114 R13 .6487
SG1 660.8 SG2 384.3 THA 178.88
                                                                                                                                                                                 LSA 594.7 M5A 153.7 S5A 25.0
EL1 428.8 EL2 89.1 ALF 54.70
                                                                                                                                                                                                 ARRIVAL DATE MAR 1 1966
                                                                                                          FLIGHT TIME 82.00
LAUNCH DATE DEC 9 1965
    HELIOCENTRIC CONIC
                                                                                                          DISTANCE 228.588
     RL 147.33 LAL .00 LOL 76.71 VL 27.902 GAL -8.33 AZL 86.61 MCA 103.85 SMA 129.72 ECC .19757 INC 3.3892 VI 30.240 RP 107.73 LAP 3.29 LOP 180.58 VP 37.957 GAP -5.91 AZP 90.81 TAL 218.84 TAP 322.69 RCA 104.09 APO 155.35 VZ 35.176 RC 61.127 GL 19.26 GP .16 ZAL 140.65 ZAP 32.26 ETS 358.70 ZAE 151.75 ETE 341.71 ZAC 65.76 ETC 163.13 CLP -32.26
     PLANETOCENTRIC CONIC
     C3 24.492 VHL 4.949 DLA -2.66 RAL 290.46 RAD 6568.0 VEL 12.078 PTH 2.16 VMP 4.834 DPA -14.95 RAP 331.54 ECC 1.4031
     C3 24.492 VHL 4.949 DLA -2.66 RAL 290.46 RAD 6568.0 VEL 12.078 PTH 2.16 VHP 4.834 DPA -14.95 RAP 331.54 ECC 1.4031 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 11 58 4989.85 22.52 218.92 155.64 72.37 14 35 8 4389.9 19.90 211.23 100.00 13 13 28 1922.62 -19.83 19.89 153.96 112.83 3 45 31 1322.6 -16.57 12.62 100.00 14 34 33 4723.49 23.64 198.93 155.44 71.16 15 53 17 4123.5 20.85 191.25 110.00 4 18 52 1717.89 -22.76 2.92 152.53 116.22 4 47 30 1117.9 -19.05 355.75 110.00 15 45 38 4500.99 26.65 180.80 154.19 67.76 17 0 39 3901.0 23.40 173.15
                                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 645.6 SGR 378.7 SG3 289.4

RRT -.0254 RRF .0095 RTF -.6295

SGB 748.5 R23 .0148 R13 .6293

SG1 645.7 SG2 378.5 THA 178.70
                                                                                                                                                                                 ST 250.5 SR 348.3 SS 462.2
CRT .9044 CRS .9538 CST .7488
      TDE -.1990 TRA -.2797 TC3 .5138 BAU .1748
      ROE -. 3006 RRA .0356 RC3 -. 1451 FAU .08446
     FDE .9025 FRA-1.0180 FC3-2.9857 BSP 1780
BDE .3605 BRA .2820 BC3 .5339 FSP -833
                                                                                                                                                                                 LSA 609.8 MSA 158.8 SSA 24.7
                                                                                                                                                                                 EL1 419.8 EL2 88.7 ALF 55.18
LAUNCH DATE DEC 9 1965
                                                                                                           FLIGHT TIME 84.00
                                                                                                                                                                                                 ARRIVAL DATE MAR 3 1966
                                                                                                          DISTANCE 235.253
    HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 27.971 GAL -8.31 AZL 86.61 MCA 107.08 SMA 130.22 ECC .19443 INC 3.3880 V1 30.240 RP 107.76 LAP 3.24 LOP 183.82 VP 37.999 GAP -5.23 AZP 91.00 TAL 219.70 TAP 326.78 RCA 104.90 APO 155.53 V2 35.166 RC 63.151 GL 19.45 GP .17 ZAL 141.17 ZAP 36.20 ETS 358.67 ZAE 153.42 ETE 341.22 ZAC 63.07 ETC 163.00 CLP -36.20
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 24.133 VHL 4.912 DLA -2.56 RAL 289.77 RAD 6568.0 VEL 12.063 PTH 2.16 VHP 4.530 DPA -15.17 RAP 330.84 ECC 1.3972
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ.RT ASC INJ.AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 49 55 2180.30 -18.72 39.32 153.52 111.64 2 26 15 1580.3 -15.62 32.02
90.00 13 9 55 4983.32 22.39 218.49 154.86 72.19 14 32 58 4383.3 19.74 210.82
100.00 3 10 4 1921.76 -19.81 19.84 153.05 112.85 3 42 6 1321.8 -16.54 12.57
100.00 14 32 27 4717.10 23.50 198.51 154.46 70.98 15 51 4 4117.1 20.69 190.84
110.00 4 15 34 1716.71 -22.72 2.85 151.62 116.25 4 44 11 1116.7 -19.01 355.68
110.00 15.43 26 4494.91 26.49 180.40 153.21 67.57 16 58 21 3894.9 23.22 172.77
                                                                                               DIFFERENTIAL CORRECTIONS
      TDE -.1887 TRA -.2834 TC3 .4886 BAU .1643
      RDE -.2929 RRA .0357 RC3 -.1441 FAU .09441
     FDE 1.0230 FRA-1.1804 FC3-3.3870 BSP 1660
BDE .3485 BRA .2654 BC3 .5094 FSP -956
```

APRIVAL DATE MAR 5 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 241.888
    RL 147.33 LAL .00 LOL 76.71 VL 28.029 GAL -8.29 AZL 86.61 MCA 110.31 SHA 130.63 ECC .19174 INC 3.3867 VI 30.240 RP 107.80 LAP 3.18 LOP 187.05 VP 38.031 GAP -4.59 AZP 91.18 TAL 220.44 TAP 330.75 RCA 105.59 APO 155.68 VZ 35.155 RC 65.219 GL 19.62 GP .19 ZAL 141.59 ZAP 40.38 ETS 358.63 ZAE 155.42 ETE 340.40 ZAC 62.15 ETC 162.82 CLP -40.38
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                          2.15 VHP 4.253 DPA -15.47 RAP 329.90 ECC 1.3919
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     C3 23.810 VHL 4.880 DLA -2.47 RAL 289.20 RAD 6568.0 VEL 12.049 PTH
                                                                                                                                                                           -15.61
                       1 46 57 2179.90
13 8 19 4977.14
3 7 8 1921.22
14 30 49 4711.06
4 12 44 1715.85
15 41 42 4489.18
                                                                                                                                                         1579.9
                                                                                                 152.74
                                                                                                                    111.65
                                                                                                                                      2 23 17
                                                               -18.71
                                                                                 39.30
         90.00
                                                                                                                                                                               19.59
                                                                                                                                                                                                210.43
                                                                                                                       12.03
                                                                                                                                                           4377.1
                                                                                                                                    14 31 17
                                                                                                   154.03
                                                              22.26
                                                                                218.09
         90.00
                                                                                                                                                                                                 12.54
                                                                                                                                                           1321.2
                                                                                                                                                                             -16.53
                                                                                                                                      3 39 9
                                                              -19.80
                                                                                  19.81
                                                                                                   152.28
                                                                                                                      112.87
        100.00
                                                                                                                      70.81 15 49 20
116.28 4 41 20
67.39 16 56 31
                                                                                                                                                           4111.1
                                                                                                                                                                               20.53
                                                                                                                                                                                                190.46
                                                                                                153.63
                                                              23.37
                                                                               198.11
        100.00
                                                                                                                                                                                                355.63
                                                                                                                                                           1115.9
                                                                                                                                                                            -18.98
                                                                                                  150.85
                                                             -22.69
                                                                                   2.80
        110.00
                                                                                                                                                           3889.2
                                                                                                                                                                               23.05
                                                                                                                                                                                                172.41
                                                                                 180.02
                                                                                                152.37
                                                             26.35
        110.00
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 594.8 SGR 364.1 SG3 370.1
RRT -.0252 RRF .DO26 RTF -.5382
                                                                                                                                                      ST 230.2 SR 334.6 SS 530.4
CRT .8751 CRS .9501 CST .6943
     TOE -.1748 TRA -.2932 TC3 .4501 BAU .1503
     ROE - . 2848 RRA . . 0324 RC3 - . 1422 FAU . 10532
                                                                                     5GB 697.4 R23 .0191 R13 .5380
                                                                                                                                                      LSA 645.9 MSA 169.1 55A 23.7
     FOE 1.1560 FRA-1.3557 FC3-3.8293 BSP 1497
                                                                                                                                                      EL1 395.1 ELE 94.4 ALF 56.81
                                                                                    SG1 595.0 SG2 363.9 THA 178.59
     BOE .3342 BRA .2950 BC3 .4721 FSP -1093
                                                                                                                                                                     ARRIVAL DATE HAR 7 1966
                                                                                           FLIGHT TIME 88.00
LAUNCH DATE DEC 9 1965
                                                                                          DISTANCE 248.493
   HELIOCENTRIC CONIC
    TELIOCENINIC CONIC

RL 147.33 LAL .00 LOL 76.71 VL 28.077 GAL -8.26 A7L 86.61 MCA 113.54 SMA 130.96 ECC .18943 INC 3.3854 V1 30.240

RP 107.83 LAP 3.10 LOP 190.29 VP 38.056 GAP -3.97 A7P 91.35 TAL 221.04 TAP 334.58 RCA 106.17 APO 155.79 V2 35.143

RC 67.327 GL 19.78 GP .20 ZAL 141.91 ZAP 44.81 ETS 358.58 ZAE 157.74 ETE 339.15 ZAC 60.99 ETC 162.58 CLP -44.81
    PLANE TOCENTRIC CUNIC

C3 23.514 VHL 4.849 DLA -2.38 RAL 288.74 RAD 6568.0 VEL 12.037 PTH 2.15 VHP 4.004 DPA -15.85 RAP 328.71 ECC 1.3870

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 44 25 2179.79 -18.71 39.29 152.10 111.65 2 20 44 1579.8 -15.61 31.99

90.00 13 7 12 4971.14 22.13 217.69 153.33 71.87 14 30 3 4371.1 19.45 210.05

100.00 3 4 39 1920.96 -19.79 19.79 151.65 112.87 3 36 40 1321.0 -16.52 12.52

100.00 14 29 39 4705.19 23.24 197.73 152.92 70.65 15 48 4 4105.2 20.38 190.09
   PLANETOCENTRIC CONIC
                                                                                                152.92
                                                                                                                       116.29 4 38 56
67.22 16 55 10
                         4 10 21 1715.28
                                                                                    2.76
                                                               -22.68
        110.00
                                                                                                                                                                                                  172.06
                                                                                                                                                            3883.6
                                                                                                                                                                               22.88
                                           4483.64
                                                               26.20
                                                                                  179.65
                                                                                                    151.67
                       15 40 26
        110.00
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                     SGT 562.5 SGR 355.3 SG3 416.2

RRT -.0300 RRF -.0011 RTF -.4554

SGB 665.3 R23 .0238 R13 .4550

SG1 562.7 SG2 355.0 THA 178.20
                                                                                                                                                      ST 214.2 SR 326.6 SS 564.4
CRT .8393 CRS .9486 CST .6380
LSA 663.7 MSA 173.5 SSA 23.2
     TOE -.1556 TRA -.3084 TC3 .3988 BAU .1328
     RDE -.2762 RRA .0316 RC3 -.1395 FAU .11722
     FDE 1.2961 FRA-1.5455 FC3-4.3158 BSP 1312
BOE .3170 BRA .3100 BC3 .4225 FSP -1249
                                                                                                                                                       EL1 377.4 EL2 100.8 ALF 58.68
                                                                                                                                                                    ARRIVAL DATE MAR 9 1966
                                                                                           FLIGHT TIME 90.00
LAUNCH DATE DEC 9 1965
     RL 147.33 LAL .00 LOL 76.71 VL 28.116 GAL -8.22 A7L 86.62 MCA 116.76 SNA 131.26 ECC .18745 INC 3.3841 VI 30.240 RP 107.87 LAP 3.02 LOP 193.52 VP 38.074 GAP -3.38 A7P 91.53 TAL 221.51 TAP 338.27 RCA 106.66 APO 155.87 VZ 35.132 RC 69.470 GL 19.92 GP .22 7AL 142.14 7AP 49.50 ETS 358.52 ZAE 160.37 ETE 337.25 7AC 59.59 ETC 162.28 CLP -49.50
                                                                                          DISTANCE 255.065
    MELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.235 VHL 4.820 DLA -2.28 RAL 288.39 RAD 6567.9 VEL 12.026 PTH 2.15 VHP 3.783 DPA -16.29 RAP 327.27 ECC 1.3824 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM 'INJ 2 LAT INJ 2 LONG
                       1 42 17 2179.98
13 6 33 4965.14
3 2 34 1920.98
14 28 57 4699.35
4 8 22 1714.97
15 39 38 4478.13
                                                                                               151.58
                                                                                                                    111.65 2 18 37
71.71 14 29 18
                                                                                                                                                            1580.0
                                                                                                                                                                            -15.61
                                                                                                                                       2 18 37
                                                                                  39.30
                                                                -18.71
          90.00
                                                                                                                                                                                                209.67
                                                                                                                                                             4365.1
                                                                                                                                                                               19.30
                                                                22.00
                                                                                  217.30
                                                                                                   152.75
           90.00
                                                                                                                                                                               -16.52
                                                                                                                                                                                                  12.52
                                                                                                151.11
                                                                                                                                        3 34 35
                                                                                                                                                            1321.0
                                                                                                                       112.87
                                                                -19.79
                                                                                   19.79
         100.00
                                                                                                                         70.49 15 47 16
                                                                                                                                                                              20.23
                                                                                                                                                                                                149.73
                                                                                                                                                            4099.3
                                                                                  197.34
                                                                                                   152.34
                                                               23.10
                                                                                                                       116.30 4 36 5.
47.05 16.54 16
         100.00
                                                                                                                                                                               -18.95
                                                                                                                                                                                                 344.58
                                                                                                                                                            1115.0
                                                                                                  149.70
                                                                -22.67
                                                                                    2.74
         110.00
                                                                                                                                                                               22.72
                                                                                                                                                                                                  171.72
                                                                                                                                                            3878.1
                                                                                  179.29
                                                                                                    151.08
                                                                26.05
         110.00
                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 531.0 SGR 345.5 SG3 464.5

RRT -.0330 RRF -.0079 RTF -.3264

SGB 633.6 R23 .0265 R13 .3258

SGI 531.3 SG2 345.2 TMA 177.87
                                                                                                                                                      ST 198.0 SR 317.8 SS 600.0
CRT .7769 CRS .9485 CST .5511
LSA 684.1 MSA 177.8 SSA 22.5
      TOE -.1331 TRA -.3324 TC3 .3290 BAU .1106
     ROE -.2672 RRA .0314 RC3 -.1358 FAU .12957
FDE 1.4488 FRA-1.7372 FC3-4.8277 BSP 1038
BOE .2985 BRA .3339 BC3 .3560 FSP -1407
                                                                                                                                                        EL1 357.6 ELE 110.8 ALF 61.14
                                                                                                                                                                      ARRIVAL DATE HAR 11 1966
                                                                                            FLIGHT TIME 92.00
LAUNCH DATE DEC 9 1965
                                                                                            DISTANCE 261.606
                                 .00 LOL 76.71 VL 28.146 GAL -8.18 AZL 86.62 HCA 119.99 SNA 131.48 ECC .18573 INC 3.3826 VI 30.240 2.93 LOP 196.74 VP 38.085 GAP -2.82 AZP 91.69 TAL 221.84 TAP 341.83 RCA 107.06 APO 155.90 V2 35.120 20.06 GP .24 ZAL 142.28 ZAP 54.42 ETS 358.44 ZAE 163.26 ETE 334.31 ZAC 57.95 ETC 161.92 CLP -54.42
    HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL
RP 107.90 LAP 2.93 LOP
RC 71.643 GL 20.06 GP
     PLANETOCENTRIC CONIC
                                                                                                                            2.14 VHP 3.590 OPA -16.80 RAP 325.58 ECC 1.3780
     C3 22.966 VHL 4.792 DLA -2.17 RAL 288.15 RAD 6567.9 VEL 12.014 PTH 2.14 VHP 3.590 DPA -16.80 RAP 325.58 ECC 1.3780 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 6 21 4959.02 21.87 216.90 152.27 71.55 14 29 0 4359.0 19.15 209.28 100.00 3 0 51 1921.25 -19.80 19.81 150.70 112.87 3 32 52 1321.3 -16.53 12.54 100.00 14 28 42 4693.39 22.97 196.95 151.86 70.32 15 46 56 4093.4 20.08 169.35 110.00 4 6 46 1714.88 -22.67 2.74 149.29 116.90 4 35 21 1114.9 -18.95 355.57 110.00 15 39 16 4472.52 25.90 178.92 150.60 66.88 16 53 49 3872.5 22.55 171.37
      C3 22.966 VHL 4.792 DLA -2.17 RAL 288.15 RAD 6567.9 VEL 12.014 PTH
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ST 182.0 SR 308.3 SS 634.9
CRT .6676 CRS .9489 CST .4122
LSA 705.6 MSA 181.4 SSA 21.9
                                                                                    SGT 509.5 SGR 334.8 SG3 514.1

RRT -.0392 RRF -.0169 RTF -.1420

SGB 609.6 R23 .0267 R13 .1413

SGI 509.8 SG2 334.3 THA 177.41
      TDE -.1058 TRA -.3640 TC3 .2422 BAU .0845
      RDE -.2576 RRA .0317 RC3 -.1310 FAU .14220
      FOE 1.6058 FRA-1.9283 FC3-5.3604 BSP 704
BOE .2785 BRA .3654 BC3 .2753 FSP -1571
                                                                                                                                                      EL1 335.7 EL2 124.4 ALF 64.78
```

FLIGHT TIME 86.00

. .

```
LAUNCH DATE DEC 9 1965
                                                                                     FLIGHT TIME 94.00
                                                                                                                                                         ARRIVAL DATE MAR 13 1966
    HELIOCENTRIC CONIC
                                                                                    DISTANCE 268.115
     RL 147.33 LAL .00 LOL 76.71 VL 28.168 GAL -8.14 AZL 86.62 MCA 123.21 SMA 131.65 ECC .18425 INC 3.3810 V1 30.240 RP 107.94 LAP 2.83 LOP 199.97 VP 38.090 GAP -2.28 AZP 91.85 TAL 222.05 TAP 345.26 RCA 107.39 APO 155.90 VZ 35.108 RC 73.845 GL 20.19 GP .26 ZAL 142.33 TAP 59.56 ETS 338.36 TAE 166.34 ETE 329.58 ZAC 56.11 ETC 161.47 CLP -59.56
    PLANETOCENTRIC CONIC
     C3 22.700 VHL 4.764 DLA -2.06 RAL 288.00 RAD 6567.9 VEL 12.003 PTH 2.14 VHP 3.426 OPA -17.36 RAP 323.66 ECC 1.3736
     C3 22.700 VHL 4.764 DLA -2.06 RAL 288.00 RAD 6567.9 VEL 12.003 PTM 2.14 VMP 3.426 OPA -17.36 RAP 323.66 ECC 1.3736 LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 9 6 2181.07 -18.74 39.37 150.85 111.62 2 15.27 1581.1 -15.64 32.07 90.00 13 6 37 4952.69 21.74 216.48 151.90 71.39 14 29 9 4352.7 18.99 208.88 100.00 2 59 29 1921.76 -19.81 19.84 150.39 112.85 3 31 30 1321.8 -16.54 12.57 100.00 14 28 55 4687.22 22.83 196.55 151.49 70.16 15 47 2 4087.2 19.91 188.96 110.00 4 5 31 1715.02 -22.67 2.74 148.99 116.30 4 34 6 1115.0 -18.95 355.58 110.00 15 39 21 4466.73 25.75 178.02 188.96 66.70 16 53 48 3866.7 22.37 171.02
    DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                SGT 509.8 SGR 323.2 SG3 564.2

RRT -.0527 RRF -.0276 RTF .0912

SGB 603.6 R23 .0196 R13 -.0919

SGI 510.3 SGZ 322.5 THA 176.81
                                                                                                                                            ST 169.7 SR 298.1 SS 666.6
CRT .4812 CRS .9494 CST .1948
     TOE -.0728 TRA -.4026 TC3 .1389 BAU .0567
     ROE -. 2477 RRA .0326 RC3 - 1250 FAU .15491
     FDE 1.7562 FRA-2.1163 FC3-5.9077 BSP 329
                                                                                                                                            LSA 726.4 MSA 184.3 SSA 21.3
     BDE .2582 BRA .4039 BC3 .1869 FSP -1747
                                                                                                                                             EL1 312.3 EL2 142.0 ALF 70.49
LAUNCH DATE DEC 9 1965
                                                                                     FLIGHT TIME 96.00
                                                                                                                                                          ARRIVAL DATE MAR 15 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 274.592
    RL 147.33 LAL .00 LOL 76.71 VL 28.183 GAL -8.08 AZL 86.62 MCA 126.43 SMA 131.76 ECC .18296 INC 3.3793 V1 30.240 RP 107.98 LAP 2.72 LOP 203.19 VP 38.090 GAP -1.76 AZP 92.01 TAL 222.14 TAP 348.57 RCA 107.65 APO 155.86 V2 35.095 RC 76.070 GL 20.32 GP .28 ZAL 142.30 ZAP 64.87 ETS 358.27 ZAE 169.48 ETE 321.38 ZAC 54.10 ETC 160.96 CLP -64.87
   PLANETOCENTRIC CONIC
    C3 22.434 VHL 4.736 DLA -1.94 RAL 287.95 RAD 6567.9 VEL 11.992 PTH 2.14 VHP 3.289 DPA -17.94 RAP 321.55 ECC 1.3692 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                                                                                          150.64
                                                                                                                                              1582.0
                        1 37 59 2182.01
                                                          -18.76
                                                                            39.43
                                                                                                            111.60 2 14 21
                                                                                                                                                                -15.67
                                                                                                                                                                                    32.12
         90.00
                      13 7 19
                                      4946.01
                                                            21.59
                                                                            216.05
                                                                                             151.61
                                                                                                                71.22
                                                                                                                            14 29 45
                                                                                                                                                  4346.0
                                                                                                                                                                    18.83
                                                                                                                                                                                    208.46
                     2 58 25 1922.52
14 29 34 4680.73
4 4 36 1715.36
15 39 52 4460.65
                                                                                                               112.84 3 30 28
69.98 15 47 34
        100.00
                                                          -19.83
                                                                            19.89
                                                                                            150.18
                                                                                                                                                 1322.5
                                                                                                                                                                  -16.57
                                                                                                                                                                                     12.61
                                                                                          150.18
151.20
        100.00
                                                          22.67
                                                                            196.13
                                                                                                                                                  4080.7
                                                                                                                                                                   19.74
                                                                                                                                                                                    188.56
                                                                                                                                                                                    355.60
        110.00
                                                          -22.68
                                                                             2.77
                                                                                          148.78
                                                                                                              116.29 4 33 11
66.52 16 54 13
                                                                                                                                                 1115.4
                                                                                                                                                               -18.96
        110.00
                                                         25.58
                                                                            178.15
                                                                                            149.93
                                                                                                                                                 3860.7
                                                                                                                                                                  22.19
                                                                                                                                                                                    170.64
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                $GT 546.1 $GR 310.8 $G3 611.2

RRT -.0684 RRF -.0437 RTF .3386

$GB 628.4 R23 .0096 R13 -.3391

$GI 546.7 $G2 309.7 THA 176.72
    TOE -.0359 TRA -.4496 TC3 .0162 BAU .0356
ROE -.2374 RRA .0340 RC3 -.1177 FAU .16666
                                                                                                                                            ST 168.9 SR 287.5 SS 697.8
CRT .2155 CRS .9512 CST -.0842
    FOE 1.9051 FRA-2.2804 FC3-6.4316 BSP 137
                                                                                                                                             LSA 750.2 MSA 186.8 SSA 20.6
    BDE .2401 BRA .4509 BC3 .1188 FSP -1904
                                                                                                                                            ELI 290.9 EL2 163.0 ALF 79.42
                                                                                    FLIGHT TIME 98.00
                                                                                                                                                        ARRIVAL DATE HAR 17 1966
LAUNCH DATE DEC 9 1965
                                                                                    DISTANCE 281.038
   HELIOCENTRIC CONIC
    RL 147.33 LAL .09 LOL 76.71 VL 28.192 GAL -8.02 AZL 86.62 HCA 129.64 SMA 131.82 ECC .18183 INC 3.3775 VI 30.240 RP 108.02 LAP 2,60 LOP 206.40 VP 38.084 GAP -1.27 AZP 92.16 TAL 222.12 TAP 351.76 RCA 107.85 APO 155.79 VZ 35.082 RC 78.316 GL 20.45 GP .31 ZAL 142.19 ZAP 70.32 ETS 358.17 ZAE 172.36 ETE 305.71 ZAC 51.97 ETC 160.36 CLP -70.32
   PLANETOCENTRIC CONIC
    C3 22.163 VHL 4.708 DLA -1.80 RAL 287.99 RAD 6567.9 VEL 11.981 PTH 2.14 VHP 3.179 DPA -18.54 RAP 319.29 ECC 1.3647
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           111.58 2 13 32
71.04 14 30 47
112.81 3 29 42
69.80 15 48 32
116.27 4 32 34
66.33 16 55 3
                                                                                         150.51
                                                                                                                                             1583.2
                                                                                                                                                               -15.70
                    1 37 8 2183.21
13 8 28 4938.92
                                                          -18.79
                                                                           39.50
                                                                                                                                                                                    32.20
         90.00
                                                                                                                                                                 18.65
                                                                                                                                                4338.9
                                                                          215.59
                                                                                            151.41
         90.00
                                                          21.43
                     2 57 39 1923.52
14 30 38 4673.84
                                                                                            150.05
                                                                                                                                                1323.5
       100.00
                                                          -19.86
                                                                                                                                                                -16.60
                                                                                                                                                                                    12.67
                                                                           19.95
                                                                                            150.99
                                                                                                                                                4073.8
       100.00
                                                          22.51
                                                                          195.68
                                                                                                                                                                19.56
                                                                                                                                                                                   188.13
                      4 3 58 1715.91 -22.70
15 40 49 4454.21 25.41
                                                                             2.80
                                                                                            148.66
                                                                                                                                                1115.9
                                                                                                                                                               -18.98
                                                                                                                                                                                   355.63
       110.00
                                                                           177.73
                                                                                            149.72
                                                                                                                                                3854.2
                                                                                                                                                                  21.99
       110.00
                                                                                                                                                                                  170.25
   DIFFFRENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                              SGT 622.8 SGR 297.8 SG3 654.7

RRT -.0913 RRF -.0629 RTF .5460

SGB 690.3 R23 -.0015 R13 -.5461

SGI 623.6 SG2 296.1 THA 176.77
                                                                                                                                          ST 183.8 SR 276.4 S5 723.1

CRT -.0864 CRS .9528 CST -.3743

LSA 772.8 MSA 188.3 SSA 19.9
    TOE .0059 TRA -.5026 TC3 -.1224 BAU .0485
    RDE -.2269 RRA .0359 RC3 -.1089 FAU .17745
    FOE 2.0305 FRA-2.4246 FC3-6.9315 BSP 640
    BOE .2269 BRA .5039 BC3 .1638 FSP -2062
                                                                                                                                           EL1 277.2 EL2 182.6 ALF 95.81
                                                                                    FLIGHT TIME 100.00
                                                                                                                                                        ARRIVAL DATE MAR 19 1966
LAUNCH DATE DEC 9 1965
                                                                                    DISTANCE 287.453
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.194 GAL -7.96 AZL 86.62 MCA 132.86 SMA 131.84 ECC .18085 INC 3.3755 VI 30.240 RP 108.06 LAP 2.47 LOP 209.62 VP 38.074 GAP -.79 AZP 92.30 TAL 221.98 TAP 354.83 RCA 107.99 APO 155.68 VZ 35.069 RC 80.581 GL 20.58 GP .33 ZAL 142.00 ZAP 75.83 ETS 358.08 ZAE 174.13 ETE 275.67 ZAC 49.78 ETC 159.69 CLP -75.83
   PLANETOCENTRIC CONIC
    C3 21.885 VHL 4.678 DLA -1.66 RAL 288.12 RAD 6567.9 VEL 11.969 PTH 2.13 VMP 3.096 DPA -19.13 RAP 316.94 ECC 1.3602
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 36 33 2184.67
13 10 2 4931.34
2 57 8 1924.77
14 32 9 4666.48
4 3 36 1716.67
15 42 10 4447.34
                                                                                                            111.55 2 12 58

70.85 14 32 14

112.79 3 29 12

69.61 15 49 56

116.25 4 32 13

66.12 16 56 17
                                                                                                                                             1584.7
                                                          -16.63
                                                                                          150.46
                                                                                                                                                                                    32.28
        90.00
                                                                           39.60
                                                                                                                                                                  18.46
                                                                           215.10
                                                                                            151.28
                                                                                                                                                 4331.3
                                                                                                                                                                                   207.55
        90.00
                                                           21.26
       100.00
                                                          -19.89
                                                                            20.03
                                                                                            150.00
                                                                                                                                                1324.8
                                                                                                                                                                  -16.63
                                                                                                                                                                                    12.75
                                                          22.34
                                                                          195.20
                                                                                            150.86
                                                                                                                                                4066.5
                                                                                                                                                                19.36
                                                                                                                                                                                   187.67
       100.00
                                                                                                                                                               -19.01
                                                          -22.72
                                                                                            148.62
                                                                                                                                                1116.7
                                                                             2.85
                                                                                                                                                                                   355.68
       110.00
                                                                          177.29
                                                                                            149.58
                                                                                                                                                3847.3
                                                                                                                                                                   21.78
                                                         25.22
                                                                                                                                                                                   169.83
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                            MIO-COURSE EXECUTION ACCURACY
SGT 738.4 SGR 284.1 SG3 690.8 ST 215.8 SR 264.9 SS 746.5
RRT -.1182 RRF -.0895 RTF .6916 CRT -.3381 CRS .9556 CST -.5920
SGB 791.2 R23 -.0062 R13 -.6916 LSA 798.6 MSA 189.5 SSA 19.1
SG1 739.3 SG2 281.8 THA 176.95 EL1 284.7 EL2 189.0 ALF 119.30
   DIFFERENTIAL CORRECTIONS
    TOE .0508 TRA -.5619 TC3 -.2775 BAU .0862
    ROE -.2160 RRA .0383 RC3 -.0987 FAU .18614
FDE 2.1417 FRA-2.5271 FC3-7.3635 BSP 1212
BDE .2219 BRA .5632 BC3 .2945 FSP -2185
```

ARRIVAL DATE MAR 21 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 293.838
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.191 GAL -7.88 AZL 86.63 HCA 136.07 SHA 131.81 ECC .17998 INC 3.3733 VI 30.240 RP 108.10 LAP 2.34 LOP 212.83 VP 38.060 GAP -.34 AZP 92.43 TAL 221.73 TAP 357.80 RCA 108.09 APO 155.54 V2 35.056 RC 82.862 GL 20.71 GP .36 ZAL 141.74 ZAP 81.34 ETS 358.00 ZAE 173.58 ETE 238.50 ZAC 47.60 ETC 158.96 CLP -81.34
   PLANETOCENTRIC CONIC
     C3 21.598 VHL 4.647 DLA -1.50 RAL 288.32 RAD 6567.9 VEL 11.957 PTH 2.13 VHP 3.039 OPA -19.69 RAP 314.58 ECC 1.3554
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 36 12 2186.41
13 12 2 4923.23
2 56 51 1926.26
14 34 5 4658.61
4 3 30 1717.64
15 43 55 4440.00
                                                                                                                                          1586.4
                                                                                                                                                         -15.79
                                                                                                                                                                             32.39
                                                                                                                         2 12 38
                                                                                       150.49
                                                                                                         111.51
         90.00
                                                        -18.87
                                                                         39.71
                                                                                                           70.65 14 34
                                                                                                                                                                             207.04
                                                                                                                                  6
                                                                                                                                           4323.2
                                                                                                                                                             18.25
                                                        21.08
                                                                        214.57
                                                                                         151.22
         90.00
                                                                                                                         3 28 57
                                                                                                                                           1326.3
                                                                                                                                                            -16.67
                                                                                                                                                                             12.84
                                                                                                           112.75
        100.00
                                                        -19.93
                                                                         20.12
                                                                                        150.03
                                                                                                                                           4058.6
                                                                                                                                                            19.15
                                                                                                                                                                             187.18
                                                                                     150.80
                                                                                                            69.40 15 51 43
                                                        22.15
                                                                         194,69
        100.00
                                                                                                                        4 32 7
                                                                                                                                           1117.6
                                                                                                                                                           -19.04
                                                                                                                                                                           355.74
                                                                                                          116.23
                                                        -22.75
                                                                          2.91
                                                                                       148.65
        110.00
                                                                                                                      16 57 55
                                                                                                                                           3840.0
                                                                                                                                                             21.55
                                                         25.02
                                                                         176.81
                                                                                        149.52
                                                                                                            65.91
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 883.3 SGR 270.0 SG3 719.7
RRT -.1523 RRF -.1210 RTF .7848
                                                                                                                                       ST 261.5 SR 253.1 SS 762.6
CRT -.5165 CR5 .9583 CST -.7330
     TOE .0986 TRA -.6250 TC3 -.4453 BAU .1310
     RDE -.2049 RRA .0411 RC3 -.0869 FAU .19293
                                                                            SGB 923.7 R23 -.0107 R13 -.7848
                                                                                                                                       LSA 823.2 MSA 189.8 55A 18.4
     FDE 2.2168 FRA-2.5952 FC3-7.7334 BSP 1820
                                                                                                                                       EL1 317.0 EL2 178.8 ALF 136.81
                                                                            SG1 884.4 SG2 266.6 THA 177.07
     BDE .2274 BRA .6264 BC3 .4537 FSP -2298
                                                                                                                                                   ARRIVAL DATE MAR 23 1966
LAUNCH DATE DEC 9 1965
                                                                                 FLIGHT TIME 104.00
                                                                                 DISTANCE 300.192
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.183 GAL -7.80 AZL 86.63 MCA 139.28 SMA 131.75 ECC .17922 INC 3.3708 VI 30.240 RP 108.14 LAP 2.20 LOP 216.04 VP 38.042 GAP .10 AZP 92.56 TAL 221.39 TAP .67 RCA 108.14 APO 155.37 V2 35.043 RC 85.157 GL 20.84 GP .39 ZAL 141.41 ZAP 86.77 ETS 357.93 ZAE 171.12 ETE 215.08 ZAC 45.49 ETC 158.20 CLP -86.77
   PLANETOCENTRIC CONIC
    C3 21.300 VHL 4.615 DLA -1.32 RAL 288.61 RAD 6567.9 VEL 11.945 PTH 2.13 VHP 3.004 DPA -20.20 RAP 312.27 ECC 1.3505 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 36 3 2188.43
13 14 28 4914.52
2 56 47 1928.03
14 36 25 4650.15
4 3 37 1718.82
15 46 5 4432.12
                                                                                       150.59
                                                       -18.93
                                                                         39.83
                                                                                                          111.46
                                                                                                                        2 12 32
                                                                                                                                           1588.4
                                                                                                                                                           -15.84
                                                                                                                                                                              32.51
         90.00
                                                                                                                        14 36 22
                                                                                                                                            4314.5
                                                                                                                                                             18.03
                                                                                                            70.43
         90.00
                                                         20.89
                                                                         214.01
                                                                                         151.23
                                                                                                                         3 28 55
                                                                                                                                            1328.0
                                                                                                                                                             -16.73
                                                                                                           112.71
       100.00
                                                       -19.98
                                                                         20.23
                                                                                         150.13
                                                                                                          112.71 3 28 55
69.18 15 53 55
116.20 4 32 16
65.68 16 59 57
                                                                                                                                            4050.2
                                                                                                                                                             18.92
                                                                                        150.81
       100.00
                                                         21.95
                                                                         194.15
                                                                                                                                           1118.8
                                                                                                                                                            -19.08
                                                                                                                                                                             355.81
       110.00
                                                        -22.78
                                                                           2.98
                                                                                        148.75
                                                                                                                                                              21.30
                                                                                                                                            3832.1
       110.00
                                                         24.80
                                                                         176.31
                                                                                         149.52
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 1050.0 SGR 255.8 SG3 737.8
RRT -.1932 RRF -.1620 RTF .8424
SGB 1080.7 R23 -.0108 R13 -.8424
                                                                                                                                       ST 316.6 SR 240.9 SS 777.0
CRT -.6332 CRS .9622 CST -.8145
     TOE .1478 TRA -.6910 TC3 -.6247 BAU .1791
     ROE -.1936 RRA .0441 RC3 -.0737 FAU .19669
                                                                                                                                      LSA 851.8 MSA 190.1 SSA 17.5
    FOE 2.2734 FRA-2.6089 FC3-7.9945 BSP 2466
BDE .2436 BRA .6924 BC3 .6291 FSP -2356
                                                                           SG1 1051.2 SG2 250.6 THA 177.14
                                                                                                                                      EL1 363.1 EL2 162.6 ALF 146.79
                                                                                                                                                  ARRIVAL DATE MAR 25 1966
                                                                                 FLIGHT TIME 106.00
LAUNCH DATE DEC 9 1965
                                                                                 DISTANCE 306.518
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.171 GAL -7.70 AZL 86.63 MCA 142.49 SMA 131.66 ECC .17855 INC 3.3680 V1 30.240 RP 108.18 LAP 2.05 LOP 219.25 VP 38.020 GAP .52 AZP 92.67 TAL 220.96 TAP 3.44 RCA 108.15 APO 155.17 V2 35.030 RC 87.465 GL 20.98 GP .42 TAL 141.01 ZAP 92.07 ETS 357.87 ZAE 167.93 ETE 203.11 ZAC 43.51 ETC 157.41 CLP -92.08
   PLANETOCENTRIC CONIC
     C3. 20.991 VML 4.582 DLA -1.14 RAL 288.97 RAD 6567.9 VEL 11.932 PTM 2.12 VMP 2.992 DPA -20.64 RAP 310.09 ECC 1.3455
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     150.75
                                                                                                          111.41 2 12 37
70.21 14 39 3
                                                                                                                                           1590.7
                                                                                                                                                                             32.65
                                                                         39.98
                      1 36 6 2190.74
13 17 18 4905.19
         90.00
                                                        -18.98
                                                                                                                                           4305.2
                                                                                                                                                            17.79
                                                                                                                                                                            205.92
                                                                                         151.30
                                                                         213.41
         90.00
                                                         20.67
                                                                                                                                                            -16.78
                    2 56 55 1930.06
14 39 10 4641.11
                                                                                                                                           1330.1
                                                                                                                                                                             13.07
                                                                                                          112.67
                                                                                                                         3 29 5
                                                                         20.36
                                                                                         150.30
        100.00
                                                        -20.03
                                                                                                            112.67 3 29 3
68.95 15 56 31
                                                                                                                                                            18.67
                                                                                                                                                                            186.10
                                                                                         150.88
                                                                                                                                            4041.1
        100.00
                                                         21.73
                                                                         193.56
                                                                                                                                                           -19.12
                                                                                                                                                                            355.89
                      4 3 57 1720.23
15 48 37 4423.70
                                                                                                          116.16 4 32 37
65.44 17 2 21
                                                                                                                                           1120.2
                                                                           3.07
                                                                                         148.94
        110.00
                                                       -22.83
                                                                                                                                                           21.04
                                                                                                                                                                            168.39
        110.00
                                                                         175.77
                                                                                         149.58
                                                                                                                                           3823.7
                                                         24.56
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ST 377.5 SR 228.4 SS 782.6
CRT -.7114 CRS .9656 CST -.8650
                                                                            SGT 1229.5 SGR 241.5 SG3 748.1
RRT -.2427 RRF -.2084 RTF .8790
SGB 1253.0 R23 -.0134 R13 -.8789
     TOE .1978 TRA -.7575 TC3 -.8114 BAU .2283
    ROE -.1821 RRA .0473 RC3 -.0592 FAU .19853
FOE 2.2854 FRA-2.5929 FC3-8.1877 BSP 3126
BOE .2688 BRA .7590 BC3 .8136 FSP -2411
                                                                                                                                       LSA 878.1 MSA 189.1 SSA 16.7
                                                                             SG1 1231.0 SG2 234.0 THA 177.17
                                                                                                                                       EL1 416.5 EL2 145.5 ALF 153.18
                                                                                                                                                    ARRIVAL DATE MAR 27 1966
                                                                                  FLIGHT TIME 108.00
LAUNCH DATE DEC 9 1965
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 312.816
                            .00 LOL 76.71 VL 28.154 GAL -7.60 AZL 86.64 MCA 145.69 SMA 131.54 ECC .17796 INC 3.3647 V1 30.240
1.90 LOP 222.45 VP 37.996 GAP .92 AZP 92.78 TAL 220.43 TAP 6.12 RCA 108.13 APO 154.95 V2 35.016
21.12 GP .45 ZAL 140.54 ZAP 97.19 ETS 357.82 ZAE 164.59 ETE 196.48 ZAC 41.72 ETC 156.63 CLP -97.19
    RL 147.33 LAL
    RP 108.22 LAP 1.90 LOP
RC 89.783 GL 21.12 GP
   PLANETOCENTRIC CONIC
    C3 ZD.671 VHL 4.547 OLA -.93 RAL 289.40 RAO 6567.8 VEL 11.919 PTM 2.12 VHP 2.999 OPA -21.02 RAP 308.09 ECC 1.3402 CALCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 36 20 2193.35 -19.05 40.14 150.98 111.36 2 12.53 1593.4 -15.98 32.81 90.00 13 20 32 4895.20 20.44 212.77 151.43 69.97 14 42 7 4295.2 17.53 205.30 100.00 2 57 14 1932.36 -20.09 20.50 150.54 112.61 3 29.27 1332.4 -16.85 13.21 100.00 14 42 19 4651.42 21.49 192.94 151.01 68.71 15.59 30 4051.4 18.41 185.51 110.00 4 4 29 1721.85 -22.88 3.17 149.18 116.12 4 33 11 1121.9 -19.18 355.98 110.00 15 51 33 4414.69 24.30 175.19 149.71 65.19 17 5 8 3814.7 20 78
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .2474 TRA -.8232 TC3-1.0038 BAU .2777
RDE -.1703 RRA .0505 RC3 -.0436 FAU .19738
FDE Z.2798 FRA-2.5242 FC3-8.2669 BSP 3795
BDE .3003 BRA .8248 BC3 1.0048 FSP -2411
                                                                                                                                       ST 441.4 SR 215.5 SS 786.6

CRT -.7656 CRS .9701 CST -.8947

LSA 907.9 MSA 188.4 SSA 15.6
                                                                             SGT 1416.7 SGR 227.4 SG3 747.7
                                                                             RRT -.3003 RRF -.2649 RTF .9020
                                                                             SGB 1434.8 R23 -.0131 R13 -.9020
                                                                           SG1 1418.3 SG2 216.6 THA 177.17
                                                                                                                                       EL1 473.9 EL2 129.1 ALF 157.77
```

FLIGHT TIME 102.00

ARRIVAL DATE MAR 29 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 319.087
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.134 GAL -7.50 AZL 86.64 HCA 148.89 SMA 131.39 ECC .17745 INC 3.3608 VI 30.240 RP 108.26 LAP 1.74 LOP 225.65 VP 37.968 GAP 1.31 AZP 92.88 TAL 219.83 TAP 8.72 RCA 108.08 APO 154.71 V2 35.003 RC 92.112 GL 21.26 GP .49 ZAL 140.00 ZAP 102.06 ETS 357.80 ZAE 161.30 ETE 192.38 ZAC 40.15 ETC 155.91 CLP-102.06
    PLANETOCENTRIC CONIC
                                                     -.71 RAL 289.91 RAD 6567.8 VEL 11.905 PTH
                                                                                                                                  2.12 VHP 3.023 OPA -21.32 RAP 306.32 ECC 1.3347
     C3 20.339 VHL 4.510 DLA
     UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 36 44 2196.26 -19.12 40.32 151.28 111.29 2 13 20 1596.3 -16.06 32.99
                                                                                                                              20 20.71 14 45 35
112.55 3 20
68 4"
                                                                                                                                                                                          17.25
                                                                                                                                                                                                             204.65
                                                                                                                                                                     4284.5
                                                                                                         151.62
                         13 24 10 4884.55
                                                                  20.19
                                                                                      212.08
          90.00
                       2 57 44 1934.94 -20.16
14 45 51 4621.10 21.23
4 5 13 1723.70 -22.93
15 54 51 4405.10 24.03
                                                                                                                                                                                                             13.36
                                                                                                                                                                     1334.9
                                                                                                                                                                                         -16.93
                                                                                                        150.84
         100.00
                                                                                       20.66
                                                                                                                            68.45 16 2 52
116.07 4 33 57
64.92 17 8 16
                                                                                                      151.19
149.49
                                                                                                                                                                     4021.1
                                                                                                                                                                                          18.12
                                                                                                                                                                                                             184.87
                                                                                      192.28
         100.00
                                                                                                                                                                                     -19.24
                                                                                                                                                                                                             356.09
                                                                                                                                                                    1123.7
                                                                                        3.28
         110.00
                                                                                                                                                                     3805.1
                                                                                                                                                                                          20.45
                                                                                                                                                                                                            167.27
                                                                                     174.58
                                                                                                         149.89
        110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 506.5 SR 202.2 SS 784.7
CRT -.8052 CRS .9743 CST -.9142
                                                                                           SGT 1606.7 SGR 213.7 SG3 740.3
RRT -.3667 RRF -.3267 RTF .9174
     TOE .2958 TRA -.8869 TC3-1.1995 BAU .3262
     ROE -.1584 RRA .0535 RC3 -.0269 FAU .19447
                                                                                           SGB 1620.9 R23 -.0139 R13 -.9174
                                                                                                                                                                LSA 937.1 MSA 187.0 SSA 14.6
     FOE 2.2426 FRA-2.4313 FC3-8.2779 BSP 4466
BDE .3355 BRA .8885 BC3 1.1998 FSP -2402
                                                                                           5G1 1608.7 5G2 198.6 THA 177.16
                                                                                                                                                                EL1 533.4 EL2 113.9 ALF 161.30
                                                                                                                                                                               ARRIVAL DATE MAR 31 1966
                                                                                                FLIGHT TIME 112.00
LAUNCH DATE DEC 9 1965
                                                                                                DISTANCE 325.331
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 28.110 GAL -7.38 AZL 86.64 HCA 152.09 SMA 131.22 ECC .17700 INC 3.3563 VI 30.240 RP 108.31 LAP 1.57 LOP 228.84 VP 37.939 GAP 1.68 AZP 92.97 TAL 219.14 TAP 11.24 RCA 107.99 APO 154.44 V2 34.990 RC 94.449 GL 21.41 GP .53 ZAL 139.39 ZAP 106.68 ETS 357.79 ZAE 158.16 ETE 189.63 ZAC 38.82 ETC 155.26 CLP-106.68
   PLANETOCENTRIC CONIC
                                                     -.48 RAL 290.48 RAD 6567.8 VEL 11.890 PTH 2.11 VHP 3.062 0PA -21.55 RAP 304.81 ECC 1.3291
     C3 19.995 VHL 4.472 DLA
     LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       151.63
                                                                                                                                               2 13 57
                                                                                                                                                                     1599.5
                                                                                                                                                                                       -16.14
                                                                                                                                                                                                              33.18
          90.00
                                                                  -19.20
                                                                                       40.53
                                                                                                                            111.22
                           1 37 17 2199.45
                                                                                                                                                                                                             203.95
                                           4873.22
                                                                                      211.36
                                                                                                         151.86
                                                                                                                                69.45
                                                                                                                                              14 49 26
                                                                                                                                                                      4273.2
                                                                                                                                                                                          16.95
          90.00
                         13 28 12
                                                                   19.92
                        2 58 24 1937.79
14 49 46 4610.12
4 6 8 1725.77
15 58 32 4394.90
                                                                                                         151.19
                                                                                                                              112.49
                                                                                                                                                3 30 42
                                                                                                                                                                      1337.8
                                                                                                                                                                                         -17.01
                                                                                                                                                                                                             13.53
                                                                  -20.23
                                                                                       20.84
         100.00
                                                                                      191.59
                                                                                                         151.43
                                                                                                                                68.18 16 6 37
                                                                                                                                                                      4010.1
                                                                                                                                                                                         17.81
                                                                                                                                                                                                            184.20
                                                                  20.96
         100.00
                                                                                                                              116.02 4 34 54
64.64 17 11 47
                                                                                                                                                                      1125.8
                                                                                                                                                                                        -19.31
                                                                                                                                                                                                             356.21
                                                                                         3.41
                                                                                                         149.86
         110.00
                                                                  -22.99
                                                                                                                                                                     3794.9
                                                                                                                                                                                        20.12
                                                                                                                                                                                                            166.66
                                                                                      173.94
                                                                                                         150.12
                                                                 23.73
         110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                           SGT 1795.6 SGR 200.8 SG3 725.0
RRT -.4415 RRF -.4022 RTF .9274
SGB 1806.8 R23 -.0127 R13 -.9274
                                                                                                                                                                ST 571.7 SR 188.5 3S 782.1
CRT -.8362 CRS .9792 CST -.9264
     TOE .3428 TRA -.9469 TC3-1.3963 BAU .3732
     THE CONTROL OF THE CO
                                                                                                                                                                LSA 969.1 MSA 186.2 55A 13.4
                                                                                           SG1 1797.8 SG2 180.0 THA 177.14
                                                                                                                                                                EL1 593.7 EL2 99.6 ALF 164.12
                                                                                                                                                                              ARRIVAL DATE APR 2 1966
                                                                                                FLIGHT TIME 114.00
LAUNCH DATE OFC 9 1965
                                                                                               01STANCE 331.550
   HELIOCENTRIC CONIC
    RL 147,33 LAL .00 LOL 76:71 VL 28.083 GAL -7.25 A7L 86.65 HCA 155.29 SMA 131.02 ECC .17661 INC 3.3505 V1 30.240 RP 108.35 LAP 1.40 LOP 232.04 VP 37.907 GAP 2.04 A7P 93.04 TAL 218.39 TAP 13.68 RCA 107.88 APO 154.16 V2 34.977 RC 96.794 GL 21.56 GP .58 7AL 138.73 ZAP 111.02 ETS 357.81 ZAE 155.23 ETE 187.67 7AC 37.74 ETC 154.73 CLP-111.02
    PLANETOCENTRIC CONIC
                                                     -.23 RAL 291.13 RAD 6567.8 VEL 11.875 PTH 2.11 VHP 3.114 DPA -21.71 RAP 303.59 ECC 1.3232
     C3 19.640 VHL 4.432 OLA
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          111.15 2 14 44
69.18 14 53 39
112.42 3 31 36
67.91 16 10 43
115.96 4 36 3
64.36 17 15 38
                                                                                                      152.05
                                                                                                                                                                                      -16.24
                        1 38 1 2202.91
13 32 37 4861.26
2 59 15 1940.67
14 54 4 4598.53
                                                                                                                                                                    1602.9
                                                                                                                                                                                                             33.39
          90.00
                                                                                       40.74
                                                                  -19.28
                                                                                                                                                                                        16.63
                                                                                                                                                                                                            203.22
                                                                                      210.60
                                                                                                        152.16
                                                                                                                                                                     4261.3
          90.00
                                                                  19.63
                                                                                                                                                                                                             13.72
                                                                                                                                                                     1340.9
                                                                                                                                                                                        -17.10
                                                                                                         151.61
                                                                                       21.04
         100.00
                                                                  -20.31
                                                                                                      151.72
                                                                                                                                                                     3998.5
                                                                                                                                                                                        17.48
                                                                                                                                                                                                            163.50
                                                                                     190.85
                                                                  20.66
         100.00
                                                                                                      150.28
                                                                                                                                                                     1128.0
                                                                                                                                                                                       -19.38
                                                                                                                                                                                                            346.35
                         4 7 15 1728.03
16 2 34 4384.14
                                                                                        3.55
                                                                 -23.06
         110.00
                                                                                                                                                                3784.1
                                                                                                                                                                                        19.77
                                                                                                                                                                                                           166.02
                                                                                      173.26
                                                                                                         150.41
                                                                 23.42
         110.00
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 635.4 SR 174.5 SS 774.2
CRT -.8611 CRS .9836 CST -.9349
                                                                                          SCT 1982.2 SCR 189.0 SC3 705.9
RRT -.5239 RRF -.4822 RTF .9344
SCB 1991.2 R23 -.0125 R13 -.9344
      TOE .3873 TRA-1.0029 TC3-1.5945 BAU .4187
     ROE -.1338 RRA .0586 RC3 .0091 FAU .18349
FOE 2.1223 FRA-2.1636 FC3-8.0865 BSP 5767
BDE .4097 BRA 1.0046 BC3 1.5945 FSP -2302
                                                                                                                                                              LSA 999.7 MSA 184.8 SSA 12.2
                                                                                                                                                                EL1 653.3 EL2 86.3 ALF 166.46
                                                                                           SG1 1984.7 SG2 160.8 THA 177.12
                                                                                                                                                                               ARRIVAL DATE APR 4 1966
                                                                                                FLIGHT TIME 116.00
LAUNCH DATE DEC 9 1965
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 337.745
     RL 147.33 LAL .00 LOL 76.71 VL 28.054 GAL -7.12 AZL 86.66 HCA 158.48 SMA 130.81 ECC .17627 INC 3.3432 VI 30.240 RP 108.39 LAP 1.23 LOP 235.23 VP 37.873 GAP 2.39 AZP 93.11 TAL 217.57 TAP 16.05 RCA 107.75 APO 153.87 VZ 34.964 RC 99.145 GL 21.70 GP .65 ZAL 137.99 ZAP 115.08 ETS 357.85 ZAE 152.51 ETE 186.17 ZAC 36.91 ETC 154.34 CLP-115.08
    PLANETOCENTRIC CONIC
                                                        .03 RAL 291.84 RAD 6567.8 VEL 11.860 PTH 2.10 VHP 3.177 OPA -21.79 RAP 302.66 ECC 1.3172
     C3 19.274 VHL 4.390 DLA
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                       -16.34
                                                                                                                            111.06
                                                                                                                                                                                                             33.61
                                                                                                                                               2 15 42
                                                                                                                                                                     1606.6
                                                                                       40.97
                                                                                                       152.52
          90.00
                           1 38 55 2206.57
                                                                   -19.37
                                                                                                                                                                                                             202.45
                        13 37 24 4848.69
3 0 16 1944.14
14 58 44 4586.35
4 8 33 1730.42
16 6 57 4372.83
                                                                                                                                             14 56 13
                                                                                                                                                                      4248.7
                                                                                                                                                                                          16.29
                                                                                      209.81
                                                                                                         152.51
                                                                                                                                68.89
                                                                   19.33
          90.00
                                                                                                                              112.34 3 32 41
67.62 16 15 10
                                                                                                                                                                                                             13.92
                                                                                                                                                                      1344.1
                                                                                                                                                                                        -17.19
                                                                   -20.40
                                                                                       21.24
                                                                                                         152.09
         100.00
                                                                                                                                                                     3986.3
                                                                                                                                                                                         17.14
                                                                                                                                                                                                             182.76
                                                                    20.35
                                                                                     190.08
                                                                                                         152.07
         100.00
                                                                                                                              115.90 4 37 24
64.06 17 19 50
                                                                                                                                                                                                             356.49
                                                                                         3.70
                                                                                                         150.77
                                                                                                                                                                     1130.4
                                                                                                                                                                                        -19.46
         110.00
                                                                  -23.13
                                                                                     172.55
                                                                                                          150.75
                                                                                                                                                                     3772.8
                                                                                                                                                                                          19.41
                                                                                                                                                                                                             165.35
                                                               23.08
                                                                                        MID-COURSE EXECUTION ACCURACY
SGT 2162.6 SGR 178.7 SG3 681.7
RRT -.6124 RRF -.5696 RTF .9388
SGB 2169.9 R23 -.0098 R13 -.9388
SG1 2165.3 SG2 141.1 THA 177.09

EL1 712.8 EL2 73.6 ALF 168.43
         110.00
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE .4304 TRA-1.0531 TC3-1.7907 BAU .4615
     RDE -.1214 RRA .0605 RC3 .0283 FAU .17615
FDE 2.0509 FRA-2.0029 FC3-7.9120 BSP 6379
BDE .4472 BRA 1.0548 BC3 1.7909 FSP -2222
```

FLIGHT TIME 110.00

ARRIVAL DATE APR 6 1966

LAUNCH DATE DEC 9 1965

DISTANCE 343.916 RL 147.33 LAL .00 LOL 76.71 VL 28.022 GAL -6.98 AZL 86.67 HCA 161.68 SMA 130.58 ECC .17600 INC 3.3335 V1 30.240 RP 108.43 LAP 1.05 LOP 238.42 VP 37.838 GAP 2.72 AZP 93.16 TAL 216.68 TAP 18.36 RCA 107.60 APO 153.56 V2 34.951 RC 101.502 GL 21.84 GP .74 ZAL 137.20 ZAP 118.87 ETS 357.93 ZAE 150.03 ETE 184.98 ZAC 36.33 ETC 154.12 CLP-118.87 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC .30 RAL 292.62 RAO 6567.8 VEL 11.844 PTH 2.10 VHP 3.249 OPA -21.80 RAP 302.02 ECC 1.3110 C3 18.897 VHL 4.347 DLA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1610.3 33.84 1 40 2 2210.30 13 42 32 4835.64 153.05 -19.46 41.21 110.98 2 16 52 90.00 201.66 4235.6 15.93 68.61 15 3 7 152.92 19.00 208.99 90.00 -17.28 3 1 31 1947.47 15 3 44 4573.71 3 33 58 1347.5 -20.48 21.45 152.62 112.26 100.00 16.77 182.00 67.33 16 19 58 3973.7 152.48 20.02 189.29 100.00 -19.54 4 38 58 1132.8 151.32 115.84 4 10 5 1732.84 16 11 39 4361.10 -23.20 3.85 110.00 63.76 17 24 20 19.02 3761.1 22.73 171.82 151.16 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2339.2 SGR 170.5 SG3 656.6 RRT -.7037 RRF -.6600 RTF .9419 SGB 2345.4 R23 -.0064 R13 -.9419 ST 758.4 SR 145.6 55 757.3 CRT -.9023 CRS .9923 CST -.9440 TOE .4700 TRA-1.0986 TC3-1.9894 BAU .5027 ROE -.1088 RRA .0621 RC3 .0488 FAU .16868 FOE 1.9647 FRA-1.8441 FC3-7.7276 BSP 6993 LSA 1065.9 MSA 183.5 SSA 9.3 EL1 769.7 EL2 61.8 ALF 170.11 SG1 2342.3 SG2 121.0 THA 177.06 BOE .4824 BRA 1.1003 BC3 1.9900 FSP -2150 ARRIVAL DATE APR 8 1966 FLIGHT TIME 120.00 LAUNCH DATE DEC 9 1965 DISTANCE 350.064 HELIOCENTRIC CONIC .00 LOL 76.71 VL 27.988 GAL -6.83 AZL 86.68 HCA 164.87 SMA 130.34 ECC .17578 INC 3.3199 V1 30.240 .87 LOP 241.60 VP 37.801 GAP 3.04 AZP 93.21 TAL 215.74 TAP 20.61 RCA 107.43 APO 153.25 V2 34.939 21.97 GP .87 ZAL 136.35 ZAP 122.39 ETS 358.06 ZAE 147.77 ETE 183.97 ZAC 35.98 ETC 154.09 CLP-122.39 RL 147.33 LAL RP 108.46 LAP RC 103.862 GL 21.97 GP PLANETOCENTRIC CONIC .57 RAL 293.48 RAO 6567.7 VEL 11.828 PTH 2.09 VHP 3.328 DPA -21.73 RAP 301.64 ECC 1.3046 ME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG C3 18.508 VHL 4.302 DLA 90.00 1 41 25 2213.83 110.90 2 18 19 1613.8 -16.53 34.06 -19.55 41.43 153.64 68.32 15 8 19 4222.3 15.56 200.85 153.38 13 47 56 4822.34 18.67 208.15 90.00 112.19 3 35 32 67.03 16 25 2 -17.37 14.31 1350.6 153.21 3 3 2 1950.59 -20.56 21.65 100.00 16.40 3960.8 152.94 100.00 15 9 1 4560.81 19.68 188.48 -19.61 115.78 4 40 48 63.45 17 29 8 1135.1 4 11 53 1735.06 151.91 -23.27 3.99 110.00 18.62 3749.1 4349.10 22.37 171.08 151.62 16 16 39 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2507.6 SGR 165.1 SG3 629.1 RRT -.7928 RRF -.7500 RTF .9436 SGB 2513.0 R23 .0011 R13 -.9436 SG1 2511.0 SG2 100.5 THA 177.01 ST 817.1 SR 131.0 SS 748.3 CRT -.9207 CRS .9959 CST -.9462 LSA 1100.5 MSA 183.7 SSA 7.8 TOE .5082 TRA-1.1367 TC3-2.1861 BAU .5412 RDE -.0965 RRA .0631 RC3 .0705 FAU .16054 FOE 1.8827 FRA-1.6747 FC3-7.5096 BSP 7556 BDE .5173 BRA 1.1384 BC3 2.1872 FSP -2058 EL1 826.0 EL2 50.6 ALF 171.57 ARRIVAL DATE APR 10 1966 FLIGHT TIME 122.00 LAUNCH DATE DEC 9 1965 DISTANCE 356.191 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 27.952 GAL -6.67 AZL 86.70 HCA 168.06 SMA 130.08 ECC .17562 INC 3.2990 V1 30.240 RP 108.50 LAP .68 LOP 244.79 VP 37.763 GAP 3.35 AZP 93.23 TAL 214.74 TAP 22.80 RCA 107.24 APO 152.93 V2 34.926 RC 106.225 GL 22.06 GP 1.07 ZAL 135.44 ZAP 125.66 ETS 358.28 ZAE 145.73 ETE 183.05 ZAC 35.82 ETC 154.30 CLP-125.67 PLANETOCENTRIC CONIC .83 RAL 294.40 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 3.414 OPA -21.55 RAP 301.51 ECC 1.2979 C3 18.103 VHL 4.255 OLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 13 2216.53 -19.62 41.61 154.27 110.84 2 20 10 1616.5 -16.61 34.22 110.84 2 20 10 68.04 15 13 40 112.13 3 37 30 66.75 16 30 17 4209.3 15.20 4809.28 18.34 207.34 153.91 13 53 31 90.00 -17.44 14.45 1352.9 153.85 3 4 57 1952.91 -20.62 21.80 100.00 16.03 180.46 3948.1 19.34 187.69 153.47 15 14 28 4548.13 100.00 -19.66 356.85 1136.5 4 14 5 -23.31 4.08 152.56 1736.54 110.00 63.16 17 34 7 18.23 163.26 3737.3 16 21 50 22.01 170.36 152.14 4337.27 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2670.6 SGR 163.7 SG3 602.1 RRT -.8731 RRF -.8327 RTF .9447 SGB 2675.6 R23 .0147 R13 -.9447 SG1 2674.4 SG2 79.7 THA 176.93 ST 872.3 SR 116.7 SS 736.5 CRT -.9379 CRS .9982 CST -.9478 TOE .5428 TRA-1.1685 TC3-2.3857 BAU .5778 RDE -. 0845 RRA . 0637 RC3 . 0947 FAU . 15265 LSA 1132.8 MSA 183.5 SSA 6.2 FOE 1.7926 FRA-1.5127 FC3-7.3001 BSP 8103 BDE .5494 BRA 1.1702 BC3 2.3875 FSP -1976 EL1 879.2 EL2 40.2 ALF 172.83 ARRIVAL DATE APR 12 1966 FLIGHT TIME 124.00 LAUNCH DATE DEC 9 1965 HELIOCENTRIC CONIC DISTANCE 362.296 .00 LOL 76.71 VL 27.915 GAL -6.50 AZL 86.74 HCA 171.24 SMA 129.81 ECC .17552 INC 3.2635 VI 30.240
.50 LOP 247.97 VP 37.724 GAP 3.65 AZP 93.23 TAL 213.69 TAP 24.93 RCA 107.03 APO 152.60 V2 34.914
22.06 GP 1.42 ZAL 134.50 ZAP 128.69 ETS 358.65 ZAE 143.90 ETE 182.07 ZAC 35.82 ETC 154.82 CLP-128.71 RL 147.33 LAL RP 108.54 LAP RC 108.588 GL 22.06 GP PLANETOCENTRIC CONIC 2.08 VHP 3.505 OPA -21.18 RAP 301.61 ECC 1.2908 C3 17.672 VHL 4.204 DLA 1.02 RAL 295.41 RAD 6567.7 VEL 11.792 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 '1 45 49 2216.85 -19.62 41.63 154.95 110.83 2 22 46 1616.9 -16.62 34.24 15 18 55 4197.7 14.88 199.37 154.50 67.80 206.62 13 56 57 4797.72 18.05 1352.9 -17.44 14.45 21.80 154.53 112.13 3 40 11 3 7 38 1952.95 -20.62 100.00 16 35 26 3936.9 15.70 179.79 154.07 66.51 15 19 49 186.99 4536.86 19.04 153.25 115.75 4 45 54 1135.9 -19.64 356.82 4 16 58 1735.93 -23.29 4.05 110.00 152.73 62.90 17 39 5 3726.6 17.87 162.64 169.70 16 26 59 4326.64 21.68 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 923.2 SR 103.6 SS 724.6 CRT -.9541 CRS .9987 CST -.9480 LSA 1163.6 MSA 184.7 SSA 4.6 SGT 2826.0 SGR 168.7 SG3 574.6 RRT -.9362 RRF -.9020 RTF ..9448 TDE .5733 TRA-1.1917 TC3-2.5886 BAU .6123 ROE -.0735 RRA .0640 RC3 .1237 FAU .14460 FOE 1.7037 FRA-1.3463 FC3-7.0837 BSP 8613 BOE .5780 BRA 1.1935 BC3 2.5915 FSP -1882 SGB 2831.0 R23 .0486 R13 -.9449 EL1 928.5 EL2 30.9 ALF 173.88 5G1 2830.4 5G2 59.2 THA 176.8D

FLIGHT TIME 118.00

```
FLIGHT TIME 126.00
                                                                                                                                            ARRIVAL DATE APR 14 1966
LAUNCH DATE DEC 9 1965
                                                                             DISTANCE 368.362
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 27.876 GAL -6.33 AZL 86.81 HCA 174.42 SMA 129.54 ECC .17548 INC 3.1881 V1 30.240 RP 108.58 LAP .31 LOP 251.15 VP 37.685 GAP 3.94 AZP 93.17 TAL 212.59 TAP 27.01 RCA 106.81 APO 152.27 VZ .34.903 RC 110.951 GL 21.83 GP 2.16 TAL 133.59 TAP 131.50 ETS 359.44 ZAE 142.27 ETE 180.71 TAC 35.87 ETC 155.96 CLP-131.54
   PLANETOCENTRIC CONIC
                                                                                                         2.08 VMP 3.600 OPA -20.39 RAP 301.85 ECC 1.2827
     C3 17.175 VHL 4.144 DLA
                                              .99 RAL 296.52 RAD 6567.7 VEL 11.771 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   111.00 2 27 17
                    1 50 27 2209.46
14 3 13 4791.91
                                                                                                                                 1609.5
                                                                                                                                                   -16.42
                                                                                                                                                                    33.79
        90.00
                                                      -19.44
                                                                     41.16
                                                                                   155.61
                                                                                                67.66 15 23 5
112.31 3 44 41
66.38 16 39 37
115.95 4 50 23
62.76 17 43 17
         90.00
                                                      17.90
                                                                     206.26
                                                                                    155.19
                                                                                                                                    4191.9
                                                                                                                                                    14.72
                                                                                                                                                                    199.02
                   3 12 16 1945.59 -20.43
19 24 6 4531.01 18.88
4 21 34 1728.67 -23.08
16 31 17 4320.71 21.49
        100.00
                                                                      21.34
                                                                                    155.19
                                                                                                                                    1345.6
                                                                                                                                                    -17.23
                                                                                                                                                                     14.01
                                                                                                                                3931.0 15.52
1128.7 -19.40
                                                                                  154.75
                                                                                                                                                                    179.45
                                                                     186.63
        100.00
                                                                      3.59
                                                                                    153.92
                                                                                                                                                                    356.39
       110.00
                                                                                                                                    3720.7
                                                                                                                                                     17.67
                                                                     169.34
                                                                                    153.42
                                                                                                                                                                    162.30
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 960.3 SR 93.3 SS 703.4

CRT -.9670 CRS .9968 CST -.9465

LSA 1179.5 MSA 185.9 SSA 2.9

EL1 964.5 EL2 23.7 ALF 174.63
                                                                        SGT 2977.9 SGR 187.0 SG3 548.7
RRT -.9752 RRF -.9531 RTF .9447
     TDE .5906 TRA-1.2065 TC3-2.8083 BAU .6460
    ROE -. 0645 RRA . 0650 RC3 . 1660 FAU . 13706
                                                                        9GB 2983.8 R23 .1428 R13 -.9448
SG1 2983.5 SG2 41.3 THA 176.49
    FOE 1.5915 FRA-1.1880 FC3-6.9086 BSP 9139
BOE .5942 BRA 1.2082 BC3 2.8132 FSP -1803
                                                                             FLIGHT TIME 128.00
                                                                                                                                            ARRIVAL DATE APR 16 1966
LAUNCH DATE DEC 9 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 374.448
    RL 147.33 LAL .00 LOL 76.71 VL 27.835 GAL -6.15 AZL 87.09 MCA 177.61 SMA 129.25 ECC .17549 INC 2.9177 V1 30.240 RP 108.61 LAP .12 LOP 254.32 VP 37.644 GAP 4.23 AZP 92.91 TAL 211.44 TAP 29.05 RCA 106.57 APO 151.94 V2 34.892 RC 113.313 GL 20.34 GP 4.88 ZAL 133.08 ZAP 133.98 ETS 2.27 ZAE 140.80 ETE 177.09 ZAC 35.46 ETC 159.77 CLP-134.18
   PLANETOCENTRIC CONIC
    C3 16.377 VHL 4.047 DLA -.25 RAL 297.92 RAD 6567.7 VEL 11.737 PTH 2.07 VHP 3.708 DPA -17.62 RAP 301.93 ECC 1.2695 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  156.00
                                                                                                   112.06
                     2 5 11 2160.16
                                                      -18.21
                                                                      34.06
                                                                                                                   2 41 12
                                                                                                                                    1560.2
                                                                                                                                                   -15.06
                                                                                                                                                                      30.81
        90.00
                                                                                                  68.25 15 19 55
113.38 3 58 3
66.94 16 37 0
117.03 5 2 30
63.28 17 41 56
                    13 59 36 4819.37
                                                                     207.97
                                                                                                                                     4219.4
                                                                                                                                                                    200.67
                                                      18.60
                                                                                    156.11
                                                                                                                                                     15.48
        90.00
                   3 26 25 1898.14
15 21 3 4556.62
4 34 24 1685.34
16 29 33 4342.18
                                                      -19.18
                                                                      18.37
                                                                                    155.58
                                                                                                                                     1298.1
                                                                                                                                                    -15.85
                                                                                                                                                                     11.16
       100.00
                                                                                  155.68
                                                                                                                                     3956.6
                                                     19.57
                                                                  188.22
                                                                                                                                                    16.28
       100.00
                                                                                   154.28
                                                                                                                                                                    353.85
                                                      -21.76
                                                                                                                                    1085.3
                                                                         . 92
                                                                                                                                                   -17.96
       110.00
                                                                  170.66
                                                                                                                                     3742.2
                                                     22.16
                                                                                    154.40
                                                                                                                                                     18.39
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 3150.9 SGR 262.9 SG3 525.4 ST 923.0 SR 95.2 SS 636.0 RRT -.9813 RRF -.9869 RTF ..9443 CRT -.9650 CRS ..9945 CST -.9327 SG6 3161.9 R23 ..3118 R13 -.9447 LSA 1108.4 MSA 192.3 SSA 1.3 SG1 3161.5 SG2 50.5 THA 175.32 EL1 927.6 EL2 24.9 ALF 174.31
    TOE .5388 TRA-1.2104 TC3-3.1280 BAU .6876
    FOE -.0636 RRA .0718 RC3 .2781 FAU .13042
FOE 1.3627 FRA-1.0285 FC3-6.8943 BSP 10010
BOE .5426 BRA 1.2125 BC3 3.1403 FSP -1762
                                                                            FLIGHT TIME 130.00
                                                                                                                                           ARRIVAL CATE APR 18 1966
LAUNCH DATE DEC 9 1965
                                                                            DISTANCE 380.495
  HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 27.794 GAL -5.95 AZL 85.14 MCA 180.79 SMA 128.96 ECC .17558 INC 4.8017 V1 30.240 RP 108.64 LAP -.07 LOP 247.50 VP 37.804 GAP 4.50 AZP 94.86 TAL 210.25 TAP 31.04 RCA 106.32 APO 151.61 VZ 34.881 RC 115.673 GL 31.71 GP -14.18 ZAL 126.78 ZAP 134.89 ETS 342.89 ZAE 136.00 ETE 197.81 ZAC 45.09 ETC 139.90 CLP-136.72
   PLANETOCENTRIC CONIC
    C3 19.843 VHL 4.455 DLA 11.25 RAL 297.35 RAD 6567.8 VEL 11.884 PTH
                                                                                                        2.11 VMP 3.909 CPA -36.24 RAP 306.60 ECC 1.3266
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                1969.2
                                                                                                   100.90 1 17 31
63.22 16 40 34
102.24 2 39 51
61.90 17 52 11
105.96 3 56 41
58.27 18 44 43
                  0 34 42 2569.25
15 25 34 4499.80
                                                                                162.20
157.22
                                                                                                                                                                     57.01
                                                     -26.30
                                                                     65.23
                                                                                                                                                  -24.53
        90.00
                                                                    188.87
                                                                                                                                    3899.8
                                                                                                                                                     5.89
                                                                                                                                                                   182.11
                                                      9.56
        90,00
                   2 1 42 2288.65
16 41 15 4255.65
                                                                                                                                    1688.6
                                                                                                                                                    -25.52
                                                                                                                                                                    36.07
                                                     -27.48
                                                                      44.32
                                                                                   161.92
       100.00
                                                                                 156.66
                                                                                                                                    3655.7
                                                                                                                                                     6.79
                                                                                                                                                                   163.66
                                                     10.63
                                                                    170.35
       100.00
                   3 22 46 2034.97 -30.64
17 36 40 4082.07 13.45
                                                                    24.15 161.02
155.52 155.00
                                                                                                                                   1435.0
                                                                                                                                                   -28.15
                                                                                                                                                                    15.84
       110.00
                                                                                                                                 3482.1
                                                                                    155.00
                                                                                                                                                      9.16
                                                                                                                                                                  149.05
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  CIFFFRENTIAL CORRECTIONS
                                                                       SGT 2895.0 SGR 227.7 SG3 421.8

RRT .8127 RRF .9634 RTF .9390

SG8 2904.0 R23 .3410 R13 .9400

SG1 2901.0 SG2 132.4 THA 3.66
                                                                                                                              ST 1948.0 SR 147.9 SS 1120.2
CRT .9646 CRS -.9927 CST -.9893
LSA 2247.2 MSA 145.9 SSA .3
    TOE 1.4807 TRA-1.0315 TC3-1.9194 BAU .5117
    ROE .1147 RRA .0214 RC3 -.1921 FAU .09056
FDE 2.5722 FRA -.5357 FC3-3.9510 BSP 1624
BDE 1.4851 BRA 1.0318 BC3 1.9289 FSP -553
                                                                                                                                EL1 1953.2 EL2 38.9 ALF
                                                                                                                                            ARRIVAL DATE APR 20 1966
                                                                             FLIGHT TIME 132.00
LAUNCH DATE DEC 9 1965
                                                                            DISTANCE 386.525
  HELTOCENTRIC CONTC
    RL 147.33 LAL .00 LOL 76.71 VL 27.751 GAL -5.75 AZL 86.32 MCA 183.96 SMA 128.67 ECC .17572 INC 3.6812 VI 30.240 RP 108.68 LAP -.25 LOP 260.67 VP 37.582 GAP 4.77 AZP 93.68 TAL 209.03 TAP 32.99 RCA 106.06 APO 151.28 V2 34.870 RC 118.029 GL 25.54 GP -2.79 ZAL 128.57 ZAP 138.83 ETS 354.42 ZAE 137.76 ETE 185.40 ZAC 39.86 ETC 151.36 CLP-138.91
  PLANETOCENTRIC CONIC
                                           5.42 RAL 299.59 RAD 6567.7 VEL 11.761 PTH 2.08 VMP 3.903 OPA -24.87 RAP 305.11 ECC 1.2788
    C3 16.940 VHL 4.116 DLA
    ENCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 35 2344.18 -22.49 49.86 159.65 107.68 2 8 40 1744.2 -19.86 42.17
                                                                                                   197.69
                                                                                   157.39
                                                                                                                                    4050.8
                                                                                                                                                    10.58
                                                                                                                                                                    190.73
                    14 48 31
                                    4650.82
                                                      14.05
        90.00
                                                                                  159.28
                                                                                                                                    1473.6
                                                                                                                                                   -20.70
                                                                                                                                                                    21.92
       100.00
                     2 53 29 2073.56
                                                     -23.51
                                                                     29.59
                   16 7 18
                                                                    178.52
                                                                                   156.91
                                                                                                                                    3796.7
                                                                                                                                                   11.38
                                                                                                                                                                   171.62
       100.00
                                    4396.67
                                                      15.02
                                                                                  158.13
                                                                                                                                                 -22.94
                     4 7 36 1841.63
                                                     -26.25
                                                                      10.63
                                                                                                                                    1241.6
                                                                                                                                                                     3.24
       110.00
                                    4201.36
                                                     17.61
                                                                    162.27
                                                                                    155.48
                                                                                                                                    3601.4
                                                                                                                                                    13.52
                                                                                                                                                                   155.55
                    17 9 41
       110.00
                                                                    DIFFERENTIAL CORRECTIONS
    TOE .8509 TRA-1.2638 TC3-3.1996 BAU .7248
RDE .0051 RRA .0413 RC3 .0666 FAU .11448
    FOE 1.6593 FRA -.8146 FC3-5.8510 85P 10227
BOE .8510 BRA 1.2645 BC3 3.2003 FSP -1529
```

ARRIVAL DATE APR 22 1966

LAUNCH DATE DEC 9 1965 DISTANCE 392.537 HELIOCENTRIC CONIC RL 147.33 LAL .DD LOL 76.71 VL 27.708 GAL -5.54 AZL 86.45 HCA 187.14 SHA 128.37 ECC .17594 INC 3.5538 V1 30.240 RP 108.71 LAP -.44 LOP 263.84 VP 37.521 GAP 5.03 AZP 93.53 TAL 207.76 TAP 34.90 RCA 105.78 APO 150.95 V2 34.860 RC 120.382 GL 25.02 GP -1.51 ZAL 127.50 ZAP 141.02 ETS 355.79 ZAE 136.86 ETE 183.65 ZAC 40.25 ETC 153.35 CLP-141.05 PLANETOCENTRIC CONIC 2.07 VHP 4.005 OPA -23.42 RAP 305.96 ECC 1.2690 C3 16.346 VHL 4.043 OLA 5.22 RAL 301.03 RAD 6567.7 VEL 11.736 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 1 36 54 2329.64 14 52 46 4649.01 3 0 42 2059.34 16 11 39 4394.54 160.46 108.06 2 15 44 1729.6 -19.51 41.25 48.90 90.00 -22.18 4049.0 10.53 190.62 158.34 65.13 16 10 15 13.99 197.58 90.00 109.40 3 35 1 1459.3 -20.34 21.02 160.09 28.65 100.00 -23.19 157.86 63.81 17 24 53 11.32 171.50 3794.5 100.00 14.96 178.40 158.93 4 45 3 -22.54 1828.11 4198.53 113.14 4 45 3 60.16 18 24 14 1228.1 2.40 4 14 35 -25.89 9.94 110.00 3598.5 155.39 13.41 17 14 15 17.51 162.10 156.45 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1312.3 SR 21.5 55 759.3 CRT .1428 CRS -.4126 CST -.9594 3GT 3535.4 3GR 116.7 3G3 454.0 RRT -.9025 RRF -.8160 RTF .9419 TOE .8429 TRA-1.2574 TC3-3.4694 BAU .7587 ROE .0082 RRA .0419 RC3 .1232 FAU .10934 FOE 1.5310 FRA -.6949 FC3-5.7909 BSP 10939 BDE .8429 BRA 1.2581 BC3 3.4716 FSP -1497 3.3 5G8 3557.3 R23 -.0794 R13 -.9418 LSA 1504.6 MSA 187.9 SSA EL1 1312.3 EL2 21.3 ALF SG1 3537.0 SG2 50.2 THA 178.29 ARRIVAL DATE APR 24 1966 FLIGHT TIME 136.00 DISTANCE 398.533 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 27.663 GAL -5.33 AZL 86.50 HCA 190.31 SHA 128.06 ECC .17623 INC 3.5043 V1 30.240 RP 108.74 LAP -.63 LOP 267.01 VP 37.480 GAP 5.28 AZP 93.45 TAL 206.46 TAP 36.77 RCA 105.49 APO 150.63 V2 34.851 RC 122.731 GL 24.97 GP -1.02 ZAL 126.13 ZAP 143.05 ETS 356.36 ZAE 135.96 ETE 182.85 ZAC 41.12 ETC 154.50 CLP-143.06 PLANETOCENTRIC CONIC 2.06 VHP 4.110 OPA -22.71 RAP 307.09 ECC 1.2619 5.51 RAL 302.48 RAD 6567.6 VEL 11.717 PTH C3 15.911 VHL 3.989 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1732.6 41.44 161.57 107.98 2 19 21 -19.58 90.00 1 40 29 2332.65 -22.25 49.10 15 0 45 4633.71 3 4 25 2061.89 16 19 30 4379.70 4 18 38 1629.65 17 21 47 4184.71 64.90 16 17 59 189.74 4033.7 10.06 90.00 13.55 196.67 159.37 109.33 3 38 47 1461.9 -20.40 21.19 161.20 -23.25 28.82 100.00 63.58 17 32 29 100.00 177.52 158.90 160.05 3779.7 10.84 170.65 14.51 113.09 4 49 7 1229.7 -22.58 2.49 110.00 -25.94 10.04 HID-COURSE EXECUTION ACCURACY 3584.7 12.92 154.63 110.00 17.04 161.31 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3668.4 SGR 138.9 SG3 435.0 RRT -.8616 RRF -.7990 RTF .9407 ST 1357.4 SR 29.5 S5 748.3 TDE .8653 TRA-1.2436 TC3-3.6955 BAU .7868 CRT .5061 CRS -.7261 CST -.9586 ROE .0167 RRA .0391 RC3 .1563 FAU .10376 SGB 3671.1 R23 -.0233 R13 -.9407 LSA 1538.7 MSA 189.5 SSA 4.8 FOE 1.4535 FRA -.5790 FC3-5.6459 BSP 11445 SG1 3670.4 SG2 70.5 THA 178.13 EL1 1357.5 EL2 25.5 ALF BOE .8655 BRA 1.2442 BC3 3.6988 FSP -1443 ARRIVAL DATE APR 26 1966 FLIGHT TIME 138.00 LAUNCH DATE DEC 9 1965 01STANCE 404.512 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 27.619 GAL -5.10 AZL 86.52 MCA 193.49 SMA 127.76 ECC .17660 INC 3.4778 V1 30.240 RP 108.76 LAP -.81 LOP 270.17 VP 37.438 GAP 5.53 AZP 93.38 TAL 205.12 TAP 38.61 RCA 105.20 APO 150.32 V2 34.842 RC 125.075 GL 25.05 GP -.76 ZAL 124.63 ZAP 144.94 ETS 356.68 ZAE 135.13 ETE 182.33 ZAC 42.20 ETC 155.40 CLP-144.95 PLANETOCENTRIC CONIC C3 15.530 VHL 3.941 DLA 5.97 RAL 303.99 RAD 6567.6 VEL 11.701 PTH 2.06 VHP 4.218 OPA -22.19 RAP 308.39 ECC 1.2556 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.74 2 22 1 64.61 16 27 10 109.10 3 41 40 63.28 17 41 28 112.88 4 52 29 162.83 2 22 1 1741.7 -19.80 1 42 59 2341.69 15 10 17 4613.71 3 7 9 2070.21 49.70 -22.44 90.00 4013.7 9.45 188.50 160.49 195.49 90.00 12.97 1470.2 -20.62 21.71 162.47 29.37 -23,44 100.00 3760.4 10.22 169.55 160.02 100.00 16 28 48 4360.43 110.00 4 21 53 1836.36 110.00 17 30 34 4167.04 176.39 13.92 -22.78 2.91 161.34 1236.4 10.48 -26.11 59.60 18 40 1 3567.0 12.28 153.66 158.60 160.30 16.44 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3794.8 SGR 157.0 SG3 416.6 RRT -.8117 RRF -.7627 RTF .9394 ST 1413.0 SR 41.4 55 743.9 CRT .7052 CRS -.8731 CST -.9587 TDE .8969 TRA-1.2230 TC3-3.9114 BAU .8130 RDE .0263 RRA .0349 RC3 .1820 FAU .09834 FDE 1.3939 FRA -.4690 FC3-5.4822 BSP 11894 SGB 3798.1 R23 -. 0005 R13 -. 9394 LSA 1586.0 MSA 190.5 SSA 6.2 SG1 3797.0 SG2 91.6 THA 178.08 ELI 1413.3 EL2 29.4 ALF 1.18 BOE .8973 BRA 1.2235 BC3 3.9157 FSP -1387 ARRIVAL DATE APR 28 1966 FLIGHT TIME 140.00 LAUNCH DATE DEC 9 1965 **DISTANCE 410.476** HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 27.573 GAL -4.86 AZL 86.54 HCA 196.66 SMA 127.45 ECC .17705 INC 3.4613 VI 30.240 RP 108.79 LAP -.99 LOP 273.34 VP 37.397 GAP 5.77 AZP 93.32 TAL 203.75 TAP 40.41 RCA 104.89 APO 150.02 VZ 34.834 RC 127.413 GL 25.20 GP -.60 ZAL 123.01 ZAP 146.72 ETS 356.91 ZAE 134.39 ETE 181.96 ZAC 43.43 ETC 156.20 CLP-146.73 PLANETOCENTRIC CONIC C3 15.182 VHL 3.896 DLA 6.52 RAL 305.57 RAD 6567.6 VEL 11.686 PTH 2.06 VHP 4.327 DPA -21.74 RAP 309.82 ECC 1.2499 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 164.22 1 45 3 2354.08 15 20 49 4591.11 3 9 30 2081.71 16 39 3 4338.72 107.41 2 24 17 1754.1 -20.10 50.52 -22.69 90.00 64.30 16 37 20 3991.1 8.75 187.29 194.16 161.71 12.31 90.00 3 44 12 1481.7 -20.91 22.44 30.13 163.86 108.78 -23.69 100.00 62.96 17 51 22 112.59 4 55 37 59.26 18 49 19 168.32 3738.7 9.52 161.23 100.00 13.25 175.13 4 24 51 1845.90 17 40 12 4147.29 1245.9 -23.07 3.50 162.75 -26.36 11.11 110.00 159.17 3547.3 11.56 152.58 15.75 159.81 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY TOE .9333 TRA-1.1956 TC3-4.1225 BAU .8378 SGT 3916.0 SGR 173.5 SG3 399.0 RRT -.7597 RRF -.7202 RTF .9380 SGB 3919.9 R23 .0109 R13 -.9381 ST 1474.6 SR 55.1 SS 743.1 CRT .8078 CRS -.9368 CST -.9592 ROE .0362 RRA .0298 RC3 .2042 FAU .09314 FOE 1.3446 FRA -.3651 FC3-5.3110 BSP 12318 LSA 1641.1 MSA 191.1 SSA 7.6 EL1 1475.3 EL2 32.5 ALF 1.73 SG1 3918.3 SG2 112.8 THA 178.07 BDE .9340 BRA 1.1959 BC3 4.1275 FSP -1332

FLIGHT TIME 134.00

ARRIVAL DATE APR 3D 1966

```
LAUNCH DATE DEC 9 1965
                                                                                               DISTANCE 416.423
    HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 27.527 GAL -4.62 AZL 86.55 HCA 199.83 SMA 127.14 ECC .17759 INC 3.4499 V1 30.240 RP 108.81 LAP -1.17 LOP 276.51 VP 37.356 GAP 6.02 AZP 93.25 TAL 202.36 TAP 42.18 RCA 104.56 APO 149.72 V2 34.826 RC 129.747 GL 25.36 GP -.49 ZAL 121.29 ZAP 148.41 ETS 357.10 ZAE 133.72 ETE 181.66 ZAC 44.78 ETC 156.94 CLP-148.41
    PLANETOCENTRIC CONIC
     C3 14.861 VHL 3.855 DLA 7.14 RAL 307.23 RAD 6567.6 VEL 11.672 PTH 2.05 VHP 4.438 DPA -21.30 RAP 311.36 ECC 1.2446 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      165.73
                                                                                                                         107.00
                         1 46 56 2368.85
15 32 10 4566.78
                                                                                      51.50
                                                                                                                                            2 26 25
                                                                                                                                                                  1768.8
                                                                                                                                                                                    -20.44
                                                                                                                                                                                                          43.75
                                                                  -22.99
          90.00
                                                                                                                              63.98 16 48 17
                                                                                                                                                                                        8.00
                                                                                     192.74
                                                                                                        163.03
                                                                                                                                                                   3966.8
                                                                                                                                                                                                          185.90
          90.00
                                                                  11.59
                        3 11 41 2095.47
16 50 6 4315.39
4 27 44 1857.47
17 50 32 4126.16
                                                                                      31.04
                                                                                                        165.38
                                                                                                                             108.39
                                                                                                                                              3 46 37
                                                                                                                                                                   1495.5
                                                                                                                                                                                       -21.26
                                                                                                                                                                                                           23.31
                                                                  -23.99
         100.00
                                                                                                                            62.64 18 2 1 3715.4
112.23 4 58 42 1257.5
58.92 18 59 18 3526.2
                                                                                     173.77
                                                                                                        162.55
                                                                                                                                                                                         8.76
                                                                                                                                                                                                          167.01
         100.00
                                                                 12.53
                                                                                                                                                                                      -23.41
                                                                                                                                                                                                            4.23
                                                                                      11.88
                                                                                                        164.29
         110.00
                                                                 -26.66
                                                                                                                                                                                    10.79
                                                               15.02
                                                                                157.98
                                                                                                        161.12
         110.00
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 4064.4 SGR 190.8 SG3 387.1
RRT -.7137 RRF -.6891 RTF .9397
SGB 4068.9 R23 .0253 R13 -.9397
SGI 4066.7 SG2 133.6 THA 178.08
                                                                                                                                                             ST 1518.9 SR 70.3 SS 725.6
CRT .8612 CRS -.9642 CST -.9600
     TDE .9554 TRA-1.1783 TC3-4.3768 BAU .8707
     RDE .0466 RRA .0245 RC3 .2256 FAU .08995
FDE 1.2672 FRA -.3044 FC3-5.2403 BSP 13130
                                                                                                                                                             LSA 1674.3 MSA 187.1 SSA 9.1
     BOE .9566 BRA 1.1786 BC3 4.3827 FSP -1354
                                                                                                                                                             EL1 1520.1 EL2 35.7 ALF
                                                                                                                                                                            ARRIVAL DATE MAY 2 1966
                                                                                                FLIGHT TIME 144.00
LAUNCH DATE DEC 9 1965
                                                                                               DISTANCE 422.361
   HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 27.481 GAL -4.37 AZL 86.56 MCA 202.99 SMA 126.84 ECC .17821 INC 3.4415 V1 30.240
RP 108.84 LAP -1.34 LOP 279.67 VP 37.316 GAP 6.25 AZP 93.17 TAL 200.92 TAP 43.92 RCA 104.23 APO 149.44 V2 34.819
RC 132.074 GL 25.53 GP -.42 ZAL 119.46 ZAP 149.99 ETS 357.25 ZAE 133.14 ETE 181.42 ZAC 46.23 ETC 157.65 CLP-150.00
     C3 14.562 VHL 3.816 DLA 7.81 RAL 308.98 RAO 6567.6 VEL 11.660 PTH 2.05 VHP 4.550 OPA -20.86 RAP 312.98 ECC 1.2396 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 41 2385.77 -23.32 52.63 167.37 106.53 2 28 27 1785.8 -20.83 44.84 90.00 15 44 22 4540.80 10.81 191.23 164.47 63.67 17 0 3 3940.8 7.18 184.43 100.00 3 13 48 2111.29 -24.33 32.10 167.03 107.93 3 48 59 1511.3 -21.65 24.33 100.00 17 1 57 4290.52 11.74 172.34 163.99 62.31 18 13 27 3690.5 7.95 165.61 110.00 4 30 30 1870.84 -27.01 12.77 165.96 111.80 5 1 48 1270.8 -23.80 5.07 110.00 18 1 36 4103.72 14.22 156.73 162.54 58.58 19 10 0 3503.7 9 42
    PLANETOCENTRIC CONIC
                                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                         SGT 4112.0 SGR 203.4 SG3 362.7

RRT -.6508 RRF -.6179 RTF .9319

SGB 4117.1 R23 .0140 R13 -.9319
                                                                                                                                                             ST 1635.9 SR 83.2 SS 767.4
CRT .9114 CRS -.9846 CST -.9615
      TOE 1.0352 TRA-1.0997 TC3-4.4848 BAU .8743
      ROE .0551 RRA .0170 RC3 .2412 FAU .08182
     EBE 1.2974 FRA -.1388 FC3-4.8642 BSP 12641
BDE 1.0366 BRA 1.0998 BC3 4.4913 FSP -1153
                                                                                                                                                              LSA 1798.4 MSA 194.2 55A 9.8
                                                                                         SG1 4114.2 SG2 154.4 THA 178.15
                                                                                                                                                             EL1 1637.7 EL2 34.2 ALF 2.66
                                                                                                                                                                           ARRIVAL DATE MAY 4 1966
LAUNCH DATE DEC 9 1965
                                                                                              FLIGHT TIME 146.00
                                                                                              DISTANCE 428.280
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 27.435 GAL -4.10 AZL 86.56 MCA 206.16 SMA 126.53 ECC .17894 INC 3.4351 V1 30.240 RP 108.86 LAP -1.51 LOP 282.83 VP 37.275 GAP 6.49 AZP 93.08 TAL 199.47 TAP 45.63 RCA 103.89 APO 149.17 V2 34.812
     RC 134.395 GL 25.70 GP -.36 ZAL 117.54 ZAP 151.51 ETS 357.39 ZAE 132.61 ETE 181.22 ZAC 47.76 ETC 158.32 CLP-151.51
     C3 14.291 VHL 3.780 OLA 8.52 RAL 310.81 RAO 6567.6 VEL 11.648 PTH 2.04 VHP 4.664 DPA -20.40 RAP 314.69 ECC 1.2352 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 50 25 2404.48 -23.68 53.88 169.14 106.00 2 30 30 1804.5 -21.26 46.05 90.00 15 57 15 4513.77 9.99 189.67 166.03 63.36 17 12 29 3913.8 6.33 182.90 100.00 3 15 54 2128.79 -24.69 33.27 168.81 107.41 3 51 23 1528.8 -22.07 25.45
    PLANETOCENTRIC CONIC
                                                                                         3.27 168.81 107.41 3 51 23

0.86 165.54 62.00 18 25 32

3.77 167.75 111.32 5 5 0

5.44 164.08 58.25 19 21 17

HID-COURSE EXECUTION ACCURACY
                        17 14 27
                                           4264.70
                                                                  10.92
                                                                                  170.86
         100.00
                        4 33 34 1885.72
18 13 17 4080.53
                                                                                                                                                                                                           6.01
                                                                                                                                                                 1285.7
                                                                                                                                                                                     -24.23
                                                                 -27.38
                                                                                      13.77
         110.00
                                                                                    155.44
                                                                                                                                                                  3440.5
                                                                                                                                                                                       9.10
                                                                                                                                                                                                         148.97
                                                              13.40
         110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 1699.7 SR 98.3 SS 762.9
CRT .9357 CRS -.9911 CST -.9628
                                                                                        SCT 4236.2 SGR 219.3 SG3 350.2

RRT -.6055 RRF -.5819 RTF .9320

SGB 4241.8 R23 .0209 R13 -.9320

SGI 4238.2 SG2 174.5 THA 178.20
      TOE 1.0722 TRA-1.0583 TC3-4.7085 BAU .9009
     ROE .0647 RRA .0103 RC3 .2587 FAU .07825
FOE 1.2471 FRA -.0693 FC3-4.7402 BSP 13212
BOE 1.0742 BRA 1.0584 BC3 4.7156 FSP -1142
                                                                                                                                                            LSA 1855.8 MSA 191.2 55A 11.1
                                                                                                                                                             FI 1 1702.2 FL2 34.6 ALF
                                                                                                                                                                                                              3.10
                                                                                                                                                                            APRIVAL DATE MAY 5 1966
                                                                                               FLIGHT TIME 148.00
LAUNCH DATE DEC 9 1965
                                                                                               DISTANCE 434.185
   HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 27.389 GAL -3.83 AZL 86.57 HCA 209.33 SMA 126.22 ECC .17977 INC 3.4299 V1 30.240
RP 108.87 LAP -1.68 LOP 286.00 VP 37.236 GAP 6.72 AZP 92.99 TAL 197.99 TAP 47.32 RCA 103.53 APO 148.91 VZ 34.806
RC 136.709 GL 25.86 GP -.31 ZAL 115.53 ZAP 152.94 ETS 357.52 ZAE 132.15 ETE 181.05 ZAC 49.38 ETC 158.96 CLP-152.94
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 52 8 2425.01 -24.06 55.27 171.04 105.41 2 32 33 1825.0 -21.71 47.38 90.00 16 10 53 4485.66 9.12 188.06 167.71 63.08 17 25 39 3845.7 8 44
                       3 18 1 2148.02
17 27 41 4237.88
4 36 36 1902.12
18 25 36 4056.54
                                                                                                                                             3 53 49
                                                                                                                                                                   1548.0
                                                                                                                                                                                       -22.53
                                                                                                                                                                                                           26.70
                                                                  -25.07
                                                                                      34.57
                                                                                                        170.72
                                                                                                                             106.83
         100.00
                                                                                                                            61.70 18 38 19
110.77 5 A 14
                                                                                                                                                                   3637.9
                                                                                                                                                                                         6.20
                                                                                                                                                                                                         162.68
                                                                                 169.34
                                                                                                        167.22
                                                                 10.06
         100.00
                                                                                                                                                                                     -24.70
                                                                                                                                                                                                            7.06
                                                                 -27.78
                                                                                      14.87
                                                                                                        169.69
                                                                                                                                                                   1302.1
         110.00
                                                                                                                             57.93 19 33 12
                                                                                                                                                                                         8.21
                                                                                                                                                                   3456.5
                                                                                154.11
                                                                                                        165.75
         110.00
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SGT 4345.5 SGR 234.5 SGS 337.0

RRT -.5602 RRF -.5429 RTF .9311

SGB 4351.8 R23 .0244 R13 -.9312

SG1 4347.5 SG2 194.1 THA 178.27
                                                                                                                                                             ST 1775.5 SR 113.0 SS 765.8
CRT .9547 CRS -.9939 CST -.9644
      TOE 1.1184 TRA-1.0030 TC3-4.9101 BAU .9235
                                                                                                                                                     ST 1773... CRT .9939 CST -.963-
LSA 1927.6 MSA 188.8 SSA 12.2
EL1 1778.8 EL2 33.5 ALF 3.48
     RDE .0738 RRA .0030 RC3 .2741 FAU .07431
FDE 1.2114 FRA .0078 FC3-4.5798 BSP 13619
```

FLIGHT TIME 142.00

BOE 1.1208 BRA 1.0030 BC3 4.9178 FSP -1107

ARRIVAL DATE MAY 8 1966

FLIGHT TIME 150.00 LAUNCH DATE DEC 9 1965 RL 147.33 LAL .00 LOL 76.71 VL 27.342 GAL -3.55 AZL 86.57 MCA 212.49 SMA 125.92 ECC .18070 INC 3.4257 VI 30.240 RP 108.89 LAP -1.84 LOP 289.16 VP 37.197 GAP 6.95 AZP 92.89 TAL 196.49 TAP 48.98 RCA 103.16 APO 148.67 VZ 34.801 RC 139.015 GL 26.00 GP -.28 ZAL 113.41 ZAP 154.31 ETS 357.65 ZAE 131.74 ETE 180.90 ZAC 51.07 ETC 159.57 CLP-154.31 DISTANCE 440.076 HELIOCENTRIC CONIC C3 13.833 VHL 3.719 DLA 10.06 RAL 314.75 RAD 6567.5 VEL 11.628 PTH 2.04 VHP 4.896 DPA -19.42 RAP 318.29 ECC 1.2277
LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
90.00 1 53 52 2447.33 -24.45 56.78 173.08 104.74 2 34 39 1847.3 -22.19 48.84
90.00 16 25 15 4456.59 8.22 186.39 169.53 62.81 17 39 32 3856.6 4.51 179.68 PLANETOCENTRIC CONIC 106.19 3 20 11 2168.94 17 41 37 4210.22 172.77 35.99 -25.48 100.00 161.14 3610.2 5.28 61.42 18 51 48 169.03 9.17 167.78 100.00 -25.20 8.21 1320.0 5 11 44 4 39 44 1920.01 18 38 34 4031.91 110.16 -28.21 16.09 171.77 110.00 7.28 146.38 57.63 19 45 46 3431.9 152.77 167.55 110.00 18 38 34 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1858.3 SR 127.4 SS 772.2 CRT .9692 CRS -.9938 CST -.9662 SGT 4448.6 SGR 249.1 SG3 324.3 RRT -.5163 RRF -.5038 RTF .9300 TOE 1.1696 TRA -.9383 TC3-5.0994 BAU .9446 ROE .0826 RRA -.0046 RC3 .2878 FAU .07043 SGB 4455.5 R23 .0263 R13 -.9300 SG1 4450.4 SG2 213.3 THA 178.34 LSA 2007.7 MSA 186.2 SSA 13.3 FOE 1.1829 FRA .0835 FC3-4.4075 BSP 13977 EL1 1862.4 EL2 31.3 ALF BOE 1.1725 BRA .9383 BC3 5.1075 FSP -1068 ARRIVAL DATE MAY 10 1966 FLIGHT TIME 152.00 LAUNCH DATE DEC 9 1965 RL 147.33 LAL .00 LOL 76.71 VL 27.295 GAL -3.26 A7L 86.58 HCA 215.66 SMA 125.61 ECC .18176 INC 3.4222 VI 30.240 RP 108.90 LAP -1.99 LOP 292.32 VP 37.158 GAP 7.18 A7P 92.78 TAL 194.97 TAP 50.62 RCA 102.78 APO 148.44 V2 34.797 RC 141.312 GL 26.12 GP -.25 TAL 111.20 ZAP 155.62 ETS 357.77 ZAE 131.38 ETE 180.77 ZAC 52.82 ETC 160.15 CLP-155.62 DISTANCE 445.953 HELIOCENTRIC CONIC C3 13.652 VML 3.695 DLA 10.88 RAL 316.87 RAD 6567.5 VEL 11.621 PTH 2.04 VMP 5.015 DPA -18.88 RAP 320.17 ECC 1.2247 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG PLANETOCENTRIC CONIC 175.27 104.01 1 55 37 2471.45 -24.86 58.43 90.00 62.56 17 54 9 3.56 178.00 3826.7 7.29 184.70 171.50 16 40 22 4426.71 90.00 -23.52 29.55 3 58 56 1591.6 105.47 37.54 174.97 2191.55 -25.90 100.00 3 22 25 159.58 4.33 61.16 19 5 58 SSAL A 170.99 166.18 4181.84 8.24 17 56 16 100.00 -25.73 5 15 19 1339.4 174.00 109.49 1939.39 -28.65 17.42 4 43 0 110.00 145.05 57.35 19 58 57 6.34 3406.8 169.49 151.40 4006.77 10.72 110.00 18 52 10 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RGT 4547.6 SGR 263.4 SG3 312.2 RRT -.4744 RRF -.4664 RTF ..9289 SGB 4555.3 R23 .0279 R13 -.9290 SGI 4549.4 SG2 231.8 THA 178.42 ST 1945.1 SR 141.6 SS 779.0 CRT .9799 CRS -.9916 CST -.9680 TOE 1.2239 TRA -.8647 TC3-5.2784 BAU .9649 ROE .0911 RRA -.0127 RC3 .2996 FAU .06674 LSA 2092.0 MSA 183.2 SSA 14.3 EL1 1950.0 EL2 28.2 ALF 4.08 FOE 1.1568 FRA .1564 FC3-4.2321 BSP 14310 BDE 1.2273 BRA .8648 BC3 5.2869 FSP -1029 ARRIVAL DATE MAY 12 1966 FLIGHT TIME 154.00 LAUNCH DATE DEC 9 1965 DISTANCE 451.816 RL 147.33 LAL .00 LOL 76.71 VL 27.249 GAL -2.96 A7L 86.58 MCA 218.82 SMA 125.31 ECC .18293 INC 3.4191 VI 30.240 RP 108.92 LAP -2.14 LOP 295.48 VP 37.120 GAP 7.41 AZP 92.67 TAL 193.42 TAP 52.24 RCA 102.39 APO 148.23 V2 34.793 RC 143.598 GL 26.21 GP -.23 ZAL 108.90 ZAP 156.87 ETS 357.89 ZAE 131.06 ETE 180.66 ZAC 54.63 ETC 160.71 CLP-156.87 HELIOCENTRIC CONIC C3 13.507 VML 3.675 DLA 11.73 RAL 319.08 RAD 6567.5 VEL 11.614 PTH 2.04 VMP 5.137 DPA -18.32 RAP 322.09 ECC 1.2223 PLANETOCENTRIC CONIC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 177.62 60.22 -25.27 1 57 26 2497.37 90.00 176.29 18 9 29 2.57 3795.1 62.34 182.96 173.61 6.33 90.00 16 56 13 4396.14 -24.05 31.16 104.69 4 1 39 1615.8 177.33 2215.85 -26.33 39.22 3 24 43 100.00 157.98 3.35 4152.89 1960.22 60.93 19 20 50 3552.9 164.56 173.09 7.26 100.00 18 11 37 -26.28 10.83 108.75 5 19 5 57.08 20 12 46 1360.2 176.38 -29.12 18.86 4 46 25 110.00 143.70 5.37 3381.3 171.58 150.02 3981.28 19 6 25 ORBIT DETERMINATION ACCURACY 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2036.2 SR 155.5 55 786.5 SGT 4642.5 SGR 277.2 SG3 300.7 RRT -.4340 RRF -.4302 RTF .9280 SGB 4650.7 R23 .0291 R13 -.9280 TOE 1.2816 TRA -.7830 TC3-5.4429 BAU .9845 CRT .9874 CR5 -.9878 CST -.9700 RDE .0995 RRA -.0209 RC3 .3094 FAU .06320 LSA 2180.9 MSA 179.6 SSA 15.3 EL1 2042.0 EL2 24.5 ALF 4.31 FOE 171332 FRA .2250 FC3-4.0507 BSP 14637 BOE 1.2854 BRA .7833 BC3 5.4517 FSP -994 5G1 4644.0 SG2 249.7 THA 178.51 ARRIVAL DATE MAY 14 1966 ELICHT TIME 156.00 LAUNCH DATE DEC 9 1965 DISTANCE 457.665 RE 147.33 LAL .00 LOL 76.71 VL 27.202 GAL -2.64 A7L 86.58 HCA 221.98 SMA 125.01 ECC .18424 INC 3.4165 V1 30.240 RP 108.93 LAP -2.28 LOP 298.64 VP 37.083 GAP 7.64 A7P 92.54 TAL 191.86 TAP 53.84 RCA 101.98 APO 148.04 V2 34.790 RC 145.874 GL 26.25 GP -.21 7AL 106.50 7AP 158.08 ETS 358.01 7AE 130.79 ETE 180.56 7AC 56.49 ETC 161.24 CLP-158.08 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 13.402 VHL 3.661 DLA 12.60 RAL 321.39 RAD 6567.5 VEL 11.610 PTH 2.03 VHP 5.261 DPA -17.73 RAP 324.06 ECC 1.2206 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 102.34 180.12 2525.07 -25.69 62.14 1 59 17 90.00 174.56 3765.0 1.57 62.15 18 25 33 175.88 181.21 17 12 48 4365.02 5.34 90.00 32.90 -24.60 1641.8 4 4 29 179.85 103.63 41.03 3 27 7 2241.82 -26.76 100.00 156.36 3523.5 60.72 19 36 23 175.35 18 27 39 4123.51 6.31 162.92 100.00 12.31 -26.86 1382.5 5 23 2 107.94 -29.60 20.42 178.93 4 49 59 1982.52 110.00 20 27 12 4.40 142.35 3355.6 56.84 173.82 8.83 148.65 19 21 16 3955.57 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2132.9 SR 169.2 SS 795.3 CRT .9924 CRS -.9826 CST -.9720 SGT 4731.6 SGR 290.5 SG3 289.7 TDE 1.3438 TRA -.6914 TC3-5.5874 BAU 1.0027 RRT -.3947 RRF -.3942 RTF .9269 ROE .1077 RRA -.0293 RC3 .3168 FAU .05974 LSA 2275.7 MSA 175.9 SSA 16.2 EL1 2139.5 EL2 20.7 ALF 4.50 FOE 1.1130 FRA .2923 FC3-3.8593 BSP 14907 BOE 1.3481 BRA .6920 BC3 5.5963 FSP -954 SGB 4740.5 R23 .0296 R13 -.9270

SGI 4733.0 SG2 266.8 THA 178.61

```
LAUNCH DATE DEC 9 1965
                                                                      FLIGHT TIME 158.00
   HELIOCENTRIC CONIC
                                                                     DISTANCE 463.500
    RL 147.33 LAL .00 LOL 76.71 VL 27.156 GAL -2.32 AZL 86.59 MCA 225.14 SMA 124.71 ECC .18568 INC 3.4142 V1 30.240 RP 108.93 LAP -2.42 LOP 301.80 VP 37.047 GAP 7.87 AZP 92.41 TAL 190.28 TAP 55.42 RCA 101.56 APO 147.87 V2 34.787 RC 148.138 GL 26.26 GP -.19 ZAL 104.01 ZAP 159.23 ETS 358.13 ZAE 130.55 ETE 180.48 ZAC 58.40 ETC 161.74 CLP-159.23
   PLANETOCENTRIC CONIC
     C3 13.340 VHL 3.652 DLA 13.48 RAL 323.80 RAD 6567.5 VEL 11.607 PTH 2.03 VHP 5.387 DPA -17.10 RAP 326.05 ECC 1.2195
     LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    2 1 14 2554.55
                                                 -26.10
                                                              64.20
                                                                          182.79
                                                                                         101.38
                                                                                                      2 43 48
                                                                                                                      1954.6
                                                                                                                                    -24.27
                                                                                                                                                   56.01
                   17 30 5
                                 4333.54
                                                              179.44
                                                                            178.32
                                                                                                     18 42 19
                                                  4.34
                                                                                            61.99
                                                                                                                       3733.5
                                                                                                                                                   172.80
                                                                                                                                        . 56
                    3 29 38 2269.44
                                                 -27.20
                                                               42.96
                                                                            182.53
                                                                                           102.90
                                                                                                      4 7 27
                                                                                                                       1669.4
                                                                                                                                     -25.15
                                                                                                                                                    34.76
                                                                                            60.54 19 52 36
107.06 5 27 11
56.63 20 42 14
       100.00
                   18 44 22
                                 4093.89
                                                  5.32
                                                              161.28
                                                                            177.78
                                                                                                                       3493.9
                                                                                                                                      1.36
                                                                                                                                                   154.74
                    4 53 45 2006.23
                                                 -30.08
                                                               22.10
                                                                            181.65
                                                                                           107.06
                                                                                                                       1406.2
                                                                                                                                     -27.45
                                                                                                                                                    13.89
       110.00
                  19 36 44
                                 3929.86
                                                 7.86
                                                              147.27
                                                                            176.21
                                                                                                                       3329.9
                                                                                                                                      3.42
                                                                                                                                                   141.01
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 4820.5 SGR 303.4 SG3 279.3

RRT -.3575 RRF -.35608 RTF .9264

SGB 4830.0 R23 .0305 R13 -.9264

SGI 4821.7 SG2 283.3 THA 178.71
                                                                                                                   5T 2229.4 SR 182.8 SS 802.3
CRT .9951 CRS -.9765 CST -.9739
     TOE 1.4071 TRA -.5932 TC3-5.7184 BAU 1.0215
    RDE .1159 RRA -.0377 RC3 .3219 FAU .05657
    FOE 1.0921 FRA .3539 FC3-3.6714 BSP 15226
RNF 1.4119 BRA .5944 BC3 5.7275 FSP -924
                                                                                                                   LSA 2370.2 MSA 171.7 SSA 17.1
EL1 2236.9 EL2 18.1 ALF 4.67
LAUNCH DATE DEC 9 1965
                                                                      FLIGHT TIME 160.00
                                                                                                                             APRIVAL DATE MAY IN 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 469.320
    RL 147.33 LAL .00 LOL 76.71 VL 27.109 GAL -1.99 A7L 86.59 HCA 228.30 SMA 124.42 ECC .18728 INC 3.4121 VI 30.240 RP 108.94 LAP -2.55 LOP 304.97 VP 37.011 GAP 8.11 A7P 92.27 TAL 188.68 TAP 56.98 RCA 101.12 APO 147.72 VZ 34.786 RC 150.390 GL 26.21 GP -.17 ZAL 101.44 ZAP 160.35 ETS 358.25 ZAE 130.35 ETE 180.41 ZAC 60.36 ETC 162.22 CLP-160.35
   PLANETOCENTRIC CONIC
    C3 13.327 VHL 3.651 DLA 14.39 RAL 326.31 RAD 6567.5 VEL 11.607 PTH 2.03 VMP 5.517 DPA -16.45 RAP 328.08 ECC 1.2193 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    2 3 15 2585.78
                                                -26.50
                                                              66.40
                                                                           185.63
                                                                                         100.35
                                                                                                       2 46 20
                                                                                                                      1985.4
                                                                                                                                     -24.81
                                                                                                                                                   58.14
                                                                                                    18 59 46
                                4301.88
                                                  3.32
                                                              177.67
                                                                            180.92
                                                                                            61.86
                                                                                                                       3701.9
                                                                                                                                       -.47
                                                                                                                                                   171.04
                  3 32 16 2298.67
19 1 43 4064.22
4 57 43 2031.33
19 52 46 3904.32
                                                                            185.38
       100.00
                                                -27.63
                                                               45.03
                                                                                           101.89
                                                                                                       4 10 35
                                                                                                                       1698.7
                                                                                                                                     -25.71
                                                                                                                                                    36.76
                                                                                                    20 9 28
       100.00
                                                  4.32
                                                              159.64
                                                                            180.37
                                                                                            60.39
                                                                                                                       3464.2
                                                                                                                                       . 35
                                                                                                                                                   .153.11
      110.00
                                                -30.57
                                                               23.89
                                                                            184.54
                                                                                           106.10
                                                                                                       5 31 34
                                                                                                                       1431.3
                                                                                                                                     -28.06
                                                                                                                                                   15.59
                                                                                            56.44 20 57 51
      110.00
                                                 6.91
                                                              145.92
                                                                            178.77
                                                                                                                       3304.3
                                                                                                                                      2.45
                                                                                                                                                   139.67
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
    TOE 1.4738 TRA -.4860 TC3-5.8258 BAU 1.0396
                                                                 SGT 4905.4 SGR 315.7 SG3 269.5
RRT -.3214 RRF -.3283 RTF .9261
SGB 4915.5 R23 .0311 R13 -.9261
                                                                                                                   ST 2328.6 SR 196.3 SS 808.9
CRT .9958 CRS -.9698 CST -.9758
    RDE .1242 RRA -.0461 RC3 .3244 FAU .05354
                                                                                                                   LSA 2467.2 MSA 167.4 SSA 17.9
EL1 2336.8 EL2 18.0 ALF 4.80
    FOE 1.0725 FRA .4124 FC3-3.4783 BSP 15532
    BOE 1.4790 BRA .4881 BC3 5.8349 FSP
                                                                  5G1 4906.4 SG2 298.9 THA 178.81
LAUNCH DATE DEC 9 1965
                                                                     FLIGHT TIME 162.00
                                                                                                                            ARRIVAL DATE MAY 20 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 475.126
   RL 147.33 LAL .00 LOL 76.71 VL 27.063 GAL -1.64 A7L 86.59 MCA 231.47 SMA 124.13 ECC .18903 INC 3.4102 V1 30.240 RP 108.94 LAP -2.67 LOP 308.13 VP 36.976 GAP 8.35 A7P 92.13 TAL 187.06 TAP 58.53 RCA 100.66 APO 147.59 V2 34.785
   RC 152.629 GL 26.11 GP -.16 7AL 98.79 7AP 161.42 ETS 358.38 7AE 130.18 ETE 180.34 7AC 62.36 ETC 162.66 CLP-161.42
  PLANETOCENTRIC CONIC
    C3 13.366 VHL 3.656 DLA 15.29 RAL 328.91 RAD 6567.5 VEL 11.608 PTH 2.03 VHP 5.651 DPA -15'.77 RAP 330.13 ECC 1.2200
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 5 22 2618.69
18 6 42 4270.24
       90.00
                                               -26.89
                                                              68.73
                                                                          188.63
                                                                                          99.24
                                                                                                      2 49 1
                                                                                                                     2018.7
                                                                                                                                    -25.33
                                                                                                                                                   60.41
       90.00
                                                             175.90
                                                                                                    19 17 52
                                                 2.30
                                                                           183.69
                                                                                           61.77
                                                                                                                                                  169.27
                 3 35 3 2329.45
19 19 42 4034.72
5 1 54 2057.73
20 9 21 3879.20
      100.00
                                                -28.04
                                                              47.23
                                                                           188.40
                                                                                         100.81
                                                                                                      4 13 53
                                                                                                                      1729.4
                                                                                                                                    -26.26
                                                                                                                                                   38.88
      100.00
                                                 3.33
                                                             158.02
                                                                           183.12
                                                                                           60.28
                                                                                                   20 26 56
                                                                                                                     3434.7
                                                                                                                                     -.65
                                                                                                                                                  151.49
      110.00
                                                -31.05
                                                              25.80
                                                                           187.61
                                                                                          105.07
                                                                                                      5 36 11
                                                                                                                      1457.7
                                                                                                                                    -28.67
                                                                                                                                                   17.40
                                                                                                  21 14 0
      110.00
                                                5.96
                                                             144.59
                                                                           181.49
                                                                                           56.28
                                                                                                                      3279.2
                                                                                                                                                  138.36
                                                                                                                                      1.49
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                SGT 4986.4 SGR 327.4 SG3 260.1

RRT -.2862 RRF -.2962 RTF ..9259

SGB 4997.1 R23 ..0314 R13 -.9259

SG1 4987.3 SG2 313.6 THA 178.92
    TDE" 1.5438 TRA -.3697 TC3-5.9061 BAU 1.0570
                                                                                                                  ST 2429.6 SR 209.7 55 815.4
   ROE .1327 RRA -.0544 RC3 .3241 FAU .05064
                                                                                                                  CRT .9948 CRS -.9624 CST -.9777
   FDE 1.0546 FRA .4686 FC3-3.2800 BSP 15815
BDE 1.5495 BRA .3737 BC3 5.9150 FSP -865
                                                                                                                 LSA 2566.1 MSA 163.4 55A 18.6
EL1 2438.6 EL2 21.2 ALF 4.91
LAUNCH DATE DEC 9 1965
                                                                     FLIGHT TIME 164.00
  HELIOCENTRIC CONIC
                                                                    DISTANCE 480.916
   RL 147.33 LAL .00 LOL 76.71 VL 27.017 GAL -1.28 AZL 86.59 MCA 234.63 SMA 123.84 ECC .19095 INC 3.4085 V1 30.240 RP 108.94 LAP -2.78 LOP 311.29 VP 36.943 GAP 8.59 AZP 91.97 TAL 185.43 TAP 60.06 RCA 100.19 APO 147.49 V2 34.784 RC 154.855 GL 25.95 GP -.15 ZAL 96.06 ZAP 162.47 ETS 358.50 ZAE 130.03 ETE 180.29 ZAC 64.39 ETC 163.09 CLP-162.47
  PLANETOCENTRIC CONIC
   C3 13.464 VHL 3.669 DLA 16.20 RAL 331.60 RAD 6567.5 VEL 11.612 PTH 2.03 VHP 5.788 DPA -15.05 RAP 332.20 ECC 1.2216
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             2653.22
       90.00
                   2 7 36
                                               -27.24
                                                                         191.60
                                                                                         98.05
                                                                                                      2 51 49
                                                                                                                     2053.2
                                                              71.20
                                                                                                                                                   62.81
                  18 25 57
                                4238.88
                                                             174.15
                                                                                           61.71
                                                                                                     19 36 36
       90.00
                                                 1.29
                                                                           186.63
                                                                                                                      3638.9
                                                                                                                                     -2.50
                                                                                                                                                  167.52
      100.00
                  3 38 0 2361.70
                                                              49.54
                                                                           191.59
                                                                                                      4 17 22
                                               -28.43
                                                                                           99.65
                                                                                                                      1761.7
                                                                                                                                    -26.80
                                                                                                                                                  41.12
                  19 38 14
                                                 2.35
                                                                                                    20 44 59
      100.00
                                4005.64
                                                             156.42
                                                                           186.05
                                                                                           60.19
                                                                                                                      3405.6
                                                                                                                                     -1.64
                                                                                                                                                  149.90
                                               -31.52
                       6 19
                                2085.37
                                                                           190.85
                                                                                                     5 41 4
      110.00
                                                              27.81
                                                                                          103.96
                                                                                                                      1485.4
                                                                                                                                    -29.28
                                                                                                    21 30 39
                                3854.73
                  20 26 24
                                                 5.03
                                                             143.30
                                                                           184.38
                                                                                           56.14
                                                                                                                      3254.7
      110.00
                                                                                                                                      . 55
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 2534.9 SR 223.0 S5 823.0
CRT .9924 CRS -.9546 CST -.9795
   TOE 1.6195 TRA -. 2412 TC3-5.9478 BAU 1.0721
                                                                 SGT 5059.7 SGR 338.3 SG3 250.9
   RDE .1414 RRA -.0625 RC3 .3207 FAU .04770
                                                                 RRT -.2507 RRF -.2625 RTF .9253
                                                                                                                 LSA 2669.6 MSA 159.9 SSA 19.2
EL1 2544.6 EL2 27.3 ALF 4.99
   FOE 1.0402 FRA .5253 FC3-3.0669 8SP 16023
                                                                5GB 5071.0 R23 .0305 R13 -.9254
   BOE 1.6256 BRA .2492 BC3 5.9564 FSP -831
                                                                SG1 5060.4 SG2 327.5 THA 179.04
```

ARRIVAL DATE MAY 24 1966

LAUNCH DATE DEC 9 1965

DISTANCE 486.690 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 26.971 GAL -.91 AZL 86.59 MCA 237.79 SMA 123.56 ECC .19305 INC 3.4068 VI 30.240 RP 108.94 LAP -2.88 LOP 314.45 VP 36.910 GAP 8.84 AZP 91.82 TAL 183.79 TAP 61.58 RCA 99.70 APO 147.41 VZ 34.785 RC 197.067 GL 25.73 GP -.14 ZAL 93.27 ZAP 163.48 ETS 358.62 ZAE 129.91 ETE 180.25 ZAC 66.46 ETC 163.49 CLP-163.48 PLANETOCENTRIC CONIC C3 13.626 VHL 3.691 DLA 17.10 RAL 334.38 RAD 6567.5 VEL 11.619 PTH 2.04 VHP 5.930 OPA -14.31 RAP 334.29 ECC 1.2243 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 9 59 2689.26.08
18 45 43 4209.08
3 41 8 2395.28
19 57 15 3977.28
5 11 0 2114.11
20 43 53 3831.21 96.79 2 54 48 61.68 19 55 51 195.14 2089.2 -26.33 65.33 -27.56 73.79 3608.1 -3.49 165.80 172.43 189.75 90.00 . 30 98.42 4 21 3 60.14 21 3 32 1795.3 -27.32 43.48 -28.79 51.98 194.95 100.00 -2.60 148.34 3377.3 100.00 1.39 154.86 189.14 102.78 5 46 14 56.04 21 47 44 1514.1 -29.89 21.34 -31.98 29.93 194.26 110.00 -.35 3231.2 110.00 4.14 142.07 187.42 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2630.9 SR 236.4 SS 825.0 SCT 5135.8 SGR 348.8 SC3 242.4 RRT - .2180 RRF - .2335 RTF .9260 SGB 5147.6 RZ3 .0316 R13 - .9260 TOE 1.6925 TRA -.1078 TC3-5.9729 BAU 1.0896 CRT .9890 CRS -.9468 CST -.9810 RDE .1506 RRA -.0702 RC3 .3147 FAU .04518 LSA 2762.8 MSA 156.3 SSA 19.7 EL1 2641.3 EL2 34.8 ALF 5.08 FOE 1.0207 FRA .5750 FC3-2.8708 BSP 16342 EL1 2641.3 EL2 34.8 ALF BOE 1.6992 BRA .1287 BC3 5.9811 FSP -810 SG1 5136.4 SG2 340.4 THA 179.15 ARRIVAL DATE MAY 26 1966 LAUNCH DATE DEC 9 1965 FLIGHT TIME 168.00 HELIOCENTRIC CONIC DISTANCE 492.447 RL 147.33 LAL .00 LOL 76.71 VL 26.926 GAL -.52 A7L 86.59 MCA 240.95 SMA 123.28 ECC .19535 INC 3.4053 V1 30.240
RP 108.94 LAP -2.98 LOP 317.62 VP 36.878 GAP 9.09 AZP 91.66 TAL 182.14 TAP 63.09 RCA 99.19 APO 147.36 V2 34.786
RC 159.265 GL 25.44 GP -.13 ZAL 90.43 ZAP 164.46 ETS 358.75 ZAE 129.81 ETE 180.22 ZAC 68.56 ETC 163.86 CLP-164.46 2.04 VHP 6.077 OPA -13.55 RAP 336.39 ECC 1.2281 C3 13.860 VHL 3.723 DLA 17.98 RAL 337.24 RAD 6567.5 VEL 11.630 PTH 2.04 VHP 6.077 DPA -13.55 RAP 336.39 ECC 1.2281 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 19 5 58 4178.13 -.67 170.76 193.02 61.69 20 15 36 3578.1 -4.45 164.12 100.00 3 44 29 2430.07 -29.11 54.51 198.47 97.12 4 24 59 1830.1 -27.82 45.95 100.00 20 16 41 3949.92 .46 153.36 192.40 60.11 21 22 31 3349.9 -3.52 146.83 110.00 5 15 58 2143.84 -32.40 32.15 197.84 101.54 5 51 42 1543.8 -30.47 23.46 110.00 21 1 42 3808.92 3.29 140.90 190.63 55.96 22 5 10 3208.9 -1.20 134.69 C3 13.860 VHL 3.723 DLA 17.98 RAL 337.24 RAD 6567.5 VEL 11.630 PTH HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5205.6 SGR 358.5 SG3 234.2 RRT -.1846 RRF -.2016 RTF .9264 ST 2728.8 SR 249.7 55 829.0 TOE 1.7709 TRA .0364 TC3-5.9559 BAU 1.1050 CRT .9847 CR5 -.9391 CST -.9826 ROE .1603 RRA -.0776 RC3 .3058 FAU .04261 SGB 5217.9 R23 .0304 R13 -.9264 SGI 5206.0 SGZ 352.3 THA 179.27 LSA 2858.7 MSA 153.5 SSA 20.1 EL1 2739.9 EL2 43.4 ALF 5.15 FOE 1.0061 FRA .6239 FC3-2.6618 BSP 16608 EL1 2739.9 EL2 43.4 ALF BOE 1.7782 BRA .0857 BC3 5.9638 FSP -786 ARRIVAL DATE MAY 28 1966 FLIGHT TIME 170.00 LAUNCH DATE DEC 9 1965 DISTANCE 498.185 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 26.881 GAL -.12 AZL 86.60 HCA 244.11 SMA 123.00 ECC .19785 INC 3.4039 V1 30.240 RP 108.93 LAP -3.06 LOP 320.78 VP 36.846 GAP 9.35 AZP 91.49 TAL 180.47 TAP 64.58 RCA 98.66 APO 147.33 V2 34.788 RC 161.449 GL 25.09 GP -.13 TAL 87.55 ZAP 165.41 ETS 358.87 ZAE 129.73 ETE 180.19 ZAC 70.68 ETC 164.21 CLP-165.42 PLANETOCENTRIC CONIC 2.04 VMP 6.229 DPA -12.75 RAP 338.50 ECC 1.2332 C3 14.172 VHL 3.765 DLA 18.83 RAL 340.16 RAD 6567.6 VEL 11.643 PTH ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.73 2 15 14 2765.20 19 26 34 4149.36 94.07 3 1 19 2165.2 202.27 -28.05 79.29 90.00 95.76 4 29 9 60.11 21 41 50 100.23 5 57 28 55.90 22 22 53 162.50 3549.4 -5.36 196.46 90.00 -1.60 169.16 48.51 1865.9 -28.27 3 48 3 2465.88 202.14 -29.38 57.14 100.00 151.93 195.81 3323.9 -4.40 145.40 20 36 26 3923.92 -.42 100.00 100.23 1574.4 -31.04 25.66 5 21 13 2174.39 -32.79 34.44 201.58 110.00 3188.2 -1.99 133.61 21 19 45 3788.18 2.50 193.99 139.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5281.2 SGR 367.5 SG3 226.5 RRT -.1529 RRF -.1719 RTF .9295 SGB 5293.9 R23 .0294 R13 -.9295 SGI 5281.5 SG2 363.2 THA 179.39 ST 2817.3 SR 263.1 55 829.3 TOE 1.8481 TRA .1811 TC3-5.9241 BAU 1.1238 CRT .9800 CRS -.9329 CST -.9844 RDE .1708 RRA -.0844 RC3 .2943 FAU .04057 FOE .9900 FRA .6586 FC3-2.4783 BSP 17022 BDE 1.8560 BRA .1998 BC3 5.9314 FSP -780 LSA 2944.7 MSA 149.4 SSA 20.4 EL1 2829.1 EL2 52.1 ALF 5.23 ARRIVAL DATE MAY 30 1966 FLIGHT TIME 172.00 LAUNCH DATE DEC 9 1965 DISTANCE 503.906 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 26.836 GAL .30 AZL 86.60 MCA 247.27 SMA 122.72 ECC .20058 INC 3.4026 V1 30.240 RP 108.92 LAP -3.14 LOP 323.95 VP 36.816 GAP 9.62 AZP 91.32 TAL 178.80 TAP 66.07 RCA 98.11 APO 147.34 V2 34.791 RC 163.619 GL 24.66 GP -.12 ZAL 84.63 ZAP 166.35 ETS 358.99 ZAE 129.67 ETE 180.17 ZAC 72.83 ETC 164.54 CLP-166.35 PLANETOCENTRIC CONIC C3 14.572 VHL 3.817 DLA 19.65 RAL 343.14 RAD 6567.6 WEL 11.660 PTH 2.05 VHP 6.388 DPA -11.93 RAP 340.63 ECC 1.2398 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 4 55 2204.8 -27.54 73.57 2 18 10 2804.79 -28.20 82.17 206.06 92.64 90.00 19 47 26 4122.09 200.06 61.78 20 56 8 3522.1 -6.23 160.97 -2.47 167.63 90.00 -29.60 59.84 205.96 94.36 4 33 36 1902.5 -28.68 51.16 3 51 54 2502.54 100.00 150.60 60.13 22 1 23 3299.6 -5.22 144,05 199.38 20 56 23 3899.57 -1.25 100.00 5 26 48 2205.60 21 37 58 3769.27 98.87 6 3 34 55.86 22 40 47 1605.6 -31.57 27.94 205.48 -33.15 36.81 110.00 MID-COURSE EXECUTION ACCURACY 3169.3 -2.72 132.62 21 37 58 138.83 1.78 110.00 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 2917.2 SR 276.4 SS 834.6 CRT .9741 CRS -.9237 CST -.9853 LSA 3043.0 MSA 150.7 SSA 20.4 EL1 2929.6 EL2 62.2 ALF 5.28 SGT 5325.1 SGR 375.6 SG3 218.2 TOE 1.9381 TRA .3632 TC3-5.7929 BAU 1.1298 RDE .1818 RRA -.0909 RC3 .2798 FAU .03745 RRT -.1173 RRF -.1354 RTF .9263 SGB 5338.4 R23 .0264 R13 -.9263 SGI 5325.3 SG2 373.0 THA 179.52 RRT -.1173 RRF -.1354 RTF .9263 FOE .9801 FRA .7239 FC3-2.2248 BSP 16922 BOE 1.9466 BRA .3744 BC3 5.7997 FSP -724 SG1 5325.3 SG2 373.0 THA 179.52

FLIGHT TIME 166.00

ARRIVAL CATE JUN 1 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 509.605
   HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 26.791 GAL .74 AZL 86.60 MCA 250.44 SMA 122.45 ECC .20356 INC 3.4013 VI 30.240 RP 108.91 LAP -3.20 LOP 327.12 VP 36.787 GAP 9.90 AZP 91.14 TAL 177.11 TAP 67.55 RCA 97.53 APO 147.38 VZ 34.794 RC 165.775 GL 24.17 GP -.11 ZAL 81.70 ZAP 167.26 ETS 359.11 ZAE 129.63 ETE 180.15 ZAC 75.01 ETC 164.85 CLP-167.26
    PLANETOCENTRIC CONIC
     C3 15.069 VHL 3.882 DLA 20.43 RAL 346.17 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 6.553 DPA -11.09 RAP 342.76 ECC 1.2480
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 21 21 2845.10 -28.30 85.12 209.97 91.16 3 8 46 2245.1 -27.83 76.48
                                                                                                          91.16
                                                                                                                61.86 21 16 41
92.91 4 38 22
60.17 22 21 2
97.47 6 10 1
55.83 22 58 45
                                                                                            203.79
                                                                                                                                                 3496.7
                                                                                                                                                                   -7.03
                                                                                                                                                                                   159.53
         90.00
                      20 8 24
                                       4096.73
                                                            -3.29
                                                                           166.22
                     3 56 2 2539.78
21 16 24 3877.29
5 32 44 2237.26
21 56 12 3752.57
        100.00
                                                                                            209.91
                                                                                                                                                1939.8
                                                                                                                                                                 -29.04
                                                                                                                                                                                   53.87
                                                           -29.76
                                                                             62.60
        100.00
                                                           -2.01
                                                                           149.37
                                                                                            203.08
                                                                                                                                                3277.3
                                                                                                                                                                  -5.96
                                                                                                                                                                                   142.82
                                                                                         203.08
209.52
                                                                                                                                            1637.3 -32.06
        110.00
                                                           -33.45
                                                                             39.23
                                                                                                                                                                                   30.28
        110.00
                                                          1.14
                                                                          137.96
                                                                                            201.12
                                                                                                                                                3152.6
                                                                                                                                                                  -3.35
                                                                                                                                                                                   131.75
                                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SGT 5384.8 SGR 383.2 SG3 210.9 ST 2991.7 SR 289.9 S5 830.1 RRT -.0861 RRF -.1064 RTF .9274 CRT .9665 CR5 -.9165 CST -.9863 SGB 5398.4 R23 .0263 R13 -.9274 LSA 3114.6 MSA 150.3 SSA 20.4 SG1 5384.9 SG2 381.8 TMA 179.65 EL1 3004.9 EL2 71.8 ALF 5.36
     TOE 2.0176 TRA .5368 TC3-5.6751 BAU 1.1445
     ROE .1939 RRA -.0965 RC3 .2635 FAU .03530
    FOE .9620 FRA .7676 FC3-2.0283 BSP 17205
BOE 2.0269 BRA .5454 BC3 5.6812 FSP -707
LAUNCH DATE DEC 9 1965
                                                                                     FLIGHT TIME 176.00
                                                                                                                                                         ARRIVAL DATE JUN 3 1966
                                                                                    DISTANCE 515.281
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 26.747 GAL 1.19 AZL 86.60 MCA 253.60 SMA 122.19 ECC .20679 INC 3.4001 V1 30.240 RP 108.90 LAP -3.26 LOP 330.28 VP 36.759 GAP 10.19 AZP 90.96 TAL 175.43 TAP 69.03 RCA 96.92 APO 147.45 V2 34.798 RC 167.915 GL 23.62 GP -.11 ZAL 78.77 ZAP 168.15 ETS 359.23 ZAE 129.60 ETE 180.14 ZAC 77.20 ETC 165.13 CLP-168.15
   PLANETOCENTRIC CONIC
    C3 15.674 VHL 3.959 DLA 21.17 RAL 349.23 RAD 6567.6 VEL 11.707 PTH 2.06 VHP 6.726 DPA -10.23 RAP 344.89 ECC 1.2579
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               -28.06
                        2 24 49 2685.91
                                                           -28.32
                                                                            88.10
                                                                                         213.99
                                                                                                              89.67
                                                                                                                             3 12 55
                                                                                                                                               2285.9
                                                                                                                                                                                    79.45
                                                                                                                61.95 21 37 15
91.45 4 43 27
60.22 22 40 38
96.04 6 16 49
55.82 23 16 39
                      20 29 21
                                        4073.64
                                                            -4.03
                                                                           164.92
                                                                                            207.65
                                                                                                                                                 3473.6
                                                                                                                                                                   -7.75
                                                                                                                                                                                   158.22
                        4 0 30 2577.37
                                                           -29.86
                                                                           65.39
                                                                                            213.98
                                                                                                                                                 1977.4
                                                                                                                                                                 -29.34
                                                                                                                                                                                    56.62
                                                                      148.28
                     21 36 21 3857.42
                                                           -2.68
                                                                                            206.91
                                                                                                                                                 3257.4
                                                                                                                                                                   -6.62
                                                                                                                                                                                   141.72
                                                                                                                                                               -32.51
                                                                                                                                                1669.2
                     5 39 0 2269.19
22 14 20 3738.35
                                                           -33.71
                                                                             41.69
                                                                                            213.68
                                                                                                                                                                                    32.66
                                                                      137.21
                                                            .59
                                                                                            204.86
                                                                                                                                                3138.4
                                                                                                                                                                  -3.89
                                                                                                                                                                                   131.01
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 5437.9 SGR 390.0 SG3 203.7
RRT -.0541 RRF -.0747 RTF .9284
                                                                                                                                        ST 3061.1 SR 303.2 SS 826.4
CRT .9628 CRS -.9099 CST -.9874
     TOE 2.1004 TRA .7229 TC3-5.5155 BAU .1.1569
     ROE .2069 RRA -.1013 RC3 .2454 FAU .03311
                                                                             SGB 5451.9 R23 . 0243 R13 -.9284 LSA 3181.5 RSA 150.6 SSA 20.2 SG1 5437.9 SG2 389.4 THA 179.78 EL1 3075.0 EL2 81.5 ALF 5.45
    FDE .9469 FRA .8104 FC3-1.8288 BSP 17418
BDE 2.1105 BRA .7299 BC3 5.5210 FSP -685
                                                                                                                                                       ARRIVAL DATE JUN 5 1966
                                                                                   FLIGHT TIME 178.00
LAUNCH DATE DEC 9 1965
                                                                                   DISTANCE 520.933
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 26.704 GAL 1.66 AZL 86.60 HCA 256.76 SMA 121.92 ECC .21031 INC 3.3989 V1 30.240 RP 108.89 LAP -3.31 LOP 333.45 VP 36.731 GAP 10.49 AZP 90.78 TAL 173.73 TAP 70.50 RCA 96.28 APO 147.57 V2 34.803 RC 170.040 GL 23.00 GP -.10 ZAL 75.85 ZAP 169.03 ETS 359.35 ZAE 129.58 ETE 180.14 ZAC 79.41 ETC 165.39 CLP-169.03
   PLANETOCENTRIC CONIC
                                                                                                                 2.07 VMP 6.907 DPA -9.35 RAP 347.04 ECC 1.2699
     C3 16.399 VHL 4.050 DLA 21.84 RAL 352.31 RAD 6567.7 VEL 11.738 PTH
    C3 16.399 VHL 4.050 DLA 21.84 RAL 352.31 RAD 6567.7 VEL 11.738 PTH 2.07 VMP 6.907 DPA -9.35 RAP 347.D4 ECC 1.2699 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 50 7 4053.22 -4.68 163.78 211.63 62.04 21 57 40 3453.2 -8.39 157.06 100.00 4 5 20 2615.04 -29.89 68.19 218.15 89.88 4 48 55 2015.0 -29.58 59.40 100.00 21 56 5 3840.33 -3.26 147.34 210.84 60.27 23 0 5 3240.3 -7.19 140.76 110.00 22 32 15 3726.93 .16 136.62 208.71 55.82 23 34 22 3126.9 -4.33 130.41
                    21 56 5 3840.33 -3.26
5 45 39 2301.20 -33.91
22 32 15 3726.93 .16
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             RGI 5486.2 SGR 396.0 SGS 196.7

RRT -.0221 RRF -.0429 RTF .9295

SGB 5500.5 R23 .0223 R13 -.9295

SGJ 5486.2 SG2 395.9 THA 179.91
                                                                                                                                           ST 3120.9 SR 316.3 SS 820.9
CRT .9571 CRS -.9037 CST -.9884
     TOE 2.1837 TRA .9211 TC3-5.3222 BAU 1.1679
    ROE .2209 RRA -.1051 RC3 .2259 FAU .03100
FOE .9319 FRA .8528 FC3-1.6364 BSP 17618
BOE 2.1949 BRA .9271 BC3 5.3270 FSP -665
                                                                                                                                           LSA 3238.9 MSA 151.7 35A 19.9
                                                                                                                                         ELI 3135.6 EL2 91.2 ALF 5.54
                                                                                    FLIGHT TIME 180.00
LAUNCH DATE DEC 9 1965
                                                                                   DISTANCE 526.559
   HELIOCENTRIC CONIC
    RL 147.33 LAL .00 LOL 76.71 VL 26.660 GAL 2.16 AZL 86.60 HCA 259.93 SMA 121.67 ECC .21414 INC 3.3978 V1 30.240 RP 108.87 LAP -3.35 LOP 336.62 VP 36.705 GAP 10.81 AZP 90.59 TAL 172.04 TAP 71.97 RCA 95.61 APO 147.72 VZ 34.808 RC 172.148 GL 22.34 GP -.10 ZAL 72.95 ZAP 169.89 ETS 359.46 ZAE 129.57 ETE 180.14 ZAC 81.64 ETC 165.62 CLP-169.89
   PLANETOCENTRIC CONIC
     C3 17.260 VHL 4.155 DLA 22.46 RAL 355.39 RAD 6567.7 VEL 11.775 PTH 2.08 VHP 7.097 DPA -8.45 RAP 349.18 ECC 1.2841
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          222.32
                                                                                                                              3 22 14
                                                                                                                                               2367.8
                                                                                                                                                               -28.30
                                                                           94.09
                                                                                                                86.67
         90.00
                        2 32 47 2967.81
                                                          -28.14
                                                                                                                62.13 22 17 47

88.51 4 54 46

60.32 23 19 12

93.12 6 31 33

55.82 23 51 47
                                                                                                                                                3435.8
                                                                                                                                                                   -8.93
                                                                                                                                                                                   156.06
                                                                           162.80
                                                                                            215.69
                      21 10 31
                                        4035.85
                                                           -5.24
         90.00
                                                                                         222.40
                                                                                                                                                2052.5
                                                                                                                                                                 -29.75
                                                                                                                                                                                    62.17
                                                          -29.86
                                                                            70.98
                       4 10 33 2652.53
        100.00
                                                                                                                                                3226.4
                                                                                                                                                                   -7.65
                                                          -3.73
                                                                          146.57
                                                                                           214.86
                      22 15 26
                                      3826.36
        100.00
                                                                                            222.33
                                                                                                                                                1735.1
                                                                                                                                                                 -33.25
                                                                                                                                                                                    37.50
                                                                            46.64
                                                          -34.06
        110.00
                       5 52 40 2333.09
                                                                                                                                                3118.6
                                                                          136.18
                                                                                            212.64
        110.00
                      22 49 49
                                       3718.57
                                                           -.16
                                                                            MID-COURSE EXECUTION ACCURACY
SGT 5529.6 SGR 4D1.3 SG3 190.2
RRT .0104 RRF -.0102 RTF .9306
SGB 5544.1 R23 -.0199 R13 .9306
SGB 5544.1 R23 -.0199 R13 .9306
SGB 5529.6 SG2 4D1.3 THA .04
EL1 3188.6 EL2 100.9 ALF 5.64
   DIFFERENTIAL CORRECTIONS
     TOE 2.2694 TRA 1.1345 TC3-5.0939 BAU 1.1764
     RDE .2360 RRA -.1080 RE3 .2055 FAU .02889
FDE .9183 FRA .8966 FC3-1.4489 BSP 17727
     BDE 2.2816 BRA 1.1396 BC3 5.0980 FSP -640
```

FLIGHT TIME 174.00

ARRIVAL DATE JUN 9 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 532.154
   RL 147.33 LAL .00 LOL 76.71 VL 26.617 GAL 2.67 AZL 86.60 MCA 263.09 SHA 121.41 ECC .21830 INC 3.3966 VI 30.240 RP 108.85 LAP -3.37 LOP 339.79 VP 36.679 GAP 11.14 AZP 90.41 TAL 170.34 TAP 73.44 RCA 94.91 APO 147.92 V2 34.814 RC 174.239 GL 21.62 GP -.10 ZAL 70.08 ZAP 170.74 ETS 359.57 ZAE 129.57 ETE 180.15 ZAC 83.88 ETC 165.84 CLP-170.74
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                   2.09 VHP 7.298 DPA -7.53 RAP 351.33 ECC 1.3007
   C3 18.274 VHL 4.275 DLA 23.01 RAL 358.45 RAD 6567.7 VEL 11.818 PTH
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             226.58
                                                                                                                                           -28.31
                 2 37 22 3008.26
21 30 24 4021.93
4 16 13 2669.56
22 34 14 3815.87
6 0 3 2364.68
23 6 53 3713.50
                                                                                                85.21
                                                                                                             3 27 31
                                                                                                                             2408.3
                                                   -27.94
                                                                  97.03
       90.00
                                                                                                                                                            155.27
                                                                                                  62.21 22 37 26
                                                                                                                              3421.9
                                                                                                                                              -9.36
                                                    -5.68
                                                                  162.02
                                                                               219.84
       90.00
                                                                                                                              2089.6
                                                                                                                                                              64.92
                                                                                                  87.07
                                                                                                                                             -29.85
                                                                               226.72
                                                   -29.76
                                                                  73.72
                                                                                                 60.36 23 37 50
91.67 6 39 28
55.82 24 8 47
      100.00
                                                                                                                                             -A.00
                                                                                                                                                            139.40
                                                                                                                              3215.9
                                                    -4.08
                                                                  146.00
                                                                               218.96
      100.00
                                                                                                                                                             39.92
                                                                                                                              1764.7
                                                                                                                                            -33.54
                                                                            226.78
                                                                  49.11
                                                  -34.15
      110.00
                                                                                                                                                            129.70
                                                                                                                              3113.5
                                                                                                                                              -4.84
                                                                  135.92
                                                                                216.64
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 3208.6 SR 341.4 SS 805.7
CRT .9458 CRS -.8921 CST -.9901
                                                                    SGT 5569.1 SGR 405.8 SG3 183.7
RRT .0421 RRF .0215 RTF .9321
SGB 5583.9 R23 -.0179 R13 .9320
    TOE 2.3509 TRA 1.3563 TC3-4.8488 BAU 1.1854
    ROE .2522 RRA -.1097 RC3 .1846 FAU .02695
                                                                                                                          LSA 3322.1 MSA 156.4 SSA 19.0
EL1 3224.8 EL2 110.4 ALF 5.75
   FOE .9027 FRA .9372 FC3-1.2768 BSP 17912
BOE 2.3644 BRA 1.3608 BC3 4.8523 FSP -621
                                                                    SG1 5569.1 SGZ 405.4 THA .18
                                                                                                                                      ARRIVAL DATE JUN 11 1966
                                                                          FLIGHT TIME 184.00
LAUNCH DATE DEC 9 1965
                                                                         DISTANCE 537.715
   RL 147.33 LAL .00 LOL 76.71 VL 26.575 GAL 3.21 AZL 86.60 MCA 266.26 SMA 121.16 ECC .22283 INC 3.3955 VI 30.240 RP 108.83 LAP -3.39 LOP 342.97 VP 36.655 GAP 11.49 AZP 90.22 TAL 168.65 TAP 74.91 RCA 94.16 APO 148.16 V2 34.821 RC 176.312 GL 20.87 GP -.09 ZAL 67.27 ZAP 171.58 ETS 359.67 ZAE 129.58 ETE 180.16 ZAC 86.14 ETC 166.03 CLP-171.58
  HELTOCENTRIC CONIC
    C3 19.458 VHL 4.411 DLA 23.50 RAL 1.49 RAD 6567.8 VEL 11.868 PTH 2.11 VHP 7.511 DPA -6.60 RAP 353.48 ECC 1.3202 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 Z 42 27 3047.95 -27.68 99.91 230.89 83.70 1 11 E
  PLANETOCENTRIC CONIC
                                                                                                  62.27 22 56 27
85.66 5 7 46
60.39 23 55 51
90.23 6 47 45
55.82 24 25 14
                  21 49 35 4011.82
                                                    -6.00
                                                                  161.45
        90.00
                                                                                                                                                               67.62
                                                                                                                               2125.9
                                                                                                                                               -29.89
                                                                                231.10
                                                   -29.60
                                                                   76.41
                     4 22 20 2725.87
      100.00
                                                                                                                                                              139.02
                                                                  145.62 223.10
51.54 231.29
                                                                                                                               3209.1
                                                                                                                                               -8.22
                 22 52 22 3809.13
6 7 50 2395.85
                                                    -4.31
       100.00
                                                                                                                               1795.8
                                                                                                                                             -33.77
                                                                                                                                                              42.32
                                                   -34.18
       110.00
                                                                                                                               3111.9
                                                                                                                                               -4.90
                                                                                                                                                              129.62
                                                                  135.84
                  23 23 22 3711.92
                                                    -.42
                                                                                220.68
      110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5604.3 SGR 409.5 SG3 177.4
RRT .0738 RRF .0535 RTF .9336
                                                                                                                           ST 3232.6 SR 353.1 SS 795.3
CRT .9402 CRS -.8868 CST -.9908
    TOE 2.4319 TRA 1.5922 TC3-4.5827 BAU 1.1929
    RDE .2694 RRA -.1102 RC3 .1638 FAU .02507
                                                                                                                           LSA 3343.8 MSA 159.7 SSA 18.4
                                                                    SGB 5619.2 R23 -.0158 R13 .9336
    FDE .8874 FRA .9781 FC3-1.1154 BSP 18076
                                                                                                                           ELI 3249.6 EL2 119.6 ALF 5.87
                                                                     SG1 5604.4 SG2 408.4 THA .31
    BOE 2.4467 BRA 1.5960 BC3 4.5856 FSP -603
                                                                                                                                      ARRIVAL DATE JUN 13 1966
                                                                          FLIGHT TIME 186.00
LAUNCH DATE DEC 9 1965
                                                                         DISTANCE 543.238
    RL 147.33 LAL .00 LOL 76.71 VL 26.532 GAL 3.78 AZL 86.61 HCA 269.43 SHA 120.91 ECC .22777 INC 3.3944 VI 30.240 RP 108.81 LAP -3.39 LOP 346.14 VP 36.631 GAP 11.87 AZP 90.03 TAL 166.96 TAP 76.39 RCA 93.37 APO 148.45 V2 34.828 RC 178.366 GL 20.08 GP -.09 TAL 64.51 ZAP 172.42 ETS 359.76 ZAE 129.59 ETE 180.17 ZAC 88.40 ETC 166.20 CLP-172.42
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 20.838 VHL 4.565 DLA 23.91 RAL 4.49 RAD 6567.8 VEL 11.926 PTH 2.12 VHP 7.736 DPA -5.66 RAP 355.62 ECC 1.3429
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 48 3 3086.55 -27.37 102.69 235.24 82.43 3 39 30 2486.5 -28.13 94.10 90.00 22 7 53 4005.86 -6.19 161.11 228.26 62.31 23 14 39 3405.9 -9.85 154.34
                                                                                            82.43 3 39 30
62.31 23 14 39
84.30 5 14 58
60.40 24 13 7
                                                                                                                                               -29.87
                                                                                 235.51
                     4 28 57 2761.23
                                                                    79.02
                                                   -29.39
       100.00
                                                                                                                                               -8.31
                                                                                                                                                              138.87
                                                                                                                               3206.4
                                                                                 227.28
                                                                  145.47
       100.00
                    23 9 41 3806.41
                                                     -4.40
                                                                                                   88.81 6 56 24
55.82 24 41 4
                                                                                                                               1826.5
                                                                                                                                              -33.95
                                                                                 235.85
                    6 15 57 2426.45
23 39 10 3713.95
                                                                    53.93
       110.00
                                                    -34.17
                                                                                                                               3113.9
                                                                                                                                                -4.82
                                                                                                             24 41 4
                                                                                 224.75
                                                     -.34
                                                                  135.94
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 3244.6 SR 364.1 55 784.2
                                                                       SGT 5634.6 SGR 412.5 SG3 171.4
     TOE 2.5117 TRA 1.8414 TC3-4.3009 BAU 1.1988
                                                                                                                           CRT .9348 CRS -.8818 CST -.9915
                                                                      RRT .1056 RRF .0858 RTF .9353
SGB 5649.7 R23 -.0136 R13 .9353
    RDE .2878 RRA -.1094 RC3 .1433 FAU .02326
FDE .8726 FRA 1.0188 FC3 -.9663 BSP 18228
BDE 2.5281 BRA 1.8447 BC3 4.3033 FSP -584
                                                                                                                          LSA 3353.6 MSA 163.4 SSA 17.8
                                                                                                                            EL1 3262.5 EL2 128.6 ALF
                                                                      SG1 5634.8 SG2 410.2 THA
                                                                                                            .45
                                                                                                                                       ARRIVAL DATE JUN 15 1966
                                                                           FLIGHT TIME 188.00
 LAUNCH DATE DEC 9 1965
                                                                          DISTANCE 548.719
    RL 147.33 LAL .00 LOL 76.71 VL 26.491 GAL 4.38 A7L 86.61 MCA 272.60 SMA 120.67 ECC .23314 INC 3.3933 V1 30.240 RP 108.78 LAP -3.39 LOP 349.32 VP 36.809 GAP 12.26 A7P 89.85 TAL 165.27 TAP 77.87 RCA 92.54 APO 148.80 V2 34.836 RC 180.400 GL 19.27 GP -.09 TAL 61.82 TAP 173.25 ETS 359.84 TAE 129.60 ETE 180.19 ZAC 90.67 ETC 166.35 CLP-173.25
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                   -4.71 RAP 357.77 ECC 1.3693
     C3 22.438 VHL 4.737 DLA 24.26 RAL 7.43 RAD 6567.9 VEL 11.992 PTH 2.14 VHP 7.976 DPA
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               3 46 18
                                                                                                                             2523.8
                                                                   105.35
                                                                                 239.61
                                                                                                 81.14
                     2 54 14 3123.75
22 25 11 4004.35
                                                    -27.01
         90.00
                                                                                                             23 31 55
                                                                                                                                3404.3
                                                                                                                                                -9.89
                                                                                                                                                               154.26
                                                                                  232.50
                                                                                                    62.32
                                                                   161.03
                                                    -6.24
         90.00
                                                                                                                                2195.4
                                                                                                                                                -29.80
                                                                                                                                                                72.79
                     4 36 4 2795.44
23 26 2 3807.90
                                                                                  239.95
                                                                                                    83.01
                                                                                                               5 22 39
                                                    -29.14
                                                                    81.53
        100.00
                                                                                                                                                              138.95
                                                                                                    60.40 24 29 30
                                                                                                                                3207.9
                                                                                                                                                -8.26
                                                                                  231.47
                                                                   145.56
        100.00
                                                     -4.35
                                                                                                               7 5 22
                                                                                                                                1856.4
                                                                                                                                                               47.02
                     6 24 25 2456.42
23 54 10 3719.68
                                                                                  240.43
                                                                                                    67.43
                                                   -34.10
                                                                     56.27
        110.00
                                                                                                    55.82 24 56 9
                                                                                                                                3119.7
                                                                                                                                               -4.60
                                                                                                                                                               130.03
                                                      -.12
                                                                                  228.84
                                                                   136.24
                     23 54 10
        110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 5661.2 SGR 414.7 SG3 165.7
RRT .1380 RRF .1192 RTF .9369
SGB 5676.4 R23 -.0109 R13 .9369
                                                                                                                            ST 3249.5 SR 374.1 SS 773.8
CRT .9294 CRS -.8772 CST -.9922
     TOE 2.5936 TRA 2.1086 TC3-4.0029 BAU 1.2013
     ROE .3072 RRA -.1070 RC3 .1237 FAU .02143
FDE .8599 FRA 1.0613 FC3 -.8267 BSP 18288
                                                                                                                         LSA 3357.0 MSA 167.4 55A 17.2
EL1 3268.0 EL2 137.3 ALF 6.12
                                                                       3C1 5661.5 3G2 410.7 THA .58
     BOE 2.6117 BRA 2.1113 BC3 4.0048 FSP -562
```

FIIGHT TIME 182.00

```
LAUNCH DATE DEC 9 1965
                                                                                              FLIGHT TIME 190.00
                                                                                                                                                                          ARRIVAL DATE JUN 17 1966
                                                                                              DISTANCE 554.151
    HELIOCENTRIC CONIC
      RL 147.33 LAL .00 LOL 76.71 VL 26.450 GAL 5.00 A7L 86.61 MCA 275.77 SMA 120.43 ECC .23901 INC 3.3922 VI 30.240 RP 108.76 LAP -3.37 LOP 352.49 VP 36.587 GAP 12.68 A7P 89.66 TAL 163.60 TAP 79.37 RCA 91.65 APO 149.21 VZ 34.845 RC 182.414 GL 18.44 GP -.08 ZAL 59.21 ZAP 174.07 ETS 359.90 ZAE 129.61 ETE 180.21 ZAC 92.94 ETC 166.47 CLP-174.07
    PLANETOCENTRIC CONTC
      C3 24.290 VHL 4.929 DLA 24.54 RAL 10.31 RAD 6568.0 VEL 12.069 PTH 2.16 VHP 8.232 DPA -3.75 RAP 359.92 ECC 1.3998 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        17.87 243.99 79.94 3 53 41

17.87 243.99 79.94 3 53 41

11.21 236.74 62.30 23 48 6

13.93 244.39 81.78 5 30 50

15.88 235.65 60.37 24 44 54

8.55 245.03 86.09 7 14 38

16.73 232.91 55.82 1 14 24

MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             2559.3
                                                                                                                                                                                -27.73
                        3 1 2 3159.29
22 41 18 4007.53
                                                                 -26.61
           90.00
                                                                                    107.87
                                                                                                                                                                                                       99.39
           90.00
                                                                  -6.14
                                                                                    161.21
                                                                                                                                                                 3407.5
                                                                                                                                                                                    -9.80
                                                                                                                                                                                                       154.44
                        4 43 41 2626.32
23 41 20 3613.73
         100.00
                                                                 -26.84
                                                                                     83.93
                                                                                                                                                                 2228.3
                                                                                                                                                                                   -29.68
                                                                                                                                                                                                        75.23
         100.00
                                                                  -4.15
                                                                                    145.88
                                                                                                                                                                 3213.7
                                                                                                                                                                                    -8.07
                                                                                                                                                                                                       139.28
                         6 33 12 2485.69 -33.99
0 12 14 3729.14 .24
         110.00
                                                                                     58.55
                                                                                                                                                                 1885.7
                                                                                                                                                                                  -34.15
                                                                                                                                                                                                        49.31
                                                                   .24
         110.00
                                                                                    136.73
                                                                                                                                                                3129.1
                                                                                                                                                                                    -4.24
                                                                                                                                                                                                       130.52
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                        SCT 5682.8 SGR 416.2 SG3 160.1
RRT .1698 RRF .1515 RTF .9390
SGB 5698.0 R23 -.0089 R13 .9390
SGI 5683.2 SG2 410.1 THA .72
      TOE 2.6708 TRA 2.3877 TC3-3.7057 BAU 1.2039
                                                                                                                                                            ST 3238.9 SR 382.9 SS 761.4
CRT .9240 CRS -.8727 CST -.9928
     ROE .3276 RRA -.1031 RC3 .1052 FAU .01976
FDE .8458 FRA 1.1024 FC3 -.7041 83P 18422
BDE 2.6908 BRA 2.3899 BC3 3.7072 FSP -545
                                                                                                                                                          LSA 3344.7 MSA 171.6 SSA 16.6
EL1 3258.2 EL2 145.6 ALF 6.25
LAUNCH DATE DEC 9 1965
                                                                                              FLIGHT TIME 192.00
                                                                                                                                                                          ARRIVAL DATE JUN 19 1966
   HELIOCENTRIC CONIC
                                                                                              DISTANCE 559.527
     RL 147.33 LAL .00 LOL 76.71 VL 26.409 GAL 5.67 AZL 86.61 MCA 278.94 SMA 120.20 ECC .24541 INC 3.3910 V1 30.240 RP 108.73 LAP -3.35 LOP 355.67 VP 36.566 GAP 13.13 AZP 89.47 TAL 161.94 TAP 80.88 RCA 90.70 APO 149.69 V2 34.854 RC 184.407 GL 17.60 GP -.08 ZAL 56.88 ZAP 174.89 ETS 359.93 ZAE 129.62 ETE 180.23 ZAC 95.22 ETC 166.57 CLP-174.89
    PLANETOCENTRIC CONIC
     C3 26.433 VHL 5.141 DLA 24.76 RAL 13.10 RAD 6568.1 VEL 12.158 PTH
                                                                                                                                                                    -2.78 RAP
                                                                                                                               2.18 VHP 8.506 OPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       3 8 28 3192.96
22 56 10 4015.57
4 51 49 2859.79
23 55 31 3823.97
6 42 16 2514.23
0 25 29 3742.30
                                                                                      10.25 240.37 78.82 4 1 41
61.66 240.95 62.25 24 5 5
86.21 248.84 80.62 5 39 28
46.44 239.81 60.33 24 59 15
60.76 249.64 84.79 7 24 10
37.42 236.97 55.82 1 27 51
HID-COURSE EXECUTION ACCURACY
          90.00
                                                                                                                                                             2593.C
                                                                                                                                                                                  -27.46
                                                                 -26.18
                                                                                   110.25
                                                                                                                                                                                                      101.82
          90.00
                                                                 -5.88
                                                                                    161.66
                                                                                                                                                                 3415.6
                                                                                                                                                                                    -9.55
                                                                                                                                                                                                        154.90
         100.00
                                                                 -28.51
                                                                                     86.21
                                                                                                                                                                 2259.8
                                                                                                                                                                                   -29.51
                                                                                                                                                                                                         77.55
         100.00
                                                                 -3.81
                                                                                   146.44
                                                                                                                                                                 3224.0
                                                                                                                                                                                    -7.73
                                                                                                                                                                                                       139.85
         110.00
                                                                                     60.76
                                                                                                                                                                                  -34.18
                                                                 -33.63
                                                                                                                                                                1914.2
                                                                                                                                                                                                         51.54
         110.00
                                                                  .75
                                                                                   137.42
                                                                                                                                                                3142.3
                                                                                                                                                                                    -3.74
                                                                                                                                                                                                       131.21
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5699.8 SGR 416.8 SG3 154.7
RRT .2017 RRF .1841 RTF .9412
SG8 5715.0 R23 -.0069 R13 .9412
                                                                                                                                                           ST 3218.9 SR 390.5 S5 749.0
CRT .9187 CRS -.8684 CST -.9934
      TOE 2.7473 TRA 2.6832 TC3-3.4066 BAU 1.2042
     RDE .3489 RRA -.0976 RC3 .0880 FAU .01814
FDE .8325 FRA 1.1441 FC3 -.5943 BSP 18545
BDE 2.7694 BRA 2.6850 BC3 3.4077 FSP -529
                                                                                                                                                          LSA 3323.2 MSA 175.8 SSA 15.9
EL1 3238.8 EL2 153.3 ALF 6.37
                                                                                       SG1 5700.4 SG2 408.2 THA .85
                                                                                             FLIGHT TIME 194.00
                                                                                                                                                                        ARRIVAL DATE JUN 21 1966
LAUNCH DATE DEC 9 1965
                                                                                            DISTANCE 564.838
    RL 147.33 LAL .00 LOL 76.71 VL 26.369 GAL 6.37 AZL 86.61 MCA 282.32 SMA 119.97 ECC .25241 INC 3.3898 V1 30.240 RP 108.70 LAP -3.31 LOP 358.85 VP 36.546 GAP 13.61 AZP 89.29 TAL 160.29 TAP 82.41 RCA 89.69 APO 150.25 VZ 34.863 RC 186.379 GL 16.75 GP -.08 ZAL 54.25 ZAP 175.72 ETS 359.91 ZAE 129.63 ETE 180.25 ZAC 97.50 ETC 166.64 CLP-175.72
    PLANETOCENTRIC CONIC
     C3 28.909 YHL 5.377 DLA 24.91 RAL 15.81 RAD 6568.2 VEL 12.259 PTH 2.21 YHP 8.801 DPA -1.81 RAP
     ENCH AZHTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEZHTH INJETME PO CST TIM INJEEAT INJE LONG
                        3 16 33 3224.61
23 9 40 4028.51
3 0 25 2869.77
0 12 26 3838.58
6 51 35 2542.05
0 37 47 3759.07
                                                                                               252.74
                                                                                                                      77.79 4 10 18 2624.6 -27.17 104.09 62.17 24 16 49 3428.5 -9.15 155.64
                                                                -25.75
                                                                                 112.46
                                                                  -5.47
                                                                                  162.39
                                                                                                     245.12
                                                                                                                           79.53 5 48 34
60.27 1 16 25
83.53 7 33 55
55.84 1 40 26
         100.00
                                                                -28.16
                                                                                     88.37
                                                                                                     253.28
                                                                                                                                                               2289.8
                                                                                                                                                                                   -29.32
                                                                                                                                                                                                       79.76
                                                                                                     243.93
                                                                                                                                                                3238.6
                                                                                                                                                                                    -7.25
                                                                                                                                                                                                      140.67
        100.00
                                                                  -3.31
                                                                                  147.25
                                                                                                                                                                                   -34.17
        110.00
                                                                -33.64
                                                                                     62.91
                                                                                                     254.23
                                                                                                                                                               1942.0
                                                                                                                                                                                                       53.71
                                                                                                                                                                3159.1
                                                                                                                                                                                  -3.10
        110.00
                          0 37 47
                                           3759.07
                                                                 1.39
                                                                                  138.30
                                                                                                     241.00
                                                                                                                                                                                                      132.09
                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 5712.4 SGR 416.8 SG3 149.5
RRT .2338 RRF .2167 RTF .9435
SGB 5727.5 R23 -.0052 R13 .9435
     TOE 2.8238 TRA 2.9974 TC3-3.1083 BAU 1.2017
                                                                                                                                                          ST 3190.8 SR 396.8 SS 736.9
    ROE .3711 RRA -.0902 RC3 .0724 FAU .01657
FDE .8202 FRA 1.1872 FC3 -.4963 83P 18643
BDE 2.8481 BRA 2.9988 BC3 3.1092 FSP -513
                                                                                                                                                         CRT .9133 CRS -.8642 CST -.9940
                                                                                                                                                          LSA 3293.8 MSA 180.0 SSA 15.3
EL1 3211.3 EL2 160.6 ALF 6.50
                                                                                        SG1 5713.2 SG2 405.1 THA .98
                                                                                             FLIGHT TIME 196.00
                                                                                                                                                                         ARRIVAL DATE JUN 23 1966
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 570.075
    RL 147.33 LAL .00 LOL 76.71 VL 26.329 GAL 7.12 AZL 86.61 MCA 285.29 SMA 119.74 ECC .26007 INC 3.3887 VI 30.240 RP 108.67 LAP -3.27 LOP 2.03 VP 36.527 GAP 14.13 AZP 89.11 TAL 158.67 TAP 83.96 RCA 88.60 APO 150.88 VZ 34.873 RC 188.330 GL 15.90 GP -.08 ZAL 51.90 ZAP 176.54 ETS 359.82 ZAE 129.63 ETE 180.27 ZAC 99.77 ETC 166.68 CLP-176.55
   PLANETOCENTRIC CONIC
    C3 31.773 VHL 5.637 DLA 25.01 RAL 18.42 RAD 6568.3 VEL 12.375 PTH
                                                                                                                              2.23 VHP 9.116 DPA
    C3 31.773 VML 5.637 DLA 25.D1 RAL 18.42 RAD 6568.3 VEL 12.375 PTM 2.23 VMP 9.118 DPA -.83 RAP 6.34 ECC 1.9229

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 25 15 3254.20 -25.31 114.52 257.10 76.85 4 19 29 2654.2 -26.87 106.20

90.00 23 21 48 4046.33 -4.90 163.39 249.24 62.08 24 29 14 3446.3 -8.60 156.66

100.00 5 9 27 2918.28 -27.79 90.41 257.70 78.52 5 58 5 2318.3 -29.09 81.85

100.00 0 24 13 3857.47 -2.68 148.29 248.01 60.22 1 28 31 3257.5 -6.62 141.72

110.00 7 1 1 2569.18 -33.41 65.00 258.81 82.31 7 43 50 1969.2 -34.11 55.83

110.00 0 49 8 3779.33 2.16 139.35 244.99 55.68 1 52 7 3179.3 -2.33 133.15
                                                                                                                                         1 52 7
                                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                     SGT 5722.1 SGR 416.0 SG3 144.7 ST 3158.9 SR 401.5 S5 726.6 RRT .2665 RRF .2500 RTF .9460 CRT .9079 CRS -.8603 CST -.9945 SGB 5737.2 R23 -.0034 R13 .9460 LSA 3260.9 MSA 183.9 SSA 14.7 SG1 5723.2 SG2 400.9 TMA 1.12 EL1 3179.9 EL2 167.2 ALF 6.60
    TOE 2.9036 TRA 3.3342 TC3-2.8114 BAU 1.1945
    RDE .3941 RRA -.0809 RC3 .0585 FAU .01499
FDE .8103 FRA 1.2331 FC3 -.4085 BSP 18647
BDE 2.9302 BRA 3.3352 BC3 2.8120 FSP -494
```

ARRIVAL DATE JUN 25 1966

FLIGHT TIME 198.00 LAUNCH DATE DEC 9 1965 DISTANCE 575.223 HELIOCENTRIC CONIC RL 147.33 LAL .00 LOL 76.71 VL 26.290 GAL 7.91 AZL 86.61 MCA 288.47 SMA 119.52 ECC .26848 INC 3.3875 VI 30.240 RP 108.63 LAP -3.21 LOP 5.22 VP 36.509 GAP 14.69 AZP 88.93 TAL 157.07 TAP 85.54 RCA 87.43 APO 151.61 V2 34.884 RC 190.259 GL 15.05 GP -.08 ZAL 49.66 ZAP 177.38 ETS 359.57 ZAE 129.62 ETE 180.30 ZAC 102.04 ETC 166.71 CLP-177.38 PLANETOCENTRIC CONIC C3 35.090 VHL 5.924 DLA 25.05 RAL 20.92 RAD 6568.4 VEL 12.508 PTH 2.26 VMP 9.462 OPA LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 108.15 261.43 76.00 4 29 13 2681.7 -26.55 3 34 31 3261.71 23 32 31 4068.87 -24.87 116.41 90.00 -7.90 157.95 24 40 20 3468.9 61.97 23 32 31 -4.18 164.66 253.28 90.00 77.58 6 7 57 60.16 1 39 28 2345.3 -28.84 83.82 262.10 5 18 51 2945.34 -27.41 92.33 0 34 48 3880.48 7 10 37 2595.66 3280.5 143.00 -5.85 100.00 -1.90 149.55 252.02 7 53 53 57.89 1995.7 -34.02 -33.15 67.02 263.35 81.14 2 2 54 3202.9 -1.43 55.94 D 59 31 3.06 140.59 248.93 3802.92 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5725.7 SGR 414.5 SG3 139.8 RRT .2985 RRF .2026 RTF .9467 SGB 5740.7 R23 -.0021 R13 .9467 SG1 5727.1 SG2 395.5 THA 1.24 ST 3116.3 SR 404.7 SS 715.7 CRT .9025 CRS -.8565 CST -.9951 TOE 2.9800 TRA 3.6878 TC3-2.5284 BAU 1.1863 ROE .4177 RRA -. 0695 RC3 .0462 FAU .01354 LSA 3217.5 MSA 187.5 SSA 14.1 FOE .7999 FRA 1.2790 FC3 -.3340 BSP 18745 BOE 3.0091 BRA 3.6885 BC3 2.5288 FSP -479 EL1 3137.7 EL2 173.1 ALF 6.71 ARRIVAL DATE JUN 27 1966 FLIGHT TIME 200.00 HELIOCENTRIC CONIC DISTANCE 580.269 RL 147.33 LAL .00 LOL 76.71 VL 26.251 GAL 8.76 AZL 86.61 HCA 291.65 SMA 119.30 ECC .27772 INC 3.3862 VI 30.240 RP 108.60 LAP -3.15 LOP 8.40 VP 36.492 GAP 15.30 AZP 88.75 TAL 155.50 TAP 87.15 RCA 86.17 APO 152.43 V2 34.895 RC 192.167 GL 14.22 GP -.07 ZAL 47.52 ZAP 178.23 ETS 358.94 ZAE 129.60 ETE 180.32 ZAC 104.30 ETC 166.70 CLP-178.23 C3 38.937 VHL 6.240 DLA 25.04 RAL 23.32 RAD 6568.5 VEL 12.661 PTH 2.30 VHP 9.835 DPA 1.10 RAP 10.60 ECC 1.6408 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 44 18 3307.26 -24.43 118.16 265.74 75.23 4 39 25 2707.5 -26.23 109.95 100.00 23 41 52 4095.89 -3.32 166.17 257.25 61.86 24 50 8 3495.9 -7.05 159.48 100.00 5 28 35 2971.02 -27.02 94.14 266.46 76.70 6 18 7 2371.0 -26.58 85.68 100.00 0 44 11 3907.37 -.99 151.03 255.96 60.12 1 49 19 3307.4 -4.95 144.49 110.00 7 20 18 2621.52 -32.86 68.98 267.84 80.01 8 4 0 2021.5 -33.89 59.90 DIFFERENTIAL CORRECTIONS PLANETOCENTRIC CONIC HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5725.0 SGR 412.2 SG3 135.3 RRT .3308 RRF .3153 RTF .9516 SGB 5739.8 R23 -.0009 R13 .9516 SGI 5726.6 SG2 388.9 THA 1.37 ST 3069.4 SR 406.2 55 706.3 CRT .8971 CRS -.8529 CST -.9956 TOE 3.0585 TRA 4.0648 TC3-2.2549 BAU 1.1739 ROE .4420 RRA -.0561 RC3 .0356 FAU .01211 FDE .7912 FRA 1.3274 FC3 -.2694 B9P 18805 LSA 3169.9 MSA 190.6 SSA 13.6 EL1 3091.0 EL2 178.2 ALF 6.79 BDE 3.0902 BRA 4.0652 BC3 2.2552 FSP -464 ARRIVAL DATE JUN 29 1966 FLIGHT TIME 202.00 LAUNCH DATE DEC 9 1965 DISTANCE 585.192 HELIOCENTRIC CONIC RL 147.33 LAL .0D LOL 76.71 VL 26.214 GAL 9.67 A7L 86.62 MCA 294.84 SMA 119.09 ECC .28790 INC 3.3849 V1 30.240 RP 108.57 LAP -3.07 LOP 11.59 VP 36.476 GAP 15.97 AZP 88.58 TAL 153.97 TAP 88.80 RCA 84.80 APO 153.37 VZ 34.906 RC 194.054 GL 13.39 GP -.07 TAL 45.48 TAP 179.09 ETS 356.87 TAE 129.56 ETE 180.35 TAC 106.54 ETC 166.66 CLP-179.09 PLANETOCENTRIC CONIC 2.06 RAP 12.71 ECC 1.7144 C3 43.412 VHL 6.589 DLA 24.98 RAL 25.60 RAD 6568.6 VEL 12.837 PTH 2.34 VHP 10.242 DPA C3 43.412 VHL 6.589 DLA 24.98 RAL 25.60 RAD 6568.6 VEL 12.837 PTH 2.34 VHP 10.242 DPA 2.06 RAP 12.71 ECC 1.7144

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 54 30 3330.98 -24.01 119.77 270.00 74.52 4 50 1 2731.0 -25.91 111.61
90.00 23 49 53 4127.08 -2.31 167.91 261.14 61.77 24 58 40 3527.1 -6.07 161.25
100.00 5 38 34 2995.43 -26.63 95.85 270.77 75.89 6 28 30 2395.4 -28.30 87.45
100.00 0 52 25 3937.86 .05 152.70 259.82 60.11 1 58 3 3337.9 -3.93 146.17
110.00 7 30 0 2646.80 -32.55 70.89 272.29 78.93 8 14 7 2046.8 -33.73 61.65
110.00 1 17 29 3859.26 5.20 143.54 256.62 56.17 2 21 48 3259.3 .72 137.32 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5720.3 SGR 409.2 SG3 130.9 RRT .3631 RRF .3481 RTF .9546 SGB 5734.9 R23 -.0001 R13 .9546 SGI 5722.2 SG2 381.2 THA 1.49 5T 3018.9 SR 406.1 55 698.2 TOE 3.1398 TRA 4.4674 TC3-1.9934 BAU 1.1570 CRT .8918 CRS -.8495 CST -.9961 ROE .4668 RRA -.0403 RC3 .0267 FAU .01072 FOE .7842 FRA 1.3787 FC3 -.2139 BSP 18850 BOE 3.1743 BRA 4.4675 BC3 1.9936 FSP -449 LSA 3119.1 MSA 193.1 SSA 13.0 EL1 3040.7 EL2 182.4 ALF 6.86 ARRIVAL DATE JUL 1 1966 FLIGHT TIME 204.00 LAUNCH DATE DEC 9 1965 DISTANCE 589.969 HELIOCENTRIC CONIC RL 147.35 LAL .00 LOL 76.71 VL 26.177 GAL 10.65 AZL 86.62 MCA 298.02 SMA 118.88 ECC .29915 INC 3.3835 V1 30.240
RP 108.53 LAP -2.99 LOP 14.77 VP 36.460 GAP 16.70 AZP 88.41 TAL 152.49 TAP 90.51 RCA 83.32 APO 154.44 V2 34.918
RC 195.918 GL 12.57 GP -.07 ZAL 43.55 ZAP 179.92 ETS 295.41 ZAE 129.50 ETE 180.38 ZAC 108.77 ETC 166.60 CLP-179.97 PLANETOCENTRIC CONIC C3 48.633 VHL 6.974 DLA 24.87 RAL 27.77 RAD 6568.8 VEL 13.038 PTH 2.38 VMP 10.688 DPA 3.01 RAP 14.82 ECC 1.8004 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 274.22 90.00 4 5 0 3353.03 90.00 0 0 35 4162.03 100.00 5 48 43 3018.65 100.00 0 59 33 3971.65 5 0 33 2753.0 -25.59 113.15 -23.60 121.26 73.89 1 9 57 3562.0 -4.96 163.22 169.86 264.93 61.71 -1.19 6 39 2 2 5 45 2418.7 -28.02 89.11 97.46 275.02 75.12 -26.23 3371.6 -2.79 148.03 154.55 263.60 60.13 1.19 8 24 12 2071.5 -33.54 63.76 72.74 276.66 77.88 7 39 40 2671.52 -32.21 110.00 3291.5 1.96 130.00 145.24 260.36 56.35 1 25 5 110.00 3891.54 6.42 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5711.0 SGR 405.6 SG3 126.7 RRT .3957 RRF .3813 RTF .9579 SGB 5725.4 R23 .0007 R13 .9579 SGI 5713.3 SG2 372.4 THA 1.62 ST 2966.7 SR 404.3 SS 692.7 CRT .8866 CRS -.8466 CST -.9966 LSA 3067.0 MSA 194.9 SSA 12.5 EL1 2988.4 EL2 185.7 ALF 6.92 TOE 3.2258 TRA 4.8997 TC3-1.7420 BAU 1.1327 ROE .4920 RRA -.0220 RC3 .0195 FAU .00931 FOE .7801 FRA 1.4344 FC3 -.1657 BSP 18820 BOE 3.2631 BRA 4.8998 BC3 1.7421 FSP -433

ARRIVAL DATE JUL 3 1966

LAUNCH DATE DEC 9 1965

```
DISTANCE 594.570
    HELIOCENTRIC CONIC
     RL 147.33 LAL .00 LOL 76.71 VL 26.140 GAL 11.71 AZL 86.62 MCA 301.21 SHA 118.68 ECC .31161 INC 3.3820 V1 30.240 RP 108.49 LAP -2.89 LOP 17.96 VP 36.446 GAP 17.50 AZP 88.25 TAL 151.06 TAP 92.27 RCA 81.70 APO 155.66 V2 34.930 RC 197.761 GL 11.78 GP -.07 ZAL 41.73 ZAP 179.13 ETS 186.41 ZAE 129.42 ETE 180.40 ZAC 110.97 ETC 166.50 CLP 179.13
    PLANETOCENTRIC CONIC
     C3 54.749 VHL 7.399 DLA 24.73 RAL 29.81 RAD 6569.0 VEL 13.271 PTH 2.42 VMP 11.178 DPA 3.95 RAP 16.90 ECC 1.9010 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00 4 15 44 3373.55

90.00 0 6 9 4200.36

100.00 5 58 58 3040.75

100.00 1 5 36 4008.40

110.00 7 49 16 2695.67

110.00 1 31 48 3926.24
                                                                                                           278.37
                                                                                                                                  73.31 5 11 58
61.68 1 16 9
                                                                                                                                                                                               -25.28
                                                                                                                                                                             2773.6
                                                                      -23.21
                                                                                          122.63
                                                                                                                                                                              3600.4
                                                                                                                                                                                                     -3.74
                                                                         .05
                                                                                          172.00
                                                                                                              268.62
                                                                                                                                                    6 49 39
2 12 25
8 34 11
2 37 14
                                                                                                                                                       6 49 39
                                                                                                                                                                              2440.7
                                                                                                                                                                                                   -27.72
                                                                                                                                                                                                                         90.69
                                                                                                                                      74.42
                                                                      -25.84
                                                                                           98.98
                                                                                                              279.20
                                                                                                                                                                              3408.4
                                                                                                                                                                                                                       150.05
                                                                        2.44
                                                                                          156.57
                                                                                                              267.29
                                                                                                                                       60.20
                                                                                                                                                                                                   -1.54
                                                                                                                                                                             2095.7
                                                                                                                                                                                                  -33.33
                                                                                                                                                                                                                         65.61
                                                                      -31.85
                                                                                           74.53
                                                                                                              280.96
                                                                                                                                       76.88
                                                                                                                                      56.60
                                                                                                                                                                             3326.2
                                                                                                                                                                                                      3.28
                                                                                                                                                                                                                       140.82
                                                                       7.73
                                                                                          147.08
                                                                                                              264.03
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                               SCT 5700.1 SGR 401.4 SG3 122.7
RRT .4283 RRF .4142 RTF .9613
SGB 5714.2 R23 .0009 R13 .9613
SGI 5702.7 SG2 362.6 THA 1.73
                                                                                                                                                                       ST 2912.6 SR 400.9 SS 688.0
CRT .8815 CRS -.8438 CST -.9971
     TOE 3.3169 TRA 5.3638 TC3-1.5088 BAU 1.1044
     RDE .5177 RRA -.0011 RC3 .0137 FAU .00797 FDE .7767 FRA 1.4930 FC3 -.1260 BSP 18865
                                                                                                                                                                       LSA 3013.1 MSA 195.8 SSA 11.9
                                                                                                                                                                        EL1 2934.1 EL2 187.9 ALF 6.95
     BDE 3.3571 BRA 5.3638 BC3 1.5088 FSP -419
                                                                                                                                                                                        ARRIVAL DATE JUL 5 1966
                                                                                                      FLIGHT TIME 208.00
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 598.958
     RL 147.33 LAL .00 LOL 76.71 VL 26.105 GAL 12.86 A7L 86.62 MCA 304.39 SMA 118.48 ECC .32545 INC 3.3804 V1 30.240 RP 108.45 LAP -2.79 LOP 21.15 VP 36.432 GAP 18.38 AZP 88.09 TAL 149.70 TAP 94.09 RCA 79.92 APO 157.04 V2 34.942 RC 199.580 GL 10.99 GP -.07 ZAL 40.02 ZAP 178.20 ETS 184.08 ZAE 129.31 ETE 180.43 ZAC 113.15 ETC 166.38 CLP 178.20
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 61.946 VML 7.871 DLA 24.54 RAL 31.73 RAD 6569.2 VEL 13.539 PTM 2.47 VMP 11.719 DPA 4.87 RAP 18.97 ECC 2.0195
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 26 35 3392.68 -22.83 123.91 282.44 72.78 5 23 8 2792.7 -24.97 115.89
90.00 0 10 35 4241.65 1.38 174.30 272.21 61.71 1 21 17 3641.6 -2.41 167.68
100.00 6 9 13 3061.77 -25.44 100.42 283.30 73.76 7 0 15 2461.8 -27.42 92.18
100.00 1 10 36 4047.79 3.77 158.74 270.89 60.32 2 18 6 3447.8 -21 152.21
110.00 7 58 43 2719.22 -31.47 76.26 285.16 75.92 8 44 2 2119.2 -33.09 67.41
110.00 1 37 38 3963.11 9.11 149.05 267.61 56.91 2 43 41 3363.1 4.69 142.75
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 5682.7 SGR 396.5 SG3 118.8
RRT .4606 RRF .4471 RTF .9648
SGB 5696.6 R23 .0010 R13 .9648
SGI 5685.7 SG2 351.7 THA 1.85
                                                                                                                                                                        ST 2856.0 SR 395.8 SS 685.7
CRT .8766 CR5 -.8414 CST -.9975
     TOE 3.4131 TRA 5.8610 TC3-1.2898 BAU 1.0682
     RDE .5437 RRA .0225 RC3 .0094 FAU .00661
FDE .7758 FRA 1.5566 FC3 -.0924 85P 18878
BDE 3.4561 BRA 5.8610 BC3 1.2898 FSP -406
                                                                                                                                                                        LSA 2957.2 MSA 195.9 SSA 11.4
                                                                                                                                                                        EL1 2877.1 ELZ 189.1 ALF
                                                                                                                                                                                       ARRIVAL DATE JUL 7 1966
                                                                                                     FLIGHT TIME 210.00
LAUNCH DATE DEC 9 1965
                                                                                                     DISTANCE 603.085
   HELIOCENTRIC CONTC
    RL 147.33 LAL .00 LOL 76.71 VL 26.070 GAL 14.12 AZL 86.62 MCA 307.59 SMA 118.29 ECC .34087 INC 3.3787 V1 30.240
RP 108.41 LAP -2.68 LOP 24.35 VP 36.419 GAP 19.37 AZP 87.94 TAL 148.42 TAP 96.01 RCA 77.97 APO 158.61 V2 34.955
RC 201.376 GL 10.22 GP -.07 ZAL 38.43 ZAP 177.23 ETS 183.39 ZAE 129.16 ETE 180.46 ZAC 115.29 ETC 166.22 CLP 177.23
    PLANETOCENTRIC CONIC

C3 70.463 VHL 8.394 OLA 24.31 RAL 33.52 RAD 6569.4 VEL 13.850 PTH 2.53 VHP 12.320 OPA 5.77 RAP 21.01 ECC 2.1596

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 4 37 28 3410.48 -22.47 125.08 286.42 72.29 5 34 19 2810.5 -24.68 117.11

100.00 6 19 26 3081.72 -25.06 101.78 287.30 73.14 7 10 48 2481.7 -27.13 93.59

100.00 1 14 40 4089.47 5.17 161.04 274.37 60.52 2 22 50 3489.5 1.21 154.50

110.00 8 8 0 2742.08 -31.08 77.93 289.25 75.00 8 53 42 2142.1 -32.83 69.14

110.00 1 42 36 4001.88 10.54 151.14 271.11 57.29 2 49 18 3401.9 6.15 144.79
    PLANETOCENTRIC CONIC
                                                                                            01.78 287.30 73.14 7 10 48
61.04 274.37 60.52 2 22 50
77.93 289.25 75.00 8 53 42
51.14 271.11 57.29 2 49 18
MID-COURSE EXECUTION ACCURACY
SCT 5661.3 SCR 300 0 457
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 5661.3 SCR 390.9 SC3 115.2
RRT .4930 RRF .4799 RTF .9683
SCB 5674.8 R23 .0009 R13 .9683
SCI 5664.6 SC2 339.9 THA 1.96
                                                                                                                                                                       ST 2799.0 SR 389.2 55 685.9
CRT .8720 CRS -.8394 CST -.9979
      TOE 3.5176 TRA 6.3980 TC3-1.0858 BAU 1.0228
     ROE .5700 RRA .0490 RC3 .0082 FAU .00523
FOE .7775 FRA 1.6260 FC3 -.0642 BSP 18888
BOE 3.5635 BRA 6.3982 BC3 1.0858 FSP -394
                                                                                                                                                                        LSA 2901.4 MSA 195.0 SSA 10.9
                                                                                                                                                                        EL1 2819.6 EL2 189.2 ALF 6.95
                                                                                                                                                                                        ARRIVAL DATE JUL 9 1966
                                                                                                      FLIGHT TIME 212.00
LAUNCH DATE DEC 9 1965
                                                                                                     DISTANCE 606.891
    HELIOCENTRIC CONIC
          147.33 LAL .00 LOL 76.71 VL 26.037 GAL 15.50 AZL 86.62 MCA 310.78 SMA 118.11 ECC .35813 INC 3.3768 V1 30.240 108.37 LAP -2.56 LOP 27.54 VP 36.408 GAP 20.47 AZP 87.79 TAL 147.24 TAP 98.02 RCA 75.81 APO 160.41 V2 34.968 203.147 GL 9.47 GP -.07 ZAL 36.97 ZAP 176.21 ETS 183.09 ZAE 128.96 ETE 180.48 ZAC 117.38 ETC 166.03 CLP 176.21
     RL 147.33 LAL
     RC 203.147 GL
    PLANETOCENTRIC CONIC
     C3 80.602 VHL 8.978 DLA 24.05 RAL 35.16 RAD 6569.6 VEL 14.211 PTH 2.59 VHP 12.991 DPA 6.65 RAP 23.02 ECC 2.3265 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                             290.29
                                                                                                                                      71.86
                                                                                                                                                       5 45 24
                                                                                                                                                                            2827.0
                                                                                                                                                                                                -24.40
                                                                                                                                                                                                                     118.24
                                                                      -22.12
                                                                                          126.17
                           4 48 17 3426.98
0 16 18 4331.46
           90.00
                                                                                                                                                    1 20 29
                                                                                                                                                                                                       .49
                                                                                                                                                                                                                       172.69
                                                                                                              279.04
                                                                                                                                       61.98
                                                                                                                                                                              3731.5
                                                                        4.27
                                                                                          179.33
           90.00
                                                                                                                                                                                                   -26.83
                          6 29 32 3100.53
1 17 44 4133.14
                                                                                                                                       72.57
                                                                                                                                                       7 21 12
                                                                                                                                                                              2500.5
                                                                                                                                                                                                                         94.91
                                                                                          103.05
                                                                                                              291.18
                                                                      -24.68
         100.00
                                                                                                                                                                                                                       156.89
                                                                                                                                       60.79
                                                                                                                                                     2 26 37
                                                                                                                                                                              3533.1
                                                                                                                                                                                                     2.68
                                                                        6.63
                                                                                          163.46
                                                                                                              277.75
         100.00
                                                                                                                                                                             2164.1
                                                                                                              293.21
                                                                                                                                       74.14
                                                                                                                                                        9 3 7
                                                                                                                                                                                                   -32.55
                                                                                                                                                                                                                         70.80
                                                                      -30.68
                                                                                            79.52
         110.00
                            8 17 3 2764.15
1 46 42 4042.29
                                                                                                                                                     2 54 5
                                                                                                                                                                                                                       146.93
                                                                                                              274.50
                                                                                                                                       57.76
                                                                                                                                                                             3442.3
                                                                                                                                                                                                      7.67
                                                                      12.02
                                                                                          153.33
         110.00
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                              HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                SGT 5638.4 SGR 384.9 SG3 111.7
RRT .5256 RRF .5132 RTF .9719
                                                                                                                                                                       ST 2744.6 SR 381.2 SS 689.6
CRT .8679 CRS -.8381 CST -.9982
      TDE 3.6367 TRA 6.9843 TC3 -.8948 BAU .9642
     ROE .5968 RRA .0789 RC3 .0043 FAU .00374
FOE .7833 FRA 1.7036 FC3 -.0402 BSP 18794
                                                                                                                                                                      LSA 2849.0 MSA 193.0 SSA 10.3
EL1 2764.6 EL2 188.0 ALF 6.91
                                                                                             SGB 5651.5 R23 .0007 R13 .9719
SG1 5642.0 SG2 327.3 THA 2.06
      BDE 3.6854 BRA 6.9847 BC3 .8948 FSP -380
```

FLIGHT TIME 206.00

```
ARRIVAL DATE JUL' 11 1966
                                                                                      FLIGHT TIME 214.00
LAUNCH DATE DEC 9 1965
    RL 147.33 LAL .00 LOL 76.71 VL 26.004 GAL 17.02 AZL 86.63 MCA 313.97 SMA 117.93 ECC .37751 INC 3.3748 V1 30.240 RP 108.33 LAP -2.43 LOP 30.74 MP 36.397 GAP 21.71 AZP 87.66 TAL 146.18 TAP 100.15 RCA 73.41 APO 162.45 VZ 34.981 RC 204.893 GL 8.74 GP -.07 ZAL 35.63 ZAP 175.14 ETS 182.95 ZAE 128.70 ETE 180.51 ZAC 119.43 ETC 165.81 CLP 175.14
                                                                                      DISTANCE 610.297
    HELIOCENTRIC CONIC
     C3 92.738 VHL 9.831 DLA 23.75 RAL 36.67 RAD 6569.8 VEL 14.632 PTH 2.65 VMP 13.745 DPA 7.50 RAP 24.98 ECC 2.5266
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 58 58 3442.08 -21.80 127.16 294.02 71.46 5 56.20 2842.1 -24.13 119.26
90.00 0 17 38 4379.26 5.79 182.01 282.26 62.23 1 30 37 3779.3 2.03 175.35
100.00 6 39 27 3118.09 -24.32 104.22 294.92 72.06 7 31 25 2518.1 -28.54 96.13
100.00 1 19 50 4178.49 8.13 165.99 280.99 61.13 2 29 28 3578.5 4.21 159.39
    PLANETOCENTRIC CONIC
     C3 92.758 VHL 9.631 DLA 23.75 RAL 36.67 RAD 6569.8 VEL 14.632 PTH 2.65 VMP 13.745 DPA
                                                                                                                                                       7.50 RAP 24.98 ECC 2.5266
                                      2785.24
                                                            -30.28
         110.00
                       8 25 50
                                                                                                                                                                                        149.16
                                                                                                                                 2 58 0
                                                                                                                                                     3464.1
                                                                                                                                                                        9.23
                                                                                                                   58.30
                                                                                               277.79
                                                                              155.63
                                                              13.52
        110.00
                                         4084.10
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                        1 49 56
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ST 2687.7 SR 371.8 85 695.8
CRT .8643 CRS -.8372 CST -.9986
                                                                                 SGT 5608.5 SGR 378.3 SG3 108.4
RRT .5576 RRF .5459 RTF .9755
SGB 5621.3 R23 .0003 R13 .9755
SG1 5612.5 SG2 313.8 THA 2.16
    DIFFERENTIAL CORRECTIONS
      TOE 3.7648 TRA 7.6175 TC3 -.7210 BAU
                                                                  .8941
      RDE .6239 RRA .1119 RC3 .0032 FAU .00222
                                                                                                                                                LSA 2794.6 MSA 190.0 SSA 9.8
     FOE .7914 FRA 1.7884 FC3 -.0207 BSP 18794
BOE 3.8161 BRA 7.6183 BC3 .7210 FSP -369
                                                                                                                                               EL1 2707.0 EL2 185.7 ALF 6.85
                                                                                                                                                              ARRIVAL DATE JUL 13 1966
                                                                                       FLIGHT TIME 216.00
 LAUNCH DATE DEC 9 1965
                                                                                       DISTANCE 613.199
     RE 147.33 LAL .00 LOL 76.71 VL 25.974 GAL 18.71 AZL 86.63 MCA 317.17 SMA 117.77 ECC .39934 INC 3.3725 V1 30.240 RP 108.29 LAP -2.29 LOP 33.93 VP 36.388 GAP 23.11 AZP 87.53 TAL 145.26 TAP 102.43 RCA 70.74 APO 164.79 V2 34.994 RC 206.614 GL 8.03 GP -.07 ZAL 34.44 ZAP 174.01 ETS 182.89 ZAE 128.38 ETE 180.53 ZAC 121.40 ETC 165.56 CLP 174.01
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                                          8.31 RAP 26.89 ECC 2.7683
      C3 107.446 VHL 10.366 DLA 23.41 RAL 38.02 RAD 6570.1 VEL 15.126 PTH 2.72 VHP 14.595 DPA
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                                             297.58
                                                                              128.04
                          5 9 26 3455.66
                                                             -21.50
                                                                                                                                                                                         178.11
           90.00
                                                                                                                                                                          3.62
                                                                                                                                   1 31 45
                                                                                                                                                      3828.5
                                                                                                                     62.58
                                                                               184.80
                                                                                                285.33
                                                                7.35
                                        4428.54
                          0 17 56
                                                                                                                     71.59 7 41 22
61.57 2 31 21
                                                                                                                                                                                          97.25
           90.00
                                                                                                                                                      2534.2
                                                                                                                                                                        -26.26
                         6 49 8 3134.21
1 20 56 4225.22
8 34 19 2805.13
1 52 14 4127.06
                                                                                                                    71.59
                                                                                                298.49
                                                                               105.30
                                                              -23.97
                                                                                                                                                                                         161.97
         100.00
                                                                                                                                                      3625.2
                                                                                                                                                                         5.78
                                                                               168.62
                                                                                                284.09
                                                                9.65
                                                                                                                                                      2205.1
3527.1
         100.00
                                                                                                                                                                       -31.97
                                                                                                                                                                                          73.86
                                                                                                                                   9 21 4
                                                                                                                    72.57
                                                                                                300.63
                                                                                 82.45
                                                              -29.88
          110.00
                                                                                                                                                                        10.82
                                                                                                                                                                                         151.48
                                                                                                                                   3 1 1
                                                                               158.03
                                                                                                280.94
                                                                                                                     58.94
                                                             15.05
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
          110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ST 2631.9 SR 361.0 S5 705.7
CRT .8613 CRS -.8369 CST -.9988
     DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5574.7 SGR 371.1 SG3 105.3
RRT .5894 RRF .5784 RTF .9789
SGB 5587.1 R23 -.0003 R13 .9789
       TOE 3.9099 TRA 8.3097 TC3 -.5615 BAU .8065
       ROE .6514 RRA .1467 RC3 .0029 FAU .00055
FOE .8037 FRA 1.8632 FC3 -.0044 BSP 18770
                                                                                                                                                 LSA 2742.3 MSA 185.9 SSA 9.3
EL1 2650.3 EL2 182.2 ALF 6.77
                                                                                    SG1 5579.0 SG2 299.5 THA 2.25
       BOE 3.9638 BRA 8.3111 BC3 .5615 FSP -358
                                                                                                                                                              ARRIVAL DATE JUL 15 1966
                                                                                        FLIGHT TIME 218.00
  LAUNCH DATE DEC 9 1965
       RL 147.33 LAL .00 LOL 76.71 VL 25.945 GAL 20.61 A7L 86.63 HCA 320.37 SMA 117.61 ECC .42406 INC 3.3699 VI 30.240 RP 108.25 LAP -2.15 LOP 37.13 VP 36.380 GAP 24.70 A7P 87.40 TAL 144.51 TAP 104.89 RCA 67.73 APO 167.48 V2 35.007 RC 208.309 GL 7.33 GP -.07 ZAL 33.40 ZAP 172.78 ETS 182.86 ZAE 127.97 ETE 180.56 ZAC 123.29 ETC 165.29 CLP 172.78
     HELIOCENTRIC CONIC
                                                                                                                                                          9.08 RAP 28.74 ECC 3.0629
      PLANETOCENTRIC CONIC
       C3 125.349 VHL 11.196 DLA 23.03 RAL 39.21 RAO 6570.3 VEL 15.706 PTH 2.79 VHP 15.362 DPA 9.08 RAP 28.74 ECC 3.0629

LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 19 38 3467.47 -21.24 128.81 300.96 70.82 6 17 26 2867.5 -23.66 120.98

90.00 0 17 12 4479.02 8.92 187.68 288.23 63.01 1 31 51 3879.0 5.23 180.94

100.00 6 58 31 3148.63 -23.66 106.26 301.86 71.18 7 51 0 2548.6 -26.01 98.24

100.00 1 20 59 4273.10 11.19 171.34 287.03 62.10 2 32 12 3673.1 7.37 164.64

110.00 8 42 26 2823.54 -29.50 83.75 304.04 71.89 9 29 29 2223.5 -31.69 75.22

110.00 1 53 34 4170.95 16.57 160.52 283.95 59.67 3 3 5 3571.0 12.42 153.87
       C3 125.349 VHL 11.196 DLA 23.03 RAL 39.21 RAD 6570.3 VEL 15.706 PTH 2.79 VHP 15.362 DPA
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ST 2577.2 SR 349.2 55 720.0
CRT .8592 CRS -.8374 CST -.9991
                                                                                    SGT 5537.0 SGR 363.4 SG3 102.3
RRT .6209 RRF .6107 RTF .9822
SG6 5549.0 R23 -.0010 R13 .9822
SG1 5541.7 SG2 284.6 THA 2.34
       DIFFERENTIAL CORRECTIONS
        TDE 4.0764 TRA 9.0702 TC3 -.4160 BAU .6971
                                                                                                                                                  LSA 2692.5 MSA 180.7 SSA 8.7
EL1 2594.7 EL2 177.4 ALF 6.67
        ROE .6795 RRA .1893 RC3 .0034 FAU-.00134
FOE .8210 FRA 1.9903 FC3 .0093 BSP 18723
        BOE 4.1326 BRA 9.0722 BC3 .4160 FSP
                                                                   -348
                                                                                                                                                                ARRIVAL DATE JUL 17 1966
                                                                                          FLIGHT TIME 220.00
   LAUNCH DATE DEC 9 1965
        RELIOCENTRIC CONIC

RL 147.33 LAL .00 LOL 76.71 VL 25.918 GAL 22.74 AZL 86.63 MCA 323.58 SMA 117.46 ECC .45214 INC 3.3669 VI 30.240

RP 108.21 LAP -2.00 LOP 40.34 VP 36.373 GAP 26.53 AZP 87.29 TAL 143.99 TAP 107.56 RCA 64.35 APO 170.57 V2 35.020

RC 209.976 GL 6.64 GP -.06 ZAL 32.54 ZAP 171.46 ETS 182.85 ZAE 127.45 ETE 180.58 ZAC 125.09 ETC 164.99 CLP 171.46
                                                                                          DISTANCE 616.905
       HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC
                                                                                                                                                            9.80 RAP 30.49 ECC 3.4255
        C3 147.382 VHL 12.140 DLA 22.61 RAL 40.21 RAD 6570.6 VEL 16.392 PTH 2.86 VHP 16.667 DPA
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 129.44
                                                                -21.02
                             5 29 30
                                             3477.18
                                                                                                                                                                             6.86
                                                                                                                                                                                            163.64
             90.00
                                                                                                                                                        1030.5
                                                                                                                                     1 30 49
                                                                                                                       63.55
                                                                                 190.64
                                                                                                   290.93
                                                                10.49
                            0 15 19
                                             4530.49
                                                                                                                                                                          -25.79
                                                                                                                                                                                             99.10
             90.00
                                                                                                                                                        2561.0
                                                                                                                                  8 0 15
2 31 58
9 37 28
                                                                                                                       70.83
                                                                                 107.07
                                                                                                   304.99
                                                                -23.39
                                             3161.00
                                                                                                                                                                                            167.37
                           7 7 34
                                                                                                                                                                             8.98
            100.00
                                                                                                                                                        3721.9
                                                                                                                       62.72
                                                                12.73
                                                                                                   289.78
                                                                                 174.15
                                             4321.90
                                                                                                                                                                                             76.44
                            1 19 56
                                                                                                                                                        2240.1
                                                                                                                                                                         -31.42
            100.00
                                                                                                                       71.29
                                                                                                   307.20
                                                               -29.14
                                                                                   84.90
                            8 50 8 2840.10
1 53 51 4215.56
                                                                                                                                                                           14.02
                                                                                                                                                                                            156.34
            110.00
                                                                                                                       60.49
                                                                                                                                     3 4 7
                                                                                                                                                        3615.6
                                                                                 163.09
                                                                                                  286.77
                                                                18.09
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
            110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ST 2525.0 SR 336.3 SS 739.9
        DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5496.8 SGR 355.4 SG3 99.6
RRT .6520 RRF .6427 RTF .9853
         TOE 4.2717 TRA 9.9114 TC3 -.2833 BAU .5584
                                                                                                                                                 CRT .8582 CR5 -.8390 CST -.9993
         ROE .7086 RRA .2342 RC3 .0044 FAU-.00358
FOE .8448 FRA 2.1125 FC3 .0210 BSP 18579
BOE 4.3301 BRA 9.9141 BC3 .2834 FSP -337
                                                                                                                                                LSA 2646.9 MSA 174.4 55A 8.2
EL1 2541.6 EL2 171.6 ALF 6.55
```

SGB 5508.2 R23 -.0016 R13 .9853 5G1 5501.6 5G2 269.2 THA 2.42

```
LAUNCH DATE DEC 10 1965
                                                                                                                                          FLIGHT TIME 70.00
                                                                                                                                                                                                                                                    ARRIVAL DATE FEB 18 1966
          HELIOCENTRIC CONIC
                                                                                                                                        DISTANCE 189.031
           RL 147.31 LAL -.00 LOL 77.73 VL 27.322 GAL -8.79 AZL 86.60 HCA 85.03 SHA 125.76 ECC .22811 INC 3.4003 V1 30.243 RP 107.58 LAP 3.39 LOP 162.75 VP 37.575 GAP -10.27 AZP 89.70 TAL 213.26 TAP 298.28 RCA 97.07 APO 154.44 VZ 35.224 RC 51.018 GL 17.27 GP .42 ZAL 137.31 ZAP 14.37 ETS 357.31 ZAE 148.42 ETE 341.46 ZAC 63.77 ETC 163.27 CLP -14.37
          PLANETOCENTRIC CONIC
            C3 29.114 VHL 5.396 DLA -3.73 RAL 296.13 RAD 6568.2 VEL 12.267 PTM 2.21 VMP 7.047 DPA -14.68 RAP 531.53 ECC 1.4791
            LNCH AZMTH LNCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 162.74
                                   2 20 0 2190.62 -18.98

13 22 38 5066.04 24.00

3 39 36 1933.84 -20.13

14 45 43 4798.05 25.19

4 43 51 1732.72 -23.20

15 57 58 4571.93 28.39
                                                                                                                                                                            111.42 2 56 31
74.51 14 47 4
                  90.00
                                                                                                -18.98
                                                                                                                           39.97
                                                                                                                                                                                                        2 56 31
                                                                                                                                                                                                                                 1590.6 -15.90 32.64
                  90.00
                                                                                                                          224.02
                                                                                                                                                     164.91
                                                                                                                                                                                                                                        4466.D
                                                                                                                                                                                                                                                                     21.64
                                                                                                                                                                                 74.51 14 47 4 4466.0
112.58 4 11 50 1333.8
73.35 16 5 42 4198.0
115.84 5 12 44 1132.7
70.11 17 14 10 3971.9
                                                                                                                             20.60
                100.00
                                                                                                                                                     162.24
                                                                                                                                                                                                                                                              -16.89
22.67
                100.00
                                                                                                                                                 164.53
                                                                                                                 203.93
3.85
185.58
                                                                                                                          203.93
                                                                                                                                                 160.76
                110.00
                                                                                                                                                                                                                                                             -19.53
25.42
                110.00
                                                                                                                                                     163.35
        DIFFERENTIAL CORRECTIONS
                                                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                 SGT 639.2 SGR 397.1 SG3 138.2

RRT -.0151 RRF ..0055 RTF -.6415

SGB 752.5 R23 ..0102 R13 ..6414

SG1 639.2 SG2 397.0 THA 179.13
           TOE -.2105 TRA -.3378 TC3 .4438 BAU .1795
                                                                                                                                                                                                                             ST 248.5 SR 369.0 SS 292.8
CRT .8763 CRS .9707 CST .7539
LSA 515.0 MSA 133.7 SSA 24.8
           ROE -.3471 RRA .0561 RC3 -.1253 FAU .04586
          FDE .4347 FRA -.3979 FC3-1.3636 BSP 1740
BDE .4059 BRA .3424 BC3 .4612 FSP -359
                                                                                                                                                                                                                                ELI 433.1 EL2 102.0 ALF 57.42
   LAUNCH DATE DEC 10 1965
                                                                                                                                         FLIGHT TIME 72.00
                                                                                                                                                                                                                                                    ARRIVAL DATE FEB 20 1966
       HELIOCENTRIC CONIC
                                                                                                                                       DISTANCE 195.839
         RL 147.31 LAL -.00 LOL 77.73 VL 27.473 GAL -8.75 AZL 86.60 MCA 88.27 SMA 126.75 ECC .22099 INC 3.3957 V1 30.243 RP 107.61 LAP 3.39 LOP 185.99 VP 37.678 GAP -9.39 AZP 89.90 TAL 214.73 TAP 303.00 RCA 98.74 APO 154.76 V2 35.216 RC 52.701 GL 17.63 GP .45 ZAL 138.39 ZAP 17.29 ETS 357.52 ZAE 148.43 ETE 341.93 ZAC 64.07 ETC 163.34 CLP -17.29
        PLANETOCENTRIC CONIC
        PLANETOCENTRIC CONIC

C3 28.191 VHL 5.309 DLA -3.60 RAL 294.79 RAD 6568.1 VEL 12.230 PTH 2.20 VHP 6.583 DPA -14.54 RAP 331.83 ECC 1.4639
LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 13 42 2186.62 -18.88 39.72 160.89 111.50 2 50 8 1586.6 -15.79 32.40
90.00 13 18 17 5053.93 23.78 223.20 162.95 74.16 14 42 31 4453.9 21.38 215.35
100.00 3 33 21 1929.65 -20.02 20.33 160.40 112.67 4 5 31 1329.6 -16.77 13.04
110.00 14 41 18 4786.13 24.96 203.12 162.57 72.99 16 1 4 4186.1 22.39 195.27
110.00 4 37 44 1728.09 -23.06 3.56 158.92 115.96 5 6 33 1128.1 -19.38 356.35
110.00 15 53 24 4560.46 28.12 184.80 161.37 69.71 17 9 25
DIFFERENTIAL CORRECTIONS
TOE -.2109 TRA -.3215 TC3 .4676 BAU .1827 SGT 647.4 SGR 396.2 SG3 157.5 ST 250.8 SR 368.2 SS 315.9
       DIFFERENTIAL CORRECTIONS
          TDE -.2109 TRA -.3215 TC3 .4676 BAU .1827
                                                                                                                                5GT 647.4 SGR 396.2 SG3 157.5
RRT -.0133 RRF .0029 RTF -.6475
SGB 759.0 R23 .0108 R13 .6474
                                                                                                                                                                                                                            ST 250.8 SR 368.2 SS 315.9
CRT .8869 CRS .9657 CST .7541
          RDE -.3408 RRA .0518 RC3 -.1283 FAU .05099
         FDE .4915 FRA -.4851 FC3-1.5658 BSP 1771
BDE .4008 BRA .3256 BC3 .4849 FSP -417
                                                                                                                                                                                                                            LSA 528.0 MSA 137.3 SSA 25.2
                                                                                                                                SG1 647.5 SG2 396.2 THA 179.25
                                                                                                                                                                                                                             EL1 434.6 EL2 98.2 ALF 56.96
LAUNCH DATE DEC 10 1965
                                                                                                                                      FLIGHT TIME 74.00
                                                                                                                                                                                                                                                ARRIVAL DATE FEB 22 1966
                                                                                                                                     DISTANCE 202.627
       RL 147.31 LAL -.00 LOL 77.73 VL 27.606 GAL -8.71 AZL 86.61 HCA 91.51 SMA 127.64 ECC .21483 INC 3.3912 V1 30.243
RP 107.63 LAP 3.39 LOP 169.24 VP 37.767 GAP -8.55 AZP 90.09 TAL 216.13 TAP 307.64 RCA 100.22 APO 155.07 VZ 35.208
RC 54.462 GL 17.95 GP .48 ZAL 139.37 ZAP 20.37 ETS 357.67 ZAE 148.72 ETE 342.27 ZAC 64.22 ETC 163.38 CLP -20.36
      PLANETOCENTRIC CONIC
        C3 27.423 VHL 5.237 DLA -3.48 RAL 293.57 RAD 6568.1 VEL 12.198 PTH 2.19 VMP 6.148 DPA -14.45 RAP 331.98 ECC 1.4513
       C3 27.423 VHL 5.237 DLA -3.48 RAL 293.57 RAD 6568.1 VEL 12.198 PTH 2.19 VHP 6.148 DPA -14.45 RAP 331.98 ECC 1.4513 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 59 2183.26 -18.80 39.51 159.23 111.58 2 44.22 1583.3 -15.70 32.20 90.00 13 14 15 5043.53 23.58 222.50 161.20 73.86 14 38 19 4445.5 21.15 214.68 100.00 3 27 42 1926.12 -19.93 20.11 158.74 112.76 3 59 48 1326.1 -16.67 12.83 100.00 14 37 13 4775.91 24.75 202.43 160.81 72.68 15 56 49 4175.9 22.15 194.60 110.00 4 32 12 1724.17 -22.94 3.31 157.27 116.06 5 0 56 1124.2 -19.25 356.12 110.00 15 49 12 4550.62 27.89 184.13 159.61 69.38 17 5 3 3950.6 24.83 176.30 DIEFERBENTIAL COMPACTIONS.
     DIFFERENTIAL CORRECTIONS
                                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
       TOE -.2104 TRA -.3076 TC3 .4852 BAU .1842
                                                                                                                                                                                                                         ST 251.9 SR 366.5 SS 340.8

CRT .8950 CRS .9610 CST .7533

LSA 541.5 MSA 141.6 SSA 25.3

EL1 434.5 EL2 94.8 ALF 56.61
                                                                                                                             SGT 651.8 SGR 394.4 SG3 179.4
RRT -.0112 RRF -.0003 RTF -.6495
SGB 761.8 R23 .0118 R13 .6495
        ROE -.3347 RRA .D481 RC3 -.1304 FAU .05684
       FOE .5571 FRA -.5844 FC3-1,7944 89P 1784
BOE .3953 BRA .3113 BC3 .5024 FSP -484
                                                                                                                              561 651.8 562 394.3 THA 179.39
LAUNCH DATE DEC 10 1965
                                                                                                                                     FLIGHT TIME 76.00
                                                                                                                                                                                                                                                ARRIVAL DATE FEB 24 1966
     HELIOCENTRIC CONIC
                                                                                                                                   DISTANCE 209.392
      RL 147.31 LAL -.00 LOL 77.73 VL 27.722 GAL -8.69 AZL 86.61 MCA 94.75 SMA 128.44 ECC .20952 INC 3.3866 V1 30.243 RP 107.66 LAP 3.38 LOP 172.48 VP 37.845 GAP -7.75 AZP 90.28 TAL 217.43 TAP 312.18 RCA 101.53 APO 155.55 V2 35.200 RC 56.291 GL 18.23 GP .52 ZAL 140.25 ZAP 23.61 ETS 357.78 ZAE 149.32 ETE 342.49 ZAC 64.20 ETC 163.40 CLP -23.61
     PLANETOCENTRIC CONIC
       C3 26.780 VHL 5.175 DLA -3.39 RAL 292.47 RAD 6568.1 VEL 12.172 PTH
      C3 26.780 VHL 5.175 DLA -3.39 RAL 292.47 RAD 6566.1 VEL 12.172 PTH 2.18 VHP 5.742 DPA -14.42 RAP 331.96 ECC 1.4407 DATA CONTROL CONTRO
                                                                                                                                                                                    2.18 VHP 5.742 DPA -14.42 RAP 331.96 ECC 1.4407
                                                                                                                        MID-COURSE EXECUTION ACCURACY
SGT 651.6 SGR 391.5 SG3 204.4
RRT -.0089 RRF -.0044 RTF -.6464
SGB 760.1 R23 .0133 R13 .6463
SGB 760.1 R23 .0135 R13 .6463
SGI 651.6 SGZ 391.5 THA 179.52
EL1 432.8 EL2 92.2 ALF 56.39
     DIFFERENTIAL CORRECTIONS
                                                                                                                       MID-COURSE EXECUTION ACCURACY
       TOE -. 2085 TRA -. 2966 TC3 .4955 BAU .1835
       RDE -.3285 RRA .0450 RC3 -.1315 FAU .06348
      FOE .6323 FRA -.6972 FC3-2.0522 BSP 1776
BOE .3891 BRA .3000 BC3 .5127 FSP -561
```

ARRIVAL DATE FEB 26 1966

LAUNCH DATE DEC 10 1965

DISTANCE 216.132 RL 147.31 LAL -.00 LOL 77.73 VL 27.824 GAL -8.66 AZL 86.62 MCA 97.98 SMA 129.15 ECC .20496 INC 3.3820 VI 30.243 RP 107.69 LAP 3.35 LOP 175.72 VP 37.911 GAP -6.99 AZP 90.47 TAL 218.62 TAP 316.60 RCA 102.68 APO 155.62 V2 35.191 RC 58.184 GL 18.47 GP .56 ZAL 141.02 ZAP 27.04 ETS 357.86 ZAE 150.23 ETE 342.57 ZAC 64.01 ETC 163.39 CLP -27.03 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 26.237 VHL 5.122 DLA -3.30 RAL 291.50 RAD 6568.1 VEL 12.150 PTH 2.18 VMP 5.366 DPA -14.44 RAP 331.76 ECC 1.4318 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1578.1 1 58 19 2176.12 13 7 23 5026.72 -18.67 39.19 156.46 111.69 2 34 37 90.00 73.38 14 31 10 112.88 3 50 8 4426.7 20.76 221.37 158.28 23.26 90.00 12.50 3 18 7 1920.69 14 30 16 4759.38 4 22 50 1718.11 15 42 3 4534.73 1320.7 -16.51 19.77 155.98 -19.78 100.00 72.19 15 49 35 116.22 4 51 28 68.85 16 57 37 21.75 193.54 4159.4 201.32 157.89 100.00 24.41 154.52 -19.05 355.76 1118.1 -22.76 2.94 110.00 3934.7 24.36 183.05 156.67 110.00 27.50 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 247.4 SR 360.7 SS 394.2 CRT .9015 CRS .9524 CST .7420 SGT 646.2 SGR 387.7 SG3 233.1 RRT -.0099 RRF -.0078 RTF -.6392 TOE -.2031 TRA -.2876 TC3 .4998 BAU .1813 ROE -.3221 RRA .0424 RC3 -.1316 FAU .07112 FDE .7155 FRA -.8267 FC3-2.3467 BSP 1781 BDE .3808 BRA .2907 BC3 .5169 FSP -654 LSA 568.4 HSA 151.6 55A 25.2 SG8 753.6 R23 .0177 R13 .6391 EL1 427.9 EL2 90.2 ALF 56.59 5G1 646.2 SG2 387.6 THA 179.47 ARRIVAL DATE FEB 28 1966 FLIGHT TIME 80.00 LAUNCH DATE DEC 10 1965 DISTANCE 222.845 RL 147.31 LAL -.00 LOL 77.73 VL 27.912 GAL -8.63 A7L 86.62 MCA 101.22 SMA 129.77 ECC .20104 INC 3.3774 V1 30.243 RP 107.72 LAP 3.31 LOP 178.96 VP 37.965 GAP -6.26 A7P 90.66 TAL 219.68 TAP 320.90 RCA 103.68 APO 155.85 V2 35.181 RC 60.133 GL 18.68 GP .61 ZAL 141.68 ZAP 30.67 ETS 357.91 ZAE 151.45 ETE 342.49 ZAC 63.61 ETC 163.34 CLP -30.67 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 25.771 VHL 5.076 DLA -3.22 RAL 290.64 RAD 6568.0 VEL 12.130 PTH 2.17 VHP 5.018 DPA -14.53 RAP 331.36 ECC 1.4241 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1576.2 155.53 111.73 2 30 35 -15.51 1 54 19 2176.20 -18.62 39.07 90.00 213.15 15 4 36 5019.77 3 14 9 1918.65 14 27 26 4752.55 4 18 57 1715.80 15 39 8 4528.17 14 28 15 4419.8 20.60 23.13 220.91 157.08 73.19 en no 112.92 3 46 8 71.99 15 46 39 -16.45 12.38 1318.7 154.85 -19.73 19.64 100.00 193.10 21.58 4152.6 24.27 200.87 156.69 100.00 153.39 116.28 4 47 33 68.63 16 54 36 -18.98 355.63 1115.8 -22.69 2.79 110.00 174.86 182.61 155.47 192A . 2 24.19 27.34 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 243.0 SR 356.4 55 423.8 CRT .8990 CRS .9493 CST .7307 LSA 583.4 MSA 157.2 55A 24.6 SGT 634.4 SGR 382.8 SG3 265.0 RRT -.0072 RRF -.0137 RTF -.6206 TOE -.1971 TRA -.2845 TC3 .4919 BAU .1754 ROE -.3155 RRA .0404 RC3 -.1308 FAU .07959 SGB 740.9 R23 .0208 R13 .6205 SG1 634.4 SG2 382.8 THA 179.61 FDE .8125 FRA -.9688 FC3-2.6736 BSP 1715 BDE .3721 BRA .2874 BC3 .5090 FSP -754 EL1 421.9 EL2 89.9 ALF 56.79 ARRIVAL DATE MAR 2 1966 FLIGHT TIME 82.00 LAUNCH DATE DEC 10 1965 DISTANCE 229.528 RL 147.31 LAL -.00 LOL 77.73 VL 27.987 GAL -8.61 AZL 86.63 MCA 104.45 SHA 130.30 ECC .19767 INC 3.3726 V1 30.243 RP 107.75 LAP 3.27 LOP 182.20 VP 38.012 GAP -5.56 AZP 90.84 TAL 220.61 TAP 325.06 RCA 104.54 APO 156.06 V2 35.171 RC 62.133 GL 18.86 GP .66 7AL 142.24 ZAP 34.53 ETS 357.95 ZAE 153.01 ETE 342.22 ZAC 62.99 ETC 163.25 CLP -34.52 HELLOCENTRIC CONIC PLANETOCENTRIC CONIC C3 25.364 VML 5.036 DLA -3.14 RAL 289.92 RAD 6568.0 VEL 12.114 PTH 2.17 VMP 4.698 DPA -14.69 RAP 330.73 ECC 1.4174 LNCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1574.6 -15.46 154.36 111.76 2 27 5 156.05 73.01 14 25 49 1 50 50 2174.64 13 2 15 5013.47 3 10 43 1916.97 14 25 4 4746.37 4 15 36 1713.86 15 36 40 4522.24 -18.58 38.97 90.00 20.46 4413.5 23.00 220.49 90.00 112.96 3 42 40 71.81 15 44 10 116.33 4 44 10 68.44 16 52 2 153.88 1317.0 -16.40 12.28 19.54 -19.68 100.00 21.43 192.71 4146.4 200.45 24.14 100.00 1113.9 -18.91 -22.63 2.67 152.42 110.00 3922.2 24.02 182.21 154.43 110.00 27.19 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 236.0 SR 351.3 S5 454.6 CRT .8908 CRS .9469 CST .7117 LSA 598.9 MSA 162.8 SSA 24.4 SGT 616.1 SGR 376.9 SG3 300.7 RRT -.0050 RRF -.0207 RTF -.5898 SG8 -722.3 R23 .0254 R13 .5898 SG1 616.1 SG2 376.9 THA 179.72 TDE -.1883 TRA -.2864 TC3 .4733 BAU .1663 ROE -.3066 RRA .0389 RC3 -.1289 FAU .08904 FOE .9208 FRA-1.1262 FC3-3.0391 BSP 1617 -867 ELI 413.3 ELZ 91.2 ALF 57.32 BOE .3615 BRA .2890 BC3 .4905 FSP APRIVAL DATE MAR 4 1965 FLIGHT TIME 84.00 LAUNCH DATE DEC 10 1965 DISTANCE 236.182 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 28.050 GAL -8.58 AZL 86.63 MCA 107.68 SMA 130.75 ECC .19479 INC 3.3677 V1 30.243 RP 107.78 LAP 3.21 LOP 185.44 VP 38.049 GAP -4.90 AZP 91.02 TAL 221.41 TAP 329.09 RCA 105.28 APO 156.22 VZ 35.160 RC 64.180 GL 19.02 GP .72 ZAL 142.70 ZAP 38.62 ETS 357.96 ZAE 154.89 ETE 341.70 ZAC 62.15 ETC 163.12 CLP -38.62 PLANETOCENTRIC CONIC 2.17 VHP 4.407 OPA -14.92 RAP 329.87 ECC 1.4114 C3 25.001 VHL 5.000 DLA -3.07 RAL 289.31 RAD 6568.0 VEL 12.099 PTM LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCM TIME
1 47 51 2173.38
13 0 22 5007.62
3 7 46 1915.80
14 23 9 4740.63
4 12 44 1712.24
14 34 40 4516.76 1573.4 31.60 111.79 2 24 5 -18.55 38.89 153.52 90.00 72.65 14 23 50 4407.6 20.32 212.37 220.10 155.17 22.88 90.00 3 39 42 1315.6 -16.36 12.20 19.45 153.04 112.99 -19.65 100.00 71.65 15 42 9 116.37 4 41 16 154.77 4140.6 21.28 192.34 200.07 24.02 100.00 1112.2 355.42 -22.59 2.57 151.60 116.37 110.00 68.26 16 49 57 3916.6 23.86 174.14 181.85 153.54 110.00 27.05 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 224.8 SR 345.5 SS 485.4 CRT .8735 CRS .9445 CST .6793 SGT 592.0 SGR 370.1 SG3 340.5 RRT -.0068 RRF -.0282 RTF -.5459 SGB 698.2 R23 .0342 R13 .5437 SG1 592.0 SG2 370.1 THA 179.60 TOE -.1749 TRA -.2928 TC3 .4442 BAU .1543 ROE -.3013 RRA .0381 RC3 -.1261 FAU .09956 LSA 613.7 MSA 168.1 SSA 24.0 FOE 1.0378 FRA-1.3002 FC3-3.4477 BSP 1507 EL1 401.3 EL2 94.2 ALF 58.45 BOE .3484 BRA .2953 BC3 .4618 FSP -1000

FLIGHT TIME 78.00

```
LAUNCH DATE DEC 10 1965
                                                                                                 FLIGHT TIME 86.00
                                                                                                                                                                              ARRIVAL DATE MAR 6 1966
                                                                                                 DISTANCE 242.804
    HELIOCENTRIC CONIC
      RL 147.31 LAL -.00 LOL 77.73 VL 28.103 GAL -8.55 AZL 86.64 MCA 110.91 SMA 131.14 ECC .19231 INC 3.3626 V1 30.243
RP 107.81 LAP 3.14 LOP 188.67 VP 38.077 GAP -4.27 AZP 91.20 TAL 222.07 TAP 332.98 RCA 105.92 APO 156.35 V2 35.149
RC 66.268 GL- 19.16 GP .78 ZAL 143.06 ZAP 42.96 ETS 357.96 ZAE 157.10 ETE 340.84 ZAC 61.07 ETC 162.94 CLP -42.95
     PLANETOCENTRIC CONIC
      C3 24.669 VHL 4.967 OLA -2.99 RAL 288.81 RAD 6568.0 VEL 12.085 PTH 2.16 VHP 4.144 DPA -15.22 RAP 328.76 ECC 1.4D6D LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        1 45 20 2172.39
12 58 57 5002.03
3 5 16 1914.50
14 21 41 4735.15
4 10 19 1710.89
15 33 8 4511.53
                                                                                                     152.82
                                                                                                                           111.61 2 21 32
72.70 14 22 19
                                                                                                                                              2 21 32
                                                                                                                                                               1572.4
                                                                                                                                                                                     -15.40
           90.00
                                                                                       38.83
                                                                   -16.52
                                                                                                                                                                                                             31.54
           90.00
                                                                   22.77
                                                                                      219.73
                                                                                                        154.41
                                                                                                                                                                     4402.0
                                                                                                                                                                                         20.19
                                                                                                                                                                                                            212.01
                                                                                                                             113.02 5 37 11
71.49 15 40 36
116.40 4 38 50
68.09 16 48 19
         100.00
                                                                                                     152.35
154.02
                                                                  -19.62
                                                                                       19.39
                                                                                                                                                                     1314.5
                                                                                                                                                                                        -16.33
                                                                                                                                                                                                             12.13
         100.00
                                                                  23.90
                                                                                      199.71
                                                                                                                                                                     4135.2
                                                                                                                                                                                        21.15
                                                                                                                                                                                                            191.99
                                                                -22.54
                                                                                                     150.90
         110.00
                                                                                        2.49
                                                                                                                                                                 1110..
3911.5
                                                                                                                                                                                        -18.82
                                                                                                                                                                                                           355.34
         110.00
                                                                   26.92
                                                                                      181.50
                                                                                                         152.79
                                                                                                                                                                                         23.71
                                                                                                                                                                                                            173.61
                                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFFRENTIAL CORRECTIONS
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     TOE -.1593 TRA -.3073 TC3 .3993 BAU .1377
ROE -.2935 RRA .0378 RC3 -.1221 FAU .11082
FOE 1.1694 FRA-1.4825 FC3-3.8892 BSP .1317
BOE .3340 BRA .3097 BC3 .4175 FSP -1138
                                                                                           SGT 563.1 SGR 362.3 SG3 363.3
RRT -.0068 RRF -.0391 RTF -.4692
SGB 669.6 R23 .0446 R13 .4690
SG1 563.2 SG2 362.3 THA 179.57
                                                                                                                                                              ST 212.8 SR 338.8 SS 518.4
CRT .8432 CRS .9436 CST .6316
LSA 631.1 MSA 173.3 SSA 23.5
                                                                                                                                                                EL1 387.4 EL2 100.0 ALF 59.88
LAUNCH DATE DEC 10 1965
                                                                                                 FLIGHT TIME 88.00
                                                                                                                                                                               ARRIVAL DATE MAR 8 1966
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 249.395
     RL 147.31 LAL -.00 LOL 77.73 VL 28.145 GAL -8.51 AZL 86.64 HCA 114.14 SHA 131.45 ECC .19017 INC 3.3573 V1 30.243
RP 107.85 LAP 3.06 LOP 191.90 VP 38.098 GAP -3.66 AZP 91.37 TAL 222.60 TAP 336.74 RCA 106.45 APO 156.44 V2 35.138
RC 68.394 GL 19.29 GP .85 ZAL 143.33 ZAP 47.55 ETS 357.95 ZAE 159.63 ETE 339.50 ZAC 59.74 ETC 162.71 CLP -47.54
    PLANETOCENTRIC CONIC
     C3 24.358 VHL 4.935 DLA -2.92 RAL 288.42 RAD 6568.0 VEL 12.072 PTH 2.16 VHP 3.909 DPA -15.59 RAP 327.40 ECC 1.4009 DRA AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 13 2171.65 -18.50 38.78 152.25 111.82 2 19 25 1571.6 -15.38 31.50 90.00 12 57 59 4996.54 22.66 219.37 153.79 72.55 14 21 15 4396.5 20.06 211.66 100.00 3 3 12 1913.64 -19.59 19.33 151.77 113.04 3 35 6 1313.6 -16.31 12.08 100.00 14 20 41 4729.78 23.78 199.35 153.39 71.33 15 39 31 4129.8 21.01 191.65 110.00 4 8 20 1709.77 -22.51 2.42 150.33 116.43 4 36 49 1109.8 -18.78 355.27 110.00 15 32 3 4506.41 26.79 181.16 152.15 67 03 16.47 0 3006.4
                                                                                                                               71.33 15 39 31
116.43 4 36 49
67.93 16 47 9
                         15 32 3
                                                                  26.79
                                             4506.41
                                                                                      181.16
                                                                                                         152.15
                                                                                                                                                                     3906.4
                                                                                                                                                                                          23.56
                                                                                                                                                                                                            173.49
    DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                                              ST 198.6 SR 331.5 SS 551.4 CRT .7904 CRS .9433 CST .5559 LSA 648.9 MSA 178.1 SSA 23.0 EL1 370.8 EL2 108.8 ALF 62.04
                                                                                           SGT 533.6 SGR 353.6 SG3 429.0
RRT -.0112 RRF -.0523 RTF -.3573
      TOE -.1394 TRA -.3289 TC3 .3396 BAU .1170
      RDE - .2853 RRA .0382 RC3 - .1170 FAU .12280
     FOE 1.3087 FRA-1.6733 FC3-4.3647 BSP 1077
BDE .3175 BRA .3311 BC3 .3592 FSP -1288
                                                                                           SGB 640.1 R23 .0594 R13 .3568
SG1 533.6 SG2 353.5 TMA 179.24
                                                                                               FLIGHT TIME 90.00
                                                                                                                                                                             ARRIVAL DATE MAR 10 1966
LAUNCH DATE DEC 10 1964
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 255.953
    RL 147.31 LAL -.00 LOL 77.73 VL 28,179 GAL -8.47 AZL 86.65 MCA 117.36 SMA 131.69 ECC :18833 INC 3.3518 V1 30.243
RP 107.89 LAP 2.98 LOP 195.13 VP 38.112 GAP -3.08 AZP 91.54 TAL 222.99 TAP 340.36 RCA 106.89 APO 156.49 V2 35.126
RC 70.553 GL 19.40 GP .92 ZAL 143.51 ZAP 52.38 ETS 357.92 ZAE 162.45 ETE 337.41 ZAC 58.18 ETC 162.42 CLP -52.37
   PLANETOCENTRIC CONIC
     C3 24.060 VHL 4.905 OLA -2.84 RAL 288.14 RAD 6568.0 VEL 12.060 PTH 2.16 VHP 3.702 DPA -16.01 RAP 325.79 ECC 1.3960
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               1571.1
                        1 41 30 2171.12
12 57 27 4991.03
3 1 32 1912.99
14 20 7 4724.40
                                                                                                    151.78 111.84 2 17 41
153.27 72.40 14 20 38
                                                                                                                                                                                    -15.37
                                                                                                                                                                                                            31.47
          90.00
                                                                  -18.49
                                                                                      38.75
                                                                                                                                             2 17 41
                                                                                                                                                                                                           211.31
                                                                                                                                                                   4391.0
                                                                                                                                                                                       19.93
          90.00
                                                                   22.55
                                                                                    219.00
                                                                                                     151.31
                                                                                                                            113.05
                                                                                                                                             3 33 25
                                                                                                                                                                   1313.0
                                                                                                                                                                                      -16.29
                                                                                                                                                                                                            12.04
        100.00
                                                                 -19.58
                                                                                      19.29
                                                                                                                            71.18 15 38 52
116.45 4 35 13
67.77 16 46 25
        100.00
                                                                  23.66
                                                                                     198.99
                                                                                                       152.87
                                                                                                                                                                   4124.4
                                                                                                                                                                                       20.88
                                                                                                                                                                                                          191.31
                                                                                                                                                                1108.9
                         4 6 44 1708.85
15 31 24 4501.30
                                                             -22.48
26.66
                                                                                                                                                                                      -18.75
                                                                                                                                                                                                          355.22
                                                                                       2.36
                                                                                                        149.67
        110.00
                                                                                                                                                                   3901.3
                                                                                                                                                                                        23.41
                                                                                                                                                                                                           173.17
                                                                                     180.82
                                                                                                        151.63
        110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 509.9 SGR 344.0 SG3 477.1
RRT -.0247 RRF -.0676 RTF -.1977
SGB 615.1 R23 .0766 R13 .1962
SG1 510.0 SG2 343.8 THA 178.25
                                                                                                                                                              ST 183.1 SR 323.5 SS 582.6
CRT .6978 CRS .9432 CST .4337
LSA 666.4 MSA 182.1 SSA 22.5
     TOE -.1141 TRA -.3571 TC3 .2654 BAU .0925
     RDE -.2767 RRA .0392 RC3 -.1107 FAU .13539
     FDE 1.4498 FRA-1.8700 FC3-4.8714 BSP 802
                                                                                                                                                              EL1 351.6 EL2 120.7 ALF 65.35
     BOE .2993 BRA .3593 BC3 .2875 FSP -1453
                                                                                                                                                                             ARRIVAL DATE MAR 12 1966
LAUNCH DATE DEC 10 1965
                                                                                                FLIGHT TIME 92.00
                                                                                               OISTANCE 262.479
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 28.204 GAL -8.42 AZL 86.65 MCA 120.58 SMA 131.88 ECC .18673 INC 3.3459 V1 30.243 RP 107.92 LAP 2.88 LOP 198.35 VP 38.119 GAP -2.52 AZP 91.70 TAL 223.26 TAP 343.84 RCA 107.25 APO 156.50 V2 35.114 RC 72.741 GL 19.51 GP 1.00 ZAL 143.61 ZAP 57.43 ETS 357.90 ZAE 165.52 ETE 334.04 ZAC 56.40 ETC 162.07 CLP -57.42
   PLANETOCENTRIC CONIC
     C3 23.768 VHL 4.875 DLA -2.75 RAL 287.96 RAD 8568.0 VEL 12.048 PTH 2.15 VHP 3.524 OPA -16.49 RAP 323.95 ECC 1.3912
    C3 23.768 VHL 4.875 DLA -2.75 RAL 287.96 RAD 6568.0 VEL 12.048 PTH 2.15 VHP 3.524 DPA -16.49 RAP 323.95 ECC 1.3912 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 57 23 4985.38 22.43 218.63 152.85 72.25 14 20 28 4385.4 19.79 210.95 100.00 3 0 13 1912.54 -19.57 19.26 150.95 113.06 3 32 5 1312.5 -16.28 12.02 100.00 14 20 0 4718.87 23.54 198.63 152.45 71.05 15 38 39 4118.9 20.73 190.96 110.00 4 5 31 1708.11 -22.46 2.32 149.52 116.47 4 33 59 1108.1 -18.72 355.18 110.00 15 31 11 4496.06 26.52 180.47 151.21 67.60 16 46 7 3896.1 23.25 172.84
                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 171.6 SR 314.9 SS 614.1

CRT .5463 CRS .9444 CST .2534

LSA 686.1 MSA 185.8 SSA 21.8

EL1 331.6 EL2 136.5 ALF 69.86
     TOE -.0853 TRA -.3943 TC3 .1725 BAU .0638
                                                                                          SGT 503.6 SGR 333.6 SG3 525.1
RRT -.0454 RRF -.0880 RTF .0170
     ROE -.2676 RRA .0408 RC3 -.1030 FAU .14784
     FOE 1.5953 FRA-2.0575 FC3-5.3848 BSP 445
BOE .2809 BRA .3964 BC3 .2009 FSP -1614
                                                                                         SGB 604.1 R23 .0867 R13 -.0201
SG1 504.0 SG2 333.0 THA 176.94
```

```
ARRIVAL DATE HAR 14 1966
                                                                                   FLIGHT TIME 94.00
                                                                                   DISTANCE 268.973
   RL 147.31 LAL -.00 LOL 77.73 VL 28.221 GAL -8.37 AZL 86.66 MCA 123.80 SHA 132.01 ECC .18534 INC 3.3396 VI 30.243 RP 107.96 LAP 2.77 LOP 201.58 VP 38.121 GAP -1.99 AZP 91.86 TAL 223.39 TAP 347.20 RCA 107.54 APO 156.48 V2 35.101 RC 74.954 GL 19.61 GP 1.09 ZAL 143.62 ZAP 62.68 ETS 357.87 ZAE 168.75 ETE 328.24 ZAC 54.43 ETC 161.66 CLP -62.67
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.477 VHL 4.845 DLA -2.66 RAL 287.88 RAD 6568.0 VEL 12.036 PTH 2.15 VHP 3.375 DPA -17.01 RAP 321.90 ECC 1.3864
    C3 23.477 VML 4.845 DLA -2.66 RAL 287.88 RAD 6568.0 VEL 12.036 PTH 2.15 VMP 3.375 DPA -17.01 RAP 321.90 ECC 1.3864 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 7 2170.66 -18.48 38.72 151.15 111.84 2 15 18 1570.7 -15.35 31.44 90.00 12 57 44 4979.49 22.31 218.24 152.53 72.09 14 20 43 4379.5 19.65 210.58 100.00 2 59 14 1912.26 -19.56 19.25 150.68 113.07 3 31 6 1312.3 -16.27 12.00 100.00 14 20 18 4713.12 23.41 198.25 152.12 70.87 15 38.52 4113.1 20.99 190.59 110.00 4 4 38 1707.52 -22.44 2.28 149.26 116.49 4 33 5 1107.5 -18.70 355.14 110.00 15 31 24 4490.62 26.38 180.11 150.88 67.43 16 46 14 3890.6 23.09 172.50
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ST 167.0 SR 305.7 SS 641.9
CRT .3154 CRS .9455 CST .0015
LSA 705.3 MSA 188.5 SSA 21.3
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 526.0 SGR 322.6 SG3 572.6
RRT -.0800 RRF -.1118 RTF .2569
    TOE -.0512 TRA -.4382 TC3 .0640 BAU .0357
    RDE -.2582 RRA .0430 RC3 -.0939 FAU .16006
                                                                               368 617.0 R23 .0793 R13 -.2610
361 527.0 S62 321.0 THA 175.53
    FOE 1.7303 FRA-2.2372 FC3-5.9024 BSP 110
                                                                                                                                           EL1 311.8 EL2 155.4 ALF 76.92
    BOE .2632 BRA .4404 BC3 .1136 FSP -1782
                                                                                                                                                        ARRIVAL DATE MAR 16 1966
                                                                                    FLIGHT TIME 96.00
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 275.435
    RL 147.31 LAL -.00 LOL 77.73 VL 28.232 GAL -8.31 AZL 86.67 MCA 127.02 SNA 132.09 ECC .18413 INC 3.3328 V1 30.243 RP 108.00 LAP 2.66 LOP 204.80 VP 38.117 GAP -1.48 AZP 92.01 TAL 223.41 TAP 350.43 RCA 107.77 APO 156.41 V2 35.089 RC 77.191 GL 19.71 GP 1.17 ZAL 143.56 ZAP 68.07 ETS 357.85 ZAE 171.93 ETE 317.02 ZAC 52.33 ETC 161.18 CLP -68.06
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.182 VHL 4.815 DLA -2.56 RAL 287.89 RAD 6567.9 VEL 12.023 PTH 2.15 VHP 3.253 DPA -17.53 RAP 319.69 ECC 1.3815 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               -15.35
                                                                                          150.97
                                                                                                             111.84
                                                                                                                            2 14 35
                     1 38 24 2170.69
12 58 30 4973.27
                                                                            38.72
                                                          -18.48
         90.00
                                                                                                                                                                                  210.18
                                                                                                                           14 21 23
                                                                                                                                                 4373.3
                                                                                                                                                                   19.50
                                                                                            152.28
                                                                                                                71.93
                                                                           217.63
                                                           22.18
         90.00
                                                                                                                                                                                    11.99
                                                                                                                                                                 -16.26
                     2 58 33 1912.14
14 21 2 4707.06
4 4 4 1707.07
15 32 1 4484.90
                                                                                            150.50
                                                                                                              113.07
                                                                                                                            3 30 25
                                                                                                                                                 1312.1
                                                                            19.24
                                                          -19.55
        100.00
                                                                                                              70.70 15 39 29
116.50 4 32 31
67.25 16 46 46
                                                                                         151.88
                                                                                                                                                                 20.43
                                                                                                                                                 4107.1
                                                                           197.85
                                                          23.28
       100.00
                                                                                                                                                                                  355.11
                                                                                         149.08
                                                                                                                                                                  -18.69
                                                                                                                                                1107.1
                                                                             2.25
                                                         -22.43
       110.00
                                                                                                                                                3884.9
                                                                                                                                                                   22.92
                                                                                            150.63
                                                                           179.73
        110.00
                                                           26.23
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 176.0 SR 296.1 SS 668.4
CRT .0384 CRS .9480 CST -.2709
                                                                                SGT 587.4 SGR 311.1 SG3 615.8
RRT -.1210 RRF -.1426 RTF .4770
     TOE -.0138 TRA -.4903 TC3 -.0629 BAU .0323
     ROE -. 2484 RRA .0458 RC3 -. 0833 FAU .17099
                                                                                                                                          LSA 727.0 MSA 190.9 SSA 20.6
EL1 296.2 EL2 175.8 ALF 87.98
                                                                                SGB 664.8 R23 .0634 R13 -.4804
     FDE 1.8593 FRA-2.3867 FC3-6.3859 BSP 470
     BDE .2488 BRA .4925 BC3 .1044 FSP -1927
                                                                                SG1 589.1 SG2 308.0 THA 174.95
                                                                                                                                                        ARRIVAL DATE MAR 18 1966
                                                                                    FLIGHT TIME 98.00
LAUNCH DATE DEC 10 1965
                                                                                    OISTANCE 281.865
    RL 147.31 LAL -.00 LOL 77.73 VL 28.237 GAL -8.24 AZL 86.67 HCA 130.24 SHA 132.12 ECC .18306 INC 3.3254 V1 30.243 RP 108.04 LAP 2.54 LOP 208.01 VP 38.109 GAP -1.00 AZP 92.15 TAL 223.31 TAP 353.55 RCA 107.93 APO 156.31 V2 35.076 RC 79.446 GL 19.81 GP 1.26 ZAL 143.42 ZAP 73.55 ETS 357.83 ZAE 174.52 ETE 292.34 ZAC 50.14 ETC 160.64 CLP -73.55
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 22.879 VHL 4.783 DLA -2.45 RAL 287.98 RAD 6567.9 VEL 12.011 PTH 2.14 VHP 3.158 DPA -18.06 RAP 317.37 ECC 1.3765 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             1570.9
         CH AZMTH LINCH TIME C-1 TIME

90.00 1 37 57 2170.89

90.00 12 59 41 4966.68

100.00 2 58 9 1912.17

100.00 14 22 10 4700.63

110.00 4 3 47 1706.73

110.00 15 33 1 4478.84
                                                                                         150.88
152.12
                                                                                                            111.84 2 14 8
                                                                             38.73
                                                           -18.48
                                                                                                               71.75 14 22 27
113.07 3 30 2
                                                                                                                                                                                   209.77
                                                                                                                                                                   19.34
                                                                                                                                                 4366.7
                                                                           217.40
                                                           22.04
                                                                                                                                                                 -16.26
                                                                                                                                                                                    11.99
                                                                                                                                                 1312.2
                                                                                           150.41
                                                                             19.24
                                                          -19.56
                                                                                                              70.52 15 40 30 4100.6
116.51 4 32 14 1106.7
67.07 16 47 40 3878.8
         100.00
                                                                                         151.72
                                                                                                                                                                                   189.81
                                                                                                                                                                 20.26
                                                          23.13
                                                                            197.43
        100.00
                                                                                                                                                                                   355.09
                                                                                                                                                                 -18.68
                                                                                         148.99
150.46
                                                                              2.23
                                                       -22.42
        110.00
                                                                                                                                                                    22.74
                                                                                                                                                                                   171.77
                                                            26.07
                                                                            179.34
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 199.9 SR 286.0 SS 689.2
CRT -. 2263 CRS .9503 CST -. 5094
                                                                               SGT 686.1 SCR 299.3 SG3 654.4

RRT -.1693 RRF -.1780 RTF .6417

SGB 748.5 R23 .0455 R13 -.6439

SG1 688.3 SG2 294.0 THA 174.83
      TOE .0277 TRA -.5478 TC3 -.2043 BAU .0662
      RDE -.2383 RRA .0490 RC3 -.0711 FAU .18068
                                                                                                                                            LSA 747.9 MSA 192.3 SSA 20.0
      FDE 1.9624 FRA-2.5118 FC3-6.8368 BSP 990
                                                                                                                                            EL1 292.4 EL2 190.5 ALF 105.86
      BOE .2399 BRA .5500 BC3 .2163 FSP -2069
                                                                                                                                                         ARRIVAL DATE MAR 20 1966
                                                                                     FLIGHT TIME 100.00
 LAUNCH DATE DEC 10 1965
                                                                                     DISTANCE 288.264
     RL 147.31 LAL -.00 LOL 77.73 VL 28.235 GAL -8.17 AZL 86.68 HCA 133.45 SHA 132.11 ECC .18211 INC 3.3172 V1 30.243 RP 108.08 LAP 2.41 LOP 211.23 VP 38.096 GAP -.53 AZP 92.28 TAL 223.11 TAP 356.56 RCA 108.05 APO 156.17 V2 35.063 RC 81.719 GL 19.90 GP 1.36 ZAL 143.21 ZAP 79.06 ETS 357.83 ZAE 175.03 ETE 248.56 ZAC 47.92 ETC 160.05 CLP -79.05
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 22.567 VHL 4.750 DLA -2.33 RAL 288.15 RAD 6567.9 VEL 11.998 PTH 2.14 VHP 3.089 DPA -18.55 RAP 315.01 ECC 1.3714
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             111.83 2 13 57
71.57 14 23 55
113.07 3 29 54
70.33 15 41 55
116.51 4 32 14
66.87 16 48 58
                                                                             38.75
                                                                                           150.85
                         1 37 46 2171.23
                                                            -18.49
          90.00
                                                                                                                                                  4359.7
                                                                                                                                                                    19.17
                                                                                                                                                                                    209.32
                                                                             216.94
                                                                                             152.03
                                                            21.89
                      13 1 16 4959.66
          90.00
                                                                                                                                                  1312.3
                                                                                                                                                                   -16.27
                                                                                                                                                                                     12.00
                         2 58 2 1912.33
                                                                                             150.39
                                                            -19.56
                                                                              19.25
         100.00
                                                                                                                                                                   20.09
                                                                                                                                                                                    189.38
                                                                                                                                                  4093.8
                       14 23 41 4693.79
4 3 47 1706.49
                                                                                             151.62
                                                             22.98
                                                                            196.98
         100.00
                                                                                                                                                  1106.5
                                                                                                                                                                   -18.67
                                                                                                                                                                                    355.08
                                                            -22.41
                                                                               2.22
                                                                                             148.98
         110.00
                                                                                                                                                                   22.54
                                                                                                                                                                                    171.37
                                                                                                                                                  3872.4
                                                            25.90
                                                                             178.91
                                                                                             150.36
                       15 34 25
                                         4472.39
         110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                            SGT 817.6 SGR 287.4 SG3 684.8 ST 237.6 SR 275.6 SS 707.5 RRT -.2204 RRF -.2214 RTF .7509 CRT -.4258 CRS .9538 CST -.6708 SGB 866.6 R23 .0349 R13 -.7523 LSA 771.5 MSA 193.3 SSA 19.2 SG1 820.3 SG2 279.4 THA 174.99 ELI 309.4 ELZ 191.5 ALF 125.36
       TOE .0714 TRA -.6108 TC3 -.3607 BAU .1102
      RDE -.2279 RRA .0525 RC3 -.0574 FAU .18798
      FOE 2.0486 FRA-2.5903 FC3-7.2117 BSP 1573
BDE .2389 BRA .6130 BC3 .3653 FSP -2173
```

```
LAUNCH DATE DEC 10 1965
                                                                                                  FLIGHT TIME 102.00
                                                                                                                                                                               ARRIVAL DATE MAR 22 1966
     HELIOCENTRIC CONIC
                                                                                                DISTANCE 294.632
      RL 147.31 LAL -.00 LOL 77.73 VL 28.228 GAL -8.09 A7L 86.69 MCA 136.66 SMA 132.06 ECC .18128 INC 3.3082 V1 30.243
RP 108.12 LAP 2.27 LOP 214.44 VP 38.079 GAP -.08 A7P 92.41 TAL 222.80 TAP 359.46 RCA 108.12 APO 156.00 V2 35.050
RC 84.008 GL 20.00 GP 1.46 TAL 142.93 TAP 84.52 ETS 357.84 TAE 172.90 ETE 216.20 TAC 45.75 ETC 159.42 CLP -84.52
     PLANETOCENTRIC CONIC
      C3 22.243 VHL 4.716 DLA -2.20 RAL 288.41 RAD 6567.9 VEL 11.984 PTH
                                                                                                                                   2.14 VMP 3.045 OPA -19.00 RAP 312.68 ECC 1.3661
      LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 50 2171.69 -18.51 38.78 150.90 111.82 2 14 2 1571.7 -15.38 31.50 90.00 13 3 13 4952.19 21.72 216.45 152.00 71.38 14 25 46 4352.2 18.98 208.85 100.00 2 58 9 1912.60 -19.57 19.27 150.44 113.06 3 30 2 1312.6 -16.28 12.02 100.00 14 25 35 4686.51 22.81 196.50 151.59 70.14 15 43 42 4086.5 19.90 188.92 110.00 4 4 3 1706.33 -22.41 2.21 149.03 116.52 4 32 29 1106.3 -18.66 355.07 110.00 15 36 11 4465.54 25.72 178.47 150.53 66.66 16 50 37 3865.5 22.34 170.94
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                          SGT 971.9 SGR 275.5 SG3 708.0
RRT -.2768 RRF -.2700 RTF .8202
SGB 1010.2 R23 .0258 R13 -.8210
SG1 975.1 SG2 263.9 THA 175.16
      TOE .1172 TRA -.6765 TC3 -.5279 BAU .1575
                                                                                                                                                               5T 285.2 SR 264.7 SS 718.3
CRT -.5645 CR5 .9569 CST -.7740
LSA 793.5 MSA 193.3 SSA 18.6
      RDE -.2172 RRA .0564 RC3 -.0421 FAU .19336
      FOE 2.0966 FRA-2.6348 FC3-7.5259 BSP 2185
BDE .2468 BRA .6788 BC3 .5295 FSP -2269
                                                                                                                                                                EL1 344.5 EL2 180.9 ALF 138.78
LAUNCH DATE DEC 10 1965
                                                                                                 FLIGHT TIME 104.00
                                                                                                                                                                                ARRIVAL DATE MAR 24 1966
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 300.971
     RL 147.31 LAL -.00 LOL 77.73 VL 28.217 GAL -8.00 AZL 86.70 HCA 139.87 SHA 131.98 ECC .18053 INC 3.2981 V1 30.243
RP 108.16 LAP 2.13 LOP 217.64 VP 38.058 GAP .35 AZP 92.52 TAL 222.40 TAP 2.27 RCA 108.15 APO 155.80 V2 35.036
      RC 86.309 GL 20.09 GP 1.56 ZAL 142.58 ZAP 89.87 ETS 357.88 ZAE 169.72 ETE 201.40 ZAC 43.69 ETC 158.78 CLP -89.87
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 21.907 VHL 4.680 DLA -2.06 RAL 288.74 RAD 6567.9 VEL 11.970 PTH 2.13 VHP 3.023 OPA -19.39 RAP 310.44 ECC 1.3605
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 38 8 2172.26 -18.52 38.82 151.01 111.81 2 14 20 1572.3 -15.40 31.54
90.00 15 5 34 4944.23 21.55 215.93 152.04 71.17 14 27 58 4344.2 18.78 208.35
100.00 2 58 31 1912.97 -19.58 19.29 150.55 113.05 3 30 24 1313.0 -16.29 12.04
100.00 14 27 52 4678.76 22.63 196.00 151.62 69.93 15 45 51 4078.8 19.69 188.44
110.00 4 4 33 1706.24 -22.40 2.20 149.15 116.52 4 33 0 1106.2 -18.66 355.07
110.00 15 38 19 4458.26 25.52 177.99 150.36 66.45 16 52 37 3858.3 22.11 170.50

DIFFERENTIAL CORRECTIONS
                                                                                                     150.52
151.62
149.15
150.36
                                                                                                                                                                     1106.2 -18.66
3858.3
    DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
      TOE .1634 TRA -.7440 TC3 -.7047 BAU .2065
                                                                                           SGT 1142.7 SGR 264.1 SG3 720.2
RRT -.3375 RRF -.3273 RTF .8634
                                                                                                                                                                ST 339.3 SR 253.4 SS 727.6
CRT -.6573 CRS .9614 CST -.8344
      RDE -.2062 RRA .0602 RC3 -.0257 FAU .19563
                                                                                           SGB 1172.8 R23 .0229 R13 -.8639
SGI 1146.3 SG2 247.8 THA 175.32
     FOE 2.1278 FRA-2.6235 FC3-7.7310 BSP 2827
BOE .2631 BRA .7464 BC3 .7052 FSP -2309
                                                                                                                                                                LSA 819.2 MSA 193.3 SSA 17.7
                                                                                                                                                                EL1 389.4 EL2 166.4 ALF 147.13
                                                                                               FLIGHT TIME 106.00
LAUNCH DATE DEC 10 1965
                                                                                                                                                                              ARRIVAL DATE MAR 26 1966
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 307.281
     RL 147.31 LAL -.00 LOL 77.73 VL 28.201 GAL -7.90 AZL 86.71 HCA 143.07 SMA 131.86 ECC .17987 INC 3.2865 V1 30.243
RP 108.20 LAP 1.97 LOP 220.85 VP 38.034 GAP .76 AZP 92.63 TAL 221.90 TAP 4.98 RCA 108.14 APO 155.58 VZ 35.023
RC 88.623 GL 20.18 GP 1.68 ZAL 142.17 ZAP 95.05 ETS 357.94 ZAE 166.30 ETE 193.99 ZAC 41.79 ETC 158.15 CLP -95.05
    PLANETOCENTRIC CONIC
     C3 21.556 VHL 4.643 DLA -1.92 RAL 289.14 RAD 6567.9 VEL 11.956 PTH 2.13 VHP 3.021 DPA -19.70 RAP 308.37 ECC 1.3548
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                1572.9
        90.00 1 38 40 2172.89 -18.54

90.00 13 8 16 4935.82 21.36

100.00 2 59 7 1913.38 -19.59

100.00 14 30 30 4670.56 22.44

110.00 4 5 19 1706.16 -22.40

110.00 15 40 47 4450.55 25.31
                                                                                                                         111.80 2 14 53 1572.9

70.96 14 30 31 4335.8

113.04 3 31 0 1313.4

69.71 15 48 20 4070.6

116.52 4 33 45 1106.2

66.22 16 54 58 3850.5
                                                                                      38.86
                                                                                                      151.19
                                                                                                                                                                                     -15.41
18.57
                                                                                     215.39
                                                                                                         152.13
                                                                                      19.32
                                                                                                         150.73
                                                                                                                                                                                        -16.30
                                                                                                                                                                                                             12.07
                                                                                 150.73
195.47 151.72
                                                                                                                                                                                     19.47
                                                                                                      149.34
150.44
                                                                                       2.20
                                                                                                                                                                                      -18.66
21.88
                                                                                                                                                                                                            355.06
                                                                                177.49
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                          SGT 1322.8 SGR 253.3 SG3 724.0

RRT -.4036 RRF -.3905 RTF .8910

SGB 1346.9 R23 .0214 R13 -.8914

SGI 1326.9 SG2 231.0 THA 175.44
                                                                                                                                                               ST 397.1 SR 241.7 SS 731.5
CRT -.7218 CRS .9659 CST -.8721
     TDE .2094 TRA -.8112 TC3 -.8880 BAU .2559
                                                                                                                                                         CRT -.7218 CR5 ... 407 ... 16.8
LSA 844.9 MSA 192.7 SSA 16.8
     RDE -.1949 RRA .0640 RC3 -.0080 FAU .19562
     FDE 2.1280 FRA-2.5729 FC3-7.8564 BSP 3478
BDE .2861 BRA .8137 BC3 .8880 FSP -2324
                                                                                                                                                               EL1 439.6 ELZ 151.1 ALF 152.81
LAUNCH DATE DEC 10 1965
                                                                                                FLIGHT TIME 108.00
                                                                                                                                                                              ARRIVAL DATE MAR 28 1966
   HELIOCENTRIC CONIC
                                                                                               DISTANCE 313.564
    RL 147.31 LAL -.00 LOL 77.73 VL 28.182 GAL -7.79 AZL 86.73 MCA 146.28 SMA 131.71 ECC .17928 INC 3.2730 V1 30.243
RP 108.24 LAP 1.82 LOP 224.05 VP 38.007 GAP 1.15 AZP 92.72 TAL 221.33 TAP 7.60 RCA 108.10 APO 155.33 V2 35.010
RC 90.946 GL 20.26 GP 1.81 ZAL 141.69 ZAP 100.01 ETS 358.03 ZAE 162.91 ETE 189.69 ZAC 40.09 ETC 157.57 CLP-100.01
   PLANETOCENTRIC CONIC
     C3 21.192 VHL 4.603 DLA -1.77 RAL 289.62 RAD 6567.9 VEL 11.940 PTH 2.12 VHP 3.038 DPA -19.94 RAP 306.51 ECC 1.3488
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 26 2173.52 -18.55 38.90 151.42 111.78 2 15 39 1573.5 -15.43 31.61
                                                                                                                                                                                     -15.43
                                                                                                                         70.74 14 33 25
113.03 3 31 51
69.49 15 51 9
116.52 4 34 45
65.98 16 57 38
          90.00
                        13 11 18
                                          4926.97
                                                                   21.17
                                                                                     214.81
                                                                                                         152.28
                                                                                                                                                                     4327.0
                                                                                                                                                                                         18.35
                                                                                                                                                                                                            207.27
                        2 59 57 1913.78
14 33 27 4661.95
4 6 19 1706.05
15 43 35 4442.44
                                                                                                     150.96
        100.00
                                                                  -19.60
                                                                                      19.34
                                                                                                                                                                     1313.8
                                                                                                                                                                                       -16.31
                                                                                                                                                                                                            12.09
        100.00
                                                                  22.23
                                                                                    194.91
                                                                                                       151.86
                                                                                                                                                                     4061.9
                                                                                                                                                                                       19.24
                                                                                                                                                                                                            187.39
                                                                                                      149.58
                                                                                                                                                                                    -18.65
        110.00
                                                                 -22.40
                                                                                       2.19
                                                                                                                                                                     1106.0
                                                                                                                                                                                                            355.06
        110.00
                                                                25.09
                                                                                     176.97
                                                                                                        150.59
                                                                                                                                                                    3842.4
                                                                                                                                                                                        21.63
                                                                                                                                                                                                            169.53
                                                                                     MID-COURSE EXECUTION ACCURACY
SGT 1507.6 SGR 243.4 SG3 720.2
RRT -.4748 RRF -.4588 RTF .9093
SGB 1527.2 R23 .0207 R13 -.9096
SGI 1512.2 SG2 213.5 THA 175.53

SGI 1512.2 SG2 213.5 THA 175.53

SGI 23.2 213.5 THA 175.53
   DIFFERENTIAL CORRECTIONS
     TOE .2540 TRA -.8767 TC5-1.0759 BAU .3048
     RDE -.1832 RRA .0677 RC3 .0111 FAU .19365
FDE 2.0962 FRA-2.4928 FC3-7.9109 89P 4135
     BOE .3132 BRA .8793 BC3 1.0759 FSP -2326
```

```
ARRIVAL DATE MAR 30 1966
                                                                              FLIGHT TIME 110.00
LAUNCH DATE DEC 10 1965
                                                                            DISTANCE 319.819
  HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 28.158 GAL -7.68 AZL 86.74 HCA 149.48 SMA 131.54 ECC .17876 INC 3.2571 V1 30.243 RP 108.29 LAP 1.65 LOP 227.25 VP 37.978 GAP 1.53 AZP 92.81 TAL 220.67 TAP 10.15 RCA 108.03 APO 155.06 V2 34.996
    RC 93.279 GL 20.34 GP 1.95 TAL 141.16 TAP 104.72 ETS 358.16 TAE 159.67 ETE 186.88 TAC 38.62 ETC 157.08 CLP-104.73
   PLANETOCENTRIC CONIC
    C3 20.812 VHL 4.562 DLA -1.61 RAL 290.17 RAD 6567.8 VEL 11.924 PTH 2.12 VHP 3.071 DPA -20.09 RAP 304.90 ECC 1.3425
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 40 27 2174.06
13 14 38 4917.75
3 1 2 1914.08
14 36 44 4652.96
4 7 34 1705.63
15 46 42 4433.98
                                                                                                                                                   -15.45
                                                                                   151.71
                                                                                                                   2 16 41
                                                                                                                                    1574.1
                                                                                                                                                                      31.64
                                                                                                    111.77
                                                                      38.93
         90.00
                                                     -18.56
                                                                                                                                                                     206.70
                                                                                                       70.51 14 36 36
                                                                                                                                     4317.8
                                                                                                                                                      18.11
                                                                                     152.48
                                                       20.96
                                                                     214.22
         90.00
                                                                                                                   3 32 56
                                                                                                                                     1314.1
                                                                                                                                                    -16.32
                                                                                                                                                                     12.11
                                                                                     151.26
                                                                                                      113.03
                                                     -19.61
                                                                      19.36
       100.00
                                                                                                                                     4053.0
                                                                                   152.07
                                                                                                       69.25 15 54 17
                                                                                                                                                    19.00
                                                                                                                                                                    186.83
       100.00
                                                      22.02
                                                                     194.33
                                                                                                     116.53 4 36 0
65.74 17 0 36
                                                                                                                                     1105.8
                                                                                                                                                  -18.65
21.36
                                                                                                                                                                    355.04
                                                                                     149.65
                                                     -22.39
                                                                       2.18
                                                                                                                                     3834.0
                                                                                                                                                                    169.01
                                                                                     150.79
       110.00
                                                    24.85
                                                                     176.42
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 1692.7 SGR 234.7 SG3 708.4

RRT -.5495 RRF -.5325 RTF .9213

SGB 1708.9 R23 .0232 R13 -.9215
                                                                                                                                 ST 515.5 SR 216.9 SS 725.9
CRT -.8033 CRS .9751 CST -.9117
    TDE .2971 TRA -.9390 TC3-1.2659 BAU .3523
    RDE - .1714 RRA .0710 RC3 .0311 FAU .18942
                                                                                                                                 LSA 896.3 MSA 190.4 55A 14.8
    FDE 2.0512 FRA-2.3756 FC3-7.8796 BSP 4777
                                                                         SG1 1697.7 SG2 195.5 THA 175.58
                                                                                                                                 EL1 545.8 EL2 122.0 ALF 160.30
    BDE .3430 BRA .9417 BC3 1.2663 FSP -2288
                                                                                                                                             ARRIVAL DATE APR 1 1966
                                                                              FLIGHT TIME 112.00
LAUNCH DATE DEC 10 1965
                                                                             DISTANCE 326.048
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 28.132 GAL -7.55 AZL 86.76 HCA 152.68 SMA 131.35 ECC .17830 INC 3.2379 V1 30.243 RP 108.35 LAP 1.49 LOP 230.44 VP 37.946 GAP 1.90 AZP 92.88 TAL 219.94 TAP 12.61 RCA 107.93 APO 154.77 V2 34.983 RC 95.621 GL 20.40 GP 2.13 ZAL 140.56 ZAP 109.16 ETS 358.33 ZAE 156.63 ETE 184.87 ZAC 37.40 ETC 156.72 CLP-109.17
   PLANETOCENTRIC CONIC
    C3 20.417 VHL 4.518 OLA -1.45 RAL 290.78 RAD 6567.8 VEL 11.908 PTH 2.12 VHP 3.117 OPA -20.14 RAP 303.56 ECC 1.3360 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 44 2174.36 -18.57 38.95 152.05 111.77 2 17 58 1574.4 -15.46 31.66 90.00 13 18 16 4908.28 20.74 213.61 152.74 70.28 14 40 4 4308.3 17.87 206.11 100.00 3 2 24 1914.14 -19.61 19.36 151.60 113.03 3 34 18 1314.1 -16.32 12.11 100.00 14 40 17 4643.73 21.79 193.73 152.32 69.02 15 57 41 4043.7 18.75 186.26
                                                                                                        69.02 15 57 41
116.54 4 37 31
65.49 17 3 50
                                                                                                                                      1105.4
                                                                                                                                                      -18.63
                                                                                                                                                                     355.01
       110.00 4 9 6 1705.36
110.00 15 50 5 4425.27
                                                                                                       116.54
                                                                                     150.23
                                                      -22.38
                                                                       2.15
                                                                                                                                      3825.3
                                                                                                                                                      21.09
                                                                                                                                                                      168.48
                                                      24.61
                                                                      175.87
                                                                                     151.04
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 573.2 SR 204.0 SS 717.4
CRT -.8309 CRS .9797 CST -.9220
                                                                          SGT 1876.5 SGR 227.8 SG3 692.2
RRT -.6269 RRF -.6088 RTF .9295
     TOE .3373 TRA -.9975 TC3-1.4587 BAU .3984
     ROE -.1593 RRA .D740 RC3 .D527 FAU .18410
FOE 1.9828 FRA-2.2430 FC3-7.8064 BSP 5419
BOE .3730 BRA 1.0002 BC3 1.4596 FSP -2248
                                                                         SGB 1890.3 R23 .0268 R13 -.9297
SGI 1882.0 SG2 177.0 THA 175.61
                                                                                                                                  LSA 921.4 MSA 188.9 SSA 13.6
                                                                                                                                 ELI 598.6 EL2 108.7 ALF 162.95
                                                                                                                                             ARRIVAL DATE APR 3 1966
                                                                              FLIGHT TIME 114.00
LAUNCH DATE DEC 10 1965
                                                                             DISTANCE 332.252
    RL 147.31 LAL -.00 LOL 77.73 VL 28.103 GAL -7.42 AZL 86.79 HCA 155.87 SMA 131.14 ECC .17789 INC 3.2140 V1 30.243 RP 108.37 LAP 1.31 LOP 233.63 VP 37.912 GAP 2.25 AZP 92.93 TAL 219.13 TAP 15.01 RCA 107.81 APO 154.46 V2 34.970 RC 97.969 GL 20.45 GP 2.34 ZAL 139.92 ZAP 113.32 ETS 358.56 ZAE 153.82 ETE 183.32 ZAC 36.41 ETC 156.52 CLP-113.34
    HELIOCENTRIC CONIC
    PLANE TOCENTRIC CONIC
     C3 20.005 VHL 4.473 OLA -1.30 RAL 291.47 RAD 6567.8 VEL 11.891 PTH 2.11 VHP 3.176 OPA -20.10 RAP 302.50 ECC 1.3292
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 43 21 2174.18

13 22 8 4898.73

3 4 5 1913.74

14 44 5 4634.41

4 10 57 1704.45

15 53 42 4416.46
                                                                                                                                   1574.2
                                                                                                                                                                31.65
                                                                       38.94
                                                                                   152.45
                                                                                                      111.77
                                                                                                                    2 19 35
                                                       -18.57
         90.00
                                                                                                                                                                      205.52
                                                                                                                                      4298.7
                                                                      212.99
                                                                                                        70.05
                                                                                                                  14 43 46
                                                       20.52
                                                                                      153.06
         90.00
                                                                                                                                      1313.7
                                                                                                                                                      -16.31
                                                                                                                                                                      12.09
                                                                                                                  3 35 59
                                                                       19.34
                                                                                      152.00
                                                                                                       113.03
                                                       -19.60
        100.00
                                                                                                      68.78 16 1 19
116.56 4 39 21
65.24 17 7 19
                                                                                                                                                                      185.69
                                                                                                                                      4034.4
                                                                                                                                                      18.49
                                                                      193.13
                                                                                     152.64
                                                      21.56
        100.00
                                                                                                                                      1104.4
                                                                                                                                                      -18.60
                                                                                                                                                                     354.96
                                                                        2.09
                                                                                     150.64
                                                     -22.35
        110.00
                                                                                                                                      3816.5
                                                                                                                                                      20.61
                                                                                                                                                                      167.95
                                                                      175.30
                                                                                     151.35
                                                      24.36
        110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 2055.2 SGR 223.1 SG3 670.5
RRT -.7037 RRF -.6865 RTF .9348
SG8 2067.3 R23 .0348 R13 -.9350
SG1 2061.2 SG2 158.0 THA 175.61
                                                                                                                                  ST 629.3 SR 190.9 55 708.9
CRT -.8543 CRS .9846 CST -.9283
     TOE .3752 TRA-1.0502 TC3-1.6513 BAU .4421
     ROE -.1472 RRA .0765 RC3 .0758 FAU .17727
FOE 1.9105 FRA-2.0861 FC3-7.6716 BSP 6023
                                                                                                                                  LSA 948.4 MSA 188.1 SSA 12.3
                                                                                                                                  EL1 650.6 EL2 96.0 ALF 165.14
     BOE .4031 BRA 1.0530 BC3 1.6530 FSP -2174
                                                                                                                                              ARRIVAL DATE APR 5 1966
                                                                               FLIGHT TIME 116.00
 LAUNCH DATE DEC 10 1965
                                                                              DISTANCE 338.432
    HELIOCENTRIC CONIC
     RL 147.31 LAL -.00 LOL 77.73 VL 28.071 GAL -7.28 AZL 86.82 HCA 159.07 SHA 130.91 ECC .17755 INC 3.1835 V1 30.243 RP 108.41 LAP 1.14 LOP 236.82 VP 37.877 GAP 2.59 AZP 92.97 TAL 218.27 TAP 17.33 RCA 107.66 APO 154.15 V2 34.957
                          20.46 GP 2.62 ZAL 139.22 ZAP 117.20 ETS 358.87 ZAE 151.23 ETE 182.01 ZAC 35.66 ETC 156.54 CLP-117.23
     RC 100.323 GL
    PLANETOCENTRIC CONIC
     C3 19.574 VHL 4.424 DLA -1.17 RAL 292.23 RAD 6567.8 VEL 11.872 PTH 2.11 VHP 3.244 DPA -19.94 RAP 301.72 ECC 1.3221
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 45 24 2173.10 -18.54 38.87 152.89 111.79 2 21 37 1573.1 -15.42 31.59 90.00 13 26 8 4889.47 20.31 212.40 153.43 69.83 14 47 37 4289.5 17.38 204.95
                                                                                                        113.06 3 38 4
68.56 16 5 6
                     3 6 12 1912.46
14 48 1 4625.34
4 13 12 1702.74
15 57 30 4407.83
                                                                                                                                       1312.5
                                                                                                                                                       -16.27
                                                                                     152.44
                                                                                                       113.06
                                                       -19.56
                                                                       19.26
        100.00
                                                                                                                                                                       185.13
                                                                                                                                       4025.3
                                                                                                                                                       18.24
                                                       21.34
                                                                       192.55
                                                                                     153.01
        100.00
                                                                                                       116.61 4 41 35
65.00 17 10 58
                                                                                                                                       1102.7
                                                                                                                                                       -18.54
                                                                                                                                                                       354.86
                                                                                      151.09
        110.00
                                                      -22.30
                                                                         1.99
                                                                       174.76 151.72 65.00 17.10 ...

MID-COURSE EXECUTION ACCURACY
SGT 2251.0 SGR 221.5 SG3 647.5
RRT -.7777 RRF -.7618 RTF .9386
SGB 2242.0 R23 ..0462 R13 -.9388
                                                                                                                                       3807.8
                                                                                                                                                      20.54
                                                                                                                                                                       167.43
        110.00
                                                        24.11
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 681.2 SR 177.6 SS 695.2
CRT -.8734 CRS .9888 CST -.9323
      TOE .4082 TRA-1.0983 TC3-1.8481 BAU .4844
     ROE -.1351 RRA .0788 RC3 .1014 FAU .17020
FDE 1.8193 FRA-1.9290 FC3-7.5279 BSP 6639
BOE .4300 BRA 1.1011 BC3 1.8509 FSP -2111
                                                                                                                                LSA 971.4 MSA 187.1 SSA 11.0
EL1 698.9 EL2 84.3 ALF 166.98
```

ARRIVAL DATE APR 7 1966

```
LAUNCH DATE DEC 10 1965
                                                                                                                      DISTANCE 344.589
    HELIOCENTRIC CONIC
       RL 147.31 LAL -.00 LOL 77.73 VL 28.037 GAL -7.13 AZL 86.86 HCA 162.26 SMA 130.66 ECC .17725 INC 3.1422 V1 30.243 RP 108.44 LAP .96 LOP 240.01 VP 37.840 GAP 2.92 AZP 92.99 TAL 217.34 TAP 19.60 RCA 107.50 APO 153.82 V2 34.945 RC 102.682 GL 20.41 GP 3.00 ZAL 138.48 ZAP 120.81 ETS 359.30 ZAE 148.88 ETE 180.81 ZAC 35.12 ETC 156.82 CLP-120.86
     PLANETOCENTRIC CONIC
       C3 19.120 VHL 4.373 DLA -1.08 RAL 293.06 RAD 6567.8 VEL 11.853 PTH 2.10 VHP 3.320 DPA -19.64 RAP 301.20 ECC 1.3147
      C3 19.12D VHL 4.373 DLA -1.08 MAL 293.08 MAD 6567.8 VEL 11.853 PH 2.10 VHP 5.32D DA -19.68 MAP 501.20 ECC 1.3147

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 30 8 4881.07 2D.11 211.86 153.86 69.63 14 51 29 4281.1 17.15 204.43 100.00 3 8 53 1909.63 -19.49 19.08 152.93 113.13 3 40 43 1309.6 -16.19 11.84 100.00 14 51 59 4617.08 21.13 192.03 153.44 68.35 16 8 56 4017.1 18.01 184.63 110.00 4 15 59 1699.60 -22.20 1.79 151.58 116.69 4 44 18 1099.6 -18.44 354.68 110.00 16 1 22 4399.88 23.88 174.25 152.15 64.78 17 14 42 3799.9 20.28 166.96
                                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                              SGT 2399.4 SGR 224.1 SG3 622.4 ST 729.6 SR 164.6 S5 679.9 RRT -.8446 RRF -.8315 RTF .9409 CRT -.8910 CR5 .9928 CST -.9346 SG8 2409.8 R23 .0651 R13 -.9412 LSA 993.5 MSA 186.2 SSA 9.6 SG1 2406.8 SG2 119.6 TMA 175.48 EL1 744.4 EL2 73.3 ALF 168.52
       TOE .4378 TRA-1.1387 TC3-2.0458 BAU .5240
       RDE -.1232 RRA .0806 RC3 .1303 FAU .16259
      FDE 1.7233 FRA-1.7637 FC3-7.3618 BSP 7210
BDE .4548 BRA 1.1415 BC3 2.0500 FSP -2036
LAUNCH DATE DEC 10 1965
                                                                                                                        FLIGHT TIME 120.00
                                                                                                                                                                                                                         ARRIVAL DAJE APR 9 1966
    HELIOCENTRIC CONIC
                                                                                                                      DISTANCE 350.723
      RL 147.31 LAL -.00 LOL 77.73 VL 28.001 GAL -6.98 AZL 86.92 MCA 165.45 SMA 130.40 ECC .17702 INC 3.0838 V1 30.243 RP 108.48 LAP .77 LOP 243.20 VP 37.802 GAP 3.23 AZP 92.99 TAL 216.36 TAP 21.80 RCA 107.32 APO 153.48 V2 34.932
       RC 105.043 GL 20.27 GP 3.54 ZAL 137.72 ZAP 124.15 ETS 359.91 ZAE 146.74 ETE 179.56 ZAC 34.77 ETC 157.47 CLP-124.23
    PLANETOCENTRIC CONIC
      C3 18.635 VHL 4.317 OLA -1.07 RAL 293.98 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 3.404 DPA -19.13 RAP 300.92 ECC 1.3067
     C3 18.635 VHL 4.317 OLA -1.07 RAL 293.98 RAO 6567.8 VEL 11.833 PTH 2.10 VHP 3.404 DPA -19.13 RAP 300.92 ECC 1.3067 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 13 7 2164.68 -18.33 38.35 153.89 111.97 2 27.41 1564.7 -15.19 31.08 100.00 13 33 52 4874.69 19.96 211.46 154.36 69.48 14.55 7 4274.7 16.99 204.04 100.00 3 12 28 1903.89 -19.33 18.73 153.44 113.25 3 44 12 1303.9 -16.02 11.50 100.00 14 55 42 4610.71 20.97 191.62 153.94 68.20 16 12 33 4010.7 17.83 184.24 110.00 4 19 34 1693.82 -22.02 1.44 152.10 116.83 4 47 48 1093.8 -18.25 354.34 110.00 16 5 5 4393.55 23.69 173.85 152.66 64.61 17 18 19 3793.5 20.08 166.58
                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 2560.6 SGR 232.8 SG3 595.4 ST 772.7 SR 152.4 55 665.7 RRT -.8995 RRF -.8918 RTF .9420 CRT -.9066 CRS .9961 CST -.9346 SGB 2571.1 R23 .0987 R13 -.9424 LSA 1012.8 M5A 186.7 SSA 8.0 SG1 2569.1 SG2 101.4 THA 175.32 EL1 785.0 EL2 63.3 ALF 169.79
       TOE .4621 TRA-1.1710 TC3-2.2471 BAU .5613
      ROE -.1121 RRA .D821 RC3 .1644 FAU .15446
FOE 1.6258 FRA-1.5894 FC3-7.1758 BSP 7744
BOE .4755 BRA 1.1738 BC3 2.2532 FSP -1943
                                                                                                                                                                                                                       ARRIVAL DATE APR 11 1966
                                                                                                                       FLIGHT TIME 122.00
LAUNCH DATE DEC 10 1965
                                                                                                                       DISTANCE 356.836
    HELTOCENTRIC CONIC
     RL 147.31 LAL -.00 LOL 77.73 VL 27.963 GAL -6.81 AZL 87.01 HCA 168.63 SMA 130.13 ECC .17683 INC 2.9934 VI 30.243 RP 108.52 LAP .59 LOP 246.38 VP 37.763 GAP 3.54 AZP 92.94 TAL 215.32 TAP 23.95 RCA 107.12 APO 153.14 V2 34.920 RC 107.406 GL 19.93 GP 4.40 ZAL 136.96 ZAP 127.23 ETS .85 ZAE 144.80 ETE 178.06 ZAC 34.53 ETC 158.65 CLP-127.36
    PLANETOCENTRIC CONIC
      C3 18.099 VHL 4.254 DLA -1.23 RAL 294.99 RAD 6567.7 VEL 11.810 PTH 2.09 VMP 3.495 DPA -18.28 RAP 300.83 ECC 1.2979
     C3 18.099 VHL 4.254 DLA -1.23 RAL 294.99 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 3.495 DPA -18.28 RAP 300.83 ECC 1.2979
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 13 56 51 2152.87 -18.02 37.61 154.41 112.22 2 32 44 1552.9 -14.86 30.37
90.00 13 36 43 4872.85 19.91 211.34 154.95 69.44 14 57 56 4272.8 16.94 203.93
100.00 3 17 37 1892.31 -19.02 18.01 153.97 113.50 3 49 10 1292.3 -15.68 10.81
100.00 14 58 38 4608.63 20.92 191.49 154.54 68.15 16 15 27 4008.6 17.77 184.11
110.00 4 24 34 1682.78 -21.68 .76 152.65 117.10 4 52 36 1082.8 -17.88 355.70
110.00 16 8 11 4390.93 23.62 173.69 153.26 64.54 17 21 22 3790.9 19.99 196.642
                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                          HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TOE .4763 TRA-1.1946 TC3-2.4595 BAU .5973
                                                                                                              SGT 2716.7 SGR 251.7 SG3 569.1

RRT - .9397 RRF - .9394 RTF .9426

SGB 2728.3 R23 .1542 R13 - .9430

SG1 2727.0 SG2 85.7 THA 175.02
                                                                                                                                                                                                     ST 805.2 SR 141.7 S5 639.7
CRT -.9193 CRS .9983 CST -.9328
      ROE -.1021 RRA .0839 RC3 .2092 FAU .14659
FOE 1.5083 FRA-1.4197 FC3-7.0119 BSP 8274
BOE .4871 BRA 1.1975 BC3 2.4684 FSP -1863
                                                                                                                                                                                                      LSA 1021.1 MSA 187.0 SSA
                                                                                                                                                                                                      EL1 815.7 EL2 55.0 ALF 170.77
                                                                                                                                                                                                                        ARRIVAL DATE APR 13 1966
LAUNCH DATE DEC 10 1965
                                                                                                                       FLIGHT TIME 124.00
                                                                                                                      DISTANCE 362.928
    HELIOCENTRIC CONIC
     RL 147.31 LAL -.00 LOL 77.73 VL 27.923 GAL -6.64 AZL 87.16 MCA 171.82 SMA 129.85 ECC .17671 INC 2.8341 V1 30.243 RP 108.56 LAP .40 LOP 249.56 VP 37.722 GAP 3.83 AZP 92.81 TAL 214.23 TAP 26.05 RCA 106.90 APO 152.79 V2 34.909 RC 109.770 GL 19.16 GP 5.92 ZAL 136.30 ZAP 130.02 ETS 2.50 ZAE 143.01 ETE 175.87 ZAC 34.32 ETC 160.87 CLP-130.28
    PLANETOCENTRIC CONIC
      C3 17.465 VML 4.179 DLA -1.79 RAL 296.14 RAD 6567.7 VEL 11.783 PTH 2.08 VMP 3.595 DPA -16.74 RAP 300.85 ECC 1.2874
     C3 17.465 VHL 4.179 DLA -1.79 RAL 296.14 RAD 6567.7 VEL 11.783 PTH 2.08 VMP 3.595 OPA -16.74 RAP 300.85 ECC 1.2874 LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 5 39 2126.99 -17.35 36.01 154.91 112.73 2 41 6 1527.0 -14.12 28.82 90.00 13 37 7 4862.13 20.13 211.93 155.68 69.66 14 58 29 4282.1 17.18 204.50 100.00 3 26 10 1667.29 -18.33 16.47 154.47 114.03 3 57 17 1267.3 -14.93 9.33 100.00 14 59 17 4617.06 21.13 192.03 155.27 68.35 16 16 15 4017.1 18.01 184.63 110.00 4 32 30 1659.65 -20.96 359.36 153.12 117.64 5 0 9 1059.7 -17.09 352.36 110.00 15 9 27 4397.47 23.81 174.10 154.02 64.71 17 22 44 3797.5 20.20 166.81
                                                                                                              MID-COURSE EXECUTION ACCURACY

GGT 2864.D SGR 289.8 SG3 541.2

RRT -.9617 RRF -.9726 RTF .9422

SG8 2878.6 R23 .2398 R13 -.9429

SG1 2877.5 SG2 79.D THA 174.44

SG1 2877.7 EL2 49.8 ALF 171.32
                                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
       TOE .4725 TRA-1.2039 TC3-2.6902 BAU .6314
      ROE -.0943 RRA .0864 RC3 .2760 FAU .13833
FDE 1.3656 FRA-1.2376 FC3-6.8570 BSP 8750
BOE .4818 BRA 1.2070 BC3 2.7043 FSP -1763
```

FLIGHT TIME 118.00

ARRIVAL DATE APR 15 1966

```
LAUNCH DATE DEC 10 1965
                                                                                                       DISTANCE 369.001
     RL 147.31 LAL -.00 LOL 77.73 VL 27.882 GAL -6.46 A7L 87.52 HCA 175.00 SMA 129.56 ECC .17664 INC 2.4727 VI 30.243 RP 108.59 LAP .22 LOP 252.73 VP 37.681 GAP 4.12 A7P 92.47 TAL 213.10 TAP 28.10 RCA 106.67 APO 152.44 V2 34.897 RC 112.133 GL 17.09 GP 9.35 ZAL 136.00 ZAP 132.31 ETS 6.13 ZAE 141.17 ETE 171.55 ZAC 33.91 ETC 165.89 CLP-133.01
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 16.581 VHL 4.072 DLA -3.62 RAL 297.59 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 3.719 DPA -13.28 RAP 300.73 ECC 1.2729

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 25 4 2058.07 -15.49 31.81 155.29 114.00 2 59 22 1458.1 -12.12 24.76

90.00 13 29 14 4927.10 21.17 214.82 156.79 70.74 14 51 21 4327.1 18.35 207.28

100.00 3 44 43 1801.14 -16.45 12.46 154.83 115.31 4 14 44 1201.1 -12.91 5.46

100.00 14 52 16 4659.27 22.17 194.73 156.40 69.42 16 9 56 4059.3 19.17 187.22

110.00 4 49 4 1599.67 -19.02 355.78 153.45 118.95 5 15 44 999.7 -15.02 348.96

110.00 16 4 24 4433.50 24.84 176.39 155.20 65.72 17 18 18 3633.5 21.35 168.98
                                                                                                                                           2.07 VHP 3.719 DPA -13.28 RAP 300.73 ECC 1.2729
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                  SCT 2996.7 SGR 379.4 SG3 509.5

RRT -,9646 RRF -,9919 RTF .9412

SGB 3020.6 R25 .3145 R13 -,9425

SG1 3019.0 SG2 99.3 THA 173.03
                                                                                                                                                                           ST 775.5 SR 133.0 SS 529.3
CRT -.9182 CRS .9993 CST -.9068
      TDE .4176 TRA-1.1841 TC3-2.9693 BAU .6645
      RDE -.0901 RRA .0919 RC3 .4093 FAU .12920
                                                                                                                                                                            LSA 928.8 MSA 191.4 SSA
      FOE 1.1232 FRA-1.0286 FC3-6.7457 BSP 9147
                                                                                                                                                                            EL1 785.1 EL2 52.0 ALF 171.01
      BDE .4272 BRA 1.1876 BC3 2.9974 FSP -1652
                                                                                                                                                                                            ARRIVAL DATE APR 17 1966
                                                                                                         FLIGHT TIME 128.00
 LAUNCH DATE DEC 10 1965
                                                                                                        DISTANCE 375.053
      RL 147.31 LAL -.00 LOL 77.73 VL 27.840 GAL -6.27 A7L 89.13 MCA 178.18 SMA 129.26 ECC .17664 INC .8126 V1 30.243 RP 108.63 LAP .03 LOP 255.91 VP 37.640 GAP 4.39 A7P 90.87 TAL 211.92 TAP 30.10 RCA 106.43 APO 152.09 V2 34.886 RC 114.493 GL 6.24 GP 23.85 7AL 137.39 ZAP 131.03 ETS 19.99 ZAE 135.97 ETE 156.02 ZAC 34.02 ETC 187.42 CLP-135.87
     HELIOCENTRIC CONIC
      C3 14.813 VML 3.849 DLA -14.06 RAL 300.79 RAD 6567.6 VEL 11.670 PTH 2.05 VMP 4.095 DPA 1.08 RAP 298.69 ECC 1.2438 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 1 23 1692.52 -4.43 10.66 156.76 118.00 4 29 36 1092.5 -.65 4.02 90.00 12 18 26 5241.67 26.65 236.19 161.72 80.05 13 45 48 4641.7 25.00 227.91 100.00 5 15 17 1454.13 -5.46 352.56 156.19 119.43 5 39 31 854.1 -1.50 345.02 100.00 13 47 14 4955.29 27.80 214.88 161.48 78.55 15 9 49 4355.3 25.94 206.58 110.00 6 6 48 1292.72 -8.12 338.69 154.56 123.32 6 28 21 692.7 -3.68 332.41 DIFFERENTIAL CORRECTIONS
     PLANETOCENTRIC CONIC
                                                                                                MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ST 473.6 SR 96.0 SS 200.7

CRT -.6458 CRS .9995 CST -.6518

LSA 498.0 MSA 160.7 SSA 2.6
                                                                                                SGT 3005.1 SGR 725.3 SG3 416.3

RRT -.9422 RRF -.9997 RTF .9361

SGB 3091.4 R23 .3348 R13 -.9421

SGI 3082.3 SG2 237.0 THA 167.11
       TOE .0663 TRA -.9918 TC3-3.3636 BAU .6905
       ROE -.0560 RRA .0927 RC3 .9176 FAU .10488
FOE .3272 FRA -.5520 FC3-6.1294 BSP 8646
BOE .0868 BRA .9962 BC3 3.4865 FSP -1261
                                                                                                                                                                            ELI 477.8 EL2 72.7 ALF 172.36
                                                                                                                                                                                             ARRIVAL DATE APR 19 1966
                                                                                                         FLIGHT TIME 130.00
  LAUNCH DATE DEC 10 1985
       RL 147.31 LAL -.00 LOL 77.73 VL 27.797 GAL -6.07 A7L 83.23 MCA 181.36 SMA 128.96 ECC .17670 INC 6.7649 V1 30.243 RP 108.66 LAP -.16 LOP 259.08 VP 37.598 GAP 4.66 A7P 96.76 TAL 210.70 TAP 32.07 RCA 106.17 APO 151.75 V2 34.875 RC 116.852 GL 39.80 GP -29.95 ZAL 122.49 ZAP 130.51 ETS 327.63 ZAE 127.91 ETE 209.21 ZAC 55.65 ETC 129.62 CLP-138.56
                                                                                                         DISTANCE 381.093
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
        C3 25.884 VHL 5.088 DLA 19.39 RAL 296.61 RAD 6568.0 VEL 12.135 PTH 2.17 VHP 4.419 DPA -51.63 RAP 311.38 ECC 1.4260
       C3 25.884 VHL 5.088 DLA 19.39 RAL 296.61 RAD 6568.0 VEL 12.135 PTH 2.17 VHP 4.419 DPA -51.63 RAP 311.38 ECC 1.4260 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 7 35 2929.64 -28.26 91.30 169.90 88.06 23 56 24 2329.6 -28.23 82.64 90.00 16 34 59 4268.50 2.25 175.80 161.58 61.77 17 46 7 3668.5 -1.54 169.17 100.00 0 44 56 2628.36 -29.89 69.18 169.94 89.45 1 28 45 2028.4 -29.64 60.38 100.00 17 44 14 4045.01 3.68 158.58 160.79 60.31 851 39 3445.0 -.30 152.06 110.00 2 19 17 2333.20 -34.06 46.65 169.63 93.12 2 58 10 1733.2 -33.25 37.51 110.00 18 26 23 3912.94 7.23 146.37 158.59 56.50 19 31 36 3312.9 2.78 140.12
                                                                                                  MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1950.3 SR 357.3 SS 1028.6
CRT .9688 CRS -.9962 CST -.9867
                                                                                                    SCT 3353.6 SCR 542.0 SG3 363.6
RRT .8769 RRF .9827 RTF .9508
SCB 3397.1 R23 .2995 R13 .9541
        TOE 1.6543 TRA-1.6014 TC3-1.9948 BAU .7038
        ROE .3167 RRA -. 0478 RC3 -. 3971 FAU .08674
                                                                                                                                                                             LSA 2227.5 MSA 166.3 SSA
        FOE 2.3692 FRA-1.0146 FC3-2.9680 BSP 10157
BOE 1.6843 BRA 1.6021 BC3 2.0339 FSP -1201
                                                                                                                                                                             EL1 1980.8 EL2 87.2 ALF 10.08
                                                                                                   SG1 3387.3 SG2 257.9 THA 8.11
                                                                                                                                                                                              ARRIVAL DATE APR 21 1966
                                                                                                          FLIGHT TIME 132.00
  LAUNCH DATE DEC 10 1965
                                                                                                          DISTANCE 387.109
        RL 147.31 LAL -.00 LOL 77.73 VL 27.753 GAL -5.87 AZL 85.60 HCA 184.54 SHA 128.65 ECC .17683 INC 4.4038 V1 30.243 RP 108.69 LAP -.35 LOP 262.25 VP 37.556 GAP 4.93 AZP 94.39 TAL 209.44 TAP 33.98 RCA 105.90 APO 151.40 V2 34.865 RC 119.206 GL 29.28 GP -9.47 ZAL 127.34 ZAP 139.18 ETS 346.45 ZAE 135.83 ETE 192.04 ZAC 43.49 ETC 145.04 CLP-140.10
       HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC
        C3 18.786 VHL 4.334 DLA 9.21 RAL 299.33 RAD 6567.8 VEL 11.839 PTH 2.10 VHP 4.025 DPA -31.35 RAP 307.03 ECC 1.3092
        LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                                                     1889.1
                                                                                                                  162.42
                                                                                                                                        103.47
                                                                                                                                                              1 36 45
                               0 55 16 2489.10
15 12 57 4554.07
                                                                           -25.14
                                                                                                 59.65
               90.00
                                                                                                                                           63.82 16 28 51
104.81 2 57 59
                                                                                                                                                                                                                               185.18
                                                                                                                                                                                     3954.1
                                                                                                                                                                                                            7.60
                                                                                                192.00
                                                                                                                    158.41
                                                                           11.21
               90.00
                                                                                                                                                                                                                                 30.92
                                                                                                                                                                                     1612.2
                                                                                                                                                                                                          -23.98
                                                                                                  38.97
                                                                                                                    162.10
                                                                          -26.27
                                2 21 7 2212.23
             100.00
                                                                                                                                            62.51 17 41 34
108.52 4 12 23
                                                                                                                                                                                     3706.2
                                                                                                                                                                                                            8.46
                                                                                                                                                                                                                               166.49
                                                                                                                    157.88
                                                                                                173.24
                               16 29 48
                                                   4306.18
                                                                           12.24
             100.00
                                                                                                                                                                                                                                 11.25
                                                                                                                                                              4 12 23
                                                                                                                                                                                     1366.6
                                                                                                                                                                                                         -26.45
                                                                                                                    161.09
                                                                                                                                          108.52
                                                                          -29.26
                                                                                                  19.31
                                 3 39 36 1966.59
17 27 47 4124.58
                                                                                                                                            58.90 18 36 32
                                                                                                                                                                                     3524.6
                                                                                                                                                                                                           10.73
                                                                                                                                                                                                                               151.34
                                                                                                                    156.31
                                                                           14.96
                                                                                               157.89
             110.00
                               17 27 47
                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                ORBIT DETERMINATION ACCURACY
        DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ST 1483.7 SR 82.6 SS 849.7
CRT .8701 CRS -.9630 CST -.9706
                                                                                                 SGT 3447.7 SGR 118.9 SG3 439.8

RRT .6048 RRF .8218 RTF .9425

SGB 3449.7 R23 .3156 R13 .9427

SGI 3448.4 SG2 94.7 THA 1.20
          TOE 1.0377 TRA-1.3939 TC3-2.9457 BAU .7402
         ROE .0619 RRA .0262 RC3 -.0909 FAU .10829
FOE 1.8263 FRA -.8729 FC3-4.9903 BSP 10630
                                                                                                                                                                           LSA 1702.0 MSA 182.0 SSA 1.8
EL1 1485.4 EL2 40.7 ALF 2.78
          BOE 1.0396 BRA 1.3941 BC3 2.9471 FSP -1454
```

FLIGHT TIME 126.00

```
LAUNCH DATE DEC 10 1965
                                                                                            FLIGHT TIME 134.00
                                                                                                                                                                     ARRIVAL DATE APR 23 1966
     HELIOCENTRIC CONIC
                                                                                           DISTANCE 393.109
      RL 147.31 LAL -.00 LOL 77.73 VL 27.708 GAL -5.65 AZL 86.01 HCA 187.71 SMA 128.84 ECC .17702 INC 3.9859 VI 30.243
RP 108.72 LAP -.53 LOP 265.42 VP 37.514 GAP 5.18 AZP 93.95 TAL 208.15 TAP 35.86 RCA 105.62 APO 151.06 V2 34.856
RC 121.557 GL 27.26 GP -5.46 ZAL 127.04 ZAP 141.79 ETS 350.69 ZAE 135.78 ETE 187.54 ZAC 42.45 ETC 149.61 CLP-142.12
     PLANETOCENTRIC CONIC
      C3 17.515 VHL 4.185 DLA
                                                    7.51 RAL 301.01 RAD 6567.7 VEL 11.786 PTH 2.08 VHP 4.096 OPA -27.19 RAP 307.38 ECC 1.2883
      C3 17.515 WHL 4.185 OLA 7.51 RAL 301.01 RAD 6567.7 VEL 11.786 PTH 2.08 VHP 4.096 OPA -27.19 RAP 307.38 ECC 1.2883 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 15 18 24 18.15 -23.93 54.80 162.30 105.61 1 55 36 1818.1 -21.56 46.93 90.00 15 6 20 4592.30 12.34 194.23 159.14 64.31 16 22 52 3992.3 8.79 187.36 100.00 2 40 15 2144.16 -25.00 34.31 161.96 106.95 3 15 59 1544.2 -22.44 26.45 100.00 16 24 4 4341.52 13.34 175.29 158.63 63.00 17 36 25 3741.5 9.61 168.48 110.00 3 56 44 1904.81 -27.84 15.05 160.88 110.68 4 28 29 1304.8 -24.78 7.23 110.00 17 24 4 4153.64 15.97 159.53 157.14 59.37 18 33 18 3553.6 11.79 152.92
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
      TOE .9582 TRA-1.3520 TC3-3.2914 BAU .7707
ROE .0382 RRA .0364 RC3 .0245 FAU .10440
                                                                                      SGT 3577.1 SGR 75.4 SG3 429.4
RRT -.3026 RRF -.0637 RTF .9405
SGB 3577.9 R23 -.2319 R13 -.9404
                                                                                                                                                       ST 1428.7 SR 54.5 SS 789.5
CRT .7732 CRS -.9125 CST -.9644
     ROE .0382 RRA .0364 RC3 .0245 FAU .10489
FOE 1.6119 FRA -.7261 FC3-5.1843 BSP 11152
                                                                                                                                                       LSA 1622.6 MSA 186.6 SSA 3.3
                                                                                      SG1 3577.2 SG2 71.9 THA 179.63
     BDE .9589 BRA 1.3525 BC3 3.2914 FSP -1429
                                                                                                                                                       ELI 1429.3 ELZ 34.5 ALF 1.69
LAUNCH DATE DEC 10 1965
                                                                                            FLIGHT TIME 136.00
                                                                                                                                                                     ARRIVAL DATE APR 25 1966
    HELIOCENTRIC CONIC
                                                                                           DISTANCE 399.094
     RL 147.31 LAL -.00 LOL 77.73 VL 27.662 GAL -5.43 AZL 86.19 MCA 190.89 SMA 128.03 ECC .17730 INC 3.8102 V1 30.243
RP 108.75 LAP -.72 LOP 268.59 VP 37.472 GAP 5.43 AZP 93.74 TAL 206.82 TAP 37.70 RCA 105.33 APO 150.73 V2 34.846
RC 123.903 GL 26.52 GP -3.78 ZAL 126.00 ZAP 143.88 ETS 352.53 ZAE 135.18 ETE 185.48 ZAC 42.80 ETC 152.01 CLP-144.05
    PLANETOCENTRIC CONIC
     C3 16.801 VHL 4.099 DLA
                                                   7.13 RAL 302.58 RAD 6567.7 VEL 11.755 PTH 2.07 VHP 4.193 OPA -25.29 RAP 308.35 ECC 1.2765
     C3 16.801 WL 4.099 DLA 7.13 RAL 302.58 RAD 6567.7 VEL 11.755 PTH 2.07 VMP 4.193 DPA -25.29 RAP 308.35 ECC 1.2765 LNCM AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 24 31 2396.36 -23.52 53.34 163.05 106.23 2 4 27 1796.4 -21.07 45.52 90.00 15 9 37 4594.86 12.42 194.38 160.12 64.35 16 26 12 3994.9 8.87 187.51 100.00 2 49 16 2123.00 -24.57 32.88 162.70 107.58 3 24 39 1523.0 -21.93 25.08 100.00 16 27 33 4343.45 13.40 175.40 159.63 63.03 17 39 56 3743.5 9.68 168.59 110.00 4 5 18 1885.03 -27.36 13.72 161.61 111.34 4 36 43 1285.0 -24.21 5.96 110.00 17 28 0 4154.19 15.99 159.56 158.15 59.38 18 37 14 3554.2 11.81 152.95
    DIFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
     TOE .9508 TRA-1.3201 TC3-3.5445 BAU .7964
                                                                                      SGT 3697.0 SGR 102.2 SG3 413.1
RRT -.6218 RRF -.4814 RTF .9387
                                                                                                                                                       ST 1444.1 SR 54.0 SS 764.2
CRT .7651 CRS -.9103 CST -.9619
     ROE .0370 RRA .0372 RC3 .0866 FAU .09983
FOE 1.4956 FRA -.5957 FC3-5.1442 BSP 11530
                                                                                      SGB 3698.4 R23 -.1310 R13 -.9387
                                                                                                                                                       LSA 1623.8 MSA 188.7 SSA
                                                                                                                                                                                                      4.8
     BDE .9515 BRA 1.3206 BC3 3.5455 FSP -1373
                                                                                     $61 3697.5 $62 80.1 THA 179.01
                                                                                                                                                      EL1 1444.6 EL2 34.8 ALF
LAUNCH DATE DEC 10 1965
                                                                                          FLIGHT TIME 138.00
                                                                                                                                                                   ARRIVAL DATE APR 27 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 405.063
     RL 147.31 LAL -.00 LOL 77.73 VL 27.616 GAL -5.20 A7L 86.29 MCA 194.06 SMA 127.72 ECC .17765 INC 3.7137 V1 30.243
RP 108.78 LAP -.90 LOP 271.76 VP 37.430 GAP 5.68 A7P 93.60 TAL 205.46 TAP 39.51 RCA 105.03 APO 150.40 V2 34.838
RC 126.245 GL 26.22 GP -2.86 ZAL 124.66 ZAP 145.76 ETS 353.58 ZAE 134.53 ETE 184.28 ZAC 43.64 ETC 153.85 CLP-145.86
   PLANETOCENTRIC CONIC
     C3 16.262 VHL 4.033 OLA 7.21 MAL 304.16 MAO 6567.7 VEL 11.732 PTH 2.07 VMP 4.297 DPA -24.10 MAP 309.59 ECC 1.2676
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  106.37 2 10 2
64.21 16 32 58
107.73 3 30 16
62.89 17 46 40
111.51 4 42 26
59.22 18 43 52
                                                                                                                                                     1791.5 -20.96 45.21
                       1 30 11 2391.51
15 16 33 4584.77
         90.00
                                                              -23.43
                                                                                53.01
                                                                                               164.12
          90.00
                                                               12.12
                                                                               193.79
                                                                                                  161.23
                                                                                                                                                           3984.8
                                                                                                                                                                               8.55
                                                                                                                                                                                                186.93
                       2 54, 58 2118.01
16 34 26 4333.50
        100.00
                                                              -24.47
                                                                                 32.55
                                                                                                163.78
                                                                                                                                                      1518.0
                                                                                                                                                                             -21.81
                                                                                                                                                                                                 24.76
        100.00
                                                              13,09
                                                                              174.82
                                                                                                  160.74
                                                                                                                                                           3733.5
                                                                                                                                                                               9.35
                                                                                                                                                                                               168.03
                         4 11 7 1879.74
17 34 48 4144.53
        110.00
                                                             -27.23
                                                                                                162.68
                                                                                 13.36
                                                                                                                                                          1279.7
                                                                                                                                                                             -24.06
                                                                                                                                                                                                   5.63
        110.00
                        17 34 AR
                                                             15.66
                                                                                159.02
                                                                                                  159.27
                                                                                                                                                           3544.5
                                                                                                                                                                               11.46
                                                                                                                                                                                                152.43
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
     TOE .9646 TRA-1.2899 TC3-3.7765 BAU .8215
                                                                                     SGT 3816.8 SGR 129.9 SG3 396.4
                                                                                                                                                     ST 1481.1 SR 61.4 55 752.6
    ROE .0418 RRA .0348 RC3 .1292 FAU .09467
FDE 1.4169 FRA -.4776 FC3-5.0403 BSP 11928
BDE .9655 BRA 1.2904 BC3 3.7787 FSP -1314
                                                                                                                                               CRT .8021 CRS -.9342 CST -.9604
                                                                                    RRT -.6614 RRF -.5672 RTF .9369
                                                                                                                                                     LSA 1651.5 MSA 191.0 SSA 6.2
EL1 1481.9 EL2 36.6 ALF 1.90
                                                                                   5GB 3819.0 R23 -.0704 R13 -.9368
                                                                                     5G1 3817.8 5G2 97.4 THA 178.71
LAUNCH DATE DEC 10 1965
                                                                                          FLIGHT TIME 140.00
                                                                                                                                                                    ARRIVAL DATE APR 29 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 411.016
    RL 147.31 LAL -.00 LOL 77.73 VL 27.570 GAL -4.96 AZL 86.35 MCA 197.23 SMA 127.40 ECC .17808 INC 3.6521 V1 30.243
RP 108.80 LAP -1.08 LOP 274.92 VP 37.388 GAP 5.92 AZP 93.49 TAL 204.06 TAP 41.29 RCA 104.71 APO 150.09 V2 34.830
RC 128.581 GL 26.11 GP -2.29 ZAL 123.15 ZAP 147.51 ETS 354.26 ZAE 133.90 ETE 183.48 ZAC 44.74 ETC 154.92 CLP-147.58
   PLANETOCENTRIC CONIC
    C3 15.808 VHL 3.976 OLA
                                                 7.52 RAL 305.79 RAD 6567.6 VEL 11.713 PTH 2.06 VHP 4.404 OPA -23.22 RAP 311.00 ECC 1.2602
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  53.25 165.40 106.27 2 14 11
192.84 162.44 64.00 16 41 37
32.75 165.05 107.64 3 34 34
173.90 161.95 62.67 17 55 10
13.49 163.97 111.45 4 47 5
158.19 160.48 56.98 18 52 1
MIO-COURSE EXECUTION ACCURACY
         90.00
                        1 34 16 2395.01
                                                              -23.50
                                                                                53.25
                                                                                                                                                          1795.0
                      15 25 28
         90.00
                                          4566.40
                                                              11.64
                                                                                192.84
                                                                                                                                                           3968.4
                                                                                                                                                                               8.05
       100.00
                         2 59 13 2121.00
                                                              -24.53
                                                                                 32.75
                                                                                                                                                           1521.0
                                                                                                                                                                             -21.88
                                                                                                                                                                                                 24.95
       100.00
                      16 43 12 4317.64
                                                              12.60
                                                                               173.90
                                                                                                                                                           3717.6
                                                                                                                                                                                8.84
                        4 15 43 1861.61
       110.00
                                                              -27.28
                                                                                 13.49
                                                                                                                                                           1281.6
                                                                                                                                                                            -24.12
                                                                                                                                                       3529.8
                      17 43 11
       110.00
                                         4129.60
                                                                               158.19
                                                             15.14
                                                                                                                                                                            10.92
                                                                                  MID-COURSE EXECUTION ACCURACY
SGT 3938.2 SGR 153.6 SG3 381.2 ST 1526.7 SR 71.9 SS 743.6
RRT -.6478 RRF -.5802 RTF .9357 CRT .8436 CRS -.9571 CST -.9601
SGB 3941.2 R23 -.0347 R13 -.9356 LSA 1688.9 MSA 191.4 SSA 7.6
SGI 3939.5 SG2 117.0 THA 178.55 ELI 1527.9 EL2 38.6 ALF 2.28
   DIFFERENTIAL CORRECTIONS
    TOE .9864 TRA-1.2583 TC3-4.0052 BAU .8471
ROE .0490 RRA .0306 RC3 .1622 FAU .09007
    FOE 1.3490 FRA -.3766 FC3-4.9328 BSP 12381
BOE .9876 BRA 1.2587 BC3 4.0085 FSP -1273
```

ARRIVAL DATE MAY 1 1966 FLIGHT TIME 142.00 LAUNCH DATE DEC 10 1965 **DISTANCE 416.953** HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 27.523 GAL -4.71 AZL' 86.39 MCA 200.40 SMA 127.08 ECC .17861 INC 3.6091 V1 30.243 RP 108.82 LAP -1.26 LOP 278.09 VP 37.346 GAP 6.15 AZP 93.38 TAL 202.64 TAP 43.04 RCA 104.39 APO 149.78 V2 34.822 RC 130.911 GL 26.10 GP -1.89 ZAL 121.50 ZAP 149.16 ETS 354.76 ZAE 133.32 ETE 182.89 ZAC 46.02 ETC 155.99 CLP-149.21 PLANETOCENTRIC CONIC 7.97 RAL 307.49 RAD 6567.6 VEL 11.696 PTH 2.06 VMP 4.513 DPA -22.48 RAP 312.53 ECC 1.2536 C3 13.409 VHL 3.925 DLA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 37 32 2403.63 -23.66 15 36 45 4548.23 11.03 3 2 43 2128.87 -24.69 16 53 14 4298.22 11.99 4 19 44 1887.84 -27.43 17 52 42 4112.02 14.52 45.99 106.03 2 17 35 1803.6 -21.24 166.83 53.82 90.00 16 51 33 3948.2 7.42 184.85 163.76 63.75 90.00 191.66 107.41 3 38 12 62.41 18 4 53 111.25 4 51 12 58.71 19 1 14 25.46 1528.9 -22.07 166.49 33.28 100.00 163.26 3698.2 8.20 166.04 172.78 100.00 1287.8 -24.29 6.14 165.42 13.91 110.00 161.80 3512.0 10.27 150.66 110.00 157.19 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4081.4 SGR 175.3 SG3 370.1 RRT -.6242 RRF -.5806 RTF .9369 ST 1562.5 SR 84.5 SS 724.2 CRT .8749 CRS -.9718 CST -.9602 TOE 1.0005 TRA-1.2356 TC3-4.2645 BAU .8794 ROE .0573 RRA .0255 RC3 .1903 FAU .08698 FOE 1.2666 FRA -.3111 FC3-4.8872 85P 13166 SGB 4085.1 R23 -. 0063 R13 -. 9369 LSA 1713.9 MSA 188.1 SSA 9.1 SG1 4082.8 SGZ 136.9 THA 178.46 EL1 1564.2 EL2 40.9 ALF 2.71 BOE 1.0022 BRA 1.2358 BC3 4.2687 FSP -1291 FLIGHT TIME 144.00 ARRIVAL DATE MAY 3 1966 LAUNCH DATE DEC 10 1965 DISTANCE 422.881 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 27.476 GAL -4.45 AZL 86.42 HCA 203.56 SMA 126.77 ECC .17921 INC 3.5772 V1 30.243 RP 108.85 LAP -1.43 LOP 281.25 VP 37.305 GAP 6.59 AZP 93.28 TAL 201.19 TAP 44.76 RCA 104.05 APO 149.49 V2 34.816 RC 133.236 GL 26.14 GP -1.61 ZAL 119.72 ZAP 150.71 ETS 355.14 ZAE 132.80 ETE 182.45 ZAC 47.43 ETC 156.93 CLP-150.75 PLANETOCENTRIC CONIC C3 15.048 VHL 3.879 DLA 8.52 RAL 309.27 RAD 6567.6 VEL 11.680 PTH 2.05 VHP 4.623 DPA -21.82 RAP 314.16 ECC 1.2477 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 105.67 2 20 34 63.49 17 2 36 107.06 3 41 27 62.14 18 15 39 110.93 4 55 5 58.41 19 11 24 -21.51 1816.1 46.80 90.00 1 40 18 2416.07 -23.89 54.66 168.42 3925.2 6.69 183.54 4525.16 10.33 190.33 165.19 90.00 15 47 11 3 5 47 2140.36 17 4 23 4276.09 4 23 27 1897.30 34.05 168.09 1540.4 -22.35 26.20 -24.92 100.00 11.29 171.52 164.70 3676.1 7.47 164.80 100.00 1297.3 -24.56 6.75 -27.66 14.55 167.03 110.00 3491.9 9.53 149.58 156.07 163.22 18 3 12 4091.93 13.80 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1670.7 SR 96.4 SS 761.1 CRT .9141 CRS -.9868 CST -.9612 TOE 1.0735 TRA-1.1533 TC3-4.3829 BAU .8828 SGT 4128.4 SGR 193.0 SG3 347.7 ROE .0650 RRA .0187 RC3 .2127 FAU .07930 FOE 1.2873 FRA -.1496 FC3-4.5621 BSP 12670 RRT -.5741 RRF -.5255 RTF .9291 5GB 4132.9 R23 -.0106 R13 -.9291 LSA 1828.0 MSA 195.0 SSA 9.8 EL1 1673.0 EL2 39.1 ALF 3.02 BOE 1.0754 BRA 1.1534 BC3 4.3881 FSP -1103 SG1 4129.9 SG2 157.9 THA 178.46 ARRIVAL DATE MAY 5 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 10 1965 DISTANCE 428.790 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 27.428 GAL -4.18 AZL 86.45 HCA 206.73 SHA 126.46 ECC .17993 INC 3.5526 VI 30.243 RP 108.87 LAP -1.60 LOP 284.41 VP 37.265 GAP 6.62 AZP 93.17 TAL 199.72 TAP 46.45 RCA 103.70 APO 149.21 VZ 34.809 RC 135.553 GL 26.21 GP -1.39 TAL 117.83 ZAP 152.18 ETS 355.45 ZAE 132.33 ETE 182.09 ZAC 48.94 ETC 157.78 CLP-152.21 PLANETOCENTRIC CONIC 2.05 VHP 4.736 DPA -21.18 RAP 315.87 ECC 1.2424 C3 14.728 VHL 3.838 DLA 9.15 RAL 311.13 RAD 6567.6 VEL 11.667 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 105.22 2 23 19 63.22 17 14 32 106.63 3 44 31 61.86 18 27 16 110.53 4 58 51 58.12 19 22 18 47.80 1831.4 -21.85 1 42 47 2431.36 15 59 32 4500.23 170.14 -24.17 55.70 90.00 182.13 3900.2 5.90 9.57 188.89 166.75 90.00 27.13 1554.6 -22.68 35.02 169.82 3 8 36 2154.61 -25.20 100.00 3652.2 6.68 163.48 166.25 17 16 24 4252.20 10.52 170.15 100.00 -24.90 .7.51 1309.2 168.79 -27.95 15.35 110.00 4 27 2 1909.19 8.73 148.43 3470.4 18 14 28 154.88 164.77 4070.41 13.03 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4252.3 SGR 211.3 SGS 336.3 RRT -.5407 RRF -.5058 RTF .9294 SGB 4257.5 R23 .0028 R13 -.9294 SGI 4253.8 SG2 177.7 THA 178.46 ST 1726.6 \$R 110.1 \$\$ 753.8 CRT .9347 CRS -.9921 CST -.9622 TOE 1.1039 TRA-1.1100 TC3-4.6152 BAU .9099 RDE .0736 RRA .0121 RC3 .2340 FAU .07600 FDE 1.2318 FRA -.0819 FC3-4.4672 BSP 13267 LSA 1877.3 MSA 192.0 SSA 11.1 BOE 1.1063 BRA 1.1101 BC3 4.6212 FSP -1098 ARRIVAL DATE MAY 7 1966 FLIGHT TIME 148.00 LAUNCH DATE DEC 10 1965 DISTANCE 434.686 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 27.381 GAL -3.90 AZL 86.47 HCA 209.90 SMA 126.14 ECC .18075 INC 3.5329 V1 30.243 RP 108.88 LAP -1.76 LOP 287.58 VP 37.225 GAP 6.85 AZP 93.06 TAL 198.22 TAP 48.12 RCA 103.34 APO 148.94 V2 34.804 RC 137.863 GL 26.29 GP -1.22 ZAL 115.84 ZAP 153.58 ETS 355.72 ZAE 131.91 ETE 181.80 ZAC 50.55 ETC 158.55 CLP-153.61 PLANETOCENTRIC CONIC C3 14.442 VHL 3.800 DLA 9.83 RAL 313.08 RAD 6567.6 VEL 11.654 PTH 2.05 VHP 4.850 OPA -20.56 RAP 317.65 ECC 1.2377 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 172.01 104.69 2 25 55 1849.3 -22.23 1 45 6 2449.27 -24.48 56.92 90.00 62.96 17 27 20 3873.6 180.64 16 12 46 4473.63 8.75 187.37 168.43 90.00 106.11 3 47 29 61.59 18 39 43 1571.3 -23.07 28.22 171.70 3 11 17 2171.29 -25.52 36.15 100.00 3626.8 5.84 162.06 17 29 16 4226.84 9.71 168.71 167.93 61.5. 110.05 5 4 19 33 57 100.00 1923.26 4047.63 1323.3 -25.29 8.42 110.00 4 30 33 -28.28 16.31 170.69 147.21 3447.6 7.87 110.00 18 26 30 12.21 153.63 166.43 MID-COURSE EXECUTION ACCURACY

SGT 4360.0 SGR 228.4 SG3 324.2

RRT -.5040 RRF -.4777 RTF .9285

SGB 4366.0 R23 .0102 R13 -.9285

SGB 4366.0 R23 .0102 R13 -.9285

LSA 1944.1 M5A 189.8 SSA 12.2

EL1 1800.9 EL2 37.6 ALF 3.75 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE 1.1458 TRA-1.0517 TC3-4.8227 BAU .9324 RDE .0820 RRA .0048 RC3 .2325 FAU .07225 FOE 1.1943 FRA -.0050 FC3-4.3314 BSP 13671 BOE 1.1487 BRA 1.0517 BC3 4.8293 FSP -1065

```
ARRIVAL DATE MAY 9 1966
                                                                                    FLIGHT TIME 150.00
LAUNCH DATE DEC 10 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 440.568
     RL 147.31 LAL -.00 LOL 77.73 VL 27.333 GAL -3.62 AZL 86.48 MCA 213.06 SMA 125.83 ECC .18168 INC 3.5166 V1 30.243 RP 108.90 LAP -1.92 LOP 290.74 VP 37.185 GAP 7.07 AZP 92.95 TAL 196.70 TAP 49.76 RCA 102.97 APO 148.69 V2 34.799 RC 140.164 GL 26.37 GP -1.09 ZAL 113.74 ZAP 154.92 ETS 355.94 ZAE 131.54 ETE 181.57 ZAC 52.23 ETC 159.27 CLP-154.94
    PLANETOCENTRIC CONIC
     C3 14.191 VHL 3.767 DLA 10.56 RAL 315.12 RAD 6567.6 VEL 11.644 PTH 2.04 VHP 4.966 DPA -19.94 RAP 319.50 ECC 1.2336
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                         174.03
                       1 47 18 2469.51
                                                                                                            104.07 2 28 27
                                                                                                                                              1869.5
                                                          -24.83
                                                                           58.30
                                                                                                                                                                                   50.31
         90.00
       90.00 16 26 52 4445.66
100.00 313 54 2190.20
100.00 17 42 57 4200.20
110.00 4 34 5 1939.29
110.00 18 39 15 4023.88
                                                                                                            62.71 17 40 58
105.52 3 50 24
61.33 18 52 57
109.50 5 6 24
57.54 19 46 19
                                                                                                                                                3845.7
                                                             7.88
                                                                           185.77
                                                                                            170.26
                                                                                                                                                                                   179.07
                                                                                                                                                1590.2
                                                                            37.45
                                                                                            173.73
                                                                                                                                                                                   29.46
                                                          -25.87
                                                                                                                                               1339.3
3423 ^
                                                                                        169.74
172.74
                                                            8.84
                                                                           167.21
                                                                                                                                                                   4.94
                                                                                                                                                                                  160.59
                                                                                                                                                                -25.72
                                                          -28.65
                                                                            17.41
                                                                                                                                                                                    9.46
                                                          11.35
                                                                           152.33
                                                                                            168.24
                                                                                                                                                                    6.98
                                                                                                                                                                                  145.95
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                                                         ST 1874.9 SR 137.3 S5 760.4
CRT .9667 CRS -.9948 CST -.9652
                                                                               SGT 4462.1 SGR 244.6 SG3 312.5
RRT -.4669 RRF -.4475 RTF .9274
3GB 4468.8 R23 .0153 R13 -.9274
     TOE 1.1932 TRA -.9845 TC3-5.0185 BAU .9535
    RDE .0902 RRA -.0029 RC3 .2687 FAU .06858
    FOE 1.1635 FRA .0698 FC3-4.1837 BSP 14028
                                                                                                                                         LSA 2019.2 MSA 187.1 SSA 13.3
EL1 1879.6 EL2 35.1 ALF 4.05
                                                                           SG1 4463.6 SG2 216.2 THA 178.53
    BOE 1.1967 BRA .9845 BC3 5.0257 FSP -1030
                                                                                    FLIGHT TIME 152.00
                                                                                                                                                        ARRIVAL DATE MAY 11 1966
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 446.436
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 27.286 GAL -3.32 A7L 86.50 HCA 216.22 SMA 125.52 ECC .18272 INC 3.5029 V1 30.243 RP 108.91 LAP -2.07 LOP 293.90 VP 37.146 GAP 7.30 A7P 92.83 TAL 195.16 TAP 51.38 RCA 102.59 APO 148.46 V2 34.795 RC 142.456 GL 26.43 GP -.98 ZAL 111.54 ZAP 156.20 ETS 356.15 ZAE 131.22 ETE 181.37 ZAC 53.99 ETC 159.93 CLP-156.21
   PLANETOCENTRIC CONIC
    C3 13.979 VHL 3.739 DLA 11.34 RAL 317.26 RAD 6567.6 VEL 11.635 PTH 2.04 VHP 5.084 DPA -19.31 RAP 321.39 ECC 1.2301
    C3 13.979 VML 3.739 DLA 11.34 RAL 317.26 RAD 6567.6 VEL 11.635 PTH 2.D4 VMP 5.084 DPA -19.31 RAP 321.39 ECC 1.2301 LNCH AZNHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 41 48 4416.54 6.97 184.12 172.22 62.49 17 55 24 3816.5 3.23 177.44 100.00 3 16 30 2211.20 -26.25 38.90 175.91 104.84 3 53 21 1611.2 -23.95 30.85 100.00 17 57 25 4172.55 7.93 165.66 171.70 61.08 19 6 58 3572.5 4.01 159.06 110.00 4 37 41 1957.16 -29.05 18.65 174.95 108.86 5 10 18 1357.2 -26.20 10.63 110.00 18 52 44 399.35 10.45 151.00 170.18 57.27 19 59 23 3399.4 6.06 144.66 DESCRIPTION ACCURACY CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                             SGT 4558.1 SGR 260.0 SG3 301.1

RRT -.4301 RRF -.4163 RTF .9262

SGB 4565.5 R23 .0188 R13 -.9262

SGI 4559.5 SG2 234.7 THA 178.59
                                                                                                                                         ST 1958.2 SR 150.8 SS 766.8
CRT .9778 CRS -.9930 CST -.9670
     TOE 1.2449 TRA -.9078 TC3-5.2007 BAU .9734
    RDE .0983 RRA -.0110 RC3 .2825 FAU .06499
FDE 1.1367 FRA .1429 FC3-4.0248 B9P 14350
                                                                                                                                         LSA 2100.2 MSA 184.1 SSA 14.4
EL1 1963.7 EL2 31.5 ALF 4.31
                                                                                                                                         EL1 1963.7 EL2 31.5 ALF
     BOE 1.2488 BRA .9078 BC3 5.2084 FSP
                                                             -993
                                                                                                                                                       ARRIVAL DATE MAY 13 1966
                                                                                  FLIGHT TIME 154.00
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 452.291
  HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 27.238 GAL -3.01 A7L 86.51 HCA 219.39 SMA 125.22 ECC .18390 INC 3.4911 V1 30.243 RP 108.92 LAP -2.21 LOP 297.06 VP 37.108 GAP 7.53 A7P 92.70 TAL 193.59 TAP 52.98 RCA 102.19 APO 148.24 V2 34.791 RC 144.737 GL 26.47 GP -.89 ZAL 109.23 ZAP 157.42 ETS 356.33 ZAE 130.94 ETE 181.20 ZAC 55.80 ETC 160.55 CLP-157.44
   PLANETOCENTRIC CONIC
    C3 13.806 VHL 3.716 DLA 12.15 RAL 319.49 RAD 6567.5 VEL 11.627 PTH 2.04 VHP 5.205 OPA -18.66 RAP 323.33 ECC 1.2272
    LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   H LNCH TIME L-I TIME
1 51 33 2516.56
16 57 32 4386.49
3 19 6 2234.20
18 12 40 4144.08
4 41 22 1976.78
19 6 53 3974.26
                                                                                                                                                             -23.58
                                                                                       178.54
                                                                                                                                           1916.6
                                                                                                                                                                                   53.44
                                                                                                                           2 33 29
                                                         -25.57
                                                                           61.55
                                                                                                            102.61
        90.00
                                                                                                             62.28 18 10 38
104.09 3 56 20
60.86 19 21 44
108.15 5 14 18
57.01 20 13 8
                                                                                          174.34
                                                                                                                                               3786.5
                                                                                                                                                                   2.26
         90.00
                                                           6.02
                                                                           182.42
                                                                                                                                                                                  32.39
                                                                                                                                               1634.2
                                                                                                                                                                -24.44
                                                         -26.64
                                                                           40.50
                                                                                          178.26
       100.00
                                                                                       173.81
177.33
                                                                                                                                               3544.1
                                                                                                                                                                   3.05
                                                                                                                                                                                157.49
                                                           6.99
                                                                          164.07
       100.00
                                                                                                                                               1376.8
                                                                                                                                                                -26.71
                                                                                                                                                                                  11.92
                                                         -29.47
                                                                           20.02
       110.00
                                                    9.52
                                                                                                                                               3374.3
                                                                                                                                                                   5.11
                                                                          149.65
                                                                                          172.28
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 4648.4 SGR 274.6 SG3 290.2
RRT -.3931 RRF -.3838 RTF .9248
SGB 4656.5 R23 .0208 R13 -.9249
SGI 4649.7 SG2 252.4 THA 178.67
                                                                                                                                          ST 2049.4 SR 164.2 55 775.8
CRT .9861 CRS -.9894 CST -.9690
    TOE 1.3026 TRA -.8210 TC3-5.3652 BAU .9917
    RDE .1062 RRA -.0194 RC3 .2938 FAU .06147
                                                                                                                                          LSA 2189.9 HSA 180.8 35A 15.3
    FDE 1.1155 FRA .2145 FC3-3.8549 BSP 14619
BDE 1.3D69 BRA .8213 BC3 5.3732 FSP -953
                                                                                                                                         EL1 2055.7 EL2 27.2 ALF 4.52
                                                                                                                                                       ARRIVAL DATE MAY 15 1966
                                                                                   FLIGHT TIME 156.00
LAUNCH DATE DEC 10 1965
                                                                                  DISTANCE 458.132
   HELIOCENTRIC CONIC
    RE 147.31 LAL -.00 LOC 77.73 VL 27.191 GAL -2.69 AZL 86.52 MCA 222.55 SMA 124.91 ECC .18520 INC 3.4807 V1 30.243
RP 108.93 LAP -2.35 LOP 300.22 VP 37.071 GAP 7.76 AZP 92.57 TAL 192.01 TAP 54.56 RCA 101.78 APO 148.05 VZ 34.788
RC 147.008 GL 26.48 GP -.81 ZAL 106.83 ZAP 158.60 ETS 356.50 ZAE 130.69 ETE 181.05 ZAC 57.67 ETC 161.13 CLP-158.61
   PLANETOCENTRIC CONIC
    C3 13.676 VHL 3.698 DLA 13.00 RAL 321.83 RAD 6567.5 VEL 11.622 PTH 2.04 VHP 5.328 DPA -17.99 RAP 325.30 ECC 1.2251
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                             101.75 2 36 2
62.10 18 26 39
103.25 3 59 24
60.67 19 37 14
                    1 53 39 2543.21
17 14 4 4355.70
                                                                                                                                               1943.2
        90.00
                                                         -25.95
                                                                           63.40
                                                                                          181.04
                                                                                                                                                                -24.07
                                                                                                                                                                                   55.24
                                                                           180.69
                                                                                           176.62
                                                                                                                                                3755.7
                                                           5.04
         90.00
                    3 21 44 2259.12
18 28 39 4115.02
4 45 10 1998.08
19 21 43 3948.83
                                                                                         180.77
                                                                                                                                               1659.1
                                                                                                                                                                 -24.95
                                                                                                                                                                                   34.06
                                                                           42.24
                                                         -27.04
       100.00
                                                                                                                                               3515.0
                                                                                                                                                                   2.07
                                                                                         176.09
       100.00
                                                           6.03
                                                                          162.45
                                                                           21.52
                                                                                                             107.37 5 18 28
56.78 20 27 32
                                                                                                                                               1398.1
                                                                                                                                                               -27.25
                                                         -29.92
                                                                                           179.87
       110.00
                                                                                                                                               3348.8
                                                                                                                                                                   4.14
                                                                          148.28
                                                                                           174.52
       110.00
                                                           8.57
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
SGT 4739.7 SGR 288.7 SG3 280.1 ST 2140.0 SR 177.5 S9 782.5
RRT -.3565 RRF -.3539 RTF .9242 CRT .9916 CRS -.9846 CST -.9709
SGB 4748.4 R23 .0233 R13 -.9242 L5A 2278.5 MSA 176.7 SSA 16.2
LTA 44.9 269.5 THA 178.75 EL1 2147.2 EL2 22.9 ALF 4.70
                                                                                                                                  ORBIT DETERMINATION ACCURACY
ST 2140.0 SR 177.5 SS 782.3
   DIFFERENTIAL CORRECTIONS
    TOE 1.3606 TRA -.7291 TC3-5.5215 BAU 1.0110
    ROE .1142 RRA -.0278 RC3 .3027 FAU .05828
FOE 1.0922 FRA .2784 FC3-3.6897 BSP 14943
     BOE 1.3653 BRA .7296 BC3 5.5298 FSP -923
```

```
ARRIVAL DATE MAY 17 1966
                                                                                                                                          FLIGHT TIME 158.00
LAUNCH DATE DEC 10 1965
       RL 147.31 LAL -.00 LOL 77.73 VL 27.144 GAL -2.37 A7L 86.53 MCA 225.71 SMA 124.61 ECC .18665 INC 3.4716 V1 30.243 RP 108.94 LAP -2.48 LOP 303.39 VP 37.034 GAP 7.99 A7P 92.43 TAL 190.41 TAP 56.12 RCA 101.35 APO 147.87 V2 34.786 RC 149.266 GL 26.45 GP -.75 ZAL 104.34 ZAP 159.73 ETS 356.66 ZAE 130.48 ETE 180.93 ZAC 59.59 ETC 161.67 CLP-159.74
                                                                                                                                         01STANCE 463.958
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
                                                                                                                                                                                          2.04 VHP 5.454 DPA -17.30 RAP 327.31 ECC 1.2237
        C3 13.592 VHL 3.687 DLA 13.87 RAL 324.27 RAD 6567.5 VEL 11.618 PTH
        C3 13.592 VML 3.687 DLA 13.87 MAL 324.27 MAU 0307.7 VEL 11.010 INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG LNCH AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG LNCH AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG LNCH AZMTH INJ Z L
                                    1 55 47 2571.86
17 31 21 4324.37
                                                                                                                                                                                   61.95 18 43 26
102.34 4 2 33
60.50 19 53 28
106.50 5 22 49
56.58 20 42 35
                                                                                                                                                                                                                                                                                                     172.29
                                                                                                                                                                                                                                             3724.4
                                                                                                                                                                                                                                                                              .26
                                                                                                                                                      179.07
                                                                                                                           178.93
                                                                                                  4.04
                90.00
                                                                                                                                                                                                                                                                                                       35.88
                                                                                                                                                                                                                                                                        -25.47
                                                                                                                                                                                                                                             1685.9
                                                                                                                              44.13
                                                                                                                                                      183.45
                                                                                                -27.44
                                    3 24 27 2285.91
             100.00
                                                                                                                                                                                                                                                                                                     154.28
                                                                                                                                                                                                                                            3485.5
                                                                                                                                                                                                                                                                          1.07
                                                                                                                                                   178.52
                                                                                                                          160.82
                                    18 45 22
                                                                4085.55
                                                                                                     5.04
                                                                                                                                                                                                                                                               -27.81
             100.00
                                                                                                                                                                                                                                       1421.0
                                                                                                                                                                                                                                                                                                       14.89
                                                                                                                                                     182.59
                                                                                               -30.37
                                                                                                                             23.15
                                        4 49 8 2020.98
             110.00
                                                                                                                                                                                                                                             3323.2
                                                                                                                                                                                                                                                                            3.17
                                                                                                                                                                                                                                                                                                     140.66
                                                                                                                           146.92
                                                                                                                                                     176.93
                                                                                                 7.62
                                     19 37 12 3923.25
             110.00
                                                                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                                   MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                SGT 4827.2 SGR 302.2 SG3 270.4

RRT -.3240 RRF -.3243 RTF .9238

SGB 4836.7 R23 .0253 R13 -.9238

SGI 4828.2 SG2 285.8 TMA 178.83
                                                                                                                                                                                                                                     ST 2234.2 SR 190.7 SS 788.8
CRT .9948 CRS -.9788 CST -.9730
         TOE 1.4222 TRA -.6287 TC3-5.6579 BAU 1.0296
         ROE .1221 RRA -.0363 RC3 .3090 FAU .05524
FOE 1.0709 FRA .3387 FC3-3.5163 BSP 15260
                                                                                                                                                                                                                                     LSA 2370.7 MSA 172.3 SSA 17.1
EL1 2242.3 EL2 19.3 ALF 4.85
         BOE 1.4274 BRA .6298 BC3 5.6663 FSP -895
                                                                                                                                                                                                                                                           ARRIVAL DATE MAY 19 1966
                                                                                                                                           FLIGHT TIME 160.00
                                                                                                                                           DISTANCE 469.771
        RE 147.31 LAL -.00 LOL 77.73 VL 27.097 GAL -2.03 A7L 86.54 MCA 228.87 SMA 124.31 ECC .18824 INC 3.4634 V1 30.243 RP 108.94 LAP -2.61 LOP 306.55 VP 36.998 GAP 8.22 A7P 92.28 TAL 188.80 TAP 57.67 RCA 100.91 APO-147.72 V2 34.785 RC 151.511 GL 26.38 GP -.69 ZAL 101.75 ZAP 160.82 ETS 356.81 ZAE 130.30 ETE 180.82 ZAC 61.56 ETC 162.18 CLP-160.83
      HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC
         C3 13.559 VHL 3.682 DLA 14.75 RAL 326.80 RAD 6567.5 VEL 11.617 PTH 2.04 VHP 5.583 DPA -16.59 RAP 329.34 ECC 1.2231
         LINCH AZMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                     99.79
                                                                                                                                                    186.54
                                                                                                  -26.70
                                                                                                                              67.58
                                          1 57 59 2602.45
               90.00
                                                                                                                                                                                                                                                                                                       170.53
                                                                                                                                                                                                                                               3692.7
                                                                                                                                                                                                                                                                               - . 76
                                                                                                                                                                                                            19 0 56
                                    17 49 23 4292.72
3 27 16 2314.50
19 2 47 4055.91
4 53 16 2045.42
19 53 17 3897.75
                                                                                                                                                                                         61.83
                                                                                                                                                         181.69
                                                                                                      3,03
                                                                                                                             177.16
                                                                                                                                                                                      101.34 4 5 5U
60.36 20 10 23
4 27 21
                                                                                                                                                                                                                                                                                                          37.84
                                                                                                                                                                                                                                               1714.5
                                                                                                                                                                                                                                                                           -26.00
                                                                                                                                                         186.30
                                                                                                                                46.16
                                                                                                  -27.84
                                                                                                                                                                                                                                                                                                       152.65
                                                                                                                                                                                                                                              3455.9
                                                                                                                                                                                                                                                                                .07
                                                                                                                                                        161.12
                                                                                                      4.04
                                                                                                                            159.18
                                                                                                                                                                                      105.55 5 27 21 1445.4 -28.39
- 56.39 20 58 14 3297.7 2.20
                                                                                                                                                                                                                                                                                                          16.56
                                                                                                                                                        185.48
                                                                                                  -30.83
                                                                                                                                24.91
                                                                                                                                                                                                                                                                            2.20
                                                                                                                                                                                                                                                                                                       139.33
                                                                                                                             145.57
                                                                                                                                                         179.51
                                                                                                 6.66
                                                                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
        DIFFERENTIAL CORRECTIONS
                                                                                                                                  SGT 4911.4 SGR 314.9 SG3 261.3

RRT -.2904 RRF -.2947 RTF .9235

SGB 4921.5 R23 .0267 R13 -.9235

SGI 4912.2 SG2 301.3 THA 178.93
                                                                                                                                                                                                                                       ST 2331.8 SR 203.8 35 795.9
CRT .9961 CRS -.9722 CST -.9749
          TOE 1.4877 TRA -.5187 TC3-5.7716 BAU 1.0478
          ROE 1.302 RRA -.0447 RC3 .3125 FAU .05233
FOE 1.0521 FRA .3975 FC3-3.3412 BSP 15565
BDE 1.4934 BRA .5207 BC3 5.7800 FSP -868
                                                                                                                                                                                                                                     LSA 2466.5 MSA 168.0 SSA 17.9
EL1 2340.7 EL2 18.0 ALF 4.98
                                                                                                                                                                                                                                                           ARRIVAL DATE MAY 21 1966
                                                                                                                                            FI IGHT TIME 162.00
   LAUNCH DATE DEC 1Q 1965
          RL 147.31 LAL -.00 LOL 77.73 VL 27.050 GAL -1.67 AZL 86.54 MCA 232.03 SMA 124.02 ECC .19000 INC 3.4559 VI 30.243
RP 108.94 LAP -2.72 LOP 309.71 VP 36.964 GAP 8.46 AZP 92.13 TAL 187.17 TAP 59.20 RCA 100.46 APO 147.56 V2 34.784
RC 153.743 GL 26.25 GP -.65 ZAL 99.09 ZAP 161.88 ETS 356.94 ZAE 130.15 ETE 180.74 ZAC 63.57 ETC 162.66 CLP-161.89
                                                                                                                                            DISTANCE 475.568
         PLANETOCENTRIC CONIC
           C3 13.581 VHL 3.685 DLA 15.65 RAL 329.43 RAD 6567.5 VEL 11.618 PTH 2.04 VHP 5.716 DPA -15.85 RAP 331.39 ECC 1.2235
          C3 13.581 VHL 3.685 DLA 15.65 RAL 329.43 RAD 6567.5 VEL 11.618 PTH 2.04 VHP 5.716 DPA -15.85 RAP 331.39 ECC 1.2235 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 D 14 2634.91 -27.06 69.89 189.55 98.68 2 44 9 2034.9 -25.58 61.53 90.00 18 8 7 4260.99 2.01 175.38 184.48 61.75 19 19 8 3661.0 -1.79 168.76 100.00 3 30 11 2344.79 -28.23 48.33 189.33 100.26 4 9 16 1744.8 -26.52 39.94 100.00 19 20 51 4026.33 3.05 157.56 183.90 60.25 20 27.57 3426.3 -.94 151.03 110.00 4 57 36 2071.32 -31.29 26.78 188.56 104.53 5 32 7 1471.3 -28.98 18.34 110.00 20 9 56 3872.58 5.71 144.24 182.25 56.24 21 14 28 3272.6 1.23 138.01
                                                                                                                                 HID-COURSE EXECUTION ACCURACY
         DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                                       ST 2431.1 SR 216.9 SS 802.0
CRT .9956 CRS -.9650 CST -.9768
                                                                                                                                      SGT 4990.3 SGR 326.9 SG3 252.3

RRT -.2572 RRF -.2652 RTF .9232

SGB 5001.0 R23 .0277 R13 -.9253

SGI 4991.0 SG2 315.9 THA 179.03
            TOE 1.5565 TRA -.3993 TC3-5.8562 BAU 1.0648
           ROE .1385 RRA -.0530 RC3 .3130 FAU .04950
FDE 1.0340 FRA .4540 FC3-3.1552 BSP 15839
BDE 1.5627 BRA .4028 BC3 5.8645 FSP -840
                                                                                                                                                                                                                                       LSA 2563.9 MSA 163.8 SSA 18.7
EL1 2440.7 EL2 20.2 ALF 5.08
                                                                                                                                                                                                                                                              ARRIVAL DATE MAY 23 1966
                                                                                                                                               FLIGHT TIME 164.00
    LAUNCH DATE DEC 10 1965
           RL 147.31 LAL -.00 LOL 77.73 VL 27.003 GAL -1.31 AZL 86.55 MCA 235.19 SMA 123.73 ECC .19193 INC 3.4491 VI 30.243
RP 108.94 LAP -2.83 LOP 312.87 VP 36.930 GAP 8.70 AZP 91.97 TAL 185.52 TAP 60.71 RCA 99.98 APO 147.48 V2 34.784
RC 155.962 GL Z6.06 GP -.61 ZAL 96.35 ZAP 162.90 ETS 357.07 ZAE 130.02 ETE 180.66 ZAC 65.61 ETC 163.10 CLP-162.91
                                                                                                                                              OISTANCE 481.351
          HELIOCENTRIC CONIC
          PLANETOCENTRIC CONIC
                                                                                                                                                                                                2.04 VHP 5.853 OPA -15.10 RAP 333.47 ECC 1.2249
            C3 13.665 VHL 3.697 DLA 16.54 RAL 332.15 RAD 6567.5 VEL 11.621 PTH 2.04 VHP 5.853 OPA -15.10 RAP 333.47 ECC 1.2249

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ LONG

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ Z LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ Z LAT IN
                                                                                                                                                        192.73
                                         2 2 35
18 27 30
                                                                                                      -27.39
                                                                                                                                  72.34
                                                                      2669.13
                                                                                                                                                                                        61.70 19 38 0
99.10 4 12 52
60.17 20 46 8
103.43 5 37 8
56.11 21 31 14
                    90.00
                                                                                                                                                                                                                                                                                 -2.80
                                                                                                                                                                                                                                                  3629.4
                                                                                                                                                           187.44
                                                                                                                                 173.62
                                                                                                           .99
                                                                      4229.43
                     90.00
                                                                                                                                                                                                                                                                              -27.04
                                                                                                                                                                                                                                                  1776.7
                                                                                                                                                           192.54
                                       3 33 16 2376.69
19 39 30 3997.10
                                                                                                      -28.60
                                                                                                                                   50.63
                  100.00
                                                                                                                                                                                                                                                                               -1.93
                                                                                                                                                                                                                                                  3397.1
                                                                                                                                                       186.85
                                                                                                                                 155.95
                                                                                                        2.06
                  100.00
                                                                                                                                                                                                                                                                                                             20.25
                                                                                                                                                                                                                                                                            -29.56
                                                                                                                                                                                                                                                  1498.5
                                                                                                     -31.74
                                                                                                                                  28.78
                                                                                                                                                          191.81
                                        5 2 9
20 27 6
                                                                     2098.55
                  110.00
                                                                                                                                                                                                                                                  3248.0
                                                                                                                                                                                                                                                                                     .29
                                                                                                                                                           185.16
                                                                                                                                 142.95
                                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
ST 2534.0 SR 229.9 SS 808.9
                                                                      3848.01
                  110.00
                                                                                                                                   MID-COURSE EXECUTION ACCURACY
           DIFFERENTIAL CORRECTIONS
                                                                                                                                    9GT 5063.4 SGR 338.2 SG3 243.7 ST 2534.0 SR 229.9 SS 808.9 RRT -.2237 RRF -.2342 RTF ..9231 CRT ..9937 CR5 -.9574 CST -.9787 RRT -.2237 RRF -.2342 RTF ..9231 LS4 2665 [] MSA 159.9 SSA 19.3
              TDE 1.6305 TRA -.2694 TC3-5.9054 BAU 1.0803
             RDE .1470 RRA -. 0611 RC3 .3104 FAU .04670
                                                                                                                                                                                                                                      LSA 2665.0 MSA 159.9 SSA 19.3
EL1 2544.3 EL2 25.8 ALF 5.15
                                                                                                                                     SGB 5074.7 R23 .0276 R13 -.9231
SGI 5064.0 SG2 329.6 THA 179.14
             FOE 1.0189 FRA .5087 FC3-2.9585 BSP 16057
BOE 1.6371 BRA .2763 BC3 5.9136 FSP -809
```

```
LAUNCH CATE DEC 10 1965
                                                                                                   FLIGHT TIME 166.00
                                                                                                                                                                                 ARRIVAL CATE MAY 25 1966
      HELIOCENTRIC CONIC
                                                                                                 DISTANCE 487.117
       RL 147.3] LAL -.00 LOL 77.73 VL 26.957 GAL -.93 A7L 86.56 HCA 238.35 SMA 123.44 ECC .19404 INC 3.4428 V1 30.243
RP 108.94 LAP -2.93 LOP 316.04 VP 36.897 GAP 8.95 A7P 91.81 TAL 183.86 TAP 62.22 RCA 99.49 APO 147.39 V2 34.785
RC 158.168 GL 25.82 GP -.57 ZAL 93.54 ZAP 163.89 ETS 357.20 ZAE 129.92 ETE 180.60 ZAC 67.69 ETC 163.52 CLP-163.90
      PLANETOCENTRIC CONIC
       C3 13.815 VHL 3.717 DLA 17.43 RAL 334.97 RAD 6567.5 VEL 11.628 PTH 2.04 VHP 5.994 CPA -14.31 RAP 335.56 ECC 1.2274
       LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         2 5 3 2704.98

18 47 28 4198.35

3 36 30 2410.05

19 58 42 3968.51

5 6 58 2126.99

20 44 43 3824.34
            90.00
                                                                                                        196.09
                                                                    -27.68
                                                                                        74.92
                                                                                                                                  96.23 2 50 8
                                                                                                                                                                        2105.0
                                                                                                                                                                                         -26.53
                                                                                                                                                                                                                66.44
            90.00
                                                                                                                                  61.68 19 57 26
97.87 4 16 40
                                                                       -.01
                                                                                        171.89
                                                                                                            190.58
                                                                                                                                                                        3598.4
                                                                                                                                                                                            -3.80
                                                                                                                                                                                                               165.25
           100.00
                                                                     -28.93
                                                                                        53.05
                                                                                                            195.91
                                                                                                                                                                        1810.1
                                                                                                                                                                                           -27.54
                                                                                                                                                                                                                44.52
                                                                                                                                60.13 21 4 50
102.25 5 42 25
56.01 21 48 27
          100.00
                                                                      1.09
                                                                                        154.38
                                                                                                            189.97
                                                                                                                                                                        3368.5
                                                                                                                                                                                           -2.89
                                                                                                                                                                                                               147.86
          110.00
                                                                                                       195.24
                                                                    -32.17
                                                                                         30.89
                                                                                                                                                                        1527.0
                                                                                                                                                                                          -30.15
                                                                                                                                                                                                                22.26
          110.00
                                                                     3.88
                                                                                        141.71
                                                                                                           188.23
                                                                                                                                                                        3224.3
                                                                                                                                                                                              - .61
                                                                                                                                                                                                              135.50
     DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
       TOE 1.7057 TRA -.1306 TC3-5.9289 BAU 1.0964
                                                                                             SGT 5136.4 SGR 348.9 SG3 235.7

RRT -.1914 RRF -.2048 RTF ..9231

SGB 5148.2 R23 ..0278 R13 -.9232
                                                                                                                                                                  5T 2633.5 SR 243.0 SS 814.3
CRT .9905 CRS -.9495 CST -.9804
      ROE .1561 RRA -.0689 RC3 .3050 FAU .04413
FOE 1.0037 FRA .5619 FC3-2.7655 BSP 16315
BDE 1.7128 BRA .1477 BC3 5.9367 FSP -784
                                                                                                                                                                  LSA 2762.6 MSA 156.7 SSA 19.8
                                                                                             SG1 5136.8 SG2 342.4 THA 179.25
                                                                                                                                                                 EL1 2644.4 EL2 33.3 ALF 5.22
 LAUNCH DATE DEC 10 1965
                                                                                                   FLIGHT TIME 168.00
                                                                                                                                                                                 ARRIVAL CATE MAY 27 1966
     HELIOCENTRIC CONIC
                                                                                                 DISTANCE 492.866
      RL 147.31 LAL -.00 LOL 77.73 VL 26.911 GAL -.54 AZL 86.56 HCA 241.52 SMA 123.16 ECC .19636 INC 3.4368 V1 30.243 RP 108.94 LAP -3.02 LOP 319.20 VP 36.864 GAP 9.20 AZP 91.64 TAL 182.19 TAP 63.71 RCA 98.97 APO 147.34 V2 34.787
       RC 160.359 GL 25.50 GP -.54 74L 90.68 7AP 164.86 ETS 357.31 7AE 129.84 ETE 180.55 7AC 69.80 ETC 163.91 CLP-164.86
     PLANETOCENTRIC CONIC
      C3 14.038 VHL 3.747 DLA 18.31 RAL 337.86 RAD 6567.6 VEL 11.637 PTH 2.04 VHP 6.141 DPA -13.51 RAP 337.67 ECC 1.2310 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 39 2742.30 -27.92 77.62 199.60 94.90 2 53 21 2142.3 -26.95 69.09
                                 7 55
                                              4168.07
                                                                       -.99
                                                                                        170.20
                                                                                                           193.90
                                                                                                                                  61.70
                                                                                                                                                20 17 23
                                                                                                                                                                        3568.1
                                                                                                                                                                                                               163.56
                            3 39 56 2444.71
20 18 19 3940.90
          100.00
                                                                     -29.23
                                                                                                                                               4 20 41
                                                                                         55.58
                                                                                                          199.45
                                                                                                                                  96.57
                                                                                                                                                                        1844.7
                                                                                                                                                                                           -28.01
                                                                                                                                                                                                                 46.99
          100.00
                          20 18 19
                                                                        . 15
                                                                                                                                 60.11 21 24 0
                                                                                       152.86
                                                                                                          193.26
                                                                                                                                                                       3340.9
                                                                                                                                                                                            -3.83
                                                                                                                                                                                                               146.34
                           5 12 3 2156.49
                                                                     -32.57
          110.00
                                                                                         33.09
                                                                                                          198.85
                                                                                                                                101.00
                                                                                                                                               5 48 O
                                                                                                                                                                                                                24.37
                                                                                                                                                                       1556.5
                                                                                                                                                                                           -30.71
                                                                                                                                 55.93 22 6 3
          110.00
                          21 2 41
                                              3801.88
                                                                    3.02
                                                                                       140.53
                                                                                                          191.47
                                                                                                                                                                       3201.9
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                           SCT 5206.1 SCR 358.8 SC3 227.6

RRT -.1602 RRF -.1768 RTF ..9243

SCB 5218.5 R23 .0284 R13 -.9243

SCI 5206.4 SCZ 354.1 THA 179.36
      TOE 1.7799 TRA .0130 TC3-5.9223 BAU 1.1129
                                                                                                                                                                 ST 2725.2 SR 256.2 SS 814.3
      RDE .1657 RRA -.0762 RC3 .2967 FAU .04173
                                                                                                                                                                 CRT .9865 CRS -.9419 CST -.9820
      FDE .9844 FRA .6066 FC3-2.5736 BSP 16644
BDE 1.7876 BRA .0773 BC3 5.9297 FSP -768
                                                                                                                                                                 LSA 2851.6 MSA 153.1 55A 20.2
                                                                                                                                                                 EL1 2736.9 EL2 41.8 ALF
LAUNCH DATE DEC 10 1965
                                                                                                 FLIGHT TIME 170.00
                                                                                                                                                                               ARRIVAL DATE HAY 29 1966
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 498.598
      RL 147.31 LAL -.OD LOL 77.73 VL 26.865 GAL -.13 AZL 86.57 HCA 244.68 SMA 122.88 ECC .19888 INC 3.4313 V1 30.243
RP 108.93 LAP -3.10 LOP 322.37 VP 36.833 GAP 9.46 AZP 91.47 TAL 180.52 TAP 65.19 RCA 98.44 APO 147.32 V2 34.789
      RC 162.536 GL 25.12 GP -.51 TAL 87.77 TAP 165.80 ETS 357.41 TAE 129.78 ETE 180.50 TAC 71.93 ETC 164.27 CLP-165.80
    PLANETOCENTRIC CONIC
      C3 14.342 VHL 3.787 DLA 19.16 RAL 340.82 RAD 6567.6 VEL 11.650 PTH 2.05 VHP 6.293 DPA -12.68 RAP 339.78 ECC 1.2360
      ENCH AZMITH ENCH TIME E-I TIME INJECT INJECT
                        2 10 25 2780.94 -28.12

19 28 46 4138.91 -1.93

3 43 36 2480.49 -29.48

20 38 17 3914.58 -.74

5 17 26 2186.89 -32.94

21 20 55 3780.95 2.22
           90.00
                                                                                       80.43
                                                                                                       203.27
                                                                                                                                93.50
                                                                                                                                               2 56 46
                                                                                                                                                                      2180.9
                                                                                                                                                                                       -27.33
                                                                                                                                                                                                           71.86
                                                                                                                                61.74 20 37 45
95.20 4 24 56
           90.00
                                                                                      168.57
                                                                                                          197.37
                                                                                                                                                                      3538.9
                                                                                                                                                                                           -5.70
                                                                                                                                                                                                             161.91
         100.00
                                                                                       58.22
                                                                                                          203.15
                                                                                                                                                                      1880.5
                                                                                                                                                                                          -28.44
                                                                                                                                                                                                              49.56
                                                                                                                                60.12 21 43 31
99.69 5 53 53
         100.00
                                                                                                                                                                      3314.6
                                                                                     151.42
                                                                                                          196.71
                                                                                                                                                                                          -4.71
                                                                                                                                                                                                             144.88
                                                                                                                                                                 3314.6
1586.9
         110.00
                                                                                       35.39
                                                                                                        202.62
                                                                                                                                                                                        -31.25
                                                                                                                                                                                                             26.57
                                                                                                                                 55.88 22 23 56
         110.00
                                                                                     139.44
                                                                                                          194.86
                                                                                                                                                                      3180.9
                                                                                                                                                                                          -2.27
                                                                                                                                                                                                             133.23
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                           SCI 5272.6 SGR 367.9 SG3 220.8
RRT -.1279 RRF -.1460 RTF .9249
SGB 5285.4 R23 .0274 R13 -.9249
SGI 5272.8 SG2 364.9 THA 179.49
      TOE 1.8634 TRA .1753 TC3-5.8709 BAU 1.1270
                                                                                                                                                                ST 2823.6 SR 269.3 SS 820.1
CRT .9816 CRS -.9341 CST -.9835
      RCE .1760 RRA -. 0831 RC3 .2854 FAU .03940
                                                                                                                                                                LSA 2948.6 MSA 151.3 SSA 20.4
EL1 2835.9 EL2 51.3 ALF 5.35
     FDE .9742 FRA .6584 FC3-2.3781 BSP 16876
BDE 1.8717 BRA .1940 BC3 5.8778 FSP -747
LAUNCH DATE DEC 10 1965
                                                                                                 FLIGHT TIME 172.00
                                                                                                                                                                               ARRIVAL DATE MAY 31 1966
   HELIOCENTRIC CONTC.
                                                                                               DISTANCE 504.310
     RL 147.31 LAL -.00 LOL 77.73 VL 26.820 GAL .30 A7L 86.57 HCA 247.84 SMA 122.60 ECC .20163 INC 3.4260 V1 30.243
RP 108.92 LAP -3.17 LOP 325.53 VP 36.803 GAP 9.73 A7P 91.29 TAL 178.83 TAP 66.67 RCA 97.88 APO 147.32 V2 34.792
     RC 164.699 GL 24.68 GP -.48 7AL 84.83 7AP 166.71 ETS 357.51 7AE 129.73 ETE 180.47 7AC 74.09 ETC 164.61 CLP-166.72
   PLANETOCENTRIC CONIC
     C3 14.737 VHL 3.839 DLA 19.98 RAL 343.84 RAD 6567.6 VEL 11.667 PTH 2.05 VHP 6.451 DPA -11.83 RAP 341.91 ECC 1.2425
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00
                           2 13 24 2820.64
                                                                   -28.25
                                                                                      83.33
                                                                                                        207.08
                                                                                                                               92.06
                                                                                                                                                3 0 25
                                                                                                                                                                    2220.6
                                                                                                                                                                                        -27.66
                                                                                                                                                                                                              74.71
          90.00
                                                                                                                                61.81 20 58 24
93.79 · 4 29 28
                         19 49 53
                                            4111.24
                                                                   -2.82
                                                                                      167.03
                                                                                                         201.01
                                                                                                                                                                      3511.2
                                                                                                                                                                                           -6.57
                                                                                                                                                                                                             160.35
         100.00
                           3 47 31
                                            2517.17
                                                                   -29.67
                                                                                      60.92
                                                                                                         206.99
                                                                                                                                                                      1917.2
                                                                                                                                                                                         -28.83
                                                                                                                                                                                                              52.22
                       20 58 27
                                                                                                                                60.15 22 3 17
98.33 6 0 6
55.85 22 42 1
         100.00
                                           3889.95
                                                                   -1.58
                                                                                    150.07
                                                                                                         200.31
                                                                                                                                                                     3289.9
                                                                                                                                                                                          -5.54
                                                                                                                                                                                                             143.52
        110.00
                         5 23 8 2217.99
21 39 19 3761.89
                                                                   -33.27
                                                                                       37.75
                                                                                                         206.54
                                                                                                                                                                                         -31.77
                                                                                                                                                                    1618.0
                                                                                                                                                                                                               28.85
                                                                                                                                                                3161.9
         110.00
                                                                  1.49
                                                                                     138.44
                                                                                                         198.40
                                                                                                                                                                                           -3.00
                                                                                                                                                                                                             132.24
                                                                                        MID-COURSE EXECUTION ACCURACY
SGT 5324.5 SGR 376.3 SG3 212.6
RRT -.0953 RRF -.1125 RTF .9242
SGB 5337.8 R23 .0241 R13 -.9242
SGB 5337.8 R23 .0241 R15 -.9242
   DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
     TOE 1.9451 TRA .3447 TC3-5.7696 BAU 1.1380 ROE .1871 RRA -.0893 RC3 .2717 FAU .03671
    FOE .9603 FRA .7069 FC3-2.1563 BSP 16925
BDE 1.9541 BRA .3560 BC3 5.7760 FSP -704
```

ARRIVAL CATE JUN 2 1966 LAUNCH DATE DEC 10 1965 FLIGHT TIME 174.00 HELIOCENTRIC CONIC DISTANCE 510.001 RL 147.31 LAL -.00 LOL 77.73 VL 26.775 GAL .74 A7L 86.58 HCA 251.00 SMA 122.33 ECC .20463.INC 3.4209 V1 30.243
RP 108.91 LAP -3.23 LOP 328.70 VP 36.774 GAP 10.01 A7P 91.11 TAL 177.13 TAP 68.14 RCA 97.30 APO 147.36 V2 34.796 24.16 GP -.46 TAL 81.87 TAP 167.61 ETS 357.59 TAE 129.70 ETE 180.44 TAC 76.28 ETC 164.92 CLP-167.62 RC 166.847 GL PLANETOCENTRIC CONIC C3 15.231 VHL 3.903 CLA 20.75 RAL 346.91 RAD 6567.6 VEL 11.688 PTM 2.06 VHP 6.617 OPA -10.96 RAP 344.04 ECC 1.2507 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 211.01 90.57 3 4 19 2261.2 90.00 2 16 37 2861.17 20 11 8 4085.47 -28.31 86.29 158.89 204.79 61.90 21 19 14 -7.38 90.00 -3.65 165.59 3 51 44 2554.50 21 18 43 3867.37 5 29 11 2249.59 21 57 45 3745.04 210.97 92.34 4 34 18 1954.5 54.95 100.00 -29.81 63.69 60.19 22 23 11 3267.4 142.27 -2.34 148.83 204.06 100.00 96.92 6 6 ... 75.83 23 0 10 210.61 1649.6 -32.24 31.19 -33.56 40.18 110.00 .85 3145.0 202.07 110.00 137.56 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5381.3 SGR 384.0 SG3 205.5 RRT -.0642 RRF -.0835 RTF .9253 SGB 5395.0 R23 .0238 R13 -.9253 ST 2987.4 SR 295.8 SS 817.9 TOE 2.0259 TRA .5225 TC3-5.6486 BAU 1.1514 .9707 CRS -.9192 CST -.9860 ROE .1991 RRA -.0947 RC3 .2558 FAU .03454 FOE .9437 FRA .7513 FC3-1.9630 BSP 17183 CRT LSA 3107.8 MSA 149.8 SSA 20.5 EL1 3001.2 EL2 70.7 ALF 5.49 BOE 2.0357 BRA .5310 BC3 5.6544 FSP -687 SG1 5381.3 SG2 383.2 THA 179.74 ARRIVAL DATE JUN 4 1966 FLIGHT TIME 176.00 LAUNCH DATE DEC 10 1965 DISTANCE 515.670 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 26.730 GAL 1.20 A7L 86.58 MCA 254.17 SMA 122.06 ECC .20790 INC 3.4161 V1 30.243 RP 108.89 LAP -3.29 LOP 331.87 VP 36.745 GAP 10.30 A7P 90.93 TAL 175.43 TAP 69.60 RCA 96.68 APO 147.44 V2 34.800 RC 168.980 GL 23.59 GP -.44 ZAL 78.91 ZAP 168.49 ETS 357.66 ZAE 129.68 ETE 180.43 ZAC 78.48 ETC 165.20 CLP-168.50 PLANETOCENTRIC CONIC C3 15.836 VHL 3.979 DLA 21.48 RAL 350.D1 RAD 6567.6 VEL 11.714 PTH 2.06 VHP 6.790 DPA -10.07 RAP 346.18 ECC 1.2606 LNCH AZMEN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMEN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 20 8 2902.23 20 32 23 4061.98 -28.30 2302.2 90.00 89.30 215.07 89.07 3 8 30 -28.13 80.64 21 40 5 4 39 29 90.00 -4.40 164.27 208.69 62.00 3462.0 157.56 3 56 16 -29.88 215.07 90.87 1992.2 -29.44 57.71 100.00 2592.20 66.49 60.25 22 43 2 100.00 21 38 55 3847.24 -3.02 147.72 207.93 3247.2 -6.96 141.15 6 13 37 5 35 36 2281.48 -33.79 42.64 214.81 95.48 1681.5 33.58 110.00 22 16 3730.73 . 30 136.82 205.86 55.82 23 18 16 3130.7 -4.18 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5433.6 SGR 390.8 SG3 198.8 RRT -.0334 RRF -.0539 RTF .9264 ST 3054.3 SR 308.9 SS 813.6 TOE 2.1069 TRA .7122 TC3-5.4922 BAU 1.1638 ROE .2121 RRA -.0993 RC3 .2380 FAU .03244 FOE .9281 FRA .7952 FC3-1.7737 BSP 17416 BDE 2.1176 BRA .7191 BC3 5.4974 FSP -669 CRT .9650 CRS -.9122 CST -.9870 SGB 5447.6 R23 .0227 R13 -.9264 LSA 3172.3 MSA 150.2 SSA 20.3 SG1 5433.6 SG2 390.6 THA 179.86 EL1 3068.9 EL2 80.7 ALF 5.58 ARRIVAL DATE JUN 6 1966 LAUNCH DATE DEC 10 1965 FLIGHT TIME 178.00 HELIOCENTRIC CONIC DISTANCE 521.313 RL 147.31 LAL -.00 LOL 77.73 VL 26.686 GAL 1.67 A7L 86.59 MCA 257.33 SMA 121.80 ECC .21145 INC 3.4113 VI 30.243 RP 108.88 LAP -3.33 LOP 335.04 VP 36.718 GAP 10.60 A7P 90.75 TAL 173.73 TAP 71.06 RCA 96.04 APO 147.55 V2 34.805 RC 171.096 GL 22.95 GP -.42 TAL 75.96 TAP 169.36 ETS 357.71 TAE 129.67 ETE 180.41 TAC 80.70 ETC 165.47 CLP-169.37 PLANETOCENTRIC CONIC C3 16.564 VHL 4.070 OLA 22.15 RAL 353.13 RAD 6567.7 VEL 11.745 PTH 2.07 VHP 6.971 CPA -9.16 RAP 348.32 ECC 1.2726 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 23 58 2943.53 -28.22 92.32 219.22 87.56 3 13 1 2343.5 -28.26 83.65 90.00 20 53 26 4041.18 -5.07 163.10 212.72 62.10 22 0 47 3441.2 -8.76 156.37 100.00 4 1 11 2630.01 -29.89 69.30 219.27 89.39 4 45 1 2030.0 -29.65 60.51 89.39 4 45 1 60.31 23 2 43 21 58 53 3829.93 5 42 23 2313.44 22 34 11 3719.27 3229.9 -7.53 140.18 100.00 -3.61 146.77 211.91 94.02 6 20 56 55.82 23 36 11 110.00 -33.97 45.12 219.13 1713.4 -33.04 36.00 110.00 136.22 209.75 55.82 3119.3 -4.62 130.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 3112.7 SR 321.8 SS 808.3 CRT .9592 CRS -.9057 CST -.9880 SGT 5481.1 SGR 396.9 SG3 192.2 RRT -.0023 RRF -.0230 RTF .9276 SGB 5495.4 R23 .0209 R13 -.9276 TOE 2.1893 TRA .9137 TC3-5.3004 BAU 1.1748 RCE .2261 RRA -.1030 RC3 .2189 FAU .03037 LSA 3228.4 MSA 151.5 SSA 20.0 .9133 FRA .8383 FC3-1.5875 BSP 17605 BCE 2.2009 BRA .9195 BC3 5.3049 FSP -648 EL1 3128.0 EL2 90.6 ALF 5.67 SG1 5481.1 SG2 396.9 THA 179.99 ARRIVAL DATE JUN 8 1966 FLIGHT TIME 180.00 LAUNCH DATE DEC 10 1965 HELIOCENTRIC CONIC DISTANCE 526.930 RL 147.31 LAL -.00 LOL 77.73 VL 26.642 GAL 2.17 AZL 86.59 MCA 260.50 SMA 121.54 ECC .21532 INC 3.4067 V1 30.243
RP 108.86 LAP -3.36 LOP 338.21 VP 36.692 GAP 10.92 AZP 90.56 TAL 172.02 TAP 72.52 RCA 95.37 APO 147.70 V2 34.811
RC 173.196 GL 22.27 GP -.41 ZAL 73.03 ZAP 170.21 ETS 357.75 ZAE 129.67 ETE 180.41 ZAC 82.93 ETC 165.71 CLP-170.22 PLANETOCENTRIC CONIC C3 17.431 VHL 4.175 OLA 22.76 RAL 356.25 RAD 6567.7 VEL 11.782 PTH 2.08 VHP 7.163 OPA -8.24 RAP 350.47 ECC 1.2869 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 28 10 2984.72 21 14 8 4023.50 4 6 31 2667.63 22 18 28 3815.82 5 49 33 2345.29 -28.31 2384.7 86.66 86.06 3 17 55 -28.06 95.32 223.45 90.00 3423.5 -9.31 155.36 90.00 62.20 22 21 11 -5.63 162.11 216.84 63.29 87.92 4 50 59 2067.6 -29.80 100.00 -29.83 72.10 223.56 23 22 4 -8.00 139.39 100.00 60.36 3215.8 -4.08 145.99 215.99 6 28 38 110.00 -34.10 47.59 223.54 92.56 1745.3 -33.37 23 53 47 3110.9 -4.94 22 51 56 3710.93 -.45 55.82 110.00 135.78 213.73 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5523.0 SGR 402.3 SG3 185.8 RRT .0295 RRF .0088 RTF .9289 ST 3163.0 SR 334.4 SS 802.2 CRT .9534 CRS -.8996 CST -.9889 TOE 2.2735 TRA 1.1298 TC3-5.0728 BAU 1.1831 RDE .2412 RRA -.1055 RC3 .1988 FAU .02832 SGB 5537.6 R23 -.0187 R13 .9289 SG1 5523.0 SG2 402.1 THA .12 FDE .8997 FRA .8817 FC3-1.4067 BSP 17716 BDE 2.2862 BRA 1.1347 BC3 5.0767 FSP -625 LSA 3276.6 MSA 153.5 SSA 19.6 EL1 3179.0 EL2 100.4 ALF 5.76

ARRIVAL DATE JUN 10 1966

LAUNCH DATE DEC 10 1965

```
DISTANCE 532.516
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.599 GAL 2.70 A7L 86.60 MCA 263.66 SMA 121.28 ECC .21953 INC 3.4022 V1 30.243 RP 108.84 LAP -3.38 LOP 341.38 VP 36.666 GAP 11.25 A7P 90.38 TAL 170.32 TAP 73.98 RCA 94.65 APO 147.90 V2 34.817 RC 175.278 GL 21.53 GP -.39 TAL 70.14 ZAP 171.05 ETS 357.75 ZAE 129.68 ETE 180.40 ZAC 85.18 ETC 165.92 CLP-171.06
   PLANETOCENTRIC CONIC
    C3 18.455 VML 4.296 DLA 23.30 RAL 359.36 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 7.364 DPA -7.30 RAP 352.62 ECC 1.3037
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 32 50 3025.46
21 34 17 4009.35
4 12 17 2704.76
22 37 30 3805.28
5 57 6 2376.83
23 9 10 3705.97
                                                                                                                                                             -28.30
                                                                                                            84.59
                                                                                                                            3 23 15
                                                                                                                                               2425.5
                                                                                                                                                                                  89.64
                                                                                          227.75
         90.00
                                                          -27.84
                                                                          98.28
                                                                                                               62.29 22 41 6
86.48 4 57 22
                                                                                                                                               3409.3
                                                                                                                                                                  -9.74
                                                                                                                                                                                  154.54
                                                           -6.08
                                                                           161.31
                                                                                           221.03
                                                                                                                                               2104.8
                                                                                                                                                                 -29.88
                                                          -29.70
                                                                           74.85
                                                                                           227.91
       100.00
                                                                                        220.13
228.02
                                                                                                               60.41 23 40 55
                                                                                                                                               3205.3
                                                                                                                                                                  -8.34
                                                                                                                                                                                 138.60
                                                                           145.41
                                                           -4.44
       100.00
                                                                                                                            6 36 43
                                                                                                                                               1776.8
                                                                                                                                                               -33.64
                                                                                                                                                                                   40.85
                                                                                                               91.11 6 36 43
55.82 24 10 56
                                                         -34.17
                                                                           50.06
       110.00
                                                                                                                                               3106.0
                                                                                                                                                                  -5.12
                                                                                                                                                                                  129.31
                                                                           135.53
                                                                                           217.77
       110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5562.0 SGR 406.8 5G3 179.6
RRT .0604 RRF .0395 RTF .9305
SGB 5576.8 R23 -.0170 R13 .9305
                                                                                                                                         ST 3196.3 SR 346.5 SS 792.9
CRT .9477 CRS -.8937 CST -.9898
    TOE 2.3534 TRA 1.3553 TC3-4.8284 BAU 1.1921
    ROE .2574 RRA -.1070 RC3 .1783 FAU .02643
FOE .8840 FRA .9230 FC3-1 2400 REA
                                                                                                                                          LSA 3307.6 MSA 156.3 SSA 19.0
                                                                                                                                          EL1 3213.2 EL2 110.1 ALF 5.87
                                                                              5G1 5562.0 SG2 406.1 THA .25
    BOE 2.3675 BRA 1.3595 BC3 4.8317 FSP -607
                                                                                    FLIGHT TIME 184.00
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 538.067
  HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.556 GAL 3.25 A7L 86.60 MCA 266.83 SMA 121.03 ECC .22412 INC 3.3977 V1 30.243 RP 108.82 LAP -3.39 LOP 344.55 VP 36.642 GAP 11.60 A7P 90.19 TAL 168.61 TAP 75.44 RCA 93.90 APO 148.15 V2 34.824 RC 177.341 GL 20.76 GP -.38 7AL 67.30 7AP 171.88 ETS 357.73 7AE 129.69 ETE 180.41 7AC 87.44 ETC 166.11 CLP-171.89
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 19.653 VHL 4.433 DLA 23.78 RAL 2.44 RAD 6567.8 VEL 11.876 PTH 2.11 VHP 7.578 DPA -6.35 RAP 354.77 ECC 1.3234
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 37 59 3065.37 -27.55 101.16 232.09 83.17 3 29 4 2465.4 -28.21 92.56
90.00 21 53 42 3999.12 -6.40 160.73 225.28 62.36 23 D 21 3399.1 -10.05 153.96
100.00 4 18 33 2741.13 -29.52 77.54 232.32 85.07 5 4 14 2141.1 -29.89 68.75
100.00 22 55 49 3798.60 -4.66 145.04 224.32 60.44 23 59 7 3198.6 -8.56 138.43
110.00 6 5 3 2407.91 -34.18 52.48 232.57 89.67 6 45 11 1807.9 -33.85 43.25
110.00 23 25 48 3704.58 -.70 135.45 221.86 55.82 24 27 32 3104.6 -5.18 129.23
                                                                               MIO-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5596.0 SGR 410.6 SG3 173.6
RRT .0915 RRF .0710 RTF .9322
SGB 5611.0 R23 -.0148 R13 .9322
                                                                                                                                           ST 3218.3 SR 358.0 SS 782.9
     TOE 2.4329 TRA 1.5940 TC3-4.5618 BAU 1.1993
                                                                                                                                         CRT .9420 CRS -.8883 CST -.9905
LSA 3327.6 MSA 159.6 SSA 18.5
ELI 3236.0 EL2 119.5 ALF 5.99
    ROE .2748 RRA -.1071 RC3 .1578 FAU .02460
FOE .8692 FRA .9640 FC3-1.0835 BSP 18064
BOE 2.4484 BRA 1.5976 BC3 4.5646 FSP -590
                                                                           SG1 5596.1 SG2 408.8 THA .39
                                                                                                                                                       ARRIVAL DATE JUN 14 1966
                                                                                  FLIGHT TIME 186.00
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 543.581
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.514 GAL 3.82 AZL 86.61 HCA 270.00 SHA 120.78 ECC .22911 INC 3.3933 V1 30.243 RP 108.79 LAP -3.39 LOP 347.73 VP 36.618 GAP 11.98 AZP 90.00 TAL 166.91 TAP 76.91 RCA 93.11 APO 148.45 V2 34.832 RC 179.385 GL 19.95 GP -.36 7AL 64.52 ZAP 172.71 ETS 357.66 ZAE 129.71 ETE 180.41 ZAC 89.71 ETC 166.28 CLP-172.72
   PLANETOCENTRIC CONIC
                                                               5.47 RAO 6567.9 VEL 11.934 PTH 2.12 VHP 7.805 OPA -5.39 RAP 356.92 ECC 1.3465
    C3 21.051 VHL 4.588 DLA 24.19 RAL
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 43 41 3104.13
22 12 12 3993.18
4 25 19 2776.48
23 13 16 3796.05
6 13 22 2438.40
23 41 42 3706.90
                                                                                        236.47
                                                                                                          81.82 3 35 25
62.40 23 18 45
                                                                                                                                                              -28.05
                                                                                                                                               2504.1
                                                          -27.20
                                                                           103.95
         90.00
                                                                                                                                                                -10.24
                                                                                                                                                3393.2
                                                                           160.39
                                                                                           229.56
                                                          -6.59
         90.00
                                                                                                                                               2176.5
                                                                                                                                                                 -29.85
                                                                                           236.77
                                                                                                               83.72
                                                                                                                           5 11 35
                                                                            80.14
                                                          -29.29
        100.00
                                                                                                               60.45 24 16 32
                                                                                       228.55
                                                                                                                                                                 -8.65
                                                                                                                                                                                 138.29
                                                                                                                                               3196.1
                                                          -4.75
                                                                           144.90
        100.00
                                                                          54.86 237.17
135.57 225.98
                                                                                                              88.26 6 54 1
55.82 24 43 29
                                                                                                                                                               -34.01
                                                                                                                                                                                   45.62
                                                       -34.14
                                                                                                                                               1838.4
        110.00
                                                                                                                                                                  -5.09
                                                                                                                                                                                  129.35
                                                                                                                                               3106.9
                                                           -.61
        110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              HID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                             SGT 5625.6 SGR 413.6 SG3 167.8
RRT .1226 RRF .1025 RTF .9339
SGB 5640.8 R23 -.0127 R13 .9339
                                                                                                                                          ST 3228.4 SR 368.7 SS 771.8
CRT .9364 CRS -.8830 CST -.9912
     TOE 2.5111 TRA 1.8471 TC3-4.2793 BAU 1.2050
    ROE .2932 RRA -.1059 RC3 .1377 FAU .02281
FOE .8545 FRA 1.0054 FC3 -.9381 BSP 18206
                                                                                                                                          LSA 3335.8 MSA 163.4 SSA 17.8
                                                                                                                                          EL1 3246.9 EL2 128.7 ALF
                                                                                SG1 5625.8 SG2 410.4 THA
                                                                                                                          . 52
     BDE 2.5282 BRA 1.8501 BC3 4.2815 FSP -572
                                                                                                                                                        ARRIVAL DATE JUN 16 1966
                                                                                    FLIGHT TIME 188.00
LAUNCH DATE DEC 10 1965
                                                                                   DISTANCE 549.050
   HELTOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.472 GAL 4.43 AZL 86.61 HCA 273.17 SMA 120.53 ECC .23456 INC 3.3888 VL 30.243 RP 108.77 LAP -3.38 LOP 350.90 VP 36.596 GAP 12.37 AZP 89.81 TAL 165.22 TAP 78.39 RCA 92.26 APO 148.81 VZ 34.840 RC 181.409 GL 19.12 GP -.35 ZAL 61.80 ZAP 173.53 ETS 357.53 ZAE 129.73 ETE 180.43 ZAC 91.99 ETC 166.43 CLP-173.54
   PLANETOCENTRIC CONIC
                                                               8.45 RAO 6567.9 VEL 12.002 PTH 2.14 VHP 8.046 DPA -4.42 RAP 359.07 ECC 1.3732
     C3 22.676 VHL 4.762 DLA 24.52 RAL
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH A7MTH LNCH TIME L-I TIME
90.00 2 50 1 3141.39
90.00 22 29 38 3991.84
                                                                                                            60.54 3 42 22
62.41 23 36 10
82.44 5 19 27
60.44 24 33 2
                                                                                         240.86
                                                                                                                             3 42 22
                                                                                                                                                2541.4
                                                                                                                                                                -27.85
                                                          -26.81
                                                                           106.60
                                                                                                                                                                  -10.28
                                                                                                                                                3391.8
                                                                           160.32
                                                                                            233.85
                                                            -6.63
                                                                                                                                                                 -29.75
                                                                                                                                                2210.6
                        4 32 36 2810.60
                                                                                           241.24
                                                          -29.01
                                                                            82.54
        100.00
                    23 29 44 3797.86
6 22 3 2468.21
                                                                                                                                                3197.9
                                                                                                                                                                   -8.59
                                                                           145.00
                                                                                          232.78
                                                            -4.69
        100.00
                                                                                                                          7 3 11 1 2 36
                                                                                                                                                                -34.11
                                                                                                                86.89
                                                                                                                                                1868.2
                                                           -34.06
                                                                            57.19
                                                                                          241.79
        110.00
                                                                                                                                                3113.0
                                                                                                                                                                   -4.86
                        0 0 43
                                       3713.01
                                                            - . 37
                                                                           135.89
                                                                                           230.10
                                                                                                                55.82
                                                                            MID-COURSE EXECUTION ACCURACY
       110.00
                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5651.2 SGR 415.8 SG3 162.4 ST 3231.0 SR 378.4 S5 761.6 RRT .1545 RRF .1353 RTF .9357 CRT .9308 CR5 -.8782 C5T -.9919 SGB 5666.4 R23 -.0101 R13 .9357 LSA 3336.8 MSA 167.6 S5A 17.2 SGI 5651.5 SG2 410.8 THA .65 ELI 3250.2 EL2 137.5 ALF 6.23
     TOE 2.5912 TRA 2.1179 TC3-3.9803 BAU 1.2072
     ROE .3127 RRA -.1032 RC3 .1185 FAU .02102
FDE .8421 FRA 1.0484 FC3 -.8023 BSP 18263
BDE 2.6100 BRA 2.1204 BC3 3.9820 FSP -551
```

FLIGHT TIME 182.00

ARRIVAL DATE JUN 18 1966

FLIGHT TIME 190.00 LAUNCH DATE DEC 10 1965 DISTANCE 554.470 HELIOCENTRIC CONIC RE 147.31 LAL -.00 LOL 77.73 VL 26.430 GAL 5.06 AZL 86.62 HCA 276.34 SMA 120.29 ECC .24050 INC 3.3844 VI 30.243 RP 108.74 LAP -3.36 LOP 354.08 VP 36.574 GAP 12.80 AZP 89.63 TAL 163.54 TAP 79.88 RCA 91.36 APO 149.23 V2 34.849 -.34 ZAL 59.17 ZAP 174.34 ETS 357.31 ZAE 129.74 ETE 180.44 ZAC 94.27 ETC 166.54 CLP-174.35 RC 183.413 GL 18.28 GP PLANETOCENTRIC CONIC C3 24.559 VHL 4.956 DLA 24.79 RAL 11.36 RAD 6568.0 VEL 12.080 PTH 2.16 VHP 8.304 DPA -3.45 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.60 245.27 79.35 2576.8 3 49 56 2 56 59 3176.84 -26.39 109.11 62.38 23 52 27 81.22 5 27 50 60.41 24 48 30 85.56 7 12 40 153.74 3395.4 -10.17 -6.52 160.52 238.13 22 45 51 3995.39 -29.60 76.33 4 40 26 2843.31 23 45 6 3804.15 6 31 2 2497.28 0 14 55 3722.94 2243.3 100.00 -28.69 85.02 245.72 3204.1 -8.38 138.74 237.01 -4.47 145.35 100.00 50.21 1897.3 -34.17 110.00 -33.93 59.45 246.43 MID-COURSE EXECUTION ACCURACY 3122.9 -4.48 130.20 .01 136.41 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5671.6 SGR 417.2 SG3 157.0 RRT .1856 RRF .1668 RTF .9380 ST 3217.7 SR 387.0 SS 749.0 CRT .9252 CRS -.8733 CST -.9926 TOE 2.6660 TRA 2.4005 TC3-3.6823 BAU 1.2095 ROE .3331 RRA -.0989 RC3 .1003 FAU .01939 FDE .8278 FRA 1.0897 FC3 -.6834 BSP 18401 SGB 5686.9 R23 -.0083 R13 .9379 LSA 3321.8 MSA 171.9 SSA 16.6 SG1 5672.1 SG2 409.9 THA EL1 3237.6 EL2 145.9 ALF 6.36 BOE 2.6867 BRA 2.4025 BC3 3.6837 FSP -535 .79 ARRIVAL DATE JUN 20 1966 FLIGHT TIME 192.00 HELIOCENTRIC CONIC DISTANCE 559.832 RL 147.31 LAL -.00 LOL 77.73 VL 26.389 GAL 5.74 AZL 86.62 HCA 279.52 SHA 120.06 ECC .24699 INC 3.3798 VI 30.243 RP 108.71 LAP -3.33 LOP 357.26 VP 36.553 GAP 13.25 AZP 89.44 TAL 161.87 TAP 81.39 RCA 90.41 APO 149.71 V2 34.858 RC 185.395 GL 17.42 GP -.33 ZAL 56.62 ZAP 175.16 ETS 356.97 ZAE 129.76 ETE 180.45 ZAC 96.55 ETC 166.64 CLP-175.17 PLANETOCENTRIC CONIC C3 26.740 VHL 5.171 DLA 25.00 RAL 14.18 RAD 6568.1 VEL 12.170 PTH 2.18 VHP 8.581 DPA -2.47 RAP 3.36 ECC 1.4401 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 103.06 249.68 3 58 9 2610.3 -27.31 78.25 3 4 39 3210.28 -25.95 111.46 24 7 28 154.24 62.33 3404.0 -9.91 23 0 44 4003.98 -6.25 161.00 242.38 90.00 80.08 5 36 -2 60.37 1 6 47 5 36 42 2274.5 -29.42 78.64 4 48 48 2874.51 -28.34 87.27 250.20 3215.0 -8.03 139.35 0 3 12 3814.98 -4.11 145.95 241.21 100.00 -34.18 7 22 24 1 30 27 52.42 6 40 19 2525.60 0 28 11 3736.66 1925.6 84.27 -33.76 61.64 251.06 3136.7 -3.96 130.92 55.82 .53 137.13 238.32 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5687.7 SGR 417.8 SC3 151.8 RRT .2168 RRF .1987 RTF .9403 SGB 5703.0 R23 -.0064 R13 .9403 ST 3195.4 SR 394.2 SS 736.7 TOE 2.7402 TRA 2.7004 TC3-3.3818 BAU 1.2093 CRT .9196 CRS -.8687 CST -.9932 RDE .3544 RRA -.0928 RC3 .0836 FAU .01780 FDE .8146 FRA 1.1321 FC3 -.5762 BSP 18512 LSA 3298.0 MSA 176.3 SSA 15.9 SG1 5688.4 SG2 407.8 THA .92 BOE 2.7631 BRA 2.7020 BC3 3.3829 FSP -519 ARRIVAL DATE JUN 22 1966 FLIGHT TIME 194.00 LAUNCH DATE DEC 10 1965 DISTANCE 565.129 HELIOCENTRIC CONIC RL 147.31 LAL -.00 LOL 77.73 VL 26.349 GAL 6.45 AZL 86.62 MCA 282.69 SMA 119.83 ECC .25409 INC 3.3752 V1 30.243 RP 108.68 LAP -3.29 LOP .44 VP 36.534 GAP 13.74 AZP 89.26 TAL 160.22 TAP 82.91 RCA 89.38 APO 150.28 V2 34.868 RC 187.357 GL 16.56 GP -.33 ZAL 54.17 ZAP 175.98 ETS 356.41 ZAE 129.77 ETE 180.47 ZAC 98.83 ETC 166.70 CLP-175.99 PLANETOCENTRIC CONIC C3 29.264 VHL 5.410 DLA 25.14 RAL 16.92 RAD 6568.2 VEL 12.273 PTH 2.21 VHP 8.878 DPA -1.49 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.00 254.08 77.25 4 7 1 2641.6 3 12 59 3241.55 23 14 12 4017.67 -25.50 113.64 62.24 24 21 10 155.02 3417.7 -9.49 246.59 161.78 23 14 12 -5.81 79.02 5 46 3 60.30 1 20 0 -- 7 32 23 80.81 2304.1 -29.21 254.66 4 57 39 2904.14 -27.98 89.40 140.21 3230.3 -7.52 245.36 3830.32 -3.59 146.79 100.00 0 16 10 54.58 7 32 23 1953.2 -34.15 83.03 63.77 255.69 6 49 50 2553.16 -33.55 1 43 2 3154.1 -3.30 131.83 138.03 242.38 55.84 0 40 28 3754.06 1.20 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5699.5 SGR 417.7 SG3 146.8 RRT .2482 RRF .2307 RTF .9427 SGB 5714.7 R23 -.0046 R13 .9427 SGI 5700.4 SG2 404.6 THA 1.05 ST 3154.9 SR 400.0 SS 724.9 CRT .9140 CRS -.8642 CST -.9938 TOE 2.8141 TRA 3.0189 TC3-3.0829 BAU 1.2064 ROE .3766 RRA -.0850 RC3 .0664 FAU .01625 FOE .8024 FRA 1.1761 FC3 -.4807 BSP 18607 BOE 2.8392 BRA 3.0201 BC3 3.0836 FSP -503 LSA 3266.3 MSA 180.6 SSA 15.3 EL1 3186.0 EL2 161.2 ALF 6.61 ARRIVAL DATE JUN 24 1966 FLIGHT TIME 196.00 LAUNCH DATE DEC 10 1965 DISTANCE 570.348 HELIOCENTRIC CONIC RL 147.3] LAL -.00 LOL 77.73 VL 26.309 GAL 7.21 AZL 86.63 MCA 285.87 SMA 119.60 ECC .26187 INC 3.3704 VI 30.243 RP 108.65 LAP -3.24 LOP 3.62 VP 36.515 GAP 14.26 AZP 89.08 TAL 158.59 TAP 84.46 RCA 88.28 APO 150.92 V2 34.878 RC 189.297 GL 15.69 GP -.32 ZAL 51.81 ZAP 176.80 ETS 355.48 ZAE 129.78 ETE 180.49 ZAC 101.11 ETC 166.75 CLP-176.81 RC 189.297 GL 15.69 GP PLANETOCENTRIC CONIC C3 32.186 VHL 5.673 DLA 25.22 RAL 19.55 RAD 6568.3 VEL 12.392 PTH 2.24 VHP 9.199 DPA 7.64 ECC 1.5297 - .51 RAP LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 107.36 3 21 59 3270.61 23 26 13 4036.41 5 6 57 2932.20 0 27 52 3850.03 6 59 32 2580.01 0 51 47 3775.01 -26.68 258.47 76.34 4 16 30 -25.05 115.65 90.00 -8.91 156.10 62.13 24 33 29 3436.4 162.83 250.73 -5.22 90.00 5 55 50 82.86 -28.97 78.03 2332.2 -27.60 91.40 259.11 100.00 141.31 60.24 1 32 2 3250.0 -6.87 -2.93 147.88 249.47 100.00 7 42 32 56.67 -34.08 1980.0 -33.31 65.83 260.29 81.83 1 54 42 110.00 2.00 139.13 246,40 55.87 3175.0 -2.50 3775.01 0 51 47 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 3130.7 SR 404.4 SS 714.7 CRT .9084 CRS -.8601 CST -.9944 SGT 5708.3 SGR 416.9 SG3 142.1 RRT .2802 RRF .2634 RTF .9453 TOE 2.8913 TRA 3.3600 TC3-2.7854 BAU 1.1988 SGB 5723.5 R23 -.0029 R13 .9453 SGI 5709.5 SG2 400.1 THA 1.18 ROE .3996 RRA -.0752 RC3 .0549 FAU .01470 FOE .7926 FRA 1.2225 FC3 -.3953 BSP 18610 LSA 3231.3 MSA 184.6 SSA 14.7 EL1 3152.3 EL2 168.0 ALF 6.71

BOE 2.9188 BRA 3.3609 BC3 2.7860 FSP -485

ARRIVAL DATE JUN 26 1966

```
LAUNCH DATE DEC 10 1965
                                                                                             FLIGHT TIME 198.00
                                                                                            DISTANCE 575.477
    HELIOCENTRIC CONIC
     RL 147.31 LAL -.00 LOL 77.73 VL 26.270 GAL 8.01 AZL 86.63 MCA 289.05 SMA 119.38 ECC .27041 INC 3.3656 V1 30.243 RP 108.62 LAP -3.18 LOP 6.81 VP 36.497 GAP 14.83 AZP 88.90 TAL 156.98 TAP 86.03 RCA 87.10 APO 151.66 VZ 34.889 RC 191.216 GL 14.84 GP -.31 ZAL 49.55 ZAP 177.63 ETS 353.78 ZAE 129.77 ETE 180.51 ZAC 103.38 ETC 166.76 CLP-177.65
    PLANETOCENTRIC CONIC
     C3 35.574 VML 5.964 DLA 25.25 RAL 22.08 RAD 6568.4 VEL 12.528 PTH 2.27 VMP 9.547 DPA
                                                                                                                                                                     .47 RAP
     C3 35.574 VML 5.964 OLA 25.25 RAL 22.08 RAD 6568.4 VEL 12.528 PTH 2.27 VMP 9.547 DPA .47 RAP 9.78 ECC 1.9855 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 31 36 3297.47 -24.60 117.49 262.83 75.52 4 26 33 2697.5 -26.35 109.26 90.00 23 36 46 4060.03 -4.47 164.16 254.80 62.01 24 44 26 3460.0 -8.18 157.45 100.00 5 16 40 2958.75 -27.21 93.28 263.54 77.12 6 5 58 2358.8 -28.71 84.79 100.00 0 38 19 3873.98 -2.12 149.19 253.50 60.18 1 42 53 3274.0 -6.07 142.64 110.00 7 9 21 2606.17 -33.04 67.82 264.86 80.68 7 52 47 2006.2 -33.97 58.71 110.00 1 2 7 3799.33 2.92 140.40 250.36 55.93 2 5 27 3199.3 -1.57 134.19
                                                                                    6 5 58
60.18 1 42 53
204.86 80.68 7 52 47
204.86 55.93 2 5 27
MID-COURSE EXECUTION ACCURACY
SGT 5710.8 SGR 415.2 SG3
RRT .3116 RRF 207
SGB 5725
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                                                         ST 3086.0 SR 407.0 SS 704.0
CRT .9026 CRS -.8559 CST -.9949
     TDE 2.9648 TRA 3.7185 TC3-2.5016 BAU 1.1899
     RDE .4232 RRA -.0633 RC3 .0430 FAU .01326
FDE .7823 FRA 1.2693 FC3 -.3228 BSP 18699
BDE 2.9949 BRA 3.7190 BC3 2.5019 FSP -470
                                                                                      SGB 5725.9 R23 -. 0017 R13 .9482
                                                                                                                                                         LSA 3185.8 MSA 188.3 SSA 14.1
                                                                                    SG1 5712.3 SG2 394.5 THA 1.30
                                                                                                                                                         EL1 3107.9 EL2 174.0 ALF 6.81
LAUNCH DATE DEC 10 1965
                                                                                             FLIGHT TIME 200.00
                                                                                                                                                                        ARRIVAL CATE JUN 28 1966
   HELIOCENTRIC CONIC
                                                                                            DISTANCE 580.500
     RL 147.31 LAL -.00 LOL 77.73 VL 26.231 GAL 8.87 A7L 86.64 MCA 292.23 SMA 119.16 ECC .27980 INC 3.3605 V1 30.243
RP 108.58 LAP -3.11 LOP 9.99 VP 36.880 GAP 15.45 A7P 88.73 TAL 155.41 TAP 87.64 RCA 85.82 APO 152.50 V2 34.900
RC 193.113 GL 13.99 GP -.30 ZAL 47.40 ZAP 178.46 ETS 350.03 ZAE 129.75 ETE 180.54 ZAC 105.64 ETC 166.74 CLP-178.49
   PLANETOCENTRIC CONIC
     C3 39.508 VHL 6.286 OLA 25.22 RAL 24.49 RAD 6568.5 VEL 12.684 PTH 2.30 VMP 9.925 DPA
                                                                                                                                                                    1.44 RAP 11.90 ECC 1.6502
    C3 39.508 VML 6.286 OLA 25.22 RAL 24.49 RAD 6568.5 VEL 12.684 PTM 2.30 VMP 9.925 DPA 1.44 RAP 11.90 ECC 1.6502 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 41 44 3322.27 -24.17 119.18 267.16 74.78 4 37 6 2722.3 -26.03 111.00 90.00 23 45 54 4088.24 -3.56 165.74 258.79 61.89 24 54 2 3488.2 -7.30 159.05 100.00 5 26 41 2983.88 -26.82 95.04 267.92 76.27 6 16 25 2383.9 -28.44 86.61 100.00 0 47 34 3901.87 -1.17 150.72 257.46 60.13 1 52 35 3301.9 -5.14 144.18 110.00 7 19 15 2631.71 -32.74 69.75 269.38 79.57 8 3 7 2031.7 -33.83 60.69 110.00 1 11 29 3826.81 3.97 141.84 254.26 56.02 2 15 16 3226.8 -.52 135.63
                                                                                     24 54 2
76.27 6 16 25
27.46 60.13 1 52 35
27.45 60.13 1 52 35
41.84 254.26 56.02 2 15 16
HID-COURSE EXECUTION ACCURACY
SGT 5709.7 SGR 412.9 SG3
RRT .3431 RRF 3008 5724
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     TOE 3.0400 TRA 4.1009 TC3-2.2284 BAU 1.1772
                                                                                                                                                        ST 3036.9 SR 408.0 SS 694.7
     ROE .4473 RRA -.0493 RC3 .0329 FAU .01187
FOE .7736 FRA 1.3186 FC3 -.2601 BSP 18766
                                                                                                                                                         CRT .8969 CRS -.8519 CST -.9955
                                                                                    SGB 5724.6 R23 -.0006 R13 .9512
SG1 5711.4 SG2 387.7 THA 1.43
                                                                                                                                                         LSA 3136.1 MSA 191.5 55A 13.5
     BOE 3.0728 BRA 4.1012 BC3 2.2287 FSP -456
                                                                                                                                                         EL1 3059.0 EL2 179.2 ALF
                                                                                           FLIGHT TIME 202.00
                                                                                                                                                                      ARRIVAL DATE JUN 3D 1966
LAUNCH DATE DEC 10 1965
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 585.397
    RL 147.31 LAL -.00 LOL 77.73 VL 26.193 GAL 9.80 AZL 86.64 MCA 295.41 SMA 118.95 ECC .29016 INC 3.3552 VI 30.243 RP 108.55 LAP -3.03 LOP 13.18 VP 36.463 GAP 16.12 AZP 88.56 TAL 153.88 TAP 89.30 RCA 84.44 APO 153.46 VZ 34.912 RC 194.989 GL 13.15 GP -.30 ZAL 45.36 ZAP 179.28 ETS 336.90 ZAE 129.72 ETE 180.56 ZAC 107.89 ETC 166.70 CLP-179.35
    PLANETOCENTRIC CONIC
                                                                                                                                                                  2.41 RAP 14.02 ECC 1.7256
     C3 44.089 VHL 6.640 DLA 25.14 RAL 26.79 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 10.338 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 271.45
                                                                                                                                                                              -25.70
                       3 52 17 3345.17
23 53 40 4120.68
                                                                -23.75
                                                                                  120.73
                                                                                                                         74.11
                                                                                                                                         4 48 2
                                                                                                                                                          2745.2
                                                                                                                                                                                                 112.60
         90.00
                                                                                   167.56 262.69 61.79 25 2 21

96.70 272.25 75.48 6 27 5

152.45 261.34 60.11 2 1 10

71.63 273.84 78.51 8 13 26

143.43 258.09 56.16 2 24 11

MID-COURSE EXECUTION ACCURACY
                                                                 -2.52
                                                                                  167.56
                                                                                                                                                              3520.7
                                                                                                                                                                                  -6.27
                                                                                                                                                                                                    160.89
                       5 36 58 3007.70
0 55 37 3933.39
7 29 10 2656.65
1 19 54 3857.20
                                                                -26.42
                                                                                                                                                              2407.7
                                                                                                                                                                                 -28.15
                                                                                                                                                                                                      88.33
                                                                                  152.45
                                                                                                                                                              3333.4
                                                                                                                                                                                 -4.OA
                                                                                                                                                                                                   145.92
                                                                  -.10
                                                                                                                                                             2056.7
                                                                                                                                                                                 -33.66
                                                                                                                                                                                                    62.61
        110.00
                                                               -32.42
                                                                                                                                                             3257.2
                                                                                  143.43
                                                                                                                                                                                     .65
                                                                                                                                                                                                   137.21
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 5704.0 SGR 409.8 SG3 128.7
RRT .3748 RRF .3594 RTF .9544
SGB 5718.7 R23 .0001 R13 .9544
SGI 5706.1 SG2 379.8 THA 1.55
                                                                                                                                                       ST 2984.9 SR 407.4 SS 686.9
CRT .8912 CRS -.8482 CST -.9960
     TOE 3.1184 TRA 4.5094 TC3-1.9664 BAU 1.1591
     ROE .4720 RRA -.0330 RC3 .0244 FAU .01050
FOE .7667 FRA 1.3710 FC3 -.2062 BSP 18803
                                                                                                                                                       LSA 3083.7 MSA 194.1 SSA 12.9
EL1 3006.9 EL2 183.5 ALF 6.96
     BOE 3.1539 BRA 4.5095 BC3 1.9665 FSP
                                                                   -442
                                                                                            FLIGHT TIME 204.00
                                                                                                                                                                       ARRIVAL DATE JUL 2 1966
LAUNCH DATE DEC 10 1965
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 590.143
     RL 147.31 LAL -.00 LOL 77.73 VL 26.156 GAL 10.80 AZL 86.65 MCA 298.60 SMA 118.74 ECC .30160 INC 3.3495 V1 30.243
RP 108.51 LAP -2.94 LOP 16.37 VP 36.448 GAP 16.86 AZP 88.40 TAL 152.40 TAP 91.00 RCA 82.93 APO 154.55 V2 34.924
RC 196.842 GL 12.33 GP -.29 ZAL 43.42 ZAP 179.63 ETS 234.05 ZAE 129.66 ETE 180.58 ZAC 110.11 ETC 166.62 CLP 179.77
   PLANETOCENTRIC CONIC
     C3 49.441 VHL 7.031 OLA 25.02 RAL 28.96 RAD 6568.8 VEL 13.069 PTH 2.39 VHP 10.790 OPA
                                                                                                                                                                   3.36 RAP 16.13 ECC 1.8137
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 3 9 3366.37 -23.35 122.15 275.69 73.51 4 59 16 2766.4 -25.39 114.08
          90.00 4 3 9
                       0 4 5 4156.93
5 47 24 3030.31
1 2 32 3968.22
7 39 2 2681.03
1 27 23 3890.27
                                                                                                                                                               3556.9
                                                                 -1.35
                                                                                  169.58
                                                                                                     266.49
                                                                                                                           61.71
                                                                                                                                          1 13 22
                                                                                                                                                                                  -5.12
                                                                                                                                                                                                    162.93
          90.00
                                                                                                                                       6 37 54
2 8 41
                                                                                                                                                                                -27.86
                                                                -26.02
                                                                                    98.26
                                                                                                    276.53
                                                                                                                           74.75
                                                                                                                                                               2430.3
                                                                                                                                                                                                     89.94
        100.00
                                                                 1.08
                                                                                  154.36
                                                                                                    265.14
                                                                                                                           60.13
                                                                                                                                                              3368.2
                                                                                                                                                                                 -2.90
                                                                                                                                                                                                   147.84
        100.00
                                                                                                                                       8 23 43
2 32 14
                                                                                                                                                              2081.0
                                                               -32.07
                                                                                    73.44
                                                                                                    278.23
                                                                                                                           77.48
                                                                                                                                                                                -33.46
                                                                                                                                                                                                      64.49
                                                                 6.38
                                                                                  145.17
                                                                                                     261.85
                                                                                                                           56.35
                                                                                                                                                              3290.3
                                                                                                                                                                                   1.91
                                                                                                                                                                                                    138.94
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SCT 5696.0 SGR 406.1 SG3 124.8
RRT .4068 RRF .3920 RTF .9578
SGB 5710.5 R23 .0008 R13 .9578
                                                                                                                                                        ST 2932.3 SR 405.1 SS 681.6
CRT .8856 CRS -.8449 CST -.9965
     TDE 3.2026 TRA 4.9497 TC3-1.7159 BAU 1.1343
     RDE .4972 RRA -.0141 RC3 .0176 FAU .00910
                                                                                                                                                        LSA 3031.3 MSA 195.9 SSA 12.4
     FDE .7626 FRA 1.4280 FC3 -.1594 BSP 18761
                                                                                   SG1 5698.4 SG2 370.8 THA 1.67
                                                                                                                                                      EL1 2954.3 EL2 186.8 ALF 7.00
     BOE 3.2410 BRA 4.9497 BC3 1.7160 FSP -426
```

```
ARRIVAL CATE JUL 4 1965
LAUNCH DATE DEC 10 1965
                                                                                  FLIGHT TIME 206.00
                                                                                  CISTANCE 594.707
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.119 GAL 11.87 AZL 86.66 HCA 301.79 SMA 118.54 ECC .31428 INC 3.3436 V1 30.243
RP 108.47 LAP -2.84 LOP 19.56 VP 36.433 GAP 17.68 AZP 88.24 TAL 150.97 TAP 92.76 RCA 81.28 APO 155.79 VZ 34.936
RC 198.673 GL 11.52 GP -.29 ZAL 41.60 ZAP 178.83 ETS 196.13 ZAE 129.58 ETE 180.60 ZAC 112.32 ETC 166.52 CLP 178.87
   PLANETOCENTRIC CONIC
    27.110 VPL 1.404 ULA 24.86 MAL 31.01 RAC 6569.0 VEL 13.307 PTH 2.43 VMP 11.288 DPA 4.30 RAP 18.21 ECC 1.9170 CNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 14 14 3386.03 -22.96 123.46 279.86 72.96 5 10 40 2786.0 -25.08 115.43 90.00 0 9 22 4196.53 -.07 171.79 270.19 61.68 1 19 19 3596.5 -3.86 165.15
                                                                                                                                                 4.30 RAP 18.21 ECC 1.9170
    C3 55.718 VHL 7.464 CLA 24.86 RAL 31.01 RAC 6569.0 VEL 13.307 PTH 2.43 VMP 11.288 DPA
                     5 57 54 3051.79
1 8 23 4006.01
7 48 48 2704.83
1 33 59 3925.73
                                                                           99.74
                                                                                          280.73
                                                                                                              74.07
                                                                                                                            5 48 46
                                                                                                                                              2451.8
                                                                                                                                                               -27.57
                                                                                                                                                                                 91.47
                                                          -25.63
       100.00
                                                                                                             74.07 6 48 46
60.19 2 15 9
76.50 8 33 53
56.59 2 39 24
                                                                                                                                              3406.0
                                                                                                                                                                               149.92
                                                                                                                                                               -1.63
                                                                          156.44
                                                                                          268.83
                                                           2.36
       100.00
                                                                                          282.54
                                                                                                                                             2104.8
                                                                                                                                                              -33.24
                                                                                                                                                                                66.31
                                                         -31.71
                                                                           75.20
       110.00
                                                                                                                                            3325.7
                                                                                                                                                                 3.26
                                                                                                                                                                               140.79
                                                                         147.05
                                                                                          265.53
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2875.2 SR 401.1 S5 677.2
CRT .8801 CRS -.8417 CST -.9970
                                                                             SGT 5681.8 SGR 401.6 SG3 120.8
RRT .4384 RRF .4241 RTF .9613
    TOE 3.2885 TRA 5.4178 TC3-1.4834 BAU 1.1050
    RCE .5226 RRA .0072 RC3 .0122 FAU .00778 FCE .7592 FRA 1.4877 FC3 -.1208 BSP 18818
                                                                              SGB 5696.0 R23 .0010 R13 .9613
SG1 5684.5 SG2 360.8 THA 1.78
                                                                                                                                         LSA 2974.4 MSA 196.9 55A
                                                                                                                                                                                   11.9
                                                                                                                                                                                 7.03
                                                                                                                                         EL1 2896.9 EL2 189.0 ALF
    BOE 3.3298 BRA 5.4178 BC3 1.4835 FSP -413
                                                                                   FLIGHT TIME 208.00
                                                                                                                                                      APRIVAL DATE JUL 6 1966
LAUNCH DATE DEC 10 1965
                                                                                  DISTANCE 599.051
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 26.084 CAL 13.05 A7L 86.66 MCA 304.98 SMA 118.34 ECC .32838 INC 3.3371 VI 30.243 RP 108.43 LAP -2.73 LOP 22.75 VP 36.420 CAP 18.58 AZP 88.09 TAL 149.62 TAP 94.60 RCA 79.48 APO 157.20 VZ 34.948 RC 200.481 GL 10.73 CP -.28 ZAL 39.89 ZAP 177.92 ETS 189.75 ZAE 129.46 ETE 180.63 ZAC 114.49 ETC 166.38 CLP 177.94
   PLANETOCENTRIC CONIC
    C3 63.115 VHL 7.945 OLA 24.66 RAL 32.93 RAD 6569.2 VEL 13.582 PTH 2.48 VHP 11.838 OPA 5.22 RAP 20.28 ECC 2.0387 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 25 25 3404.32 -22.59 124.68 283.95 72.46 5 22 9 2804.3 -24.78 116.69 90.00 0 13 31 4239.05 1.30 174.16 273.77 61.71 1 24 10 3639.1 -2.49 167.53 100.00 6 8 25 3072.20 -25.24 101.13 284.84 73.43 6 59 37 2472.2 -27.27 92.92 100.00 1 13 12 4046.40 3.72 158.66 272.43 60.32 2 20 38 3446.4 -.26 152.13 110.00 7 58 26 2728.03 -31.35 76.91 286.75 75.56 8 43 54 2128.0 -32.99 68.08 110.00 1 39 40 3963.34 9.11 149.06 269.12 56.91 2 45 44 3363.3 4.69 142.76
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2817.5 SR 395.5 SS 675.3
CRT .8748 CR5 -.8389 CST -.9974
                                                                              SGT 5663.5 SGR 396.5 SG3 117.1
RRT .4700 RRF .4562 RTF .9649
SGB 5677.4 R23 .0011 R13 .9649
     TOE 3.3812 TRA 5.9225 TC3-1.2650 BAU 1.0674
     RDE .5484 RRA .0314 RC3 .0081 FAU .00643
                                                                                                                                          LSA 2917.5 MSA 197.0 SSA 11.3
            .7584 FRA 1.5528 FC3 -.0882 BSP 18836
     FOE
                                                                                                                                         EL1 2838.7 EL2 190.2 ALF 7.03
                                                                              SG1 5666.6 SG2 349.8 THA 1.89
     BOE 3.4254 BRA 5.9226 BC3 1.2650 FSP -401
                                                                                                                                                     ARRIVAL DATE JUL 8 1966
                                                                                  FLIGHT TIME 210.00
LAUNCH DATE DEC 10 1965
                                                                                  DISTANCE 603.124
     RL 147.31 LAL -.00 LOL 77.73 VL 26.049 GAL 14.33 AZL 86.67 HCA 308.17 SHA 118.15 ECC .34411 INC 5.3302 V1 30.243 RP 108.39 LAP -2.62 LOP 25.94 VP 36.407 GAP 19.58 AZP 87.94 TAL 148.35 TAP 96.52 RCA 77.49 APO 158.81 VZ 34.961 RC 202.264 GL 9.96 GP -.28 TAL 38.30 TAP 176.95 ETS 187.28 TAE 129.30 ETE 180.65 TAC 116.63 ETC 166.21 CLP 176.96
    PLANETOCENTRIC CONIC
                                                                                                                                                  6.12 RAP 22.32 ECC 2.1830
    C3 71.881 VHL 8.478 CLA 24.42 RAL 34.72 RAD 6569.4 VEL 13.901 PTH 2.54 VHP 12.451 OPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       287.94
                                                                                                              72.01
                                                                                                                                          2821.3
                                                                                                                                                            -24.49
                                                                                                                           5 33 36
         90.00 4 36 35 3421.30
90.00 0 16 36 4284.05
                                                          -22.24
                                                                         125.80
                                                                                                                           1 28 0
                                                                                                                                              3684.0
                                                                                                                                                                 -1.04
                                                            2.75
                                                                          176.67
                                                                                          277.25
                                                                                                              61.61
                                                                                                                            7 10 23
                                                                                                                                              2491.5
                                                                                                                                                              -26.97
                                                                                                                                                                                  94.28
                     6 18 52 3091.54
1 17 0 4089.04
                                                         -24.86
                                                                          102.44
                                                                                          288.85
                                                                                                              72.84
                                                                                                                         2 25 9
                                                                                                                                              3489.0
                                                                                                                                                                 1.19
                                                                                                                                                                               154.47
                                                            5.16
                                                                          161.01
                                                                                          275.92
                                                                                                              60.52
        100.00
                                                                                                                           8 53.42
                                                                                                                                                               -32.72
                                                                                                                                                                                 69.78
                      8 7 51
                                                                                                                                              2150.5
                                      2750.53
                                                      -30.93
                                                                           78.54
                                                                                          290.85
                                                                                                              74.67
                                                                            51.19 272.62 57.30 2 51 13
MID-COURSE EXECUTION ACCURACY
                                                                          151.19
                                                                                                                                              3402.8
                                                                                                                                                                 6.19
                                                          10.57
                                       4002.81
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2759.9 SR 388.4 SS 675.9
CRT .8698 CRS -.8366 CST -.9978
                                                                               SGT 5641.6 SGR 390.7 SG3 113.6
      TOE 3.4829 TRA 6.4683 TC3-1.0616 BAU 1.0202
                                                                              RRT .5016 RRF .4884 RTF .9685
SGB 5655.1 R23 .0009 R13 .9685
SG1 5645.0 SG2 337.8 THA 2.00
     ROE .5744 RRA .0584 RC3 .0053 FAU .00505
FDE .7603 FRA 1.6241 FC3 -.0609 BSP 18832
BOE 3.5300 BRA 6.4686 BC3 1.0616 FSP -388
                                                                                                                                         LSA 2861.2 MSA 196.0 SSA 10.8
                                                                                                                                          EL1 2780.6 EL2 190.2 ALF 7.01
                                                                                                                                                      ARRIVAL DATE JUL 10 1966
                                                                                   FI IGHT TIME 212.00
LAUNCH DATE DEC 10 1965
                                                                                  DISTANCE 606.863
     RL 147.31 LAL -.00 LOL 77.73 VL 26.016 GAL 15.73 AZL 86.68 HCA 311.36 SMA 117.97 ECC .36172 INC 3.3226 V1 30.243
RP 108.35 LAP -2.49 LOP 29.14 VP 36.396 GAP 20.71 AZP 87.80 TAL 147.18 TAP 98.54 RCA 75.30 APO 160.64 V2 34.974
RC 204.023 GL 9.20 GP -.28 ZAL 36.84 ZAP 175.94 ETS 186.01 ZAE 129.10 ETE 180.67 ZAC 118.72 ETC 166.01 CLP 175.95
    PLANETOCENTRIC CONIC
                                                                                                                 2.60 VHP 13.135 DPA
     C3 82.332 VHL 9.074 DLA 24.14 RAL 36.37 RAD 6569.6 VEL 14.272 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      4 47 40 3437.12
6 29 10 3109.75
1 19 50 4133.60
8 17 3 2772.23
1 48 27 4043.89
                                                                                                                                                                -24.22
                                                                                                                                                                              118.92
                                                                                                             71.59
                                                                                                                                              2837.0
                                                                                         291.81
         90.00
                                                          -21.91
                                                                          126.83
                                                                                                                                               3731.1
                                                                                                                                                                                172.67
                                                                                                                            1 30 50
                                                                                                                                                                  .48
                                                                          179.31
                                                                                           280.59
                                                                                                               61.98
         90.00
                                                            4.26
                                                                                                                         . ¢0 59
2 28 44
9 7
                                                                                                                                                                -26.68
                                                          -24.49
                                                                          103.67
                                                                                           292.73
                                                                                                               72.30
                                                                                                                                               2509.7
                                                                                                                                                                                 95.55
        100.00
                                                                                                                                               3533.6
                                                                                                                                                                  2.70
                                                                                           279.29
                                                                                                               60.79
                                                                                                                                                                                156.92
                                                                          163.49
        100.00
                                                            6.64
                                                                                                               73.82
                                                                                                                                              2172.2
                                                                                                                                                               -32.44
                                                                                                                                                                                 71.41
                                                          -30.53
                                                                                           294.80
        110.00
                                                                            80.10
                                                                                                               57.78
                                                                                                                            2 55 50
                                                                                                                                               3443.9
                                                                                                                                                                 7.73
                                                                                                                                                                                 147.02
                                                                          153.42
                                                                                           276.02
        110.00
                                                         12.07
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            SGT 5617.8 SGR 384.5 SG3 110.3
RRT .5335 RRF .5210 RTF .9722
SGB 5630.9 R23 .0007 R13 .9722
SGI 5621.5 SG2 325.0 THA 2.10
                                                                                                                                        ST 2704.9 SR 379.9 55 680.1
CRT .8654 CRS -.8350 CST -.9982
     TDE 3.5988 TRA 7.0638 TC3 -.8718 BAU .9596
     RDE .6009 RRA .0888 RC3 .0036 FAU .00357
     FOE .7662 FRA 1.7035 FC3 -.0375 BSP 18736
BDE 3.6486 BRA 7.0644 BC3 .8718 FSP -375
                                                                                                                                         LSA 2808.2 MSA 193.9 SSA 10.2
                                                                                                                                      EL1 2724.9 EL2 188.9 ALF 6.96
```

ARRIVAL DATE JUL 12 1966

LAUNCH CATE DEC 10 1965

```
DISTANCE 610.186
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 25.983 GAL 17.29 A7L 86.69 HCA 314.56 SMA 117.79 ECC .38151 INC 3.3142 V1 30.243
RP 108.31 LAP -2.36 LOP 32.33 VP 36.385 GAP 21.97 A7P 87.67 TAL 146.13 TAP 100.69 RCA 72.85 APO 162.73 V2 34.987
RC 205.757 GL 8.47 GP -.27 TAL 35.52 TAP 174.86 ETS 185.25 TAE 128.84 ETE 180.69 TAC 120.75 ETC 165.77 CLP 174.87
   PLANETOCENTRIC CONIC
    C3 94.883 VHL 9.741 CLA 23.83 RAL 37.87 RAD 6569.8 VEL 14.705 PTH 2.66 VHP 13.904 CPA
                                                                                                                                                  7.83 RAP 26.29 ECC 2.5615
    ENCH AZMTH ENCH TIME E-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    4 58 34 3451.34
0 19 42 4379.90
6 39 15 3126.71
1 21 42 4179.76
8 25 56 2792.93
1 51 30 4086.30
                                                                                         295.55
                                                                                                             71.23
                                                                                                                           5 56 5
                                                                                                                                             2851.3
                                                                          127.76
                                                                                                                                                              -23.96
                                                          -21.60
         90 00
                                                                                                                           1 32 42
                                                                                                                                              3779.9
                                                                                                                                                                  2.05
                                                                                          283.80
                                                                                                              62.24
         90.00
                                                           5.81
                                                                          182.05
                                                                                                                        7 31 22
2 31 21
                                                                                                                                              2526.7
                                                                                                                                                               -26.39
                                                                          104.80
                                                                                          296.47
                                                                                                              71.80
                                                         -24.13
       100.00
                                                                                                                                                                                159.46
                                                                                          282.52
                                                                                                                                              3579.8
                                                                                                                                                                 4.26
       100.00
                                                           8.17
                                                                          166.06
                                                                                                              61.15
                                                                                                                        9 12 29
2 59 36
                                                                                                                                             2192.9
                                                                                          298.60
                                                                                                              73.03
                                                                                                                                                               -32.15
                                                                                                                                                                                 72.95
       110.00
                                                        -30.13
                                                                           81.58
                                                                          155.76
                                                                                          279.30
                                                                                                              58.33
                                                                                                                                             3486.3
                                                                                                                                                                  9.32
       110.00
                                                        13.60
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                             SGT 5587.0 SGR 377.5 SG3 107.0
RRT .5647 RRF .5529 RTF .9758
SGB 5599.7 R23 .0002 R13 .9758
SGI 5591.1 SG2 311.3 THA 2.19
                                                                                                                                        ST 2647.6 SR 369.9 SS 686.8
CRT .8614 CRS -.8338 CST -.9985
    TOE 3.7239 TRA 7.7074 TC3 -.6992 BAU .8869
    RCE .6276 RRA .1223 RC3 .0028 FAU .00204 FCE .7745 FRA 1.7905 FC3 -.0186 BSP 18736
                                                                                                                                         LSA 2753.5 MSA 190.8 55A
                                                                                                                                         EL1 2666.8 EL2 186.5 ALF
    BDE 3.7764 BRA 7.7084 BC3 .6992 FSP -364
                                                                                   FLIGHT TIME 216.00
                                                                                                                                                      ARRIVAL CATE JUL 14 1966
LAUNCH DATE DEC 10 1965
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 612.983
    RL 147.31 LAL -.00 LOL 77.73 VL 25.953 GAL 19.01 A7L 86.70 MCA 317.76 SMA 117.63 ECC .40383 INC 3.3049 V1 30.243 RP 108.27 LAP -2.22 LOP 35.53 VP 36.376 GAP 23.40 A7P 87.55 TAL 145.23 TAP 102.99 RCA 70.13 APO 165.13 V2 35.000 RC 207.465 GL 7.75 GP -.27 TAL 34.34 ZAP 173.72 ETS 184.75 TAE 128.50 ETE 180.71 TAC 122.72 ETC 165.51 CLP 173.72
   PLANETOCENTRIC CONIC
    PLANETOCENIMIC CONIC
C3 110.076 VHL 10.492 DLA 23.48 RAL 39.20 RAD 6570.1 VEL 15.212 PTH 2.73 VHP 14.773 DPA 8.63 RAP 28.20 ECC 2.8116
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 9 14 3464.16 -21.31 128.60 299.11 70.90 6 6 58 2864.2 -23.72 120.75
90.00 0 19 43 4430.06 7.39 184.89 286.85 62.59 1 33 33 3830.1 3.66 178.19
100.00 6 49 5 3142.22 -23.80 105.83 300.03 71.36 7 41 27 2542.2 -26.12 97.80
100.00 1 22 33 4227.24 9.72 168.74 285.61 61.59 2 53 1 3627.2 5.85 162.09
110.00 8 34 30 2812.42 -29.73 82.96 302.21 72.30 9 21 22 2212.4 -31.86 74.40
110.00 1 53 38 4129.81 15.14 158.19 282.44 58.98 3 2 27 3529.8 10.92 151.63
                                                                          158.19
                                                                                          282.44
                                                                                                              58.98
                                                                                                                           3 2 27
                                                                                                                                              3529.8
                                                                                                                                                               10.92
                       1 53 38
                                      4129.81
                                                        15.14
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             SGT 5552.5 SGR 370.0 SG3 104.0
RRT .5957 RRF .5847 RTF .9793
SGB 5564.8 R23 -.0004 R13 .9793
SGI 5556.9 SG2 296.9 THA 2.28
                                                                                                                                        ST 2591.6 SR 358.7 SS 697.3
CRT .8581 CRS -.8333 CST -.9988
    TOE 3.8661 TRA 8.4119 TC3 -.5410 BAU .7962
    ROE .6547 RRA .1594 RC3 .0027 FAU .00034
    FOE .7870 FRA 1.8880 FC3 -.0027 BSP 18710
                                                                                                                                         LSA 2701.2 MSA 186.6 SSA
    BOE 3.9212 BRA 8.4134 BC3 .5410 FSP -354
                                                                                                                                         EL1 2609.9 EL2 182.9 ALF
                                                                                                                                                     ARRIVAL DATE JUL 16 1966
                                                                                  FLIGHT TIME 218.00
LAUNCH DATE DEC 10 1965
                                                                                 DISTANCE 615.112
    RL 147.31 LAL -.00 LOL 77.73 VL 25.924 GAL 20.95 AZL 86.71 HCA 320.96 SHA 117.47 ECC .42912 INC 3.2943 V1 30.243 RP 108.23 LAP -2.07 LOP 38.73 VP 36.368 GAP 25.03 AZP 87.44 TAL 144.51 TAP 105.47 RCA 67.06 APO 167.88 V2 35.014
                           7.05 GP -.26 TAL 33.32 TAP 172.48 ETS 184.41 TAE 128.08 ETE 180.73 TAC 124.60 ETC 165.21 CLP 172.49
    RC 209.146 GL
   PLANETOCENTRIC CONIC
    C3 128.630 VHL 11.342 DLA 23.09 RAL 40.37 RAO 6570.4 VEL 15.810 PTH 2.80 VHP 15.762 DPA
                                                                                                                                                 9.40 RAP 30.03 ECC 3.1169
    UNCH AZMTH LNCH TIME L-I TIME
90.00 5 19 35 3475.23
90.00 0 18 41 4481.33
100.00 6 58 35 3156.03
100.00 1 22 22 4275.76
                                                      INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         2875.2
                                                                                                                                                           -23.52
                                                                                       302.46
                                                                                                                                                                               121.50
                                                         -21.06
                                                                        129.31
                                                                                                            70.63 6 17 30
63.04 1 33 22
                                                                                                                                                                               181.07
                                                                                                                                             3881.3
                                                            8.99
                                                                          187.81
                                                                                          289.73
                                                                                                                                                                 5.30
                                                                                                                        7 51 11
2 33 38
                                                                                                                                                                                 98.75
                                                        -23.50
                                                                          106.74
                                                                                          303.38
                                                                                                              70.97
                                                                                                                                             2556.0
                                                                                                                                                              -25.88
                                                                         171.50
                                                                                         288.53
                                                                                                              62.13
                                                                                                                                             3675.8
                                                                                                                                                                 7.46
                                                                                                                                                                               164.79
                                                        11.28
                                                                           84.22 305.59 71.64 9 29 51
60.70 285.43 59.72 3 4 21
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                 75.72
                     8 42 40
                                    2830.38
                                                                                                                                             2230.4
                                                                                                                                                              -31.58
       110.00
                                                       -29.36
                                                                         160.70
                                                                                                                                             3574.2
                                                                                                                                                               12.54
       110.00
                       1 54 46
                                                         16.68
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 2537.0 SR 346.3 S5 712.3
CRT .8557 CR5 -.8336 CST -.9991
                                                                             SGT 5514.0 SGR 362.0 SG3 101.1
RRT .6264 RRF .6162 RTF .9826
SGB 5525.9 R23 -.0011 R13 .9826
    TOE 4.0301 TRA 9.1862 TC3 -.3968 BAU .6825
    ROE .6824 RRA .2004 RC3 .0034 FAU-.00158
FDE .8046 FRA 1.9980 FC3 .0107 BSP 18658
BDE 4.0875 BRA 9.1883 BC3 .3969 FSP -344
                                                                                                                                        LSA 2651.6 MSA 181.2 SSA 8.6
                                                                                                                                         EL1 2554.3 EL2 178.0 ALF 6.70
                                                                              SG1 5518.7 SG2 281.9 THA 2.36
                                                                                   FLIGHT TIME 220.00
                                                                                                                                                     ARRIVAL DATE JUL 18 1966
LAUNCH DATE DEC 10 1965
                                                                                 DISTANCE 616.383
   HELIOCENTRIC CONIC
    RL 147.31 LAL -.00 LOL 77.73 VL 25.897 GAL 23.14 AZL 86.72 MCA 324.16 SHA 117.33 ECC .45786 INC 3.2821 V1 30.243
RP 108.19 LAP -1.92 LOP 41.94 VP 36.362 GAP 26.91 AZP 87.34 TAL 144.02 TAP 108.19 RCA 63.61 APO 171.05 V2 35.027
RC 210.800 GL 6.36 GP -.26 ZAL 32.48 ZAP 171.14 ETS 184.15 ZAE 127.55 ETE 180.75 ZAC 126.37 ETC 164.90 CLP 171.14
    RC 210.800 GL
   PLANETOCENTRIC CONIC
    C3 151.512 VHL 12.309 DLA 22.65 RAL 41.35 RAD 6570.6 VEL 16.518 PTH 2.88 VMP 16.895 DPA 10.11 RAP 31.78 ECC 3.4935
    UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 29 34 3484.19 -20.86 129.89 305.58 70.41 6 27 38 2884.2 -23.34 122.10 90.00 0 16 31 4533.46 10.58 190.81 292.40 63.58 1 32 4 3933.5 6.95 184.01
                     7 7 43 3167.76
1 21 3 4325.13
8 50 24 2846.47
1 54 51 4219.19
                                                                                                                            8 0 30
                                                                                                                                              2567.8
                                                                                                                                                               -25.66
                                                                                                                                                                                 99.56
                                                                          107.52
                                                                                          306.49
                                                                                                              70.64
       100.00
                                                         -23.23
                                                                                                                          2 33 9
9 37 51
                                                                                                                                              3725.1
                                                                                                                                                                              167.56
                                                                         174.34
                                                                                                                                                                9.08
                                                                                          291.24
                                                                                                              62.77
                                                         12.83
       100.00
                                                                                                                                                               -31.31
                                                       -29.01
                                                                          85.35
                                                                                          30A . 72
                                                                                                              71.06
                                                                                                                                             2246.5
                                                                                                                                                                                76.90
       110.00
                                                                         163.30
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                             3619.2
                                                                                                                                                                14.15
                                                                                                                                                                                156.54
                                                        18.21
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5472.9 SGR 353.5 SG3 98.5

RRT .6567 RRF .6475 RTF .9857

SGB 5484.3 R23 -.0018 R13 .9857

SGI 5477.9 SG2 266.4 THA 2.43
                                                                                                                                        ST 2484.9 SR 333.1 SS 733.0
CRT .8544 CRS -.8350 CST -.9993
    TOE 4.2236 TRA10.0430 TC3 -.2657 BAU .5383
    ROE .7110 RRA .2455 RC3 .0045 FAU-.00387
FOE .8288 FRA 2.1237 FC3 .0221 BSP 18504
                                                                                                                                       LSA 2606.3 MSA 174.7 SSA 8.1
EL1 2501.3 EL2 171.9 ALF 6.56
    BOE 4.2831 BRAID.0460 BC3 .2657 FSP -333
```

FLIGHT TIME 214.00

ARRIVAL CATE FEB 19 1966

FLIGHT TIME 70.00 LAUNCH DATE DEC 11 1965 015TANCE 190.023 RL 147.30 LAL -.00 LOL 78.74 VL 27.451 GAL -9.11 A7L 86.60 HCA 85.64 SMA 126.58 ECC .22618 INC 3.4020 VI 30.247 RP 107.60 LAP 3.39 LOP 164.37 VP 37.662 GAP -9.86 A7P 89.74 TAL 215.29 TAP 300.93 RCA 97.95 APO 155.21 V2 35.220 RC 51.850 GL 17.10 GP .76 ZAL 139.24 ZAP 16.01 ETS 356.30 ZAE 148.66 ETE 342.12 ZAC 63.67 ETC 163.43 CLP -15.99 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 29.935 VHL 5.471 DLA -4.08 RAL 295.14 RAD 6568.2 VEL 12.301 PTH 2.22 VHP 6.846 DPA -14.36 RAP 331.41 ECC 1.4927 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 14 47 2186.61 -18.88 39.72 162.15 111.50 2 51 14 1586.6 -15.79 32.40 13 12 9 5083.97 3 34 13 1930.38 14 35 25 4815.43 4 38 5 1730.45 15 48 2 4588.12 225.23 164.56 24.32 90.00 112.66 4 6 24 73.89 15 55 40 1330.4 -16.79 13.09 161.65 -20.04 20.38 100.00 23.07 197.18 4215.4 25.53 205.12 164.19 100.00 115.90 5 6 55 70.67 17 4 30 -19.46 356.49 1130.5 160.15 3.70 -23.13 110.00 25.85 3988.1 28.76 186.70 163.03 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 240.3 SR 370.4 SS 289.0 CRT .8769 CRS .9627 CST .7324 LSA 509.5 MSA 135.0 SSA 24.8 SGT 625.2 SGR 395.9 SG3 143.7 RRT -.0042 RRF -.0070 RTF -.6282 TDE - .2064 TRA - .3309 TC3 .4320 BAU .1792 RDE -.3533 RRA .0557 RC3 -.1173 FAU .04812 SGB 740.0 R23 .0114 R13 .6282 FDE .4437 FRA -.4581 FC3-1.3916 BSP 1657 BDE .4091 BRA .3355 BC3 .4477 FSP -375 EL1 430.2 EL2 99.4 ALF 58.48 SG1 625.2 SG2 395.9 THA 179.74 BDE .4091 BRA .3355 BC3 .4477 FSP FLIGHT TIME 72.00 LAUNCH DATE DEC 11 1965 HELIOCENTRIC CONIC DISTANCE 196.826 RL 147.30 LAL -.00 LOL 78.74 VL 27.593 GAL -9.06 A7L 86.61 MCA 88.88 SMA 127.53 ECC .21957 INC 3.3941 V1 30.247 RP 107.62 LAP 3.39 LOP 167.62 VP 37.759 GAP -8.99 A7P 89.93 TAL 216.75 TAP 305.63 RCA 99.53 APO 155.53 V2 35.212 RC 53.572 GL 17.42 GP .82 7AL 140.26 7AP 19.03 ETS 356.60 7AE 148.84 ETE 342.55 7AC 63.86 ETC 163.49 CLP -19.02 PLANETOCENTRIC CONIC C3 29.054 VHL 5.390 DLA -3.98 RAL 293.89 RAD 6568.2 VEL 12.265 PTH 2.21 VHP 6.392 DPA -14.23 RAP 331.60 ECC 1.4782 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 Z 9 0 2182.36 -18.77 39.45 160.41 111.60 Z 45 Z3 1582.4 -15.68 32.15 13 7 55 5073.26 3 28 29 1925.97 14 31 7 4804.88 4 32 27 1725.69 15 43 38 4577.93 14 32 28 4473.3 21.80 216.61 74.72 224.51 162.72 90.00 24.13 112.76 4 0 35 1326.0 12.82 100.00 -19.92 20.10 159.91 73.56 15 51 12 116.02 5 1 13 70.32 16 59 56 4204.9 22.83 25.32 204.40 162.35 1125.7 -19.30 356.21 -22.99 3.41 158.42 110.00 3977.9 25.58 178.06 28.53 186.00 161.18 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 240.1 SR 369.8 SS 311.1 CRT .8853 CRS .9570 CST .7297 LSA 520.8 MSA 139.0 SSA 25.1 SGT 631.5 SGR 395.0 SG3 164.0 RRT -. 0043 RRF -. 0106 RTF -. 6342 TDE -.2046 TRA -.3149 TC3 .4534 BAU .1821 ROE - .3475 RRA .0521 RC3 - .1191 FAU .05366 SGB 744.9 R23 .0151 R13 .6342 SG1 631.5 SG2 395.0 THA 179.75 FOE .5008 FRA -.5541 FC3-1.5990 BSP 1715 BDF .4033 BRA .3192 BC3 .4688 FSP -438 ELI 430.3 ELZ 95.9 ALF 58.35 BOE .4033 BRA .3192 BC3 .4688 FSP ARRIVAL DATE FEB 23 1966 FLIGHT TIME 74.00 LAUNCH DATE DEC 11 1965 DISTANCE 203.608 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 27.718 GAL -9.02 A7L 86.61 MCA 92.11 SMA 128.39 ECC .21386 INC 3.3861 VI 30.247
RP 107.64 LAP 3.38 LOP 170.86 VP 37.843 GAP -8.16 A7P 90.13 TAL 218.12 TAP 310.23 RCA 100.93 APO 155.84 V2 35.204
RC 55.368 GL 17.69 GP .88 7AL 141.17 ZAP 22.22 ETS 356.82 ZAE 149.32 ETE 342.88 ZAC 63.90 ETC 163.53 CLP -22.20 PLANETOCENTRIC CONIC C3 28.317 VHL 5.321 DLA -3.89 RAL 292.75 RAD 6568.1 VEL 12.235 PTH 2.20 VHP 5.969 DPA -14.16 RAP 331.63 ECC 1.4660 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1578.7 -15.58 90.00 2 3 49 2178.70 90.00 13 4 3 5064.09 100.00 3 23 20 1922.18 100.00 14 27 13 4795.85 110.00 4 27 24 1721.60 110.00 15 39 38 4569.19 31.92 111.67 2 40 7 158.86 -18.6A 39.22 216.01 14 28 27 4464.1 21.60 161.10 74.45 223.89 23.97 112.84 3 55 22 73.29 15 47 9 116.13 4 56 6 70.01 16 55 47 12.59 158.37 1322.2 -16.56 19.87 -19.82 100.00 195.90 160.72 4195.8 22.62 203.78 25.15 355.97 -19.17 156.88 1121.6 -22.87 3.15 110.00 159.54 3969.2 25.34 28.33 185.40 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 240.2 SR 368.3 SS 335.4 CRT .8914 CRS .9522 CST .7268 LSA 533.3 MSA 144.0 SSA 25.2 SGT 633.4 SGR 393.1 SG3 187.0 RRT -.0008 RRF -.0163 RTF -.6329 SGB 745.5 R23 .0171 R13 .6329 SG1 633.4 SG2 393.1 THA 179.95 TOE -.2031 TRA -.3031 TC3 .4664 BAU .1823 ROE -.3418 RRA .0491 RC3 -.1199 FAU .05991 FOE .5676 FRA -.6618 FC3-1.8315 BSP 1715 BOE .3976 BRA .3071 BC3 .4815 FSP -509 EL1 429.7 EL2 93.3 ALF 58.15 ARRIVAL DATE FEB 25 1966 FLIGHT TIME 76.00 LAUNCH DATE DEC 11 1965 DISTANCE 210.366 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 27.827 GAL -8.98 AZL 86.62 HCA 95.35 SMA 129.14 ECC .20895 INC 3.3782 VI 30.247 RP 107.67 LAP 3.36 LOP 174.10 VP 37.915 GAP -7.37 AZP 90.32 TAL 219.37 TAP 314.72 RCA 102.16 APO 156.13 V2 35.195 RC 57.230 GL 17.92 GP .95 ZAL 141.98 ZAP 25.58 ETS 356.98 ZAE 150.11 ETE 343.08 ZAC 63.76 ETC 163.54 CLP -25.57 PLANETOCENTRIC CONIC C3 27.696 VML 5.263 DLA -3.81 RAL 291.74 RAD 6568.1 VEL 12.209 PTH 2.19 VHP 5.575 DPA -14.13 RAP 331.48 ECC 1.4558 C3 27.696 VHL 5.263 OLA -3.81 RAL 291.74 RAD 6568.1 VEL 12.209 PTH 2.19 VHP 5.575 OPA -14.13 RAP 331.48 ECC 1.4558 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 59 12 2175.55 -18.60 39.02 157.50 111.74 2 35 28 1575.5 -15.49 31.73 90.00 13 0 35 5056.17 23.82 223.35 159.66 74.22 14 24 51 4456.2 21.43 215.50 100.00 3 18 46 1918.90 -19.73 19.66 157.01 112.92 3 50 44 1318.9 -16.46 12.40 100.00 14 23 43 4788.05 25.00 203.25 159.28 73.05 15 43 31 4188.1 22.44 195.39 110.00 4 22 55 1718.06 -22.76 2.93 155.52 116.22 4 51 33 1118.1 -19.05 355.76 110.00 15 36 3 4561.65 28.15 184.88 158.09 69.75 16 52 4 3961.7 25.13 177.01 DIEFERRILLE CORFECTIONS ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY MID-COURSE EXECUTION ACCUMACY
SGT 630.3 SGR 390.2 SG3 213.0 ST 238.6 SR 366.1 SS 361.1
RRT .0029 RRF -.0233 RTF -.6255 CRT .8942 CRS .9480 CST .7209
SGB 741.3 R23 -.0203 R13 -.6255 LSA 546.2 MSA 149.4 SSA 25.1
CCC .630 3 SG2 390.1 THA .17 EL1 427.3 EL2 91.5 ALF 58.13 DIFFERENTIAL CORRECTIONS TOE -.2000 TRA -.2946 TC3 .4718 BAU .1802 RDE -.3359 RRA .0467 RC3 -.1197 FAU .06699 FDE .6441 FRA -.7836 FC3-2.0939 BSP 1697 BOE .3910 BRA .2983 BC3 .4867 FSP -589

```
FLIGHT TIME 78.00
                                                                                                                                                                                                                              ARRIVAL DATE FEB 27 1966
 LAUNCH DATE DEC 11 1965
                                                                                                                          01STANCE 217.097
     HELIOCENTRIC CONIC
        RL 147.30 LAL -.00 LOL 78.74 VL 27.922 GAL -8.95 AZL 86.63 HCA 98.59 SMA 129.81 ECC .20474 INC 3.3701 V1 30.247 RP 107.70 LAP 3.33 LOP 177.35 VP 37.975 GAP -6.62 AZP 90.50 TAL 220.50 TAP 319.09 RCA 103.23 APO 156.38 V2 35.186
       RC 59.152 GL 18.13 GP 1.02 TAL 142.68 TAP 29.14 ETS 357.10 TAE 151.21 ETE 343.15 TAC 63.43 ETC 163.52 CLP -29.13
     PLANETOCENTRIC CONIC
        C3 27.164 VHL 5.212 DLA -3.74 RAL 290.85 RAD 6568.1 VEL 12.188 PTH 2.19 VHP 5.211 DPA -14.17 RAP 331.14 ECC 1.4470
        ENCH AZMTH ENCH TIME E-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               THE L-1 TIME INJ LATE INJ LATE
                                                                                                                                  156.30
                                                                                                                                                                                                            1572.8
                                                                                                                                                            111.80 2 31 22
                                                                                                                                                                                                                                      -15.41
                                                                                                               38.85
              90.00
                                                                                                                                                                                                                                                                      31.57
                                                                                                                                                                   74.02 14 21 42
              90.00
                                                                                                              222.89
                                                                                                                                     158.40
                                                                                                                                                                                                                  4449.3
                                                                                                                                                                                                                                            21.27
                                                                                                                                                                                                                                                                     215.95

    112.98
    3 46 41
    1516.1
    -16.38

    72.84
    15 40 19
    4181.2
    22.27

    116.30
    4 47 33
    1115.0
    -18.95

    69.53
    16 48 49
    3955.1
    24.95

                                                                                                                                  155.81
158.02
                                                                                                             19.<u>48</u>
202.79
            100.00
                                                                                                                                                                                                                                                                      12.23
           100.00
                                                                                                                                                                                                                                                                   194.95
                                                                                                                                  154.33
                                                                                                                                                                                                                                                                 355.58
            110.00
                                                                                                                2.74
           110.00
                                                                                                             184.43
                                                                                                                                     156.83
                                                                                                                                                                                                                                                                    176.58
                                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                  MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                          ST 235.2 SR 363.0 SS 388.3
CRT .8929 CRS .9444 CST .7104
LSA 559.6 MSA 155.2 SSA 24.9
EL1 422.9 EL2 90.9 ALF 58.31
                                                                                                                    SGT 621.7 SGR 386.2 SG3 242.5

RRT .0070 RRF -.0317 RTF -.6100

SGB 731.9 R23 -.0247 R13 -.6101

SGI 621.7 SG2 386.2 THA .41
       TOE -.1949 TRA -.2901 TC3 .4684 BAU .1755
       ROE -.3299 RRA .0449 RC3 -.1183 FAU .07497
      FOE .7308 FRA -.9203 FC3-2.3894 BSP 1647
BOE .3832 BRA .2936 BC3 .4831 FSP -681
LAUNCH DATE DEC 11 1965
                                                                                                                           FLIGHT TIME 80.00
                                                                                                                                                                                                                              ARRIVAL DATE MAR 1 1966
    HELIOCENTRIC CONIC
                                                                                                                          DISTANCE 223.799
      RL 147.30 LAL -.00 LOL 78.74 VL 28.003 GAL -8.92 AZL 86.64 HCA 101.82 SMA 130.39 ECC .20113 INC 3.3620 V1 30.247
RP 107.73 LAP 3.29 LOP 180.58 VP 38.026 GAP -5.91 AZP 90.69 TAL 221.51 TAP 323.33 RCA 104.16 APO 156.61 V2 35.176
RC 61.127 GL 18.30 GP 1.11 ZAL 143.27 ZAP 32.92 ETS 357.20 ZAE 152.64 ETE 343.06 ZAC 62.88 ETC 163.47 CLP -32.90
     PLANETOCENTRIC CONIC
                                                                                                                                                                      2.18 VHP 4.876 OPA -14.27 RAP 330.58 ECC 1.4394
      C3 26.702 VML 5.167 DLA -3.68 RAL 290.08 RAD 6568.1 VEL 12.169 PTH 2.18 VMP 4.876 OPA -14.27 RAP 330.58 ECC 1.4394 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 51 38 2170.45 -18.47 38.71 155.26 111.85 2 27 49 1570.5 -15.35 31.43 90.00 12 54 56 5043.10 23.58 222.47 157.31 73.84 14 18 59 4443.1 21.14 214.65 100.00 3 11 15 1913.61 -19.59 19.33 154.77 113.04 3 43 9 1313.6 -16.31 12.08 100.00 14 18 0 4775.17 24.74 202.39 156.93 72.66 15 37 35 4175.2 22.13 194.56 110.00 4 15 33 1712.34 -22.59 2.58 153.30 116.37 4 44 5 1112.3 -18.86 355.42 110.00 15 30 12 4549.21 27.85 184.03 155.73 69.33 16 46 1 3949.2 24.79 176.21
      C3 26.702 VML 5.167 DLA -3.68 RAL 290.08 RAD 6568.1 VEL 12.169 PTH
                                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ST 228.2 SR 359.1 SS 415.8
CRT .8856 CRS .9410 CST .6912
                                                                                                                    SGT 607.5 SGR 381.4 SG3 275.7
RRT .0078 RRF -.0407 RTF -.5855
        TOE -.1861 TRA -.2892 TC3 .4571 BAU .1683
       RDE -.3236 RRA .0438 RC3 -.1159 FAU .08400
       FOE .8260 FRA-1.0739 FC3-2.7236 BSP 1598
BOE .3733 BRA .2925 BC3 .4716 FSP -790
                                                                                                                     SGB 717.3 R23 -. 0331 R13 -. 5857
                                                                                                                                                                                                          LSA 572.2 M5A 161.0 SSA
                                                                                                                                                                                                                                                                         24.6
                                                                                                                    SG1 607.5 SG2 381.4 THA .46
                                                                                                                                                                                                           EL1 415.5 EL2 91.6 ALF 58.96
                                                                                                                                                                                                                            ARRIVAL DATE MAR 3 1966
                                                                                                                          FLIGHT TIME 82.00
LAUNCH DATE DEC 11 1965
     MELIOCENTRIC CONIC
                                                                                                                        DISTANCE 230.471
       RL 147.30 LAL -.00 LOL 78.74 VL 28.071 GAL -8.89 A7L 86.65 MCA 105.05 SMA 130.88 ECC .19803 INC 3.3536 VI 30.247
RP 107.76 LAP 3.24 LOP 183.82 VP 38.066 GAP -5.22 A7P 90.87 TAL 222.37 TAP 327.42 RCA 104.96 APO 156.80 V2 35.166
RC 63.151 GL 18.45 GP 1.20 7AL 143.77 7AP 36.92 ETS 357.27 7AE 154.40 ETE 342.78 7AC 62.11 ETC 163.38 CLP -36.91
     PLANETOCENTRIC CONIC
       C3 26.292 VHL 5.128 DLA -3.63 RAL 289.44 RAD 6568.1 VEL 12.152 PTH 2.18 VHP 4.569 DPA -14.43 RAP 329.80 ECC 1.4327
      LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 52 47 5037.88 23.47 222.09 156.37 73.68 14 16 44 4437.5 21.01 214.29 100.00 3 8 16 1911.47 -19.54 19.20 153.88 113.08 3 40 8 1311.5 -16.24 11.95 100.00 14 15 49 4769.65 24.62 202.01 155.98 72.49 15 35 19 4169.6 22.00 194.20
                                                                                                                               154.37 111.89 2 24 46 1568.4

156.37 73.68 14 16 44 4437.5

153.88 113.08 3 40 8 1311.5

155.98 72.49 15 35 19 4169.6

152.41 116.42 4 41 8 1110.0

154.78 69.15 16 43 41 3943.9
                                                      1710.00
4543.88
                                                                                                                                                                                                                                       -18.79
                                  4 12 38
                                                                                                                                                                                                                                                                   355.29
           110.00
                                                                                   -22.52
                                                                                                               2.43
                                                                               27.72
                                                                                                             183.67
                                                                                                                                                                                                                                          24 64
                                                                                                                                                                                                                                                                   175.86
           110.00
                               15 27 57
                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                   SGT 587.1 SGR 375.6 SG3 312.3
RRT .0109 RRF -.0530 RTF -.5432
SGB 697.0 R23 -.0430 R13 -.5436
                                                                                                                                                                                                 ST 220.4 SR 354.5 S5 445.4
CRT .8712 CRS .9391 CST .6637
LSA 586.7 MSA 166.9 55A 24.2
       TOE -.1758 TRA -.2952 TC3 .4326 BAU .1571
       ROE -.3170 RRA .0433 RC3 -.1123 FAU .09389
      FOE .9345 FRA-1.2397 FC3-3.0916 BSP 1477
BOE .3624 BRA .2984 BC3 .4470 FSP -907
                                                                                                                                                                                                           EL1 406.6 EL2 94.3 ALF 59.76
                                                                                                                    SG1 587.1 SG2 375.5 THA .68
                                                                                                                           FLIGHT TIME 84.00
                                                                                                                                                                                                                              ARRIVAL DATE MAR 5 1966
LAUNCH DATE DEC 11 1965
                                                                                                                          DISTANCE 237.112
    HELIOCENTRIC CONIC
      RL 147.30 LAL -.00 LOL 78.74 VL 28.128 GAL -8.85 AZL 86.66 MCA 108.28 SMA 131.30 ECC .19537 INC 3.3450 V1 30.247
RP 107.80 LAP 3.18 LOP 187.05 VP 38.099 GAP -4.57 AZP 91.05 TAL 223.10 TAP 331.38 RCA 105.64 APO 156.95 V2 35.155
RC 65.219 GL 18.57 GP 1.30 ZAL 144.17 ZAP 41.17 ETS 357.32 ZAE 156.49 ETE 342.24 ZAC 61.11 ETC 163.25 CLP -41.15
     PLANETOCENTRIC CONIC
      C3 25.920 VHL 5.091 DLA -3.57 RAL 288.90 RAD 6568.0 VEL 12.137 PTH 2.18 VHP 4.292 DPA -14.66 RAP 328.77 ECC 1.4266
     C3 25.920 VHL 5.091 DLA -3.57 RAL 288.90 RAD 6568.0 VEL 12.137 PH 2.18 VHP 4.292 DPA -14.56 RAP 328.77 ECC 1.4266 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 51 4 5032.23 23.37 221.74 155.57 73.54 14 14 57 4432.2 20.69 213.95 100.00 3 5 46 1909.59 -19.49 19.08 153.13 113.13 3 37 35 1309.6 -16.19 11.84 100.00 14 14 5 4764.48 24.52 201.67 155.18 72.34 15 33 30 4164.5 21.87 193.87 110.00 4 10 11 1707.93 -22.46 2.31 151.66 116.48 4 38 39 1107.9 -18.72 355.17 110.00 15 26 10 4538.90 27.60 183.34 153.97 68.99 16 41 48 3938.9 24.50 175.54
                                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                SGT 562.0 SGR 368.9 SG3 352.9 ST 208.7 SR 349.1 SS 474.5
RRT .0086 RRF -.0665 RTF -.4810 CRT .8440 CRS .9371 CST .6179
SGB 672.2 R23 -.0592 R13 -.4814 LSA 600.2 MSA 172.4 SSA 23.9
SGI 562.0 SG2 368.8 THA .57 ELI 394.5 EL2 99.1 ALF 61.24
       TOE -.1607 TRA -.3061 TC3 .3977 BAU .1428
        ROE -.3099 RRA .0436 RC3 -.1076 FAU .10485
      FOE 1.0494 FRA-1.4218 FC3-3.5018 BSP 1344
BDE .3491 BRA .3092 BC3 .4120 FSP -1043
```

ARRIVAL CATE MAR 7 1966

LAUNCH DATE DEC 11 1965

DISTANCE 243.721 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 28.175 GAL -8.81 A7L 86.66 HCA 111.51 SMA 131.64 ECC .19308 INC 3.3360 V1 30.247 RP 107.83 LAP 3.10 LOP 190.29 VP 38.123 GAP -3.94 A7P 91.22 TAL 223.69 TAP 335.20 RCA 106.22 APO 157.05 V2 35.143 RC 67.327 GL 18.69 GP 1.42 TAL 144.48 TAP 45.66 ETS 357.36 TAE 158.92 ETE 341.35 TAC 59.86 ETC 163.08 CLP -45.64 PLANETOCENTRIC CONIC C3 25.575 VHL 5.057 CLA -3.51 RAL 288.48 RAC 6568.0 VEL 12.122 PTH 2.17 VHP 4.043 OPA -14.96 RAP 327.50 ECC 1.4209 ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 43 59 2165.03 -18.34 12 49 49 5027.16 23.27 3 3 41 1907.93 -19.44 14 12 48 4759.49 24.41 4 8 10 1706.09 -22.40 15 24 49 4534.11 27.49 15.20 152.98 111.96 2 20 4 1565.0 31.10 -18.34 38.37 90.00 73.39 14 13 36 4427.2 20.77 90.00 221.40 154.89 113.16 3 35 29 72.19 15 32 7 116.52 4 36 36 68.83 16 4D 23 1307.9 152.50 154.50 -16.14 11.74 18.98 100.00 21.75 193.55 100.00 201.33 4159.5 1106.1 151.03 -18.66 24.36 355.06 110.00 2.19 175.24 110.00 183.01 153.29 3934.1 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 196.9 SR 343.0 S5 505.5 CRT .7986 CRS .9369 CST .5515 LSA 616.3 MSA 177.8 5SA 23.4 SGT 534.6 SGR 361.3 SG3 395.9 RRI .0053 RRF -.0848 RTF -.3830 TDE -.1434 TRA -.3256 TC3 .3466 BAU .1235 RDE -.3025 RRA .0445 RC3 -.1015 FAU .11638 FDE 1.1776 FRA-1.6094 FC3-3.9395 BSP 1127 568 645.3 R23 -.0810 R13 -.3833 BOE .3347 BRA .3286 BC3 .3611 FSP -1183 SG1 534.7 SG2 361.3 THA .38 EL1 380.9 EL2 106.8 ALF 63.09 LAUNCH DATE DEC 11 1965 FLIGHT TIME 88.00 ARRIVAL DATE MAR 9 1966 HELIOCENTRIC CONIC DISTANCE 250.298 RL 147.30 LAL -.00 LOL 78.74 VL 28.212 GAL -8.77 A7L 86.67 MCA 114.73 SMA 131.91 ECC .19110 INC 3.3267 V1 30.247 RP 107.87 LAP 3.02 LOP 193.52 VP 38.140 GAP -3.35 A7P 91.39 TAL 224.14 TAP 338.87 RCA 106.70 APO 157.12 V2 35.132 RC 69.470 GL 18.79 GP 1.54 7AL 144.70 7AP 50.40 ETS 357.39 7AE 161.65 ETE 339.92 7AC 58.37 ETC 162.86 CLP -50.38 PLANETOCENTRIC CONIC C3 25.245 VHL 5.024 DLA -3.46 RAL 288.17 RAD 6568.0 VEL 12.109 PTH 2.17 VHP 3.822 DPA -15.32 RAP 325.97 ECC 1.4155 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 152.47 111.99 1563.6 -15.16 90.00 1 42 18 2163.65 -18.30 38.28 2 18 22 31.02 12 49 0 5022.15 3 2 2 1906.46 14 11 57 4754.57 4 6 34 1704.42 15 23 54 4529.38 154.33 14 12 42 4422.2 90.00 23.17 221.07 73.25 20.66 213,30 1306.5 4154.6 21.63 1104.4 -18.60 24.22 3 33 48 100.00 -19.40 18.89 151.98 113.20 11.65 201.00 153.94 150.52 72.05 15 31 12 193.23 100.00 24.31 116.56 4 34 58 68.67 16 39 23 -22.35 110.00 2.09 354.96 27.37 110.00 182.69 152.73 174.94 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 510.9 SGR 353.0 SG3 441.2 RRT -.0068 RRF -.1064 RTF -.2406 SGB 621.0 R23 .1095 R13 .2399 SG1 510.9 SG2 352.9 THA 179.49 ST 184.2 SR 336.3 SS 535.8 CRT .7215 CRS .9372 CST .4482 TOE -.1217 TRA -.3525 TC3 .2808 BAU .0999 RDE -.2946 RRA .0461 RC3 -.0941 FAU .12850 FDE 1.3104 FRA-1.8022 FC3-4.4064 BSP 861 BDE .3188 BRA .3555 BC3 .2961 FSP -1332 LSA 632.6 MSA 182.6 55A 22.8 EL1 365.0 EL2 117.5 ALF 65.77 ARRIVAL CATE MAR 11 1966 FLIGHT TIME 90.00 LAUNCH DATE DEC 11 1965 CISTANCE 256.841 HELLOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 28.241 GAL -8.72 AZL 86.68 HCA 117.96 SMA 132.12 ECC .18938 INC 3.3168 VI 30.247 RP 107.90 LAP 2.93 LOP 196.74 VP 38.149 GAP -2.78 AZP 91.56 TAL 224.45 TAP 342.41 RCA 107.10 APO 157.14 V2 35.420 RC 71.643 GL 18.87 GP 1.66 ZAL 144.84 ZAP 55.36 ETS 357.41 ZAE 164.66 ETE 337.61 ZAC 56.66 ETC 162.59 CLP -55.35 PLANETOCENTRIC CONIC C3 24.925 VHL 4.993 DLA -3.39 RAL 287.95 RAD 6568.0 VEL 12.096 PTH 2.16 VHP 3.631 DPA -15.72 RAP 324.21 ECC 1.4102 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 152.06 112.02 2 17 1 153.87 73.11 14 12 13 151.57 113.22 3 32 29 153.48 71.90 15 30 41 150.12 116.60 4 33 44 152.26 68.52 16 38 49 1 40 59 2162.43 12 48 36 5017.08 3 0 44 1905.15 30.94 90.00 1562.4 -15.12 -18.27 38.21 212.97 4417.1 20.54 90.00 23.07 220.73 -16.06 21.51 11.57 1305.1 100.00 -19.37 18.80 100.00 14 11 32 4749.60 4 5 21 1702.89 15 23 25 4524.61 4149.6 192.91 24.21 200.67 -18.55 24.09 1102.9 354.87 110.00 -22.30 1.99 174.64 110.00 27.25 182.37 3924.6 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 499.2 SGR 344.0 SG3 488.2 RRT -.0343 RRF -.1315 RTF -.0498 SGB 606.2 R23 .1347 R13 .0457 SG1 499.5 SG2 343.6 THA 177.43 ST 172.2 SR 329.1 55 564.1 (RT .5926 CRS .9377 CST .2889 LSA 648.7 MSA 186.7 SSA 22.4 EL1 347.4 EL2 131.4 ALF 69.74 TOE -.0950 TRA -.3862 TC3 .2007 BAU .0726 ROE - .2863 RRA .0483 RC3 - .0852 FAU .14100 FOE 1.4417 FRA-1.9974 FC3-4.8974 BSP 567 BCE .3017 BRA .3892 BC3 .2180 FSP -1496 ARRIVAL DATE MAR 13 1966 FLIGHT TIME 92.00 LAUNCH DATE DEC 11 1965 HELIOCENTRIC CONIC DISTANCE 263.352 RL 147.30 LAL -.00 LOL 78.74 VL 28.261 GAL -8.66 AZL 86.69 MCA 121.18 SMA 132.27 ECC .18789 INC 3.3064 V1 30.247 RP 107.94 LAP 2.83 LOP 199.97 VP 38.153 GAP -2.23 AZP 91.71 TAL 224.64 TAP 345.82 RCA 107.42 APO 157.13 V2 35.108 RC 73.845 GL 18.96 GP 1.80 7AL 144.89 ZAP 60.53 ETS 357.44 ZAE 167.90 ETE 333.65 ZAC 54.75 ETC 162.27 CLP -60.52 PLANETOCENTRIC CONIC C3 24.607 VHL 4.961 OLA -3.33 RAL 287.84 RAC 6568.0 VEL 12.082 PTH 2.16 VHP 3.468 OPA -16.17 RAP 322.23 ECC 1.4050 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 40 1 2161.35 12 48 38 5011.85 151.74 153.51 112.04 1561.3 38.14 2 16 2 -15.09 90.00 -18.24 72.97 14 12 10 22.97 90.00 220.38 4411.8 20.42 212.64 113.25 3 31 32 71.76 15 30 36 116.64 4 32 50 68.36 16 38 40 2 59 48 1903.96 14 11 32 4744.46 1304.0 151.26 153.12 -16.02 11.50 100.00 -19.3418.73 100.00 24.10 200.33 4144.5 21.38 192.58 149.81 1701.48 4519.70 1101.5 -18.50 354.79 110.00 4 4 29 -22.26 1.91 23.95 15 23 20 27.13 182.04 151.90 3919.7 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY SGT 512.0 SGR 334.5 SG3 533.9 ST 166.8 SR 321.2 SS 592.1 RRT -.0749 RRF -.1629 RTF .1804 CRT .4007 CRS .9396 CST .0752 SGB 611.6 R23 .1396 R13 -.1884 LSA 667.0 MSA 190.4 SSA 21.8 TOE -.0651 TRA -.4289 TC3 .1024 BAU .0417 ROE -.2777 RRA .0513 RC3 -.0747 FAU .15304 FOE 1.5746 FRA-2.1776 FC3-5.3844 BSP 227

FLIGHT TIME 86.00

BOE .2852 BRA .4319 BC3 .1267 FSP -1649

SG1 513.1 SG2 332.9 THA 175.16

EL1 330.0 EL2 148.8 ALF 75.16

ARRIVAL CATE MAR 15 1966

LAUNCH DATE DEC 11 1965

FLIGHT TIME 94.00

```
ARRIVAL CATE MAR 23 1966
                                                                              FLIGHT TIME 102.00
LAUNCH DATE DEC 11 1965
    RL 147.30 LAL -.00 LOL 78.74 VL 28.265 GAL -8.29 A7L 86.76 HCA 137.25 SMA 132.31 ECC .18266 INC 3.2394 V1 30.247
RP 108.14 LAP 2.20 LOP 216.04 VP 38.097 GAP .17 A7P 92.38 TAL 223.84 TAP 1.09 RCA 108.14 APO 156.47 V2 35.043
RC 85.157 GL 19.28 GP 2.57 7AL 144.08 ZAP 87.67 ETS 357.80 ZAE 171.42 ETE 199.76 7AC 43.94 ETC 159.98 CLP -87.66
                                                                              DISTANCE 295.424
   HELIOCENTRIC CONIC
    C3 22.911 VHL 4.787 CLA -2.91 RAL 288.54 RAD 6567.9 VEL 12.012 PTH 2.14 VMP 3.060 CPA -18.27 RAP 310.82 ECC 1.3771
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     112.13 2 15 37
                                                                                    151.37
                                                                       37.87
                    1 39 40 2156.99
12 54 35 4981.25
2 59 39 1898.97
                                                       -18.13
                                                                                                                                                       19.69
                                                                                                                                                                       210.69
                                                                                                      72.14 14 17 36
113.36 3 31 18
70.90 15 35 51
116.80 4 33 3
67.45 16 43 29
         90.00
                                                                                                                                       4381.3
                                                                                      152.85
                                                                      218.36
                                                       22.34
                                                                                                                                                                       11.20
                                                                                                                                                       -15.88
         90.00
                                                                                                                                       1299.0
                                                                       18.42
                                                                                      150.89
                                                      -19.20
                                                                                                                                                                       190.68
                                                                                                                                                      20.62
        100.00
                                                                                                                                       4114.5
                                                                                   152.45
                                                                      198.34
                    14 17 16
                                    4714.51
                                                       23.44
                                                                                                                                                                       354.41
                                                                                                                                                     -18.29
        100.00
                                                                                                                                    1095.1
                      4 4 48 1695.07 -22.06
                                                                                     149.46
                                                                         1.51
                                                                                                                                                                       172.53
                                                                                                                                                        23.11
        110.00
                                                                                    151.21
                                                                                                                                       3891.2
                                                                      180.15
                    15 28 38 4491.18
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                       26.40
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ST 307.4 SR 274.8 S5 676.2
CRT -.5950 CRS .9559 CST -.7997
LSA 766.7 MSA 197.6 S5A 18.6
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 1062.1 SGR 286.9 SG3 690.9

RRT -.3919 RRF -.4031 RTF .8454

SGB 1100.2 R23 .0546 R13 -.8473

SG1 1068.4 SG2 262.3 THA 173.57
     TOE .1327 TRA -.7302 TC3 -.6063 BAU .1857
     RDE - .2285 RRA .0721 RC3 .0006 FAU .19219
     FOE 1.9765 FRA-2.6405 FC3-7.2621 BSP 2552
BOE .2642 BRA .7338 BC3 .6063 FSP -2204
                                                                                                                                   EL1 368.9 EL2 184.0 ALF 140.35
                                                                                                                                               ARRIVAL DATE MAR 25 1966
                                                                                FLIGHT TIME 104.00
 LAUNCH DATE DEC 11 1965
                                                                               DISTANCE 301.747
     RL 147.30 LAL -.00 LOL 78.74 VL 28.250 GAL -8.19 AZL 86.78 HCA 140.46 5MA 132.19 ECC .18192 INC 3.2213 V1 30.247 RP 108.18 LAP 2.05 LOP 219.25 VP 38.074 GAP .59 AZP 92.49 TAL 223.38 TAP 3.83 RCA 108.15 APO 156.24 V2 35.030
    HELIOCENTRIC CONIC
     RC 87.465 GL 19.33 GP 2.75 7AL 143.72 7AP 92.91 ETS 357.95 7AE 167.93 ETE 191.48 7AC 41.95 ETC 159.48 CLP -92.91
     C3 22.534 VHL 4.747 DLA -2.81 RAL 288.91 RAD 6567.9 VEL 11.996 PTH 2.14 VHP 3.050 DPA -18.54 RAP 308.69 ECC 1.37D8
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 40 25 2156.06 -18.11
12 56 49 4974.11 22.19
3 0 27 1897.88 -19.17
14 19 28 4707.52 23.29
4 5 42 1693.64 -22.02
15 30 43 4484.52 26.22
                                                                                     151.49
                                                                       37.81
                                                                                                                                                         19.52
                                                                                                                                                                         210.23
          90.00
                                                                                                                                         4374.1
                                                                                                                     14 19 43
                                                                                                          71.95
                                                                                        152.91
                                                                       217.89
                                                                                                                                                        -15.85
                                                                                                        113.38 3 32 5
70.71 15 37 55
116.83 4 33 55
67.24 16 45 27
          90.00
                                                                                                                       3 32 5
                                                                                                                                        1297.9
                                                                                       151.02
                                                                         18.35
                                                                                                                                                                         190.24
                                                                                                                                        4107.5
                                                                                                                                                         20.44
         100.00
                                                                                      152.51
                                                                        197.88
                                                                                                                                                                       354.33
                                                                                                                                                        -18.24
         100.00
                                                                                                                                        1093.6
                                                                                     149.60
                                                                          1.43
         110.00
                                                                                                                                        3884.5
                                                                                                                                                          22.91
                                                                       179.71
                                                                                        151.26
                                                                                                                                    ORBIT DETERMINATION ACCURACY
         110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ST 359.4 SR 263.9 S5 678.4

CRT - 6708 CR5 .9598 CST - 8474

LSA 787.4 MSA 196.8 SSA 17.9
     DIFFERENTIAL CORRECTIONS
                                                                            SGT 1234.5 SGR 278.9 SG3 699.2
RRT - 4615 RRF - 4659 RTF .8788
SGB 1265.6 R23 .0492 R13 - 8800
      TDE .1754 TRA -.7986 TC3 -.7796 BAU .2349
      RDE - .2174 RRA .0766 RC3 .0199 FAU .19351
      FOE 1.9752 FRA-2.6158 FC3-7.4347 BSP 3185
BOE .2793 BRA .8023 BC3 .7798 FSP -2248
                                                                                                                                    EL1 411.8 EL2 170.8 ALF 147.53
                                                                            SG1 1241.5 SG2 246.0 THA 173.80
                                                                                                                                                ARRIVAL DATE MAR 27 1966
                                                                                FLIGHT TIME 106.00
  LAUNCH DATE DEC 11 1965
      TELIOCENIAIC CONIC

RE 147.30 LAL -.00 LOL 78.74 VL 28.231 GAL -8.09 A7L 86.80 MCA 143.66 SMA 132.05 ECC .18126 INC 3.2004 VI 30.247

RP 108.22 LAP 1.90 LOP 222.45 VP 38.047 GAP .99 A7P 92.58 TAL 222.83 TAP 6.49 RCA 108.12 APO 155.99 V2 35.016

RC 89.783 GL 19.37 GP 2.95 ZAL 143.30 ZAP 97.94 ETS 358.14 ZAE 164.45 ETE 187.04 ZAC 40.15 ETC 159.03 CLP -97.95
     HELIOCENTRIC CONIC
       C3 22.140 VHL 4.705 DLA -2.70 RAL 289.36 RAD 6567.9 VEL 11.980 PTH 2.14 VHP 3.059 DPA -18.73 RAP 306.75 ECC 1.3644
      PLANETOCENTRIC CONIC
       C3 22.140 VHL 4.705 OLA -2.70 RAL 289.36 RAO 6567.9 VEL 11.980 PTH 2.14 VHP 3.059 DPA -18.73 RAP 306.75 ECC 1.3644 CLOCK A7MIN LOCK TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 14 26 2154.94 -18.08 37.74 151.68 112.17 2 17 21 1554.9 -14.91 3D.49 90.00 12 59 21 4966.68 22.04 217.40 153.02 71.75 14 22 7 4366.7 19.34 209.76 100.00 3 1 31 1896.61 -19.14 18.27 151.21 113.41 3 33 8 1296.6 -15.81 11.06 100.00 14 21 57 4700.24 23.12 197.40 152.62 70.51 15 40 17 4100.2 20.25 189.78 110.00 4 6 52 1692.03 -21.97 1.33 149.79 116.87 4 35 5 1092.0 -18.19 354.24 110.00 15 33 5 4477.59 26.04 179.25 151.37 67.03 16 47 43 3877.6 22.70 171.69 INTERPRETATIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ST 413.5 SR 252.6 55 678.7
CRT -.7252 CRS .9648 CST -.8767
                                                                            SGT 1413.2 SGR 272.1 SG3 698.1
RRT -.5315 RRF -.5326 RTF .9002
SGB 1439.2 R23 .0486 R13 -.9011
SG1 1420.8 SG2 229.3 THA 174.00
      DIFFERENTIAL CORRECTIONS
        TOE .2172 TRA -.8658 TC3 -.9583 BAU .2839
                                                                                                                                     LSA 810.3 MSA 196.0 SSA 17.0
        RDE - .2060 RRA .0808 RC3 .0403 FAU .19214
       FDE 1.9578 FRA-2.5427 FC3-7.5131 BSP 3821
BOE .2994 BRA .8695 BC3 .9592 FSP -2244
                                                                                                                                     EL1 458.4 EL2 156.9 ALF 152.64
                                                                                                                                                  ARRIVAL DATE HAR 29 1966
                                                                                  FLIGHT TIME 108.00
   LAUNCH DATE DEC 11 1965
       RELICENTRIC CONTE

RE 147.30 LAL -.00 LOL 78.74 VL 28.209 GAL -7.97 AZL 86.82 MCA 146.86 SHA 131.89 ECC .18067 INC 3.1762 V1 30.247

RP 108.26 LAP 1.74 LOP 225.65 VP 38.018 GAP 1.38 AZP 92.66 TAL 222.19 TAP 9.06 RCA 108.06 APO 155.71 V2 35.003

RC 92.112 GL 19.39 GP 3.16 ZAL 142.82 ZAP 102.74 ETS 358.38 ZAE 161.11 ETE 184.26 ZAC 38.56 ETC 158.67 CLP-102.76
                                                                                 DISTANCE 314.308
       HELIOCENTRIC CONIC
        C3 21.729 VHL 4.661 DLA -2.61 RAL 289.88 RAD 6567.9 VEL 11.963 PTH 2.13 VHP 3.085 DPA -18.83 RAP 305.04 ECC 1.3576
       PLANETOCENTRIC CONIC
        ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         112.20
                                                          -18.04
                                                                           37.65
                          1 42 46 2153.49
13 2 9 4959.07
                                                                                                                                                                           209.29
            90.00
                                                                                                                       14 24 48
                                                                                                                                           4359.1
                                                                                                             71.56
                                                                                         153.19
                                                                          216.90
                                                          21.87
                         13 2 9
                                                                                                                                                           -15.76
                                                                                                                                                                            10.97
            90.00
                                                                                                                                           1295.0
                                                                                                           113.45 3 34 29
                                                                            18.18
                                                                                          151.44
                                                          -19.09
                          3 2 54 1895.01
                                                                                                                                                                           189.31
                                                                                                        70.31 15 42 55
116.92 4 36 31
66.81 16 50 14
                                                                                                                                                           20.06
           100.00
                                                                                                                                           4092.8
                                                                                       152.79
                                                                          196.91
                        14 24 42
                                        4692.78
                                                          22.95
                                                                                                                                                                           354.12
                                                                                                                                                          -18.12
           100.00
                                                                                                                                           1090.1
                                                                                         150.03
                                                          -21.91
                                                                            1.21
                           4 8 21 1690.10
15 35 44 4470.46
                                                                                                                                                                          171.25
                                                                                                                                           3870.5
                                                                                                                                                           22.49
           110.00
                                                                          178.79
                                                                                          151.54
                         15 35 44
                                                         25.85
                                                                                                                                      ORBIT DETERMINATION ACCURACY
           110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ST 467.6 SR 240.7 SS 673.3
CRT -.7652 CRS .9694 CST -.8961
       DIFFERENTIAL CORRECTIONS
                                                                              SGT 1594.3 SGR 266.8 SG3 690.5
RRT -.6022 RRF -.6004 RTF .9146
         TOE .2568 TRA -.9305 TC3-1.1410 BAU .3320
        ROE -.1942 RRA .0847 RC3 .0620 FAU .18906
FOE 1.9116 FRA-2.4438 FC3-7.5324 BSP 4459
                                                                                                                                      LSA 831.7 MSA 194.5 55A 16.1
                                                                             SGB 1616.5 R23 .0498 R13 - .9154
                                                                                                                                    ELI 506.0 ELZ 143.2 ALF 156.50
                                                                              SG1 1602.6 SG2 211.9 THA 174.14
         BOE .3220 BRA .9343 BC3 1.1427 FSP -2232
```

LAUNCH DATE DEC 11 1965

ARRIVAL DATE MAR 31 1966

```
MELIOCENTRIC CONIC
                                                                                                                  DISTANCE 320.548
            RE 147.30 LAL -.00 LOL 78.74 VL 28.182 GAL -7.85 AZL 86.85 HCA 150.06 SMA 131.69 ECC .18013 INC 3.1475 VI 30.247
RP 108.31 LAP 1.57 LOP 228.85 VP 37.987 GAP 1.76 AZP 92.73 TAL 221.48 TAP 11.55 RCA 107.97 APO 155.42 VZ 34.990
           RC 94.449 GL 19.40 GP 3.42 7AL 142.29 7AP 107.27 ETS 358.67 7AE 157.97 ETE 182.30 7AC 37.21 ETC 158.43 CLP-107.31
          PLANETOCENTRIC CONIC
           C3 21.300 VHL 4.615 CLA -2.51 RAL 290.46 RAD 6567.9 VEL 11.945 PTH 2.13 VHP 3.126 OPA -18.82 RAP 303.60 ECC 1.3505 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 44 25 2151.53 -17.99 37.53 152.20 112.24 2 20 17 1551.5 -14.82 30.29 90.00 13 5 10 4951.43 21.71 216.40 153.42 71.36 14 27 41 4351.4 18.96 208.80 100.00 3 4 36 1892.91 -19.04 18.05 151.73 113.49 3 36 9 1292.9 -15.70 10.84 100.00 14 27 41 4685.28 22.78 196.42 153.02 70.10 15 45 46 4085.3 19.86 188.84 110.00 4 10 9 1687.69 -21.84 1.06 150.32 116.98 4 38 17 1087.7 -18.04 353.98 110.00 15 38 37 4463.26 25.66 178.32 151.75 66.60 16 53 D 3865.3 22.27 170.80 INTERPRETATIAL CORRECTIONS
                                                                                                     18.05 151.73
196.42 153.02
1.06 150.32
178.32
         DIFFERENTIAL CORRECTIONS
                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
           TOE .2938 TRA -.9913 TC3-1.3263 BAU .3765
ROE -.1821 RRA .0881 RC3 .0852 FAU .18409
FOE 1.8538 FRA-2.3133 FC3-7.4823 BSP 5083
                                                                                                         SGT 1774.6 SGR 263.2 SG3 676.2
RRT -.6712 RRF -.6688 RTF .9241
SGB 1794.0 R23 .0554 R13 -.9248
SGI 1783.5 SG2 194.1 THA 174.25
                                                                                                                                                                                        ST 520.6 SR 228.5 SS 666.2

CRT -.7962 CRS .9745 CST -.9080

LSA 854.0 MSA 193.4 SSA 15.0
           BDE .3457 BRA .9952 BC3 1.3290 FSP -2186
                                                                                                                                                                                         EL1 553.4 EL2 130.0 ALF 159.56
    LAUNCH DATE DEC 11 1965
                                                                                                                  FLIGHT TIME 112.00
                                                                                                                                                                                                            ARRIVAL DATE APR 2 1966
        HELIOCENTRIC CONIC
                                                                                                                 DISTANCE 326.762
         RL 147.30 LAL -.00 LOL 78.74 VL 28.153 GAL -7.72 A7L 86.89 NCA 153.26 SMA 131.48 ECC .17965 INC 3.1126 VI 30.247 RP 108.35 LAP 1.40 LOP 232.04 VP 37.953 GAP 2.11 A7P 92.78 TAL 220.70 TAP 13.96 RCA 107.86 APO 155.10 V2 34.977 RC 96.794 GL 19.37 GP 3.72 ZAL 141.72 ZAP 111.53 ETS 359.03 ZAE 155.04 ETE 180.79 ZAC 36.09 ETC 158.37 CLP-111.58
         RC 96.794 GL 19.37 UP

**PLANETOCENTRIC CONIC**

C3 20.852 VHL 4.566 DLA -2.44 RAL 291.12 RAD 6567.8 VEL 11.926 PTH 2.12 VHP 3.180 DPA -18.71 RAP 302.43 ECC 1.3432

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 46 29 2148.73 -17.92 37.35 152.53 112.30 2 22 18 1548.7 -14.74 30.12

90.00 13 8 21 4944.00 21.55 215.92 153.70 71.17 14 30 45 4344.0 18.78 208.34

90.00 13 8 21 4944.00 21.55 215.92 153.70 71.17 14 30 45 4344.0 18.78 208.34

10.67
        PLANETOCENTRIC CONIC
                             H LNCH TIME L-1 TIME INJ LAI
1 46 29 2148.73 -17.92
13 8 21 4944.00 21.55
3 6 42 1890.00 -18.96
14 30 49 4677.96 22.61
4 12 20 1684.53 -21.74
15 41 40 4456.20 25.46
                                                                                                                     153.70
152.07
153.30
150.66
                                                                                                                                                  69.91 15 48 47 4078.0

117.05 4 40 25 1084.5

66.38 16 55 57 3856.2
                                                                             22.61
-21.74
                                                                                                                                                                                                                                       188.39
              110.00
                                                                                                          .87
                                                                                                                                                                                                                    -17.94
22.05
                                                                                                                                                                                                                                          353.80
              110.00
                                                                                                    177.86
                                                                                                                           152.04
                                                                                                                                                                                                                                            170.37
       DIFFERENTIAL CORRECTIONS
                                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                         SGT 1952.5 SGR 262.0 SG3 658.3

RRT -.7378 RRF -.7553 RTF .9308

SGB 1970.0 R23 .0637 R13 -.9314

SG1 1962.1 SG2 176.0 THA 174.30
          TOE .3272 TRA-1.0475 TC3-1.5145 BAU .4233
                                                                                                                                                                                        ST 570.9 SR 215.8 SS 654.5
CRT -.8207 CRS .9792 CST -.9159
         ROE -.1698 RRA .0911 RC3 .1104 FAU .17819
         FOE 1.7760 FRA-2.1702 FC3-7.3981 BSP 5704
BOE .3686 BRA 1.0515 BC3 1.5185 FSP -2138
                                                                                                                                                                                        LSA 874.0 MSA 191.8 SSA 13.9
                                                                                                                                                                                        EL1 599.0 EL2 117.6 ALF 162.05
- LAUNCH DATE DEC 11 1965
                                                                                                                 FLIGHT TIME 114.00
                                                                                                                                                                                                         ARRIVAL DATE APR 4 1966
       MELIOCENTRIC CONIC
                                                                                                                DISTANCE 332.951
         RL 147.30 LAL -.00 LOL 78.74 VL 28.127 GAL -7.59 AZL 86.93 HCA 156.46 SHA 131.25 ECC .17923 INC 3.0690 V1 30.247

RP 108.39 LAP 1.23 LOP 235.23 VP 37.918 GAP 2.46 AZP 92.81 TAL 219.86 TAP 16.31 RCA 107.72 APO 154.77 V2 34.964

RC 99.145 GL 19.30 GP 4.11 ZAL 141.09 ZAP 115.50 ETS 359.49 ZAE 152.35 ETE 179.49 ZAC 35.22 ETC 158.53 CLP-115.57
       PLANETOCENTRIC CONIC
         C3 20.381 VHL 4.515 DLA -2.40 RAL 291.85 RAD 6567.8 VEL 11.906 PTH 2.12 VHP 3.244 DPA -18.47 RAP 301.53 ECC 1.3354
         LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                            1 49 5 2144.61 -17.81 13 11 34 4937.20 21.40 3 9 18 1885.82 -18.84 14 34 2 4671.22 22.45 4 14 59 1680.20 -21.60 15 44 50 4449.60 25.28
                                                                                                  90.00
                                                                               -17.81
                                                                                                                                                                                                                                            29.67
               90.00
             100.00
                                                                             22.45 195.51
-21.60 .60
                                                                                                                                                                                                                                            10.42
             100.00
                                                                                                                                                                                                                                          187.97
            110.00
                                                                                                                                                                                                                                          353.55
            110 00
                                                                                                177.43
                                                                                                       #ID-COURSE EXECUTION ACCURACY
SGT 2124.7 SGR 264.D SG3 636.D
RRT -.7990 RRF -.7982 RTF .9350
SGB 2141.1 R23 .0782 R13 -.9356
SG1 2135.2 SG2 157.9 THA 174.30

D849.6 21.85 169.96
ORBIT DETERMINATION ACCURACY
ST 618.5 SR 203.2 SS 642.D
CRT -.8417 CRS .9841 CST -.9203
LSA 894.1 MSA 190.9 SSA 12.6
EL1 642.4 EL2 105.7 ALF 164.10
      DIFFERENTIAL CORRECTIONS
                                                                                                       MID-COURSE EXECUTION ACCURACY
         TOE .3573 TRA-1.0972 TC3-1.7037 BAU .4657
        ROE -.1576 RRA .0936 RC3 .1380 FAU .17109
FOE 1.6940 FRA-2.0072 FC3-7.2675 BSP 6285
BDE .3905 BRA 1.1012 BC3 1.7093 FSP -2063
  LAUNCH DATE DEC 11 1965
                                                                                                           FLIGHT TIME 116.00
                                                                                                                                                                                                         ARRIVAL DATE APR 6 1966
      HELIOCENTRIC CONIC
                                                                                                               DISTANCE 339.116
       RL 147.30 LAL -.00 LOL 78.74 VL 28.087 GAL -7.44 AZL 86.99 HCA 159.65 SMA 131.00 ECC .17886 INC 3.0127 V1 30.247
RP 108.43 LAP 1.05 LOP 238.42 VP 37.881 GAP 2.79 AZP 92.83 TAL 218.95 TAP 18.59 RCA 107.57 APO 154.43 V2 34.951
RC 101.502 GL 19.16 GP 4.61 ZAL 140.44 ZAP 119.19 ETS .09 ZAE 149.88 ETE 178.26 ZAC 34.55 ETC 158.98 CLP-119.29
      PLANETOCENTRIC CONIC
        C3 19.885 VHL 4.459 DLA -2.41 RAL 292.65 RAD 6567.8 VEL 11.886 PTH 2.11 VMP 3.318 DPA -18.06 RAP 300.89 ECC 1.3273
       19.885 VML 4.459 DLA -2.41 RAL 292.65 RAD 6567.8 VEL 11.886 PTH 2.11 VMP 3.318 DPA -18.06 RAP 3DD.89 ECC 1.3273 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 13 52 23 2138.35 -17.65 36.71 153.32 112.51 2 28 1 1538.3 -14.45 29.50 90.00 13 14 42 4931.70 21.27 215.12 154.44 70.86 14 36 53 4331.7 18.47 207.57 100.00 3 12 36 1879.57 -18.67 17.22 152.86 113.78 3 43 56 1279.6 -15.30 10.05 100.00 14 37 9 4665.71 22.32 195.15 154.04 69.58 15 54 55 4065.7 19.34 187.62 110.00 4 18 16 1674.00 -21.41 .23 151.47 117.31 4 46 10 1074.0 -17.58 353.19 110.00 15 47 59 4444.05 25.13 177.07 152.79 66.03 17 2 3 3844.0 21.68 169.63 DIFFERENTIAL CORRECTIONS
                                                                                                      MID-COURSE EXECUTION ACCURACY
SGT 2293.1 3GR 270.3 5G3 612.5
RRT -.8534 RRF -.8552 RTF .9379
SGB 2309.0 R23 .0994 R13 -.9385
SG1 2304.7 5G2 140.2 THA 174.24

SG1 2304.7 5G2 140.2 THA 174.24

SG1 2304.7 SG2 140.2 THA 174.24
      DIFFERENTIAL CORRECTIONS
                                                                                                     MID-COURSE EXECUTION ACCURACY
       TOE .3817 TRA-1.1411 TC3-1.8977 BAU .5065
       ROE -.1454 RRA .0959 RC3 .1698 FAU .16374
       FOE 1.5967 FRA-1.8433 FC3-7.1290 BSP 6867
       BOE .4084 BRA 1.1451 BC3 1.9053 FSP -1994
```

FLIGHT TIME 110.00

ARRIVAL DATE APR 8 1966

```
FLIGHT TIME 118.00
LAUNCH DATE DEC 11 1965
                                                                                       DISTANCE 345.258
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 28.051 GAL -7.29 ATL 87.06 HCA 162.84 SHA 130.73 ECC .17855 INC 2.9366 V1 30.247 RP 108.46 LAP .87 LOP 241.60 VP 37.842 GAP 3.11 ATP 92.81 TAL 217.98 TAP 20.82 RCA 107.39 APO 154.08 VZ 34.939 RC 103.862 GL 18.91 GP 5.30 TAL 139.76 TAP 122.60 ETS .89 TAE 147.63 ETE 176.95 TAC 34.08 ETC 159.83 CLP-122.76
   PLANETOCENTRIC CONTC
     C3 19.353 VHL 4.399 DLA -2.52 RAL 293.54 RAD 6567.8 VEL 11.863 PTH 2.10 VHP 3.400 DPA -17.42 RAP 300.49 ECC 1.3185 LNCH A787H LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A787H INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            153.77
                      1 56 45 2128.46

13 17 25 4928.74

3 16 56 1869.85

14 39 56 4662.58

4 22 29 1664.65

15 50 52 4440.54
                                                                                                                                                                     -14.16
                                                                                                               112.71
         90.00
                                                                               36.10
                                                                                                                                 2 32 14
                                                                                                                                                   1528.5
                                                                                                                                                                                          28.91
                                                             -17.39
                                                                                                                    70.78 14 39 33
                                                                                                                                                                        18.39
                                                                                                                                                                                         207.38
                                                                                               154.92
                                                                                                                                                      4328.7
          90.00
                                                            21.21
                                                                             214.93
                                                                                                                  113.98
                                                                                                                                  3 48 5
                                                                                                                                                      1269.9
                                                                                                                                                                        -15.01
                                                                                                                                                                                           9.48
                                                                               16.62
                                                                                               153.31
        100.00
                                                            -18.41
                                                                                                                  69.50 15 57 38 4062.6
117.53 4 50 13 1064.7
65.92 17 4 53 3840.5
                                                                                                                                                      4062.6
                                                                                                                                                                      19.26
        100.00
                                                            22.25
                                                                             194.95
                                                                                               154.52
                                                                                             151.92
                                                                                                                                                                      -17.26
                                                       -21 ...
25 .03
                                                                                                                                                                                         352.65
        110.00
                                                           -21.12
                                                                             359.66
                                                                                                                                                                     21.57
        110.00
                                                                             176.85
                                                                                               153.27
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 697.1 SR 178.4 SS 605.3
CRT -.8732 CRS .9925 CST -.9215
                                                                                  SGT 2455.1 SGR 282.6 SG3 586.9
RRT -.8977 RRF -.9040 RTF ..9394
SGB 2471.4 R23 ..1329 R13 -.9401
     TOE .3998 TRA-1.1768 TC3-2.0966 BAU .5451
     ROE -.1337 RRA .0978 RC3 .2074 FAU .15584
                                                                                                                                                LSA 920.9 MSA 190.0 SSA 9.9
     FOE 1.4938 FRA-1.6693 FC3-6.9712 BSP 7414
                                                                                   SG1 2468.3 SG2 123.9 THA 174.08
                                                                                                                                                 EL1 714.6 ELZ 84.8 ALF 167.22
     BOE .4215 BRA 1.1809 BC3 2.1069 FSP -1909
                                                                                                                                                              ARRIVAL DATE APR 10 1966
                                                                                       FLIGHT TIME 120.00
LAUNCH DATE DEC 11 1965
                                                                                       DISTANCE 351.378
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 28.013 GAL -7.12 A7L 87.17 HCA 166.03 SMA 130.46 ECC .17828 INC 2.8272 V1 30.247 RP 108.50 LAP .68 LOP 244.79 VP 37.802 GAP 3.42 A7P 92.74 TAL 216.95 TAP 22.98 RCA 107.20 APO 153.72 V2 34.926 RC 106.225 GL 18.45 GP 6.30 7AL 139.10 7AP 125.74 ETS 2.04 7AE 145.56 ETE 175.38 7AC 33.75 ETC 161.24 CLP-125.99
   PLANETOCENTRIC CONIC
                                                                                                                       2.10 VHP 3.490 OPA -16.44 RAP 300.29 ECC 1.3089
     C3 18.772 VHL 4.333 DLA -2.82 RAL 294.53 RAD 6567.8 VEL 11.839 PTH
    C3 18.772 VHL 4.333 DLA -2.82 RAL 294.53 RAD 6567.8 VEL 11.839 PTH 2.10 VMP 3.490 DPA -16.44 RAP 300.29 ECC 1.3089 LDCH A7HTH LDCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 2 54 2112.08 -16.96 35.09 154.23 113.02 2 58 6 1512.1 -13.69 - 27.94 90.00 13 19 9 4930.73 21.25 215.06 155.49 70.83 14 41 20 4330.7 18.44 207.51 100.00 3 22 56 1853.92 -17.96 15.65 153.77 114.30 3 53 50 1253.9 -14.53 8.54 100.00 14 41 48 4664.12 22.28 195.05 155.09 69.54 15 59 32 4064.1 19.30 187.52 110.00 4 28 10 1649.71 -20.64 358.76 152.38 117.87 4 55 39 1049.7 -16.75 351.79 110.00 15 53 4 4441.09 25.05 176.88 153.86 65.94 17 7 5 3841.1 21.58 169.44
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                                                 ST 721.7 SR 166.8 SS 577.1
CRT -.8831 CRS .9956 CST -.9177
     TOE .4059 TRA-1.2049 TC3-2.3088 BAU .5830
                                                                                   SGT 2614.5 SGR 304.9 SG3 561.7
RRT -.9308 RRF -.9431 RTF .9403
     ROE -.1224 RRA .1000 RC3 .2561 FAU .14814
FOE 1.3685 FRA-1.4998 FC3-6.8320 BSP 7985
BOE .4240 BRA 1.2090 BC3 2.3230 FSP -1836
                                                                                   SGB 2632.3 R23 .1812 R13 -.9412
SG1 2629.9 SG2 110.8 THA 173.79
                                                                                                                                                 LSA 919.4 MSA 190.2 SSA 8.4
                                                                                                                                                 EL1 736.7 EL2 76.7 ALF 168.33
                                                                                                                                                              ARRIVAL DATE APR 12 1966
                                                                                       FLIGHT TIME 122.00
LAUNCH DATE DEC 11 1965
                                                                                       DISTANCE 357.477
   HELIOCENTRIC CONIC
     RL 147.30 LAL -.00 LOL 78.74 VL 27.973 GAL -6.95 AZL 87.35 MCA 169.21 SMA 130.17 ECC .17808 INC 2.6540 V1 30.247 RP 108.54 LAP .50 LOP 247.97 VP 37.762 GAP 3.72 AZP 92.61 TAL 215.88 TAP 25.09 RCA 106.99 APO 153.35 V2 34.914 RC 108.588 GL 17.59 GP 7.90 ZAL 138.50 ZAP 128.55 ETS 3.84 ZAE 143.63 ETE 173.21 ZAC 33.51 ETC 163.61 CLP-128.99
   PLANETOCENTRIC CONIC
     C3 18.107 VHL 4.255 DLA -3.48 RAL 295.65 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 3.592 DPA -14.84 RAP 300.21 ECC 1.2980 LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           154.69 113.57 2 47 5

156.22 71.15 14 41 1

154.23 114.86 4 2 30

155.83 69.84 15 59 31

152.83 118.44 5 3 39

154.61 66.21 17 7 45
                                                                                                                                                                    -12.84
                      2 12 22 2002.80
13 18 38 4943.11
3 32 5 1825.66
14 41 36 4675.49
4 36 35 1623.71
15 53 35 4450.20
                                                                                                                                                1482.8
                                                                               33.31
                                                            -16.17
          90.00
                                                                                                                                                                                          208.28
                                                                              215.86
                                                                                                                                                      4343.1
                                                                                                                                                                         18.75
                                                             21.53
          90.00
                                                                               13.93
                                                                                                                                                      1225.7
                                                                                                                                                                      -13.67
                                                                                                                                                                                            6.88
                                                            -17.16
        100.00
                                                                                                                                                      4075.5
                                                                                                                                                                        19.60
                                                                                                                                                                                          188.23
                                                                              195.79
                                                            22.55
        100.00
                                                                                                                                                      1023.7
                                                                                                                                                                       -15.86
                                                                                                                                                                                         350.31
                                                           -19.81
                                                                              357.20
        110.00
                                                                                                                                                     3850.2
                                                                                                                                                                        21.87
                                                                                                                                                                                          170.00
                                                       25.30
                                                                              177.47
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 2763.9 SGR 343.7 SG3 534.7
RRT -.9509 RRF -.9712 RTF .9405
SGB 2785.1 R23 .2444 R13 -.9416
                                                                                                                                                 ST 729.7 SR 156.9 SS 538.2
CRT -.8880 CRS .9979 CST -.9092
     TDE .3965 TRA-1.2185 TC3-2.5343 BAU .6185
     ROE -.1122 RRA .1026 RC3 .3242 FAU .13997
FOE 1.2188 FRA-1.3196 FC3-6.6923 BSP 8491
BDE .4121 BRA 1.2229 BC3 2.5550 FSP -1751
                                                                                                                                                 LSA 900.1 MSA 190.8 SSA 6.9
                                                                                   SG1 2783.1 SG2 105.6 THA 173.25
                                                                                                                                                  EL1 743.0 EL2 70.9 ALF 169.09
                                                                                                                                                               ARRIVAL DATE APR 14 1966
                                                                                        FLIGHT TIME 124.00
LAUNCH DATE DEC 11 1965
                                                                                        DISTANCE 363.556
   HELIOCENTRIC CONIC
     RL 147.30 LAL -.00 LOL 78.74 VL 27.931 GAL -6.78 AZL 87.66 MCA 172.40 SMA 129.88 ECC .17793 INC 2.3378 VI 30.247
RP 108.58 LAP .31 LOP 251.15 VP 37.720 GAP 4.01 AZP 92.32 TAL 214.76 TAP 27.15 RCA 106.77 APO 152.98 V2 34.903
RC 110.951 GL 15.81 GP 10.81 ZAL 138.13 ZAP 130.91 ETS 7.01 ZAE 141.64 ETE 169.63 ZAC 33.27 ETC 167.99 CLP-131.81
    PLANETOCENTRIC CONIC
     C3 17.282 VHL 4.157 DLA -5.05 RAL 297.00 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 3.714 DPA -11.90 RAP 300.10 ECC 1.2844
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 29 30 2023.07 -14.51 29.71 155.14 114.59 3 3 13 1425.1 -11.07 22.72 90.00 13 12 16 4981.15 22.34 218.35 157.27 72.14 14 35 17 4381.2 19.69 210.68
                       3 48 28 1768.34
14 35 59 4711.11
                                                                                                                                                                                             3.56
                                                                                10.50
                                                                                                154.66
                                                                                                                   115.89
                                                                                                                                 4 17 57
                                                                                                                                                       1168.3
                                                                                                                                                                        -11.88
        100.00
                                                             -15.49
                                                                                                                   70.81 15 54 30
119.51 5 17 28
67.12 17 4 21
                                                                                                                                                                                           190.47
                                                            23.37
                                                                               198.12
                                                                                             156.90
                                                                                                                                                       4111.1
                                                                                                                                                                        20.54
        100.00
                         4 51 16 1571.75
15 49 41 4480.47
                                                           -18.09
26.12
                                                                               354.15
                                                                                              153.23
                                                                                                                   119.51
                                                                                                                                                       971.7
                                                                                                                                                                        -14.03
                                                                                                                                                                                           347.39
        110.00
                                                                                                                                                                                           171.87
                                                                                                                                                                        22.79
                       15 49 41
                                                                             179.44
                                                                                              155.74
                                                                                                                                                      3880.5
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                 SG1 2899.5 SGR 416.1 SG3 502.9

RRT -.9571 RRF -.9890 RTF ..9394

SG8 2929.2 R23 .3047 R13 -.9412

SG1 2926.8 SG2 119.4 THA 172.17
                                                                                                                                                 ST 701.3 SR 149.1 S5 474.4
CRT -.8773 CRS .9991 CST -.8868
      TOE .3520 TRA-1.2082 TC3-2.7891 BAU .6522
      RDE -.1031 RRA .1059 RC3 .4361 FAU .13058
                                                                                                                                                LSA 837.8 M5A 193.0 SSA 5.3
EL1 713.5 EL2 70.3 ALF 169.33
     FOE 1.0124 FRA-1.1102 FC3-6.5413 8SP 8903
      BOE .3668 BRA 1.2129 BC3 2.8230 FSP -1633
```

```
non-transmission and April 16 c
```

LAUNCH DATE DEC 11 1965	FLIGHT TIME 126.00	ARRIVAL DATE APR 16 1966
RP 108.61 LAP .12 LOP 254.32 V RC 113.313 GL 10.95 GP 17.72 Z	DISTANCE 369.615 1. 27.889 GAL -6.59 AZL 88.42 HCA 175.58 SMA 129.57 1. 27.678 GAP 4.29 AZP 91.57 TAL 213.59 TAP 29.17 1. 138.40 ZAP 131.92 ETS 14.12 ZAE 138.65 ETE 161.99	RCA 106.53 APO 152.62 V2 34.892 ZAC 33.20 ETC 178.43 CLP-134.53
LNCH A7MTH LNCH TIME L-I TIME 90.00 3 12 53 1861.15 90.00 12 44 48 5110.47	RAL 299.00 RAO 6567.6 VEL 11.725 PTH 2.07 VMP 3.921 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -9.72 20.22 155.85 116.75 3 43 54 24.78 227.04 159.62 75.83 14 9 59	PO CST TIM INJ 2 LAT INJ 2 LONG 1261.1 -6.06 13.46 4510.5 22.59 219.06
100.00 14 10 52 4832.88 110.00 5 27 0 1433.91 110.00 15 29 52 4585.70	-10.71 1.53 155.33 118.08 4 56 24 25.85 206.31 159.31 74.44 15 31 25 -13.30 346.34 153.81 121.78 5 50 53 28.70 186.53 158.29 70.59 16 46 18 MIO-COURSE EXECUTION ACCURACY	4232.9 23.46 198.32 833.9 -9.01 339.88 3985.7 25.79 178.57
TDE .1843 TRA-1.1487 TC3-3.1389 B RDE0827 RRA .1119 RC3 .6889 F FDE .5852 FRA8388 FC3-6.3267 B BDE .2020 BRA 1.1541 BC3 3.2136 F	MID-COURSE EXECUTION ACCURACY SAU .6915 SGT 3030.0 SGR 588.0 SG3 456.7 FAU .11763 RRT9502 RRF9978 RTF .9382 SSP 9397 SGB 3086.5 R23 .3312 R139418 FSP -1481 SG1 3081.3 SG2 180.2 THA 169.52	ST 569.3 SR 128.8 S5 313.2 CRT7719 CRS .9991 CST7855 LSA 635.0 MSA 188.6 SSA 4.3 EL1 578.1 EL2 80.7 ALF 169.89
LAUNCH DATE DEC 11 1965	FLIGHT TIME 128.00	ARRIVAL DATE APR 18 1966
HELIOCENTRIC CONIC	DISTANCE 375.650	
RP 108.64 LAP07 LOP 257.50 V RC 115.673 GL -20.71 GP 48.81 Z	7L 27.845 GAL -6.39 AZL 93.06 MCA 178.75 SMA 129.27 PP 37.636 GAP 4.56 AZP 86.94 TAL 212.37 TAP 31.12 PAL 134.02 ZAP 120.01 ETS 37.61 ZAE 121.41 ETE 139.83	RCA 106.28 APO 152.25 V2 34.881 ZAC 43.76 ETC 217.12 CLP-139.41
C3 17.418 VHL 4.173 DLA -40.11 R LNCH AZMTH LNCH TIME L-I TIME 60.32 5 17 11 1485.60	RAL 308.72 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 5.601 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME 28.26 13.83 179.06 119.74 5.41.56	DPA 25.47 RAP 292.99 ECC 1.2867 PO CST TIM INJ 2 LAT INJ 2 LONG 885.6 31.98 6.06
119.68 11 58 4 5522.26	28.27 256.48 179.06 119.73 13 30 6	4922.3 31.99 248.71 885.6 31.98 6.06
60.32 5 17 11 1485.60 119.68 11 58 4 5522.26	28.26 13.83 179.06 119.74 5 41 56 28.27 256.48 179.06 119.73 13 30 6	885.6 31.98 6.06 4922.3 31.99 248.71
60.32 5 17 11 1485.60 119.68 11 58 4 5522.26 60.32 5 17 11 1485.60 119.68 11 58 4 5522.26	28.26 13.83 179.06 119.74 5 41 56 28.27 256.48 179.06 119.73 13 30 6	885.6 31.98 6.06 4922.3 31.99 248.71
		ORBIT DETERMINATION ACCURACY
TOE9436 TRA5283 TC3-2.6671 B RDE .3022 RRA0288 RC3 1.1920 F FDE7630 FRA .0032 FC3-2.7905 B	BAU .6803 SGT 2744.7 SGR 1079.2 SG3 220.7 FAU .05614 RRT9126 RRF9986 RTF .9325	CRT9679 CRS .9994 CST9763
	95P 6636 SGB 2949.2 R23 .3118 R139501	LSA 1475.2 HSA 136.7 SSA .8
BOE .9908 BRA .5290 BC3 2.9213 F	FSP -567 SG1 2919.9 SG2 414.7 THA 159.84	ELI 1388.1 ELZ 100.0 ALF 163.03
LAUNCH DATE DEC 11 1965		ARRIVAL DATE APR 20 1966
HELIOCENTRIC CONIC	DISTANCE 381.687	ECC .17786 INC 7.5394 VI 30.247
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z	DISTANCE 381.687 (L 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 (P 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 (FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 ZAC 59.38 ETC 127.38 CLP-140.12
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 7 PLANETOCENTRIC CONIC	DISTANCE 381.687 VL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 VP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 VAL 121.26 ZAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 7 PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME	DISTANCE 381.687 VL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 VP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 VAL 121.26 VAP 129.00 ETS 322.54 VAE 124.54 ETE 211.11 VAL 296.68 RAD 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 7 PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 DLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SHA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 38.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65
HELIOCENTRIC CONIC RL 147.3D LALDD LOL 78.74 V RP 108.68 LAP25 LOP 26D.67 V RC 118.029 GL 42.25 GP -34.9D Z PLANETOCENTRIC CONIC C3 29.D88 VHL 5.393 DLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 D 14 4D 2756.33	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 TAP 129.00 ETS 322.54 TAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 7 PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58	DISTANCE 381.687 VL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 VP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 VAL 121.26 TAP 129.00 ETS 322.54 TAE 124.54 ETE 211.11 VAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME -27.52 101.40 173.12 83.06 23.25 2 -36 171.29 164.33 61.69 18.11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19.13.27 -34.14 55.13 173.71 88.11 2.35.54	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 38.10 GAP 129.00 ETS 322.54 ZAE 124.54 JP 38.10 GAP 129.00 ETS 322.54 ZAE 124.54 JP 38.10 GAP 129.00 ETS 322.54 JP 38.10 GAP 129.00 ETS 32.54 JP 38.10 GAP 129.00 ETS 322.54 JP 38.10 GAP 129.00 JP 38.10 G	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22
HELIOCENTRIC CONIC RL 147.3D LALDD LOL 78.74 V RP 108.68 LAP25 LOP 26D.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 TAP 129.00 ETS 322.54 TAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1	ECC .17786 INC 7.5394 VI 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 28. 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY FAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .7245 SGR 3471.7 R23 .2953 R13 .9554	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RCC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4
HELIOCENTRIC CONIC RL 147.3D LALDD LOL 78.74 V RP 108.68 LAP25 LOP 26D.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SHA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTP 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .07863 RRT .8682 RRF .9786 RTF .9517 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 55 13 2441.80 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TOE 1.8410 TRA-1.7516 TC3-1.8223 B ROE .3783 RRA0946 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 APP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11 RAL 296.68 FAO 6568.2 VEL 12.266 PTP 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 236 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .07883 RRT .8882 RRF .9786 RTF .99517 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 TMA 8.47	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RCC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B ROE .3783 RRA0546 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965	DISTANCE 381.687 AL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 AP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 TAP 129.00 ETS 322.54 TAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 OUSTANCE 387.690	ECC .17786 INC 7.5394 VI 30.247 RCA 106.02 APO 151.89 V2 34.870 PAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 DLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 55 13 2441.80 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE 3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RD 108.71 LAP44 LOP 265.84 V	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 APP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 236 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07863 RRT .8682 RRF .9786 RTF .9517 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 TMA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BOE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 263.84 V RC 120.382 GL 31.83 GP -14.27 Z	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 38.296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.15 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 SPP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 OISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 PAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RCC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 265.84 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 38.296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.15 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 SSP 10916 SGB 3471.7 R23 .2953 R13 .9554 SSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VMP 4.171	ECC .17786 INC 7.5394 VI 30.247 RCA 106.02 APO 151.89 V2 34.870 ZAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIN INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 VI 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BOE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 263.84 V RC 120.382 GL 31.83 GP -14.27 Z	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11 RAL 296.68 FAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SGS 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 BBP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 299.30 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 TAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 DLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 55 13 2441.80 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE 3.3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 265.84 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH A7MTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56	DISTANCE 381.687 JL 27.800 GAL -6.19 A7L 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 236 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.15 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9917 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SG1 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VHP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12 -26.62 67.09 164.95 100.02 1 13 12	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RCA 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 35 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 7 PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERNTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 263.84 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH A7MTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 1 57 17 2313.94	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JRAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 SSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VMP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 9.21 188.22 159.66 63.11 16 45 0 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17 56 17	ECC .17786 INC 7.5394 VI 30.247 RCA 106.02 APO 151.89 V2 34.870 ZAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIN INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 VI 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48 1713.9 -25.99 37.81 3645.5 6.46 163.10
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 014 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B ROE .3783 RRA0546 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH A7MTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 1 6 45 32 4245.48 110.00 3 19 6 2057.95	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 TAP 129.00 ETS 322.54 TAE 124.54 ETE 211.11 RAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07863 RRT .8682 RRF .9786 RTF .9517 SSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VMP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17 56 17 -31.06 25.81 163.82 105.06 3 53 24	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 TAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48 1713.9 -25.99 37.81 1458.0 -28.68 17.42
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 DLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 55 13 2441.80 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TDE 1.8410 TRA-1.7516 TC3-1.8223 B RDE 3.783 RRA0546 RC33874 F FDE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH A7MTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 15 71 7 2313.94 110.00 3 19 6 2057.95 110.00 17 40 13 4074.23	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JRAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 SPP 10916 SGB 3471.7 R23 .2953 RT3 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VMP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 9.21 188.22 159.66 63.11 16 45 0 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17 56 17	ECC .17786 INC 7.5394 VI 30.247 RCA 106.02 APO 151.89 V2 34.870 ZAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIN INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 VI 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48 1713.9 -25.99 37.81 3645.5 6.46 163.10
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 014 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TOE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH AZMTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 15 30 11 4488.56 100.00 16 45 32 4245.48 110.00 3 19 6 2057.95 110.00 17 40 13 4074.23 OIFFERENTIAL CORRECTIONS TOE 1.1938 TRA-1.4933 TC3-2.7253 6	DISTANCE 381.687 JL 27.800 GAL -6.19 AZL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JRAL 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 SSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 OISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAO 6567.8 VEL 11.911 PTH 2.12 VMP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 9.21 188.22 159.66 63.11 16 45 0 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17 56 17 -31.06 25.81 163.82 105.06 3 53 24 MIO-COURSE EXECUTION ACCURACY BAU .7477 SGT 3478.5 SGR 206.8 SG3 404.7	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 ZAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 ZAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48 1713.9 -25.99 37.81 3645.5 6.46 163.10 1458.0 -28.68 17.42 3474.2 8.87 148.63- ORBIT DETERMINATION ACCURACY ST 1620.3 SR 137.9 SS 876.2
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH A7MTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 0 14 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TOE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.71 LAP44 LOP 265.84 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH A7MTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 1 57 17 2313.94 100.00 16 45 32 4245.48 110.00 3 19 6 2057.95 110.00 17 40 13 4074.23 OIFFERENTIAL CORRECTIONS TOE 1.1938 TRA-1.4933 TC3-2.7253 E ROE .1087 RRA .0167 RC31689 E	DISTANCE 381.687 JL 27.800 GAL -6.19 ATL 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 FAL 121.26 FAP 129.00 ETS 322.54 FAE 124.54 ETE 211.11 RAL 296.68 FAO 6568.2 VEL 12.266 PTH 2.21 VHP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 -36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.13 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY BAU .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .9517 BSP 10916 SGB 3471.7 R23 .2953 R13 .9554 FSP -1096 SGI 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 VP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAL 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 RAL 299.30 RAD 6567.8 VEL 11.911 PTH 2.12 VHP 4.171 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 9.21 188.22 159.66 63.11 16 45 0 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17 56 17 -31.06 25.81 163.82 105.06 3 53 24 13.17 155.09 157.39 58.17 18 48 7 MID-COURSE EXECUTION ACCURACY BAU .7477 SGT 3478.5 SGR 206.8 SG3 404.7 FAU .10079 RRT .7551 RRF .9247 RTF .9414	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 RCC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 7AC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3686.6 5.53 181.48 1713.9 -25.99 37.81 3645.5 6.46 163.10 1458.0 -28.68 17.42 3474.2 8.87 148.63- ORBIT DETERMINATION ACCURACY
HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RP 108.68 LAP25 LOP 260.67 V RC 118.029 GL 42.25 GP -34.90 Z PLANETOCENTRIC CONIC C3 29.088 VHL 5.393 OLA 21.92 R LNCH AZMTH LNCH TIME L-I TIME 90.00 22 33 53 3068.62 90.00 17 1 22 4187.58 100.00 014 40 2756.33 100.00 18 7 12 3975.10 110.00 18 43 9 3862.40 OIFFERENTIAL CORRECTIONS TOE 1.8410 TRA-1.7516 TC3-1.8223 B RDE .3783 RRA0546 RC33874 F FOE 2.2770 FRA9947 FC3-2.3462 B BDE 1.8795 BRA 1.7525 BC3 1.8630 F LAUNCH OATE DEC 11 1965 HELIOCENTRIC CONIC RL 147.30 LAL00 LOL 78.74 V RC 120.382 GL 31.83 GP -14.27 Z PLANETOCENTRIC CONIC C3 20.483 VHL 4.526 DLA 11.81 R LNCH AZMTH LNCH TIME L-I TIME 90.00 0 29 57 2595.63 90.00 15 30 11 4488.56 100.00 15 30 11 4488.56 100.00 16 45 32 4245.48 110.00 3 19 6 2057.95 110.00 17 40 13 4074.23 OIFFERENTIAL CORRECTIONS TOE 1.1938 TRA-1.4933 TC3-2.7253 6	DISTANCE 381.687 JL 27.800 GAL -6.19 A7L 82.46 HCA 181.94 SMA 128.95 JP 37.593 GAP 4.83 AZP 97.53 TAL 211.14 TAP 33.08 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 37.593 GAP 129.00 ETS 322.54 ZAE 124.54 ETE 211.11 JP 38.12 296.68 RAO 6568.2 VEL 12.266 PTH 2.21 VMP 4.737 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -27.52 101.40 173.12 83.06 23 25 2 36 171.29 164.33 61.69 18 11 10 -29.43 78.66 173.36 84.49 1 0 37 1.31 154.74 163.40 60.13 19 13 27 -34.14 55.15 173.71 88.11 2 35 54 5.32 143.71 160.90 56.18 19 47 32 MID-COURSE EXECUTION ACCURACY AND TOURSE EXECUTION ACCURACY FAU .07883 RRT .8682 RRF .9786 RTF .99517 BAD .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FAU .07883 RRT .8682 RRF .9786 RTF .99517 BAD .7245 SGT 3422.4 SGR 583.1 SG3 318.1 FSP -1096 SG1 3459.9 SG2 286.1 THA 8.47 FLIGHT TIME 132.00 DISTANCE 387.690 VL 27.754 GAL -5.98 AZL 85.04 HCA 185.11 SMA 128.63 NP 37.550 GAP 5.09 AZP 94.94 TAL 209.85 TAP 34.96 FAE 126.49 ZAP 139.13 ETS 340.45 ZAE 133.87 ETE 196.17 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME -26.62 67.09 164.95 100.02 1 13 12 9.21 188.22 159.66 63.11 16 45 0 -27.84 46.12 164.69 101.36 2 35 51 10.31 169.77 159.08 61.79 17.56 17 -31.06 25.81 163.82 105.06 3 53 24 13.17 155.09 157.39 58.17 18 48 7 MID-COURSE EXECUTION ACCURACY BAU .7477 SGT 3478.5 SGR 206.8 SG3 404.7 FAU .10079 RRT .7551 RRF .9247 RTF .9414 BSP 10649 SGB 3484.6 R23 .3246 R13 .9419	ECC .17786 INC 7.5394 V1 30.247 RCA 106.02 APO 151.89 V2 34.870 TAC 59.38 ETC 127.38 CLP-140.12 OPA -56.38 RAP 313.79 ECC 1.4787 PO CST TIM INJ 2 LAT INJ 2 LONG 2468.6 -28.20 92.80 3587.6 -4.14 164.65 2156.3 -29.88 69.88 3375.1 -2.67 148.22 1841.8 -34.02 45.89 3262.4 .84 137.48 ORBIT DETERMINATION ACCURACY ST 2047.1 SR 402.5 SS 1000.4 CRT .9685 CRS9956 CST9875 LSA 2307.8 MSA 166.4 SSA .4 EL1 2084.0 EL2 98.5 ALF 10.80 ARRIVAL DATE APR 22 1966 ECC .17795 INC 4.9595 V1 30.247 RCA 105.74 APO 151.53 V2 34.860 TAC 46.53 ETC 141.35 CLP-141.29 OPA -35.96 RAP 308.72 ECC 1.3371 PO CST TIM INJ 2 LAT INJ 2 LONG 1995.6 -24.97 58.82 3888.6 5.53 181.48 1713.9 -25.99 37.81 3645.5 6.46 163.10 1458.0 -28.68 17.42 3474.2 8.87 148.63- ORBIT DETERMINATION ACCURACY ST 1620.3 SR 137.9 SS 876.2 CRT .9159 CRS9824 CST9747

ARRIVAL DATE APR 24 1966

```
FLIGHT TIME 134.00
LAUNCH DATE DEC 11 1965
   RL 147.30 LAL -.00 LOL 78.74 VL 27.708 GAL -5.76 A7L 85.64 HCA 188.29 SMA 128.31 ECC .17813 INC 4.3549 V1 30.247 RP 108.74 LAP -.63 LOP 267.01 VP 37.507 GAP 5.34 A7P 94.31 TAL 208.52 TAP 36.81 RCA 105.46 APO 151.17 V2 34.851 RC 122.751 GL 29.00 GP -8.69 7AL 126.70 ZAP 142.30 ETS 346.25 ZAE 134.64 ETE 190.45 ZAC 44.50 ETC 146.98 CLP-143.17
                                                                   DISTANCE 393.678
  HELIOCENTRIC CONIC
   C3 18.648 VML 4.318 DLA 9.33 RAL 301.10 RAD 6567.8 VEL 11.833 PTH 2.10 VMP 4.200 DPA -30.24 RAP 308.75 ECC 1.3069 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   PLANETOCENTRIC CONIC
                                                                                      103.40 1 38 57
                                                                        164.10
                 0 57 26 2491.24
15 17 2 4548.46
2 23 21 2214.15
16 33 48 4300.78
                                               -25.18
                                                            59.79
                                                                                                                                   7.42
                                                                                                  16 32 50
                                                                                                                   3948.5
                                                                                         63.76
                                                            191.68
                                                                         160.07
                                              11.04
                                                                                                                                 -24.02
                                                                                                                                               31.05
                                                                                                  3 0 15
                                                                                                                   1614.2
                                                                                        104.75
                                               -26.30
                                                             39.10
                                                                         163.79
                                                                                        62.44 17 45 29
108.47 4 14 47
58.82 18 40 19
                                                                                                                   3700.8
                                                                                                                                  8.28
                                                                       159.53
                                                            172.93
                                              12.07
      100.00
                                                                                                                                               11.35
                                                                                                                                -26.49
                                                                                                                   1368.1
                                                                        162.78
                                                             19.41
                                              -29.29
                   3 41 59 1968.06
      110.00
                                                                                                                                 10.55
                                                                                                                   3519.6
                                                            157.62
                                                                         157.96
                                                                                                               ORBIT DETERMINATION ACCURACY
                 17 31 39
                              4119.64
                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 1526.0 SR 87.5 SS 806.0
                                                               SGT 3602.3 SGR 102.6 SG3 403.4
RRT .3490 RRF .5894 RTF .9386
    TOE 1.0627 TRA-1.4333 TC3-3.1228 BAU .7786
                                                                                                                CRT .8573 CRS -.9590 CST -.9677
    RDE .0652 RRA .0325 RC3 -.0392 FAU .09976
                                                                                                               LSA 1718.1 MSA 185.3 SSA 3.4
EL1 1527.9 EL2 45.0 ALF 2.82
                                                               SGB 3603.7 R23 .2791 R13 .9387
SG1 3602.5 SG2 96.2 THA .57
    FDE 1.6568 FRA -.7333 FC3-4.6313 BSP 11166
                                                                                                 .57
    BDE 1.0647 BRA 1.4337 BC3 3.1231 FSP -1338
                                                                                                                          ARRIVAL DATE APR 26 1966
                                                                   FLIGHT TIME 136.00
LAUNCH DATE DEC 11 1965
                                                                   DISTANCE 399.651
    RL 147.30 LAL -.00 LOL 78.74 VL 27.661 GAL -5.53 AZL 85.92 HCA 191.46 SMA 127.99 ECC .17838 INC 4.0838 V1 30.247 RP 108.76 LAP -.81 LOP 270.17 VP 37.464 GAP 5.58 AZP 94.00 TAL 207.17 TAP 38.63 RCA 105.16 APO 150.82 V2 34.842
   HELIOCENTRIC CONIC
    RC 125.075 GL 27.80 GP -6.16 7AL 125.91 7AP 144.54 ETS 349.02 7AE 134.39 ETE 187.62 7AC 44.43 ETC 150.14 CLP-145.01
    8.49 RAL 302.74 RAD 6567.7 VEL 11.792 PTH 2.09 VHP 4.283 DPA -27.48 RAP 309.60 ECC 1.2909
   PLANETOCENTRIC CONIC
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 1513.5 SR 77.3 SS 770.4
                                                               SGT 3724.5 SGR 95.8 SG3 391.7
RRT -.2197 RRF -.0171 RTF .9366
SGB 3725.8 R23 -.1935 R13 -.9366
     TDE 1.0250 TRA-1.3945 TC3-3.4115 BAU .8062
                                                                                                                CRT .8315 CRS -.9487 CST -.9637
     ROE .0557 RRA .0360 RC3 .0369 FAU .09590
                                                                                                               LSA 1689.6 MSA 188.5 SSA 4.8
     FOE 1.5142 FRA -. 6056 FC3-4.6967 BSP 11625
                                                                                                               ELI 1514.9 ELZ 42.9 ALF
                                                              SG1 3724.6 SG2 93.5 THA 179.68
     BOE 1.0265 BRA 1.3950 BC3 3.4117 FSP -1304
                                                                                                                          ARRIVAL DATE APR 28 1966
                                                                    FLIGHT TIME 138.00
 LAUNCH DATE DEC 11 1965
    RL 147.30 LAL -.00 LOL 78.74 VL 27.613 GAL -5.29 A7L 86.07 HCA 194.63 SHA 127.67 ECC .17871 INC 3.9294 VI 30.247 RP 108.79 LAP -.99 LOP 273.34 VP 37.421 GAP 5.82 A7P 93.80 TAL 205.78 TAP 40.41 RCA 104.85 APO 150.49 V2 34.834 RC 127.413 GL 27.20 GP -4.73 7AL 124.72 7AP 146.46 ETS 350.65 7AE 133.92 ETE 185.92 7AC 45.05 ETC 152.28 CLP-146.76
                                                                    DISTANCE 405.609
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                            2.08 VHP 4.380 OPA -25.77 RAP 310.79 ECC 1.2795
     C3 16.986 VHL 4.121 DLA 8.29 RAL 304.38 RAD 6567.7 VEL 11.763 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        105.08
                                                             56.01 165.42
                   1 18 44 2435.94
15 21 52 4560.33
                                                -24.25
                                                                                                                                                185.54
         90.00
                                                                                          63.90 16 37 53
                                                                                                                     3960.3
                                                                           162.02
                                                 11.39
                                                             192.37
                                                                                        106.44 3 20 5
62.58 17 51 3
110.22 4 33 27
58.92 18 47 4
         90.00
                                                                                                                    1560.6
                                                                                                                                  -22.82
                                                                                                                                                27.52
                                                                           165.09
                                               -25.32
                                                              35.43
                    2 44 5 2160.65
        100.00
                                                                                                                                                166.75
                                                                                                                    3710.9
                                                                                                                                    8.61
                                                                          161.51
                                                             173.51
                  16 39 12 4310.85
                                                 12.39
                                                                                                                                  -25.16
        100.00
                                                                       164.03
                                                                                                                    1318.5
                                                                                                                                                 8.11
                                               -28.17
                                                              15.98
                    A 1 28 1918.45
        110.00
                                                                                                                    3525.8
                                                                                                                                  10.78
                                                                                                                                                151.41
                                                                           160.00
                                                15.00
                                                             157.96
                  17 38 18
                                 4125.81
                                                                                                                 ORBIT DETERMINATION ACCURACY
        110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ST 1531.3 SR 79.7 SS 750.1
CRT .8382 CRS -.9543 CST -.9613
    DIFFERENTIAL CORRECTIONS
                                                                SGT 3846.6 SGR 118.2 SG3 378.2

RRT -.4521 RRF -.3157 RTF .9349

SGB 3848.4 R23 -.1203 R13 -.9349

SGB 3847.0 SG2 105.4 THA 179.20
      TOE 1.0193 TRA-1.3604 TC3-3.6669 BAU
                                                     .8330
     ROE .0563 RRA .0360 RC3 .0894 FAU .09159
FOE 1.4155 FRA -.4923 FC3-4.6682 BSP 12092
                                                                                                                 LSA 1696.4 MSA 190.7 55A 6.2
                                                                                                                 EL1 1532.8 EL2 43.4 ALF 2.50
      BDE 1.0209 BRA 1.3608 BC3 3.6680 FSP -1265
                                                                                                                            ARRIVAL DATE APR 30 1966
                                                                     FLIGHT TIME 140.00
  LAUNCH DATE DEC 11 1965
     RL 147.30 LAL -.00 LOL 78.74 VL 27.566 GAL -5.05 AZL 86.17 MCA 197.80 SMA 127.35 ECC .17913 INC 3.8286 V1 30.247
RP 108.81 LAP -1.17 LOP 276.51 VP 37.379 GAP 6.06 AZP 93.65 TAL 204.36 TAP 42.16 RCA 104.54 APO 150.16 V2 34.826
RC 129.747 GL 26.90 GP -3.81 ZAL 123.30 ZAP 148.21 ETS 351.72 ZAE 133.41 ETE 184.79 ZAC 46.04 ETC 153.91 CLP-148.42
                                                                     DISTANCE 411.552
    HELIOCENTRIC CONIC
      C3 16.429 VHL 4.053 DLA 8.41 RAL 306.05 RAD 6567.7 VEL 11.739 PTH 2.07 VHP 4.483 DPA -24.53 RAP 312.18 ECC 1.2704
     PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 24 26 2432.18

15 29 29 4548.78

2 49 52 2156.69

16 46 45 4299.51

4 7 24 1914.04

17 45 43 4114.92
                                                                            166.59
                                                                                        105.19
                                                              55.75
                                                 -24.18
                                                                                                                                                 184.88
         90.00
                                                                                                     16 45 18
                                                                                                                      3948.8
                                                                                                                                     7.43
                                                                            163.21
                                                                                           63.76
                                                              191.70
                                                 11.05
                                                                                                                                                  27.26
         90.00
                                                                                                      3 25 48
                                                                                                                      1556.7
                                                                                                                                   -22.73
                                                                                          106.57
                                                               35.16
                                                                            166.25
                                                -25.24
         100.00
                                                                                                     17 58 25
                                                                                                                      3699.5
                                                                                                                                     8.24
                                                                                                                                                 166.12
                                                                                           62.43
                                                                            162.70
                                                              172.86
                                                 12.03
         100.00
                                                                                                                                   -25.03
                                                                                                                                                   7.82
                                                                                                      4 39 18
                                                                                                                      1314.0
                                                                                          110.37
                                                               15.68
                                                                            165.20
                                                -28.06
                                                                                                                                                 150.82
         110.00
                                                                                           58.75 18 54 17
                                                                                                                      3514.9
                                                                                                                                  10.37
                                                              157.35
                                                                            161.20
                                             14.62
                                                                                                                 ORBIT DETERMINATION ACCURACY
         110.00
                                                                 HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1570.3 SR 87.2 55 740.3
CRT .8611 CRS -.9665 CST -.9604
                                                                  SCT 3959.1 SCR 143.0 SC3 364.0
RRT -.5130 RRF -.4170 RTF .9332
SCB 3961.6 R23 -.0724 R13 -.9331
      TOE 1.0341 TRA-1.3199 TC3-3.8970 BAU .8564
                                                                                                            ROE .0609 RRA .0315 RC3 .1294 FAU .08707
      FOE 1.3448 FRA -.3844 FC3-4.5879 BSP 12447
                                                                  SG1 3959.7 SG2 122.7 THA 178.94
      BOE 1.0359 BRA 1.3203 BC3 3.8992 FSP -1216
```

```
LAUNCH DATE DEC 11 1965
                                                                                                                                                        FLIGHT TIME 142.00
                                                                                                                                                                                                                                                                               ARRIVAL DATE MAY 2 1966
          MELIOCENTRIC CONIC
                                                                                                                                                       DISTANCE 417.479
            RL 147.30 LAL -.00 LOL 78.74 VL 27.518 GAL -4.79 AZL 86.24 MCA 200.97 SMA 127.03 ECC .17964 INC 3.7578 V1 30.247 RP 108.84 LAP -1.34 LOP 279.67 VP 37.337 GAP 6.29 AZP 93.51 TAL 202.92 TAP 43.89 RCA 104.21 APO 149.84 VZ 34.819 RC 132.074 GL 26.74 GP -3.17 ZAL 121.71 ZAP 149.84 ETS 352.49 ZAE 132.92 ETE 183.98 ZAC 47.25 ETC 155.23 CLP-149.99
          PLANETOCENTRIC CONIC
                                                                                      8.72 RAL 307.78 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 4.590 DPA -23.53 RAP 313.71 ECC 1.2626
            C3 15.954 VHL 3.994 DLA
           C3 15.954 VHL 3.994 OLA 8.72 RAL 307.78 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 4.590 DPA -23.53 RAP 313.71 ECC 1.2626 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 852 2435.63 -24.25 55.99 167.94 105.09 2 9 27 1835.6 -21.94 48.08 90.00 15 38 52 4531.94 10.54 190.72 164.52 63.57 16 54 24 3931.9 6.90 183.93 100.00 2 54 27 2159.60 -25.30 35.36 167.61 106.48 3 30 26 1559.6 -22.80 27.45 100.00 16 55 58 4283.21 11.51 171.92 164.01 62.22 18 7 21 3683.2 7.71 165.20 110.00 4 12 22 1915.78 -28.11 15.80 166.57 110.31 4 44 17 1315.8 -25.08 7.93 110.00 17 54 33 4099.79 14.08 156.51 162.51 58.53 19 2 53 3499.8 9.82 150.01 OFFFFRENTIAL CORRECTIONS
         DIFFERENTIAL CORRECTIONS
                                                                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
            TOE 1.0431 TRA-1.2901 TC3-4.1555 BAU .8870
                                                                                                                                             9GT 4094.3 SGR 166.1 SG3 353.4
RRT -.5252 RRF -.4612 RTF ..9338
SGB 4097.7 R23 -.0351 R13 -.9338
                                                                                                                                                                                                                                                       ST 1601.3 SR 97.4 SS 721.7
CRT .8829 CRS -.9763 CST -.9600
           ROE .0674 RRA .0266 RC3 .1620 FAU .08396
           FDE 1.2628 FRA -.3121 FC3-4.5560 BSP 13154
BDE 1.0452 BRA 1.2903 BC3 4.1586 FSP -1224
                                                                                                                                                                                                                                                       LSA 1748.8 MSA 189.6 SSA 9.1
                                                                                                                                              3G1 4095.2 SG2 141.3 THA 178.78
                                                                                                                                                                                                                                                       ELI 1603.6 ELZ 45.7 ALF 3.08
   LAUNCH DATE DEC 11 1965
                                                                                                                                                       FLIGHT TIME 144.00
                                                                                                                                                                                                                                                                               ARRIVAL DATE MAY 4 1966
        HELIOCENTRIC CONIC
                                                                                                                                                      DISTANCE 423.397
          RL 147.30 LAL -.00 LOL 78.74 VL 27.469 GAL -4.53 AZL 86.30 MCA 204.13 SMA 126.70 ECC .18023 INC 3.7047 V1 30.247 RP 108.86 LAP -1.51 LOP 282.83 VP 37.295 GAP 6.52 AZP 93.38 TAL 201.45 TAP 45.58 RCA 103.87 APO 149.54 V2 34.812 RC 134.395 GL 26.68 GP -2.71 ZAL 119.97 ZAP 151.36 ETS 353.08 ZAE 132.47 ETE 183.37 ZAC 48.62 ETC 156.36 CLP-151.48
        PLANETOCENTRIC CONIC
          C3 15.533 VHL 3.941 DLA
                                                                                    9.17 RAL 309.59 RAD 6567.6 VEL 11.701 PTH 2.06 VHP 4.698 DPA -22.67 RAP 315.35 ECC 1.2556
          C3 15.533 VHL 3.941 DLA 9.17 RAL 309.59 RAO 6567.6 VEL 11.701 PTH 2.06 VMP 4.698 DPA -22.67 RAP 315.35 ECC 1.2556 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 15 49 40 4511.28 9.91 189.53 165.94 63.34 17 4 51 3911.3 6.25 182.76 100.00 2 58 19 2167.39 -25.45 35.89 169.15 106.23 3 34 27 1567.4 -22.98 27.96 100.00 17 6 31 4263.33 10.88 170.79 165.43 61.99 18 17 35 3663.3 7.05 164.09 110.00 4 16 47 1921.87 -28.25 16.22 168.12 110.10 4 48 49 1321.9 -25.25 8.33 110.00 18 4 33 4081.61 13.43 155.50 163.93 58.27 19 12 35 3481.6 9.14 149.03
                                                                                                                                        189.53 165.94 63.34 17 4 51 3911.3 6.25 35.89 169.15 106.23 3 34 27 1567.4 -22.98 170.79 165.43 61.99 18 17 35 3663.3 7.05 16.22 168.12 110.10 4 48 49 1321.9 -25.25 155.50 163.93 58.27 19 12 35 3481.6 9.14
                                                                                                                                                                                                                                                                                                                            149.03
       DIFFERENTIAL CORRECTIONS
                                                                                                                                         MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                                                                                          SGT 4147.D SGR 186.9 SG3 333.5

RRT -.4969 RRF -.4330 RTF .9264

SGB 4151.2 R23 -.0324 R13 -.9264

SGI 4148.1 SG2 162.1 THA 178.72

CODIT DETERMINATION ACCURACY

CRT .9147 CR5 -.988D CST -.9606

LSA 1849.D MSA 195.9 SSA 9.8

SGI 4148.1 SG2 162.1 THA 178.72

ELI 1700.1 EL2 43.8 ALF 3.35
          TOE 1.1060 TRA-1.2080 TC3-4.2925 BAU .8922
          ROE .0744 RRA .0205 RC3 .1895 FAU .07696
          FOE 1.2709 FRA -.1603 FC3-4.2897 BSP 12746
          BOE 1.1085 BRA 1.2082 BC3 4.2966 FSP -1060
 LAUNCH DATE DEC 11 1965
                                                                                                                                                     FLIGHT TIME 146.00
                                                                                                                                                                                                                                                                           ARRIVAL DATE MAY 6 1966
       HELIOCENTRIC CONIC
                                                                                                                                                   DISTANCE 429.297
         RL 147.30 LAL -.00 LOL 78.74 VL 27.421 GAL -4.26 AZL 86.34 MCA 207.30 SMA 126.38 ECC .18094 INC 3.6634 VI 30.247
RP 108.87 LAP -1.68 LOP 286.00 VP 37.234 GAP 6.75 AZP 93.26 TAL 199.95 TAP 47.25 RCA 103.52 APO 149.25 V2 34.806
RC 136.709 GL 26.66 GP -2.35 ZAL 118.12 ZAP 152.81 ETS 353.55 ZAE 132.05 ETE 182.89 ZAC 50.12 ETC 157.35 CLP-152.90
       PLANETOCENTRIC CONIC
        C3 15.162 VHL 3.894 DLA 9.72 RAL 311.47 RAD 6567.6 VEL 11.685 PTH 2.06 VHP 4.809 DPA -21.88 RAP 317.D7 ECC 1.2495 PDC 1.064 PDC 1.065 PD
         C3 15.162 VHL 3.894 DLA
      DIFFERENTIAL CORRECTIONS
                                                                                                                                      MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                                                                                        SGT 4267.3 SGR 206.4 SG3 323.1 ST 1749.3 SR 121.0 SS 744.1 RRT -.4769 RRF -.4303 RTF .9266 CRT .9333 CRS -.9927 CST -.9614 SGB 4272.2 R23 -.0139 R13 -.9266 LSA 1895.0 MSA 193.1 SSA 11.1 SG1 4268.4 SG2 181.4 THA 178.68 ELI 1753.0 EL2 43.4 ALF 3.70
         TOE 1.1329 TRA-1.1603 TC3-4.5272 BAU .9187
        ROE .0821 RRA .0137 RC3 .2134 FAU .07381
FOE 1.2149 FRA -.0911 FC3-4.2145 BSP 13307
        BOE 1.1359 BRA 1.1604 BC3 4.5322 FSP -1053
LAUNCH DATE DEC 11 1965
                                                                                                                                                    FLIGHT TIME 148.00
                                                                                                                                                                                                                                                                           ARRIVAL DATE HAY 8 1966
     HELIOCENTRIC CONIC
                                                                                                                                                  DISTANCE 435.183
       RL 147.30 LAL -.00 LOL 78.74 VL 27.373 GAL -3.97 AZL 86.37 MCA 210.46 SMA 126.06 ECC .18174 INC 3.6300 V1 30.247 RP 108.89 LAP -1.84 LOP 289.16 VP 37.213 GAP 6.97 AZP 93.13 TAL 198.44 TAP 48.90 RCA 103.15 APO 148.98 V2 34.801 RC 139.015 GL 26.67 GP -2.08 ZAL 116.14 ZAP 154.18 ETS 353.93 ZAE 131.69 ETE 182.50 ZAC 51.72 ETC 158.23 CLP-154.26
      PLANETOCENTRIC CONIC
        C3 14.834 VML 3.852 DLA 10.34 RAL 313.44 RAD 6567.6 VEL 11.671 PTH 2.05 VMP 4.922 DPA -21.13 RAP 318.86 ECC 1.2441
      C3 14.834 VHL 3.852 DLA 10.34 RAL 313.44 RAD 6567.6 VEL 11.671 PTH 2.05 VHP 4.922 DPA -21.13 RAP 318.86 ECC 1.2441 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 38 28 2472.10 -24.87 58.48 172.99 103.99 2 19.40 1872.1 -22.70 50.48 90.00 16 14 28 4462.73 8.41 186.74 169.18 62.86 17 28 51 3862.7 4.71 180.02 100.00 3 4 57 2193.20 -25.93 37.66 172.69 105.42 3 41 30 1593.2 -23.56 29.66 100.00 17 30 40 4216.87 9.38 168.15 168.66 61.49 18 40 57 3616.9 5.50 161.51 110.00 4 24 51 1943.16 -28.74 17.68 171.70 109.36 4 57 14 1343.2 -25.83 9.71 110.00 18 27 15 4039.67 11.92 153.19 167.14 57.72 19 34 35 3439.7 7.58 146.79 OTHER PRINTIPLE CORRECTIONS.
                                                                                                                                 153.19 167.14 37.72 19 34 35 3439.7 7.38 146.79
MID-COURSE EXECUTION ACCURACY
SGT 4372.7 SGR 224.6 SG3 311.9 ST 1815.1 SR 133.7 SS 744.7
RRT -.4497 RRF -.4145 RTF .9256 CRT .9502 CRS -.9952 CST -.9626
$GB 4378.5 R23 -.0029 R13 -.9256 LSA 1957.2 MSA 190.8 SSA 12.3
SGI 4373.9 SG2 200.6 THA 178.67 EL1 1819.5 EL2 41.6 ALF 4.01
     DIFFERENTIAL CORRECTIONS
       TOE 1.1709 TRA-1.0989 TC3-4.7388 BAU .9410
       ROE .0898 RRA .0064 RC3 .2341 FAU .07024
FDE 1.1755 FRA -.0148 FC3-4.0994 BSP 13711
BOE 1.1744 BRA 1.0989 BC3 4.7446 FSP -1025
```

ARRIVAL DATE MAY 10 1966

```
FLIGHT TIME 150.00
LAUNCH DATE CEC 11 1965
                                                                             DISTANCE 441.057
  HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 27.324 GAL -3.68 AZL 86.40 MCA 213.63 SMA 125.75 ECC .18267 INC 3.6024 V1 30.247 RP 108.90 LAP -1.99 LOP 292.32 VP 37.173 GAP 7.20 AZP 93.00 TAL 196.90 TAP 50.52 RCA 102.78 APO 148.72 V2 34.797
    RC 141.312 GL 26.69 GP -1.85 ZAL 114.05 ZAP 155.49 ETS 354.25 ZAE 131.36 ETE 182.19 ZAC 53.40 ETC 159.03 CLP-155.55
   PLANETOCENTRIC CONIC
                                                                                                         2.05 VHP 5.037 DPA -20.40 RAP 320.71 ECC 1.2394
    C3 14.548 VHL 3.814 DLA 11.03 RAL 315.51 RAD 6567.6 VEL 11.659 PTH
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 5 2490.49 -25.17 59.74 174.99 103.43 2 22 35 1890.5 -23.07 51.70 90.00 16 28 20 4435.65 7.57 185.20 171.00 62.63 17 42 15 3835.7 3.84 178.51
                                                                                                     62.63 17 42 15
104.87 3 44 48
61.24 18 53 59
108.85 5 1 22
57.45 19 46 47
                                                                                                                                                     -23.93
                                                                                                                                                                     30.79
                  3 7 57 2210.31
17 44 8 4191.07
4 28 44 1957.53
18 39 51 4016.62
                                                                                                                                     1610.3
       100.00
                                                      -26.23
                                                                      38.84
                                                                                    174.69
                                                                                                                                     3591.1
                                                                                                                                                       4.64
                                                                                                                                                                     160.08
                                                                                 170.47
173.73
                                                       8.54
                                                                     166.70
       100.00
                                                                                                                                                     -26.21
                                                                                                                                                                      10.65
                                                                                                                                    1357.5
                                                      -29.06
                                                                      18.68
       110.00
                                                                                                                                                                     145.57
                                                                                                                                     3416.6
                                                                                                                                                        6.71
                                                                                    168.95
                                                                     151.93
       110.00
                                                    11.08
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4472.7 SGR 241.8 SG3 300.9
RRT -.4196 RRF -.3931 RTF .9245
                                                                                                                                 ST 1888.8 SR 146.6 SS 748.7
CRT .9644 CRS -.9955 CST -.9641
    TOE 1.2151 TRA-1.0287 TC3-4.9390 BAU .9618
    ROE .0975 RRA -.0014 RC3 .2521 FAU .06672
                                                                         3GB 4479.2 R23 .0046 R13 -.9245
3G1 4473.9 SG2 219.4 THA 178.70
                                                                                                                                 LSA 2028.3 MSA 188.3 SSA 13.4
    FOE 1.1436 FRA .0598 FC3-3.9703 BSP 14057
                                                                                                                                 EL1 1894.1 EL2 38.7 ALF 4.28
    BOE 1.2190 BRA 1.0287 BC3 4.9454 FSP -991
                                                                                                                                             ARRIVAL DATE MAY 12 1966
                                                                              FLIGHT TIME 152.00
LAUNCH DATE DEC 11 1965
                                                                              DISTANCE 446.916
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 27.276 GAL -3.38 AZL 86.42 HCA 216.79 SMA 125.43 ECC .18371 INC 3.5791 VI 30.247

RP 108.92 LAP -2.14 LOP 295.48 VP 37.134 GAP 7.42 AZP 92.87 TAL 195.33 TAP 52.13 RCA 102.39 APO 148.48 V2 34.793

RC 143.598 GL 26.71 GP -1.67 ZAL 111.86 ZAP 156.74 ETS 354.53 ZAE 131.07 ETE 181.92 ZAC 55.16 ETC 159.77 CLP-156.79
   PLANETOCENTRIC CONIC
    C3 14.303 VHL 3.782 DLA 11.77 RAL 317.67 RAD 6567.6 VEL 11.649 PTH 2.04 VHP 5.154 DPA -19.68 RAP 322.62 ECC 1.2354 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 43 33 2511.47
16 43 6 4407.17
3 10 52 2229.86
17 58 28 4164.01
4 32 37 1974.04
18 53 12 3992.59
                                                                                   177.15
                                                                                                                                                                       53.10
                                                                                                     102.77
                                                                                                                    2 25 25
                                                                                                                                     1911.5
                                                                                                                                                    -23.48
                                                      -25.49
                                                                      61.19
                                                                                                                   17 56 33
                                                                                                                                                                      176.91
                                                                                                                                      3807.2
                                                                                                                                                        2.93
                                                                                                        62.42
                                                         6.68
                                                                      183.59
                                                                                     172.97
        90.00
                                                                                                                                                                       32.10
                                                                                                                    3 48 2
                                                                                                                                      1629.9
                                                                                                                                                      -24.35
                                                                                   176.86
172.44
                                                                                                      104.23
                                                      -26.57
                                                                      40.19
                                                                                                        61.02 19 7 52
                                                                                                                                      3564.0
                                                                                                                                                        3.73
                                                                                                                                                                     158.59
                                                       7.65
                                                                      165.18
       100.00
                                                                                   175.92
                                                                                                                    5 5 31
                                                                                                                                     1374.0 -26.64
3392.6 5.80
                                                                                                                                                                       11.74
                                                      -29.42
                                                                       19.83
                                                                                                      108.25
                                                                                                                19 59 45
                                                                                                                                                         5.80
                                                                                                       57.20
       110.00
                                                     10.20
                                                                      150.63
                                                                                     170.90
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 4567.8 SGR 258.0 SG3 290.4

RRT -.3881 RRF -.3687 RTF ..9234

SGB 4575.1 R23 ..0102 R13 -.9234

SGI 4568.9 SG2 237.7 THA 178.74
                                                                                                                                  ST 1969.2 SR 159.6 S5 754.5
     TOE 1.2645 TRA -.9497 TC3-5.1263 BAU .9816
                                                                                                                                  CRT .9757 CR5 -.9940 CST -.9659
     RDE .1052 RRA -.0096 RC3 .2675 FAU .06330
                                                                                                                                 LSA 2106.7 MSA 185.1 5SA 14.4
Fit 1975 4 FL2 34.8 ALF 4.52
    FOE 1.1163 FRA .1313 FC3-3.8314 BSP 14375
BDE 1.2689 BRA .9497 BC3 5.1333 FSP -957
                                                                                                                                 ELI 1975.4 EL2 34.8 ALF
                                                                                                                                             ARRIVAL DATE MAY 14 1966
                                                                              FLIGHT TIME 154.00
LAUNCH DATE DEC 11 1965
                                                                              DISTANCE 452.763
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 27.227 GAL -3.07 AZL 86.44 HCA 219.95 SMA 125.12 ECC .18487 INC 3.5590 V1 30.247 RP 108.93 LAP -2.28 LOP 298.64 VP 37.096 GAP 7.65 AZP 92.73 TAL 193.75 TAP 53.71 RCA 101.99 APO 148.25 V2 34.790
     RC 145.874 GL 26.71 GP -1.52 ZAL 109.56 ZAP 157.94 ETS 354.77 ZAE 130.82 ETE 181.70 ZAC 56.98 ETC 160.44 CLP-157.99
    PLANETOCENTRIC CONIC

C3 14.102 VHL 3.755 DLA 12.56 RAL 319.93 RAD 6567.6 VEL 11.640 PTH 2.04 VHP 5.273 OPA -18.95 RAP 324.56 ECC 1.2321

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 45 56 2534.87 -25.83 62.82 179.47 102.02 2 28 11 1934.9 -23.92 54.68

90.00 16 58 45 4377.52 5.74 181.91 175.09 62.22 18 11 43 3777.5 1.98 175.25

100.00 3 13 44 2251.69 -26.92 41.72 179.19 103.50 3 51 16 1651.7 -24.80 33.56

100.00 18 13 38 4135.93 6.72 163.62 174.55 60.80 19 22 34 3535.9 2.78 157.05
   PLANETOCENTRIC CONIC
                                                                                                      60.80 19 22 34 3535.9
107.57 5 9 45 1392.6
56.95 20 13 26 3367.8
                                                                                                                                                      -27.11
                                                                                    178.28
                                                      -29.80
                                                                       21.13
       110.00
                      4 36 33
                                   1992.56
                                                                                                                                                        4.86
                                                                                                                                                                      143.00
                                                       9.28
                                                                      149.30
                                                                                     172.99
       110.00
                     19 7 19
                                   3967.82
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 4656.7 SGR 273.3 SG3 280.3

RRT -.3555 RRF -.3414 RTF .9220

SGB 4664.7 R23 .0135 R13 -.9220

SG1 4657.7 SG2 255.4 THA 178.80
                                                                                                                                  ST 2057.0 SR 172.5 S5 763.0
CRT .9845 CRS -.9907 CST -.9678
     TOE 1.3197 TRA -.8605 TC3-5.2961 BAU .9999
     RDE .1128 RRA -.0180 RC3 .2801 FAU .05992
                                                                                                                                 LSA 2193.1 MSA 181.8 SSA 15.4
EL1 2064.0 EL2 30.2 ALF 4.72
    FOE 1.0945 FRA .2021 FC3-3.6786 BSP 14645
BDE 1.3245 BRA .8607 BC3 5.3035 FSP -920
                                                                                                                                              ARRIVAL DATE MAY 16 1966
                                                                               FLIGHT TIME 156.00
 LAUNCH DATE DEC 11 1965
                                                                              DISTANCE 458.595
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 27.179 GAL -2.74 AZL 86.46 MCA 223.11 SMA 124.81 ECC .18618 INC 3.5413 V1 30.247 RP 108.93 LAP -2.42 LOP 301.80 VP 37.058 GAP 7.88 AZP 92.59 TAL 192.15 TAP 55.27 RCA 101.58 APO 148.05 V2 34.787 RC 148.138 GL 26.68 GP -1.39 ZAL 107.15 ZAP 159.09 ETS 354.98 ZAE 130.60 ETE 181.52 ZAC 58.86 ETC 161.06 CLP-159.13
    PLANETOCENTRIC CONIC
                                                                                                           2.04 VHP 5.395 DPA -18.22 RAP 326.55 ECC 1.2295
     C3 13.947 VHL 3.735 DLA 13.38 RAL 322.29 RAD 6567.5 VEL 11.633 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                      -24.38
                                                                                                                    2 30 56
                                                                                                                                      1960.6
                                                                                    181.96
                                                                                                      101.18
                       1 48 16 2560.57
                                                       -26.18
                                                                       64.62
         90.00
                                                                                                                                                                       173.55
                    17 15 15 4346.96
3 16 36 2275.68
18 29 36 4107.08
4 40 34 2012.96
19 22 7 3942.57
                                                                                                                   18 27 42
                                                                                                                                       3747.0
                                                                                                                                                          .99
                                                                                                        62.05
                                                                       180.19
                                                                                      177.38
                                                         4.77
         90.00
                                                                                                                                       1675.7
                                                                                                                                                      -25.27
                                                                                                                                                                       35.19
                                                                        43.40
                                                                                      181.70
                                                                                                       102.69
                                                                                                                   3 54 31
                                                       -27.29
                                                                                                        60.62 19 38 3
106.81 5 14 7
56.73 20 27 50
                                                                                                                                       3507.1
                                                                                                                                                        1.80
                                                                                                                                                                       155.46
                                                                       162.01
                                                                                     176.83
                                                         5.76
                                                                                                                                                                        14.35
                                                                                                       106.81
                                                                                                                                       1413.0
                                                                                                                                                      -27.62
                                                                                     180.82
                                                       -30.21
                                                                        22.58
        110.00
                                                                                      175.25
                                                                                                                                      3342.6
                                                                                                                                                         3.90
                                                                                                                                                                       141.67
                                                                       147.95
                                                       8.34
        110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2145.0 SR 185.4 S5 769.1
CRT .9905 CRS -.9862 CST -.9699
                                                                         SGT 4746.7 SGR 287.9 SG3 270.9
RRT -.3241 RRF -.3160 RTF .9214
     TOE 1.3758 TRA -.7658 TC3-5.4578 BAU 1.0191
                                                                        ROE .1205 RRA -.0265 RC3 .2901 FAU .05688
     FDE 1.0710 FRA .2655 FC3-3.5304 BSP 14964
BDE 1.3610 BRA .7663 BC3 5.4655 FSP -893
```

```
LAUNCH DATE DEC 11 1965
                                                                                       FLIGHT TIME 158.00
                                                                                                                                                            ARRIVAL DATE MAY 18 1966
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 464.414
     RL 147.30 LAL -.00 LOL 78.74 VL 27.131 GAL -2.41 AZL 86.47 MCA 226.28 SMA 124.51 ECC .18762 INC 3.5256 V1 30.247
RP 108.94 LAP -2.55 LOP 304.97 VP 37.022 GAP 8.10 AZP 92.44 TAL 190.54 TAP 56.82 RCA 101.15 APO 147.87 V2 34.786
RC 150.390 GL 26.62 GP -1.29 ZAL 104.65 ZAP 160.20 ETS 355.17 ZAE 130.42 ETE 181.36 ZAC 60.79 ETC 161.64 CLP-160.24
   PLANETOCENTRIC CONIC
     C3 13.842 VHL 3.720 CLA 14.23 RAL 324.75 RAD 6367.5 VEL 11.629 PTH
                                                                                                                     2.04 VHP 5.521 OPA -17.47 RAP 328.56 ECC 1.2278
     LNCH AZHTH LNCH TIME L-1 TIME. INJ. LAT. INJ. LONG. INJ. AZH T. INJ. TIME. PO. CST. TIM. INJ. Z. LAT. INJ. Z. LONG
                                                                                             184.63
        90.00
                        1 50 35 2588.49
                                                            -26.54
                                                                              66.59
                                                                                                                100.26
                                                                                                                                2 33 43
                                                                                                                                                   1988.5
                                                                                                                                                                     -24.85
                                                                                                                                                                                         54.33
          90.00
                     17 32 34
                                        4315.71
                                                              3.77
                                                                              178.44
                                                                                               179.84
                                                                                                                  61.91 18 44 30
                                                                                                                                                     3715.7
                                                                                                                                                                        - .02
                                                                                                                                                                                        171.81
        100.00 3 19 30 2301.73
100.00 18 46 20 4077.69
                                                            -27.67
                                                                              45.25
                                                                                               184.38
                                                                                                                  101.79
                                                                                                                               3 57 51
                                                                                                                                                     1701.7
                                                                                                                                                                      -25.76
                                                                                                                                                                                         36.97
                                                                                                                 60.46 19 54 18
105.95 5 18 37
56.53 20 42 54
                                                                                           179.28
                                                             4.78
                                                                             160.39
                                                                                                                                                     3477.7
                                                                                                                                                                                        153.85
                                                                                                                                                                         .81
                     4 44 42 2035.13
19 37 37 3917.06
        110.00
                                                            -30.64
                                                                              24.16
                                                                                             183.54
                                                                                                                                                    1435.1
                                                                                                                                                                     -28.15
                                                                                                                                                                                         15.85
                                                             7.38
                                                                             146.59
                                                                                              177.67
                                                                                                                                                  3317.1
                                                                                                                                                                        2.93
        110.00
                                                                                                                                                                                       140.34
   CIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  SGT 4832.4 SGR 301.7 SG3 261.8
RRT -.2924 RRF -.2894 RTF ..9209
SGB 4841.8 R23 ..0201 R13 -.9209
                                                                                                                                               ST 2238.1 SR 198.2 S$ 776.1
CRT .9944 CRS -.9806 CST -.9719
     TOE 1.4365 TRA -.6619 TC3-5.5982 BAU 1.0374
     RCE .1282 RRA -.0351 RC3 .2973 FAU .05391
FCE 1.0505 FRA .3268 FC3-3.3717 BSP 15265
BOE 1.4422 BRA .6628 BC3 5.6061 FSP -865
                                                                                                                                              LSA 2370.7 MSA 173.1 SSA 17.2
ELI 2246.8 EL2 20.9 ALF 5.03
                                                                                  SG1 4833.2 SG2 288.4 THA 178.95
LAUNCH DATE DEC 11 1965
                                                                                       FLIGHT TIME 160.00
                                                                                                                                                             ARRIVAL DATE MAY 20 1966
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 470.218
    RL 147.30 LAL -.00 LOL 78.74 VL 27.084 GAL -2.06 AZL 86.49 HCA 229.44 SMA 124.21 ECC .18922 INC 3.5115 V1 30.247 RP 108.94 LAP -2.67 LOP 308.13 VP 36.986 GAP 8.34 AZP 92.29 TAL 188.91 TAP 58.35 RCA 100.71 APO 147.71 V2 34.785 RC 152.629 GL 26.52 GP -1.19 ZAL 102.06 ZAP 161.27 ETS 355.34 ZAE 130.26 ETE 181.23 ZAC 62.76 ETC 162.17 CLP-161.31
   PLANETOCENTRIC CONIC
     C3 13.789 VHL 3.713 DLA 15.10 RAL 327.31 RAD 6567.5 VEL 11.626 PTH 2.04 VHP 5.649 DPA -16.70 RAP 330.60 ECC 1.2269 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                99.24 2 36 33
61.81 19 2 4
100.80 4 1 17
60.33 20 11 16
105.02 5 23 18
56.35 20 58 37
                     1 52 55 2618.52
17 50 40 4284.01
                                                                                            187.47
                                                                                                                                                                    -25.33
         90.00
                                                           -26.8A
                                                                             68.72
                                                                                                                                                    2014.5
                                                                                                                                                                                        60.40
         90.00
                                                              2.75
                                                                             176.67
                                                                                              182.47
                                                                                                                                                     3684.0
                                                                                                                                                                       -1.04
                                                                                                                                                                                        170.04
                     3 22 27 2329.75
19 3 48 4048.02
4 48 59 2058.99
19 53 46 3891.54
        100.00
                                                            -28.DA
                                                                              47.25
                                                                                              187.24
                                                                                                                                                     1729.7
                                                                                                                                                                      -26.27
                                                                                                                                                                                         36.90
        100.00
                                                             3.78
                                                                                              181.90
                                                                            158.75
                                                                                                                                                     3448.0
                                                                                                                                                                        -.20
                                                                                                                                                                                       152.22
                                                                                           186.44
                                                            -31.07
                                                                                                                                                     1459.0
        110.00
                                                                               25.89
                                                                                                                                                                     -28.70
                                                                                                                                                                                         17.49
        110.00
                                                                             145.24
                                                                                              180.26
                                                                                                                                                     3291.5
                                                             6.42
                                                                                                                                                                        1.96
                                                                                                                                                                                        139.00
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  SGT 4915.3 SGR 314.7 SG3 253.2
RRT -.2612 RRF -.2632 RTF .9207
SGB 4925.3 R23 .0226 R13 -.9208
                                                                                                                                              ST 2332.6 SR 211.0 SS 782.0
CRT .9962 CRS -.9742 CST -.9740
     TOE 1.4998 TRA -.5501 TC3-5.7176 BAU 1.0555
     ROE .1360 RRA -.0435 RC3 .3015 FAU .05112
FOE 1.0305 FRA .3641 FC3-3.2092 BSP 15573
                                                                                                                                              LSA 2463.4 MSA 168.5 SSA 18.0
     BOE 1.5060 BRA .5518 BC3 5.7256 FSP -840
                                                                              SG1 4916.0 SG2 303.8 THA 179.04
                                                                                                                                             EL1 2342.0 EL2 18.4 ALF 5.15
                                                                                      FLIGHT TIME 162.00
                                                                                                                                                            ARRIVAL DATE HAY 22 1966
LAUNCH DATE DEC 11 1965
                                                                                      DISTANCE 476.008
   MELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 27.036 GAL -1.71 A7L 86.50 MCA 232.60 SMA 123.91 ECC .19099 INC 3.4987 V1 30.247 RP 108.94 LAP -2.78 LOP 311.29 VP 38.951 GAP 8.57 A7P 92.13 TAL 187.26 TAP 59.86 RCA 100.25 APO 147.58 V2 34.784 RC 154.855 GL 26.36 GP -1.11 ZAL 99.38 ZAP 162.31 ETS 355.49 ZAE 130.13 ETE 181.11 ZAC 64.78 ETC 162.67 CLP-162.34
   PLANETOCENTRIC CONIC
     C3 13.795 VHL 3.714 DLA 15.98 RAL 329.97 RAD 6567.5 VEL 11.627 PTH 2.04 VMP 5.781 DPA -15.92 RAP 332.66 ECC 1.2270
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              98.14 2 39 28
61.73 19 20 23
                     1 55 17 2650.59
18 9 31 4252.11
3 25 30 2359.62
19 21 58 4018.32
                                                                                          190.48
                                                                                                                                                                  -25.81
                                                                                                                                                   2050.6
                                                                             71.01
                                                                                                                                                                                        62.62
         90.00
                                                           -27.21
                                                                                                                                                    3652.1
                                                                                                                                                                                       168.26
                                                                             174.89
                                                                                             185.28
                                                                                                                                                                      -2.07
         90.00
                                                             1.72
                                                                                                                99.73 4 4 7

60.22 20 28 57

104.00 5 28 12

44.20 21 14 57
                                                                                                                                                                                        40.97
                                                                              49.39
                                                                                             190.27
                                                                                                                                                    1759.6
       100.00
                                                           -28.41
                                                                                                                                                                     -26.77
       100.00
                                                                                                                                                    3418.3
                                                                                                                                                                                       150.59
                                                             2.78
                                                                            157.11
                                                                                            184.69
                                                                                                                                                                      -1.21
                                                                                           189.52
                                                                                                                                                    1484.4
                                                                                                                                                                     -29.26
                                                                                                                                                                                        19.26
       110.00
                        4 53 28
                                      2084.42
                                                           -31.51
                                                                              27.74
                                                                            143.91
                                                                                              183.02
                                                                                                                                                    3266.3
                                                                                                                                                                         .99
                                                                                                                                                                                       137.68
       110.00
                      20 10 30
                                        3866.28
                                                             5.47
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 4990.9 SCR 327.0 SC3 244.8

RRT -.2289 RRF -.2341 RTF .9202

SCB 5001.6 R23 .0232 R13 -.9202

SCI 4991.5 SC2 318.3 THA 179.14
                                                                                                                                             ST 2434,9 SR 223.8 55 790.7
CRT .9962 CRS -.9670 CST -.9760
     TOF 1.5705 TRA -.4258 TC3-5.8015 BAU 1.0714
    RDE .1441 RRA -.0519 RC3 .3027 FAU .04827
FDE 1.0159 FRA .4426 FC3-3.0296 BSP 15788
BDE 1.5771 BRA .4290 BC3 5.8094 FSP -809
                                                                                                                                             LSA 2564.5 MSA 164.4 55A 18.7
                                                                                                                                               EL1 2445.1 EL2 19.5 ALF
                                                                                                                                                                                            5.23
                                                                                      FLIGHT TIME 164.00
                                                                                                                                                            ARRIVAL DATE MAY 24 1966
LAUNCH DATE DEC 11 1965
                                                                                      DISTANCE 481.783
  HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.989 GAL -1.34 AZL 86.51 MCA 235.76 SMA 123.62 ECC .19293 INC 3.4869 V1 30.247
RP 108.94 LAP -2.88 LOP 314.45 VP 36.917 GAP 8.81 AZP 91.96 TAL 185.60 TAP 61.36 RCA 99.77 APO 147.46 V2 34.785
RC 157.067 GL 26.15 GP -1.04 ZAL 96.62 ZAP 163.31 ETS 355.63 ZAE 130.02 ETE 181.02 ZAC 66.83 ETC 163.14 CLP-163.34
  PLANETOCENTRIC CONIC
    C3 13.863 VHL 3.723 OLA 16.87 RAL 332.73 RAD 6567.5 VEL 11.630 PTH 2.04 VHP 5.918 DPA -15.11 RAP 334.74 ECC 1.2282 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 44 2684.55 -27.52 73.45 193.68 96.96 2 42 28 2084.6 -26.27 65.00 190.00 18 29 3 4220.33 .70 173.11 188.27 61.69 19 39 23 3620.3 -3.09 166.48 100.00 3 28 41 2391.22 -28.75 51.68 193.49 98.57 4 8 32 1791.2 -27.26 43.19 100.00 19 40 46 3988.89 1.78 155.50 187.67 60.16 20 47 15 3388.9 -2.20 148.98 110.00 4 58 9 2111.30 -31.93 29.72 192.79 102.90 5 33 20 1511.3 -29.83 21.14
                                                                                                                60.16 20 47 15
102.90 5 33 20
56.08 21 31 49
                                                                               42.61 185.93

MID-COURSE EXECUTION ACCURACY

SGT 5065.0 SGR 338.5 SG3 236.6 ST 2532,3 SM LUC.

RRT -.1979 RRF -.2068 RTF .9203 CRT .9946 CRS -.9595 C5T -.9779

MCM 4076.3 R23 .0243 R13 -.9203 LSA 2660.0 MSA 160.2 SSA 19.4

THA 179.24 EL1 2543.2 EL2 24.5 ALF 5.31
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
     TOE 1.6408 TRA -.2952 TC3-5.8617 BAU 1.0878
    ROE .1526 RRA -.0600 RC3 .3008 FAU .04564
FDE .9984 FRA .4954 FC3-2.8502 BSP 16056
BDE 1.6479 BRA .3012 BC3 5.8694 FSP -784
                                                                              SGB 5076.3 R23 .0243 R13 -.9203
SGI 5065.4 SG2 331.8 THA 179.24
```

ARRIVAL CATE MAY 26 1966 FLIGHT TIME 166.00 LAUNCH DATE DEC 11 1965 CISTANCE 487.541 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 26.942 GAL -.95 A7L 86.52 MCA 238.92 SMA 123.33 ECC .19505 INC 3.4760 V1 30.247 RP 108.94 LAP -2.98 LOP 317.62 VP 36.883 GAP 9.06 AZP 91.80 TAL 183.93 TAP 62.85 RCA 99.27 APO 147.38 V2 34.786 RC 159.265 GL 25.88 GP -.98 ZAL 93.80 ZAP 164.29 ETS 355.74 ZAE T29.94 ETE 180.94 ZAC 68.92 ETC 163.57 CLP-164.32 PLANETOCENTRIC CONIC C3 14.001 VHL 3.742 CLA 17.76 RAL 335.57 RAC 6567.6 VEL 11.636 PTH 2.04 VHP 6.059 CPA -14.29 RAP 336.84 ECC 1.2304 ENCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 0 16 2720.28 -27.79 76.03 197.04 95.69 2 45 36 2120.3 -26.71 67.53 2 0 16 2720.28 18 49 11 4188.94 61.68 19 59 0 97.33 4 12 26 60.12 21 6 7 101.72 5 38 45 55.99 21 49 10 3588.9 -4.10 164.73 191.44 171.36 90.00 - . 32 45.54 100.00 3 32 1 2424.39 100.00 20 0 7 3960.06 110.00 5 3 5 2139.47 110.00 20 45 33 3817.74 1824.4 -27.74 54.10 196.88 -29.06 190.81 196.24 .80 3360.1 -3.18 147.39 153.92 1539.5 - 30 . 39 23.15 -32.34 31.82 3.63 141.36 189.05 3217.7 - .86 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5137.1 SGR 349.3 SG3 229.0 ST 2628.9 SR 249.5 55 799.6 RRT -.1672 RRT -.1796 RTF .9209 CRT .9918 CR5 -.9519 CST -.9797 SGB 5149.0 R23 .0253 R13 -.9209 L5A 2754.6 MSA 156.4 SSA 19.9 SG1 5137.5 SG2 344.4 TMA 179.35 EL1 2640.6 EL2 31.8 ALF 5.38 TOE 1.7140 TRA -.1558 TC3-5.8916 BAU 1.1042 RCE .1615 RRA -.0677 RC3 .2959 FAU .04318 FCE .9818 FRA .5454 FC3-2.6703 BSP 16325 BCE 1.7216 BRA .1699 BC3 5.8990 FSP -761 ARRIVAL DATE MAY 28 1966 FLIGHT TIME 168.00 LAUNCH DATE DEC 11 1965 DISTANCE 493.283 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 26.896 GAL -.55 AZL 86.53 HCA 242.08 SMA 123.04 ECC .19738 INC 3.4657 V1 30.247 RP 108.93 LAP -3.06 LOP 320.78 VP 36.851 GAP 9.31 AZP 91.62 TAL 182.25 TAP 64.33 RCA 98.75 APO 147.32 V2 34.788 RC 161.449 GL 25.55 GP -.93 ZAL 90.91 ZAP 165.24 ETS 355.84 ZAE 129.87 ETE 180.87 ZAC 71.04 ETC 163.97 CLP-165.26 PLANETOCENTRIC CONIC C3 14.214 VHL 3.770 DLA 18.63 RAL 338.49 RAD 6567.6 VEL 11.645 PTH 2.04 VHP 6.205 DPA -13.44 RAP 338.95 ECC 1.2339
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 94.35 2 48 53 61.71 20 19 10 96.03 4 16 31 60.11 21 25 29 100.47 5 44 26 55.92 22 6 56 -27.11 200.58 2 2 56 2757.60 90.00 -28.01 78.74 163.00 -5.08 3458.3 19 9 52 -1.31 169.65 194.78 4158.28 90.00 -29.33 56.63 200.44 -.15 152.38 194.14 -32.73 34.02 199.86 2.76 140.18 192.32 3 35 32 2458.97 20 19 57 3932.14 5 8 17 2168.79 21 3 41 3795.08 48.01 1859.0 -28.19 100.00 145.85 3337.1 -4.12 100.00 25.26 1568.8 -30.94 110.00 3195.1 -1.73 133.97 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2723.3 SR 262.5 SS 802.2 CRT .9879 CRS -.9438 CST -.9812 SCT 5203.4 SGR 359.4 SG3 221.5 RRT -.1366 RRF -.1522 RTF .9212 SCB 5215.8 R23 .0260 R13 -.9212 SGI 5203.7 SG2 356.0 THA 179.46 TOE 1.7899 TRA -. 0043 TC3-5.8828 BAU 1.1193 ROE .1710 RRA -.0750 RC3 .2880 FAU .04077 FDE .9657 FRA .5966 FC3-2.4829 BSP 16578 LSA 2846.9 MSA 153.6 SSA 20.3 EL1 2735.6 EL2 40.5 ALF 5.44 BOE 1.7980 BRA .0751 BC3 5.8899 FSP -740 ARRIVAL DATE MAY 30 1966 FLIGHT TIME 170.00 LAUNCH DATE DEC 11 1965 DISTANCE 499.007 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 26.849 GAL -.14 AZL 86.54 MCA 245.25 SMA 122.76 ECC .19992 INC 3.4561 VI 30.247 RP 108.92 LAP -3.14 LOP 323.95 VP 36.820 GAP 9.57 AZP 91.45 TAL 180.56 TAP 65.80 RCA 98.21 APO 147.30 V2 34.791 RC 163.619 GL 25.14 GP -.88 7AL 87.98 ZAP 166.16 ETS 355.92 ZAE 129.82 ETE 180.81 ZAC 73.18 ETC 164.54 CLP-166.19 PLANETOCENTRIC CONIC C3 14.511 VHL 3.809 DLA 19.47 RAL 341.49 RAD 6567.6 VEL 11.657 PTH 2.05 VHP 6.357 DPA -12.58 RAP 341.06 ECC 1.2388 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 5 45 2796.32 -28.18 81.56 204.27 92.94 2 52 21 2196.3 -27.47 72.96 90.00 19 30 57 4128.71 -2.26 168.00 198.30 61.77 20 39 46 3528.7 -6.02 161.34 92.94 2 52 21 61.77 20 39 46 94.66 4 20 51 60.12 21 45 13 99.16 5 50 26 55.87 22 25 0 3 39 16 2494.75 20 40 7 3905.51 5 13 47 2199.06 21 22 6 3773.96 1894.7 -28.60 50.59 -29.56 59.27 204.16 100.00 144.38 3305.5 -5.02 150.92 197.62 -1.05 100.00 203.66 195.75 1599.1 27.46 36.31 -33.08 110.00 139.07 3174.0 -2.54 132.87 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY ST 2814.0 SR 275.4 55 802.7 CRT .9834 CRS -.9367 CST -.9830 DIFFERENTIAL CORRECTIONS SGT 5266.1 SGR 368.7 SG3 213.9 RRT -.1056 RRF -.1231 RTF .9230 SGB 5279.0 R23 .0253 R13 -.9230 SGI 5266.3 SG2 366.6 THA 179.57 TOE 1.8682 TRA .1528 TC3-5.8372 BAU 1.1337 ROE .1812 RRA -.0817 RC3 .2772 FAU .03844 FDE .9496 FRA .6376 FC3-2.2935 BSP 16857 BDE 1.8769 BRA .1733 BC3 5.8438 FSP -724 LSA 2935.3 MSA 150.1 SSA 20.6 EL1 2827.0 EL2 49.8 ALF 5.50 ARRIVAL DATE JUN 1 1966 FLIGHT TIME 172.00 LAUNCH DATE DEC 11 1965 HELIOCENTRIC CONIC DISTANCE 504.711 RL 147.30 LAL -.00 LOL 78.74 VL 26.804 GAL .29 ATL 86.55 HCA 248.41 SHA 122.48 ECC .20270 INC 3.4469 V1 30.247 RP 108.91 LAP -3.20 LOP 327.12 VP 36.790 GAP 9.84 ATP 91.27 TAL 178.86 TAP 67.26 RCA 97.65 APO 147.30 V2 34.794 RC 165.775 GL 24.68 GP -.84 TAL 85.01 TAP 167.07 ETS 355.98 TAE 129.79 ETE 180.77 TAC 75.35 ETC 164.68 CLP-167.09 PLANETOCENTRIC CONIC C3 14.900 VHL 3.860 DLA 20.29 RAL 344.55 RAD 6567.6 VEL 11.674 PTH 2.05 VHP 6.515 DPA -11.70 RAP 343.19 ECC 1.2452 C3 14.900 VHL 3.860 DLA 20.29 RAL 344.55 RAD 6567.6 VEL 11.674 PTH 2.05 VHP 6.515 DPA -11.70 RAP 343.19 ECC 1.2452
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 8 46 2836.21 -28.28 84.47 208.10 91.49 2 56 2 2236.2 -27.78 75.84
90.00 19 52 21 4100.60 -3.17 166.43 201.97 61.85 21 0 42 3500.6 -6.91 159.75
100.00 3 43 16 2531.50 -29.73 61.98 208.03 93.24 4 25 27 1931.5 -28.97 53.26
100.00 21 0 33 3880.54 -1.89 149.55 201.27 60.16 22 5 13 3280.5 -5.85 143.00
110.00 5 19 36 2230.09 -33.39 38.68 207.62 97.79 5 56 46 1630.1 -31.95 29.74
110.00 21 40 41 3754.72 1.22 138.07 199.32 55.84 22 43 16 3154.7 -3.27 131.86 18.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 77.07 199.32 199.3 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE 1.9534 TRA .3313 TC3-5.7441 BAU 1.1454 ROE .1923 RRA -.0878 RC3 .2639 FAU .03603 FOE .9415 FRA .6956 FC3-2.0935 BSP 16933 BDE 1.9628 BRA .3427 BC3 5.7502 FSP -686

```
LAUNCH DATE DEC 11 1965
                                                                                      FLIGHT TIME 174.00
                                                                                                                                                           ARRIVAL CATE JUN 3 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 510.394
     RL 147.30 LAL -.00 LOL 78.74 VL 26.758 GAL -.74 A7L 86.56 HCA 251.57 SMA 122.20 ECC .20572 INC 3.4382 V1 30.247 RP 108.90 LAP -3.26 LOP 330.28 VP 36.761 GAP 10.11 A7P 91.09 TAL 177.15 TAP 68.72 RCA 97.06 APO 147.34 VZ 34.798
     RC 167.915 GL 24.14 GP -.80 TAL 82.03 TAP 167.95 ETS 356.02 TAE 129.77 ETE 180.73 TAC 77.55 ETC 165.00 CLP-167.98
    PLANETOCENTRIC CONIC
     C3 15.392 VHL 3.923 OLA 21.06 RAL 347.66 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 6.681 CPA -10.80 RAP 345.33 ECC 1.2533
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 12 1 2876.97 -28.32 87.45 212.07 89.99 2 59 58 2277.0 -28.02 78.80 90.00 20 13 54 4074.38 -4.01 164.96 205.80 61.94 21 21 48 3474.4 -7.73 158.26
                                                                                                                  61.94 21 21 48
91.78 4 30 22
60.22 22 25 21
96.38 6 3 28
55.82 23 1 37
                     3 47 33 2568.93
21 21 3 3857.66
5 25 46 2261.64
21 59 19 3737.72
                                                                                                                                                                     -29.28
                                                                                              212.04
                                                                                                                                                    1968.9
                                                           -29.84
                                                                              64.76
                                                                                                                                                                                       56.00
                                                                                        203.03
211.72
203.03
       100.00
                                                            -2.67
                                                                            148.30
                                                                                                                                                   3257.7
                                                                                                                                                                      -6.61
                                                                                                                                                                                      141.73
                                                                              41.10
                                                                                                                                                  1661.6 -32.41
                                                                                                                                                                                       32.09
                                                          -33.65
                                                             .57
                                                                            137.18
                                                                                                                                                  3137.7
                                                                                                                                                                     -3.92
                                                                                                                                                                                       130.97
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5378.3 SGR 384.9 SG3 200.6

RRT - .0441 RRF - .0651 RTF .9230

SGB 5392.1 R23 .0223 R13 - .9230

SGI 5378.3 SG2 384.5 THA 179.82
                                                                                                                                     ST 2979.9 SR 301.5 SS 805.1

CRT .9725 CRS -.9211 CST -.9854

LSA 3097.8 MSA 149.7 SSA 20.7

EL1 2994.3 EL2 69.8 ALF 5.62
     TOE 2.0318 TRA .5109 TC3-5.6253 BAU 1.1586
     ROE .2043 RRA -.0930 RC3 .2483 FAU .03384
FOE .9246 FRA .7381 FC3-1.9036 BSP 17198
     FOE .9246 FRA .7381 FC3-1.9036 BSP 17198
BOE 2.0420 BRA .5193 BC3 5.6308 FSP -672
                                                                                                                                                            ARRIVAL DATE JUN 5 1966
LAUNCH DATE DEC 11 1965
                                                                                      FLIGHT TIME 176.00
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 516.055
    RL 147.30 LAL -.00 LOL 78.74 VL 26.713 GAL 1.20 AZL 86.57 HCA 254.74 SMA 121.93 ECC .20902 INC 3.4297 V1 30.247 RP 108.89 LAP -3.31 LOP 333.45 VP 36.732 GAP 10.40 AZP 90.90 TAL 175.44 TAP 70.17 RCA 96.45 APO 147.42 VZ 34.803 RC 170.040 GL 23.55 GP -.76 ZAL 79.04 ZAP 168.82 ETS 356.03 ZAE 129.76 ETE 180.70 ZAC 79.76 ETC 165.29 CLP-168.85
   PLANETOCENTRIC CONIC
     C3 15.996 VHL 4.000 DLA 21.78 RAL 350.80 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 6.854 DPA -9.89 RAP 347.47 ECC 1.2633
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                2318.3
                                                                                                             88.48
                                                                                                                                                                   -28.19
        90.00
                        2 15 33 2918.33
                                                          -28.28
                                                                             90.48
                                                                                           216.15
                                                                                                                               3 4 11
                                                                                                                                                                                       81.81
                                                                                                                 62.05 21 42 57
90.30 4 35 37
60.28 22 45 27
94.94 6 10 32
55.82 23 19 54
         90.00
                    20 35 26 4050.46
                                                            -4.77
                                                                             163.62
                                                                                              209.75
                                                                                                                                                    3450.5
                                                                                                                                                                      -8.47
                                                                                                                                                                                       156.90
        100.00
                       3 52 10 2606.79
                                                          -29.89
                                                                             67.58
                                                                                              216.17
                                                                                                                                                   2006.8
                                                                                                                                                                     -29.53
                                                                                                                                                                                        54.79
                                                          -3.36
-33.87
       100.00 21 41 30 3837.24
                                                                           147.17
                                                                                              208.97
                                                                                                                                                   3237.2
                                                                                                                                                                      -7.29
                                                                                                                                                                                      140.59
                                                                                                                                                                   -32.81
                                                                                         215.96
206.87
       110.00 5 32 18 2293.49
110.00 22 17 51 3723.30
                                                                                                                                                  1693.5
                                                                             43.57
                                                                                                                                                                                        34.49
                                                             .02
                                                                             136.43
                                                                                                                                                  3123.3
                                                                                                                                                                     -4.47
                                                                                                                                                                                      130.22
                                                                              HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                              SGT 5429.1 SGR 391.8 SG3 194.0

RRT -.0137 RRF -.0342 RTF .9245

SGB 5443.2 R23 .0214 R13 -.9245

SGI 5429.1 SG2 391.8 THA 179.94
                                                                                                                                             ST 3046.4 SR 314.5 SS 800.7
CRT .9668 CRS -.9142 CST -.9866
     TOE 2.1124 TRA .7031 TC3-5.4693 BAU 1.1707
     RDE .2172 RRA -.0974 RC3 .2308 FAU .03181
                                                                                                                                            LSA 3161.9 MSA 149.9 SSA 20.4
EL1 3061.6 EL2 79.9 ALF 5.70
     FOE .9091 FRA .7809 FC3-1.7214 BSP 17387
 BOE 2.1236 BRA .7098 BC3 5.4742 FSP -650
                                                                                    FLIGHT TIME 178.00
                                                                                                                                                          ARRIVAL DATE JUN 7 1966
LAUNCH DATE DEC 11 1965
                                                                                    DISTANCE 521.690
   HELTOCENTRIC CONTC.
    RL 147.30 LAL -.00 LOL 78.74 VL 26.668 GAL 1.69 A7L 86.58 HCA 257.90 SMA 121.67 ECC .21261 INC 3.4214 V1 30.247
RP 108.87 LAP -3.35 LOP 336.62 VP 36.705 GAP 10.71 A7P 90.72 TAL 173.72 TAP 71.62 RCA 95.80 APO 147.54 V2 34.808
RC 172.148 GL 22.89 GP -.73 ZAL 76.06 ZAP 169.68 ETS 356.01 ZAE 129.76 ETE 180.68 ZAC 81.99 ETC 165.56 CLP-169.70
  PLANETOCENTRIC CONIC
                                                                                                                    2.07 VHP 7.036 OPA -8.96 RAP 349.61 ECC 1.2753
    C3 16.728 VML 4.090 OLA 22.45 RAL 353.96 RAD 6567.7 VEL 11.752 PTH 2.07 VMP 7.036 OPA -8.96 RAP 349.61 ECC 1.2753
LNCH AZMIH LNCH TIME L-I TÎME INJ LAT INJ LONG INJ RY ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 19 24 2959.95 -28.17 93.51 220.33 86.96 3 8 44 2360.0 -28.29 84.85
90.00 20 56 48 4029.28 -5.45 162.43 213.83 62.17 22 3 57 3429.3 -9.13 155.69
100.00 3 57 10 2644.75 -29.87 70.40 220.40 88.81 4 41 14 2044.8 -29.72 61.60
100.00 22 1 43 3819.71 -3.95 146.21 213.00 60.35 23 5 23 3219.7 -7.87 139.61
110.00 5 39 14 2325.43 -34.03 46.05 220.30 93.48 6 17 59 1725.4 -33.17 36.91
110.00 22 36 9 3711.80 -.42 135.83 210.80 55.82 23 38 1 3111.8 -4.90 129.61

DIFFERENTIAL CORRECTIONS
     C3 16.728 VHL 4.090 DLA 22.45 RAL 353.96 RAD 6567.7 VEL 11.752 PTH
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
SGT 5476.6 SGR 398.0 SG3 187.8
RRT .0166 RRF -.0043 RTF .9260
SGB 5491.0 R23 -.0198 R13 .9260
SGI 5476.6 SG2 397.9 THA .07
                                                                                                                                           ST 3103.2 SR 327.2 SS 795.6
CRT .9611 CRS -.9076 CST -.9876
     TOE 2.1936 TRA .9072 TC3-5.2807 BAU 1.1819
     ROE .2313 RRA -.1009 RC3 .2120 FAU .02982
                                                                                                                                           LSA 3216.7 MSA 151.1 SSA 20.1
EL1 3119.1 EL2 90.0 ALF 5.79
    FOE .8947 FRA .8237 FC3-1.5434 BSP 17594
BOE 2.2058 BRA .9128 BC3 5.2849 FSP -633
LAUNCH DATE DEC 11 1965
                                                                                     FLIGHT TIME 180.00
                                                                                                                                                           ARRIVAL DATE JUN 9 1966
                                                                                    DISTANCE 527.298
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.624 GAL 2.20 AZL 86.59 HCA 261.07 SMA 121.41 ECC .21652 INC 3.4134 V1 30.247
RP 108.85 LAP -3.37 LOP 339.79 VP 36.679 GAP 11.03 AZP 90.53 TAL 172.01 TAP 73.07 RCA 95.12 APO 147.69 V2 34.814
RC 174.239 GL 22.18 GP -.70 ZAL 73.10 ZAP 170.52 ETS 355.95 ZAE 129.77 ETE 180.67 ZAC 84.23 ETC 165.80 CLP-170.54
   PLANETOCENTRIC CONIC
    C3 17.602 VHL 4.195 OLA 23.05 RAL 357.13 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 7.228 DPA -8.01 RAP 351.76 ECC 1.2897
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 23 39 3001.48
21 17 47 4011.26
4 2 35 2682.52
22 21 33 3805.46
5 46 33 2357.25
22 54 4 3703.49
                                                                                                               85.45 3 13 41 2401.5 -28.32 62.28 22 24 38 3411.3 -9.68 87.34 4 47 17 2082.5 -29.84 60.41 23 24 58 3205.5 -8.34 92.01 6 25 50 1757.3 -33.48 55.82 23 55 47 3103.5 -5.22
                                                                                          224.59
       90.00
                                                                                                                                                                                      87.89
                                                          -27.98
                                                                            96.54
        90.00
                                                           -6.02
                                                                            161.42
                                                                                             218.00
                                                                                                                                                                                      154.65
                                                                            73.20 224.72
145.42 217.13
48.53 224.75
       100.00
                                                          -29.78
                                                                                                                                                                                      64.40
       100.00
                                                           -4.43
                                                                            145.42
                                                                                                                                                                                     138.81
       110.00
                                                          -34.13
                                                                                                                                                                                       39.35
                                                             - .74
        110.00
                                                                            135.40
                                                                                             214.83
                                                                                                                                                                                      129.17
                                                                            MID-COURSE EXECUTION ACCURACY
SGT 5516.8 SGR 403.4 SG3 181.7
RRT .0477 RRF .0268 RTF .9272
SGB 5531.5 R23 -.0177 R13 .9272
SGI 5516.8 SG2 402.9 THA .20
SGB 553.2 EL1 3168.2 EL2 100.0 ALF 5.88
  DIFFERENTIAL CORRECTIONS
    TOE 2.2764 TRA 1.1265 TC3-5.0528 BAU 1.1899
    RDE .2464 RRA -.1032 RC3 .1923 FAU .02778
FDE .8811 FRA .8678 FC3-1.3665 BSP 17706
```

BDE 2.2897 BRA 1.1313 BC3 5.0564 FSP -611

ARRIVAL CATE JUN 11 1966

JPL TM 33-99

```
FLIGHT TIME 182.00
LAUNCH DATE DEC 11 1965
                                                                            DISTANCE 532.875
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.581 GAL 2.73 AZL 86.59 HCA 264.23 SMA 121.15 ECC .22078 INC 3.4055 VI 30.247
RP 108.83 LAP -3.59 LOP 342.97 VP 36.653 GAP 11.36 AZP 90.34 TAL 170.29 TAP 74.52 RCA 94.40 APO 147.89 V2 34.821
RC 176.312 GL 21.43 GP -.68 ZAL 70.19 ZAP 171.35 ETS 355.84 ZAE 129.79 ETE 180.66 ZAC 86.49 ETC 166.01 CLP-171.37
   PLANETOCENTRIC CONIC
                                                            .27 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 7.431 CPA -7.06 RAP 353.91 ECC 1.3067
    C3 18.636 VHL 4.317 DLA 23.59 RAL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 28 22 3042.52
21 38 12 3996.87
4 8 28 2719.76
22 40 47 3794.85
5 54 16 2388.74
23 11 28 3698.64
                                                                                                                                  2442.5
        90.00
                                                      -27.72
                                                                     99.51
                                                                                   228.92
                                                                                                     83.98
                                                                                                                 3 19 4
                                                                                                                                                  -28.27
                                                                                                                                                                     90.89
                                                                                                      62.37
                                                                                                                22 44 49
                                                                                                                                    3396.9
                                                                                                                                                    -10.12
                                                                                                                                                                    153.83
                                                      -6.47
                                                                     160.60
                                                                                    222.24
        90.00
                                                    -29.64
                                                                      75.96
                                                                                    229.11
                                                                                                      85.89
                                                                                                                 4 53 48
                                                                                                                                    2119.8
                                                                                                                                                    -29.89
                                                                                                                                                                     67.17
       100.00
                                                                                                      60.46 23 44 2
90.56 6 34 5
55.83 24 13 7
                                                                                    221.32
                                                                                                                                    3194.9
                                                                                                                                                    -8.69
                                                                                                                                                                    138.22
                                                       -4.79
                                                                     144.84
       100.00
                                                                                                                                    1788.7
                                                                                                                                                   -33.72
                                                                                                                                                                    41.77
       110.00
                                                    -34.18
                                                                      50.99
                                                                                    229.28
                                                                                                                                 3098.6
                                                                                                                                                   -5.40
                                                                                                                                                                   128.92
                                                                    135.14
                                                                                    218.92
       110.00
                                                      - .92
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5554.7 SGR 407.9 SG3 175.7
RRT .0781 RRF .0572 RTF .9288
                                                                                                                               ST 3183.8 SR 351.6 SS 780.7
CRT .9494 CRS -.8952 CST -.9894
    TOE 2.3556 TRA 1.3553 TC3-4.8074 BAU 1.1985
    RDE .2627 RRA -.1043 RC3 .1720 FAU .02592
                                                                                                                               LSA 3293.2 MSA 156.1 S5A 19.1
EL1 3201.3 EL2 109.8 ALF 5.99
    FDE .8662 FRA .9094 FC3-1.2041 8SP 17876
                                                                        SGB 5569.6 R23 -.0158 R13 .9288
                                                                         SG1 5554.7 SG2 406.7 THA
    BDE 2.3702 BRA 1.3593 BC3 4.8104 FSP -593
                                                                                                                .33
                                                                             FLIGHT TIME 184.00
                                                                                                                                           ARRIVAL DATE JUN 13 1966
LAUNCH DATE DEC 11 1965
                                                                            DISTANCE 538.417
  HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.537 GAL 3.28 AZL 86.60 HCA 267.40 SMA 120.89 ECC .22542 INC 3.3977 V1 30.247 RP 108.81 LAP -3.39 LOP 346.14 VP 36.629 GAP 11.72 AZP 90.15 TAL 168.58 TAP 75.98 RCA 93.64 APO 148.15 V2 34.828
                         20.64 GP -.66 ZAL 67.32 ZAP 172.17 ETS 355.67 ZAE 129.81 ETE 180.66 ZAC 88.75 ETC 166.20 CLP-172.20
    RC 178.366 GL
   PLANETOCENTRIC CONIC
    C3 19.849 VHL 4.455 DLA 24.05 RAL 3.39 RAD 6567.8 VEL 11.884 PTH 2.11 VHP 7.646 DPA -6.09 RAP 356.06 ECC 1.3267
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 33 35 3082.69
21 57 52 3966.51
4 14 51 2756.19
22 59 17 3788.24
6 2 24 2419.74
23 28 14 3697.46
                                                                                                                                 2482.7
                                                     -27.40
                                                                                  233.29
                                                                                                    82.56 3 24 58
                                                                    102.41
                                                                                                                23 4 18
                                                                                                       62.45
                                                                                                                                     3386.5
                                                                                                                                                    -10.44
                                                                                                                                                                     153.23
        90.00
                                                       -6.80
                                                                     160.02
                                                                                    226.54
                                                                                                      84.49 5 0 47
60.49 24 2 25
                                                                                                                                    2156.2
                                                                                                                                                    -29.88
                                                                                                                                                                     59 A7
                                                      -29.43
                                                                      78.65
                                                                                    233.55
                                                                                    225.56
                                                                                                                                    3188.2
                                                                                                                                                    -8.90
                                                                                                                                                                    137.85
       100.00
                                                       -5.01
                                                                     144.47
                                                                                                      89.12 6 42 43
55.83 24 29 51
                                                    -34.17
                                                                      53.41
                                                                                    233.87
                                                                                                                                    1819.7
                                                                                                                                                   -33.92
                                                                                                                                                                     44.17
      110.00
       110.00
                                                       - .97
                                                                     135.08
                                                                                    223.05
                                                                                                                                    3097.5
                                                                                                                                                    -5.45
                                                                                                                                                                    128.86
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                         SGT 5587.5 SGR 411.7 SG3 170.0
RRT .1085 RRF .0877 RTF .9307
     TOE 2.4333 TRA 1.5977 TC3-4.5400 BAU 1.2054
                                                                                                                               ST 3203.5 SR 362.8 SS 770.4
CRT .9436 CRS -.8895 CST -.9902
    RDE .2800 RRA -.1041 RC3 .1519 FAU .02411
           .8511 FRA .9508 FC3-1.0517 BSP 18035
                                                                         SGB 5602.7 R23 -.0139 R13 .9307
                                                                                                                                LSA 3310.9 MSA 159.6 SSA 18.5
                                                                                                                               EL1 3221.8 EL2 119.5 ALF 6.11
    BOE 2.4493 BRA 1.6011 BC3 4.5426 FSP -576
                                                                         SG1 5587,7 SG2 409.3 THA .46
                                                                                                                                           ARRIVAL DATE JUN 15 1966
                                                                             FLIGHT TIME 186.00
LAUNCH DATE DEC 11 1965
                                                                            DISTANCE 543.920
    RL 147.30 LAL -.00 LOL 78.74 VL 26.495 GAL 3.86 AZL 86.61 HCA 270.57 SMA 120.64 ECC .23048 INC 3.3899 V1 30.247 RP 108.78 LAP -3.39 LOP 349.32 VP 36.605 GAP 12.09 AZP 89.97 TAL 166.87 TAP 77.44 RCA 92.84 APO 148.45 VZ 34.836
    RC 180.400 GL 19.81 GP -.63 ZAL 64.51 ZAP 172.99 ETS 355.42 ZAE 129.83 ETE 180.66 ZAC 91.03 ETC 166.37 CLP-173.01
   PLANETOCENTRIC CONIC
    C3 21.267 VHL 4.612 DLA 24.45 RAL 6.47 RAD 6567.9 VEL 11.943 PTH 2.13 VMP 7.874 DPA -5.11 RAP 358.21 ECC 1.3500
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                2521.6
                    2 39 24 3121.62
22 16 34 3980.58
4 21 47 2791.54
23 16 53 3785.89
6 10 54 2450.11
23 44 14 3700.08
                                                                                                  81.22 3 31 26
62.49 23 22 55
                                                                                237.70
                                                                                                                   3 31 26
                                                                                                                                                   -27.97
                                                      -27.03
                                                                   105.20
                                                                                                                                                    -10.62
                                                                                                                                    3380.6
         90.00
                                                       -6.99
                                                                     159.68
                                                                                    230.87
                                                                                                                                    2191.5
                                                                                                                                                    -29.61
                                                                                                                                                                     72.50
                                                                                                                   5 8 18
       100.00
                                                    -29.17
                                                                      81.24
                                                                                    238.03
                                                                                                      83.15
                                                                                                      60.50 24 19 59
                                                                                                                                  3185.9
                                                                                                                                                    -8.98
                                                                                                                                                                    137.71
                                                      -5.09
                                                                     144.34
                                                                                    229.84
       100.00
                                                                                                                                                  -34.06
-5.35
                                                                                                      87.72 6 51 45
55.83 24 45 55
                                                                                                                                                                     46.53
                                                  -34.12
                                                                                                                                    1850.1
                                                                      55.78
                                                                                    238.50
                                                                                                                                    3100.1
                                                      -.87
                                                                     135.22
                                                                                    227.22
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 3215.7 SR 373.3 55 760.9
CRT .9378 CRS -.8841 CST -.9910
                                                                         SGT 5616.4 SGR 414.7 SG3 164.5
RRT .1397 RRF .1197 RTF .9325
SGB 5631.7 R23 -.0114 R13 .9325
     TOE 2.5130 TRA 1.8574 TC3-4.2505 BAU 1.2091
    ROE .2985 RRA -.1025 RC3 .1322 FAU .02229
FDE .8383 FRA .9940 FC3 -.9075 BSP 18090
BDE 2.5307 BRA 1.8602 BC3 4.2526 FSP -555
                                                                                                                               LSA 3321.5 MSA 163.5 SSA 17.9
                                                                         SG1 5616.7 SG2 410.6 THA
                                                                                                                                EL1 3234.8 EL2 128.8 ALF
                                                                                                                .59
                                                                                                                                            ARRIVAL DATE JUN 17 1966
                                                                              FLIGHT TIME 188.00
LAUNCH DATE DEC 11 1965
                                                                            DISTANCE 549.378
    RL 147.30 LAL -.00 LOL 78.74 VL 26.452 GAL 4.48 AZL 86.62 MCA 273.74 SMA 120.40 ECC .23600 INC 3.3821 V1 30.247 RP 108.76 LAP -3.37 LOP 352.49 VP 36.583 GAP 12.49 AZP 89.78 TAL 165.17 TAP 78.91 RCA 91.99 APO 148.81 V2 34.845 RC 182.414 GL 18.97 GP -.62 ZAL 61.78 ZAP 173.80 ETS 355.05 ZAE 129.86 ETE 180.66 ZAC 93.31 ETC 166.51 CLP-173.83
   PLANETOCENTRIC CONIC
                                                                                                                                        -4.13 RAP
    C3 22.917 VHL 4.787 DLA 24.78 RAL 9.48 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 8.117 OPA -4.13 RAP .36 ECC 1.3771
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 45 52 3158.91 -26.61 107.85 242.13 79.95 3 38 31 2558.9 -27.73 99.36
90.00 22 34 9 3979.45 -7.02 159.62 235.21 62.50 23 40 29 3379.4 -10.65 152.82
100.00 4 29 15 2025.56 -28.87 83.73 242.53 81.88 5 16 21 2225.6 -29.69 75.02
100.00 23 33 27 3788.03 -5.01 144.46 234.12 60.49 24 36 35 3188.0 -8.91 137.83
110.00 6 19 47 2479.76 -34.01 58.09 243.16 86.36 7 1 7 1879.8 -34.14 48.84
110.00 0 3 20 3706.60 -.62 135.56 231.38 55.82 1 5 7 3106.6 -5.10 129.34
    C3 22.917 VHL 4.787 DLA 24.78 RAL 9.48 RAD 6567.9 VEL 12.012 PTH 2.14 VHP 8.117 DPA
                                                                       MID-COURSE EXECUTION ACCURACY

SGT 5640.7 SGR 416.9 SG3 159.1

RRT .1701 RRF .1505 RTF .9346

SGB 5656.1 R23 -.0095 R13 .9346

SGI 5641.2 SG2 410.8 THA .72

SGI 5641.2 SG2 410.8 THA .72
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
    TOE 2.5872 TRA 2.1283 TC3-3.9577 BAU 1.2130
    ROE .3180 RRA -.0993 RC3 .1133 FAU .02063
FDE .8238 FRA 1.0356 FC3 -.7792 BSP 18237
BDE 2.6067 BRA 2.1306 BC3 3.9593 FSP -540
```

ARRIVAL DATE JUN 19 1966

```
LAUNCH DATE DEC 11 1965
                                                                                      DISTANCE 554.785
   HELTOCENTRIC CONIC
     RL 147.30 LAL -.00 LOL 78.74 VL 26.410 GAL 5.12 ATL 86.63 MCA 276.92 SMA 120.16 ECC .24202 INC 3.3743 V1 30.247
RP 108.73 LAP -3.33 LOP 353.67 VP 36.561 GAP 12.92 ATP 89.59 TAL 163.48 TAP 80.39 RCA 91.08 APO 149.24 V2 34.854
RC 184.407 GL 18.10 GP -.60 ZAL 59.12 ZAP 174.60 ETS 354.51 ZAE 129.88 ETE 180.67 ZAC 95.60 ETC 166.62 CLP-174.64
   PLANETOCENTRIC CONIC
     C3 24.832 VHL 4.983 CLA 25.03 RAL 12.42 RAC 6568.0 VEL 12.092 PTH 2.16 VHP 8.377 CPA -3.14 RAP
    C3 24.832 VML 4.983 CLA 25.03 RAL 12.42 RAC 6568.0 VEL 12.092 PTM 2.16 VMP 8.337 CPA -3.14 RAP 2.51 ECC 1.4087 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 53 1 3194.28 -26.17 110.34 246.56 78.77 3 46 16 2594.3 -27.45 101.91 100.00 22 50 27 3983.38 -6.90 159.84 239.54 62.47 23 56 50 3383.4 -10.53 153.05 100.00 4 37 18 2858.08 -28.53 86.09 247.05 80.68 5 24 56 2258.1 -29.52 77.42 100.00 23 48 51 3794.81 -4.79 144.83 238.38 60.46 24 52 6 3194.8 -8.69 138.22 110.00 6 29 0 2508.63 -33.86 60.33 247.83 85.04 7 10.48 1908.6 -34.18 51.10 110.00 0 17 35 3717.03 -.22 136.10 235.54 55.82 1 19 32 3117.0 -4.70 129.89
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5660.2 SCR 418.3 SC3 153.9
RRT .2007 RRF .1816 RTF .9369
SCB 5675.6 R23 -.0075 R13 .9369
                                                                                                                                                ST 3195.6 SR 390.8 SS 736.7
CRT .9262 CRS -.8738 CST -.9923
     TOE 2.6600 TRA 2.4151 TC3-3.6579 BAU 1.2148
    ROE .3385 RRA -.0946 RC3 .0956 FAU .01901
FDE .8100 FRA 1.0777 FC3 -.6627 B3P 18364
                                                                                                                                            CRT .9262 CR5 -.0720 -.
L5A 3298.1 M5A 172.3 55A 16.6
EL1 3216.0 EL2 146.4 ALF 6.48
                                                                                  SG1 5660.8 SG2 409.7 THA .85
     BDE 2.6815 BRA 2.4169 BC3 3.6591 FSP -524
                                                                                       FLIGHT TIME 192.00
                                                                                                                                                             ARRIVAL CATE JUN 21 1966
LAUNCH DATE DEC 11 1965
                                                                                       015TANCE 560.134
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.389 GAL 5.80 A7L 86.63 MCA 280.09 SMA 119.92 ECC .24860 INC 3.3663 VI 30.247
RP 108.70 LAP -3.31 LOP 358.85 VP 36.541 GAP 13.38 A7P 89.41 TAL 161.80 TAP 81.89 RCA 90.11 APO 149.73 V2 34.863
RC 186.379 GL 17.23 GP -.98 ZAL 56.56 ZAP 175.41 ETS 353.71 ZAE 129.90 ETE 180.68 ZAC 97.88 ETC 166.71 CLP-175.45
   PLANETOCENTRIC CONIC
    C3 27.052 VML 5.201 DLA 25.23 RAL 15.28 RAD 6568.1 VEL 12.183 PTH 2.19 VMP 8.656 DPA -2.15 RAP
                                                                                                                                                                           4.66 FCC 1.4452
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                     3 0 55 3227.46
23 5 20 3992.57
4 45 54 2888.98
0 6 58 3806.27
6 38 30 2536.71
0 30 52 3731.32
                                                                                                                                 3 54 42
                                                                                                                                                    2627.5
                                                                                                                                                                     -27.15
                                                                                                                                                                                        104.29
                                                           -25.71
                                                                            112.66
                                                                                            251.00
                                                                                                                77.70
                                                                                                                                24 11 53
                                                                                                                                                                        -10.25
                                                                                                                                                                                         153.58
                                                              -6.61
                                                                              160.36
                                                                                               243.83
                                                                                                                    62.40
                                                                                                                                                      3392.6
                                                                                                                               5 34 3
1 10 24
7 20 46
1 33 3
                                                                                                                                                     2289.0
                                                                                                                                                                                           79.70
                                                           -28.17
                                                                              88.31
                                                                                               251.56
                                                                                                                    79.56
                                                                                                                                                                       -29.32
        100.00
                                                                                                                   60.40
                                                                                                                                                     3206.3
                                                                                                                                                                       -8.31
                                                                                                                                                                                         138.86
                                                             -4.40
                                                                            145.47
                                                                                               242.62
        100.00
                                                                                                                   83.77
                                                                                                                                                   1936.7
                                                                                                                                                                                          53.29
                                                           -33.68
                                                                              62.50
                                                                                               252.50
                                                                                                                                                                      -34.17
       110.00
                                                               .33
                                                                             136.85
                                                                                               239.68
                                                                                                                   55.82
                                                                                                                                                     3131.3
                                                                                                                                                                        -4.16
                                                                                                                                                                                         130.64
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5675.6 SGR 418.8 SG3 148.9
RRT .2313 RRF .2127 RTF .9394
SGB 5691.1 R23 -.0058 R13 .9394
                                                                                                                                                ST 3170.6 SR 397.7 SS 724.5
CRT .9204 CRS -.8688 CST -.9930
     TOE 2.7317 TRA 2.7191 TC3-3.3569 BAU 1.2144
    ROE .3598 RRA -.0881 RC3 .0792 FAU .01746
FDE .7967 FRA 1.1208 FC3 -.5587 BSP 18475
BOE 2.7553 BRA 2.7205 BC3 3.3579 FSP -509
                                                                                                                                             LSA 3271.8 MSA 176.8 SSA 15.9
EL1 3191.8 EL2 154.5 ALF 6.60
                                                                                  5G1 5676.4 SG2 407.4 THA
                                                                                                                              .98
                                                                                      FLIGHT TIME 194.00
                                                                                                                                                            ARRIVAL DATE JUN 23 1966
LAUNCH DATE DEC 11 1965
                                                                                      DISTANCE 565.415
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.329 GAL 6.53 A7L 86.64 HCA 283.27 SMA 119.69 ECC .25580 INC 3.3582 VI 30.247
RP 108.67 LAP -3.27 LOP 2.03 VP 36.521 GAP 13.87 A7P 89.23 TAL 160.14 TAP 83.41 RCA 89.07 APO 150.31 V2 34.873
RC 188.330 GL 16.35 GP -.57 ZAL 54.09 ZAP 176.22 ETS 352.49 ZAE 129.92 ETE 180.70 ZAC 100.17 ETC 166.77 CLP-176.26
   PLANETOCENTRIC CONIC
     C3 29.625 VHL 5.443 DLA 25.35 RAL 18.04 RAD 6568.2 VEL 12.288 PTH
                                                                                                                     2.21 VHP 8.957 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      3 9 32 3258.31 -25.24
23 18 45 4007.06 -6.15
4 55 1 2918.23 -27.79
0 19 52 3822.37 -3.86
6 48 14 2564.00 -33.46
0 43 9 3749.36 1.02
                                                                                           255.43
248.07
                                                                                                                                                   2658.3
                                                                                                                                                                    -26.82
                                                                                                                                                                                       106.49
                                                                                                                   76.72
                                                                                                                                 4 3 50
         90.00
                                                                             114.80
                                                                                                                    62.30 24 25 32
                                                                                                                                                     3407.1
                                                                                                                                                                       -9.81
                                                                                                                                                                                        154.41
                                                                             161.18
         90.00
                                                                                                                   78.52 5 43 39
60.34 1 23 35
                                                                                                                                                                       -29.09
                                                                                                                                                                                         81.84
                                                                                              256.06
                                                                                                                                                     2318.2
        100.00
                                                                              90.40
                                                                                                                                                     3222.4
                                                                                                                                                                        -7.78
                                                                                                                                                                                        139.76
                                                                              146.35
                                                                                               246.81
        100.00
                                                                                                                               7 30 58
1 45 38
                                                                                                                                                                                         55.42
                                                                                                                   82.54
                                                                                                                                                     1964.0
                                                                                                                                                                      -34.13
                                                                               64.60
                                                                                              257.15
        110.00
                                                                                                                                                                      -3.47
                                                                             137.79
                                                                                               243.77
                                                                                                                   55.83
                                                                                                                                                     3149.4
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 RET . 2627 RRF . 2449 RTF . 9419
SCB 5703.3 R23 -.0039 R13 . 9419
SCB 589.0 SC2 403.9 THA 1.11
                                                                                                                                             ST 3142.2 SR 403.2 SS 714.1

CRT .9145 CRS -.8641 CST -.9936

LSA 3242.4 MSA 181.2 SSA 15.3

EL1 3163.8 EL2 162.0 ALF 6.71
    TDE 2.8070 TRA 3.0456 TC3-3.0516 BAU 1.2089
RDE .3821 RRA -.0797 RC3 .0645 FAU .01586
FDE .7863 FRA 1.1669 FC3 -.4635 BSP 18474
     BOE 2.8328 BRA 3.0467 BC3 3.0523 FSP -490
                                                                                                                                                             ARRIVAL DATE JUN 25 1966
                                                                                       FLIGHT TIME 196.00
LAUNCH DATE DEC 11 1965
                                                                                       DISTANCE 570.617
   HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.288 GAL 7.30 AZL 86.65 HCA 286.44 5MA 119.46 ECC .26370 INC 3.3499 VI 30.247 PP 108.63 LAP -3.21 LOP 5.22 VP 36.502 GAP 14.40 AZP 89.05 TAL 158.51 TAP 84.95 RCA 87.96 APO 150.97 VZ 34.884 RC 190.259 GL 15.48 GP -.55 ZAL 51.71 ZAP 177.03 ETS 350.49 ZAE 129.92 ETE 180.71 ZAC 102.45 ETC 166.81 CLP-177.08
   PLANETOCENTRIC CONIC
     C3 32.608 VHL 5.710 DLA 25.42 RAL 20.69 RAD 6568.3 VEL 12.409 PTH 2.24 VHP 9.281 DPA -.18 RAP 8.95 ECC 1.5366
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM. INJ 2 LAT INJ 2 LONG
                                                                                                                                                                   -26.49
                                                                                                                                                 2686.8
                       3 18 51 3286.78
23 30 37 4026.79
5 4 37 2945.82
                                                                                                                75.84
                                                                                                                                4 13 38
                                                            -24.78
                                                                             116.76
                                                                                              259.84
         90.00
                                                                                                                               24 37 44
                                                                                                                                                     3426.8
                                                                                                                                                                        -9.21
                                                                                                                                                                                         155.55
                                                                              162.29
                                                                                               252.24
                                                                                                                    62.18
                                                              -5.52
         90.00
                                                                                                                               5 53 42
                                                                                                                                                     2345.8
                                                                                                                                                                       -28.84
                                                                                                                                                                                          83.86
                                                           -27.40
                                                                               92.36
                                                                                               260.53
                                                                                                                    77.56
        100.00
                                                                                                                                1 35 32
7 41 20
                                                                                                                                                     3243.0
                                                                                                                                                                        -7.10
                       0 31 29 3842.99
6 58 10 2590.54
0 54 25 3771.02
                                                                              147.49
                                                                                               250.94
                                                                                                                    60.26
                                                                                                                                                                                         140.91
                                                            -3.17
        100.00
                                                                                                                                                                    -34.04
                                                                                               261.78
                                                                                                                    81.37
                                                                                                                                                     1990.5
                                                                                                                                                                                         57.49
                                                           -33.20
                                                                               66.63
        110.00
                                                                              138.92
                                                                                               247.82
                                                                                                                    55.86
                                                                                                                                 1 57 16
                                                                                                                                                     3171.0
                                                                                                                                                                       -2.65
                                                                                                                                                                                         132.71
                                                            1.84
        110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
SGT 5694.1 SGR 417.7 SG3 139.6
RRT .2933 RRF .2761 RTF .9447
SGB 5709.4 R23 -.0025 R13 .9447
SG1 5695.4 SG2 399.3 THA 1.24
ELI 3122.9 EL2 168.8 ALF 6.82
   DIFFERENTIAL CORRECTIONS
     TOE 2.8768 TRA 3.3871 TC3-2.7595 BAU 1.2032
     RDE .4050 RRA -.0695 RC3 .0514 FAU .01442
FDE .7747 FRA 1.2124 FC3 -.3828 BSP 18573
```

FLIGHT TIME 190.00

BDE 2.9052 BRA 3.3878 BC3 2.7600 FSP -476

```
ARRIVAL DATE JUN 27 1966
LAUNCH DATE DEC 11 1965
                                                                                                             FLIGHT TIME 198.00
    HELIOCENTRIC CONIC
                                                                                                           DISTANCE 575.726
      RL 147.30 LAL -.00 LOL 78.74 VL 26.249 GAL 8.12 AZL 86.66 MCA 289.62 SMA 119.24 ECC .27237 INC 3.3413 V1 30.247
RP 108.60 LAP -3.15 LOP 8.40 VP 36.484 GAP 14.97 AZP 88.88 TAL 156.90 TAP 86.52 RCA 86.76 APO 151.72 V2 34.895
RC 192.167 GL 14.61 GP -.54 ZAL 49.44 ZAP 177.84 ETS 346.82 ZAE 129.92 ETE 180.73 ZAC 104.72 ETC 166.81 CLP-177.91
    PLANETOCENTRIC CONIC
      C3 36.069 VHL 6.006 CLA 25.43 RAL 23.24 RAD 6568.4 VEL 12.547 PTH 2.27 VHP 9.633 CPA
                                                                                                                                                                                                   .81 RAP 11.08 ECC 1.5936
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                                                      2712.9
                            3 28 48 3312.93
23 40 59 4051.55
5 14 37 2971.83
                                                                                                                                                                                                                                   110.35
            90.00
                                                                           -24.33
                                                                                                118.55
                                                                                                                     264.23
                                                                                                                                              75.06 4 24 1
                                                                                                                                                                                                               -26.15
                                                                                                   24 48 31 76.67 6 4 8 76.67 6 4 8 76.67 6 4 8 76.67 6 4 8 76.67 6 4 8 76.67 6 4 8 76.67 6 4 8 76.67 6 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6 76.67 6
            90.00
                                                                            -4.74
                                                                                                163.68
                                                                                                                                                               24 48 31
                                                                                                                                                                                          3451.6
                                                                                                                                                                                                                 -8.44
                                                                                                                                                                                                                                       156.96
          100.00
                                                                          -27.01
                                                                                                                                                                                          2371.8
                                                                                                                                                                                                                 -28.57
                                                                                                                                                                                                                                        85.74
                            0 41 48 3867.89
7 8 13 2616.39
          100.00
                                                                            -2.32
                                                                                                 148.86
                                                                                                                                                                                          3267.9
                                                                                                                                                                                                                -6.27
                                                                                                                                                                                                                                      142.30
          110.00
                                                                          -32.92
                                                                                                                                                                                         2016.4
                                                                                                                                                                                                                -33.92
                                                                                                                                                                                                                                        59.50
                              1 4 41 3796.10
                                                                           2.80
         110.00
                                                                                               140.23
                                                                                                                                                                                         3196.1
                                                                                                                                                                                                                -1.69
                                                                                                                                                                                                                                      134.02
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                      SCT 5695.9 SGR 416.0 SC3 135.1
RRT .3241 RRF .3073 RTF .9477
SCB 5711.1 R23 -.0013 R13 .9477
SCI 5697.5 SG2 393.4 THA 1.36
      TOE 2.9476 TRA 3.7506 TC3-2.4751 BAU 1.1937
                                                                                                                                                                                    ST 3054.2 SR 409.2 SS 692.2
CRT .9025 CRS -.8549 CST -.9948
      RDE .4285 RRA -.0571 RC3 .0400 FAU .01301
FDE .7646 FRA 1.2601 FC3 -.3122 BSP 18658
                                                                                                                                                                                   LSA 3152.6 MSA 189.2 SSA 14.0
EL1 3076.6 EL2 175.0 ALF 6.92
      BOE 2.9786 BRA 3.7510 BC3 2.4754 FSP -462
LAUNCH DATE DEC 11 1965
                                                                                                             FLIGHT TIME 200.00
                                                                                                                                                                                                     ARRIVAL CATE JUN 29 1966
    HELIOCENTRIC CONIC
                                                                                                            DISTANCE 580.726
      RL 147.30 LAL -.00 LOL 78.74 VL 26.210 GAL 8.99 AZL 86.67 HCA 292.81 SMA 119.02 ECC .28192 INC 3.3323 V1 30.247 RP 108.57 LAP -3.07 LOP 11.59 VP 36.467 GAP 15.60 AZP 88.71 TAL 155.33 TAP 88.13 RCA 85.47 APO 152.58 V2 34.906
      RC 194.054 GL 13.75 GP -.53 7AL 47.28 ZAP 178.64 ETS 338.43 7AE 129.91 ETE 180.75 7AC 106.98 ETC 166.79 CLP-178.75
    PLANETOCENTRIC CONIC
      C3 40.094 WHL 6.332 DLA 25.39 RAL 25.67 RAD 6568.5 VEL 12.707 PTH 2.31 VHP 10.016 DPA 1.79 RAP 13.21 ECC 1.6598 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             3 39 18 3336.92
23 49 53 4081.02
                                                                                                                                                                                      2736.9
            9n 3nn
                                                                                                                                             74.35
                                                                                                                                                               4 34 55
                                                                          -23.90
                                                                                                120.17
                                                                                                                     268.59
                                                                                                                                                                                                                -25.82
                                                                                                                                                                                                                                     112.03
            90.00
                                                                             -3.79
                                                                                                 165.34
                                                                                                                       260.34
                                                                                                                                                 61.92
                                                                                                                                                               24 57 54
                                                                                                                                                                                          3481.0
                                                                                                                                                                                                                  -7.52
                                                                                                                                                                                                                                       158.64
                           5 24 56 2996.37
0 50 52 3896.80
7 18 20 2641.59
1 13 58 3824.35
                                                                                                      15.91 269.39 75.85 6 14 53

10.45 258.98 60.13 1 55 49

10.50 270.92 79.15 8 2 22

1.71 255.73 56.01 2 17 42

MID-COURSE EXECUTION ACCURACY
          100.00
                                                                          -26.61
                                                                                                   95.91
                                                                                                                                                                                          2396.4
                                                                                                                                                                                                                 -28.29
                                                                                                                                                                                                                                        67.51
          100.00
                                                                            -1.34
                                                                                                150.45
                                                                                                                                                                                          3296.8
                                                                                                                                                                                                                 -5.31
                                                                                                                                                                                                                                       143.90
          110.00
                                                                          -32.62
                                                                                                   70.50
                                                                                                                                                                                          2041.6
                                                                                                                                                                                                                -33.77
                                                                                                                                                                                                                                         61.45
          110.00
                                                                             3.88
                                                                                                 141.71
                                                                                                                                                                                          3224.4
                                                                                                                                                                                                                   - . 61
                                                                                                                                                                                                                                       135.50
                                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                    ST 3003.4 SR 409.7 SS 683.2
CRT .8964 CRS -.8506 CST -.9954
                                                                                                      SGT 5693.4 3GR 413.5 3G3 130.8
RRT .3549 RRF .3387 RTF .9509
SGB 5708.4 R23 -.0004 R13 .9509
      TOE 3.0199 TRA 4.1383 TC3-2.2007 BAU 1.1797
      ROE .4526 RRA -.0426 RC3 .0303 FAU .01163
FDE .7561 FRA 1.3104 FC3 -.2511 BSP 18716
BDE 3.0536 BRA 4.1386 BC3 2.2009 FSP -448
                                                                                                                                                                                    LSA 3101.2 MSA 192.5 SSA 13.5
                                                                                                                                                                                    EL1 3025.8 EL2 180.3 ALF 7.00
                                                                                                      SG1 5695.3 SG2 386.4 THA 1.48
                                                                                                                                                                                                   ARRIVAL DATE JUL 1 1966
LAUNCH DATE DEC 11 1965
                                                                                                            FLIGHT TIME: 202.00
    MELIOCENTRIC CONIC
                                                                                                           DISTANCE 585.596
      RL 147.30 LAL -.00 LOL 78.74 VL 26.172 GAL 9.93 AZL 86.68 HCA 295.99 SMA 118.81 ECC .29245 INC 3.3229 VI 30.247 RP 108.53 LAP -2.99 LOP 14.77 VP 36.451 GAP 16.28 AZP 88.54 TAL 153.79 TAP 89.78 RCA 84.06 APO 153.55 VZ 34.918 RC 195.918 GL 12.90 GP -.52 ZAL 45.23 ZAP 179.35 ETS 308.53 ZAE 129.87 ETE 180.77 ZAC 109.23 ETC 166.74 CLP-179.61
    PLANETOCENTRIC CONIC
      C3 44.785 VHL 6.692 DLA 25.30 RAL 27.98 RAD 6568.7 VEL 12.890 PTH 2.35 VMP 10.435 DPA 2.75 RAP 15.33 ECC 1.7371
     C3 44.785 VHL 6.692 DLA 23.30 RAL 27.98 RAD 6568.7 VEL 12.890 PTH 2.35 VMP 10.435 DPA 2.75 RAP 15.33 ECC 17.7371

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 50 14 3358.96 -23.49 121.66 272.91 73.72 4 46 13 2759.0 -25.50 113.56 90.00 0 1 19 4114.78 -2.71 167.23 264.25 61.80 1 9 53 3514.8 -6.46 160.55 100.00 5 35 30 3019.58 -26.21 97.52 273.75 75.09 6 25 50 2419.6 -28.00 89.18 100.00 0 58 44 3929.39 -.24 152.23 262.88 60.11 2 4 13 3329.4 -4.21 145.70 110.00 7 28 27 2666.20 -32.29 72.34 275.40 78.10 8 12 53 2066.2 -33.59 65.35 110.00 1 22 16 3855.54 5.06 143.34 259.58 56.15 2 26 32 3255.5 .58 137.12
                                                                                                 97.52 273.75 75.09 6 25 50
152.23 262.88 60.11 2 4 13
72.34 275.40 78.10 8 12 53
143.34 259.58 56.15 2 26 32
MID-COURSE EXECUTION ACCURACY
SGT 5700.9 SGR AND 3 667 100 7
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                     SCT 5700.9 SCR 410.3 SC3 126.8
RRT .3861 RRF .3711 RTF .9531
SCB 5715.6 R23 .0016 R13 .9531
                                                                                                                                                                                   ST 2953.3 SR 408.6 SS 676.7
CRT .8904 CRS -.8467 CST -.9959
      TOE 3.0992 TRA 4.5564 TC3-1.9544 BAU 1.1702
     ROE .4772 RRA -.0256 RC3 .0218 FAU .01022
FOE .7505 FRA 1.3652 FC3 -.1975 BSP 18651
                                                                                                                                                                                   LSA 3051.0 MSA 195.1 SSA 13.1
EL1 2975.7 EL2 184.6 ALF 7.05
      BOE 3.1357 BRA 4.5565 BC3 1.9545 FSP -431
                                                                                                      SG1 5703.1 SG2 378.4 THA 1.60
                                                                                                            FLIGHT TIME 204.00
                                                                                                                                                                                                    ARRIVAL DATE JUL 3 1966
LAUNCH DATE DEC 11 1965
                                                                                                           DISTANCE 590.310
   HELIOCENTRIC CONIC
     RL 147.30 LAL -.00 LOL 78.74 VL 26.134 GAL 10.94 AZL 86.69 HCA 299.18 SMA 118.60 ECC .30409 INC 3.3129 V1 30.247 RP 108.49 LAP -2.89 LOP 17.96 VP 36.436 GAP 17.04 AZP 88.38 TAL 152.31 TAP 91.49 RCA 82.54 APO 154.67 V2 34.930 RC 197.761 GL 12.07 GP -.51 ZAL 43.29 TAP 179.29 ETS 228.29 TAE 129.81 ETE 180.79 ZAC 111.46 ETC 166.65 CLP 179.51
   PLANETOCENTRIC CONIC
     C3 50.273 VHL 7.090 DLA 25.16 RAL 30.17 RAD 6568.8 VEL 13.101 PTH 2.39 VHP 10.894 DPA
                                                                                                                                                                                               3.71 RAP 17.44 ECC 1.8274
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             4 1 29 3379.26
0 7 30 4152.36
5 46 14 3041.55
1 5 27 3965.30
7 38 31 2690.22
                                                                                                                                                               4 57 48
                                                                                                                    277.17
                                                                                                                                                                                      2779.3
                                                                                                                                                                                                             -25.19
          90.00
                                                                          -23.10
                                                                                               123.01
                                                                                                                                               73.15
                                                                                                                                                                                                                                     114.97
                                                                                                                                                                1 16 43
          90.00
                                                                            -1.50
                                                                                                169.32
                                                                                                                      268.06
                                                                                                                                                61.72
                                                                                                                                                                                          3552.4
                                                                                                                                                                                                                 -5.27
                                                                                                                                                                                                                                       162.67
         100.00
                                                                         -25.82
                                                                                                  99.04
                                                                                                                      278.04
                                                                                                                                                74.39
                                                                                                                                                                6 36 55
                                                                                                                                                                                          2441.5
                                                                                                                                                                                                                -27.71
                                                                                                                                                                                                                                        90.75
                                                                                                                                                               2 11 32
8 23 21
         100.00
                                                                               .98
                                                                                                154.20
                                                                                                                      266.68
                                                                                                                                                60.12
                                                                                                                                                                                          3365.3
                                                                                                                                                                                                                 -3.00
                                                                                                                                                                                                                                       147.68
                                                                         -31.93
         110.00
                                                                                                  74.13
                                                                                                                      279.81
                                                                                                                                                77.10
                                                                                                                                                                                          2090.2
                                                                                                                                                                                                               -33.3A
                                                                                                                                                                                                                                       65.19
                                                                                                  MID-COURSE EXECUTION ACCURACY
         110.00
                              1 29 38
                                                  3449.39
                                                                           6.34
                                                                                                145.13
                                                                                                                                                                                         3289.4
                                                                                                                                                                                                                   1.88
                                                                                                                                                                                                                                      138.89
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 5678.6 SGR 406.4 SG3 122.8
RRT .4172 RRF .4021 RTF .9577
SGB 5693.1 R23 .0010 R13 .9577
SGI 5681.1 SG2 369.2 THA 1.72
                                                                                                                                                                            ST 2895.5 SR 405.7 SS 670.6

CRT .8843 CRS -.8428 CST -.9964

LSA 2993.2 MSA 197.0 SSA 12.3

EL1 2917.7 EL2 188.0 ALF 7.09
      TOE 3.1758 TRA 4.9992 TC3-1.6894 BAU 1.1355
     ROE .5021 RRA -.0063 RC3 .0158 FAU .00890
FDE .7451 FRA 1.4219 FC3 -.1533 BSP 18724
```

BOE 3.2152 BRA 4.9992 BC3 1.6895 FSP -419

ARRIVAL DATE JUL 5 1966

LSA 2766.7 MSA 194.9 SSA 10.2 EL1 2684.6 EL2 190.0 ALF 7.02

LAUNCH DATE DEC 11 1965

```
DISTANCE 594.836
   HELIOCENTRIC CONIC
   RL 147.30 LAL -.00 LOL 78.74 VL 26.098 GAL 12.04 AZL 86.70 HCA 302.37 SHA 118.40 ECC .31701 INC 3.3023 V1 30.247 RP 108.45 LAP -2.79 LOP 21.15 VP 36.421 GAP 17.86 AZP 88.23 TAL 150.89 TAP 93.26 RCA 80.87 APO 155.93 V2 34.942 RC 199.580 GL 11.26 GP -.50 ZAL 41.46 ZAP 178.52 ETS 201.80 ZAE 129.73 ETE 180.80 ZAC 113.66 ETC 166.53 CLP 178.61
   PLANETOCENTRIC CONIC
    C3 56.718 VHL 7.531 DLA 24.99 RAL 32.22 RAD 6569.0 VEL 13.345 PTH
                                                                                                     2.44 VAP 11.400 OPA
                                                                                                                                   A.64 RAP 19.52 FCC 1.9334
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2798.0
                                                                                                                                             -24.89
                                                                  124.26
                                                                                281.36
                                                                                                  72.63
                                                                                                              5 9 33
                                                                                                                                                             116.26
                  4 12 35 3398.04
0 12 29 4193.27
                                                   -22.72
        90.00
                                                                                                             1 22 22
                                                                                                                                3593.3
                                                                                                                                               -3.96
                                                                                                                                                              164.97
                                                                                 271.76
                                                                                                   61.68
                                                     -.18
                                                                  171.61
        90.00
                                                                                                  73.74 6 48 3
60.19 2 17 48
76.14 8 33 42
56.59 2 41 31
                                                                                 282.26
                                                                                                                               2462.4
                                                                                                                                               -27.42
                                                                                                                                                               92.22
                   5 57 1 3062.41
1 11 4 4004.14
                                                   -25.43
                                                                  100.46
       100.00
                                                                                                                               3404.1
                                                                                                                                               -1.69
                                                                                                                                                              149.81
                                                                                 270.38
                                                     2.30
                                                                  156.33
       100.00
                                                                                 284.13
                                                                                                                               2113.7
                                                                                                                                              -33.15
                                                                                                                                                               66.99
                                                                   75.85
                    7 48 29 2713.67
                                                  -31.56
      110.00
                                                                                                                              3325.6
                                                                                                                                                3.26
                                                                                                                                                              140.78
                                                                                 267.04
                                                                  147.05
                    1 36 5
                                   3925.63
                                                    7.71
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      RET .4481 RRF .4334 RTF .9613
SGB 5677.6 R23 .0011 R13 .9613
SGI 5666.3 SGZ 359.0 THA 1.83
                                                                                                                           ST 2837.3 SR 401.2 SS 666.6
CRT .8784 CRS -.8393 CST -.9969
    TOE 3.2586 TRA 5.4742 TC3-1.4571 BAU 1.1049
    ROE .5273 RRA .0156 RC3 .0107 FAU .00758
FDE .7418 FRA 1.4831 FC3 -.1158 BSP 18759
BDE 3.3010 BRA 5.4742 BC3 1.4571 FSP -407
                                                                                                                           LSA 2935.3 MSA 198.0 SSA 11.8
EL1 2859.2 EL2 190.2 ALF 7.11
                                                                                                                                       ARRIVAL DATE JUL 7 1966
                                                                           FLIGHT TIME 208.00
LAUNCH DATE DEC 11 1965
                                                                          DISTANCE 599.133
  HELIOCENTRIC CONIC
    RL 147.30 LAL -.00 LOL 78.74 VL 26.062 GAL 13.23 ATL 86.71 HCA 305.56 SMA 118.20 ECC .33138 INC 3.2910 VI 30.247

RP 108.41 LAP -2.68 LOP 24.35 VP 36.408 GAP 18.78 AZP 88.08 TAL 149.54 TAP 95:10 RCA 79.03 APO 157.37 V2 34.955

RC 201.376 GL 10.46 GP -.50 ZAL 39.76 ZAP 177.62 ETS 194.01 ZAE 129.61 ETE 180.82 ZAC 115.83 ETC 166.38 CLP 177.68
   PLANETOCENTRIC CONIC
    C3 64.323 VHL 8.020 DLA 24.77 RAL 34.15 RAD 6569.2 VEL 13.626 PTH 2.49 VHP 11.960 DPA 5.56 RAP 21.39 ECC 2.0586
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2815.5
                                                                                                                                                            117.45
                                                                                                             5 21 20
                                                    -22.36
                                                                                                 72.16
                    4 24 25 3415.45
                                                                  125.41
        90.00
                                                                                                                                                               167.42
                                                                                                   61.71
                                                                                                                1 26 57
                                                                                                                                3637.0
                                                                                                                                                 -2.56
                                                      1.23
                                                                   174.05
                                                                                  275.34
        90.00
                    0 16 20
                                   4237.04
                                                                                                            6 59 9
2 23 4
8 43 52
2 47 43
                                                                                                                                               -27.12
                                                                                                                                                                93.62
                                                                                                                                2482.2
                                                                   101.81
                                                                                  286.38
                                                                                                   73.13
                    6 7 47 3082.19
                                                    -25.05
      100.00
                                                                                                                                                               152.09
                                                                                                   60.32
                                                                                                                                3445.5
                                                                                                                                                 - .28
                   1 15 39 4045.54
7 58 16 2736.51
                                                      3.69
                                                                   158.61
                                                                                  273.98
      100.00
                                                                                                                                               -32.89
                                                                                                                                                                68.72
                                                                                                   75.22
                                                                                                                                2136.5
                                                    -31.18
                                                                    77.52
                                                                                  288.35
      110.00
                                                                                                                                                               142.79
                                                     9.14
                                                                  149.10
                                                                                  270.64
                                                                                                   56.92
                                                                                                                                3364.0
                                                                                                                                                 4.72
      110.00
                     1 41 39
                                   3963.98
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                            ST 2778.7 SR 395.1 55 665.0
                                                                       SCT 5644.5 SCR 396.4 SC3 115.4
RRT .4789 RRF .4649 RTF .9650
SCB 5658.4 R23 .0011 R13 .9650
    TDE 3.3480 TRA 5.9867 TC3-1.2397 BAU 1.0661
                                                                                                                            CRT .8727 CRS -.8361 CST -.9974
    RDE .5528 RRA .0403 RC3 .0070 FAU .00625
    FOE .7411 FRA 1.5498 FC3 -.0841 89P 18778
80E 3.3933 BRA 5.9869 BC3 1.2397 FSP -395
                                                                                                                           LSA 2877.5 MSA 198.1 55A 11.2
                                                                                                                           EL1 2800.1 EL2 191.4 ALF 7.11
                                                                      SG1 5647.7 SG2 347.8 THA 1.93
                                                                                                                                      ARRIVAL DATE JUL 9 1966
                                                                          FLIGHT TIME 210.00
LAUNCH DATE DEC 11 1965
                                                                         DISTANCE 603.150
    RE 147.30 LAL -.00 LOL 78.74 VL 26.028 GAL 14.54 AZL 86.72 HCA 308.75 SHA 118.01 ECC .34742 INC 3.2786 VI 30.247 RP 108.37 LAP -2.56 LOP 27.54 VP 36.395 GAP 19.80 AZP 87.95 TAL 148.28 TAP 97.03 RCA 77.01 APO 159.01 V2 34.968
   HELLOCENTRIC CONIC
                                        -.49 ZAL 38.17 ZAP 176.66 ETS 190.50 ZAE 129.45 ETE 180.84 ZAC 117.97 ETC 166.20 CLP 176.70
    RC 203.147 GL
                           9.69 CP
   PLANETOCENTRIC CONIC
    C3 73.347 VHL 8.564 OLA 24.51 RAL 35.93 RAO 6569.4 VEL 13.953 PTH 2.55 VHP 12.584 DPA
                                                                                                                                    6.46 RAP 23.63 ECC 2.2071
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2831.6
                                                                                                             5 33 4
1 30 30
                                                                              289.47
                                                                                                   71.74
                    4 35 53 3431.61
0 19 6 4283.21
6 18 27 3100.92
                                                    -22.02
                                                                 126.47
        90.00
                                                                                                                                                              169.99
                                                                                                                                3683.2
                                                                                                                                                -1.07
                                                      2.72
                                                                   176.62
                                                                                 278.81
                                                                                                   61.80
                                                                      3.07 290.40 72.56 7 10 7
4.02 277.47 60.52 2 27 23
9.13 292.45 74.35 8 53 49
1.26 274.14 57.32 2 53 3
MID-COURSE EXECUTION ACCURACY
         90.00
                                                                                                                                                               94.93
                                                                                                                                2500.9
                                                                                                                                               -26.82
                                                                 103.07
                                                    -24.67
       100.00
                                                                                                                                                 1.19
                                                                                                                                                               154.48
                                                                                                                                3489.1
                                                                  161.02
                    1 19 14 4089.13
8 7 50 2758.66
1 46 19 4004.15
                                                      5.16
       100.00
                                                                                                                                                               70.39
                                                                                                                                2158.7
                                                                                                                                               -32.62
                                                    -30.78
                                                                    79.13
       110.00
                                                                                                                                3404.2
                                                                                                                                                 6.24
                                                    10.62
                                                                  151.26
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2720.3 SR 387.4 55 666.1
CRT .8674 CRS -.8335 CST -.9978
                                                                       SGT 5621.6 SGR 390.4 SG3 112.0
RRT .5098 RRF .4964 RTF .9687
SGB 5635.1 R23 .0009 R13 .9687
SGI 5625.1 SG2 335.6 THA 2.03
     TOE 3.4462 TRA 6.5407 TC3-1.0373 BAU 1.0172 -
    ROE .5786 RRA .0678 RC3 .0045 FAU .00487
FOE .7431 FRA 1.6227 FC3 -.0575 BSP 18776
BDE 3.4945 BRA 6.5411 BC3 1.0373 FSP -383
                                                                                                                           LSA 2820.4 MSA 197.1 SSA 10.7
                                                                                                                            EL1 2741.1 EL2 191.3 ALF
                                                                                                                                                                  7.08
                                                                                                                                       ARRIVAL DATE JUL 11 1966
                                                                           FLIGHT TIME 212.00
LAUNCH DATE DEC 11 1965
                                                                           DISTANCE 606.820
    RL 147.30 LAU -.00 LOL 78.74 VL 25.994 GAL 15.97 A7L 86.73 MCA 311.95 SMA 117.83 ECC .36539 INC 3.2651 V1 30.247
RP 108.33 LAP -2.43 LOP 30.74 VP 36.384 GAP 20.95 AZP 87.82 TAL 147.12 TAP 99.06 RCA 74.78 APO 160.89 V2 34.981
RC 204.893 GL 8.93 GP -.48 ZAL 36.72 ZAP 175.65 ETS 188.53 ZAE 129.24 ETE 180.86 ZAC 120.05 ETC 165.98 CLP 175.68
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 84.125 VHL 9.172 DLA 24.22 RAL 37.57 RAD 6569.6 VEL 14.334 PTH 2.61 VHP 13.281 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2846.5
                                                                                                                                                             119.56
                                                                                                              5 44 39
                                                                                                                                              -24.05
                     4 47 13 3446.51
0 20 52 4331.36
                                                    -21.70
                                                                   127.45
                                                                                 293.35
                                   3446.51
         90.00
                                                                                                             1 33 3
7 20 55
2 30 44
9 3 29
                                                                                                                                                               172.68
                                                                                                                                 3731.4
                                                                                                                                                    .49
                                                                   179.32
                                                                                  282.15
                                                                                                    61.98
                                                       4.27
         en an
                                                                                                                                                                96.16
                     6 28 56 3118.53
1 21 50 4134.57
8 17 9 2779.99
1 50 6 4045.88
                                                                                                                                2518.5
                                                                                                                                                -26.53
                                                                   104.25
                                                                                  294.29
                                                                                                    72.04
                                                     -24.31
        100.00
                                                                                                                                                               156.97
                                                                                                    60.80
                                                                                                                                3534.6
                                                                                                                                                 2.73
                                                                  163.54
                                                                                  280.83
                                                       6.68
        100.00
                                                                                                                                2180.0
                                                                                                                                                - 32 . 34
                                                                                                                                                                71.99
                                                    -30.38
                                                                    80.66
                                                                                  296.40
                                                                                                    73.52
                                                                     277.54 57.80 2 57 32
MID-COURSE EXECUTION ACCURACY
SGT 5596.8 SGR 387 8 77
        110.00
                                                                                                                                3445.9
                                                                                                                                                  7.81
                                                                                                                                                               147.12
                                                                   153.53
                                                                                                                       ORBIT DETERMINATION ACCURACY
        110.00
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 5596.8 SGR 383.8 SG3 108.8

RRT .5409 RRF .5282 RTF .9725

SG8 5610.0 R23 .0006 R13 .9725

SG1 5600.7 SG2 322.6 THA 2.13
                                                                                                                            ST 2664.6 SR 378.3 SS 670.7
     TDE 3.5585 TRA 7.1457 TC3 -.8487 BAU .9546
                                                                                                                          CRT .8626 CRS -.8316 CST -.9982
```

FLIGHT TIME 206.00

ROE .6048 RRA .0986 RC3 .0030 FAU .00339

FOE .7491 FRA 1.7041 FC3 -.0349 BSP 18683 BOE 3.6095 BRA 7.1464 BC3 .8488 FSP -370

ARRIVAL DATE JUL 13 1966

LAUNCH DATE DEC 11 1965

DISTANCE 610.056 HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 25.962 GAL 17.56 AZL 86.75 MCA 315.14 SMA 117.66 ECC .38560 INC 3.2502 V1 30.247 RP 108.29 LAP -2.29 LOP 33.93 VP 36.374 GAP 22.24 AZP 87.69 TAL 146.09 TAP 101.23 RCA 72.29 APO 163.02 V2 34.994 RC 206.614 GL 8.19 GP -.47 ZAL 35.41 ZAP 174.57 ETS 187.29 ZAE 128.97 ETE 180.88 ZAC 122.08 ETC 165.73 CLP 174.59 PLANETOCENTRIC CONIC C3 97.089 VHL 9.853 CLA 23.90 RAL 39.06 RAD 6569.9 YEL 14.779 PTH 2.67 VHP 14.066 DPA 8.16 RAP 27.60 ECC 2.5978 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -23.80 4 58 21 3460.08 0 21 37 4381.11 297.08 -21.40 128.33 71.00 5 56 1 2860.1 120.48 285.34 1 34 38 3781.1 2.09 175.46 5.85 182.12 62.25 6 39 12 3134.89 1 23 27 4181.54 100.00 -23.96 105.34 298.02 71.57 7 31 27 2534.9 -26.25 97.30 284.05 159.56 3581.5 100.00 8.23 166.16 4.32 300.19 2200.3 -32.05 110.00 8 26 9 2800.31 -29.98 82.11 73.50 155.90 280.81 3488.9 1 52 59 4088.89 9.41 149.42 110.00 13.69 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5565.6 SGR 376.6 SG3 105.7 RRT .5713 RRF .5595 RTF .9761 SGB 5578.3 RZ3 .0001 R13 .9761 ST 2607.3 SR 367.8 SS 677.9 CRT .8582 CRS -.8300 CST -.9985 TOE 3.6808 TRA 7.8005 TC3 -.6773 BAU .8791 ROE .6311 RRA .1326 RC3 .0024 FAU .00184 FOE .7576 FRA 1.7934 FC3 -.0164 BSP 18670 .7576 FRA 1.7934 FC3 -.0164 BSP 18670 BOE 3.7345 BRA 7.8017 BC3 .6773 FSP -359 5G1 5569.7 SG2 308.8 THA 2.22 EL1 2626.4 EL2 187.4 ALF 6.94 LAUNCH DATE DEC 11 1965 FLIGHT TIME 216.00 ARRIVAL DATE JUL 15 1966 **DISTANCE 612.743** HELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 25.931 GAL 19.32 A7L 86.77 MCA 318.34 SMA 117.49 ECC .40842 INC 3.2335 V1 30.247 RP 108.25 LAP -2.15 LOP 37.13 VP 36.364 GAP 23.71 A7P 87.58 TAL 145.21 TAP 103.55 RCA 69.50 APO 165.48 V2 35.007 RC 208.309 GL 7.47 GP -.47 ZAL 34.24 ZAP 173.42 ETS 186.44 ZAE 128.63 ETE 180.89 ZAC 124.03 ETC 165.45 CLP 173.43 PLANETOCENTRIC CONIC C3 112.810 VHL 10.621 DLA 23.53 RAL 40.39 RAD 6570.1 VEL 15.302 PTH 2.74 VHP 14.955 DPA 8.96 RAP 29.50 ECC 2.8566 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -23.57 90.00 5 9 11 3472.17 -21.13 129.12 300.63 70.70 6 7 3 2872.2 121.29 3.73 1 35 14 3832.1 90.00 0 21 22 4432.14 7.46 185.00 288.38 62.60 178.31 71.14 7 41 40 61.62 2 34 34 72.05 9 21 46 59.03 3 3 49 6 49 10 3149.81 2549.8 98.33 -23.63 106.33 301.57 -25.99 1 24 4 4229.72 8 34 47 2819.38 1 54 56 4132.92 3629.7 5.93 162.22 100.00 9.80 168.88 287.13 -31.75 74.91 -29.59 2219.4 83.45 303.78 4132.92 15.25 158.36 283.94 3532.9 11.04 151.80 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5530.1 SGR 368.7 SG3 102.7 ST 2551.0 SR 356.1 SS 689.0 RRT .6015 RRF .5905 RTF .9796 CRT .8546 CRS -.8293 CST -.9988 SGB 5542.4 R23 -.0005 R13 .9796 LSA 2659.7 MSA 187.3 SSA 9.1 SG1 5534.6 SG2 294.3 TMA 2.30 EL1 2569.2 EL2 183.6 ALF 6.84 TOE 3.8199 TRA 8.5171 TC3 -.5206 BAU .7851 ROE .6578 RRA .1701 RC3 .0026 FAU .00013 FOE .7702 FRA 1.8935 FC3 -.0010 BSP 18647 BOE 3.8762 BRA 8.5187 BC3 .5206 FSP -349 SGB 5542.4 R23 -.0005 R13 .9796 SG1 5534.6 SG2 294.3 THA 2.30 EL1 2569.2 EL2 183.6 ALF ARRIVAL DATE JUL 17 1966 FLIGHT TIME 218.00 LAUNCH DATE DEC 11 1965 MELIOCENTRIC CONIC DISTANCE 614.733 RL 147.30 LAL -.00 LOL 78.74 VL 25.903 GAL 21.31 AZL 86.79 HCA 321.55 SMA 117.34 ECC .43429 INC 3.2145 V1 30.247
RP 108.21 LAP -2.00 LOP 40.34 VP 36.357 GAP 25.38 AZP 87.48 TAL 144.52 TAP 106.07 RCA 66.38 APO 168.29 VZ 35.020
RC 209.976 GL 6.76 GP -.46 ZAL 33.24 ZAP 172.17 ETS 185.82 ZAE 128.19 ETE 180.91 ZAC 125.90 ETC 165.14 CLP 172.19 PLANETOCENTRIC CONIC C3 132.047 VHL 11.491 OLA 23.13 RAL 41.54 RAD 6570.4 VEL 15.918 PTM 2.81 VMP 15.968 DPA 9.71 RAP 31.33 ECC 3.1732 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.45 6 17 44 63.06 1 34 47 70.77 7 51 30 62.17 2 34 57 71.41 9 30 17 59.79 3 5 31 121.99 5 19 41 3482.51 0 20 2 4484.15 6 58 46 3163.01 -20.90 129.78 303.97 2882.5 -23.38 90.00 9.08 187.97 291.23 3884.1 5.39 161.23 90.00 -23.34 107.20 304.90 2563.0 -25.75 99.23 100.00 290.02 3678.9 7.56 154.96 1 23 38 4278.88 11.38 171.67 100.00 2236.9 -31.47 76.20 8 43 D 2836.91 -29.21 84.68 307.15 110.00 3577.7 12.67 154.24 1 55 53 16.81 160.91 286.92 4177.74 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2496.4 SR 343.3 SS 704.7 CRT .8519 CRS -.8293 CST -.9991 SGT 5490.8 SGR 360.3 SG3 100.0 TOE 3.9812 TRA 9.3052 TC3 -.3779 BAU .6672 RDE .6850 RRA .2112 RC3 .0033 FAU-.00183 FDE .7881 FRA 2.0066 FC3 .0120 BSP 18592 BDE 4.0397 BRA 9.3076 BC3 .3779 FSP -340 RRT .6514 RRF .6213 RTF .9830 SCB 5502.6 R23 -.0012 R13 .9830 SCI 5495.5 SC2 279.2 THA 2.38 LSA 2610.2 MSA 181.8 SSA 8.5 EL1 2513.5 EL2 178.6 ALF 6.72 ARRIVAL DATE JUL 19 1966 FLIGHT TIME 220.00 LAUNCH DATE DEC 11 1965 DISTANCE 615.823 MELIOCENTRIC CONIC RL 147.30 LAL -.00 LOL 78.74 VL 25.876 GAL 23.55 AZL 86.81 MCA 324.75 SMA 117.19 ECC .46373 INC 3.1926 V1 30.247 RP 108.17 LAP -1.84 LOP 43.54 VP 36.351 GAP 27.30 AZP 87.39 TAL 144.06 TAP 108.82 RCA 62.85 APO 171.54 V2 35.034 RC 211.617 GL 6.08 GP -.46 ZAL 32.42 ZAP 170.81 ETS 185.36 ZAE 127.64 ETE 180.92 ZAC 127.66 ETC 164.81 CLP 170.82 PLANETOCENTRIC CONIC C3 155.821 VHL 12.483 DLA 22.68 RAL 42.50 RAD 6570.7 VEL 16.648 PTH 2.89 VMF 17.129 DPA 10.41 RAP 33.06 ECC 3.5644 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 29 46 3490.74 -20.71 130.31 307.07 70.25 6 27 57 2890.7 -23.22 122.54 90.00 0 17 34 4536.91 10.69 191.01 293.87 63.62 1 33 11 3936.9 7.06 184.21 7 7 58 3174.11 1 22 4 4328.77 8 50 46 2852.51 1 55 45 4223.14 307.98 70.47 8 0 52 2574.1 -25.54 99.99 100.00 -23.09 107.93 3728.8 62.82 2 34 12 70.85 9 38 18 292.71 9.20 167.76 12.94 174.55 -28.87 85.76 310.24 2252.5 -31.21 77.34 14.29 163.53 289.70 60.64 3 6 *8* 3623.1 156.76 18.34 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5448.5 SGR 351.5 SG3 97.4

RRT .6608 RRF .6517 RTF .9861

SGB 5459.8 R23 -.0019 R13 .9861

SGI 5453.5 SG2 263.6 THA 2.45 ST 2444.3 SR 329.6 SS 726.1 CRT .8503 CRS -.8305 CST -.9993 LSA 2565.1 MSA 175.1 SSA 8.0 EL1 2460.4 EL2 172.3 ALF 6.57 TOE 4.1721 TRAID.1774 TC3 -.2485 BAU .5177 ROE .7131 RRA .2564 RC3 .0046 FAU-.00417 FOE .8125 FRA 2.1357 FC3 .0232 BSP 18449 BDE 4.2326 BRAID.1806 BC3 .2485 FSP -329

FLIGHT TIME 214.00

```
ARRIVAL DATE FEB 20 1966
                                                                       FLIGHT TIME 70.00
LAUNCH DATE DEC 12 1965
                                                                       DISTANCE 191.021
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.579 GAL -9.42 A7L 86.60 HCA 86.24 SMA 127.41 ECC .22463 INC 3.4015 VI 30.250 RP 107.61 LAP 3.39 LOP 165.99 VP 37.750 GAP -9.45 A7P 89.78 TAL 217.36 TAP 303.60 RCA 98.79 APO 156.03 VZ 35.216 RC 52.701 GL 16.90 GP 1.12 ZAL 141.11 ZAP 17.74 ETS 355.43 ZAE 149.01 ETE 342.77 ZAC 63.49 ETC 163.58 CLP -17.70
   PLANETOCENTRIC CONIC
                                                                                                2.22 VHP 6.649 OPA -14.05 RAP 331.20 ECC 1.5077
    C3 30.848 VHL 5.554 DLA -4.44 RAL 294.23 RAD 6568.2 VEL 12.338 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                       1582.8
                  2 9 57 2182.78
13 1 51 5102.87
                                                                                            111.59 2 46 20
                                                                                                                                      -15.69
                                                 -18.78
                                                               39.48
                                                                            161.66
       90.00
                                                                                                                                        22.43
                                                                             164.33
                                                                                             75.60 14 26 54
                                                                                                                         4502.9
                                                 24.65
                                                               226.52
        90.00
                                                                                                                                        -16.70
                  3 29 13 1927.11
14 25 17 4833.78
                                                  -19.95
                                                                20.17
                                                                             161.16
                                                                                             112.73
                                                                                                        4 1 20
                                                                                                                         1327.1
      100.00
                                                                                             74.47 15 45 51
115.95 5 1 29
                                                                                                                                                       198.38
                                                                                                                      4233.6
1128.4
                                                                                                                                        23.48
                                                                             163.97
                                                  25.87
                                                               206.37
      100.00
                                                                                                                                       -19.39
                                                                                                                                                       356.37
                   4 32 40 1728.43
15 38 18 4605.23
                                                                             159.64
                                                                                            115.95
                                                 -23.07
                                                                 3.58
      110.00
                                                                                             71.28 16 55 4
                                                                                                                                         26.31
                                                                                                                         4005.2
                                                               187.88
                                                                             162.83
                  15 38 18
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 610.8 SGR 394.9 SG3 149.6
RRT .0036 RRF -.0195 RTF -.6155
                                                                                                                     ST 230.3 SR 371.8 $5 284.4
CRT .8754 CRS .9532 CST .7059
    TOE -.2003 TRA -.3242 TC3 .4201 BAU .1790
    ROE - .3600 RRA .0560 RC3 - .1089 FAU .05062
                                                                   SGB 727.3 R23 -. 0157 R13 -. 6155
    FOE .4510 FRA -.5230 FC3-1.4205 BSP 1611
                                                                                                                     LSA 502,9 MSA 136.7 55A
                                                                                                                                                           24.8
                                                                                                                     EL1 426.5 EL2 97.1 ALF 59.81
                                                                   SG1 610.8 SG2 394.9 THA .23
    BDE .4120 BRA .3290 BC3 .4340 FSP
                                                                                                                                 ARRIVAL DATE FEB 22 1966
                                                                       FLIGHT TIME 72.00
LAUNCH DATE DEC 12 1965
                                                                       DISTANCE 197.820
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.713 GAL -9.37 AZL 86.61 MCA 89.48 SMA 128.32 ECC .21850 INC 3.3901 V1 30.250 RP 107.63 LAP 3.39 LOP 169.24 VP 37.840 GAP -8.59 AZP 89.97 TAL 218.79 TAP 308.27 RCA 100.29 APO 156.36 VZ 35.208 RC 54.462 GL 17.17 GP 1.21 ZAL 142.06 ZAP 20.87 ETS 355.79 ZAE 149.38 ETE 343.19 ZAC 63.57 ETC 163.64 CLP -20.83
  PLANETOCENTRIC CONIC
                                                                                                Z.22 VHP 6.207 OPA -13.93 RAP 331.27 ECC 1.4938
    C3 30.002 VHL 5.477 DLA -4.36 RAL 293.06 RAD 6568.2 VEL 12.303 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            2 4 41 2178.28
12 57 47 5093.42
                                                                           160.04
                                                                                                                         1578.3
                                                                                                                                       -15.56
                                                 -18.67
                                                                39.20
       90.00
                                                                                                                          4493.4
                                                  24.49
                                                               225.88
                                                                             162.62
        90.00
                  3 23 59 1922.49
14 21 10 4824.45
4 27 32 1723.53
15 34 6 4596.16
                                                                                                                          1322.5
                                                                                                                                       -16.57
                                                 -19.83
                                                                19.88
                                                                             159.54
                                                                                                                          4224.4
                                                  25.69
                                                               205.73
                                                                             162.26
       100.00
                                                                                                                          1123.5
                                                                                                                                                       356.08
                                                 -22.93
                                                                 3.27
                                                                            158.03
                                                                                                                          3996.2
                                                                                                                                         26.07
       110.00
                                                  28.94
                                                               187.26
                                                                             161.11
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   9GT 614.4 SGR 393.9 SG3 170.7
RRT .0080 RRF -.0267 RTF -.6158
SG8 729.8 R23 -.0183 R13 -.6159
                                                                                                                      5T 230.8 SR 371.4 SS 306.8
CRT .8823 CRS .9479 CST .7033
LSA 514.5 MSA 141.6 SSA 24.9
    TOE -.1993 TRA -.3118 TC3 .4350 BAU .1799
    RDE -.3547 RRA .0531 RC3 -.1095 FAU .05646
    FOE .5110 FRA -.6254 FC3-1.6292 BSP 1620
BDE .4068 BRA .3163 BC3 .4486 FSP -457
                                                                                                                      EL1 426.9 EL2 94.5 ALF 59.61
                                                                   SG1 614.5 SG2 393.8 THA .50
                                                                                                                               ARRIVAL DATE FEB 24 1966
                                                                      FLIGHT TIME 74.00
LAUNCH DATE DEC 12 1965
                                                                      DISTANCE 204.595
  HELIOCENTRIC CONIC
   RU 147.28 LAL -.00 LOL 79.76 VL 27.830 GAL -9.32 A7L 86.62 MCA 92.72 SMA 129.14 ECC .21322 INC 3.3788 V1 30.250 RP 107.66 LAP 3.38 LOP 172.48 VP 37.918 GAP -7.78 A7P 90.16 TAL 220.11 TAP 312.83 RCA 101.60 APO 156.67 V2 35.200 RC 56.291 GL 17.40 GP 1.30 ZAL 142.90 ZAP 24.17 ETS 356.06 ZAE 150.05 ETE 343.50 ZAC 63.48 ETC 163.68 CLP -24.14
   PLANETOCENTRIC CONIC
    C3 29.290 VHL 5.412 DLA -4.30 RAL 292.01 RAD 6568.2 VEL 12.275 PTH 2.21 VHP 5.796 DPA -13.87 RAP 331.18 ECC 1.4820
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 2 0 0 2174.32
12 54 5 5085.35
3 19 20 1918.42
14 17 26 4816.48
4 22 57 1719.24
15 30 18 4588.42
                                                                           158.60
                                                                                          111.77
                                                                                                                      1574.3
                                                                                                                                      -15.45
                                                                                                         2 36 15
                                                 -18.57
                                                               38.95
       90.00
                                                                                             111.77 2 36 15
75.08 14 18 50
                                                                                                                         4485.4
                                                                                                                                        22.06
                                                                                                                                                      217.40
                                                  24.35
                                                               225.33
                                                                             161.11
        90.00
                                                                                                         3 51 18
                                                                                                                         1318.4
                                                                                                                                       -16.45
                                                                                                                                                       12.37
                                                                                             112.93
                                                -19.72
                                                                19.63
                                                                             158.10
      100.00
                                                                                              73.92 15 37 43
                                                                                                                                       23.09
                                                                                                                                                      197.25
                                                                             160.75
                                                                                                                         4216.5
                                                  25.55
                                                               205.19
      100.00
                                                                                            116.19 4 71 --
70 48 16 46 47
                                                                                                                                       -19.09
                                                                                                                                                      355.83
                                                                                                                         1119.2
                                                -22.80
                                                                 3.01
                                                                             156.59
      110.00
                                                                                                                                       25.86
                                                                                                                                                      178.74
                                                                             159.59
                                                                                                                         3988.4
                                                  28.77
                                                               186.72
       110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 614.0 SGR 391.9 SG3 194.8
RRT .0098 RRF -.0341 RTF -.6127
                                                                                                                     ST 228.4 SR 370.2 SS 329.8

CRT .8856 CRS .9425 CST .5957

LSA 525.1 MSA 146.9 SSA 25.0
    TDE -.1953 TRA -.3010 TC3 .4451 BAU .1794
    ROE -.3493 RRA .0508 RC3 -.1091 FAU .06318
FOE .5776 FRA -.7432 FC3-1.8674 BSP 1644
BDE .4002 BRA .3053 BC3 .4583 FSP -535
                                                                  SGB 728.4 R23 -.0239 R13 -.6129
                                                                                                                     EL1 425.0 EL2 92.4 ALF 59.77
                                                                   SG1 614.0 SG2 391.9 THA .61
                                                                                                                                 ARRIVAL DATE FEB 26 1966
LAUNCH DATE DEC 12 1965
                                                                       FLIGHT TIME 76.00
                                                                       DISTANCE 211.345
    RL 147.28 LAL -.00 LOL 79.76 VL 27.931 GAL -9.28 AZL 86.63 MCA 95.95 SMA 129.85 ECC .20870 INC 3.3674 VI 30.250 RP 107.69 LAP 3.35 LOP 175.72 VP 37.984 GAP -7.00 AZP 90.35 TAL 221.32 TAP 317.27 RCA 102.75 APO 156.95 VZ 35.191 RC 58.184 GL 17.60 GP 1.40 ZAL 143.64 ZAP 27.66 ETS 356.26 ZAE 151.03 ETE 343.69 ZAC 63.21 ETC 163.68 CLP -27.63
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                2.20 VHP 5.415 OPA -13.85 RAP 330.90 ECC 1.4720
    C3 28.683 VHL 5.356 DLA -4.24 RAL 291.08 RAD 6568.2 VEL 12.250 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            111.84 2 32 4
74.87 14 15 26
113.01 3 47 10
73.71 15 34 18
116.29 4 47 31
70.45 16 43 18
                                                                                                                       1570.8
                                                                                                                                       -15.36
                                                                            157.34
                                                                                                          2 32 4
                                                                36.73
                                                                                            111.84
                     1 55 54 2170.81
                                                 -18.48
                                                                                                                          4478.4
                                                                                                                                         21.91
                                                                                                                                                       216.95
                                                                             159.79
                                                  24.22
                                                               224.85
                   12 50 48 5078.38
        90.00
                                                                                                                          1314.8
                                                                                                                                       -16.34
                                                                                                                                                       12.15
                                                                 19.41
                                                                             156.84
                     3 15 15
                                 1914.82
                                                 -19.63
       100.00
                                                                                                                          4209.6
                                                                                                                                        22.94
                                                                                                                                                       196.80
                                                               204.72
                                                                            159.42
                   14 14 8 4809.60
                                                  25.41
       100.00
                                                                              155.34
                                                                                                                          1115.5
                                                                                                                                       -18.97
                                                                                                                                                       355.61
                  4 18 56 1715.46
15 26 56 4581.73
                                                                 2.77
                                                 -22.68
       110:00
                                                                                                                          3981.7
                                                                                                                                         25.68
                                                                                                                                                       178.31
                                                                              158.26
                                                               186.26
                                                 28.61
       110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 608.3 SGR 389.0 SG3 221.9
RRT .0149 RRF -.0443 RTF -.6000
                                                                                                                     ST 225.9 SR 368.1 SS 354.7
CRT .8854 CRS .9384 CST .6860
LSA 537.1 MSA 152.8 SSA 24.9
     TOE -.1911 TRA -.2953 TC3 .4457 BAU .1758
                                                                  RRT .0149 RRF -.0443 RTF -.6000 CRT .8854 CRS .9384 CST .6860
SGB 722.0 R23 -.0291 R13 -.6003 LSA 537.1 MSA 152.8 55A 24.9
SG1 608.4 SG2 388.9 THA .92 EL1 422.1 EL2 91.6 ALF 59.92
    RDE - 3438 RRA .. . 0492 RC3 - . 1074 FAU .07070
    FOE .6550 FRA -.8741 FC3-2.1340 BSP 1607
BDE .3933 BRA .2994 BC3 .4584 FSP -619
```

```
ARRIVAL DATE FEB 28 1966
                                                                         FLIGHT TIME 78.00
LAUNCH DATE DEC 12 1965
                                                                         DISTANCE 218.066
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 28.018 GAL -9.24 ATL 86.64 HCA 99.19 SHA 130.47 ECC .20482 INC 3.3559 VI 30.250 RP 107.72 LAP 3.31 LOP 178.96 VP 38.039 GAP -6.26 ATP 90.54 TAL 222.39 TAP 321.58 RCA 103.75 APO 157.20 V2 35.181 RC 60.133 GL 17.76 GP 1.51 TAL 144.27 TAP 31.36 ETS 356.42 TAE 152.33 ETE 343.76 TAC 62.73 ETC 163.66 CLP -31.33
  PLANETOCENTRIC CONIC
    C3 28.157 VHL 5.306 DLA -4.19 RAL 290.28 RAO 6568.1 VEL 12.228 PTH 2.20 VHP 5.063 OPA -13.90 RAP 330.41 ECC 1.4634
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                              111.91 2 28 27
                                                                                                                                          -15.27
                                                                                                                             1567.7
                                                                                                                                                            31.26
                                                                              156.24
       90.00
                    1 52 20 2167.68
                                                  -18.40
                                                                 38.53
                                                                                                          14 12 29
3 43 34
                                                                                                                                              21.78
                                                                                                                                                            216.55
                                                                                158.63
                                                                                                                              4472.3
                                                                                                 74.69
       90.00
                   12 47 57 5072.28
                                                   24.11
                                                                 224.44
                 3 11 42 1911.62
14 11 16 4803.57
4 15 26 1712.09
15 24 1 4575.86
                                                                                                                                                             11.96
                                                                                                113.08
                                                                                                                              1311.6
                                                                                                                                             -16.25
                                                                  19.21
                                                                                155.74
       100.00
                                                   -19.54
                                                                                              73.52 15 31 19
116.37 4 43 58
70.24 16 40 17
                                                                                                                              4203.6
                                                                                                                                             22.80
                                                                                                                                                            196.40
                                                                                158.26
      100.00
                                                  25.30
                                                                 204.31
                                                                                                                                                            355.41
                                                                                                                              1112.1
                                                                                                                                             -18.86
                                                                                154.24
                                                  -22.58
                                                                   2.56
      110.00
                                                                                157.10
                                                                                                                              3975.9
                                                                                                                                              25.52
                                                                                                                                                            177.93
                                                                 185.85
      110.00
                                                  28.48
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 221.7 SR 365.4 SS 381.0
CRT .8801 CRS .9353 CST .6702
                                                                    SGT 597.1 SGR 385.1 SG3 252.3
RRT .0201 RRF -.0566 RTF -.5769
    TDE -.1848 TRA -.2943 TC3 .4371 BAU .1692
RDE -.3380 RRA .0484 RC3 -.1046 FAU .07914
                                                                    SG8 710.5 R23 -.0367 R13 -.5775
                                                                                                                          LSA 549.4 MSA 159.1 SSA 24.7
   FOE .7425 FRA-1.0195 FC3-2.4332 BSP 1539
BOE .3853 BRA .2983 BC3 .4494 FSP -714
                                                                                                                         EL1 417.3 EL2 92.2 ALF 60.30
                                                                     SG1 597.2 SG2 385.0 THA 1.27
                                                                                                                                     ARRIVAL DATE MAR 2 1966
                                                                         FLIGHT TIME 80.00
LAUNCH DATE DEC 12 1965
  HELIOCENTRIC CONIC
                                                                         DISTANCE 224.757
   RL 147.28 LAL -.00 LOL 79.76 VL 28.093 GAL -9.20 AZL 86.66 MCA 102.42 SMA 131.01 ECC .20149 INC 3.3442 V1 30.250 RP 107.75 LAP 3.27 LOP 182.20 VP 38.085 GAP -5.55 AZP 90.72 TAL 223.32 TAP 325.74 RCA 104.61 APO 157.41 V2 35.171 RC 62.133 GL 17.90 GP 1.64 ZAL 144.81 ZAP 35.28 ETS 356.55 ZAE 153.97 ETE 343.68 ZAC 62.04 ETC 163.61 CLP -35.25
  PLANETOCENTRIC CONIC
    C3 27.694 VML 5.263 DLA -4.15 RAL 289.60 RAD 6568.1 VEL 12.209 PTH 2.19 VMP 4.741 DPA -14.01 RAP 329.70 ECC 1.4558 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                               155.28
                                                                                                                             1564.9
                                                                                                                                            -15.19
                    1 49 17 2164.87
                                                   -18.33
                                                                  38.36
                                                                                               111.97
                                                                                                              2 25 21
                                                                                                                                                              31.09
       90.00
                                                                                                  74.53 14 9 59
                                                                                157.64
                                                                                                                               4466.8
                                                                                                                                               21.66
                                                                                                                                                             216.19
                                                   24.02
                                                                  224.07
       90.00
                   12 45 32 5066.83
                                                                                               3 8 40 1908.74
14 8 49 4798.18
                                                                                                                              1308.7
                                                                                                                                             -16.16
                                                                                                                                                              11.79
                                                  -19.46
                                                                   19.03
                                                                                154.79
      100.00
                                                                                                                               4198.2
                                                                                                                                              22.67
                                                                                                                                                            196.05
                                                                               157.26
                                                  25.19
                                                                  203.94
      100.00
                    4 12 27 1709.07
15 21 32 4570.62
                                                                                                                              1109.1
                                                                                                                                             -18.76
                                                                                                                                                             355.23
                                                                    2.38
                                                                                153.29
      110.00
                                                   -22.49
                                                                                                                              3970.6
                                                                                                                                             25.38
                                                                                                                                                             177.59
                                                  28.36
                                                                  185.49
                                                                                 156.09
      110.00
                   15 21 32
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 213.8 SR 361.8 SS 407.3
CRT .8669 CRS .9322 CST .6426
LSA 561.0 MSA 165.1 55A 24.4
                                                                      SGT 580.6 SGR 380.3 SG3 286.6
RRT .0213 RRF -.0703 RTF -.5425
    TOE -.1744 TRA -.2972 TC3 .4203 BAU .1600
    ROE - 3320 RRA .0482 RC3 - 1006 FAU .08863
FOE .8373 FRA-1.1822 FC3-2.7706 BSP 1471
BDE .3751 BRA .3011 BC3 .4322 FSP -827
                                                                      SGB 694.1 R23 -.0500 R13 -.5433
                                                                      SG1 580.7 SG2 380.2 THA 1.40
                                                                                                                         EL1 409.6 EL2 94.1 ALF 61.21
                                                                                                                                     ARRIVAL DATE MAR 4 1966
                                                                         FLIGHT TIME 82.00
LAUNCH DATE DEC 12 1965
                                                                         DISTANCE 231.417
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 28.155 GAL -9.16 AZL 86.67 HCA 105.65 SMA 131.46 ECC .19863 INC 3.3321 VI 30.250 RP 107.78 LAP 3.21 LOP 185.44 VP 38.121 GAP -4.88 AZP 90.90 TAL 224.11 TAP 329.76 RCA 105.35 APO 157.58 V2 35.160
    RC 64.180 CL 18.02 CP 1.77 TAL 145.24 TAP 39.44 ETS 356.66 TAE 155.94 ETE 343.40 TAC 61.11 ETC 163.53 CLP -39.40
   PLANETOCENTRIC CONIC
    C3 27.276 VHL 5.223 OLA -4.11 RAL 289.03 RAO 6568.1 VEL 12.192 PTH
                                                                                                   2.19 VHP 4.449 DPA -14.18 RAP 328.75 ECC 1.4489
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.02 2 22 45
74.38 14 7 56
                                                                            154.47
                                                                                                                                          -15.12
                                                                                                                             1562.3
                                                                                                                                                             30.94
                                                                                                             2 22 45
                                                   -18.27
                                                                   38.20
        90.00
                   1 46 43 2162.32
12 43 34 5061.81
                                                                                                                              4461.8
                                                                                156.78
                                                                                                                                             21.55
                                                                                                                                                            215.86
                                                                  223.73
                                                   23.92
        90.00
                                                                                                             3 37 54
                                                                                                                              1306.1
                                                                                                                                             -16.09
                                                                                                                                                             11.63
                                                                   18.87
                                                                                153.98
                                                                                               113.20
      100.00
                    3 6 8 1906.14
14 6 50 4793.22
                                                  -19.39
                                                                                                 73.21 15 26 43
                                                                                                                              4193.2
                                                                                                                                            22.56
                                                                                                                                                            195.73
                                                                  203.60
                                                                                156.41
       100.00
                   14 6 50
                                                  25.10
                                                                                               116.52 4 38 23
69.90 16 35 36
                                                                                                                              1106.3
                                                                                                                                             -18.66
                                                                                                                                                            355.07
                    4 9 57 1706.33
15 19 30 4565.80
                                                                   2.21
                                                                                152.48
       110.00
                                                  -22.41
                                                                                                                           3965.8
                                                                                                                                            25.25
                                                                                                                                                            177.27
                                                   28.25
                                                                 185.16
                                                                                155.23
       110 00
                   15 19 30
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 558.9 SGR 374.7 SG3 323.9
RRT .0238 RRF -.0881 RTF -.4851
                                                                                                                         ST 205.6 SR 357.6 SS 435.4
CRT .8439 CRS .9307 CST .6037
    TDE -.1626 TRA -.3077 TC3 .3900 BAU .1464
   RDE -.3256 RRA .0488 RC3 -.0953 FAU .09892
FDE .9445 FRA-1.3557 FC3-3.1397 BSP 1327
BDE .3640 BRA .3115 BC3 .4015 FSP -947
                                                                     SGB 672.9 R23 -. 0672 R13 -. 4865
SG1 559.0 SG2 374.5 THA 1.66
                                                                                                                         LSA 574.3 MSA 171.4 SSA 24.0
                                                                                                                          EL1 400.6 EL2 98.5 ALF 62.30
                                                                                                                                     ARRIVAL DATE MAR 5 1966
                                                                          FLIGHT TIME 84.00
LAUNCH DATE DEC 12 1965
                                                                         DISTANCE 238.045
  HELTOCENTRIC CONTC.
    RL 147.28 LAL -.00 LOL 79.76 VL 28.206 GAL -9.12 ATL 86.68 HCA 108.88 SMA 131.84 ECC .19617 INC 3.3197 V1 30.250 RP 107.81 LAP 3.14 LOP 188.67 VP 38.148 GAP -4.24 AZP 91.08 TAL 224.76 TAP 333.64 RCA 105.98 APO 157.70 V2 35.149 RC 66.268 GL 18.12 GP 1.92 ZAL 145.59 ZAP 43.84 ETS 356.75 ZAE 158.24 ETE 342.87 ZAC 59.94 ETC 163.41 CLP -43.80
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 44 36 2159.99 -18.21 38.05 153.79 112.07 2 20 36 1560.0 -15.05 30.80 90.00 12 42 2 5057.07 23.84 223.41 156.06 74.25 14 6 19 4447 1 21 4447 1
                  3 4 2 1903.74
14 5 17 4788.55
4 7 54 1703.80
15 17 55 4561.25
                                                                                                                                             -16.02
                                                                                                                                                             11.49
                                                                                 153.29
                                                                                                 113.26 3 35 46
                                                                                                                              1303.7
       100.00
                                                   -19.33
                                                                   18.72
                                                                                 155.68
                                                                                                  73.06 15 25 6
                                                                                                                              4188.5
                                                                                                                                              22.45
                                                                                                                                                             195.42
       100.00
                                                    25.00
                                                                 203.29
                                                                                                                                                             354.92
                                                                                                116.58 4 36 18
69.74 16 33 56
                                                                                                                                            -18.58
       110.00
                                                   -22.33
                                                                    2.05
                                                                                 151.80
                                                                                                                              1103.8
       110.00
                                                  28.14
                                                                  184.85
                                                                                 154.50
                                                                                                                              3961.3
                                                                                                                                              25.12
                                                                                                                                                             176.98
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 534.4 SGR 368.3 SG3 364.3 ST 195.5 SR 352.7 S5 464.0

RRT .0213 RRF -.1094 RTF -.3995 CRT .8045 CRS .9301 CST .5442

SGB 649.0 R23 -.0932 R13 -.4014 L5A 588.1 MSA 177.3 SSA 23.6

SG1 534.5 SG2 368.2 THA 1.60 ELI 389.3 EL2 105.2 ALF 63.92
    TOE -.1472 TRA -.3247 TC3 .3473 BAU .1289
    ROE -.3189 RRA .0502 RC3 -.0886 FAU .11003
FOE 1.0603 FRA-1.3401 FC3-3.5423 BSP .1141
BOE .3512 BRA .3286 BC3 .3584 FSP -1078
```

FLIGHT TIME 86.00 ARRIVAL DATE MAR 8 1966 LAUNCH DATE DEC 12 1965 DISTANCE 244.639 HELIOCENTRIC CONIC RL 147.28 LAL -.00 LOL 79.76 VL 28.247 GAL -9.07 AZL 86.69 HCA 112.11 SMA 132.14 ECC .19405 INC 3.3069 V1 30.250 RP 107.85 LAP 3.06 LOP 191.90 VP 38.168 GAP -3.62 AZP 91.25 TAL 225.27 TAP 337.38 RCA 106.50 APO 157.79 V2 35.138 RC 68.394 GL 18.20 GP 2.08 ZAL 145.85 ZAP 48.48 ETS 356.83 ZAE 160.87 ETE 341.96 ZAC 58.53 ETC 163.25 CLP -48.45 PLANETOCENTRIC CONIC C3 26.528 VHL 5.150 DLA -4.04 RAL 288.22 RAC 6568.1 VEL 12.162 PTH 2.18 VHP 3.950 DPA -14.70 RAP 326.11 ECC 1.4366 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 153.22 1557.8 -14.99 90.00 1 42 55 2157.82 -18.15 37.92 30.67 23.75 223.10 155.45 4452.5 21.35 215.26 12 40 56 5052.48 100.00 3 2 22 1901.52 -19.27 18.58 152.73 1301.5 -15.95 11.36 72.93 15 23 54 116.64 4 34 38 69.59 16 32 42 14 4 10 4784.01 155.08 4184.0 22.34 195.13 100.00 24.91 202.98 -18.50 4 6 17 1701.45 15 16 45 4556.85 110.00 -22.26 151.24 1101.5 354.79 1.91 3956.8 25.00 153.89 176.70 110.00 184.55 MIO-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 511.2 SGR 361.2 SG3 407.7 RRT .0073 RRF -.1336 RTF -.2772 5T 183.3 SR 347.2 SS 491.2 CRT .7372 CR5 .9296 CST .4501 TOE -.1270 TRA -.3481 TC3 .2924 BAU .1075 ROE -.3117 RRA .0523 RC3 -.0805 FAU .12195 FOE 1.1787 FRA-1.7350 FC3-3.9799 BSP 932 SG8 626.0 R23 -.1295 R13 -.2782 LSA 601.3 MSA 182.6 55A 23.2 SG1 511.2 SG2 361.2 THA .59 EL1 375.5 EL2 114.5 ALF 66.41 BOE .3365 BRA .3520 BC3 .3032 FSP -1227 FLIGHT TIME 88.00 ARRIVAL DATE MAR 10 1966 LAUNCH DATE DEC 12 1965 HELIOCENTRIC CONIC DISTANCE 251.201 RL 147.28 LAL -.00 LOL 79.76 VL 28.279 GAL -9.02 AZL 86.71 MCA 115.33 SMA 132.38 ECC .19221 INC 3.2934 V1 30.250 RP 107.89 LAP 2.98 LOP 195.13 VP 38.181 GAP -3.04 AZP 91.41 TAL 225.64 TAP 340.97 RCA 106.94 APO 157.82 V2 35.126 RC 70.553 GL 18.28 GP 2.25 ZAL 146.02 ZAP 53.36 ETS 356.91 ZAE 163.80 ETE 340.45 ZAC 56.89 ETC 163.05 CLP -53.33 PLANETOCENTRIC CONIC C3 26.176 VHL 5.116 DLA -3.99 RAL 287.97 RAD 6568.1 VEL 12.147 PTH 2.18 VHP 3.745 DPA -15.04 RAP 324.43 ECC 1.4308 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.15 2 17 33 73.98 14 4 23 113.35 3 32 45 72.79 15 23 8 116.69 4 33 22 69.44 16 31 53 -14.94 152.76 90.00 1 41 37 2155.80 -18.10 37.79 1555.8 30.55 12 40 15 5047.88 3 1 6 1899.44 14 3 28 4779.48 90.00 23.67 222.79 154.96 4447.9 21.24 214.96 100.00 -19.21 18.45 152.27 1299.4 -15.89 11.23 100.00 24.82 202.68 154.58 4179.5 22.23 194.84 4 5 3 1699.23 15 16 0 4552.46 110.00 -22.19 1.77 150.79 1099.2 -18.43 354.66 110.00 27.93 184.25 153.39 3952.5 24.88 175.41 DIFFERENTIAL CORRECTIONS
TOE -. 1041 TRA -. 3805 TC3 . 2207 BAU . 0811 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 497.0 SCR 353.6 SC3 452.1 RRT -.0178 RRF -.1638 RTF -.1041 SCB 610.0 R23 .1676 R13 .1010 5T 173.3 SR 341.1 S\$ 519.2 CRT .6307 CRS .9307 CST .3165 LSA 616.6 MSA 187.5 SSA 22.7 ROE -.3041 RRA .0552 RC3 -.0708 FAU .13402 FOE 1.3046 FRA-1.9268 FC3-4.4326 BSP 645 BOE .3214 BRA .3844 BC3 .2318 FSP -1373 SG1 497.1 SG2 353.5 THA 178.53 EL1 360.8 EL2 127.1 ALF 69.58 FLIGHT TIME 90.00 ARRIVAL CATE MAR 12 1966 LAUNCH DATE DEC 12 1965 01STANCE 257.729 HELIOCENTRIC CONIC RL 147.28 LAL -.00 LOL 79.76 VL 28.302 GAL -8.97 AZL 86.72 HCA 118.55 SMA 132.55 ECC .19060 INC 3.2792 VI 30.250 RP 107.92 LAP 2.88 LOP 198.35 VP 38.187 GAP -2.47 AZP 91.57 TAL 225.88 TAP 344.44 RCA 107.29 APO 157.82 V2 35.114 RC 72.741 GL 18.34 GP 2.44 ZAL 146.11 ZAP 58.45 ETS 356.99 ZAE 166.99 ETE 337.87 ZAC 55.05 ETC 162.80 CLP -58.42 PLANETOCENTRIC CONIC C3 25.830 VHL 5.082 DLA -3.95 RAL 287.82 RAD 6568.0 VEL 12.133 PTH 2.17 VHP 3.569 OPA -15.41 RAP 322.52 ECC 1.4251 ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.19 2 16 35 73.85 14 4 2 113.39 3 31 48 72.65 15 22 45 116.75 4 32 28 69.29 16 31 28 1553.9 152.40 -14.88 1 40 41 2153.88 12 39 59 5043.22 37.67 90.00 -18.05 4443.2 154.55 21.14 90.00 23.58 222.48 3 0 11 1897.45 14 3 11 4774.88 1297.4 18.33 151.91 -15.83 100.00 -19.16 202.37 100.00 24.73 154.17 -18.36 24.75 1097.1 4 4 11 1697.09 1.64 150.43 110.00 -22.12 3948.0 145.95 152.98 110.00 15 15 40 4548.01 27.82 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 501.2 SGR 345.6 SG3 497.3 RRT -.0644 RRF -.1979 RTF .1081 SGB 608.8 R23 .1848 R13 -.1189 SG1 502.1 SG2 344.3 THA 175.19 ST 156.2 SR 334.4 SS 544.1 CRT .4641 CRS .9318 CST .1235 LSA 631.1 MSA 191.6 SSA 22.3 TOE -.0761 TRA -.4197 TC3 .1352 BAU .0510 ROE -.2961 RRA .0588 RC3 -.0594 FAU .14627 FOE 1.4236 FRA-2.1167 FC3-4.9024 BSP 357 BOE .3057 BRA .4238 BC3 .1477 FSP -1533 EL1 345.1 EL2 142.6 ALF 74.25 FLIGHT TIME 92.00 ARRIVAL DATE MAR 14 1966 LAUNCH DATE DEC 12 1965 DISTANCE 264.224 HELIOCENTRIC CONIC RL 147.28 LAL -.00 LOL 79.76 VL 28.317 GAL -8.90 AZL 86.74 MCA 121.77 SMA 132.67 ECC .18918 INC 3.2641 V1 30.250 RP 107.96 LAP 2.77 LOP 201.58 VP 38.187 GAP -1.94 AZP 91.72 TAL 225.99 TAP 347.77 RCA 107.57 APO 157.77 V2 35.101 RC 74.954 GL 18.39 GP 2.63 ZAL 146.13 ZAP 63.72 ETS 357.08 ZAE 170.37 ETE 333.05 ZAC 53.02 ETC 162.51 CLP -63.69 PLANETOCENTRIC CONIC C3 25.482 VHL 5.048 DLA -3.90 RAL 287.77 RAD 6568.0 VEL 12.119 PTH 2.17 VHP 3.422 DPA -15.82 RAP 320.43 ECC 1.4194 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 40 6 2152.03 12 40 7 5038.38 37.56 1552.0 30.32 -18.00 152.13 112.23 2 15 58 90.00 73.71 14 4 5
113.43 3 31 12
72.51 15 22 47
116.80 4 31 55
69.14 16 31 26 222.15 154.24 4438.4 21.03 23.49 90.00 2 59 37 1895.52 -19.11 18.21 151.64 1295.5 100.00 14 3 17 4770.11 4 3 40 1695.00 202.04 153.86 4170.1 22.01 194.23 24.63 100.00 -18.29 -22.06 150.16 1095.0 354.41 1.51 110.00 27.71 183.64 152.67 3943.4 24.52 175.83 15 15 43 4543.40 110.00 ST 167.7 SR 327.2 SS 568.5 CRT .2440 CRS .9345 CST -.1058 LSA 648.0 MSA 194 2 557 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 535.6 SGR 337.5 SG3 540.1 RRT -.1261 RRF -.2389 RTF .3334 TDE -.0454 TRA -.4677 TC3 .0324 BAU .0193 RDE - . 2877 RRA . . 0629 RC3 - . 0464 FAU . 15771 FOE 1.5421 FRA-2.2851 FC3-5.3579 BSP 276 SGB 633.1 R23 .1711 R13 -.3482 EL1 330.6 EL2 161.0 ALF 80.63 BOE .2912 BRA .4719 BC3 .0566 FSP -1675 SG1 538.3 SG2 333.1 THA 172.61

ARRIVAL DATE MAR 16 1966

LAUNCH DATE DEC 12 1965

```
DISTANCE 270.686
   HELIOCENTRIC CONIC
     RL 147.28 LAL -.00 LOL 79.76 VL 28.326 GAL -8.84 AZL 86.75 HCA 124.99 SHA 132.74 ECC .18794 INC 3.2479 VI 30.250 RP 108.00 LAP 2.66 LOP 204.80 VP 38.181 GAP -1.42 AZP 91.86 TAL 225.98 TAP 350.97 RCA 107.79 APO 157.68 VZ 35.089
     RC 77.191 GL 18.44 GP 2.83 7AL 146.08 7AP 69.12 ETS 357.19 TAE 173.77 ETE 322.16 FAC 50.87 ETC 162.18 CLP -69.09
   PLANETOCENTRIC CONTC
     C3 25.129 VHL 5.013 CLA -3.85 RAL 287.79 RAD 6568.0 VEL 12.104 PTH 2.17 VHP 3.303 CPA -16.22 RAP 318.19 ECC 1.4136
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         1 39 50 2150.21
12 40 37 5033.32
2 59 22 1893.62
14 3 46 4765.14
4 3 29 1692.92
15 16 8 4538.61
                                                                                                            151.94
                                                                                                                                                                             1550.2
                                                                                                                                    112.27 2 15 40
                                                                       -17.96
                                                                                             37.45
          90.00
                                                                                                                                       73.57 14 4 30
113.48 3 30 56
                                                                                                                                                                                                      20.91
                                                                                                                                                                                4433.3
                                                                                                               154.01
                                                                       23.39
                                                                                            221.82
          90.00
                                                                                                                                                                                                     -15.72
                                                                      -19.06
                                                                                             18.09
                                                                                                               151.45
                                                                                                                                                                                1293.6
         100.00
                                                                                                           153.62
                                                                                                                                      72.36 15 23 11
116.85 4 31 42
68.98 16 31 47
                                                                                                                                                                                                                          193.91
                                                                    24.53
-22.00
27.60
                                                                                                                                                                                4165.1
                                                                                                                                                                                                     21.89
                                                                                            201.71
         100.00
                                                                                                                                                                                                    -18.22
                                                                                                            149.98
152.43
                                                                                                                                                                                1092.9
                                                                                               1.38
         110.00
                                                                                                                                                                                1938.6
                                                                                                                                                                                                       24.49
                                                                                            183.32
         110.00
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                               MIO-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 179.8 SR 319.5 SS 588.2
CRT -.0056 CRS .9368 CST -.3452
                                                                                               SGT 604.0 SGR 329.4 SG3 580.4

RRT -.2000 RRF -.2841 RTF .5268

SGB 688.0 RZ3 .1400 R13 -.5396
      TOE -.0106 TRA -.5219 TC3 -.0843 BAU .0303
      RCE - .2788 RRA .0676 RC3 - .0318 FAU .16836
                                                                                                                                                                          LSA 663.9 MSA 197.9 SSA
                                                                                                                                                                                                                                21.3
     FOE 1.6411 FRA-2.4354 FC3-5.8003 BSP 649
                                                                                                                                                                          EL1 319.5 EL2 179.8 ALF 90.27
     BCE .2790 BRA .5263 BC3 .0901 FSP -1822
                                                                                                 SG1 608.9 SG2 320.1 THA 171.37
                                                                                                                                                                                           ARRIVAL DATE HAR 18 1966
                                                                                                       FLIGHT TIME 96.00
LAUNCH DATE DEC 12 1965
                                                                                                       DISTANCE 277.115
   HELTOCENTRIC CONTC
     RL 147.28 LAL -.00 LOL 79.76 VL 28.328 GAL -8.76 A7L 86.77 MCA 128.21 SMA 132.75 ECC .18683 INC 3.2305 VI 30.250 RP 108.04 LAP 2.54 LOP 208.01 VP 38.171 GAP -.93 A7P 92.00 TAL 225.86 TAP 354.06 RCA 107.95 APO 157.55 V2 35.076 RC 79.446 GL 18.48 GP 3.03 7AL 145.95 7AP 74.59 ETS 357.32 7AE 176.54 ETE 288.88 7AC 48.65 ETC 161.82 CLP -74.57
   PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 24.767 VHL 4.977 DLA -3.79 RAL 287.91 RAD 6568.0 VEL 12.089 PTH 2.16 VHP 3.211 DPA -16.61 RAP 315.86 ECC 1.4076
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 3 9 52 2148.38 -17.91 37.33 151.83 112.31 2 15 40 1548.4 -14.73 30.10
90.00 12 41 29 5028.00 23.29 221.46 153.85 73.42 14 5 17 4428.0 20.79 213.67
100.00 2 59 26 1891.71 -19.00 17.97 151.34 113.52 3 30 57 1291.7 -15.66 10.77
100.00 14 4 36 4759.90 24.42 201.36 153.46 72.21 15 23 56 4159.9 21.76 193.57
110.00 4 3 36 1690.82 -21.93 1.25 149.87 116.90 4 31 47 1090.8 -18.15 354.17
110.00 15 16 55 4533.56 27.47 182.98 152.26 68.81 16 32 29 3933.6 24.34 175.20
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                              MID-COURSE EXECUTION ALLUMNS.

SGT 706.8 SGR 321.7 SG3 614.4

RRT -.2745 RRF -.3356 RTF .6693

SGB 776.6 R23 .1135 R13 -.6782
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                         ST 204.1 SR 311.2 SS 605.9

CRT -.2279 CRS .9406 CST -.5368

LSA 682.1 MSA 200.0 SSA 20.7
      TOE .0263 TRA -.5829 TC3 -.2165 BAU .0719
ROE -.2695 RAA .0727 RC3 -.0156 FAU .17712
      FOE 1.7283 FRA-2.5459 FC3-6.1913 BSP 1155
BOE .2707 BRA .5874 BC3 .2171 FSP -1938
                                                                                             SG1 713.6 SG2 306.4 THA 171.25
                                                                                                                                                                         EL1 316.9 ELZ 195.2 ALF 103.84
                                                                                                                                                                                           ARRIVAL DATE MAR 20 1966
                                                                                                       FLIGHT TIME 98.00
 LAUNCH DATE DEC 12 1965
                                                                                                       DISTANCE 283.512
     HELIOCENTRIC CONIC
      RL 147.28 LAL -.00 LOL 79.76 VL 28.324 GAL -8.68 A7L 86.79 MCA 131.42 SMA 132.72 ECC .18583 INC 3.2114 V1 30.250 RP 108.08 LAP 2.41 LOP 211.23 VP 38.156 GAP -.46 A7P 92.13 TAL 225.62 TAP 357.04 RCA 108.06 APO 157.39 V2 35.063 RC 81.719 GL 18.52 GP 3.24 ZAL 145.76 ZAP 80.06 ETS 357.47 ZAE 176.14 ETE 224.70 ZAC 46.41 ETC 161.43 CLP -80.05
     PLANETOCENTRIC CONTC
      C3 24.393 VHL 4.939 CLA -3.73 RAL 288.10 RAD 6568.0 VEL 12.074 PTH 2.16 VHP 3.145 CPA -16.97 RAP 313.51 ECC 1.4015
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   112.35 2 15 58
73.26 14 6 25
113.56 3 31 17
72.04 15 25 2
116.95 4 32 10
68.64 16 33 31
                                                                                                                                                                             1546.5
                                                                                                                                                                                                  -14.68
                                                                                                                                                                                                                              29.99
                         1 40 11 2146.50
12 42 42 5022.40
2 59 47 1889.74
                                                                        -17.86
                                                                                             37.22 151.79
           90.00
                                                                                                                                                                                                      20.66
                                                                                             221.09
                                                                                                                153.76
                                                                                                                                                                                  4422.4
                                                                        23.18
            90.00
                                                                                                            151.30
153.37
                                                                                                                                                                                                      -15.60
                                                                                              17.85
                                                                                                                                                                                 1289.7
                                                                       -18.95
          100.00
                                                                                                                                                                                  4154.4
                                                                                                                                                                                                      21.63
                          14 5 48 4754.40
                                                                        24.31
                                                                                             200.99
          100.00
                                                                                                                                                                                                    -18.07
                                                                                                                                                                                                                            354.04
                          4 4 1 1688.64
15 18 3 4528.26
                                                                                                                                                                                  1088.6
                                                                       -21.86
                                                                                               1.12
                                                                                                             149.83
          110.00
                                                                                                                                                                                                        24.19
                                                                                                                  152.17
                                                                                                                                                                                  3928.3
                                                                        27.34
                                                                                             182.62
          110.00
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     CIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ST 238.6 SR 302.5 SS 619.4

CRT -.4008 CRS .9447 CST -.6723

LSA 700.9 MSA 201.3 SSA 20.0
      TOE .0652 TRA -.6482 TC3 -.3611 BAU .1178
RDE -.2597 RRA .0778 RC3 .0019 FAU .18378
                                                                                                  SGT 837.2 SGR 314.6 SG3 641.3
RRT -.3481 RRF -.3916 RTF .7641
SGB 894.3 R23 .0946 R13 -.7699
      FOE 1.7931 FRA-2.6160 FC3-6.5225 BSP 1710
BOE .2678 BRA .6529 BC3 .3611 FSP -2030
                                                                                                                                                                            EL1 328.5 EL2 201.3 ALF 119.58
                                                                                                  5G1 845.3 5G2 292.0 THA 171.53
                                                                                                                                                                                            ARRIVAL DATE MAR 22 1966
                                                                                                        FLIGHT TIME 100.00
 LAUNCH DATE DEC 12 1965
                                                                                                       DISTANCE 289.880
     HELIOCENTRIC CONIC
      RL 147.28 LAL -.00 LOL 79.76 VL 28.315 GAL -8.59 A7L 86.81 MCA 134.63 SMA 132.65 ECC .18494 INC 3.1903 VI 30.250
RP 108.12 LAP 2.27 LOP 214.44 VP 38.138 GAP -.01 A7P 92.24 TAL 225.29 TAP 359.92 RCA 108.12 APO 157.19 V2 35.050
RC 84.008 GL 18.54 GP 3.46 7AL 145.51 ZAP 85.48 ETS 357.66 ZAE 173.05 ETE 198.15 ZAC 44.23 ETC 161.03 CLP -85.47
     PLANETOCENTRIC CONIC
       C3 24.007 VHL 4.900 DLA -3.67 RAL 288.37 RAD 6568.0 VEL 12.058 PTH 2.16 VHP 3.104 DPA -17.27 RAP 311.21 ECC 1.3951
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                              29.87
                                                                                                                                                                                 1544.5
                                                                                                                                     112.39
                                                                                                                                                          2 16 32
                                                 2144.49
                                                                         -17.81
                                                                                              37.09
                                                                                                                151.81
            90.00
                               1 40 48
                                                                                                                                                                                   4416.6
                                                                                                                                                                                                         20.53
                                                                                                                                                                                                                             212.94
                                                                                                                                          73.10
                                                                                                                                                         14 7 51
                                                 5016.57
                                                                         23.06
                                                                                             220.70
                                                                                                                  153.73
                          12 44 14
                                                                                                                                                           3 31 53
                                                                                                                                                                                   1287.6
                                                                                                                                                                                                         -15.54
                                                                         -18.89
                                                                                               17.72
                                                                                                                  151.32
                                                                                                                                         113.60
           100.00
                               3 0 25
                                                 1887.64
                                                                                                               153.34
                                                                                                                                     71.88 15 26 26
117.01 4 32 50
68.46 16 34 52
                          14 7 18 4748.66
4 4 44 1686.33
15 19 29 4522.73
                                                                                                                                                                                   4148.7
                                                                                                                                                                                                         21.48
                                                                                                                                                                                                                             192.85
                                                                        24.19
                                                                                              200.61
                                                                                                                                                                                 1086.3 -18.00
                                                                                                                                                                                                                             353.91
                                                                       -21.79
                                                                                               .98
                                                                                                                 149.86
           110.00
                                                                                                                                                                                   3922.7
                                                                                                                                                                                                         24.03
                                                                    27.20
                                                                                             182.25
                                                                                                                 152.13
           110.00
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                SGI 994.9 SG2 276.1 THA 171.81 SET 171.81 SET 187.8 SET 196.5 SET 280.7 SR 292.5 SS 618.9 ST 280.7 SR 292.5 ST 
       TOE .1059 TRA -.7152 TC3 -.5139 BAU .1651
        ROE - . Z489 RRA . . D836 RC3 . . D217 FAU . 18995
       FOE 1.7932 FRA-2.6828 FC3-6.8500 BSP 2278
BOE .2705 BRA .7200 BC3 .5144 FSP -2175
```

FLIGHT TIME 94.00

```
FLIGHT TIME 102.00
                                                                                                                                      ARRIVAL CATE HAR 24 1966
 LAUNCH CATE CEC 12 1965
   MELIOCENTRIC CONIC
                                                                          DISTANCE 296.214
     RL 147.28 LAL -.00 LOL 79.76 VL 28.301 GAL -8.49 A7L 86.83 HCA 137.84 SMA 132.55 ECC .18412 INC 3.1669 V1 30.250 RP 108.16 LAP 2.13 LOP 217.64 VP 38.115 GAP .42 A7P 92.35 TAL 224.85 TAP 2.69 RCA 108.14 APO 156.95 V2 35.036
     RC 86.309 GL 18.56 CP 3.69 7AL 145.20 7AP 90.76 ETS 357.89 7AE 169.49 ETE 188.86 7AC 42.18 ETC 160.65 CLP -90.77
    PLANETOCENTRIC CONIC
     C3 23.602 VHL 4.858 CLA -3.61 RAL 288.72 RAC 6568.0 VEL 12.041 PTH 2.15 VHP 3.085 CPA -17.51 RAP 309.03 ECC 1.3884
     ENCH AZMTH ENCH TIME L-I TIME. INJ. LAT. INJ. LONG. INJ. RT. ASC. INJ. AZMTH. INJ. TIME. PO. CST. TIM. INJ. 2. LAT. INJ. 2. LONG
                                                                                                                                            -14.56
        90.00
                     1 41 42
                                  2142.31
                                                    -17.75
                                                                   36.96
                                                                                151.89
                                                                                               112.43
                                                                                                              2 17 24
                                                                                                                             1542.3
        90.00
                    12 46 5 5010.42
                                                    22.94
                                                                   220.29
                                                                                 153.76
                                                                                                  72.93 14 9 36
                                                                                                                               4410.4
                                                                                                                                              20.39
                                                                                                                                                              212.55
                  3 1 21 1885.36 -18.83
14 9 7 4742.6; 24.06
4 5 44 1683.84 -21.72
15 21 14 4516.89 27.06
                                                                                                                                              -15.47
       100.00
                                                                    17.58
                                                                                 151.41
                                                                                                  113.65
                                                                                                              3 32 47
                                                                                                                               1285.4
                                                                                                                                                              10.40
                                                                                               71.70 15 28 10
117.07 4 33 47
68.27 16 36 31
                                                                              153.37
                                                                                                                                             21.33
                                                                  200.20
                                                                                                                              4142.6
                                                                                                                                                              192.47
       100.00
                                                                                                                                             -17.91
23.86
                                                                      .83
                                                                                 149.95
                                                                                                                              1083.8
                                                                                                                                                              353.76
       110.00
                                                                               152.16
                                                                                                                             3916.9
       110.00
                                                                  181.86
                                                                                                                                                             174.15
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 1151.4 SGR 302.6 SG3 671.8

RRT -.4913 RRF -.5120 RTF .8643

SGB 1190.5 R23 .0739 R13 -.8670

SGI 1161.5 SG2 261.3 THA 172.25
                                                                                                                          5T 327.5 SR 283.0 SS 631.3
CRT -.6141 CRS .9532 CST -.8191
     TOE .1453 TRA -.7853 TC3 -.6788 BAU .2146
     ROE -.2385 RRA .0881 RC3 .0411 FAU .19042
    FCE 1.8376 FRA-2.6351 FC3-6.9847 BSP 2905
BOE .2793 BRA .7903 BC3 .6801 FSP -2148
                                                                                                                          LSA 738.2 HSA 201.5 SSA 18.7
                                                                                                                           ELI 390.1 ELZ 187.5 ALF 141.71
 LAUNCH DATE DEC 12 1965
                                                                           FLIGHT TIME 104.00
                                                                                                                                       ARRIVAL CATE MAR 26 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 302.521
    RL 147.28 LAL -.00 LOL 79.76 VL 28.283 GAL -8.39 AZL 86.86 MCA 141.05 SMA 132.41 ECC .18339 INC 3.1403 V1 30.250
RP 108.20 LAP 1.97 LOP 220.85 VP 38.089 GAP .83 AZP 92.44 TAL 224.33 TAP 5.37 RCA 108.13 APO 156.70 VZ 35.023
RC 88.623 GL 18.56 GP 3.94 ZAL 144.83 ZAP 95.87 ETS 358.16 ZAE 165.93 ETE 184.37 ZAC 40.28 ETC 160.31 CLP -95.88
   PLANETOCENTRIC CONIC
    C3 23.181 VHL 4.815 DLA -3.55 RAL 289.13 RAD 6567.9 VEL 12.023 PTH 2.15 VHP 3.086 DPA -17.66 RAP 307.02 ECC 1.3815
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            -14.49
                                                                               152.03
                                                                                                112.48
        90.00
                     1 42 54 2139.82
                                                    -17.69
                                                                   36.80
                                                                                                              2 18 34
                                                                                                                              1539.8
                                                                                                                                                              29.59
                   12 48 12
        90.00
                                   5004.13
                                                     22.81
                                                                  219.87
                                                                                 153.84
                                                                                                   72.76 14 11 36
                                                                                                                                4404.1
                                                                                                                                               20.24
                                                                                                                                                              212.14
                                                                                               113.71 3 33 58
71.52 15 30 9
117.14 4 35 2
68.07 16 38 26
                  3 2 35 1882.77
14 11 12 4736.41
4 7 1 1681.05
15 23 15 4510.90
                                                                                                                                           -15.40
21.18
-17.82
23.69
       100.00
                                                   -1A.76
                                                                   17.42
                                                                                 151.54
                                                                                                                               1282.8
                                                                                                                                                              10.24
                                                                               153.45
       100.00
                                                    23.93
                                                                  199.79
                                                                                                                              4136.4
                                                                                                                                                             192.07
                                                                               150.09
                                                                                                                              1981.0
       110.00
                                                    -21.63
                                                                      .66
                                                                                                                                                             353.60
                                                                                                                               3910.9
       110.00
                                                   26.91
                                                                  181.46
                                                                                 152.24
                                                                                                                                                             173.77
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1840 TRA -.8542 TC3 -.8484 BAU .2636

RDE -.2271 RRA .0930 RC3 .0625 FAU .19035

FDE 1.8189 FRA-2.5862 FC3-7.1090 BSP .3529

BDE .2923 BRA .8592 BC3 .8507 FSP -2173
                                                                      SCT 1323.9 SGR 298.2 SG3 675.1
RRT -.5603 RRF -.5745 RTF .8900
SGB 1357.0 R23 .0701 R13 -.8920
SGI 1334.7 SG2 245.0 THA 172.55
                                                                                                                          ST 376.7 SR 272.3 SS 630.0

CRT -.6765 CRS .9576 CST -.8557

LSA 756.6 MSA 200.6 SSA 18.0
                                                                                                                           EL1 430.4 EL2 175.5 ALF 148.01
                                                                                                                                     ARRIVAL CATE MAR 28 1966
                                                                         FLIGHT TIME 106.00
LAUNCH DATE DEC 12 1965
                                                                         OISTANCE 308.799
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 28.261 GAL -8.28 A7L 86.89 HCA 144.25 SMA 132.25 ECC .18272 INC 3.1098 V1 30.250 RP 108.24 LAP 1.82 LOP 224.05 VP 38.061 GAP 1.23 A7P 92.52 TAL 223.72 TAP 7.97 RCA 108.08 APO 156.41 V2 35.010 RC 90.946 GL 18.55 GP 4.21 7AL 144.40 7AP 100.75 ETS 358.48 7AE 162.49 ETE 181.71 7AC 38.60 ETC 160.05 CLP-100.78
   PLANETOCENTRIC CONIC
    C3 22.742 VHL 4.769 DLA -3.49 RAL 289.62 RAD 6567.9 VEL 12.005 PTH 2.14 VHP 3.105 DPA -17.73 RAP 305.23 ECC 1.3743
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               112.54 2 20 3
72.58 14 13 51
3 35 28
                  1 44 26 2136.87
12 50 33 4997.77
3 4 9 1879.74
14 13 32 4730.13
                                                                              152.22
                                                                                                                            1536.9
                                                                                                             2 20 3
                                                                                                                                             -14.40
        90.00
                                                   -17.61
                                                                   36.62
                                                                                                                              4397.8
                                                                                                                                              20.09
                                                                                                                            1279.7
                                                                  219.45
                                                                                153.98
        90.00
                                                   22.68
                                                                                                113.77
                                                                                                             3 35 28
                                                                                                                                             -15.31
                                                                   17.23
                                                                                151.74
       100.00
                                                  -18.68
                                                                                                 113.77 3 35 28
71.34 15 32 22
                                                                              153.59
                                                                                                                                             21.02
                                                                                                                                                             191.67
       100.00
                                                   23.79
                                                                  199.37
                                                                                                                            1077.8
                                                                                                117.22 4 36 36
67.88 16 40 36
                                                                                                                                             -17.71
       110.00
                   4 8 38 1677.83
15 25 31 4504.81
                                               -21.53
                                                                                                                                                            353.41
                                                                     .46 150.29
                                                                                                                                            23.51
                                                                                152.37
                                                                                                                              3904.8
       110.00
                                                    26.75
                                                                  181.05
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 1500.0 SGR 295.3 SG3 670.0
RRT -.6264 RRF -.6372 RTF .9069
SGB 1528.8 R23 .0713 R13 -.9084
                                                                                                                          ST 426.6 SR 261.1 55 626.5
CRT -.7224 CRS .9627 CST -.8785
    TOE .2211 TRA -.9209 TC3-1.0224 BAU .3119
    ROE -.2153 RRA ..0972 RC3 ..0850 FAU .18785
FOE 1.7850 FRA-2.4944 FC3-7.1510 BSP 4152
BCE .3086 BRA .9260 BC3 1.0260 FSP -2158
                                                                                                                          LSA 776.2 MSA 199.6 SSA 17.2
                                                                      SG1 1511.7 SG2 228.4 THA 172.81
                                                                                                                          EL1 472.9 EL2 162.9 ALF 152.63
                                                                          FLIGHT TIME 108.00
                                                                                                                                      ARRIVAL DATE MAR 30 1966
LAUNCH DATE DEC 12 1965
                                                                         DISTANCE 315.049
   HELTOCENTRIC CONTC.
    RL 147.28 LAL -.00 LOL 79.76 VL 28.235 GAL -8.16 A7L 86.93 HCA 147.45 SMA 132.06 ECC .18211 INC 3.0741 VI 30.250 RP 108.29 LAP 1.65 LOP 227.25 VP 38.029 GAP 1.61 A7P 92.59 TAL 223.04 TAP 10.48 RCA 108.01 APO 156.10 VZ 34.996 RC 93.279 GL 18.51 GP 4.51 7AL 143.93 7AP 105.37 ETS 358.86 7AE 159.25 ETE 179.89 7AC 37.13 ETC 159.91 CLP-105.42
   PLANETOCENTRIC CONIC
                                                                                                    2.14 VHP 3.140 DPA -17.69 RAP 303.69 ECC 1.3667
    C3 22.283 VHL 4.721 OLA -3.45 RAL 290.17 RAD 6567.9 VEL 11.986 PTH
    ENCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 I 46 20 2133.25 -17.52 36.40 152.45 112.61 2 21 53 1533.3 -14.30 29.20
                                                                                                 72.41 14 16 17
113.85 3 37 20
71.17 15 34 47
117.31 4 38 30
67.69 16 42 58
                   12 53 5
                                                                  219.03
                                                                                 154.18
                                                                                                                               4391.5
                                                                                                                                               19.94
        90.00
                                  4991.50
                                                    22.56
                   3 6 4 1876.06
14 16 3 4723.93
4 10 36 1674.00
15 27 59 4498.75
                                                   -18.58
                                                                   17.01
                                                                                 151.97
                                                                                                113.85
                                                                                                                              1276.1
                                                                                                                                             -15.20
       100.00
                                                                                                                               4123.9
                                                    23.65
                                                                  198.96
                                                                                153.78
                                                                                                                                              20.86
                                                                                                                                         -17.58
23.33
       100.00
                                                                     .23
                                                                                150.53
                                                                                                117.31
                                                                                                                              1074.0
                                                  -21.41
       110.00
                                                                  180.65
                                                                                 152.57
                                                                                                                              3898.8
                                                                                                                                                             173.01
                                  4498.75
                                                   26.59
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
SGT 1676.9 SGR 294.D SG3 659.5
RRT -.6900 RRF -.6982 RTF .9184
SGB 1702.5 R23 .0751 R13 -.9197
SG1 1689.4 SG2 211.3 THA 172.99
EL1 515.3 EL2 150.2 ALE 156.21
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .2552 TRA -.9843 TC3-1.2001 BAU .3590
    ROE - .2030 RRA .1011 RC3 .1091 FAU .18388
    FOE 1.7268 FRA-2.3803 FC3-7.1439 BSP 4771
BOE .3261 BRA .9894 BC3 1.2051 FSP -2134
```

ARRIVAL DATE APR 1 1966

```
DISTANCE 321.274
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 28.206 GAL -8.03 A7L 86.97 HCA 150.65 SMA 131.84 ECC .18156 INC 3.0316 V1 30.250 RP 108.33 LAP 1.49 LOP 230.44 VP 37.996 GAP 1.98 A7P 92.64 TAL 222.28 TAP 12.92 RCA 107.90 APO 155.78 V2 34.983 RC 95.621 GL 18.44 GP 4.88 ZAL 143.41 ZAP 109.71 ETS 359.32 ZAE 156.22 ETE 178.49 ZAC 35.91 ETC 159.95 CLP-109.79
  PLANETOCENTRIC CONIC
   C3 21.804 VHL 4.669 CLA -3.43 RAL 290.80 RAC 6567.9 VEL 11.966 PTH 2.13 VHP 3.189 CPA -17.54 RAP 302.42 ECC 1.3588
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         152.74
                                                                                                                                     -14.17
                                                                                           112.70
                                                                                                        2 24 9
                                                                                                                        1528.6
                    1 48 40 2128.64
                                                -17.39
                                                               16.11
                                                                                           72.25 14 18 50
113.95 3 39 36
71.00 15 37 19
117.42 4 40 48
67.50 16 45 30
                                                                                                                         4385.6
                                                                                                                                        19.40
                                                                                                                                                      210.96
                  12 55 45 4985.59
3 8 25 1871.41
14 18 41 4718.04
                                                                            154.43
                                                 22.43
                                                               218.64
       90.00
                                                                         152.26
154.03
                                                                                                                                                       9.57
                                                                                                                         1271.4
                                                                                                                                       -15.06
                                                -18.45
                                                               16.72
      100.00
                                                                                                                                                      190.90
                                                                                                                         4118.0
                                                                                                                                       20.71
                  14 18 41
                                                 23.52
                                                               198.57
      100.00
                                                                                                                         1069.3
                                                                                                                                      -17.42
                                                                                                                                                      352.92
                                                                         150.82
                 4 12 59 1669.28
15 30 37 4492.94
                                           -21.26
                                                               359.94
      110.00
                                                                                                                       3892.9
                                                                                                                                       23.16
                                                                                                                                                      172.64
                                                               180.26
                                                                            152.81
      110.00
                                                 26.44
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SCT 1851.3 SGR 294.9 SG3 643.0

RRT -.7489 RRF -.7569 RTF ..9260

SGB 1874.6 R23 .0842 R13 -.9271

SG1 1864.6 SG2 194.1 THA 173.12
                                                                                                                     ST 522.4 SR 237.0 SS 608.2

CRT -.7845 CRS .9729 CST -.9029

LSA 812.5 MSA 196.5 SSA 15.3
   TOE .2865 TRA-1.0428 TC3-1.3799 BAU .4041
ROE -.1906 RRA .1044 RC3 .1348 FAU .17820
   FOE 1.6609 FRA-2.2373 FC3-7.0754 BSP 5368
BOE .3441 BRA 1.0480 BC3 1.3864 FSP -2078
                                                                                                                     EL1 556.9 EL2 137.9 ALF 159.06
                                                                                                                                ARRIVAL DATE APR 3 1966
                                                                       FLIGHT TIME 112.00
LAUNCH DATE DEC 12 1965
                                                                      DISTANCE 327.472
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 28.174 GAL -7.89 AZL 87.02 HCA 153.84 SHA 131.61 ECC .18106 INC 2.9801 V1 30.250 RP 108.37 LAP 1.31 LOP 233.63 VP 37.960 GAP 2.33 AZP 92.68 TAL 221.45 TAP 15.29 RCA 107.78 APO 155.44 V2 34.970 RC 97.969 GL 18.32 GP 5.32 TAL 142.85 ZAP 113.78 ETS 359.88 ZAE 153.42 ETE 177.28 ZAC 34.92 ETC 160.20 CLP-113.89
  PLANETOCENTRIC CONIC
                                                                                                2.13 VHP 3.249 DPA -17.26 RAP 301.41 ECC 1.3506
    C3 21.301 VHL 4.615 DLA -3.45 RAL 291.50 RAD 6567.9 VEL 11.945 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        2 26 57
                                                                                                                      1522.5
                                                                            153.06
                                                                                           112.82
                   1 51 34 2122.53
12 58 25 4980.44
                                                 -17.23
                                                               35.74
       90.00
                                                                                             72.12 14 21 25
114.07 3 42 24
70.86 15 39 55
                                                                                                                          4380.4
                                                                                                                                         19.67
                                                                                                                                                       210.64
                                                                             154.74
                                                  22.33
                                                               218.30
        90.00
                 3 11 18 1865.33
14 21 22 4712.88
4 15 51 1663.26
15 33 18 4487.72
                                                                                                                          1265.3
                                                                                                                                        -14.87
                                                                                                                                                        9.21
                                                                             152.59
                                                 -18.28
                                                                16.35
      100.00
                                                                                                                          4112.9
                                                                                                                                        20.58
                                                                                                                                                       190.58
                                                                          154.34
151.15
                                                 23.41
                                                               198.23
      100.00
                                                                                           117.56 4 43 35
67.34 16 48 6
                                                                                                                          1063.3 -17.22
                                                                                                                                                       352.57
                                                 -21.07
                                                               359.57
      110.00
                                                                                                                          3887.7
                                                                                                                                         23.00
                                                                                                                                                       172.32
                                                               179.92
                                                26.31
                                                                             153.12
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 565.5 SR 224.3 SS 593.1
CRT -.8055 CRS .9777 CST -.9083
LSA 826.8 MSA 194.9 SSA 14.2
                                                                   SGT 2024.0 SGR 298.8 5G3 624.1
RRT -.8031 RRF -.8116 RTF .9313
    TOE .3124 TRA-1.0969 TC3-1.5644 BAU .4479
    ROE - .1777 RRA .1074 RC3 .1635 FAU .17193
                                                                   SGB 2046.0 R23 .0972 R13 -.9324
SG1 2038.3 SG2 176.8 THA 173.19
    FOE 1.5743 FRA-2.0884 FC3-6.9878 BSP 5977 BDE .3594 BRA 1.1022 BC3 1.5729 FSP -2028
                                                                                                                   EL1 595.1 EL2 126.3 ALF 161.42
                                                                                                                                ARRIVAL DATE APR 5 1966
                                                                       FLIGHT TIME 114.00
LAUNCH DATE DEC 12 1965
                                                                      DISTANCE 333.646
    TELECCENTRIC CONTC

RL 147.28 LAL -.00 LOL 79.76 VL 28.140 GAL -7.75 A7L 87.08 HCA 157.04 SMA 131.35 ECC .18061 INC 2.9150 V1 30.250

RP 108.41 LAP 1.14 LOP 236.82 VP 37.923 GAP 2.67 A7P 92.68 TAL 220.55 TAP 17.59 RCA 107.63 APO 155.08 V2 34.957

RC 100.323 GL 18.13 GP 5.88 ZAL 142.25 ZAP 117.55 ETS .58 ZAE 150.84 ETE 176.12 ZAC 34.16 ETC 160.74 CLP-117.71
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 20.771 VHL 4.558 CLA -3.52 RAL 292.27 RAD 6567.8 VEL 11.923 PTH 2.12 VHP 3.320 CPA -16.81 RAP 300.67 ECC 1.3418
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 55 13 2114.15
13 0 56 4976.72
3 14 55 1857.07
14 23 55 4709.04
4 19 23 1655.24
15 35 57 4483.62
                                                                          153,43
                                                                                                                      1514.2 -13.75
                                                                                         112.98 2 30 27
                                                 -17.01
                                                               35.22
        90.00
                                                                                               72.02 14 23 53
                                                                                                                          4376.7
                                                                                                                                         19.58
                                                                              155.11
                                                  22.25
                                                               218.06
        90.00
                                                                                             114.24 3 45 52
70.75 15 42 24
                                                                              152.95
                                                                                                                         1257.1
                                                                                                                                        -14.63
                                                                15.84
                                                 -18.05
       100.00
                                                                                                                          4109.0
                                                                                                                                        20.48
                                                23.32
                                                                197.98
                                                                              154.72
       100.00
                                                                                                                                                      352.11
                                                                                             1055.2 -16.94
3883.6 22.88
                                                                              151.52
                                                 -20.82
                                                                359.09
       110.00
                                                                              153.50
                                              26.20
                                                                179.65
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 604.8 SR 211.6 SS 577.1
CRT -.8235 CRS .9827 CST -.9103
LSA 840.1 MSA 193.9 SSA 13.0
                                                                   SGT 2189.9 SGR 306.4 SG3 601.3
RRT -.8503 RRF -.8610 RTF .9346
SGB 2211.3 R23 .1180 R13 -.9356
SG1 2205.4 SG2 160.2 THA 173.18
     TOE .3345 TRA-1.1432 TC3-1.7503 BAU .4891
     RDE -.1650 RRA .1097 RC3 .1956 FAU .16459
    FOE 1.4853 FRA-1.9200 FC3-6.8602 BSP 6536
BDE .3730 BRA 1.1485 BC3 1.7612 FSP -1952
                                                                                                                      ELI 630.3 ELZ 115.2 ALF 163.35
                                                                                                                                 ARRIVAL DATE APR 7 1966
                                                                        FLIGHT TIME 116.00
 LAUNCH DATE DEC 12 1965
                                                                       DISTANCE 339.796
    RL 147.28 LAL -.00 LOL 79.76 VL 28.103 GAL -7.60 AZL 87.17 HCA 160.23 SMA 131.09 ECC .18022 INC 2.8305 V1 30.250 RP 108.44 LAP .96 LOP 240.01 VP 37.864 GAP 2.99 AZP 92.66 TAL 219.60 TAP 19.83 RCA 107.46 APO 154.71 V2 34.945
   HELIOCENTRIC CONIC
                                      6.61 ZAL 141.64 ZAP 121.04 ETS 1.49 ZAE 148.48 ETE 174.87 ZAC 33.60 ETC 161.67 CLP-121.27
     RC 102.682 GL 17.82 GP
   PLANETOCENTRIC CONIC
     C3 20.208 VHL 4.495 DLA -3.69 RAL 293.13 RAD 6567.8 VEL 11.899 PTH 2.11 VMP 3.399 DPA -16.14 RAP 300.16 ECC 1.3326
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1502.2
                   1 59 55 2102.17
13 3 3 4975.55
                                                                             153.82
                                                                                              113.21
                                                                                                          2 34 58
                                                  -16.69
                                                                 34.49
         90.00
                                                                                                                                         19.55
                                                                                                                                                        210.33
                                                                                                         14 25 58
                                                                                                                           4375.5
                                                                                               71.99
                                                                217.98
                                                                               155.56
                                                   22.22
         90.00
                                                                                                                          1245.3
                                                                                                                                         -14.27
                                                                                                                                                          8.03
                                                                                              114.47
                                                                                                         3 50 18
                                                                 15.13
                                                                               153.35
                    3 19 32 1845.35
14 26 7 4707.60
                                                 -17.72
        100.00
                                                                                                                           4107.6
                                                                                                                                         20.45
                                                                                                                                                        190.25
                                                                                               70.71
                                                                                                         15 44 35
                                                                              155.17
                    14 26 7
                                                  23.29
                                                                 197.89
        100.00
                                                                                               118.00 4 51 13
67.15 16 53 1
                                                                                                                                         -16.56
                                                                                              118.00
                                                                                                                          1044.1
                                                                 358.42
                                                                              151.91
                   4 23 49 1644.II
15 38 20 4481.60
                                                 -20.47
       110.00
                                                                                                                                          22.82
                                                                                                                          3881.6
                                                                179.52
                                                 26.15
                                                                              153.95
        110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 636.9 SR 198.7 SS 554.9
CRT -.8367 CRS .9871 CST -.9094
                                                                   SGT 2353.4 SGR 319.8 SG3 578.0
RRT -.8900 RRF -.9039 RTF .9368
     TDE .3484 TRA-1.1836 TC3-1.9444 BAU .5291
     RDE -.1522 RRA .1119 RC3 .2338 FAU .15719
                                                                   SGB 2375.1 R23 .1469 R13 -.9380
SG1 2370.7 SG2 144.8 THA 173.08
                                                                                                                      LSA 846.0 MSA 192.9 55A 11.7
     FDE 1.3780 FRA-1.7540 FC3-6.7342 BSP 7112
                                                                                                                    EL1 658.8 ELZ 105.2 ALF 164.98
     BOE .3802 BRA 1.1889 BC3 1.9584 FSP -1885
```

FLIGHT TIME 110.00

=

Ξ

=

```
LAUNCH DATE DEC 12 1965
                                                                          FLIGHT TIME 118.00
                                                                                                                                     ARRIVAL CATE APR 9 1966
    HELIOCENTRIC CONIC
                                                                          CISTANCE 345.924
     RL 147.28 LAL -.00 LOL 79.76 VL 28.065 GAL -7.44 A7L 87.29 MCA 163.42 SMA 130.81 ECC .17988 INC 2.7150 V1 30.250 RP 108.48 LAP .77 LOP 243.20 VP 37.844 GAP 3.31 A7P 92.60 TAL 218.59 TAP 22.01 RCA 107.28 APO 154.34 VZ 34.932 RC 105.043 GL 17.32 GP 7.63 TAL 141.03 TAP 124.24 ETS 2.71 TAE 146.30 ETE 173.39 TAC 33.21 ETC 163.12 CLP-124.59
    PLANETOCENTRIC CONIC
     C3 19.598 VML 4.427 CLA -4.04 RAL 294.07 RAC 6567.8 VEL 11.873 PTH 2.11 VMP 3.488 CPA -15.15 RAP 299.87 ECC 1.3225
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             90.00
                      2 6 17 2084.20
                                                    -16.21
                                                                  33.39
                                                                               154.24
                                                                                                                            1484.2
                                                                                                                                           -12.89
                                                                                                                                                             26.29
         90.00
                    13 4 16 4978.97
                                                    22.30
                                                                  218.21
                                                                                156.10
                                                                                                                               4379.0
                                                                                                                                                            210.54
                                                                                                                                             19.64
                  3 25 44 1827.90
14 27 30 4710.50
        100.00
                                                    -17.23
                                                                   14.07
                                                                                153.77
                                                                                                                              1227.9
                                                                                                                                            -13.74
                                                                                                                                                              7.01
                                                                             155.71
        100.00
                                                    23.36
                                                                 198.08
                                                                                                                             4110.5
                                                                                                                                            20.52
                                                                                                                              1027.8 -16.00
3883.3
                                                                                                                                                            190.43
                   4 29 38 1627.83 -19.94
15 40 5 4483.33 26.19
                                                                              152.33
154.52
        110.00
                                                                  357.45
                                                                                                                                                            350.55
       110.00
                                                                 179.63
                                                                                                                                              22.87
                                                                                                                                                            172.04
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 660.8 SR 186.5 SS 529.3
CRT -.8466 CRS .9912 CST -.9047
                                                                      SGT 2509.2 SGR 341.0 SG3 552.5
RRT -.9200 RRF -.9390 RTF .9378
     TOE .3543 TRA-1.2138 TC3-2.1446 BAU .5667
     RDE -.1399 RRA .1137 RC3 .2806 FAU .14916
                                                                    SGB 2532.2 R23 .1883 R13 -.9390
SG1 2528.8 SG2 132.6 THA 172.85
     FOE 1.2644 FRA-1.5752 FC3-6.5887 BSP 7636
                                                                                                                         LSA 845.1 MSA 193.0 SSA 10.3
     BOE .3809 BRA 1.2191 BC3 2.1629 FSP -1798
                                                                                                                         EL1 679.8 EL2 96.5 ALF 166.28
 LAUNCH DATE DEC 12 1965
                                                                          FLIGHT TIME 120.00
                                                                                                                                     ARRIVAL DATE APR 11 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 352.030
    RL 147.28 LAL -.00 LOL 79.76 VL 28.024 GAL -7.27 A7L 87.45 MCA 166.60 SMA 130.52 ECC .17959 INC 2.5461 V1 30.250 RP 108.52 LAP .59 LOP 246.38 VP 37.803 GAP 3.61 A7P 92.48 TAL 217.53 TAP 24.14 RCA 107.08 APO 153.95 V2 34.920 RC 107.406 GL 16.49 GP 9.14 7AL 140.47 ZAP 127.12 ETS 4.47 ZAE 144.25 ETE 171.44 ZAC 32.95 ETC 165.39 CLP-127.68
   PLANETOCENTRIC CONIC
    C3 18.923 VHL 4.350 DLA -4.69 RAL 295.15 RAD 6567.8 VEL 11.845 PTH
                                                                                                    2.10 VHP 3.588 OPA -13.65 RAP 299.72 ECC 1.3114
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 15 28 2055.46 -15.42 31.65 154.69 114.05 2 49 44 1455.5 -12.04 24.60
                   2 15 28 2055.46
13 3 37 4991.12
                                                                                               72.40 14 26 48
115.33 4 4 37
71.10 15 45 52
118.90 5 4 30
67.48 16 55 20
        90.00
                                                    22.55
                                                                  219.01
                                                                                156.79
                                                                                                                              4391.1
                                                                                                                                              19.93
                                                                                                                                                            211.31
                  3 34 36 1800.17
14 27 10 4721.64
4 37 48 1602.34
15 40 28 4492.24
       100.00
                                                  -16.43
                                                                  12.40
                                                                                154.20
                                                                                                                              1200.2
                                                                                                                                             -12.88
       100.00
                                                    23.60
                                                                  198.81
                                                                                156.41
                                                                                                                              4121.6
                                                                                                                                             20.81
                                                                                                                                                            191.13
       110.00
                                                                                                                                           -15.11
                                                  -19.11
                                                                  355.94
                                                                              152.76
                                                                                                                           1002.3
                                                                                                                                                            349.11
                                                 26.43
       110.00
                                                                  180.22
                                                                                155.24
                                                                                                                              3892.2
                                                                                                                                              23.14
                                                                                                                                                            172.60
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ST 669.5 SR 174.3 SS 491.9
CRT -.8492 CR5 .9943 CST -.8949
                                                                     SGT 2660.7 SGR 375.6 SG3 526.5
RRT -.9404 RRF -.9657 RTF .9382
    TOE .3440 TRA-1.2334 TC3-2.3604 BAU .6034
    ROE -.1275 RRA .1159 RC3 .3438 FAU .14111
FDE 1.1216 FRA-1.3973 FC3-6.4559 BSP 8167
BOE .3669 BRA 1.2389 BC3 2.3853 FSP -1719
                                                                    SGB 2887.1 R23 .2393 R13 -.9398
SG1 2684.2 SG2 126.6 THA 172.42
                                                                                                                         LSA 826.6 MSA 192.9 55A
                                                                                                                                                                 8.8
                                                                                                                       EL1 686.0 EL2 89.9 ALF 167.31
                                                                         FLIGHT TIME 122.00
LAUNCH DATE DEC 12 1965
                                                                                                                                    ARRIVAL DATE APR 13 1966
                                                                        DISTANCE 358.115
    RL 147.28 LAL -.00 LOL 79.76 VL 27.982 GAL -7.09 A7L 87.72 MCA 169.79 SMA 130.21 ECC .17935 INC 2.2744 V1 30.250 RP 108.56 LAP .40 LOP 249.56 VP 37.761 GAP 3.90 A7P 92.24 TAL 216.42 TAP 26.21 RCA 106.86 APO 153.57 V2 34.909 RC 109.770 GL 15.00 GP 11.58 ZAL 140.04 ZAP 129.59 ETS 7.22 ZAE 142.19 ETE 168.53 ZAC 32.80 ETC 169.12 CLP-130.58
   PLANETOCENTRIC CONIC
    C3 18.138 VHL 4.259 DLA -5.98 RAL 296.40 RAD 6567.7 VEL 11.812 PTH 2.09 VHP 3.706 DPA -11.20 RAP 299.62 FCC 1.2985
    ENCH APATH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AFATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         1405.0
4421 =
                   2 30 15 2004.96
12 58 51 5021.74
3 48 46 1751.70
14 23 1 4750.23
                                                                                                114.87 3 3 40
73.24 14 22 32
                                                                             155.16
                                                                                             114.87
        90.00
                                                  -13.99
                                                                  28.63
                                                                                                                                          -10.52
                                                                                                                                                            21.67
        90.00
                                                                                157.75
                                                                 221.04
                                                  23.16
                                                                                                                                            20.65
                                                                                                                                                           213.27
                                                                                               116.17 4 17 71.92 15 42 11
119.76 5 16 29
68.25 16 53 2
                                                                                                                           1151.7
       100.00
                                                                                154.66
                                                 -14.99
                                                                   9.51
                                                                                                                                            -11.35
                                                                                                                                                             2.61
       100.00
                                                                                157.39
                                                  24.22
                                                                 200.71
                                                                                                                            4150.2
                                                                                                                                            21.52
                                                                                                                                                          192.95
                    4 50 31 1558.35
15 37 45 4516.34
      110.00
                                                 -17.64
27.04
                                                                 353.37
                                                                                153,20
                                                                                                                             958.4
                                                                                                                                           -13.55
                                                                                                                                                          346.65
                   15 37 45
       110.00
                                                                 181.82
                                                                                156.26
                                                                                                                             3916.3
                                                                                                                                            23.85
                                                                                                                                                           174.11
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    5GT 2805.9 SGR 434.1 SG3 498.1
RRT -.9503 RRF -.9840 RTF ..9380
SGB 2839.3 R23 ..2910 R13 -.9401
                                                                                                                        ST 652.4 SR 161.8 SS 434.9

CRT -.8368 CRS .9964 CST -.8731

LSA 776.9 MSA 193.0 SSA 7.5
    TOE .3060 TRA-1.2361 TC3-2.6008 BAU .6395
    ROE -.1145 RRA .1186 RC3 .4377 FAU .13245
FDE .9341 FRA-1.2057 FC3-6.3220 BSP 8677
    BDE .3268 BRA 1.2418 BC3 2.6374 FSP -1629
                                                                     SG1 2836.1 SG2 133.7 THA 171.62
                                                                                                                         FL1 666.5 FL2 86.7 ALF 164.07
LAUNCH DATE DEC 12 1965
                                                                         FLIGHT TIME 124.00
                                                                                                                                    ARRIVAL DATE APR 15 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 364.180
   RL 147.28 LAL -.00 LOL 79.76 VL 27.939 GAL -6.91 A7L 88.24 HCA 172.97 SMA 129.90 ECC .17917 INC 1.7622 VI 30.250 RP 108.59 LAP .22 LOP 252.73 VP 37.718 GAP 4.19 A7P 91.75 TAL 215.26 TAP 28.24 RCA 106.63 APO 153.18 V2 34.897 RC 112.133 GL 11.88 GP 16.13 7AL 139.92 7AP 131.23 ETS 12.13 7AE 139.69 ETE 163.51 7AC 32.84 ETC 176.10 CLP-133.33
  PLANETOCENTRIC CONIC
   C3 17.157 VHL 4.142 DLA
                                        -8.85 RAL 298.03 RAD 6567.7 VEL 11,770 PTH 2.08 VHP 3.871 DPA
                                                                                                                                -6.63 RAP 299.32 ECC 1.2824
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ 17ME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 59 1 1900.47 -10.92 22.49 155.80 116.29 3 30 41 1300.5 -7.30 15.68
                  12 43 3 5100.42
4 16 3 1651.95
14 8 43 4824.17
5 14 28 1469.01
        90.00
                                                  24.61
                                                                 226.36
                                                                                159.44
                                                                                                 75.53
                                                                                                           14 8 4
                                                                                                                             4500.4
                                                                                                                                             22.38
                                                                                                                                                           218.39
      100.00
                                                  -11.92
                                                                   3.70
                                                                               155.28
                                                                                               117.62
                                                                                                           4 43 34
                                                                                                                             1052.0
                                                                                                                                              -8.13
                                                                                                                                                           356.96
      100.00
                                                  25,69
                                                                 205.71
                                                                              159.12
                                                                                                 74.17
                                                                                                           15 29 7
                                                                                                                             4224.2
                                                                                                                                            23.27
                                                                                                                                                           197.75
      110.00
                                                 -14.55
                                                                              153.75
                                                                                                           5 38 57
                                                                 348.29
                                                                                               121.28
                                                                                                                             869.0
                                                                                                                                           -10.31
                                                                                                                                                           341.77
      110.00
                   15 26 46
                                  4579.87
                                                  28.57
                                                                                158.08
                                                                                                 70.38 16 43 6
                                                                 186.13
                                                                                                                             3979.9
                                                                                                                                             25.63
                                                                                                                                                           178.19
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   TOE .2009 TRA-1.2099 TC3-2.8946 BAU .6782
RDE -.0955 RRA .1221 RC3 .6028 FAU .12172
FDE .6409 FRA -.9770 FC3-6.1417 BSP 9238
BDE .2225 BRA 1.2161 BC3 2.9567 FSP -1510
                                                                     SGT 2949.0 SGR 544.1 SG3 461.6
RRT -.9496 RRF -.9948 RTF ..9371
                                                                                                                        ST 583.6 SR 142.5 SS 330.7
CRT -.7676 CRS .9968 CST -.8073
                                                                                                                      LSA 658.6 MSA 190.9 SSA 6.4
EL1 594.0 EL2 89.7 ALF 169.13
                                                                     SGB 2998.7 R23 .3255 R13 -.9403
```

SG1 2994.0 SG2 168.0 THA 170.03

ARRIVAL DATE APR 17 1966

LAUNCH DATE DEC 12 1965

```
DISTANCE 370.224
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.894 GAL -6.72 ATL 89.59 HCA 176.15 SMA 129.59 ECC .17905 INC .3880 V1 30.250 RP 108.63 LAP .03 LOP 255.91 VP 37.675 GAP 4.46 AZP 90.41 TAL 214.06 TAP 30.21 RCA 106.39 APO 152.79 V2 34.886
                      2.83 GP 27.31 ZAL 140.24 ZAP 129.88 ETS 22.84 ZAE 134.36 ETE 152.98 ZAC 34.50 ETC 192.52 CLP-136.19
   RC 114.493 GL
  PLANETOCENTRIC CONIC
   C3 15.957 VHL 3.995 DLA -17.50 RAL 300.98 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 4.266 DPA
                                                                                                                  4.45 RAP 297.85 ECC 1.2626
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        357.96
                                                                                   118.30 4 53 4
                                                                     158.54
       90.00
                  4 26 40 1583.91
                                              - .94
                                                          4.59
                                                                                    85.01 13 8 41
119.83 6 0 24
83.43 14 35 17
123.86 6 43 54
79.20 16 1 9
                                                                                                                4783.8
                                                                                                                              26.92
                                                                                                                                          237.86
                                                                       164.59
                11 38 57
                             5383.77
                                              27.91
                                                          246.39
       90.00
                                                                                                                                          340.54
                                                                                                                754.3
                                                                                                                              1.89
                                                                       157.90
                                                          347.06
      100.00
                  5 37 50
                              1354.27
                                              -2.10
                                                                    164.44
156.08
                                                                                                                                          215.94
                                                                                                                4488.6
                                                                                                                              28.01
               13 10 28 5088.64
6 23 44 1210.49
14 41 4 4805.20
                                                          224.53
                                              29.23
                                                                                                                                          328.12
                                                                                                                610.5
                                                                                                                              - . 54
                                              -5.02
                                                          334.34
      110.00
                                                                       163.83
                                                                                                                4205.2
                                                                                                                              30.80
                                                                                                                                          193.66
                                                          202.40
                                             32.63
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                            HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                          ST 524.6 SR 66.5 SS 113.0

CRT -.6106 CRS .9171 CST -.8531

LSA 535.2 MSA 76.9 SSA 11.3

EL1 526.2 EL2 52.5 ALF 175.53
                                                             SGT 3060.1 SGR 794.4 SG3 386.1
RRT -.9381 RRF -.9993 RTF .9356
   TOE -.1238 TRA-1.0806 TC3-3.2379 BAU .7210
    ROE -.0236 RRA .1161 RC3 .9691 FAU .10091
   FOE .0266 FRA -.6083 FC3-5.4745 BSP 9642
BOE .1260 BRA 1.0868 BC3 3.3798 FSP -1253
                                                             SGB 3161.5 R23 .3314 R13 -.9427
                                                             SG1 3150.2 SG2 267.2 THA 166.21
                                                                                                                      ARRIVAL DATE APR 19 1966
                                                                 FLIGHT TIME 128.00
LAUNCH DATE DEC 12 1965
                                                                DISTANCE 376.228
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.849 GAL -6.51 AZL 103.33 HCA 179.30 SMA 129.27 ECC .17894 INC13.3149 VI 30.250 RP 108.66 LAP -.16 LOP 259.08 VP 37.631 GAP 4.72 AZP 76.67 TAL 212.81 TAP 32.11 RCA 106.14 APO 152.40 V2 34.875 RC 116.852 GL -55.08 GP 74.01 ZAL 112.40 ZAP 105.03 ETS 59.07 ZAE 100.14 ETE 144.97 ZAC 60.27 ETC 244.51 CLP-160.25
  PLANETOCENTRIC CONIC
                                                                                        2.47 VHP 11.226 OPA 49.56 RAP 278.64 ECC 1.9967
    C3 60.565 VHL 7.782 DLA -68.70 RAL 346.06 RAD 6569.1 VEL 13.488 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                      245.84
                                                                                                 6 25 57
                                                                                                              1440.2
                                                                                                                              31.71
                                                                                                                                            65.28
                                                           68.60
                                                                                    156.48
     24.37
                  5 51 57 2040.17
                                              24.43
                                                                                                                                           254.73
                                                                                                17 46 22
                                                                                                                4983.2
                                                                                                                               31.72
                                                                       245.86
                                                                                      156.48
                                                          258.05
                  16 13 19
                              5583.21
                                              24.43
      155.63
                                                                                     156.48 6 25 57
156.48 17 46 22
                                                                                                                1440.2
                                                                                                                               31.71
                                                                                                                                            65.28
                                                           58.60
                                                                       245.84
                  5 51 57 2040.17
                                             24.43
       24.37
                                                                                                                                           254.73
                                                                                                                4983.2
                                                                                                                              31.72
                                                          258.05
                                                                       245.86
                                              24.43
                 16 13 19
                              5583.21
      155.63
                                                                                     156.48 6 25 57
156.48 17 46 22
                                                                                                                1440.2
                                                                                                                              31.71
                                                                                                                                            65.28
                                                                       245.84
                                                           68.60
                 5 51 57 2040.17
16 13 19 5583.21
                                              24.43
       24.37
                                                                                                                4983.2
                                                                                                                              31.72
                                                                                                                                           254.73
                                             24.43
                                                          258.05
                                                                       245.86
      155.63
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                                                            ST 2814.7 SR 432.6 SS 803.4
CRT -.9568 CRS .9763 CST -.9971
                                                              SGT 3408.2 SGR 836.1 SG3 98.2
RRT -.8913 RRF -.9542 RTF .9861
SGB 3509.2 R23 .1428 R13 -.9897
    TDE-3.7514 TRA .8915 TC3 -.5466 BAU .4708
    RDE .5187 RRA -.3339 RC3 .1984 FAU .01500
FDE-1.0840 FRA .3640 FC3 -.2144 BSP .3341
BOE 3.7871 BRA .9519 BC3 .5815 FSP -122
                                                                                                           LSA 2955.8 MSA 135.8 SSA
                                                                                                            EL1 2845.0 EL2 124.4 ALF 171.62
                                                              SG1 3489.6 SG2 370.2 THA 167.52
                                                                                                                      ARRIVAL DATE APR 21 1966
                                                                 FLIGHT TIME 130.00
LAUNCH DATE DEC 12 1965
                                                                 DISTANCE 382.278
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 27.802 GAL -6.31 AZL 82.05 HCA 182.52 SMA 128.94 ECC .17903 INC 7.9507 VI 30.250 RP 108.69 LAP -.35 LOP 262.25 VP 37.587 GAP 4.99 AZP 97.95 TAL 211.55 TAP 34.07 RCA 105.86 APO 152.03 V2 34.865
    RC 119.206 GL 43.27 GP -37.05 7AL 120.88 7AP 128.64 ETS 319.74 7AE 122.83 ETE 211.41 7AC 61.15 ETC 126.72 CLP-141.48
   PLANETOCENTRIC CONIC
                                                                                        2.23 VHP 4.952 OPA -58.38 RAP 315.33 ECC 1.5123
    C3 31.128 VHL 5.579 DLA 23.04 RAL 296.94 RAD 6568.2 VEL 12.349 PTH
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      80.60 23 8 11
61.72 18 22 50
82.05 24 41 46
60.11 19 23 11
                                                                     174.97
                                                                                                                            -27.86
                                                                                                               2539.8
      90.00 22 15 51 3139.76
90.00 17 13 39 4150.43
                                             -26.83
                                                          106.49
                                                                                                                              -5.33
                                                                                                                                           162.56
                                                                       166.17
                                                                                                                3550.4
                                                          169.22
                                              -1.56
                                                                                                                              -29.71
                                                                                                                                            74.67
                23 54 45 2820.86
18 17 26 3944.57
1 42 37 2495.68
18 49 59 3842.51
                                                                                                                2220.9
                                                                       175.33
                                             -28.91
                                                           83.39
                                                                                                                3344.6
                                                                                                                                           146.54
                                                                                                                              -3.70
                                                                        165.14
                                                .28
                                                          153.07
      100.00
                                                                                                                            -34.17
                                                                                                                                            50.09
                                                                                       85.63 2 24 13
56.09 19 54 2
                                                                                                                1895.7
                                                           59.32
                                                                       175.97
                                             -33.94
      110.00
                                                                                                                                           136.44
                                                                        162.47
                                                                                                                3242.5
                                                                                                                                 .08
                                             4.57
                                                          142.66
      110.00
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                             ST 2142.3 SR 409.8 SS 986.8
CRT .9683 CRS -.9949 CST -.9886
                                                              SGT 3416.5 SGR 568.2 SG3 287.7
    TOE 2.0014 TRA-1.7969 TC3-1.6591 BAU .7057
                                                              RRT .8521 RRF .9726 RTF .9503
SCB 3463.4 R23 .2995 R13 .9540
SCI 3450.9 SCZ 294.4 THA 8.13
    RDE .3987 RRA -.0392 RC3 -.3509 FAU .07075
                                                                                                            LSA 2388.4 MSA 162.9 SSA .5
EL1 2178.8 EL2 100.7 ALF 10.52
    FOE 2.2253 FRA -.9158 FC3-1.9677 BSP 9851
    BOE 2.0407 BRA 1.7973 BC3 1.6958 FSP -918
                                                                                                                       ARRIVAL DATE APR 23 1966
                                                                  FLIGHT TIME 132.00
LAUNCH DATE DEC 12 1965
                                                                  DISTANCE 388.267
    RL 147.28 LAL -.00 LOL 79.76 VL 27.755 GAL -6.09 AZL 84.60 HCA 185.69 SMA 128.62 ECC .17910 INC 5.4025 V1 30.250 RP 108.72 LAP -.53 LOP 265.42 VP 37.543 GAP 5.24 AZP 95.38 TAL 210.24 TAP 35.92 RCA 105.58 APO 151.65 V2 34.856
    RC 121.557 GL 33.62 GP -17.79 TAL 125.92 TAP 139.01 ETS 335.85 TAE 132.14 ETE 198.76 TAC 48.99 ETC 139.12 CLP-142.44
   PLANETOCENTRIC CONIC
    C3 22.026 VHL 4.693 DLA 13.68 RAL 299.42 RAD 6567.9 VEL 11.975 PTH 2.13 VHP 4.320 DPA -39.30 RAP 310.23 ECC 1.3625
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              -26.17
                                                                                                                 2076.7
                                                                                        97.23
                                                                                                 0 55 6
                                              -27.45
                                                           72.88
                                                                       167.19
        90.00
                   0 10 30 2676.71
                                                                                                                 3842.4
                                                                                                                                4.06
                 15 42 43 4442.41

1 39 2 2391.18

16 56 52 4203.18

3 3 26 2127.11

17 48 58 4040.01
                                                                                        62.69
                                                                                                 16 56 45
                                                7.78
                                                           185.59
                                                                        160.96
        90.00
                                                                                                                                             43.19
                                                                                                                 1791.2
                                                                                                                              -27.26
                                                                                        98.57
                                                                                                 2 18 53
                                              -28.75
                                                            51.68
                                                                        166.98
       100.00
                                                                                                                                            160.75
                                                                                                18 6 55
3 38 53
18 56 18
                                                                                                                                5.04
                                                                                        61.36
                                                                                                                 3603.2
                                                           167.38
                                                                        160.34
                                               8.94
       100.00
                                                                                                                              -30.15
                                                                                                                 1527.1
                                                            30.90
                                                                                      102.24
                                             -32.17
       110.00
                                                                                                                 3440.0
                                                                                                                                7.59
                                                           153.21
                                                                        158.55
                                                                                       57.73
                                             11.93
      110.00
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                            ST 1699.7 SR 175.7 SS 874.5
CRT .9260 CRS -.9859 CST -.9760
    TOE 1.3005 TRA-1.5979 TC3-2.5843 BAU .7634
                                                              SET 3526.5 SGR 261.7 SG3 375.0
                                                              ROE .1438 RRA .0116 RC3 -.2061 FAU .09483
FDE 1.8975 FRA -.8841 FC3-3.7275 BSP 11033
                                                                                                             LSA 1911.1 MSA 179.9 SSA 2.0
    BOE 1.3084 BRA 1.5980 BC3 2.5925 FSP -1260
```

FLIGHT TIME 126.00

```
FLIGHT TIME 134.00
                                                                                                                               ARRIVAL DATE APR 25 1966
LAUNCH DATE DEC 12 1965
                                                                       DISTANCE 394.244
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 27.707 GAL -5.86 A7L 85.33 MCA 188.86 SMA 128.29 ECC .17926 INC 4.6749 V1 30.250 RP 108.75 LAP -.72 LOP 268.59 VP 37.500 GAP 5.49 A7P 94.62 TAL 208.89 TAP 37.75 RCA 105.29 APO 151.28 V2 34.846 RC 123.903 GL 30.37 GP -11.35 ZAL 126.45 ZAP 142.67 ETS 342.40 ZAE 133.54 ETE 192.64 ZAC 46.37 ETC 145.14 CLP-144.20
   PLANFTOCENTRIC CONIC
    C3 19.737 VHL 4.443 DLA 10.78 RAL 301.27 RAD 6567.8 VEL 11.879 PTH 2.11 VHP 4.310 DPA -32.71 RAP 310.06 ECC 1.3248
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         1 24 58
                    0 42 25 2552.36
                                                                            165.83
                                                                                            101.45
                                                                                                                        1952.4
        90.00
                                                 -26.07
                                                                64.05
                                                                                                                                       -24.23
                                                                                                                                                      55.86
                                                                                                       16 40 47
                                                                              161.06
                                                                                              63.37
        90.00
                   15 25 33 4514.15
                                                  10.00
                                                               189.69
                                                                                                                         3914.1
                                                                                                                                         6.34
                                                                                                                                                      182.92
                    2 9 9 2272.65
                                                                                             102.79
                                                                                                         2 47 2
                                                                                                                         1672.6
       100.00
                                                 -27.25
                                                                43.19
                                                                              165.55
                                                                                                                                        -25.21
                                                                                                                                                       34.98
                  16 41 30 4269.10
3 29 37 2020.87
17 37 32 4093.63
                                                                                             62.05 17 52 39
106.50 4 3 18
58.44 18 45 46
                                                                             160.50
                                                                                                                         3669.1
                                                                                                                                                      164.41
       100.00
                                                  11.06
                                                               171.12
                                                                                                                                         7.24
                                                 -30.37
                                                                                             106.50
       110.00
                                                                23.14
                                                                             164.62
                                                                                                                         1420.9
                                                                                                                                        -27.81
                                                                                                                                                      14.88
                                                                             158.86
                                                                                                                         3493.6
       110.00
                                                13.46
                                                               156.16
                                                                                                                                         9.59
                                                                                                                                                      149.67
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 3635.6 SGR 139.7 SC3 379.6
RRT .5427 RRF .7602 RTF .9368
SGB 3638.3 R23 .2992 R13 .9370
SGI 3636.4 SGZ 117.3 THA 1.20
                                                                                                                     ST 1594.0 SR 114.5 SS 807.6
CRT .8823 CR5 -.9710 CST -.9690
    TOE 1.1442 TRA-1.5169 TC3-2.9935 BAU .7902
    ROE .0883 RRA .0304 RC3 -.0791 FAU .09516
FOE 1.6642 FRA -.7388 FC3-4.1740 8SP .11352
BOE 1.1476 BRA 1.5172 BC3 2.9945 FSP -1268
                                                                                                                     LSA 1780.9 MSA 185.4 55A
                                                                                                                                                          3.4
                                                                                                                     EL1 1597.2 EL2 53.8 ALF 3.63
                                                                       FLIGHT TIME 136.00
                                                                                                                                ARRIVAL DATE APR 27 1966
LAUNCH DATE DEC 12 1965
                                                                       DISTANCE 400.206
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 27.659 GAL -5.63 AZL 85.67 MCA 192.03 SMA 127.96 ECC .17948 INC 4.3293 V1 30.250 RP 108.78 LAP -.90 LOP 271.76 VP 37.456 GAP 5.73 AZP 94.23 TAL 207.51 TAP 39.54 RCA 104.99 APO 150.92 V2 34.838 RC 126.245 GL 28.86 GP -8.22 ZAL 125.87 ZAP 145.09 ETS 345.82 ZAE 133.60 ETE 189.35 ZAC 45.97 ETC 148.74 CLP-145.95
   PLANETOCENTRIC CONIC
                                       9.64 RAL 302.97 RAD 6567.8 VEL 11.829 PTH 2.09 VHP 4.378 DPA -29.34 RAP 310.83 ECC 1.3050 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 18.534 VHL 4.305 DLA
    LNCH AZHTH LNCH TIME L-I TIME
                  Unch TIME L-1 TIME
U 58 28 2499.93
15 23 2 4536.88
2 24 32 2222.30
16 39 38 4289.75
3 43 34 1975.01
17 37 6 4109.80
        90.00
                                                 -25.31
                                                                60.39
                                                                            165.98
                                                                                            103.13
                                                                                                         1 40 7
                                                                                                                         1899.9
                                                                                                                                        -23.26
                                                                                                                                                       52.33
                                                                                                       16 38 39
        90.00
                                                  10.69
                                                               191.01
                                                                                              63.62
                                                                                                                         3936.9
                                                                              161.84
                                                                                                                                          7.06
                                                                                                                                                      184.21
                                                                                            104.48 3 1 35
62.30 17 51 8
       100.00
                                                 -26.44
                                                                39.67
                                                                             165.67
                                                                                                                         1622.3
                                                                                                                                        -24.19
                                                                                                                                                       31.59
                                                 11.72
       100.00
                                                               172.30
                                                                             161.30
                                                                                                                         3689.8
                                                                                                                                         7.92
                                                                                                                                                      165.57
                                                                                            108.22 4 10
67 18 45 36
                                                 -29.44
                                                                                                                         1375.0
       110.00
                                                                19.90
                                                                             164.68
                                                                                                                                        -26.67
                                                                                                                                                       11.81
       110.00
                                                 14.44
                                                               157.06
                                                                              159.72
                                                                                                                         3509.8
                                                                                                                                                      150.54
                                                                                                                                         10.19
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                 9GT 3752.0 SGR 107.8 SG3 371.3
RRT .0967 RRF .3192 RTF .9345
1SGB 3753.5 R23 .2299 R13 .9345
    TOE 1.0884 TRA-1.4678 TC3-3.2958 BAU .8166
                                                                                                                     5T 1568.1 SR 97.5 SS 769.3
    RDE .0725 RRA .0357 RC3 .0021 FAU .09212
                                                                                                                     CRT .8574 CR5 -.9621 CST -.9646
                                                                                                                     LSA 1739.1 MSA 188.7 SSA 4.9
    FDE 1.5146 FRA -.6111 FC3-4.3029 BSP 11747
    BDE 1.0908 BRA 1.4682 BC3 3.2958 FSP -1241
                                                                   5G1 3752.0 5G2 107.3 THA
                                                                                                       .16
                                                                                                                     ELI 1570.3 ELZ 50.1 ALF
                                                                                                                                                         3.06
                                                                      FLIGHT TIME 138.00
                                                                                                                               ARRIVAL DATE APR 29 1956
LAUNCH DATE DEC 12 1965
                                                                     DISTANCE 406.153
   HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.610 GAL -5.39 AZL 85.87 HCA 195.20 SMA 127.62 ECC .17980 INC 4.1264 V1 30.250 RP 108.80 LAP -1.08 LOP 274.92 VP 37.413 GAP 5.97 AZP 93.98 TAL 206.09 TAP 41.29 RCA 104.68 APO 150.57 V2 34.830 RC 128.581 GL 28.04 GP -6.38 ZAL 124.80 ZAP 147.07 ETS 347.89 ZAE 133.31 ETE 187.31 ZAC 46.42 ETC 151.23 CLP-147.63
   PLANETOCENTRIC CONIC
                                                                                               2.09 VHP 4.467 DPA -27.22 RAP 311.99 ECC 1.2913
    C3 17.701 VHL 4.207 DLA
                                      9.22 RAL 304.64 RAD 6567.7 VEL 11.793 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 8 26 2475.74
15 26 24 4539.60
                                                               58.73
                                                                            166.72
                                                                                            103.88
                                                                                                        1 49 42
                                                                                                                       1875.7
                                                                                                                                                      50.72
                                                                                                                                       -22.78
       90.00
                                                 -24.93
                                                                                                       16 42 4
                                                                                                                         3939.6
                                                                                                                                         7.14
                                                                                                                                                     184.36
                                                              191.16
                                                                             162.85
                                                                                             63.65
        90.00
                                                 10.77
                                                                                                        3 10 57
                                                                                                                        1598.8
                                                                                                                                                      30.03
                   2 34 18 2198.84
                                                                                            105.24
                                                                                                                                       -23.68
      100.00
                                                 -26.03
                                                                38.04
                                                                             166.40
                                                                                                       17 54 46
                                                                             162.33
                                                                                             62.33
                                                                                                                         3691.7
                                                                                                                                         7.99
                                                                                                                                                     165.68
      100.00
                  16 43 14 4291.74
                                                 11.78
                                                              172.41
                                                                                                        4 25 22
                                                                                                                                                      10.36
                   3 52 49 1953.13
17 41 12 4110.21
                                                -28.96
                                                                18.37
                                                                             165.38
                                                                                            109.01
                                                                                                                        1353.1
                                                                                                                                       -26.09
      110.00
                                                                                             109.01 4 25 22
58.68 18 49 42
                  17 41 12
                                                              157.09
                                                                             160.77
                                                                                                                        3510.2
                                                                                                                                        10.20
      110.00
                                                 14.45
   CIFFFRENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SCT 3863.9 SCR 118.1 5G3 359.3
RRT -.2378 RRF -.0678 RTF .9321
SCB 3865.7 R23 -.1586 R13 -.9321
                                                                                                                     ST 1579.1 SR 96.0 SS 748.7
    TOE 1.0738 TRA-1.4230 TC3-3.5527 BAU .8408
   RDE .0696 RRA .0356 RC3 .0599 FAU .08804
FDE 1.4144 FRA -.4912 FC3-4.3058 BSP 12098
                                                                                                                     CRT .8568 CRS -.9640 CST -.9618
                                                                                                                    LSA 1739.7 MSA 191.6 55A 6.3
    BCE 1.0761 BRA 1.4234 BC3 3.5532 FSP -1195
                                                                  SG1 3864.0 SG2 114.7 THA 179.58
                                                                                                                     EL1 1581.2 EL2 49.4 ALF
                                                                                                                                                        2.98
                                                                      FLIGHT TIME 140.00
                                                                                                                               ARRIVAL DATE MAY 1 1966
LAUNCH DATE DEC 12 1965
                                                                     DISTANCE 412.086
  HELTOCENTRIC CONTC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.561 GAL -5.14 AZL 86.01 MCA 198.37 SMA 127.29 ECC .18019 INC 3.9923 VI 30.250 RP 108.82 LAP -1.26 LOP 278.09 VP 37.369 GAP 6.20 AZP 93.79 TAL 204.66 TAP 43.02 RCA 104.36 APO 150.23 V2 34.822 RC 130.911 GL 27.58 GP -5.18 ZAL 123.46 ZAP 148.83 ETS 349.29 ZAE 132.93 ETE 185.94 ZAC 47.31 ETC 153.12 CLP-149.23
  PLANETOCENTRIC CONIC
                                       9.19 RAL 306.34 RAD 6567.7 VEL 11.766 PTH 2.08 VHP 4.566 DPA -25.68 RAP 313.36 ECC 1.2805
   C3 17.045 VHL 4.129 DLA
   ENCH AZMTH LNCH TIME L-I TIME
90.00 1 15 28 2466.03
                                              INJ LAT
                                                           INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        1 56 34
                                                 -24.77
                                                               58.06
                                                                           167.77
                                                                                            104.18
                                                                                                                       1866.0
                                                                                                                                                      50.08
                                4531.83
                                                  10.53
                                                                             164.01
                                                                                             63.56
                                                                                                       16 48 29
                                                                                                                         3931.8
                                                                                                                                         6.90
                                                                                                                                                     183.92
       90.00
                  15 32 58
                                                               190.71
                   2 41 19 2189.18
                                                 -25.86
                                                                37.38
                                                                             167.45
                                                                                            105.55
                                                                                                       3 17 48
                                                                                                                         1589.2
                                                                                                                                       -23.47
                                                                                                                                                      29.39
      100.00
                  16 49 48
                                 4283.91
                                                 11.54
                                                               171.96
                                                                             163.49
                                                                                             62.23
                                                                                                       18 1 12
                                                                                                                         3683.9
                                                                                                                                         7.73
                                                                                                                                                     165.24
      100.00
                                                                                                       4 32 11
                   3 59 48 1943.59
                                                 -28.75
                                                                17.71
                                                                            166.43
                                                                                            109.34
      110.00
                                                                                             58.56 18 56 11
                  17 47 49
                                 4102.27
                                                 14.17
                                                               156.64
                                                                             161.96
                                                                                                                         3502.3
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 3979.5 SGR 139.6 SG3 347.5
RRT -.3765 RRF -.2551 RTF .9306
                                                                                                                     ST 1605.3 SR 101.0 55 733.7
    TOE 1.0757 TRA-1.3811 TC3-3.7986 BAU .8659
                                                                                                                    CRT .8701 CRS -.9714 CST -.9602
LSA 1757.4 MSA 192.7 SSA 7.6
   RDE .0721 RRA .0326 RC3 .1040 FAU .08416
FDE 1.3329 FRA -.3896 FC3-4.2745 BSP 12524
                                                                  SCB 3981.9 R23 -.1032 R13 -.9305
```

SG1 3979.8 SG2 129.3 THA 179.24

EL1 1607.7 EL2 49.7 ALF

3.14

BOE 1.0782 BRA 1.3814 BC3 3.8000 FSP -1162

ARRIVAL CATE MAY 3 1966

LAUNCH DATE DEC 12 1965

```
DISTANCE 418.003
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.512 GAL -4.88 AZL 86.10 HCA 201.54 SHA 126.96 ECC .18069 INC 3.8964 VI 30.250 RP 108.85 LAP -1.43 LOP 281.25 VP 37.327 GAP 6.43 AZP 93.63 TAL 203.19 TAP 44.73 RCA 104.02 APO 149.90 V2 34.816
   RC 133.236 GL 27.30 GP -4.34 ZAL 121.92 ZAP 150.45 ETS 350.30 ZAE 132.53 ETE 184.95 ZAC 48.46 ETC 154.64 CLP-150.75
  PLANETOCENTRIC CONIC
                                                                                                    2.07 VHP 4.669 DPA -24.47 RAP 314.89 ECC 1.2715
   C3 16.494 VHL 4.061 DLA 9.40 RAL 308.10 RAD 6567.7 VEL 11.742 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                104.21 2 1 57
63.41 16 56 54
                                                                              169.06
                                                                                                                                             -22.56
                   1 20 52 2465.12
15 41 36 4517.66
                                                   -24.75
                                                                  58.00
       90.00
                                                                                                                                                              183.12
                                                                                                                               3917.7
                                                                                                                                                6.45
                                                                                165.30
                                                    10.10
                                                                  189.90
        90.00
                                                                                                 1587.9
                                                                                                                                               -23.44
                                                                                                                                                               29.31
                                                                                 168.74
                    2 46 49 2187.91
                                                  -25.83
                                                                   37.29
      100.00
                                                                                                                               3670.1
                                                                                                                                                              164.47
                                                                                                                                                7.27
                   16 58 20
                                  4270.11
                                                    11.10
                                                                  171.17
                                                                                 164.78
      100.00
                                                                                                                               1341.5
                                                                                                                                               -25.78
                                                                                                                                                                9.60
                                                                                 167.72
                                                  -28.70
                                                                   17.57
                    4 5 32 1941.54
      110.00
                                                                                                                              3489.2
                                                                                                                                                9.43
                                                                                                                                                              149.44
                                                                                 163.25
                                                                  155.92
                   17 56 6
                                  4089.24
                                                   13.71
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1632.1 SR 109.3 55 715.3
CRT .8870 CRS -.9789 CST -.9596
                                                                     SGT 4108.5 SGR 161.9 SG3 337.8
RRT -.4276 RRF -.3448 RTF .9309
SGB 4111.7 R23 -.0595 R13 -.9309
    TDE 1.0799 TRA-1.3451 TC3-4.0570 BAU .8952
    RDE .0770 RRA .0278 RC3 .1395 FAU .08116
                                                                                                                           LSA 1775.1 MSA 190.9 55A
                                                                                                                           LSA 1775.1 MSA 190.9 SSA 9.1
EL1 1635.0 EL2 50.4 ALF 3.40
                                                                                                                                                                  9.1
   FDE 1.2511 FRA -.3140 FC3-4.2598 BSP 13177
BDE 1.0826 BRA 1.3454 BC3 4.0594 FSP -1167
                                                                      SG1 4109.1 SG2 146.3 THA 179.03
                                                                                                                                       ARRIVAL DATE MAY 5 1966
                                                                          FLIGHT TIME 144.00
LAUNCH DATE DEC 12 1965
                                                                          DISTANCE 423.910
   RL 147.28 LAL -.00 LOL 79.76 VL 27.463 GAL -4.61 A7L 86.18 MCA 204.70 SMA 126.64 ECC .18127 INC 3.8243 V1 30.250 RP 108.87 LAP -1.60 LOP 284.41 VP 37.285 GAP 6.66 A7P 93.48 TAL 201.70 TAP 46.40 RCA 103.68 APO 149.59 V2 34.809 RC 135.553 GL 27.14 GP -3.72 TAL 120.23 TAP 151.96 ETS 351.07 TAE 132.15 ETE 184.20 TAC 49.81 ETC 155.92 CLP-152.19
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 25 14 2470.34 -24.84 58.36 170.53 104.05 2 6 24 1870.3 -22.67 50.36 90.00 15 51 51 4498.97 9.53 188.82 166.72 63.21 17 6 50 3899.0 $ 486 142.06
                                                                                                               3 27 55
                                                                                                                                1592.5
                  2 51 23 2192.48
17 8 23 4252.03
4 10 34 1944.70
                                                                                                  105.44
                                                   -25.92
                                                                    37.61
                                                                                 170.22
       100.00
                                                                                                 61.86 18 19 15
109.31 4 42 58
                                                                                                                                3652.0
                                                                                                                                                 6.68
                                                                                                                                                               163.47
                                                                                 166.20
                                                    10.52
                                                                   170.15
       100.00
                                                                                                                                1344.7
                                                                                                                                                -25.87
                                                                                                                                                                9.81
      110.00
                                                   -28.77
                                                                   17.79
                                                                                 169.21
                                                                                                   58.15 19 13 34
                                                                                                                                3472.6
                                                                                                                                                 8.81
                                                                                                                                                               148.55
                                                                  155.00
                   18 5 41 4072.61
                                                  13.11
                                                                                 164.67
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1710.5 SR 119.7 SS 734.4
CRT .9128 CR5 -.9883 CST -.9597
                                                                      SGT 4175.8 SGR 184.0 SG3 321.3
RRT -.4262 RRF -.3518 RTF .9250
    TOE 1.1283 TRA-1.2685 TC3-4.2243 BAU .9052
    ROE .0833 RRA .0221 RC3 .1704 FAU .07527
                                                                      SGB 4179.8 R23 -. 0476 R13 -. 9249
                                                                                                                            LSA 1855.0 MSA 195.5 SSA 10.0
    FDE 1.2402 FRA -. 1807 FC3-4.0692 BSP 12980
                                                                      SG1 4176.5 SG2 166.4 THA 178.92
                                                                                                                          EL1 1714.0 EL2 48.8 ALF
                                                                                                                                                                 3.66
    BDE 1.1314 BRA 1.2687 BC3 4.2277 FSP -1042
                                                                                                                                      ARRIVAL DATE MAY 7 1966
                                                                           FLIGHT TIME 146.00
LAUNCH DATE DEC 12 1965
                                                                         DISTANCE 429.801
    RL 147.28 LAL __.00 LOL 79.76 VL 27.413 GAL -4.33 A7L 86.23 MCA 207.87 SMA 126.31 ECC .18196 INC 3.7676 VI 30.250
RP 108.88 LAP -1.76 LOP 287.58 VP 37.243 GAP 6.88 A7P 93.33 TAL 200.18 TAP 48.05 RCA 103.33 APO 149.29 V2 34.804
RC 137.863 GL 27.06 GP -3.25 TAL 118.40 TAP 153.39 ETS 351.68 TAE 131.79 ETE 183.61 TAC 51.29 ETC 157.02 CLP-153.57
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.595 VHL 3.949 DLA 10.25 RAL 311.84 RAD 6567.6 VEL 11.704 PTH 2.06 VMP 4.884 DPA -22.50 RAP 318.27 ECC 1.2566
    C3 13.393 VPL 3.949 ULA 1U.23 RAL 311.84 RAD 6567.6 VEL 11.704 PTH Z.U6 VPP 4.884 OPA -Z2.50 RAP 318.27 ECC 1.2566

LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 28 57 2480.11 -25.00 59.03 172.17 103.75 2 10 17 1880.1 -22.86 51.01

90.00 16 3 21 4477.16 8.86 187.57 168.26 63.00 17 17 58 3877.2 5.17 180.83

100.00 2 55 22 2201.38 -26.08 38.22 171.87 105.16 3 32 4 1601.4 -23.74 30.20

100.00 17 19 37 4231.12 9.84 168.96 167.74 61.63 18 30 8 3651.1 5.98 162.30
                                                                                                    61.63 18 30 8
109.06 4 47 41
                                                                                                                                1351.7
                                                                                                  109.06
                    4 15 9 1951.72
18 16 19 4053.54
                                                    -28.93
                                                                    18.27
                                                                                  170.48
       110.00
                                                                                                                                 3453.5
                                                                                                                                                8.10
                                                                                                                                                               147.53
                                                                                                    57,90 19 23 53
                                                                   153.95
                                                                                  166.20
                                                    12.42
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1767.1 SR 131.1 SS 733.0
CRT .9315 CRS -.9930 CST -.9603
                                                                       SGT 4281.2 SGR 204.0 SG3 310.4
RRT -.4169 RRF -.3593 RTF .9237
    TOE 1.1585 TRA-1.2103 TC3-4.4441 BAU .9274
    ROE .0902 RRA .0153 RC3 .1962 FAU .07168
FDE 1.1952 FRA -.0989 FC3-3.9792 BSP 13360
                                                                                                                            LSA 1907.7 MSA 194.2 SSA 11.2
                                                                       568 4286.1 R23 -. 0291 R13 -. 9236
                                                                                                                             ELI 1771.4 ELZ 47.5 ALF 3.96
                                                                       SG1 4282.1 SG2 185.4 THA 178.86
    BOE 1.1620 BRA 1.2103 BC3 4.4484 FSP -1012
                                                                                                                                        ARRIVAL DATE MAY 9 1966
                                                                           FLIGHT TIME 148.00
LAUNCH DATE DEC 12 1965
    RL 147.28 LAL -.00 LOL 79.76 VL 27.364 GAL -4.04 A7L 86.28 MCA 211.03 SMA 125.98 ECC .18275 INC 3.7216 V1 30.250 RP 108.90 LAP -1.92 LOP 290.74 VP 37.202 GAP 7.10 A7P 93.19 TAL 198.64 TAP 49.67 RCA 102.96 APO 149.01 V2 34.799 RC 140.164 GL 27.01 GP -2.87 TAL 116.44 TAP 154.74 ETS 352.17 TAE 131.47 ETE 183.14 TAC 52.88 ETC 157.99 CLP-154.89
                                                                          DISTANCE 435.678
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                      2.06 VHP 4.995 OPA -21.64 RAP 320.07 ECC 1.2506
     C3 15.225 VHL 3.902 DLA 10.82 RAL 313.84 RAD 6567.6 VEL 11.688 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              1893.6
                                                                                                                2 13 47
                                                                                                                                                -23.13
                                                                                  173.98
                                                                                                  103.33
                     1 32 14 2493.61
16 15 59 4452.85
                                                                     59.96
                                                     -25.22
                                                                                                             17 30 12
                                                                                                                                                                179.47
                                                                                                                                 3852.8
                                                                                                                                                   4.39
                                                                                                    62.78
                                                                                  169.94
         90.00
                                                      8.11
                                                                    186.18
                                                                                                                                                 -24.01
                                                                                                                                                                 31.03
                                                                                                                3 35 52
                                                                                                                                  1613.8
                                                                                                   104.76
                                                                                   173.68
                     2 58 59 2213.82
                                                     -26.29
                                                                     39.08
                                                                                                                                                                161.01
                                                                                                                                                  5.20
                                                                                                             18 42 3
                                                                                                                                  3607.9
                                                                                                    61.40
                    17 31 55
                                    4207.87
                                                       9.09
                                                                    167.64
                                                                                  169.41
        100.00
                                                                                                                                                                10.94
                                                                                                                4 52 11
                                                                                                                                 1361.9
                                                                                                                                                -26.33
                     4 19 29 1961.89
18 27 54 4032.56
                                                                                  172.71
                                                                                                   108.69
                                                   -29.15
                                                                     18.98
                                                                                                    108.69 4 52 11
57.64 19 35 6
                                                                                                                                                                146.41
                                                                                                                                                   7.31
                                                                                                                                 3432.6
                                                                                   167.87
                                                                    152.80
        110.00
                                                     11.66
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 1828.6 SR 143.0 SS 732.7
CRT .9478 CRS -.9955 CST -.9614
                                                                        SGT 4386.2 SGR 222.8 SG3 300.2
RRT -.3994 RRF -.3557 RTF .9228
     TOE 1.1928 TRA-1.1464 TC3-4.6615 BAU .9498
     RDE .0973 RRA .0079 RC3 .2185 FAU .06834
FDE 1.1546 FRA -.0240 FC3-3.8860 BSP 13766
BDE 1.1967 BRA 1.1465 BC3 4.6666 FSP -987
                                                                                                                           LSA 1965.8 MSA 192.0 SSA 12.3
ELI 1833.7 EL2 45.5 ALF 4.24
                                                                        SGB 4391.8 R23 -.0149 R13 -.9228
SGI 4387.1 SGZ 204.2 THA 178.84
```

FLIGHT TIME 142.00

R

=

```
LAUNCH DATE DEC 12 1965
                                                                             FLIGHT TIME 150.00
                                                                                                                                          ARRIVAL DATE MAY 11 1966
    HELIOCENTRIC CONIC
                                                                             DISTANCE 441.542
     RL 147.28 LAL -.00 LOL 79.76 VL 27.315 GAL -3.74 AZL 86.32 MCA 214.19 SMA 125.66 ECC .18367 INC 3.6835 V1 30.250 RP 108.91 LAP -2.07 LOP 293.90 VP 37.162 GAP 7.32 AZP 93.05 TAL 197.08 TAP 51.28 RCA 102.58 APO 148.74 V2 34.795
     RC 142.456 GL 26.98 GP -2.57 7AL 114.36 7AP 156.02 ETS 352.58 7AE 131.18 ETE 182.76 7AC 54.56 ETC 158.86 CLP-156.15
    PLANETOCENTRIC CONIC
     C3 14.902 VML 3.860 CLA 11.47 RAL 315.92 RAD 6567.6 VEL 11.674 PTH 2.05 VMP 5.108 OPA -20.81 RAP 321.94 ECC 1.2452
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG IN RT ASC INJ A7MTH INJ TIME PO C57 TIM INJ 2 LAT INJ 2 LONG
90.00 1 35 12 2510.35 -25.47 61.12 175.96 102.80 2 17 2 1910.4 -23.46 53.03
90.00 16 29 39 4426.51 7.28 184.68 171.76 62.56 17 43 26 3826.5 3.55 177.99
100.00 3 2 20 2229.34 -26.56 40.16 175.67 104.25 3 39 29 1629.3 -24.34 32.06
100.00 17 45 12 4182.76 8.27 166.23 171.23 61.17 18 54 55 3582.8 4.36 159.63
110.00 4 23 41 1974.78 -29.43 19.88 174.72 108.23 4 56 36 1374.8 -26.66 11.79
110.00 18 40 21 4010.07 10.84 151.58 169.68 57.38 19 47 11 3410.1 6.46 145.22
    CIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 4483.8 SGR 240.5 SG3 290.0
RRT -.3759 RRF -.3424 RTF .9215
SGB 4490.3 R23 -.0053 R13 -.9215
     TOE 1.2345 TRA-1.0729 TC3-4.8649 BAU .9704
                                                                                                                             ST 1899.3 SR 155.4 55 736.4
CRT .9620 CRS -.9960 CST -.9628
     RDE .1046 RRA -.0000 RC3 .2379 FAU .06495
     FOE 1.1225 FRA .0505 FC3-3.7732 BSP 14099
                                                                                                                             LSA 2034.2 MSA 189.5 SSA 13.4
EL1 1905.2 EL2 42.3 ALF 4.50
                                                                         SG1 4484.7 SG2 222.8 THA 178.84
     BOE 1.2389 BRA 1.0729 BC3 4.8707 FSP -955
LAUNCH DATE DEC 12 1965
                                                                            FLIGHT TIME 152.00
                                                                                                                                          ARRIVAL DATE MAY 13 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 447.393
    RL 147.28 LAL -.00 LOL 79.76 VL 27.265 GAL -3.44 AZL 86.35 HCA 217.36 SMA 125.34 ECC .18470 INC 3.6510 VI 30.250 RP 108.92 LAP -2.21 LOP 297.06 VP 37.123 GAP 7.55 AZP 92.90 TAL 195.50 TAP 52.86 RCA 102.19 APO 148.49 VZ 34.791 RC 144.737 GL 26.95 GP -2.32 ZAL 112.17 ZAP 157.25 ETS 352.92 ZAE 130.93 ETE 182.45 ZAC 56.33 ETC 159.65 CLP-157.36
   PLANETOCENTRIC CONIC
     C3 14.626 VHL 3.824 OLA 12.17 RAL 318.10 RAD 6567.6 VEL 11.662 PTM
                                                                                                        2.05 VMP 5.224 DPA -20.01 RAP 323.85 ECC 1.2407
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 37 58 2530.00
16 44 18 4398.52
                                                     -25.76
                                                                    62.48
                                                                                                                               1930.0
         90.00
                                                                                  178.10
                                                                                                   102.18
                                                                                                                  2 20 8
                                                                                                                                                 -23.83
                                                                                                                                                                   54.35
                                                                                                   62.36 17 57 37
103.64 3 42 59
60.95 19 8 42
107.66 5 0 59
57.13 20 0 3
         90.00
                                                        6.40
                                                                    183.10
                                                                                    173.73
                                                                                                                                   3798.5
                                                                                                                                                    2.65
                                                                                                                                                                  176.43
                    3 5 31 2247.59
17 59 25 4156.16
       100.00
                                                      -26.86
                                                                     41.43
                                                                                   177.82
                                                                                                                                   1647.6
                                                                                                                                                  -24.71
                                                                                                                                                                   33.29
       100.00
                                                       7.39
                                                                    164.74
                                                                                   173.19
                                                                                                                                3556.2
1390.1
                                                                                                                                                    3.46
                                                                                                                                                                  158.16
                    4 27 49 1990.09
18 53 37 3986.43
       110.00
                                                     -29.75
                                                                     20.96
                                                                                   176.90
                                                                                                                                                  -27.05
                                                                                                                                                                   12.81
       110.00
                                                       9.97
                                                                    150.30
                                                                                    171.63
                                                                                                                                  3386.4
                                                                                                                                                     5.57
                                                                                                                                                                  143.97
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        56T 4578.7 5GR 257.2 5G3 280.4

RRT -.3498 RRF -.3248 RTF .9205

SGB 4585.9 R23 .0021 R13 -.9205
    TOE 1.2808 TRA -.9916 TC3-5.0589 BAU .9904
                                                                                                                              ST 1975.7 SR 167.8 SS 741.5
CRT .9736 CRS -.9947 CST -.9646
    ROE .1119 RRA -.0083 RC3 .2544 FAU .06172
                                                                                                                              LSA 2108.7 MSA 186.2 SSA 14.5
EL1 1982.5 EL2 38.2 ALF 4.73
    FOE 1.0945 FRA .1209 FC3-3.6533 BSP 14427
    BOE 1.2857 BRA .9916 BC3 5.0653 FSP -925
                                                                        SG1 4579.6 SG2 240.9 THA 178.87
LAUNCH DATE DEC 12 1965
                                                                           FLIGHT TIME 154.00
                                                                                                                                         ARRIVAL DATE MAY 15 1966
                                                                           DISTANCE 453.231
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 27.216 GAL -3.12 AZL 86.38 HCA 220.52 SMA 125.03 ECC .18586 INC 3.6230 V1 30.250 RP 108.93 LAP -2.35 LOP 300.22 VP 37.084 GAP 7.77 AZP 92.76 TAL 193.91 TAP 54.43 RCA 101.79 APO 148.27 V2 34.788 RC 147.008 GL 26.91 GP -2.12 TAL 109.87 ZAP 158.42 ETS 353.21 ZAE 130.71 ETE 182.18 ZAC 58.15 ETC 160.37 CLP-158.52
   PLANETOCENTRIC CONIC
    C3 14.397 VHL 3.794 DLA 12.93 RAL 320.39 RAD 6567.6 VEL 11.653 PTH 2.05 VMP 5.343 DPA -19.21 RAP 325.81 ECC 1.2369
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 40 35 2552.34
16 59 53 4369.18
3 8 37 2268.38
18 14 32 4128.36
        90.00
                                                    -26.07
                                                                    64.04
                                                                                  180.41
                                                                                                101.45
                                                                                                               2 23 7
                                                                                                                              1952.3 -24.23 55.86
        90.00
                                                      5.47
                                                                   181.44
                                                                                   175.86
                                                                                                    62.17
                                                                                                               18 12 42
                                                                                                                                  3769.2
                                                                                                                                                   1.71
                                                                                                                                                                 174.79
                                                                                                   102.94 3 46 26
60.75 19 23 20
       100.00
                                                    -27.18
                                                                    42.89
                                                                                   180.14
                                                                                                                                  1668.4
                                                                                                                                                 -25.13
                                                                                                                                                                 34.69
       100.00
                                                      6.47
                                                                   163.19
                                                                                   175.31
                                                                                                                                  3528.4
                                                                                                                                                   2.52
                                                                                                                                                                 156.63
                     4 31 58 2007.62
19 7 41 3961.89
                                                                                                   107.01 5 5 25
56.90 20 13 43
       110.00
                                                    -30.11
                                                                    22.20
                                                                                   179.25
                                                                                                                                  1407.6
                                                                                                                                                 -27.49
                                                                                                                                                                  13.99
       110.00
                    19 7 41
                                                      9.06
                                                                    148.98
                                                                                   173.73
                                                                                                                                  3361.9
                                                                                                                                                  4.64
                                                                                                                                                                 142.68
   DIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    TOE 1.3342 TRA -.8993 TC3-5.2318 BAU 1.0083
                                                                        SGT 4665.1 SGR 272.9 SG3 270.8
                                                                                                                             ST 2051.1 SR 180.3 55 749.6
                                                                       RRT -.3209 RRF -.3022 RTF .9191
SG8 4673.0 R23 .0067 R13 -.9191
                                                                                                                             CRT .9828 CRS -.9917 CST -.9666
    ROE .1192 RRA -.0168 RC3 .2680 FAU .05844
                                                                                                                            LSA 2193.0 MSA 182.8 SSA 15.4
EL1 2068.7 EL2 33.1 ALF 4.92
    FOE 1.0725 FRA .1914 FC3-3.5142 BSP 14680
    BOE 1.3396 BRA .8994 BC3 5.2386 FSP -889
                                                                       SG1 4665.9 SG2 258.4 THA 178.92
LAUNCH DATE DEC 12 1965
                                                                            FLIGHT TIME 156.00
                                                                                                                                         ARRIVAL DATE MAY 17 1966
  HELIOCENTRIC CONTC
                                                                           DISTANCE 459.056
    RL 147.28 LAL -.00 LOL 79.76 VL 27.167 GAL -2.79 AZL 86.40 MCA 223.68 SMA 124.72 ECC .18717 INC 3.5983 V1 30.250 RP 108.94 LAP -2.48 LOP 303.39 VP 37.046 GAP 7.99 AZP 92.60 TAL 192.29 TAP 55.97 RCA 101.37 APO 148.06 V2 34.786 RC 149.266 GL 26.85 GP -1.95 ZAL 107.47 ZAP 159.56 ETS 353.46 ZAE 130.52 ETE 181.96 ZAC 60.04 ETC 161.03 CLP-159.64
  PLANETOCENTRIC CONIC
    C3 14.217 VHL 3.771 DLA 13.74 RAL 322.77 RAD 6567.6 VEL 11.645 PTH 2.04 VHP 5.464 DPA -18.41 RAP 327.80 ECC 1.2340
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     1 43 6 2577.20
                                                    -26.40
                                                                   65.79
                                                                                 182.89
                                                                                                100.64
                                                                                                                2 26 3
                                                                                                                                 1977.2
                                                                                                                                                -24.66
                                                                                                                                                                 57.55
        90.00
                   17 16 22 4338.76
                                                      4.50
                                                                   179.73
                                                                                   178.15
                                                                                                   62.01 18 28 41
                                                                                                                                  3738.8
                                                                                                                                                    .72
                                                                                                                                                                 173.09
                  3 11 41 2291.54
18 30 29 4099.65
      100.00
                                                    -27.53
                                                                    44.53
                                                                                   182.64
                                                                                                   102.14
                                                                                                                3 49 52
                                                                                                                                  1691.5
                                                                                                                                                  -25.57
                                                                                                                                                                  36.27
                                                                                                    60.57 19 38 49
       100.00
                                                      5.51
                                                                   161.60
                                                                                   177.60
                                                                                                                                  3499.7
                                                                                                                                                   1.55
                                                                                                                                                                 155.05
                                                                                                   106.26 5 9 57
56.68 20 28 6
       110.00
                     4 36 10 2027.20
                                                    -30.49
                                                                    23.59
                                                                                  181.78
                                                                                                                                  1427.2
                                                                                                                                                -27.96
                                                                                                                                                                  15.31
      110.00
                                                                                                                                                  3.68
                   19 22 29 3936.76
                                                    8.12
                                                                  147.64
                                                                                  175.99
                                                                                                                                3336.8
                                                                                                                                                               141.37
                                                                      MID-COURSE EXECUTION ACCURACY
5GT 4753.0 5GR 287.8 5G3 262.0 5T 2147.5 5R 192.9 5S 756.0
RRT -.2923 RRF -.2802 RTF .9184 CRT .9894 CRS -.9875 CST -.9687
SGB 4761.7 R23 .0114 R13 -.9184 LSA 2277.8 M5A 178.5 5SA 16.4
5G1 4753.7 5G2 275.1 THA 178.98 EL1 2156.0 EL2 27.8 ALF 5.08
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.3891 TRA -.8016 TC3-5.3968 BAU 1.0271
    ROE .1266 RRA -.0254 RC3 .2788 FAU .05548
FOE 1.0498 FRA .2547 FC3-3.3782 BSP 14984
BDE 1.3948 BRA .8020 BC3 5.4040 FSP -862
```

ARRIVAL DATE HAY 19 1966

LAUNCH DATE DEC 12 1965

```
DISTANCE 464.866
   RL 147.28 LAL -.00 LOL 79,76 VL 27.119 GAL -2.45 AZL 86.42 HCA 226.84 SHA 124.41 ECC .18861 INC 3.5763 V1 30.250 RP 108.94 LAP -2.61 LOP 306.55 VP 37.009 GAP 8.22 AZP 92.45 TAL 190.66 TAP 57.50 RCA 100.94 APO 147.87 V2 34.785 RC 151.511 GL 26.76 GP -1.80 TAL 104.96 ZAP 160.65 ETS 353.68 ZAE 130.36 ETE 181.77 ZAC 61.98 ETC 161.64 CLP-160.73
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 14.089 VML 3.754 DLA 14.57 RAL 325.25 RAD 6567.6 VEL 11.639 PTH 2.04 VMP 5.588 DPA -17.60 RAP 329.82 ECC 1.2319
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        67.72
                                                                                       185.56
                                                                                                         99.72
                                                                                                                      2 28 59
                                                                                                                                        2004.5
                                                                                                                                                        -25.11
                                                       -26.73
        90.00
                     1 45 35 2604.46
17 33 43 4307.52
                                                                                                                                                                          171.35
                                                                                                                                         3707.5
                                                                                                                                                            -.28
                                                                                                          61.88
                                                                                                                     18 45 31
                                                                       177.98
                                                                                       180.62
                                                         3.50
        90.00
                                                                                                                                                                           38.01
                                                                                                                                                          -26.04
                                                                        46.33
                                                                                       185.32
                                                                                                         101.25
                                                                                                                       3 53 21
                                                                                                                                         1716.9
                    3 14 44 2316.93
18 47 15 4070.29
                                                       -27.88
      100.00
                                                                                                                                                            . 5 5
                                                                                                                                                                          153.44
                                                                                                          60.42 19 55 5
                                                                                                                                         3470.3
                                                                                       180.06
                                                                       159.98
       100.00
                                                          4.53
                                                                                                                                                                           16.78
                                                                                                        105.42 5 14 36
56.49 20 43 12
                                                                                                                                                          -28.47
                                                                                                                                         1448.7
                                                                        25.14
                                                                                       184.50
                      4 40 27 2048.72
                                                      -30.89
      110.00
                                                                                                                                                            2.71
                                                                                                                                                                          140.03
                                                                                                                                         3311.3
                                                                                       178.43
                                                                       146.29
                     19 38 1
                                     3911.27
                                                        7.17
       110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2238.0 SR 205.4 SS 762.5
CRT .9938 CRS -.9821 CST -.9708
                                                                           SCT 4838.8 SCR 301.8 SG3 253.6
RRT -.2633 RRF -.2575 RTF .9181
SCB 4848.2 R23 .0154 R13 -.9181
    TOE 1.4479 TRA -.6957 TC3-5.5445 BAU 1.0458
   ROE .1341 RRA -.0340 RC3 .2867 FAU .05268
FOE 1.0289 FRA .3145 FC3-3.2372 BSP 15291
                                                                                                                                    LSA 2366.8 MSA 173.8 SSA 17.3
EL1 2247.3 EL2 22.8 ALF 5.21
                                                                            SG1 4839.4 SGZ 291.1 THA 179.06
    BOE 1.4541 BRA .6965 BC3 5.5519 FSP -837
                                                                                                                                                 ARRIVAL DATE MAY 21 1966
                                                                                FLIGHT TIME 160.00
LAUNCH DATE DEC 12 1965
                                                                                DISTANCE 470.663
  HELIOCENTRIC CONIC
   RL 147.28 LAL -.00 LOL 79.76 VL 27.070 GAL -2.10 AZL 86.44 HCA 230.00 SMA 124.10 ECC .19022 INC 3.5566 VI 30.250 RP 108.94 LAP -2.72 LOP 309.71 VP 36.973 GAP 8.45 AZP 92.29 TAL 189.01 TAP 59.02 RCA 100.50 APO 147.71 V2 34.784 RC 153.743 GL 26.63 GP -1.67 ZAL 102.36 ZAP 161.70 ETS 353.87 ZAE 130.22 ETE 181.61 ZAC 63.97 ETC 162.20 CLP-161.77
   PLANETOCENTRIC CONIC

C3 14.018 VML 3.744 DLA 15.43 RAL 327.84 RAO 6567.6 VEL 11.636 PTH 2.04 VMP 5.716 DPA -16.78 RAP 331.86 ECC 1.2307

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 48 2 2634.02 -27.05 69.82 188.40 98.71 2 31.56 2034.0 -25.57 61.47

90.00 17 51 54 4275.72 2.48 176.21 183.27 61.78 19 3 10 3675.7 -1.31 169.58

100.00 3 17 50 2344.44 -28.23 48.30 188.18 100.27 3 56.54 1744.4 -26.52 39.92

100.00 19 4 48 4040.53 3.53 158.34 182.69 60.30 20 12 8 3440.5 -.45 151.81

110.00 4 44 53 2072.05 -31.30 26.84 187.40 104.50 5 19 25 1472.0 -28.99 18.39
   PLANETOCENTRIC CONIC
                                                                                                           104.50 5 19 25
56.32 20 58 59
                                                                        144.93
                                                                                        181.03
                                                                                                                                          3285.7
      110.00
                    19 54 14
                                     3885.69
                                                         6.20
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2331.9 SR 218.0 SS 769.0
CRT .9961 CRS -.9758 CST -.9729
                                                                            SGT 4918.8 SGR 315.1 SG3 245.4
    TOE 1.5107 TRA -.5805 TC3-5.6659 BAU 1.0632
                                                                            RRT -.2338 RRF -.2331 RTF .9178
SGB 4928.9 R23 .0181 R13 -.9178
    RDE .1418 RRA -. 0425 RC3 .2915 FAU .04991
                                                                                                                                      LSA 2459.2 MSA 169.2 SSA 18.1
    FDE 1.0099 FRA .3725 FC3-3.0828 BSP 15586
                                                                                                                                      EL1 2341.9 EL2 19.2 ALF 5.32
                                                                            SG1 4919.3 SG2 306.3 THA 179.14
    BDE 1.5174 BRA .5820 BC3 5.6734 FSP -813
                                                                                                                                                 ARRIVAL DATE MAY 23 1966
                                                                                 FLIGHT TIME 162.00
TAUNCH DATE DEC 12 1965
                                                                                DISTANCE 476.445
    RL 147.28 LAL -.00 LOL 79.76 VL 27.022 GAL -1.74 AZL 86.46 MCA 233.17 SMA 123.80 ECC .19199 INC 3.5385 V1 30.250 RP 108.94 LAP -2.83 LOP 312.87 VP 36.938 GAP 8.68 AZP 92.12 TAL 187.35 TAP 60.52 RCA 100.03 APO 147.57 V2 34.784 RC 155.962 GL 26.45 GP -1.56 ZAL 99.66 ZAP 162.72 ETS 354.02 ZAE 130.11 ETE 181.48 ZAC 65.99 ETC 162.71 CLP-162.79
   HELTOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 14.006 VHL 3.742 DLA 16.31 RAL 330.53 RAD 6567.6 VEL 11.636 PTH 2.04 VHP 5.847 DPA -15.95 RAP 333.93 ECC 1.2305
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       97.62 2 34 57
61.72 19 21 36
                                                                                                                                       2065.7
                                                                                                                                                           -26.02
                                                                                    191.43
                      1 50 31 2665.74
18 10 52 4243.64
3 21 0 2373.94
                                                        -27.36
                                                                        72.10
         90.00
                                                                                                                                                           -2.34
                                                                                                                                                                            167.79
                                                                                                                                          3643.6
                                                                        174.41
                                                                                        186.10
                                                          1.45
         90.00
                                                                                                                                                           -27.00
                                                                                                                                                                             41.98
                                                                                                                                          1773.9
                                                                          50.43
                                                                                       191.22
                                                                                                           99.20
                                                                                                                       4 0 34
                                                        -28.57
        100.00
                                                                                                           60.20 20 29 55
                                                                                                                                          3410.7
                                                                                                                                                            -1.47
                                                                                                                                                                            150.17
                                                                        156.69
                                                                                        185.50
                                                          2.52
        100.00
                     19 23 4
                                     4010.67
                                                                                                                                                           -29.53
                                                                                                                                                                            20.14
                    4 49 30 2097.06
20 11 4 3860.32
                                                                                                         103.49 5 24 27
56.17 21 15 24
                                                                                                                                          1497.1
                                                        -31.71
                                                                          28.67
                                                                                        190.49
        110.00
                                                                                                                                          3260.3
                                                                                                                                                                           137.37
                                                                        143.60
                                                                                        183.81
                                                          5.24
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2427.6 SR 230.5 SS 774.8
CRT .9965 CRS -.9689 CST -.9750
                                                                            SCT 4997.3 SCR 327.6 SC3 237.6
RRT -.2044 RRF -.2086 RTF .9180
SCB 5008.0 R23 .0206 R13 -.9180
     TOE 1.5770 TRA -.4571 TC3-5.7639 BAU 1.0807
     ROE .1497 RRA -.0509 RC3 .2933 FAU .04733
FOE .9919 FRA .4268 FC3-2.9253 BSP 15862
BOE 1.5841 BRA .4599 BC3 5.7714 FSP -789
                                                                                                                                     LSA 2553.3 MSA 164.5 S5A 18.9
EL1 2438.5 EL2 19.1 ALF 5.41
                                                                             SG1 4997.8 SG2 320.6 THA 179.23
                                                                                                                                                  ARRIVAL DATE MAY 25 1966
                                                                                 FLIGHT TIME 164.00
LAUNCH DATE DEC 12 1965
                                                                                 DISTANCE 482.212
   HELIOCENTRIC CONIC
     RL 147.28 LAL -.00 LOL 79.76 VL 26.974 GAL -1.36 A7L 86.48 MCA 236.33 SMA 123.50 ECC .19394 INC 3.5219 V1 30.250 RP 108.94 LAP -2.93 LOP 316.04 VP 36.904 GAP 8.92 A7P 91.95 TAL 185.68 TAP 62.00 RCA 99.55 APO 147.45 V2 34.785 RC 158.188 GL 26.22 GP -1.46 7AL 96.89 ZAP 163.70 ETS 354.16 ZAE 130.02 ETE 181.36 ZAC 68.06 ETC 163.19 CLP-163.77
   PLANETOCENTRIC CONIC
     C3 14.060 VHL 3.750 DLA 17.19 RAL 333.31 RAD 6567.6 VEL 11.638 PTH 2.04 VHP 5.983 DPA -15.10 RAP 336.01 ECC 1.2314
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 53 2 2699.52
18 30 34 4211.55
3 24 16 2405.30
19 42 1 3981.00
                                                                                                                        2 38 2
                                                                                                                                           2099.5
                                                                                                                                                          -26.46
                                                                         7,4.53
                                                                                       194.63
                                                                                                          96.43
                                                         -27.64
         90.00
                                                                                                           61.69 19 40 46
98.05 4 4 22
60.14 20 48 22
                                                                                                                                                                            165.99
                                                                                                                                           3611.6
                                                                                                                                                             -3.38
                                                                         172.62
                                                                                         189.11
                                                            .41
         90.00
                                                                                                                                                                             44.19
                                                                                                                                           1805.3
                                                                                                                                                            -27.47
                                                                          52.70
                                                                                         194.45
                                                         -28.89
        100.00
                                                                                                                                                                            148.54
                                                                                                                                           3381.0
                                                                                                                                                            -2.47
                                                                         155.06
                                                                                         188.50
                        19 42 .
4 54 18 2123.0-
-- 29 3835.44
                                                           1.51
        100.00
                                                                                                           102.39 5 29 42
56.06 21 32 24
                                                                                                                                           1523.6
                                                                                                                                                           -30.08
                                                                                                                                                                              22.02
                                                                          30.64
                                                                                         193.77
                                                                                                          102.39
                                                         -32.12
        110.00
                                                                                                                                           3235.4
                                                                                                                                                              -.19
                                                                                                                                                                            136.08
                                                                         142.29
                                                                                         186.76
                      20 28 29
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2530.4 SR 243.1 55 783.5

CRT .9953 CRS -.9614 CST -.9771

LSA 2655.1 MSA 160.6 SSA 19.5

EL1 2541.9 EL2 23.3 ALF 5.46
                                                                           SGT 5066.8 SGR 339.2 SG3 230.0

RRT -.1734 RRF -.1802 RTF .9175

SGB 5078.1 R23 .0208 R13 -.9175

SGI 5067.1 SG2 334.0 THA 179.33
     TOE 1.6507 TRA -.3201 TC3-5.8198 BAU 1.0953
     ROE .1580 RRA -.0590 RC3 .2918 FAU .04463
FDE .9794 FRA .4832 FC3-2.7481 BSP 16058
BDE 1.6582 BRA .3255 BC3 5.8271 FSP -760
```

FLIGHT TIME 158.00

```
LAUNCH DATE DEC 12 1965
                                                                                    FLIGHT TIME 166.00
                                                                                                                                                       ARRIVAL DATE MAY 27 1966
                                                                                   DISTANCE 487.963
    HELIOCENTRIC CONIC
     RL 147.28 LAL -.00 LOL 79.76 VL 26.927 GAL -.97 A7L 86.49 MCA 239.49 SMA 123.21 ECC .19607 INC 3.5065 V1 30.250 RP 108.94 LAP -3.02 LOP 319.20 VP 36.871 GAP 9.16 A7P 91.78 TAL 183.99 TAP 63.48 RCA 99.05 APO 147.37 VZ 34.787 RC 160.359 GL 25.93 GP -1.38 7AL 94.04 7AP 164.66 ETS 354.26 7AE 129.95 ETE 181.26 7AC 70.16 ETC 163.63 CLP-164.72
    PLANETOCENTRIC CONIC
     C3 14.185 VHL 3.766 DLA 18.07 RAL 336.19 RAD 6567.6 VEL 11.643 PTH 2.04 VHP 6.124 DPA -14.24 RAP 338.11 ECC 1.2335
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 55 38 2735.11e
1 55 38 2735.11e
18 50 54 4179.81
3 27 41 2438.33
20 1 33 3951.88
4 59 21 2151.58
20 46 23 3811.40
                                                                                                            95.16 2 41 14
61.69 20 0 34
                                                                                                                                            2135.2
                                                                                          198.01
          90.00
                                                          -27.88
                                                                            77.11
                                                                                                                                                               -26.87
                                                                                                                                                                                   68.58
                                                            -.61
          90.00
                                                                           170.86
                                                                                           192.31
                                                                                                                                               3579.8
                                                                                                                                                                 -4.39
                                                                                                                                                                                  164.21
                                                                                                            96.81 4 8 20
60.11 21 7 24
101.21 5 35 12
55.96 21 49 54
                                                          -29.18
                                                                                           197.86
        100.00
                                                                            55.12
                                                                                                                                              1838.3
                                                                                                                                                                -27.93
                                                                                                                                                                                   46.54
        100.00
                                                     -32.51
                                                              .52
                                                                           153.47
                                                                                           191.67
                                                                                                                                               3351.9
                                                                                                                                                                 -3.46
                                                                                                                                                                                  146.94
                                                                                          197.24
        110.00
                                                                            32.72
                                                                                                                                              1551.6
                                                                                                                                                                -30.62
                                                                                                                                                                                  24.01
                                                                                                                                                                -1.11
        110.00
                                                                          141.03
                                                                                           189.89
                                                                                                                                               3211.4
                                                                                                                                                                                 134.82
                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SCT 5137.8 SGR 350.1 SG3 222.6

RRT -.1441 RRF -.1547 RTF .9181

SGB 5149.8 R23 .0220 R13 -.9181

SGI 5138.1 SG2 346.5 THA 179.43
     TOE 1.7226 TRA -.1782 TC3-5.8547 BAU 1.1116
                                                                                                                                         ST 2625.2 SR 255.8 SS 787.2
CRT .9928 CRS -.9538 CST -.9789
     ROE .1668 RRA -.0667 RC3 .2873 FAU .04223
FOE .9627 FRA .5330 FC3-2.5771 BSP 16341
BDE 1.7306 BRA .1903 BC3 5.8617 FSP -741
                                                                                                                                          LSA 2748.1 MSA 156.6 SSA 20.1
                                                                                                                                           EL1 2637.5 EL2 30.4 ALF 5.53
LAUNCH DATE DEC 12 1965
                                                                                    FLIGHT TIME 168.00
                                                                                                                                                        ARRIVAL DATE MAY 29 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 493.697
    RL 147.28 LAL -.00 LOL 79.76 VL 26.880 GAL -.57 ATL 86.51 MCA 242.65 SMA 122.92 ECC .19842 INC 3.4921 V1 30.250 RP 108.93 LAP -3.10 LOP 322.37 VP 36.838 GAP 9.41 ATP 91.61 TAL 182.30 TAP 64.95 RCA 98.53 APO 147.31 V2 34.789 RC 162.536 GL 25.57 GP -1.30 TAL 91.13 TAP 165.60 ETS 354.34 TAE 129.90 ETE 181.18 TAC 72.28 ETC 164.04 CLP-165.66
   PLANETOCENTRIC CONIC
    C3 14.389 VHL 3.793 OLA 18.93 RAL 339.15 RAO 6567.6 VEL 11.652 PTH 2.05 VHP 6.270 DPA -13.36 RAP 340.22 ECC 1.2368

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 58 21 2772.52 -28.08 79.82 201.56 93.81 2 44 34 2172.5 -27.26 71.25

90.00 19 11 48 4148.75 -1.62 169.12 195.68 61.73 20 20 57 3548.7 -5.38 162.47

100.00 3 31 17 2472.86 -29.43 57.65 201.44 95.50 4 12 30 1872.9 -28.36 49.01

100.00 20 21 34 3923.64 -.43 151.92 195.03 60.11 21 26 58 3323.6 -4.41 145.38

110.00 5 4 39 2180.74 -32.87 34.92 200.89 99.96 5 41 0 1580.7 -31.15 26.12
                                                                                                               61.73 20 20 57
95.50 4 12 30
60.11 21 26 58
99.96 5 41 0
55.90 22 7 50
        110.00
                     21 4 41
                                                            2.51
                                       3788.53
                                                                          139.83
                                                                                           193.19
                                                                                                                                               3188.5
                                                                                                                                                                 -1.98
                                                                                                                                                                                 133.63
    DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SGT 5204.6 SGR 360.3 SG3 215.7
RRT -.1150 RRF -.1299 RTF .9190
     TOE 1.7963 TRA -. 0255 TC3-5.8542 BAU 1.1274
                                                                                                                                         5T 2716.5 SR 268.6 SS 788.6
CRT .9892 CRS -.9458 CST -.9806
     ROE .1762 RRA -.0739 RC3 .2797 FAU .03996
                                                                               SG8 5217.1 R23 .0238 R13 -.9190
SG1 5204.8 SG2 357.9 THA 179.54
                                                                                                                                         LSA 2837.2 MSA 153.4 SSA 20.5
EL1 2729.5 EL2 39.1 ALF 5.59
    FOE .9453 FRA .5819 FC3-2.4045 BSP 16614
BOE 1.8049 BRA .0782 BC3 5.8609 FSP -722
LAUNCH DATE DEC 12 1965
                                                                                   FLIGHT TIME 170.00
                                                                                                                                                      ARRIVAL DATE MAY 31 1966
                                                                                  DISTANCE 499.412
    RL 147.28 LAL -.00 LOL 79.76 VL 26.833 GAL -.15 AZL 86.52 MCA 245.81 SMA 122.64 ECC .20098 INC 3.4784 V1 30.250 RP 108.92 LAP -3.17 LOP 325.53 VP 36.807 GAP 9.67 AZP 91.43 TAL 180.59 TAP 66.40 RCA 97.99 APO 147.28 VZ 34.792 RC 164.699 GL 25.15 GP -1.24 ZAL 88.18 ZAP 166.51 ETS 354.39 ZAE 129.87 ETE 181.11 ZAC 74.44 ETC 164.42 CLP-166.57
    PLANETOCENTRIC CONIC
    C3 14.678 VHL 3.831 DLA 19.77 RAL 342.18 RAD 6567.6 VEL 11.665 PTH 2.05 VMP 6.422 DPA -12.47 RAP 342.34 ECC 1.2416
    UNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 1 13 2811.36 -28.22 82.65 205.27 92.40 2 48 4 2211.4 -27.59 74.04
         90.00
                     19 33 9 4118.75
                                                           -2.58
                                                                          167.45
                                                                                           199.23
                                                                                                              61.79
                                                                                                                         20 41 48
                                                                                                                                              3518.8
                                                                                                                                                                 -6.33
                                                                                                                                                                                 160.78
       100.00
                       3 35 5 2508.66
                                                        -29.63
                                                                            60.29
                                                                                           205.18
                                                                                                              94.12
                                                                                                                         4 16 54
                                                                                                                                             1908.7
                                                                                                                                                                -28.75
                                                                                                              60.14 21 46 55
       100.00
                     20 41 58
                                      3896.68
                                                          -1.35
                                                                         150.44
                                                                                           198.55
                                                                                                                                              3296.7
                                                                                                                                                                -5.31
                                                                                                                                                                                 143.89
                       5 10 15 2210.90
                                                                                                                         5 47 6
       110.00
                                                         -33.20
                                                                            37.21
                                                                                           204.71
                                                                                                              98.64
                                                                                                                                              1610.9
                                                                                                                                                                -31.65
                                                                                                              55.85 22 26 4
                     21 23 17
                                                         1.70
                                                                                           196.65
                                                                                                                                              3167.2
                                                                                                                                                                -2.79
       110.00
                                                                         138.72
                                       3767.21
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5280.6 SGR 369.6 SG3 209.7
RRT -.0874 RRF -.1078 RTF .9224
SGB 5293.5 R23 .0269 R13 -.9224
    TOE 1.8690 TRA .1297 TC3-5.8407 BAU 1.1473
                                                                                                                                         ST 2799.0 SR 281.4 55 787.1
    RDE .1864 RRA -.0805 RC3 .2692 FAU .03827
FOE .9271 FRA .6213 FC3-2.2575 B9P 17053
BDE 1.8783 BRA .1527 BC3 5.8469 FSP -724
                                                                                                                                        CRT .9850 CRS -.9386 CST -.9823
                                                                                                                                        LSA 2917.3 MSA 149.9 SSA 20.8
EL1 2812.7 EL2 48.4 ALF 5.66
                                                                               SG1 5280.7 SG2 368.2 THA 179.65
LAUNCH DATE DEC 12 1965
                                                                                   FLIGHT TIME 172.00
                                                                                                                                                       ARRIVAL DATE JUN 2 1966
                                                                                 01STANCE 505.109
   HELIOCENTRIC CONIC
    RL 147.28 LAL -.00 LOL 79.76 VL 26.787 GAL .29 A7L 86.53 MCA 248.97 SMA 122.35 ECC .20378 INC 3.4654 V1 30.250 RP 108.91 LAP -3.23 LOP 328.70 VP 36.777 GAP 9.94 A7P 91.24 TAL 178.88 TAP 67.85 RCA 97.42 APO 147.29 V2 34.796 RC 166.847 GL 24.66 GP -1.18 ZAL 85.19 ZAP 167.40 ETS 354.41 ZAE 129.85 ETE 181.06 ZAC 76.62 ETC 164.77 CLP-167.46
   PLANETOCENTRIC CONIC
    C3 15.062 VHL 3.881 DLA 20.59 RAL 345.28 RAD 6567.6 VEL 11.681 PTH
                                                                                                                 2.05 VHP 6.580 OPA -11.56 RAP 344.47 ECC 1.2479
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 4 15 2851.47
19 54 50 4090.17
                                                          -28.30
                                                                                           209.13
                                                                                                              90.93
                                                                                                                           2 51 47
                                                                           85.58
                                                                                                                                             2251.5
                                                                                                                                                                -27.87
                                                                                                                                                                -7.23
                                                                                                               61.88 21 3 0
                                                          -3.50
                                                                          165.85
                                                                                           202.95
                                                                                                                                               3490.2
                     3 39 8 2545.51
21 2 38 3871.36
5 16 11 2241.87
21 42 4 3747.76
                                                                                                               92.69
                                                                                                                           4 21 34
                                                                                                                                               1945.5
       100.00
                                                         -29.78
                                                                            63.02
                                                                                           209.08
                                                                                                                                                                -29.09
                                                                                                                                                                                  54.29
                                                                          149.05
                                                                                                               60.18 22 7 9
                                                                                                                                               3271.4
       100.00
                                                          -2.21
                                                                                           202.23
                                                                                                                                                                -6.16
                                                                                                                                                                                 142.49
                                                        -33.49
                                                                           39.58
                                                                                           208.70
                                                                                                              97.27
                                                                                                                          5 53 33
                                                                                                                                              1641.9
                                                                                                                                                               -32.13
       110.00
                                                                                                                                                                                  30.62
                                                                                                              55.83 22 44 32
                                                                                                                                            3147.8
                                                                                                                                                               -3.54
                                                                          137.71
                                                                                           200.26
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                             SGT 5323.6 SGR 378.2 SG3 202.4 ST 2896.2 SR 294.3 55 794.3 RRT -.0546 RRF -.0724 RTF .9198 CRT .9796 CR3 -.9302 CST -.9836 SG8 5337.0 R23 .0219 R13 -.9198 LSA 3013.7 MSA 150.1 S5A 20.9 SG1 5323.6 SG2 377.6 THA 179.78 EL1 2910.5 EL2 58.8 ALF 5.69
    TOE 1.9570 TRA .3153 TC3-5.7249 BAU 1.1539
    ROE .1974 RRA -.0864 RC3 .2563 FAU .03536
FDE .9204 FRA .6804 FC3-2.0326 BSP 16996
BDE 1.9670 BRA .3269 BC3 5.7306 FSP -676
```

SG1 5323.6 SG2 377.6 THA 179.78

EL1 2910.5 EL2 58.8 ALF 5.69

```
ARRIVAL DATE JUN 4 1966
                                                                          FLIGHT TIME 174.00
LAUNCH DATE DEC 12-1965
   RL 147.28 LAL -.00 LOL 79.76 VL 26.741 GAL .74 AZL 86.55 MCA 252.14 SMA 122.08 ECC .20683 INC 3.4530 V1 30.250 RP 108.89 LAP -3.29 LOP 331.87 VP 36.748 GAP 10.22 AZP 91.06 TAL 177.16 TAP 69.30 RCA 96.83 APO 147.33 V2 34.800 RC 168.980 GL 24.10 GP -1.13 ZAL 82.18 ZAP 168.28 ETS 354.40 ZAE 129.84 ETE 181.01 ZAC 78.82 ETC 165.09 CLP-168.33
                                                                         DISTANCE 510.785
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.551 VHL 3.943 OLA 21.35 RAL 348.43 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 6.745 DPA -10.63 RAP 346.61 ECC 1.2559
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                89.42 2 55 44
                                                                                213.13
                    2 7 31 2892.53
20 16 41 4063.47
                                                    -28.31
                                                                  88.59
        90.00
                                                                                                                                                              157.64
                                                                                                                                                -8.07
                                                                                                             21 24 24
                                                                                                                               3463.5
                                                                                                   61.99
                                                                                 206.82
                                                    -4.36
                                                                  164.35
        90.00
                                                                                                                                                               57.04
                                                                                                                               1983.1
                                                                                                                                               -29.38
                                                                                                   91.22 4 26 32
                   3 43 29 2563.10
21 23 24 3646.13
5 22 28 2273.40
22 0 54 3730.60
                                                                                 213.12
                                                    -29.87
                                                                   65.81
       100.00
                                                                                                                                                -6.93
                                                                                                                                                              141.20
                                                                                                            22 27 32
                                                                                                   60.24
                                                                                                                               3248.1
                                                                  147.77
                                                                                 206.07
                                                     -2.99
       100.00
                                                                                                                                               -32.56
                                                                                                                                                               32.97
                                                                                                   95.85 6 0 22
55.82 23 3 5
                                                                                                                               1673.4
                                                                                 212.84
                                                  -33.74
                                                                   42.01
       110.00
                                                                                                                                                              130.60
                                                                                                                                                -4.19
                                                                                                                               3130.6
                                                                                 204.01
                                                     . 30
                                                                  136.81
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2971.3 SR 307.2 SS 792.2
                                                                     SGT 5375.2 SGR 386.0 SG3 195.7
RRT -.0246 RRF -.0435 RTF .9212
    TOE 2.0367 TRA .4985 TC3-5.6035 BAU 1.1660
                                                                                                                           CRT .9742 CRS -.9230 CST -.9850
    ROE .2093 RRA -.0915 RC3 .2410 FAU .03321
                                                                                                                          LSA 3086.7 MSA 149.1 SSA 20.8
ELI 2986.4 EL2 68.9 ALF 5.75
                                                                      SGB 5389.1 R23 .0207 R13 -.9212
SG1 5375.2 SG2 385.9 THA 179.90
    FOE .9056 FRA .7231 FC3-1.8489 BSP 17199
BDE 2.0474 BRA .5069 BC3 5.6087 FSP -655
                                                                                                                                       ARRIVAL DATE JUN 6 1966
                                                                           FLIGHT TIME 176.00
LAUNCH DATE DEC 12 1965
                                                                          DISTANCE 516.437
    RL 147.28 LAL -.00 LOL 79.76 VL 26.695 GAL 1.21 A7L 86.56 HCA 255.30 SMA 121.81 ECC .21016 INC 3.4409 VI 30.250 RP 108.88 LAP -3.33 LOP 335.04 VP 36.719 GAP 10.51 A7P 90.87 TAL 175.44 TAP 70.74 RCA 96.21 APO 147.40 V2 34.805 RC 171.096 GL 23.49 GP -1.08 7AL 79.16 7AP 169.13 ETS 354.34 7AE 129.84 ETE 180.97 7AC 81.04 ETC 165.39 CLP-169.19
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.156 VHL 4.019 DLA 22.07 RAL 351.61 RAD 6567.6 VEL 11.728 PTH 2.07 VHP 6.919 DPA -9.69 RAP 348.75 ECC 1.2659 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2334.2
                                                                                                                                             -28.24
                                                                                                  87.90 2 59 58
62.11 21 45 51
                   2 11 4 2934.22
20 38 32 4039.10
                                                                   91.64
                                                                                 217.24
                                                    -28.25
         90.00
                                                                                                                                 3439.1
                                                                                                                                                 -A.A3
                                                                                                                                                               156.25
                                                                                  210.83
                                                     -5.13
                                                                   162.98
         90.00
                                                                                                                                                -29.61
                   3 48 10 2621.12
21 44 7 3827.43
5 29 8 2305.25
22 19 38 3716.07
                                                                                                                                2021.1
                                                                                                    89.74
                                                                                                              4 31 51
                                                                                  217.28
                                                     -29.89
                                                                    68.64
                                                                                                   89.74 4 31 31
60.32 22 47 54
94.40 6 7 33
55.82 23 21 34
       100.00
                                                                                                                                                               140.04
                                                                                                                                                 -7.61
                                                                                  210.03
                                                                                                                                 3227.4
                                                     -3.69
                                                                   146.63
       100.00
                                                                                                                                                                35.38
                                                                                                                                                -32.95
                                                                                                                                1705.2
                                                                                  217.11
                                                     -33.93
                                                                     44.48
       110.00
                                                                                                                                 3116.1
                                                                                                                                                 -4.74
                                                                   136.05
                                                                                  207.89
       110.00
                                                      - . 26
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 3037.1 SR 319.9 SS 788.3
CRT .9685 CRS -.9158 CST -.9861
                                                                       SGT 5424.9 SGR 393.0 SG3 189.5
RRT .0050 RRF -.0155 RTF .9224
     TOE 2.1167 TRA .6950 TC3-5.4482 BAU 1.1778
     ROE .2223 RRA -.0957 RC3 .2238 FAU .03118
FOE .8906 FRA .7681 FC3-1.6708 BSP 17393
                                                                                                                           LSA 3150.4 MSA 149.7 SSA 20.6
EL1 3052.9 EL2 79.2 ALF 5.83
                                                                      568 5439.1 R23 -. 0201 R13 .9224
                                                                     561 5424.9 562 393.0 THA
                                                                                                            .02
     BOE 2.1283 BRA .7015 BC3 5.4528 FSP -636
                                                                                                                                       ARRIVAL DATE JUN 8 1966
                                                                           FLIGHT TIME 178.00
 LAUNCH DATE DEC 12 1965
                                                                          DISTANCE 522.065
     RL 147.28 LAL -.00 LOL 79.76 VL 26.650 GAL 1.70 A7L 86.57 HCA 258.47 SMA 121.54 ECC .21379 INC 3.4292 VI 30.250 RP 108.86 LAP -3.36 LOP 338.21 VP 36.692 GAP 10.81 A7P 90.69 TAL 173.71 TAP 72.18 RCA 95.55 APO 147.52 VZ 34.811 RC 173.196 GL 22.81 GP -1.03 TAL 76.15 TAP 169.98 ETS 354.24 TAE 129.85 ETE 180.95 TAC 83.27 ETC 165.65 CLP-170.03
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                    -8.74 RAP 350.90 ECC 1.2780
     C3 16.892 VHL 4.110 OLA 22.73 RAL 354.82 RAO 6567.7 VEL 11.759 PTH 2.08 VHP 7.102 OPA
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                221.45
                                                                                                  86.37
                                                                                                                3 4 53
                                                                    94.70
                       2 14 57 2976.20
                                                     -28.10
                                                                                                    62.24 22 7 9

88.25 4 37 34

60.39 23 8 5

92.94 6 15 9

55.82 23 39 52
         90.00
                                                                                                                                                               155.01
                                                                                                                                 3417.5
                                                                                  214.95
                                                                    161.77
                    21 0 12
                                    4017.50
                                                     -5.82
          90.00
                                                                                                                                 2059.3
                                                                                                                                                -29.77
                                                                                                                                                                62.67
                                                                                  221.55
                                                                     71.48
                       3 53 15 2659.27
                                                     -29.85
         100.00
                                                                                                                                                               139.05
                                                                                                                                 3209.7
                                                                                                                                                 -8.20
                                                                    145.65
                                                                                  214.11
                                                      -4.29
                     22 4 35
                                    3809.66
         100.00
                                                                                                                                1737.2
                                                                                                                                                -33.29
                                                                                                                                                                37.81
                                                                                  221.49
                                                                     46.96
                       5 36 12 2337.18
22 38 8 3704.51
                                                     -34.07
         110.00
                                                                                                                                 3104.5
                                                                                                                                                -5.18
                                                                                                                                                               129.23
                                                                   135.45
                                                                                  211.88
                                                     -.70
                                                                                                                         ORBIT DETERMINATION ACCURACY
                     22 38 8
         110.00
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 3096.7 SR 332.5 SS 784.4
CRT .9626 CRS -.9089 CST -.9872
                                                                        SGT 5469.2 SGR 399.2 SG3 183.6
RRT .0354 RRF .0147 RTF .9236
      TOE 2.1997 TRA .9057 TC3-5.2515 BAU 1.1868
      ROE .2363 RRA - .0988 RC3 .2053 FAU .02913
FOE .8777 FRA .8130 FC3-1.4930 BSP 17506
BOE 2.2124 BRA .9111 BC3 5.2555 FSP -614
                                                                                                                             LSA 3208.1 MSA 151.1 SSA 20.2
                                                                        SGB 5483.7 R23 -.0182 R13 .9236
                                                                                                                             EL1 3113.2 EL2 89.6 ALF
                                                                                                                                                                  5.91
                                                                        5G1 5469.2 SG2 398.9 THA .15
                                                                                                                                         ARRIVAL DATE JUN 10 1966
                                                                             FLIGHT TIME 180.00
  LAUNCH DATE DEC 12 1965
      RELICENTRIC CONTE

RE 147.28 LAL -.00 LOL 79.76 VL 26.606 GAL 2.22 AZL 86.58 MCA 261.63 SMA 121.27 ECC .21774 INC 3.4178 VI 30.250

RP 108.84 LAP -3.38 LOP 341.38 VP 36.666 GAP 11.13 AZP 90.50 TAL 171.98 TAP 73.62 RCA 94.87 APO 147.68 V2 34.817

RC 175.278 GL 22.08 GP -1.00 ZAL 73.17 ZAP 170.81 ETS 354.08 ZAE 129.87 ETE 180.92 ZAC 85.53 ETC 165.89 CLP-170.86
                                                                            DISTANCE 527.663
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 17.773 VHL 4.216 DLA 23.33 RAL 358.02 RAD 6567.7 VEL 11.796 PTH 2.09 VHP 7.294 DPA
                                                                                                                                     -7.78 RAP 353.04 ECC 1.2925
                                                                  INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      C3 17.773 VML 4.216 ULA 25.33 RAL 338.02
LNCH A7HTH LNCH TIME L-I TIME INJ LAT
90.00 2 19 14 3018.08 -27.88
90.00 21 21 29 3999.14 -6.40
100.00 3 58 45 2697.19 -29.73
100.00 22 24 39 3795.26 -4.77
110.00 5 43 40 2368.97 -34.16
                                                                                                                                               -28.30
                                                                                                                                 2418.1
                                                                                                                 3 9 32
                                                                                                    84.86
                                                                      97.74
                                                                                 225.74
                                                                                                                                                                153.96
                                                                                                                22 28 8
                                                                                                                                  3399.1
                                                                                                                                                 -10.05
                                                                                   219.18
                                                                                                     62.36
                                                                     160.73
                                                                                                                 4 43 42
                                                                                                                                  2097.2
                                                                                                                                                 -29.86
                                                                                                                                                                  65.49
                                                                                                     86.77
                                                                                   225.90
                                                                      74.29
                                                                                                     60.46 23 27 54
                                                                                                                                                  -8.67
                                                                                                                                                                138.24
                                                                                                                                  3195.3
                                                                                   218.28
                                                                     144.86
                                                                                                                                  1769.0
                                                                                                                                                 -33.57
                                                                                                                                                                  40.25
                                                                                                                 6 23 9
                                                                                                     91.47
                                                                      49.44
                                                                                   225.98
                                                                                                              23 57 50
                                                                                                                                                 -5.49
                                                                                                                                                                 128.79
                                                                                                                                  3096.2
                                                      -1.02
                                                                     135.02
                                                                                   215.95
                                                                                                     55.83
                     22 56 13
                                    3696.25
         110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                      SGT 5510.1 SGR 404.5 SG3 177.6
RRT .0651 RRF .0440 RTF .9255
SGB 5524.9 R23 -.0166 R13 .9254
SG1 5510.1 SG2 403.7 THA .28
                                                                                                                              ST 3139.0 SR 344.8 55 776.8
       TOE 2.2763 TRA 1.1244 TC3-5.0323 BAU 1.1965
                                                                                                                              CRT .9568 CRS -.9026 CST -.9882
       RDE .2515 RRA -.1009 RC3 .1858 FAU .02724
FDE .8626 FRA .8544 FC3-1.3271 BSP 17688
                                                                                                                             LSA 3248.4 MSA 153.1 SSA 19.7
EL1 3156.3 EL2 99.7 ALF 6.00
       BDE 2.2922 BRA 1.1289 BC3 5.0358 FSP -597
```

BOE 2.6020 BRA 2.1421 BC3 3.9365 FSP -529

```
ARRIVAL DATE JUN 20 1966
                                                                                            FLIGHT TIME 190.00
LAUNCH DATE DEC 12 1965
    RL 147.28 LAL -.00 LOL 79.76 VL 26.390 GAL 5.18 AZL 86.64 MCA 277.49 SMA 120.02 ECC .24356 INC 3.3620 VI 30.250 RP 108.71 LAP -3.33 LOP 357.26 VP 36.549 GAP 13.04 AZP 89.56 TAL 163.41 TAP 80.90 RCA 90.79 APO 149.25 V2 34.858 RC 185.395 GL 17.91 GP -.85 ZAL 59.07 ZAP 174.85 ETS 351.47 ZAE 130.02 ETE 180.90 ZAC 96.92 ETC 166.71 CLP-174.92
                                                                                            DISTANCE 555.097
   HELIOCENTRIC CONIC
     C3 25.108 VHL 5.011 CLA 25.27 RAL 13.50 RAC 6568.0 VEL 12.103 PTH 2.17 VHP 8.451 CPA -2.83 RAP 3.80 ECC 1.4132
    PLANETOCENTRIC CONIC
     C3 25.108 VHL 5.011 OLA 25.27 RAL 13.50 RAO 6568.0 VEL 12.103 PTH 2.17 VHP 8.451 OPA -2.83 RAP 3.80 ECC 1.4132 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 49 8 3211.59 -25.93 111.55 247.86 78.21 3 42 40 2611.6 -27.30 103.15 90.00 22 55 5 3971.52 -7.27 159.17 240.96 62.56 24 1 16 3371.5 -10.89 152.36 100.00 4 34 17 2872.61 -28.37 87.14 248.38 80.15 5 22 9 2272.6 -29.43 78.50 100.00 23 52 37 3785.74 -5.09 144.33 239.77 60.50 24 55 43 3185.7 -8.98 137.70 110.00 6 27 4 2519.72 -33.80 61.19 249.24 84.54 7 9 4 1919.7 -34.18 51.96 110.00 0 20 15 3711.39 -.44 135.81 236.88 55.82 1 22 6 3111.4 -4.92 129.59
                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 3171.7 SR 394.6 SS 724.4
CRT .9271 CRS -.8739 CST -.9921
                                                                                        SGT 5648.9 SGR 419.3 SG3 151.0
RRT .2150 RRF .1955 RTF .9359
      TOE 2.6523 TRA 2.4307 TC3-3.6345 BAU 1.2204
     ROE .3437 RRA -.0904 RC3 .0909 FAU .01865
FOE .7921 FRA 1.0663 FC3 -.6431 BSP 18342
                                                                                                                                                      LSA 3272.6 MSA 172.7 SSA 16.6
EL1 3192.7 EL2 146.9 ALF 6.59
                                                                                        SCB 5664.4 R23 -. 0069 R13 .9359
                                                                                        SG1 5649.6 SGZ 409.5 THA .92
      BOE 2.6745 BRA 2.4323 BC3 3.6356 FSP
                                                                    -514
                                                                                                                                                                        ARRIVAL DATE JUN 22 1966
                                                                                             FLIGHT TIME 192.00
LAUNCH DATE DEC 12 1965
                                                                                            DISTANCE 560.432
     RL 147.28 LAL -.00 LOL 79.76 VL 26.349 GAL 5.88 A7L 86.65 HCA 280.66 SMA 119.78 ECC .25024 INC 3.3506 VI 30.250
RP 108.68 LAP -3.29 LOP .44 VP 36.528 GAP 13.50 A7P 89.38 TAL 161.73 TAP 82.39 RCA 89.81 APO 149.76 V2 34.868
RC 187.357 GL 17.03 GP -.83 7AL 56.48 ZAP 175.65 ETS 350.14 ZAE 130.04 ETE 180.91 ZAC 99.21 ETC 166.79 CLP-175.72
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 27.370 VHL 5.232 DLA 25.44 RAL 16.38 RAD 6568.1 VEL 12.196 PTH 2.19 VHP 8.733 DPA -1.83 RAP 5.96 ECC 1.4504

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 57 16 3244.48 -25.45 113.64 252.33 77.16 351 21 2644.5 -26.97 105.51

90.00 23 9 57 3981.35 -6.96 159.73 245.29 62.48 24 16 19 3381.4 -10.59 152.93

100.00 4 43 8 2903.20 -27.99 89.33 252.92 79.05 5.31 31 2303.2 -29.22 80.74

100.00 0 10 43 3797.87 -4.68 145.00 244.04 60.44 1.14 1 3197.9 -8.59 138.39

110.00 6 36 48 2547.54 -33.60 63.34 253.94 83.28 7 19.16 1947.5 -34.16 54.14

110.00 0 33 32 3726.28 .13 136.59 241.05 55.82 1.35 38 3126.3 -4.35 130.37
     PLANETOCENTRIC CONIC
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                         HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 3144.6 SR 401.0 SS 712.4
CRT .9210 CRS -.8686 CST -.9928
                                                                                      SGT 5663.1 SGR 419.9 SG3 146.1 ST 3144.6 SR 401.0 SS 712.4
RRT .2450 RRF .2261 RTF .9385 CRT .9210 CRS -.8686 CST -.9928
SGB 5678.7 R23 -.0052 R13 .9385 LSA 3244.3 M5A 177.4 S5A 15.9
SGI 5664.1 SG2 407.0 THA 1.05 ELI 3166.3 EL2 155.2 ALF 6.71
       TOE 2.7217 TRA 2.7387 TC3-3.3318 BAU 1.2195
       ROE .3651 RRA -.0834 RC3 .0749 FAU .01712
FDE .7791 FRA 1.1099 FC3 -.5415 BSP 18445
       BDE 2.7461 BRA 2.7400 BC3 3.3327 FSP -499
                                                                                                                                                                        ARRIVAL DATE JUN 24 1966
                                                                                              FLIGHT TIME 194.00
  LAUNCH DATE DEC 12 1965
       RL 147.28 LAL -.00 LOL 79./6 VL 26.308 GAL 6.61 A7L 86.66 MCA 283.84 SMA 119.55 ECC .25754 INC 3.3389 V1 30.250 RP 108.65 LAP -3.24 LOP 3.62 VP 36.508 GAP 14.00 A7P 89.20 TAL 160.06 TAP 83.90 RCA 88.76 APO 150.34 V2 34.878 RC 189.297 GL 16.14 GP -.81 ZAL 54.00 ZAP 176.44 ETS 348.11 ZAE 130.06 ETE 180.92 ZAC 101.50 ETC 166.85 CLP-176.53
                                                                                              DISTANCE 565.697
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 29.994 VHL 5.477 DLA 25.56 RAL 19.17 RAD 6568.2 VEL 12.303 PTH 2.22 VHP 9.036 DPA
                                                                                                                                                                                       8.10 ECC 1.4936
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TJH INJ 2 LAT INJ 2 LONG
                                                                                                   256.79
                                                                                                                       76.21
                          3 6 11 3274.86
23 23 17 3996.71
                                                                                    115.94
                                                                                                                            76.21 4 0 4 6 6 6 7 7 8 9 6 7 7 2 9 4 1 9 6 7 7 2 9 4 1
                                                                  -24.98
            90.00
                                                                                                                                                                                                      153.82
                                                                                                                                                                 3396.7
                                                                                                                                                                                   -10.13
                                                                                                       249.56
                                                                                    160.59
                                                                   -6.48
            90.00
                                                                                                                                                                                  -28.97
                                                                                                                                                                2332.0
                                                                                                                                                                                                        82.85
                                                                                                      257.45
                                                                                      91.39
                          4 52 31 2932.02
                                                                  -27.60
           100.00
                                                                                                                                                                                    -8.03
                                                                                                                                                                                                      139.34
                                                                                                    248.27
                                                                                                                                                                 3214.8
                                                                   -4.12
                                                                                   145.94
                            0 23 33
                                             3814.77
                                                                                                                                                                             -34.10
                                                                                                    258.63
           100.00
                                                                                         245.18 55.83 1 48 13
MID-COURSE EXECUTION ACCURACY
SGT 5674.6 SGR 419 5
                                                                                                                                                                 1974.6
                                                                                                                                                                                                        56.24
                                                                                      65.41
                             6 46 46 2574.56
                                                                  -33.36
           110.00
                                                                                                                                                                 3145.0
                                                                                                                                                                                  -3.64
                                                                                                                                                                                                      131.35
                                                                  .85
                                                                                    137.56
                            0 45 48
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                                                      ST 3113.3 SR 406.1 SS 701.9
CRT .9148 CRS -.8636 CST -.9934
LSA 3211.0 MEA 140.0 CT
           110.00
      DIFFERENTIAL CORRECTIONS
                                                                                       SGT 5674.6 SGR 419.6 SG3 141.6

RRT .2757 RRF .2576 RTF .9411

SGB 5690.1 R23 -.0034 R13 .9411

SGI 5675.8 SG2 403.3 THA 1.17
        TOE 2.7937 TRA 3.0694 TC3-3.0266 BAU 1.2139
        ROE .3874 RRA -.0745 RC3 .0607 FAU .01556
FOE .7684 FRA 1.1565 FC3 -.4492 BSP 18446
BOE 2.8204 BRA 3.0703 BC3 3.0272 FSP -481
                                                                                                                                                            LSA 3211.9 MSA 182.0 SSA 15.3
                                                                                                                                                            EL1 3135.4 EL2 162.8 ALF 6.82
                                                                                                                                                                          ARRIVAL DATE JUN 26 1966
                                                                                               FLIGHT TIME 196.00
   LAUNCH DATE DEC 12 1965
        RL 147.28 LAL -.00 LOL 79.76 VL 26.268 GAL 7.39 AZL 86.67 MCA 287.02 SMA 119.32 ECC .26556 INC 3.3269 VI 30.250
RP 108.62 LAP -3.18 LOP 6.81 VP 36.490 GAP 14.53 AZP 89.03 TAL 158.42 TAP 85.44 RCA 87.64 APO 151.01 VZ 34.889
RC 191.216 GL 15.25 GP -.79 ZAL 51.61 ZAP 177.23 ETS 344.78 ZAE 130.07 ETE 180.93 ZAC 103.79 ETC 166.87 CLP-177.35
                                                                                               DISTANCE 570.881
      HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC
        C3 33.039 VHL 5.748 DLA 25.61 RAL 21.85 RAD 6568.3 VEL 12.426 PTH 2.25 VHP 9.364 DPA
                                                                                                                                                                         .16 RAP 10.25 ECC 1.5437
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          315 50 3302.69
23 35 0 4017.50
5 2 24 2959.11
0 35 3 3836.31
6 56 56 2600.79
0 57 1 3767.40
                                                                                                     261.23
                                                                                                                             75.36
                                                                                     117.85
                                                                   -24.51
             90.00
                                                                                                                                                                  3417.5
                                                                                                                                                                                      -9.49
                                                                                                                                                                                                       155.01
                                                                                                                                          24 41 58
                                                                                                        253.76
                                                                                                                              52.24
                                                                                      161.77
                                                                    -5.82
                                                                                                                              77.11 5 51 44
60.28 1 38 59
80.92 7 40 17
55.85 1 59 48
             90.00
                                                                                                                                                                  2359.1
                                                                                                                                                                                     -28.71
                                                                                                                                                                                                        84.82
                                                                                                     261.96
                                                                   -27.20
                                                                                        93.30
            100.00
                                                                                                                                                                                      -7.32
                                                                                                                                                                                                        140.54
                                                                                                                                                                  3236.3
                                                                                                      252.42
                                                                                      147.12
                                                                    -3.39
                                                                                                                                                                                   -34.00
            100.00
                                                                                                                                                                                                          58.29
                                                                                                                                                                  2000.8
                                                                                        67.41
                                                                                                        263.28
                                                                   -33.10
            110.00
                                                                                                                                                                                    -2.79
                                                                                                                                                                                                        132.53
                                                                                                                                                                  3167.4
                                                                                     138.73
                                                                                                        249.25
                                                                   1.71
                                                                                        HIO-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                         SGT 5694.8 RZ3 -.D021 RI3 .9441 LSA 3167.6 MSA 186.3 SSA 14.6 SGI 5680.9 SG2 338.4 THA 1.30 ELL 3092.4 EL2 169.8 ALF 6.93
       DIFFERENTIAL CORRECTIONS
         TOE 2.8608 TRA 3.4155 TC3-2.7328 BAU 1.2073
        ROE .4102 RRA -.0637 RC3 .0480 FAU .01414
FOE .7569 FRA 1.2027 FC3 -.3704 BSP 18545
         BDE 2.8901 BRA 3.4161 BC3 2.7332 FSP -467
```

Section 1

<u> Lagrandia a co</u>

```
LAUNCH DATE DEC 12 1965
                                                                                                              FLIGHT TIME 198.00
                                                                                                                                                                                          ARRIVAL DATE JUN 28 1966
                   HELIOCENTRIC CONIC
                                                                                                             DISTANCE 575.970
                   RL 147.28 LAL -.00 LOL 79.76 VL 26.228 GAL 8.22 ATL 86.69 HCA 290.20 SMA 119.10 ECC .27437 INC 3.3145 VI 30.250 RP 108.58 LAP -3.11 LOP 9.99 VP 36.472 GAP 15.12 ATP 88.85 TAL 156.81 TAP 87.01 RCA 86.42 APO 151.76 V2 34.900 RC 193.113 GL 14.37 GP -.77 TAL 49.33 TAP 178.02 ETS 338.56 TAE 130.07 ETE 180.94 TAC 106.06 ETC 166.87 CLP-178.17
                   PLANETOCENTRIC CONIC
                    C3 36.576 VML 6.048 CLA 25.60 RAL 24.42 RAD 6568.4 VEL 12.568 PTH 2.28 VMP 9.721 DPA 1.15 RAP 12.39 ECC 1.6020 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 26 10 3328.07 -24.07 119.57 265.65 74.61 4.21.38 2728.1 -25.95 111.41 90.00 23 45 9 4043.48 -4.99 163.23 257.88 62.09 24 52 32 3443.5 -8.69 156.50 100.00 5 12 43 2984.55 -26.80 95.09 266.44 76.25 6 2.27 2384.6 -28.43 86.66 100.00 0 45 13 3862.23 -2.51 148.55 256.51 60.20 1 49.35 3262.2 -6.46 141.98 110.00 7 7 13 2626.31 -32.81 69.35 267.90 79.81 750.59 2026.3 -33.86 60.27 110.00 1 7 12 3793.24 2.69 140.08 253.26 55.91 2 10.25 3193.2 -1.80 133.88 OIEFFERNITIAL CORRECTIONS
                                                                                                        15.09 268.44 76.25 6 2 27

18.55 256.51 60.20 1 49 35

19.35 267.90 79.81 7 50 59

10.08 253.26 55.91 2 10 25

MID-COURSE EXECUTION ACCURACY
                   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                       SGT 5680.8 SGR 416.7 SG3 132.8
RRT .3358 RRF .3187 RTF .9473
SGB 5696.1 R23 -.0009 R13 .9473
                     TOE 2.9283 TRA 3.7843 TC3-2.4483 BAU 1.1974
                                                                                                                                                                           ST 3021.1 SR 411.1 55 680.5
CRT .9021 CRS -.8537 CST -.9946
                    ROE .4336 RRA -.0509 RC3 .0370 FAU .01275
FDE .7469 FRA 1.2515 FC3 -.3018 BSP 18621
                                                                                                                                                                           LSA 3118.1 MSA 190.2 SSA 14.0
                    BOE 2.9603 BRA 3.7847 BC3 2.4486 FSP -454
                                                                                                        SG1 5682.6 SG2 392.4 THA 1.42
                                                                                                                                                                           ELI 3043.8 EL2 176.1 ALF 7.02
              LAUNCH DATE DEC 12 1965
                                                                                                             FLIGHT TIME 200.00
                                                                                                                                                                                          ARRIVAL DATE JUN 30 1966
                  HELIOCENTRIC CONIC
                                                                                                            DISTANCE 580.946
                   RL 147.28 LAL -.00 LOL 79.76 VL 26.189 GAL 9.11 AZL 86.70 HCA 293.38 SMA 118.88 ECC .28407 INC 3.3016 V1 30.280
RP 108.55 LAP -3.03 LOP 13.18 VP 36.455 GAP 15.75 AZP 88.69 TAL 155.24 TAP 88.62 RCA 85.11 APO 152.65 VZ 34.912
RC 194.989 GL 13.50 GP -.76 ZAL 47.16 ZAP 178.76 ETS 324.15 ZAE 130.06 ETE 180.96 ZAC 108.33 ETC 166.84 CLP-179.01
                  PLANETOCENTRIC CONIC
                   C3 40.695 VHL 6.379 DLA 25.55 RAL 26.86 RAD 6568.6 VEL 12.730 PTH 2.31 VHP 1D.109 DPA 2.13 RAP 14.52 ECC 1.6697 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 37 3 3351.19 -23.64 121.13 270.03 73.84 4 32.54 2751.2 -25.62 113.02 90.00 23 53 47 4074.27 -4.01 164.96 261.90 61.95 25 1 41 3474.3 -7.73 158.26 100.00 5 23 21 3008.48 -26.41 96.75 270.87 75.46 6 13 29 2408.5 -28.15 88.38 100.00 0 54 6 389.21 -1.50 150.19 260.51 60.14 1 58 58 3292.2 -5.46 143.65
                                                                                                   7 17 33 2651.17
1 16 23 3822.29
                      110.00
                                                                               -32.49
                                                                                                                                                                                2051.2
                                                                                                                                                                                                  -33.70
                                                                                                                                                                                                                        62.19
                       110.00
                                                                                 3.80
                                                                                                  141.60
                                                                                                                                                                                3222.3
                                                                                                                                                                                                     -.69
                                                                                                                                                                                                                       135.39
                 DIFFERENTIAL CORRECTIONS
                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                 SGT 5677.8 SGR 314.0 SG3 128.6

RRT .3660 RRF .3494 RTF .9505

SGB 5692.9 R23 -.0001 R13 .9505

SGI 5679.9 SGZ 385.2 THA 1.54
                   TOE 2.9975 TRA 4.1771 TC3-2.1747 BAU 1.1832
                                                                                                                                                                          ST 2968.4 SR 411.1 SS 671.5
CRT .8957 CRS -.8490 CST -.9952
                   ROE .4576 RRA -.0358 RC3 .0277 FAU .01140
FOE .7383 FRA 1.3026 FC3 -.2425 BSP 18688
BOE 3.0323 BRA 4.1773 BC3 2.1749 FSP -440
                                                                                                                                                                          LSA 3064.9 MSA 193.6 SSA 13.4
EL1 2991.3 EL2 181.5 ALF 7.10
              LAUNCH DATE DEC 12 1965
                                                                                                           FLIGHT TIME 202.00
                                                                                                                                                                                       ARRIVAL DATE JUL 2 1966
                  HELIOCENTRIC CONIC
                                                                                                           015TANCE 585.788
                   RL 147.28 LAL -.00 LOL 79.76 VL 26.151 GAL 10.07 AZL 86.71 HCA 296.57 SMA 118.67 ECC .29478 INC 3.2880 V1 30.250 RP 108.51 LAP -2.94 LOP 16.37 VP 36.439 GAP 16.45 AZP 88.53 TAL 153.70 TAP 90.27 RCA 83.69 APO 153.65 V2 34.924 RC 196.842 GL 12.65 GP -.74 ZAL 45.10 ZAP 179.25 ETS 281.82 ZAE 130.03 ETE 180.97 ZAC 110.58 ETC 166.77 CLP-179.87
                 PLANETOCENTRIC CONIC
                   C3 45.501 VHL 6.745 DLA 25.44 RAL 29.19 RAD 6568.7 VEL 12.918 PTH 2.35 VHP 10.533 DPA
                                                                                                                                                                                   3.10 RAP 16.64 FCC 1.7488
                   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 48 22 3372.30 -23.23 122.55 274.37 73.34 4 44 34 2772.3 -25.30 114.49
                   90.00 3 48 22 3372.30
90.00 0 4 55 4109.40
                                                                                                                                      73.34 4 44 34
                                                                                                                                                                                              -25.30
                                                                                                                                        73.34
61.82 1 13 25
74.73 6 24 44
60.11 2 7 11
77.72 8 12 28
72 14 2 28 49
                                                                                -2.88
                                                                                                  166.92
                                                                                                                   265.82
                                                                                                                                                                               3509.4
                                                                                                                                                                                                  -6.63
                                                                                                                                                                                                                     160.25
                     100.00 5 34 13 3031.05
100.00 1 1 46 3925.89
110.00 7 27 53 2675.42
                                                                              -26.01
                                                                                                  98.31
                                                                                                               275.25
                                                                                                                                                                              2431.0
                                                                                                                                                                                                 -27.85
                                                                                                                                                                                                                      90.00
                                                                                                                                                                                          -4.35
-33.51
                                                                                                               264.41
276.97
                                                                                 -.36
                                                                                                 152.04
                                                                                                                                                                              3325.9
                                                                                                                                                                                                  -4.33
                                                                                                                                                                                                                    145.51
                                                                              -32.15
                                                                                                  73.03
                                                                                                                                                                              2075.4
                                                                                                                                                                                                                      64.06
                      110.00
                                        1 24 35
                                                         3854.28
                                                                                 5.01
                                                                                                 143.28
                                                                                                                    261.07
                                                                                                                                                                              3254.3
                                                                                                                                                                                                                    137.06
                                                                                                                                                                                                      . 5 3
                 DIFFERENTIAL CORRECTIONS
                                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                 SGT 5671.5 SGR 410.7 SG3 124.8

RRT .3964 RRF .3809 RTF .9540

SGB 5686.3 R23 .0011 R13 .9540

SGI 5673.8 SG2 376.9 TMA 1.65
                  TOE 3.0701 TRA 4.6011 TC3-1.9093 BAU 1.1615
                                                                                                                                                                      ST 2914.1 SR 409.5 SS 665.3
CRT .8891 CRS -.8448 CST -.9958
                  ROE .4820 RRA -.0183 RC3 .0201 FAU .01000
FOE .7328 FRA 1.3584 FC3 -.1903 BSP 18624
                                                                                                                                                                      LSA 3010.6 MSA 196.3 SSA 12.8
EL1 2936.8 EL2 185.9 ALF 7.15
                  BOE 3.1077 BRA 4.6012 BC3 1.9094 FSP -425
LAUNCH DATE DEC 12 1965
                                                                                                           FLIGHT TIME 204.00
                                                                                                                                                                                       ARRIVAL DATE JUL 4 1966
                 HELIOCENTRIC CONIC
                                                                                                          DISTANCE 590.469
                 RL 147.28 LAL -.00 LOL 79.76 VL 26.113 GAL 11.10 A7L 86.73 MCA 299.76 SMA 118.46 ECC .30663 INC 3.2736 VI 30.250
RP 108.47 LAP -2.84 LOP 19.56 VP 36.423 GAP 17.21 A7P 88.37 TAL 152.22 TAP 91.98 RCA 82.14 APO 154.79 V2 34.936
RC 198.673 GL 11.81 GP -.73 ZAL 43.15 ZAP 178.96 ETS 226.23 ZAE 129.97 ETE 180.99 ZAC 112.81 ETC 166.68 CLP 179.26
                PLANETOCENTRIC CONIC
                  C3 51.130 VHL 7.150 DLA 25.29 RAL 31.38 RAD 6568.9 VEL 13.134 PTH
                                                                                                                                            2.40 VHP 10.999 OPA
                                                                                                                                                                                   4.05 RAP 18.75 ECC 1.8415
                  LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     90.00 3 59 59 3391.67
90.00 0 10 48 4148.36
100.00 5 45 14 3052.37
100.00 1 8 15 3962.89
110.00 7 38 9 2699.10
110.00 1 31 50 3888.93
                                                                             -22.85
                                                                                                123.84
                                                                                                                278.66
                                                                                                                                         72.80
                                                                                                                                                       4 56 31
                                                                                                                                                                              2791.7
                                                                                                                                                                                                -24.99
                                                                                                                                                                                                                 115.82
                                                                               -1.63
                                                                                                 169.10
                                                                                                                    269.63
                                                                                                                                          61.73
                                                                                                                                                        1 19 57
                                                                                                                                                                              3548.4
                                                                                                                                                                                                  -5.40
                                                                                                                                                                                                                     162.45
                                                                                                                                          74.05 6 36 6
60.12 2 14 18
76.74 8 23 8
56.34 2 36 39
                                                                             -25.62
                                                                                                 99.78
                                                                                                                  279.56
                                                                                                                                                                              2452.4
                                                                                                                                                                                                -27.56
                                                                                                                                                                                                                     91.51
                                                                                                                268.23
                                                                                 . 90
                                                                                                 154.07
                                                                                                                                                                              3362.9
                                                                                                                                                                                                 -3.08
                                                                                                                                                                                                                   147.55
                                                                             -31.80
                                                                                                  74.78
                                                                                                               281.40
264.86
                                                                                                                                                                              2099.1
                                                                                                                                                                                                -33.29
                                                                                                                                                                                                                     65.87
                                                                                 6.33
                                                                                                 145.10
                                                                                                                                                                              3288.9
                                                                                                                                                                                                   1.86
                DIFFERENTIAL CORRECTIONS
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                   SGT 5660.7 SGR 406.6 SG3 121.0
RRT .4269 RRF .4115 RTF .9576
SGB 5675.2 R23 .0010 R13 .9576
SGI 5663.3 SG2 367.5 THA 1.76
                  TOE 3.1470 TRA 5.0500 TC3-1.6628 BAU 1.1366
                                                                                                                                                                      ST 2857.7 SR 406.1 SS 659.5
                                                                                                                                                               ROE .5068 RRA .0016 RC3 .0140 FAU .00870
FOE .7275 FRA 1.4163 FC3 -.1473 BSP 18682
BDE 3.1876 BRA 5.0500 BC3 1.6628 FSP -412
```

EL1 2880.2 EL2 189.2 ALF 7.18

```
ARRIVAL DATE JUL 6 1966
                                                                         FLIGHT TIME 206.00
LAUNCH DATE DEC 12 1965
   RL 147.28 LAL -.00 LOL 79.76 VL 26.076 GAL 12.21 AZL 86.74 HCA 302.95 SHA 118.26 ECC .31979 INC 3.2583 V1 30.250 RP 108.43 LAP -2.73 LOP 22.75 VP 36.409 GAP 18.05 AZP 88.23 TAL 150.80 TAP 93.75 RCA 80.44 APO 156.08 V2 34.948 RC 200.481 GL 10.99 GP -.72 ZAL 41.33 ZAP 178.20 ETS 205.44 ZAE 129.88 ETE 181.00 ZAC 115.01 ETC 166.55 CLP 178.35
                                                                         DISTANCE 594.956
  HELLOCENTRIC CONIC
    C3 57.748 VHL 7.599 DLA 25.10 RAL 33.44 RAD 6569.1 VEL 13.383 PTH 2.45 VHP 11.514 DPA 4.99 RAP 20.84 ECC 1.9504
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             5 8 36
                                                                              282.87
                    4 11 46 3409.53
0 15 28 4190.61
                                                   -22.49
                                                                 125.02
                                                                                                                                                             164.82
        90.00
                                                                                                                               3590.6
                                                                                                                                              -4.05
                                                                                                              1 25 19
                                                                                                  61.68
                                                                                 273.33
                                                     - .26
                                                                  171.46
                                                                                                  73.42 6 47 30
60.18 2 20 22
75.80 8 33 39
56.60 2 43 34
                                                                                                                                                              92.94
        90.00
                                                                                                                                              -27.26
                                                                                                                               2472.6
                     5 56 17 3072.59
1 13 39 4002.79
                                                                                 283.80
                                                   -25.23
                                                                  101.16
                                                                                                                                                             149.74
       100.00
                                                                                                                               3402.8
                                                                                                                                              -1.73
                                                                                 271.93
                                                                  156.26
                                                     2.25
                                                                                                                                                              67.63
       100.00
                                                                                                                               2122.2
                                                                                                                                             -33.05
                                                                                 285.73
                     7 48 17 2722.19
1 38 8 3925.95
                                                   -31.42
                                                                   76.48
                                                                                                                                                            140.80
       110.00
                                                                                                                                             3.27
                                                                                                                               3325.9
                                                                 147.07
                                                                                 268.56
                                                    7.72
                                                                                                                           ORBIT DETERMINATION ACCURACY
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2798.3 SR 401.0 SS 655.9
CRT .8765 CRS -.8366 CST -.9968
                                                                      SCT 5644.8 SCR 401.7 SC3 117.3
RRT .4571 RRF .4423 RTF .9613
SCB 5659.0 R23 .0012 R13 .9613
     TOE 3.2263 TRA 5.5321 TC3-1.4312 BAU 1.1049
    ROE .5318 RRA .0240 RC3 .0093 FAU .00740
FOE .7244 FRA 1.4790 FC3 -.1109 BSP 18711
                                                                                                                          LSA 2895.2 MSA 199.2 SSA 11.7
EL1 2820.4 EL2 191.5 ALF 7.19
                                                                      SG1 5647.8 SG2 357.1 THA 1.87
     BOE 3.2698 BRA 5.5322 BC3 1.4312 FSP
                                                      -400
                                                                                                                                      ARRIVAL DATE JUL 8 1966
                                                                          FLIGHT TIME 208.00
 LAUNCH DATE DEC 12 1965
    PELIOCENIMIC CONIC

RL 147.28 LAL -.00 LOL 79.76 VL 26.041 GAL 13.43 AZL 86.76 MCA 306.14 SMA 118.06 ECC .33443 INC 3.2419 VI 30.250

RP 108.39 LAP -2.62 LOP 25.94 VP 36.396 GAP 18.99 AZP 88.09 TAL 149.46 TAP 95.60 RCA 78.58 APO 157.55 V2 34.961

RC 202.264 GL 10.19 GP -.71 ZAL 39.62 ZAP 177.32 ETS 197.30 ZAE 129.76 ETE 181.02 ZAC 117.18 ETC 166.38 CLP 177.41
                                                                          DISTANCE 599.205
   HELIOCENTRIC CONIC
     C3 65.570 VHL 8.098 DLA 24.87 RAL 35.37 RAD 6569.2 VEL 13.672 PTH 2.50 VMP 12.084 DPA 5.91 RAP 22.91 ECC 2.0791
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 23 36 3426.07 -22.14 126.11 286.99 71.88 5 20 42 2826.1 -24.41 118.18
    PLANETOCENTRIC CONIC
                                                                                                    61.71
                                                                                  276.92
                                                      1.19
                                                                   173.97
                     O 19 O
                                    4235.65
         90.00
                                                                                                                                               -26.97
                                                                                                                                                                94.29
                     6 7 18 3091.74
1 18 0 4045.21
7 58 14 2744.68
1 43 33 3965.04
                                                                                                                                2491.7
                                                                                                                6 58 50
                                                                                  287.93
                                                                                                    72.84
                                                                   102.45
                                                     -24.86
                                                                                                             2 25 25
8 43 58
                                                                                                                                                               152.07
        100.00
                                                                                                                                                 -.30
                                                                                                                                3445.2
                                                                                  275.53
                                                                                                    60.31
                                                                   158.59
                                                      3.68
                                                                                                                                                               69.34
        100.00
                                                                                                                                               -32.80
                                                                                                                                2144.7
                                                                                                    74.90
                                                                                  289.96
                                                    -31.04
                                                                    78.12
        110.00
                                                                                                                                                4.76
                                                                                                                                                              142.85
                                                                                                              2 49 38
                                                                                                                                3365.D
                                                                                                    56.93
                                                                                  272.16
                                                      9.18
                                                                   149.15
                                                                                                                            ORBIT DETERMINATION ACCURACY
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2738.7 SR 394.3 SS 654.7
CRT .8704 CRS -.8330 CST -.9973
                                                                       SCT 5625.0 SGR 396.1 SG3 113.8
RRT .4873 RRF .4730 RTF .9651
SGB 5638.9 R23 .0011 R13 .9651
SGI 5628.3 SG2 345.7 THA 1.97
     TDE 3.3119 TRA 6.0524 TC3-1.2145 BAU 1.0647
     ROE .5571 RRA .0491 RC3 .0059 FAU .00607
                                                                                                                            LSA 2836.3 MSA 199.3 SSA 11.2
     FOE .7236 FRA 1.5471 FC3 -.0802 BSP 18732
                                                                                                                            EL1 2760.2 EL2 192.7 ALF 7.18
      BDE 3.3584 BRA 6.0526 BC3 1.2145 FSP -389
                                                                                                                                       ARRIVAL DATE JUL 10 1966
                                                                           FLIGHT TIME 210.00
  LAUNCH DATE DEC 12 1965
     RL 147.28 LAL -.00 LOL 79.76 VL 26.006 GAL 14.75 AZL 86.78 MCA 309.33 SNA 117.87 ECC .35080 INC 3.2240 VI 30.250
RP 108.35 LAP -2.49 LOP 29.14 VP 36.383 GAP 20.03 AZP 87.96 TAL 148.20 TAP 97.54 RCA 76.52 APO 159.22 V2 34.974
RC 204.023 GL 9.41 GP -.69 ZAL 38.04 ZAP 176.37 ETS 193.17 ZAE 129.60 ETE 181.03 ZAC 119.31 ETC 166.18 CLP 176.44
                                                                           DISTANCE 603.164
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 74.864 VHL 8.652 DLA 24.60 RAL 37.15 RAD 6569.5 VEL 14.008 PTH 2.56 VHP 12.719 DPA
                                                                                                                                    6.80 RAP 24.95 ECC 2.2321
      UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 35 21 3441.39 -21.81 127.11 291.01 71.48 5 32 43 2841.4 -24.14 119.22
                                                                                                    61.80
                                                                                                                1 32 52
                                                                                   280.38
                                                                                                    61.80 1 32 52
72.30 7 10 1
60.52 2 29 30
74.05 8 54 3
                                                                   176.61
                       0 21 29
                                     4282.99
                                                      2.71
          90.00
                                                                                                                                               -26.68
                                                                                                                                 2509.9
                                                                                  291.96
                                                                    103.67
                        6 18 11
                                    3109.86
                                                      -24.49
         100.00
                                                                                                                                 3489.7
                                                                                                                                                 1.21
                                                                                   279.02
                                                                   161.05
                                     4089.75
                                                       5.18
                                                                                                                                                                70.98
                       1 21 20
         100.00
                                                                                                                                 2166.5
                                                                                                                                               -32.52
                                                                                   294.06
                                                                      79.69
                        8 7 57 2766.47
                                                                       MID-COURSE EXECUTION ACCURACY
                                                     -30.64
         110.00
                                                                                                                                 3405.9
                                                                                                                                                  6.31
                                                                    151.35
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                     10.69
                        1 48 4
                                    4005.91
         110.00
     DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2692.8 SR 386.2 SS 657.1
                                                                        SGT 5604.0 SGR 390.0 SG3 110.6
RRT .5179 RRF .5044 RTF .9690
SGB 5617.6 R23 .0010 R13 .9690
SGI 5607.7 SG2 333.4 THA 2.07
                                                                                                                             CRT .8648 CRS -.8303 CST -.9978
      TOE 3.4112 TRA 6.6198 TC3-1.0107 BAU 1.0116
      RDE .5827 RRA .0774 RC3 .0038 FAU .00464
FDE .7270 FRA 1.6231 FC3 -.0537 BSP 18617
                                                                                                                             LSA 2781.9 MSA 198.1 SSA 10.6
EL1 2703.6 EL2 192.5 ALF 7.13
      BOE 3.4607 BRA 6.6202 BC3 1.0107 FSP -375
                                                                                                                                        ARRIVAL DATE JUL 12 1966
                                                                             FLIGHT TIME 212.00
  LAUNCH DATE DEC 12 1965
      RL 147.28 LAL -.00 LOL 79.76 VL 25.972 GAL 16.22 AZL 86.80 MCA 312.53 SMA 117.69 ECC .36914 INC 3.2043 VI 30.250 RP 108.31 LAP -2.36 LOP 32.34 VP 36.372 GAP 21.20 AZP 87.83 TAL 147.06 TAP 99.59 RCA 74.25 APO 161.14 V2 34.987 RC 205.757 GL 8.65 GP -.69 ZAL 36.60 ZAP 175.35 ETS 190.72 ZAE 129.38 ETE 181.05 ZAC 121.38 ETC 165.95 CLP 175.41
                                                                             DISTANCE 606.761
     HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 85.982 VHL 9.273 DLA 24.30 RAL 38.79 RAD 6569.7 VEL 14.399 PTH 2.62 VHP 13.431 DPA
                                                                                                                                     7.66 RAP 26.95 ECC 2.4150
       ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     71.12
                       4 46 57 3455.50

0 22 56 4332.20

6 28 52 3126.87

1 23 42 4136.06

8 17 22 2787.42
                                                      -21.50
                                                                     128.03
                                                                                   294.89
           90.00
                                                                                                                                                    .51
                                                                                                                                                                172.73
                                                                                                                  1 35 9
                                                                                                                                  3732.2
                                                                                                      61.98
                                                                     179.37
                                                                                    243.71
                                                         4.29
                                                                                                                                                                 95.74
           90.00
                                                                                                                                  2526.9
                                                                                                      71.80
                                                                                                                  7 20 59
                                                                     104.81
                                                                                    295.85
                                                       -24.13
                                                                                                                                                                157.05
          100.00
                                                                                                                                                    2.78
                                                                                                                  2 32 38
                                                                                                                                  3536.1
                                                                                                      60.81
                                                                     163.62
                                                                                    282.37
                                                         6.73
                                                                                                                                                                 72.54
                                                                                                                  9 3 50
                                                                                                                                  2187.4
                                                                                                      73.24
                                                                                    298.01
                                                       -30.24
                                                                      81.19
                                                                                                                                                                147.25
                                                                                                                                  3448.3
                                                                                                                                                   7.90
                                                                                                                2 59 10
                                                                                                      57.83
                                                       12.23
                                                                      153.66
                                                                                    279.06
                                     4048.27
                                                                                                                              ORBIT DETERMINATION ACCURACY
                        1 51 41
          110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                              ST 2623.6 SR 376.6 SS 661.3
CRT .8594 CRS -.8278 CST -.9981
      DIFFERENTIAL CORRECTIONS
                                                                         SGT 5575.7 SGR 383.1 SG3 107.4
       TOE 3.5156 TRA 7.2298 TC3 -.8257 BAU .9492
                                                                                              .5350 RTF .9727
                                                                         RRT .5477 RRF
        RDE .6084 RRA .1084 RC3 .0025 FAU .00321
                                                                                                                             LSA 2724.7 MSA 196.0 SSA 10.1
                                                                      SGB 5588.8 R23 .0005 R13 .9727
SG1 5579.6 SG2 320.3 THA 2.16
       FDE .7318 FRA 1.7053 FC3 -.0324 BSP 18629
                                                                                                                              EL1 2643.6 EL2 191.1 ALF 7.07
       BOE 3.5679 BRA 7.2306 BC3 .8257 FSP
```

E

```
LAUNCH DATE DEC 12 1965
                                                                               FLIGHT TIME 214.00
                                                                                                                                            ARRIVAL DATE JUL 14 1966
     HELIOCENTRIC CONIC
                                                                              DISTANCE 609.906
      RL 147.28 LAL -.00 LOL 79.76 VL 25.940 GAL 17.84 AZL 86.82 MCA 315.73 SMA 117.52 ECC .38979 INC 3.1826 VI 30.250 RP 108.27 LAP -2.22 LOP 35.53 VP 36.362 GAP 22.52 AZP 87.72 TAL 146.04 TAP 101.77 RCA 71.71 APO 163.33 VZ 35.000 RC 207.465 GL 7.90 GP -.68 ZAL 35.29 ZAP 174.27 ETS 189.10 ZAE 129.11 ETE 181.06 ZAC 123.40 ETC 165.68 CLP 174.31
     PLANETOCENTRIC CONIC
      C3 99.378 VML 9.969 DLA 23.96 RAL 40.27 RAD 6569.9 VEL 14.857 PTH 2.68 VMP 14.232 DPA
                                                                                                                                        8.49 RAP 28.91 FCC 2.6355
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     A 58 17 3468.32

0 23 24 4382.90

6 39 18 3142.64

1 25 5 4183.81

8 26 28 2807.36

1 54 24 4091.86
                                                                        5 56 5
62.26 1 36 27
299.57 71.35 7 31 40
66.29 285.59 61.18 2 34 49
92.61 301.78 72.49 9 13 15
16.07 282.33 58.41 3 2 36
MID-COURSE EXECUTION ACCURACY
SGT 5543.4 SGR 375.5 SG3 10
RRT .5774 RRF .555
          90.00
                                                     -21.22
                                                                     128.87
                                                                                    298.62
                                                                                                    70.80 5 56 5
                                                                                                                                   2868.3
                                                                                                                                                   -23.65
                                                                                                                                                                   121.03
          90.00
                                                        5.91
                                                                      182.22
                                                                                                                                     3782.9
                                                                                                                                                      2.15
                                                                                                                                                                    175.56
         100.00
                                                      -23.79
                                                                      105.86
                                                                                                                                     2542.6
                                                                                                                                                     -26.12
                                                                                                                                                                     97.63
        100.00
                                                        8.30
                                                                     166.29
                                                                                                                                     3583.8
                                                                                                                                                     4.39
                                                                                                                                                                    159.68
        110.00
                                                      -29.84
                                                                       82.61
                                                                                                                                   2207.4
                                                                                                                                                    -31.94
                                                                                                                                                                     74.03
        110.00
                                                       13.80
                                                                      156.07
                                                                                                                                    3491.9
                                                                                                                                                      9.52
                                                                                                                                                                   149.58
    DIFFFRENTIAL CORRECTIONS
                                                                                                                                ORBIT DETERMINATION ACCURACY
      TOE 3.6343 TRA 7.8953 TC3 -.6557 BAU .8711
                                                                         SGT 5543.4 SGR 375.5 SG3 104.4

RRT .5774 RRF .5655 RTF .9764

SGB 5556.1 R23 -.0000 R13 .9764

SGI 5547.6 SG2 306.3 THA 2.25
                                                                                                                                ST 2565.9 SR 365.5 S5 669.0
CRT .8546 CRS -.8259 CST -.9985
     RDE .6343 RRA .1428 RC3 .0021 FAU .00166
FDE .7403 FRA 1.7968 FC3 -.0145 BSP 18623
                                                                                                                               LSA 2669.8 MSA 192.6 55A 9.5
     BOE 3.6893 BRA 7.8966 BC3 .6557 FSP -355
                                                                                                                               EL1 2585.0 EL2 188.4 ALF 6.98
 LAUNCH DATE DEC 12 1965
                                                                              FLIGHT TIME 216.00
                                                                                                                                            ARRIVAL DATE JUL 16 1966
    HELIOCENTRIC CONIC
                                                                             DISTANCE 612.480
     RL 147.28 LAL -.00 LOL 79.76 VL 25.910 GAL 19.64 AZL 86.84 MCA 318.93 SMA 117.35 ECC .41312 INC 3.1582 VI 30.250 RP 108.23 LAP -2.07 LOP 38.73 VP 36.353 GAP 24.01 AZP 87.62 TAL 145.19 TAP 104.12 RCA 68.87 APO 165.84 V2 35.014
     RC 209.146 GL
                            7.18 GP -.67 ZAL 34.14 ZAP 173.11 ETS 187.97 ZAE 128.75 ETE 181.07 ZAC 125.35 ETC 165.38 CLP 173.14
    PLANETOCENTRIC CONTC
     C3 115.653 VHL 10.754 DLA 23.58 RAL 41.58 RAD 6570.2 VEL 15.394 PTH 2.75 VHP 15.141 DPA 9.28 RAP 30.80 ECC 2.9034 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                      5 9 18 3479.67
                                                     -20.96
                                                                    129.60
                                                                                   302.16
                                                                                                                                  2879.7
                                                                                                     70.52
                                                                                                                  6 7 18
                                                                                                                                                  -23.43
                                                                                                                                                               121.80
                     0 22 52 4434.76
6 49 23 3156.97
         90.00
                                                        7.54
                                                                     185.15
                                                                                     289.90
                                                                                                       62.63
                                                                                                                   1 36 47
                                                                                                                                    3834.8
                                                                                                                                                      3.81
                                                                                                                                                                    178.45
        100.00
                                                      -23.48
                                                                     106.81
                                                                                     303.11
                                                                                                                 7 42 0
2 36 0
                                                                                                       70.94
                                                                                                                                    2557.0
                                                                                                                                                    -25.86
                                                                                                                                                                     98.82
        100.00
                      1 25 28
                                   4232.69
                                                       9.89
                                                                    169.05
                                                                                     288.64
                                                                                                       61.65
                                                                                                                                    3632.7
                                                                                                                                                     6.03
                                                                                                                                                                    162.39
                      8 35 10 2826.03
1 56 10 4136.40
        110.00
                     8 35 10
                                                     -29.45
                                                                      83.92
                                                                                     305.36
                                                                                                                 9 22 16
3 5 7
                                                                                                       71.80
                                                                                                                                    2226.0
                                                                                                                                                  -31.65
                                                                                                                                                                    75.40
        110.00
                                                      15.37
                                                                     158.56
                                                                                    285.45
                                                                                                       59.09
                                                                                                                                                                    151.99
                                                                                                                                    3536.4
                                                                                                                                                    11.16
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SCT 5507.3 SGR 367.3 SG3 101.5
RRT .6069 RRF .5959 RTF .9800
SGB 5519.6 R23 -.0007 R13 .9800
SGI 5511.8 SG2 291.7 THA 2.32
     TOE 3.7709 TRA 8.6247 TC3 -.5003 BAU .7735
                                                                                                                               ST 2509.9 SR 353.3 S5 680.8
CRT .8507 CRS -.8249 CST -.9988
     ROE .6606 RRA .1805 RC3 .0025 FAU-.00008
FOE .7533 FRA 1.8997 FC3 .0006 89P 18591
BOE 3.8283 BRA 8.6266 BC3 .5003 FSP -345
                                                                                                                               LSA 2617.7 MSA 188.1 55A 9.0
                                                                                                                              EL1 2527.9 EL2 184.4 ALF 6.87
LAUNCH DATE DEC 12 1965
                                                                           FLIGHT TIME 218.00
                                                                                                                                          ARRIVAL DATE JUL 18 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 614.323
    RL 147.28 LAL -.00 LOL 79.76 VL 25.881 GAL 21.67 AZL 86.87 MCA 322.13 SMA 117.20 ECC .43959 INC 3.1304 V1 30.250 RP 108.19 LAP -1.92 LOP 41.94 VP 36.345 GAP 25.73 AZP 87.53 TAL 144.53 TAP 106.66 RCA 65.68 APO 168.72 VZ 35.027 RC 210.800 GL 6.48 GP -.66 ZAL 33.16 ZAP 171.85 ETS 187.12 ZAE 128.30 ETE 181.08 ZAC 127.20 ETC 165.06 CLP 171.88
   PLANETOCENTRIC CONIC
    C3 135.607 VHL 11.645 DLA 23.16 RAL 42.71 RAD 6570.5 VEL 16.029 PTH
                                                                                                       2.83 VHP 16.178 DPA 10.02 RAP 32.62 ECC 3.2317
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 5 19 55 3489.29

90.00 0 21 15 4487.48

100.00 6 59 5 3169.56

100.00 1 24 47 4282.44

110.00 8 43 26 2843.11

110.00 1 56 55 4181.66
                                                     -20.74
                                                                    130.22
                                                                                 305.49
                                                                                                    70.28 6 18 5
63.09 1 36 3
                                                                                                                                                -23.24
                                                                                                                                                              122.44
                                                                                                                                   2889.3
                                                      9.18
                                                                    188.16
                                                                                   292.73
                                                                                                                                   3887.5
                                                                                                                                                    5.50
                                                                                                                                                                 181.42
       100.00
                                                     -23.19
                                                                    107.64
                                                                                   306.42
                                                                                                     70.59
                                                                                                                 7 51 55
                                                                                                                                   2569.6
                                                                                                     70.59 7 51 55 62.21 2 36 9
                                                                                                                                                  -25.63
                                                                                                                                                                   99.58
       100.00
                                                     11.49
                                                                    171.88
                                                                                   291.51
                                                                                                                                   3682.4
                                                                                                                                                    7.68
                                                                                                                                                                 165.16
       110.00
                                                                                                                9 30 49
3 6 37
                                                    -29.08
                                                                    85.11
                                                                                   308.70
                                                                                                     71.18
                                                                                                                                   2243.1
                                                                                                                                                  -31.37
                                                                                                                                                                   76.66
                                                                                 288.40
       110.00
                                               16.94
                                                                    161.13
                                                                                                     59.86
                                                                                                                                   3581.7
                                                                                                                                                  12.81
                                                                                                                                                                  154.46
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SCT 5467.2 SGR 358.5 SG3 98.8
RRT .6359 RRF .6259 RTF .9834
SGB 5478.9 R23 -.0014 R13 .9834
SGI 5471.9 SG2 276.4 THA 2.39
    TOE 3.9296 TRA 9.4271 TC3 -.3591 BAU .6510
                                                                                                                             ST 2455.5 SR 340.1 SS 697.2
CRT .8476 CRS -.8247 CST -.9990
    ROE .6874 RRA .2219 RC3 .0034 FAU-.00208
FOE .7713 FRA 2.0159 FC3 .0133 BSP 18530
BOE 3.9893 BRA 9.4298 BC3 .3591 FSP -336
                                                                                                                             LSA 2568.7 MSA 182.3 SSA 8.4
                                                                                                                              EL1 2472.5 EL2 179.2 ALF 6.73
LAUNCH DATE DEC 12 1965
                                                                            FLIGHT TIME 220.00
                                                                                                                                          ARRIVAL DATE JUL 20 1956
  HELIOCENTRIC CONIC
                                                                           DISTANCE 615.224
   RL 147.28 LAL -.00 LOL 79.76 VL 25.855 GAL 23.97 AZL 86.90 HCA 325.34 SMA 117.06 ECC .46974 INC 3.0983 V1 30.250 RP 108.15 LAP -1.76 LOP 45.14 VP 36.339 GAP 27.70 AZP 87.45 TAL 144.11 TAP 109.45 RCA 62.07 APO 172.05 V2 35.040 RC 212.427 GL 5.79 GP -.65 ZAL 32.37 ZAP 170.48 ETS 186.47 ZAE 127.73 ETE 181.09 ZAC 128.93 ETC 164.71 CLP 170.50
  PLANETOCENTRIC CONIC
   C3 160.318 VML 12.662 DLA 22.71 RAL 43.64 RAD 6570.7 VEL 16.782 PTH 2.90 VMP 17.370 OPA 10.7; RAP 34.34 ECC 3.6384
   C3 160.318 VML 12.662 DLA 22.71
LNCH A7MTH LNCH TIME L-I TIME
90.00 5 30 6 3496.81
90.00 0 18 30 4540.85
100.00 7 8 20 3180.04
100.00 1 22 57 4332.84
110.00 8 51 12 2858.23
110.00 1 56 34 4227.42
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                    -20.57
                                                                   130.70
                                                                                308.55
                                                                                                     70.10
                                                                                                                 6 28 22
                                                                                                                                  2896.8
                                                                                                                                                -23.10
                                                                                                                                                               122.94
                                                     10.81
                                                                   191.24
                                                                                   295.33
                                                                                                     63.67
                                                                                                                 1 34 11
                                                                                                                                   3940.8
                                                                                                                                                    7.18
                                                                                                                                                                 184.43
                                                    -22.95
                                                                   108.32
                                                                                   309.47
                                                                                                     70.31
                                                                                                                 8 1 20
                                                                                                                                   2580.0
                                                                                                                                                  -25.43
                                                                                                                                                                 100.40
                                                    13.07
                                                                   174.78
                                                                                  294.17
                                                                                                                2 35 10
                                                                                                     62.88
                                                                                                                                   3732.8
                                                                                                                                                   9.33
                                                                                                                                                               167.99
                                                    -28.74
                                                                                                     70.65
                                                                     86.16
                                                                                  311.75
                                                                                                                 9 38 50
                                                                                                                                  2258.2
                                                                                                                                                  -31.11
                                                                                                                                                                  77.76
                                                    18.48
                                                                   163.78
                                                                                  291.15
                                                                                                     60.72
                                                                                                                 3 7 2
                                                                                                                                  3627.4
                                                                                                                                                   14.44
                                                                                                                                                                 157.00
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 5424.0 SGR 349.3 SG3 96.4
RRT .6646 RRF .6555 RTF .9864
SGB 5435.2 R23 -.0021 R13 .9864
   TOE 4.1183 TRAID.3155 TC3 -.2312 BAU .4957
                                                                                                                             ST 2403.7 SR 325.9 SS 719.4
CRT .8458 CR5 -.8257 CST -.9993
   ROE .7149 RRA .2671 RC3 .0047 FAU-.00448
FDE .7962 FRA 2.1486 FC3 .0242 BSP 18386
BDE 4.1799 BRAIO.3189 BC3 .2313 FSP -326
```

SG1 5429.0 SG2 260.7 THA 2.46

LSA 2524.0 MSA 175.5 SSA

EL1 2419.5 EL2 172.7 ALF 6.58

7.4

JPL TM 33-99

ARRIVAL CATE FEB 21 1966 FLIGHT TIME 70.00 LAUNCH DATE DEC 13 1965 DISTANCE 192.027 HELIOCENTRIC CONIC RL 147.27 LAL -.00 LOL 80.78 VL 27.706 GAL -9.74 AZL 86.60 MCA 86.85 SMA 128.26 ECC .22346 INC 3.3986 VI 30.253 RP 107.62 LAP 3.39 LOP 167.62 VP 37.837 GAP -9.04 AZP 89.81 TAL 219.45 TAP 306.29 RCA 99.60 APO 156.92 V2 35.212 RC 53.572 GL 16.67 GP 1.51 ZAL 142.92 ZAP 19.55 ETS 354.69 ZAE 149.49 ETE 343.43 ZAC 63.22 ETC 163.74 CLP -19.50 PLANETOCENTRIC CONIC C3 31.852 VHL 5.644 DLA -4.82 RAL 293.39 RAD 6568.3 VEL 12.378 PTH 2.23 VHP 6.458 DPA -13.74 RAP 330.90 ECC 1.5242 LNCM AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 5 29 2179.14 12 51 46 5122.61 3 24 34 1924.05 14 15 22 4852.94 4 27 37 1726.65 15 28 49 4623.10 1579.1 31.95 111.66 2 41 49 -15.59 39.25 161.29 -18.69 90.00 219.86 14 17 8 4522.6 22.83 164.22 76.20 24.98 227.88 nn, ne 112.80 3 56 38 75.08 15 36 15 116.00 4 56 24 71.93 16 45 52 12.71 1324.1 -16.61 19.98 160.78 -19.87 100.00 199.65 207.69 163.87 4252.9 23.90 26.21 100.00 1126.7 356.27 -19.33 -23.02 3.47 159.24 110.00 181.03 189.13 162.76 4023.1 26.77 29.52 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 595.5 SGR 393.9 SG3 155.8 RRT .0122 RRF -.0336 RTF -.5998 ST 220.5 SR 373.3 SS 279.9 CRT .8720 CRS .9427 CST .6762 LSA 496.4 MSA 138.8 SSA 24.7 TDE -.1942 TRA -.3197 TC3 .4056 BAU. .1779 ROE -.3673 RRA .0570 RC3 -.1001 FAU .05327 FOE .4566 FRA -.5910 FC3-1.4479 BSP .1557 BDE .4154 BRA .3248 BC3 .4178 FSP -413 SGB 714.0 R23 -.0206 R13 -.6000 EL1 422.9 EL2 95.3 ALF 61.15 SG1 595.5 SG2 393.8 THA .82 FLIGHT TIME 72.00 ARRIVAL DATE FEB 23 1966 LAUNCH DATE DEC 13 1965 01STANCE 198.820 HELIOCENTRIC CONIC RL 147.27 LAL -.00 LOL 80.78 VL 27.832 GAL -9.68 AZL 86.62 MCA 90.08 SMA 129.13 ECC .21778 INC 3.3838 V1 30.253 RP 107.64 LAP 3.38 LOP 170.86 VP 37.921 GAP -8.19 AZP 90.00 TAL 220.84 TAP 310.92 RCA 101.00 APO 157.25 V2 35.204 RC 55.368 GL 16.90 GP 1.62 TAL 143.79 TAP 22.80 ETS 355.08 TAE 150.04 ETE 343.83 TAC 63.18 ETC 163.80 CLP -22.74 PLANETOCENTRIC CONIC C3 31.034 VML 5.571 DLA -4.76 RAL 292.31 RAD 6568.2 VEL 12.345 PTH 2.23 VHP 6.028 DPA -13.64 RAP 330.85 ECC 1.5107 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 0 44 2174.39
12 47 52 5114.29
3 19 50 1919.20
14 11 27 4844.71
4 22 57 1721.61
15 24 49 4615.07 1574.4 -15.46 111.77 2 36 58 75.95 14 13 6 31.66 159.78 90.00 -18.57 38.95 22.66 219.31 4514.3 24.84 227.30 162.64 90.00 12.41 -19.74 19.68 159.27 112.91 3 51 49 74.82 15 32 11 116.13 4 51 39 71.64 16 41 44 112.91 3 51 49 1319.2 -16.47 100.00 23.72 199.11 26.06 207.13 162.28 4244.7 100.00 157.74 1121.6 -19.17 -22.87 3.15 110.00 4015.1 26.56 180.50 188.57 161.16 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 220.1 SR 373.0 SS 301.8 CRT .8766 CRS .9374 CST .6710 LSA 507.2 MSA 144.3 SSA 24.8 EL1 422.9 EL2 93.4 ALF 61.11 SGT 596.8 SGR 392.9 SG3 177.7 RRT .0176 RRF -.0433 RTF -.5963 TOE -.1922 TRA -.3095 TC3 .4162 BAU . .1776 RDE -.3623 RRA .0548 RC3 -.0995 FAU .05949 SGB 714.5 R23 -. 0248 R13 -. 5967 FDE .5196 FRA -.7014 FC3-1.6597 BSP 1553 BDE .4101 BRA .3144 BC3 .4279 FSP -480 SG1 596.9 SG2 392.8 THA 1.17 ARRIVAL DATE FEB 25 1966 FLIGHT TIME 74.00 LAUNCH DATE DEC 13 1965 DISTANCE 205.588 RL 147.27 LAL -.00 LOL 80.78 VL 27.941 GAL -9.82 AZL 86.63 MCA 93.32 SMA 129.89 ECC .21292 INC 3.3691 V1 30.253
RP 107.67 LAP 3.36 LOP 174.10 VP 37.993 GAP -7.59 AZP 90.20 TAL 222.11 TAP 315.43 RCA 102.24 APO 157.55 V2 35.195
RC 57.230 GL 17.09 GP 1.74 7AL 144.56 ZAP 26.22 ETS 355.38 ZAE 150.90 ETE 344.14 ZAC 62.97 ETC 163.83 CLP -26.17 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 30.339 VHL 5.508 DLA -4.71 RAL 291.35 RAD 6568.2 VEL 12.317 PTH 2.22 VHP 5.629 DPA -13.58 RAP 330.62 ECC 1.4993 C3 30.339 VHL 5.508 DLA -4.71 RAL 291.35 RAD 6568.2 VEL 12.317 PTH 2.22 VMP 5.629 DPA -13.58 RAP 330.62 ECC 1.4995 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 56 33 2170.11 -18.47 38.69 158.44 111.86 2 32.43 1570.1 -15.34 31.41 90.00 12.44 22 5107.20 24.72 226.82 161.24 75.73 14 9 29 4507.2 22.52 218.84 100.00 3 15 40 1914.86 -19.63 19.41 157.93 113.01 3 47 35 1314.9 -16.34 12.15 100.00 14 7 55 4837.68 25.94 206.64 160.89 74.59 15 28 33 4257.7 23.57 198.64 110.00 4 18 50 1717.11 -22.73 2.87 156.41 116.24 4 47 27 1117.1 -19.02 355.70 110.00 15 21 15 4608.20 29.20 188.09 159.76 71.39 16 38 3 4008.2 26.38 180.04 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 218,4 SR 372.0 SS 324.8 CRT .8775 CRS .9328 CST .6618 LSA 518.0 MSA 150.3 SSA 24.7 SGT 593.7 SGR 390.9 SG3 202.6 RRT .0235 RRF -.0548 RTF -.5859 TOE -.1886 TRA -.3029 TC3 .4199 BAU .1749 RDE -.3572 RRA .0534 RC3 -.0978 FAU .06656 SGB 710.8 R23 -.0305 R13 -.5865 SG1 593.8 SG2 390.7 THA 1.56 FOE .5888 FRA -.8260 FC3-1.8994 BSP 1528 BDE .4040 BRA .3076 BC3 .4311 FSP -557 EL1 421.3 EL2 92.5 ALF 61.23 ARRIVAL DATE FEB 27 1966 FLIGHT TIME 76.00 LAUNCH DATE DEC 13 1965 DISTANCE 212.328 HELIOCENTRIC CONIC RL 147.27 LAL -.00 LOL 80.78 VL 28.034 GAL -9.57 AZL 86.65 HCA 96.56 SHA 130.56 ECC .20875 INC 3.3543 VI 30.253 RP 107.70 LAP 3.33 LOP 177.35 VP 38.053 GAP -6.63 AZP 90.38 TAL 223.25 TAP 319.81 RCA 103.31 APO 157.82 V2 35.186 RC 59.152 GL 17.25 GP 1.88 ZAL 145.23 ZAP 29.85 ETS 355.62 ZAE 152.08 ETE 344.34 ZAC 62.55 ETC 163.83 CLP -29.80 PLANETOCENTRIC CONIC C3 29.741 VHL 5.454 DLA -4.68 RAL 290.50 RAD 6568.2 VEL 12.293 PTH 2.21 VHP 5.261 DPA -13.58 RAP 330.20 ECC 1.4895 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME -15.23 111.94 2 29 1 75.55 14 6 17 113.10 3 43 55 157.27 2 29 1 1566.2 31.17 38.44 -18.37 90.00 1 52 55 2166.24 160.02 4501.1 22.39 218.44 24.62 226.40 90.00 12 41 16 5101.07 156.77 3 43 55 1310.9 -16.23 11.92 3 12 4 1910.94 14 4 49 4831.62 19.16 -19.52 100.00 74.40 15 25 20 116.35 4 43 49 71.18 16 34 48 4231.6 23.44 198.24 159.67 206.22 100.00 25.83 4 15 16 1713.06 15 18 6 4602.25 1113.1 -18.89 26.23 355.47 155.24 2.62 -22.61 110.00 4002.3 158.53 179.65 187.68 110.00 15 18 6 29.07 MIO-COURSE EXECUTION ACCURACY
SGT 585.8 SGR 388.0 SG3 230.9
RRT .0264 RRF -.0674 RTF -.5688
SGB 702.6 R23 -.0406 R13 -.5697
SGI 585.9 SGZ 387.8 THA 1.78
EL1 417.3 EL2 92.5 ALF 61.77 DIFFERENTIAL CORRECTIONS TOE -.1818 TRA -.2991 TC3 .4174 BAU .1702 RDE -.3520 RRA .0527 RC3 -.0949 FAU .07462 FOE .6647 FRA -.9677 FC3-2.1721 BSP 1510 BDE .3962 BRA .3037 BC3 .4280 FSP -649

```
FLIGHT TIME 78.00
                                                                                                                                       ARRIVAL DATE MAR 1 1966
LAUNCH DATE DEC 13 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 219.039
    RL 147.27 LAL -.00 LOL 80.78 VL 28.114 GAL -9.53 AZL 86.66 HCA 99.79 SMA 131.14 ECC .20517 1NC 3.3393 V1 30.253 RP 107.73 LAP 3.29 LOP 180.58 VP 38.103 GAP -5.90 AZP 90.57 TAL 224.25 TAP 324.05 RCA 104.24 APO 158.05 VZ 35.176 RC 61.127 GL 17.39 GP 2.03 ZAL 145.80 ZAP 33.69 ETS 355.82 ZAE 153.59 ETE 344.42 ZAC 61.93 ETC 163.81 CLP -33.64
   PLANETOCENTRIC CONIC
     C3 29 216 VHL 5.405 DLA -4.65 RAL 289.78 RAD 6568.2 VEL 12.272 PTH 2.21 VHP 4.923 DPA -13.64 RAP 329.56 ECC 1.4808
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 49 49 2162.71
12 38 37 5095.69
3 8 59 1907.36
14 2 9 4826.27
4 12 13 1709.38
15 15 24 4597.01
                                                                                               112.01 2 25 52
                                                                                                                             1562.7
                                                                                                                                              -15.13
        90.00
                                                    -18.28
                                                                   38.22
                                                                                 156.26
                                                                                                                                                               30.96
        90.00
                                                    24.53
                                                                   226.03
                                                                                  158.97
                                                                                                   75.39 14 3 33
                                                                                                                                4495.7
                                                                                                                                                22.28
                                                                                                                                                               218.08
       100.00
                                                                                                              3 40 46
                                                   -19.43
                                                                    18.94
                                                                                  155.76
                                                                                                  113.18
                                                                                                                                1307.4
                                                                                                                                                -16.12
                                                                                                                                                                11.71
                                                                                                   74.23 15 22 35
                                                                                                                              4226.3
1109.4
       100.00
                                                   25.73
                                                                  205.86
                                                                                  158.61
                                                                                                                                                23.32
                                                                                                                                                              197.89
       110.00
                                                   -22.50
                                                                    2.40
                                                                                  154.24
                                                                                                 116.44
                                                                                                             4 40 42
                                                                                                                                              -18.77
                                                                                                                                                               355.25
                                                                                                   70.99 16 32 1
                                                28.96
                                                                                                                                3997.0
      110.00
                                                                  187.31
                                                                                  157.47
                                                                                                                                               26.09
                                                                                                                                                              179.31
                                                                                                                       ST 2862 CR5 .9255 CST .6214
LSA 539.3 MSA 163.2 SR4
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 572.3 SGR 384.3 SG3 262.2
RRT .0319 RRF -.0840 RTF -.5362
    TOE -.1741 TRA -.3018 TC3 .4037 BAU .1616
    ROE -.3465 RRA .0528 RC3 -.0906 FAU .08348
                                                                       SGB 689.3 R23 -.0529 R13 -.5378
    FOE .7527 FRA-1.1217 FC3-2.4738 BSP 1424
BOE .3878 BRA .3064 BC3 .4137 FSP -748
                                                                       SG1 572.5 SG2 384.0 THA 2.23
                                                                                                                            EL1 412.1 EL2 94.3 ALF 62.37
                                                                                                                                        ARRIVAL DATE MAR 3 1966
LAUNCH DATE DEC 13 1965
                                                                           FLIGHT TIME 80.00
                                                                          DISTANCE 225.718
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.182 GAL -9.48 AZL 86.68 MCA 103.02 SMA 131.64 ECC .20211 INC 3.3240 V1 30.253 RP 107.76 LAP 3.24 LOP 183.82 VP 38.143 GAP -5.20 AZP 90.75 TAL 225.11 TAP 328.14 RCA 105.03 APO 158.24 V2 35.166
    RC 63.151 GL 17.49 GP 2.20 7AL 146.28 7AP 37.76 ETS 355.98 7AE 155.44 ETE 344.36 7AC 61.08 ETC 163.77 CLP -37.71
   PLANETOCENTRIC CONIC
    C3 28.746 VHL 5.362 DLA -4.62 RAL 289.18 RAD 6568.2 VEL 12.252 PTH 2.20 VHP 4.615 DPA -13.75 RAP 328.69 ECC 1.4731 LNCH A77TH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 47 13 2159.45 -18.19 38.02 155.39 112.08 2 23 12 1559.5 -15.04 30.76
                 1 LNCH TIME L-I TIME
1 47 13 2159.45
12 36 24 5090.84
3 6 23 1904.06
13 59 55 4821.46
4 9 39 1706.00
15 13 8 4592.29
                                                                               155.39
                                                                                                112.08
        90.00
                                                    -18.19
                                                                    38.02
                                                                                                               2 23 12
                                                                                                                               1559.5
                                                                                                                                              -15.04
                                                                                                                                                                30.76
        90.00
                                                                   225.70
                                                                                  158.06
                                                                                                   75.24
                                                                                                                                                               217.76
                                                    24.44
                                                                                                              14 1 15
                                                                                                                                 4490.8
                                                                                                                                                 22.18
                                                                                                 113.25 3 38 7
74.08 15 20 16
4 38 5
                                                                  18.74
205.53
                                                  -19.34
25.64
       100.00
                                                                                  154.89
                                                                                                                                1304.1
                                                                                                                                                -16.03
                                                                                                                                                                11.51
                                                                                  157.70
                                                                                                                                4221.5
                                                                                                                                                23.21
                                                                                                                                                               197.57
      100.00
                                                                     2.19
                                                                                                 116.53 4 38 5
70.82 16 29 41
                                                                                                                               1106.0
       110.00
                                                                                  133.37
                                                                                                                                               -18.65
                                                                                                                                                               355.05
                                                   -22.40
                  15 13 8
                                   4592.29 28.85
                                                                                  156.56
                                                                                                                                 3992.3
                                                                                                                                                 25.96
                                                                                                                                                               179.00
       110.00
                                                                   186.99
                                                                      MID-COURSE EXECUTION ACCURACY
SGT 334.1 SGR 379.8 SG3 296.9
RRT .0352 RRF -.1038 RTF -.4860
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS

TOE -.1631 TRA -.3102 TC3 .3797 BAU .1495

ROE -.3407 RRA .0537 RC3 -.0850 FAU .09327

FOE .8490 FRA-1.2894 FC3-2.8091 BSP 1305

BOE .3780 BRA .3148 BC3 .3891 FSP -859
                                                                                                                            ST 201.7 SR 364.6 SS 399.4
CRT .8421 CRS .9237 CST .5860
LSA 551.1 MSA 169.8 SSA 24.1
                                                                       SGB 671.7 R23 -. 0716 R13 -. 4885
                                                                       SG1 554.4 SG2 379.3 THA 2.60
                                                                                                                            EL1 405.0 EL2 97.9 ALF 63.33
                                                                          FLIGHT TIME 82.00
                                                                                                                                       ARRIVAL DATE MAR 5 1966
LAUNCH DATE DEC 13 1965
                                                                         OISTANCE 232.365
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.238 CAL -9.43 A7L 86.69 HCA 106.25 SMA 132.05 ECC .19947 INC 3.3083 VI 30.253
RP 107.80 LAP 3.18 LOP 187.05 VP 38.174 GAP -4.54 A7P 90.93 TAL 225.83 TAP 332.08 RCA 105.71 APO 158.39 V2 35.155
RC 65.219 GL 17.58 GP 2.38 ZAL 146.66 ZAP 42.07 ETS 356.13 ZAE 157.62 ETE 344.12 ZAC 59.99 ETC 163.69 CLP -42.02
   PLANETOCENTRIC CONIC
    C3 28.316 VHL 5.321 DLA -4.60 RAL 288.69 RAD 6568.1 VEL 12.235 PTH 2.20 VHP 4.336 DPA -13.92 RAP 327.57 ECC 1.4660
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                                                                                             37.83 154.66
225.40 157.29
                   1 45 5 2156.41
12 34 37 5086.35
                                                  -18.12
                                                                  225.40
                                                                                                                                               22.08
                                                                                                                                                              217.47
                                                                 18.55 154.15
205.22 156.93
1.99 152.64
186.68 188
                                                   24.36
                12 34 37 30050.33

3 4 16 1900.99 -19.26

13 58 7 4817.02 25.56

4 7 33 1702.84 -22.30

15 11 19 4587.92 28.75
                                                                                                                                             -15.94
      100.00
                                                                                                                                4217.0
                                                                                                                                               23.11
      100.00
                                                                                                                                              -18.55
                                                                                                                                                              354.87
      110.00
                                                                                                                                              25.85
                                                                                                                                                             178.71
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 532.5 SGR 374.5 SG3 335.1 ST 192.0 SR 360.7 S5 424.9

RRT .0315 RRF -.1262 RTF -.4134 CRT .8067 CRS .9220 CST .5294

SGB 651.0 R23 -.1005 R13 -.4167 LSA 562.1 MSA 176.1 S5A 23.8

SG1 532.8 SG2 374.1 THA 2.51 EL1 395.3 EL2 103.5 ALF 64.92
    TOE -.1490 TRA -.3239 TC3 .3458 BAU .1342
    ROE -.3346 RRA .0555 RC3 -.0780 FAU .10405
FOE .9509 FRA-1.4726 FC3-3.1811 BSP 1171
BOE .3663 BRA .3286 BC3 .3545 FSP -987
                                                                                                                                       ARRIVAL DATE HAR 7 1966
                                                                           FLIGHT TIME 84.00
LAUNCH DATE DEC 13 1965
                                                                          DISTANCE 238.978
   HELTOCENTRIC CONTC.
    RL 147.27 LAL -.00 LOL 80.78 VL 28.283 CAL -9.38 AZL 86.71 MCA 109.48 SMA 132.39 ECC .19719 INC 3.2921 V1 30.253
RP 107.83 LAP 3.10 LOP 190.29 VP 38.197 CAP -3.91 AZP 91.10 TAL 226.40 TAP 335.88 RCA 106.28 APO 158.49 V2 35.143
RC 67.327 GL 17.66 GP 2.57 ZAL 146.95 ZAP 46.63 ETS 356.26 ZAE 160.13 ETE 343.62 ZAC 58.66 ETC 163.58 CLP -46.57
   PLANETOCENTRIC CONIC
    C3 27.913 VHL 5.283 OLA -4.58 RAL 288.30 RAO 6568.1 VEL 12.218 PTH 2.20 VHP 4.087 DPA -14.15 RAP 326.21 ECC 1.4594
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 23 2153.53 -18.04 37.65 154.04 112.20 2 19 17 1553.5 -14.87 30.41
                                                                                               74.98 13 57 57
113.38 3 34 13
73.81 15 16 57
116.68 4 34 13
70.52 16 26 19
                                                                                                                                4482.1
                                                                                                                                                21.99
                                                                                                                                                              217.19
                  12 33 15
                                                    24.29
                                                                  225.10
                                                                                 156.64
        90.00
                                  5082.08
                                                                    18.36
                                                                                                                                               -15.85
                                                                                                                                                               11.15
       100.00
                     3 2 35 1898.07
                                                  -19.18
                                                                               153.54
                                                                                                                                1298.1
      100.00 13 56 45 4812.77
110.00 4 5 53 1699.85
                                                                                                                                4212.8
                                                                                                                                               23.01
                                                                                                                                                              197.00
                                                   25.48
                                                                  204.93
                                                                                 156.27
                                                                               152.02
                                                                                                                                                              354.69
                                                  -22.21
                                                                     1.81
                                                                                                                                1099.9
                                                                                                                                             -18.45
                                  4583.76
                                                   28.66
                                                                  186.40
                                                                                  155.12
                                                                                                                                3983.8
                                                                                                                                               25.74
                                                                                                                                                              178.44
                   15 9 55
      110.00
                                                                 DIFFERENTIAL CORRECTIONS
    TDE -.1321 TRA -.3462 TC3 .2974 BAU .1140
    RDE -.3280 RRA .0580 RC3 -.0694 FAU .11537
    FOE 1.0626 FRA-1.6602 FC3-3.5783 BSP 962
BOE .3536 BRA .3511 BC3 .3054 FSP -1119
```

ARRIVAL DATE MAR 9 1966

FLIGHT TIME 86.00 LAUNCH DATE DEC 13 1965 RL 147.27 LAL -.00 LOL 80.78 VL 28.318 GAL -9.33 A7L 86.72 MCA 112.71 SMA 132.65 ECC .19521 INC 3.2752 VI 30.253 RP 107.87 LAP 3.02 LOP 193.52 VP 38.213 GAP -3.30 A7P 91.27 TAL 226.83 TAP 339.53 RCA 106.76 APO 158.55 V2 35.132 RC 69.470 GL 17.72 GP 2.78 7AL 147.16 ZAP 51.42 ETS 356.38 ZAE 162.96 ETE 342.72 ZAC 57.09 ETC 163.44 CLP -51.36 OISTANCE 245.558 MELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.19 VHP 3.868 OPA -14.43 RAP 324.61 ECC 1.4530 C3 27.527 VHL 5.247 DLA -4.55 RAL 288.02 RAD 6568.1 VEL 12.203 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -14.80 1550.8 112.26 2 17 56 -17.97 37.48 153.53 1 42 5 2150.78 12 32 18 5077.89 90.00 216.91 74.86 13 56 56 113.44 3 32 53 4477.9 156.10 224.82 24.22 90.00 10.99 1295.3 3 1 18 1895.28 13 55 47 4808.63 18.19 153.03 -19.10 73.68 15 15 56 116.75 4 32 55 70.38 16 25 16 196.73 22.92 4208.6 155.73 204.65 100.00 25.40 1097.0 -18.35 354.53 4 4 38 1696.99 15 8 56 4579.69 1.63 151.52 -22.12 3979.7 25.63 178.17 154.58 186.12 28.57 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 172.6 SR 351.2 SS 476.4 CRT .6567 CRS .9221 CST .3273 LSA 586.8 MSA 187.6 SSA 23.0 ELI 371.4 EL2 123.1 ALF 69.79 SGT 495.0 SGR 362.3 SG3 418.3 TDE -.1105 TRA -.3749 TC3 .2368 BAU .0898 RRT -.0042 RRF -.1855 RTF -.1520 SGB 613.4 R23 .1868 R13 .1510 SGI 495.0 SGZ 362.3 THA 179.62 RDE -.3210 RRA .0614 RC3 -.0592 FAU .12736 FDE 1.1742 FRA-1.8559 FC3-4.0055 BSP 733 BOE .3395 BRA .3799 BC3 .2441 FSP -1267 ARRIVAL DATE MAR 11 1966 FLIGHT TIME 88.00 LAUNCH DATE DEC 13 1965 015TANCE 252.104 RL 147.27 LAL -.00 LOL 80.78 VL 28.344 GAL -9.27 A7L 86.74 HCA 115.93 SMA 132.85 ECC .19349 INC 3.2575 V1 30.253
RP 107.90 LAP 2.93 LOP 196.74 VP 38.221 GAP -2.73 A7P 91.43 TAL 227.12 TAP 343.05 RCA 107.14 APO 158.55 V2 35.120
RC 71.643 GL 17.76 GP 3.00 7AL 147.29 ZAP 56.42 ETS 356.51 ZAE 166.07 ETE 341.16 ZAC 55.31 ETC 163.27 CLP -56.37 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 27.149 VHL 5.210 DLA -4.53 RAL 287.84 RAD 6568.1 VEL 12.187 PTH 2.19 VHP 3.678 DPA -14.74 RAP 322.78 ECC 1.4468
LNCH AZYHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZYHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.31 2 16 59
74.73 13 56 19
113.50 3 31 56
73.55 15 15 16
116.82 4 32 0
70.23 16 24 37 2 16 59 153.13 -17.90 37.32 90.00 1 41 11 2148.11 216.64 4473.7 21.81 24.14 224.54 155.66 90.00 12 31 46 5073.66 1292.6 -15.69 10.82 3 0 24 1892.58 13 55 14 4804.45 4 3 46 1694.19 15 8 21 4575.60 -19.03 18.02 152.63 100.00 4204.5 22.82 196.46 155.29 151.12 25.32 204.37 100.00 354.36 1094.2 -18.26 -22.04 1.46 110.00 177.91 3975.6 25.52 28.47 185.84 154.14 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 494.2 SGR 355.8 SG3 461.3 RRT -.0476 RRF -.2232 RTF .0454 SGB 608.9 R23 .2188 R13 -.0566 SG1 494.8 SG2 355.0 THA 175.95 ST 166.5 SR 345.6 SS 501.5 CRT .5180 CRS .9240 CST .1643 TOE -.0864 TRA -.4128 TC3 .1600 BAU .0606 RDE -.3136 RRA .0655 RC3 -.0473 FAU .13924 LSA 600.8 MSA 192.6 SSA 22.6 FOE 1.2904 FRA-2.0430 FC3-4.4403 BSP 448 EL1 358.1 EL2 137.4 ALF 73.49 BOE .3253 BRA .4180 BC3 .1669 FSP -1409 ARRIVAL DATE MAR 13 1966 FLIGHT TIME 90.00 LAUNCH DATE DEC 13 1965 RL 147.27 LAL -.00 LOL 80.78 VL 28.363 GAL -9.21 A7L 86.76 HCA 119.15 SMA 132.99 ECC .19197 INC 5.2389 VI 30.253
RP 107.94 LAP 2.83 LOP 199.97 VP 38.224 GAP -2.17 A7P 91.58 TAL 227.28 TAP 346.43 RCA 107.46 APO 158.51 V2 35.108
RC 73.845 GL 17.80 GP 3.24 ZAL 147.35 ZAP 61.62 ETS 356.65 ZAE 169.42 ETE 338.26 ZAC 55.34 ETC 163.05 CLP -61.57 DISTANCE 258.617 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 26.772 VHL 5.174 DLA -4.50 RAL 287.75 RAD 6568.1 VEL 12.172 PTH 2.18 VHP 3.518 DPA -15.09 RAP 320.75 ECC 1.4406 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.37 2 16 23 74.60 13 56 6 -14.65 152.81 2 16 23 1545.5 1 40 37 2145.49 12 31 36 5069.38 2 59 51 1889.91 -17.83 37.15 90.00 4469.4 21.72 216.36 24.06 224.24 155.31 90.00 113.56 3 31 21 1289.9 73.42 15 15 4 4200.2 116.89 4 31 26 1091.4 70.09 16 24 21 3971.4 -15.61 10.67 152.31 -18.96 17.86 22.72 100.00 196.18 4200.2 13 55 4 4800.19 4 3 15 1691.43 15 8 9 4571.43 154.94 25.23 204.08 100.00 13 55 4 -18.17 354.20 150.81 -21.95 1.29 110.00 25.40 177.64 153.78 185.55 28.38 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 518.2 SGR 349.2 SG3 503.4 RRT -.1121 RRF -.2663 RTF .2641 SGB 624.9 R23 .2135 R13 -.2844 SGI 520.8 SG2 345.3 THA 172.26 ST 166.0 SR 339.4 SS 524.7 CRT .3260 CRS .9265 CST -.0418 TOE -.0585 TRA -.4584 TC3 .0684 BAU .0273 ROE -.3058 RRA .0703 RC3 -.0338 FAU .15078 FOE 1.4021 FRA-2.2185 FC3-4.8758 BSP 284 LSA 615.4 MSA 196.9 SSA 22.1 ELI 344.8 ELZ 154.4 ALF 78.63 BOE .3113 BRA .4638 BC3 .0763 FSP -1550 ARRIVAL DATE MAR 15 1966 FLIGHT TIME 92.00 LAUNCH DATE DEC 13 1965 DISTANCE 265.095 RL 147.27 LAL -.00 LOL 80.78 VL 28.373 GAL -9.14 A7L 86.78 MCA 122.37 SMA 133.07 ECC .19062 INC 3.2191 V1 30.253 RP 107.98 LAP 2.72 LOP 203.19 VP 38.220 GAP -1.65 A7P 91.72 TAL 227.31 TAP 349.68 RCA 107.70 APO 158.43 V2 35.095 RC 76.070 GL 17.83 GP 3.48 7AL 147.33 7AP 66.97 ETS 356.81 7AE 172.92 ETE 331.97 7AC 51.23 ETC 162.81 CLP -66.93 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.18 VHP 3.386 DPA -15.44 RAP 318.56 ECC 1.4344 C3 26.392 VHL 5.137 DLA -4.47 RAL 287.75 RAD 6568.1 VEL 12.156 PTH 2.18 VHP 3.386 DPA -15.44 RAP 318.56 ECC 1.4344 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 24 2142.85 -17.77 36.99 152.58 112.42 2 16 6 1542.9 -14.57 29.77 90.00 12 31 49 5064.92 23.98 223.94 155.05 74.47 13 56.14 4464.9 21.62 216.07 100.00 2 59 38 1887.23 -18.88 17.69 152.08 113.61 3 31 5 1287.2 -15.53 10.51 100.00 13 55 16 4795.77 25.15 203.78 154.68 73.28 15 15 11 4195.8 22.62 195.89 110.00 4 3 4 1688.66 -21.87 1.12 150.58 116.95 4 31 12 1088.7 -18.07 354.04 110.00 15 8 19 4567.11 28.28 185.25 153.51 69.94 16 24 26 3967.1 25.28 177.36 101.00 15 8 19 4567.11 28.28 185.25 153.51 69.94 16 24 26 3967.1 25.28 177.36 C3 26.392 VHL 5.137 DLA -4.47 RAL 287.75 RAD 6568.1 VEL 12.156 PTH ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY ST 173.9 SR 332.7 SS 543.8 CRT .0949 CRS .9289 CST -.2702 LSA 629.3 MSA 200.4 SSA 21.7 DIFFERENTIAL CORRECTIONS SGT 573.3 SGR 342.8 SG3 543.5 RRT -.1923 RRF -.3134 RTF .4650 TOE -.0266 TRA -.5107 TC3 -.0369 BAU .0146 SGB 568.0 R23 .1809 R13 -.4853 SGB 579.0 SG2 333.1 THA 170.15 ROE - . 2974 RRA . 0757 RC3 - . 0185 FAU . 16169 FOE 1.4981 FRA-2.3777 FC3-5.3039 BSP 538 EL1 333.2 EL2 172.9 ALF 86.11 BOE .2986 BRA .5162 BC3 .0413 FSP -1694

```
LAUNCH DATE DEC 13 1965
                                                                       FLIGHT TIME 94.00
                                                                                                                                ARRIVAL CATE MAR 17 1966
   HELIOCENTRIC CONIC
                                                                       015TANCE 271.540
    RL 147.27 LAL -.00 LOL 80.78 VL 28.377 GAL -9.07 A7L 86.80 MCA 125.59 SMA 133.10 ECC .18942 INC 3.1978 V1 30.253 RP 108.02 LAP 2.60 LOP 206.40 VP 38.211 GAP -1.14 A7P 91.86 TAL 227.23 TAP 352.81 RCA 107.89 APO 158.31 V2 35.082
     RC 78.316 GL 17.85 GP 3.73 ZAL 147.24 ZAP 72.41 ETS 357.00 ZAE 176.29 ETE 312.64 ZAC 49.02 ETC 162.54 CLP -72.37
   PLANETOCENTRIC CONIC
     C3 26.004 VHL 5.099 DLA -4.44 RAL 287.83 RAD 6568.1 VEL 12.140 PTH 2.18 VHP 3.282 DPA -15.79 RAP 316.27 ECC 1.4280
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 29 2140.17 -17.70 36.82 152.43 112.47 2 16 9 1540.2 -14 50 20 61
                                                                                        -14.50
                   12 32 23 5060.26
        90.00
                                                 23.90
                                                               223.63
                                                                             154.85
                                                                                                                         4460.3
                                                                                                                                        21.52
                                                                                                                                                      215.76
       100.00
                     2 59 45 1884.50
                                                 -18.81
                                                                 17.53
                                                                             151.93
                                                                                                                         1284.5
                                                                                                                                        -15.45
                                                                                                                                                       10.34
                 13 55 49 4791.16
       100.00
                                                 25.06
                                                               203.47
                                                                             154.48
                                                                                                                         4191.2
                                                                                                                                       22.51
                                                                                                                                                     195.59
                 4 3 12 1685.82
15 8 51 4562.61
       110.00
                                                 -21.78
                                                                  .95
                                                                             150.43
                                                                                                                         1085.8
                                                                                                                                      -17.98
                                                                                                                                                     353.88
       110.00
                                                  28.17
                                                               184.95
                                                                             153.31
                                                                                                                         3962.6
                                                                                                                                        25.16
                                                                                                                                                     177.07
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
    TOE .0074 TRA -.5700 TC3 -.1573 BAU .0547
RDE -.2886 RRA .0813 RC3 -.0017 FAU .17096
                                                                   SGT 662.1 SGR 336.9 SG3 578.4
RRT -.2747 RRF -.3660 RTF .6220
                                                                                                                     ST 192.9 SR 325.4 S5 561.2

CRT -.1271 CRS .9326 CST -.4678

LSA 645.2 MSA 203.1 S5A 21.2
    FDE 1.5846 FRA-2.5021 FC3-5.6917 BSP 988
                                                                   5GB 742.9 R23 .1483 R13 -.6373
    BOE .2887 BRA .5757 BC3 .1573 FSP -1812
                                                                   561 670.5 5G2 319.9 THA 169.67
                                                                                                                     EL1 326.8 EL2 190.5 ALF 96.54
LAUNCH DATE DEC 13 1965
                                                                       FLIGHT TIME 96.00
                                                                                                                                ARRIVAL DATE MAR 19 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 277.953
   RL 147.27 LAL -.00 LOL 80.78 VL 28.375 GAL -8.98 A7L 86.83 HCA 128.80 SHA 133.08 ECC .18835 INC 3.1747 V1 30.253
RP 108.06 LAP 2.47 LOP 209.62 VP 38.198 GAP -.86 A7P 91.99 TAL 227.03 TAP 355.83 RCA 108.02 APO 158.15 V2 35.069
RC 80.581 GL 17.86 GP 3.98 TAL 147.09 TAP 77.88 ETS 357.21 TAE 177.50 ETE 238.29 TAC 46.78 ETC 162.25 CLP -77.85
   PLANETOCENTRIC CONIC
    C3 25.605 VHL 5.060 DLA -4.41 RAL 287.99 RAD 6568.0 VEL 12.124 PTM
                                                                                               2.17 VMP 3.205 DPA -16.11 RAP 313.93 ECC 1.4214
    LNCH AZMTH LNCH TIME L-I TIME
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 40 53 2137.39
12 33 17 5055.39
3 0 10 1881.67
13 56 42 4786.34
4 3 40 1682.87
15 9 41 4557.90
       90.00
                                                 -17.62
                                                                           152.35
                                                                                                                         1537.4
                                                               36.65
                                                                                           112.53
                                                                                                         2 16 31
                                                                                                                                      -14.42
                                                                                                                                                       29.44
                                                                                           74.20 13 57 33
113.73 3 31 31
73.00 15 16 26
117.09 4 31 42
69.63 16 25 39
        90.00
                                                  23.81
                                                               223.30
                                                                             154.73
                                                                                                                         4455.4
                                                                                                                                        21.41
                                                                                                                                                      215.45
                                                                             151.85
      100.00
                                                -18.73
                                                                17.35
                                                                                                                         1281.7
                                                                                                                                        -15.36
                                                                                                                                                       10.18
      100.00
                                                 24.96
                                                               203.14
                                                                            154.36
                                                                                                                         4186.3
                                                                                                                                   -17.88
                                                                                                                                       22.40
                                                                                                                                                     195.28
      110.00
                                                -21.69
                                                                           150.35
                                                                                                                         1082.9
                                                                                                                                                     353.70
      110.00
                                                 28.06
                                                               184.62
                                                                             153.19
                                                                                                                         3957.9
                                                                                                                                        25.03
                                                                                                                                                      176.76
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 SGT 778.8 SGR 331.6 SG3 608.2
RRT -.3561 RRF -.4213 RTF .7307
    TOE .0438 TRA -.6339 TC3 -.2895 BAU .0993
                                                                                                                    $T 221.8 SR 317.4 S5 573.0
CRT -.3140 CRS .9359 CST -.6210
   ROE -.2791 RRA .0873 RC3 .0166 FAU .17871
FOE 1.8440 FRA-2.9952 FC3-6.0424 BSP 1496
BOE .2825 BRA .6399 BC3 .2900 FSP -1926
                                                                  568 846.5 R23 .1214 R13 -.7409
                                                                                                                    LSA 660.2 MSA 204.8 SSA 20.7
                                                                 5G1 789.3 SG2 305.7 THA 169.84
                                                                                                                    EL1 330.0 EL2 202.5 ALF 110.31
LAUNCH DATE DEC 13 1965
                                                                      FLIGHT TIME 98.00
                                                                                                                               ARRIVAL DATE MAR 21 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 284.334
   RL 147.27 LAL -.00 LOL 80.78 VL 28.367 GAL -8.90 AZL 86.85 MCA 132.01 SMA 133.02 ECC .18737 INC 3.1495 V1 30.253
RP 108.10 LAP 2.34 LOP 212.83 VP 38.180 GAP -.20 AZP 92.11 TAL 226.73 TAP 358.74 RCA 108.10 APO 157.95 V2 35.056
RC 82.862 GL 17.87 GP 4.25 ZAL 146.88 ZAP 83.30 ETS 357.46 ZAE 174.62 ETE 196.53 ZAC 44.57 ETC 161.95 CLP -83.29
   PLANETOCENTRIC CONIC
    C3 25.191 VHL 5.019 DLA, -4.37 RAL 288.24 RAD 6568.0 VEL 12.107 PTH 2.17 VMP 3.154 DPA -16.38 RAP 311.61 ECC 1.4146 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         112.59 2 17 10
74.05 13 58 41
       90.00
                  1 41 35 2134.44
12 34 30 5050.30
                                                                         152.33
                                                -17.55
                                                               36.47
                                                                                                        2 17 10 1534.4
        90.00
                                                23.71
                                                              222.96
                                                                            154.67
                                                                                                                        4450.3
                                                                                           113.79 3 32 11
72.84 15 17 35
117.17 4 32 25
69.46 16 26 44
                 3 0 53 1878.66
13 57 54 4781.31
      100.00
                                                -18.65
                                                               17.17
                                                                          151.83
                                                                                                                       1278.7
                                                                                                                                     -15.27
      100.00
                                                24.86
                                                              202.80
                                                                            154.30
                                                                                                                        4181.3
                                                                                                                                      22.28
                                                                                                                                                     194.95
                                                                         150.34
      110.00
                   4 4 25 1679.75
                                                -21.59
                                                                  .58
                                                                                                                       1079.7
                                                                                                                                                    353.52
                                                              184.29
      110.00
                  15 10 51
                                                27.94
                                                                             153.12
                                                                                                                        3953.0
                                 4552.99
                                                                                                                                        24.89
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                  SGT 918.5 SGR 327.2 SG3 629.5

RRT -.4318 RRF -.4799 RTF .8018

SGB 975.1 R23 .1051 R13 -.8086

SG1 930.5 SG2 291.3 THA 170.30
                                                                                                                   ST 258.5 SR 308.9 SS 582.7
CRT -.4520 CRS .9407 CST -.7217
    TDE .0809 TRA -.7019 TC3 -.4335 BAU .1465
    RDE -.2691 RRA .0931 RC3 .0361 FAU .18387
   FDE 1.6886 FRA-2.6384 FC3-6.3192 BSP 2038
BDE 2810 BRA .7081 BC3 .4350 FSP -1996
                                                                                                                   LSA 677.5 MSA 206.0 SSA 20.1
                                                                                                                    EL1 346.3 EL2 205.7 ALF 124.20
LAUNCH DATE DEC 13 1965
                                                                      FLIGHT TIME 100.00
  HELIOCENTRIC CONTC
                                                                     DISTANCE 290.683
   RL 147.27 LAL -.00 LOL 80.78 VL 28.354 GAL -8.80 AZL 86.88 MCA 135.22 SMA 132.92 ECC .18648 INC 3.1216 V1 30.253 RP 108.14 LAP 2.20 LOP 216.04 VP 38.158 GAP .24 AZP 92.22 TAL 226.33 TAP 1.55 RCA 108.14 APO 157.71 V2 35.043
   RC 85.157 GL 17.86 GP 4.52 7AL 146.61 7AP 88.63 ETS 357.75 7AE 170.99 ETE 185.99 7AC 42.45 ETC 161.67 CLP -88.63
  PLANETOCENTRIC CONIC
   C3 24.762 VHL 4.976 DLA -4.34 RAL 288.55 RAD 6568.D VEL 12.089 PTH 2.16 VHP 3.125 DPA -16.59 RAP 309.39 ECC 1.4075
   LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 42 36 2131.23
12 36 0 5045.04
3 1 54 1875.40
13 59 23 4776.10
4 5 28 1676.37
15 12 18 4547.89
       90.00
                                                -17.46
                                                              36.27
                                                                           152.37
                                                                                          112.65
                                                                                                       2 18 7
                                                                                                                       1531.2
                                                                                                                                     -14.24
       90.00
                                                                                            73.90 14 0 5
                                                                                                                                      21.18
                                                23.61
                                                              222.60
                                                                            154.67
                                                                                                                        4445.0
                                                                                                                                                     214.78
      100.00
                                                -18.56
                                                               16.97
                                                                            151.87
                                                                                           113.86
                                                                                                        3 33 9
                                                                                                                        1275.4
                                                                                                                                      -15.18
                                                                                            72.69 15 18 59
117.25 4 33 25
69.29 16 28 6
                                                                          154.30
      100.00
                                                24.76
                                                              202.45
                                                                                                                        4176.1
      110.00
                                               -21.48
                                                                  . 37
                                                                            150.38
                                                                                            117.25
                                                                                                                        1076.4
                                                                                                                                      -17.66
                                                                                                                                                    353.33
                                                                                                                                     24.75
     110.00
                                               27.82
                                                              183.94
                                                                            153.12
                                                                                                                      3947.9
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                               SGT 1073.5 SGR 323.6 SG3 644.1

RRT -.5044 RRF -.5388 RTF .8482

SGB 1121.2 R23 .0934 R13 -.8528

SGI 1086.7 SG2 276.1 THA 170.75
   TOE .1183 TRA -.7716 TC3 -.5859 BAU .1949
                                                                                                                   5T 300.5 SR 299.5 SS 585.8
CRT -.5522 CRS .9446 CST -.7901
   RDE -.2584 RRA .0988 RC3 .0570 FAU .18714
   FOE 1.6987 FRA-2.6488 FC3-6.5429 BSP 2643
BOE .2841 BRA .7779 BC3 .5887 FSP -2061
                                                                                                                   LSA 693.0 MSA 206.0 SSA 19.6
```

EL1 373.7 EL2 200.7 ALF 135.18

```
ARRIVAL DATE MAR 25 1966
                                                                          FLIGHT TIME 102.00
LAUNCH DATE DEC 13 1965
                                                                          DISTANCE 297.002
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.337 GAL -8.70 AZL 86.91 HCA 138.43 SMA 132.79 ECC .18567 INC 3.0904 V1 30.253 RP 108.18 LAP 2.05 LOP 219.25 VP 38.133 GAP .67 AZP 92.31 TAL 225.83 TAP 4.26 RCA 108.14 APO 157.45 V2 35.030
         87.465 GL 17.83 GP 4.80 ZAL 146.29 ZAP 93.79 ETS 358.09 ZAE 167.35 ETE 181.60 ZAC 40.48 ETC 161.43 CLP -93.81
   PLANETOCENTRIC CONIC
    C3 24.314 VHL 4.931 DLA -4.31 RAL 288.94 RAD 6568.0 VEL 12.070 PTH 2.16 VHP 3.118 DPA -16.72 RAP 307.32 ECC 1.4002
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 37 46 5039.66 23.51 222.24 154.73 73.75 14 1 45 4439.7 21.06 214.43 100.00 3 3 14 1871.78 -18.46 16.74 151.97 113.94 3 3 4 26 1271.8 -15.07 9.59 100.00 14 1 8 4770.77 24.65 202.09 154.35 72.53 15 20 38 4170.8 22.02 194.27
                                                                                                 117.34 4 34 43
69.11 16 29 43
                                                                                                                                1072.7
                                                                                                                                               -17.54
                                 1672.65
4542.66
                                                   -21.37
                                                                      .14
                                                                                 150.49
                     4 6 50
      110.00
                                                                                                                                                             175.79
                                                                                                                                              24.60
                                                                                                                               3942.7
                                                                  183.59
                                                                                 153.17
       110.00
                   15 14 I
                                                    27.69
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 345.5 SR 289.5 SS 587.0
CRT -.6238 CRS .9498 CST -.8325
                                                                      SGT 1238.7 SGR 321.2 SG3 649.5
RRT -.5717 RRF -.5982 RTF .8782
SGB 1279.7 R23 .D888 R13 -.8815
    TOE .1547 TRA -.8415 TC3 -.7456 BAU .2437
RDE -.2472 RRA .1040 RC3 .0786 FAU .18761
FDE 1.6943 FRA-2.6081 FC3-6.6801 BSP 3244
BOE .2916 BRA .8479 BC3 .7497 F3P -2080
                                                                                                                           LSA 710.7 MSA 205.7 SSA 18.9
                                                                      SG1 1252.9 SG2 260.6 THA 171.18
                                                                                                                           EL1 408.0 EL2 191.6 ALF 142.95
                                                                                                                                       ARRIVAL DATE MAR 27 1966
                                                                           FLIGHT TIME 104.00
LAUNCH DATE DEC 13 1965
                                                                          DISTANCE 303.292
   HELIOCENTRIC CONIC
   RL 147.27 LAL -.00 LOL 80.78 VL 28.315 GAL -8.59 A7L 86.94 HCA 141.63 SMA 132.63 ECC .18493 INC 3.0550 V1 30.253 RP 108.22 LAP 1.90 LOP 222.45 VP 38.105 GAP 1.07 A7P 92.40 TAL 225.25 TAP 6.88 RCA 108.10 APO 157.16 V2 35.016 RC 89.783 GL 17.79 GP 5.11 TAL 145.91 TAP 98.74 ETS 358.48 TAE 163.83 ETE 179.18 TAC 38.71 ETC 161.26 CLP -98.78
   PLANETOCENTRIC CONIC
                                                                                                     2.15 VHP 3.130 DPA -16.76 RAP 305.45 ECC 1.3925
    C3 23.849 VHL 4.884 DLA -4.29 RAL 289.39 RAO 6568.0 VEL 12.051 PTM
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 45 35 2123.54
12 39 44 5034.29
3 4 55 1867.64
14 3 5 4765.43
4 8 32 1668.44
15 15 57 4537.38
                                                                                                                              1523.5
                                                                                                                                                               28.62
                                                                                                 112.80 2 20 59
                                                    -17.26
                                                                   35.80
                                                                                 152.61
        90.00
                                                                                                             14 3 38
3 36 2
                                                                                                                                4434.3
                                                                                                                                                20.94
                                                                                                                                                               214.08
                                                                   221.88
                                                                                  154.84
                                                                                                   73.59
                                                    23.41
        90.00
                                                                                                                                1267.6
                                                                                                                                                -14.94
                                                                                                                                                                 9.35
                                                                                                  114.02
                                                    -18.34
                                                                    16.49
                                                                                  152.12
       100.00
                                                                                                   72.37
                                                                                                             15 22 31
                                                                                                                                4165.4
                                                                                                                                                21.89
                                                                                                                                                               193.93
                                                    24.54
                                                                   201.73
                                                                                 154.46
       100.00
                                                                                                             4 36 21
                                                                                                                                1068.4
                                                                                                                                               -17.39
                                                                                                                                                              352.87
                                                    -21.24
                                                                   359.89
                                                                                  150.64
                                                                                                  117.44
       110.00
                                                                                                   68.94 16 31 34
                                                                                                                                3937.4
                                                                                                                                                 24.45
                                                                   183.23
                                                                                 153.28
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1409.9 SGR 320.0 SG3 648.7
RRT - .6358 RRF - .6561 RTF .8984
SGB 1445.7 R23 .0871 R13 - .9009
                                                                                                                            ST 391.4 SR 278.6 SS 582.1
CRT -.6755 CRS .9543 CST -.8609
    TOE .1891 TRA -.9102 TC3 -.9110 BAU .2923
    RDE -.2352 RRA .1089 RC3 .1017 FAU .18635
                                                                                                                            LSA 726.3 MSA 204.5 SSA 18.2
    FOE 1.6594 FRA-2.5386 FC3-6.7646 BSP 3859
BOE .3018 BRA .9167 BC3 .9166 FSP -2092
                                                                                                                           EL1 445.2 EL2 180.6 ALF 148.58
                                                                       5G1 1424.9 5G2 244.4 THA 171.54
                                                                                                                                      ARRIVAL DATE MAR 29 1966
                                                                           FLIGHT TIME 106.00
LAUNCH DATE DEC 13 1965
                                                                          DISTANCE 309.554
    RL 147.27 LAL -.DD LOL 80.78 VL 28.290 GAL -8.47 AZL 86.99 HCA 144.83 SMA 132.44 ECC .18424 INC 3.0143 VI 30.253 RP 108.26 LAP 1.74 LOP 225.65 VP 38.073 GAP 1.46 AZP 92.46 TAL 224.59 TAP 9.42 RCA 108.04 APO 156.84 V2 35.003 RC 92.112 GL 17.72 GP 5.46 ZAL 145.48 ZAP 103.45 ETS 358.94 ZAE 160.49 ETE 177.57 ZAC 37.15 ETC 161.21 CLP-103.51
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.362 VHL 4.833 DLA -4.29 RAL 289.92 RAD 6567.9 VEL 12.031 PTH 2.15 VMP 3.159 DPA -16.71 RAP 303.83 ECC 1.3845
    LNCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 47 38 2118.69 -17.13 35.50 152.81 112.90 2 22 57 1518.7 -13.88 28.33 90.00 12 41 52 5029.07 23.31 221.53 155.01 73.45 14 5 41 4429.1 20.82 213.74
                                                                                                112.90 2 22 57
73.45 14 5 41
114.12 3 38 1
72.22 15 24 34
117.55 4 38 20
68.77 16 33 37
                                                                                                                              1262.8
                                                                                                                                               -14.80
                    3 6 58 1862.78
14 5 14 4760.21
                                                                                  152.32
                                                   -18.21
                                                                    16.19
        100.00
                                                                                                                                 4160.2
                                                                                                                                                21.77
                                                                                                                                                               193.49
                                                                                  154.63
        100.00
                                                    24.43
                                                                   201.38
                                                                                                                                                -17.23
                                                                                                                                                              352.99
                                                                                                                                1063.6
                                                                                  150.84
        110.00
                    4 10 36 1663.56
15 18 5 4532.19
                                                    -21.08
                                                                   359.59
                                                                                                                                 3932.2
                                                                                                                                                24.30
                                                                                                                                                               175.12
                                                    27.44
                                                                   182.88
                                                                                  153.44
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 436.9 SR 267.2 55 575.9

CRT -.7146 CRS .9598 CST -.8783

LSA 743.2 MSA 203.3 SSA 17.4
                                                                       SGT 1582.4 SGR 320.3 SG3 640.1
     TOE .2213 TRA -.9758 TC3-1.0798 BAU .3396
                                                                       RRT -.6947 RRF -.7121 RTF .9117
     RDE - .2228 RRA .1131 RC3 .1258 FAU .18281
                                                                      SGB 1614.5 R23 .0908 R13 -.9137
SG1 1598.3 SG2 228.1 THA 171.83
     FDE 1.6145 FRA-2.4294 FC3-6.7744 BSP 4463
BDE .3140 BRA .9823 BC3 1.0871 FSP -2063
                                                                                                                            EL1 483.5 EL2 168.9 ALF 152.80
                                                                                                                                        ARRIVAL DATE MAR 31 1966
                                                                           FLIGHT TIME 108.00
                                                                           DISTANCE 315.788
    HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.261 GAL -8.34 A7L 87.03 MCA 148.03 SMA 132.22 ECC .18361 INC 2.9666 VI 30.253
RP 108.31 LAP 1.57 LOP 228.85 VP 38.040 GAP 1.84 A7P 92.52 TAL 223.85 TAP 11.89 RCA 107.95 APO 156.50 V2 34.990
RC 94.449 GL 17.62 GP 5.85 ZAL 145.01 ZAP 107.88 ETS 359.47 ZAE 157.37 ETE 176.35 ZAC 35.83 ETC 161.31 CLP-107.98
    PLANETOCENTRIC CONIC
     C3 22.855 VHL 4.781 OLA -4.30 RAL 290.51 RAD 6567.9 VEL 12.010 PTH
                                                                                                      2.14 VHP 3.202 OPA -16.54 RAP 302.45 ECC 1.3761
     LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                              -13.71
                     1 50 8 2112.78
12 44 7 5024.27
3 9 28 1856.90
14 7 28 4755.39
                                                                                                                2 25 21
                                                                                                                               1512.8
                                                                    35.14
                                                                                  153.05
                                                                                                  113.01
                                                     -16.98
         90.00
                                                                                                   113.01 2 25 21
                                                                                                                                                                213.43
                                                                                                                                 4424.3
                                                                                                                                                20.71
                                                                                   155.23
                                                     23.21
                                                                    221.21
         90.00
                                                                                                                                 1256.9
                                                                                                                                                -14.62
                                                                                                                                                                 8.71
                                                                                                   114.24
                                                                                                                3 40 25
                                                                                   152.56
                                                    -18.05
                                                                     15.83
        100.00
                                                                                                    114.24 3 40 25
72.07 15 26 44
                                                                                                                                 4155.4
                                                                                                                                               21.65
                                                                                                                                                                193.28
                                                     24.33
                                                                    201.06
                                                                                   154.85
        100.00
                                                                                                   117.69 4 40 42
68.60 16 35 48
                                                                                                               4 40 42
                                                                                                                                 1057.7
                                                                                                                                               -17.03
                                                                                                                                                               352.25
                                  1657.74
4527.30
                                                                    359.24
                                                                                   151.08
                      4 13 5
                                                    -20.90
        110.00
                                                                                                                               3927.3
                                                                                                                                                24.16
                                                                                                                                                                174.81
                                                                                   153.66
                                                                   182.55
        110.00
                     15 20 21
                                                     27.32
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                           ST 480.5 $R 255.0 $S 564.5
CRT -.7441 CRS .9647 CST -.8900
                                                                        SGT 1754.8 SGR 322.6 SG3 627.4
     TOE .2497 TRA-1.0377 TC3-1.2526 BAU .3855
     ROE - 2098 RRA .1168 RC3 .1519 FAU .17814
FOE 1.5464 FRA-2.3040 FC3-6.7478 BSP 5067
                                                                        RRT -.7496 RRF -.7651 RTF .9209
                                                                       SGB 1784.2 R23 .0975 R13 -.9227
SG1 1771.6 SG2 211.5 THA 172.04
                                                                                                                           LSA 757.4 MSA 201.4 SSA 16.6
     BDE .3262 BRA 1.0443 BC3 1.2617 FSP -2032
                                                                                                                            EL1 520.8 EL2 157.2 ALF 156.14
```

```
FLIGHT TIME 110.00
LAUNCH DATE DEC 13 1965
                                                                                  DISTANCE 321.996
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.229 GAL -8.21 A7L 87.09 MCA 151.23 SMA 131.99 ECC .18304 INC 2.9095 V1 30.253
RP 108.35 LAP 1.40 LOP 232.04 VP 38.004 GAP 2.20 A7P 92.55 TAL 223.04 TAP 14.27 RCA 107.83 APO 156.15 V2 34.977
RC 96.794 GL 17.47 GP 6.32 ZAL 144.50 ZAP 112.03 ETS .10 ZAE 154.46 ETE 175.29 ZAC 34.74 ETC 161.62 CLP-112.18
   PLANETOCENTRIC CONIC
     C3 22.323 VML 4.725 OLA -4.36 RAL 291.18 RAD 6567.9 VEL 11.988 PTH 2.14 VMP 3.258 DPA -16.25 RAP 301.35 ECC 1.3674
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          1505.4
                                                                                        153.33
                                                                                                           113.15
                                                                                                                          2 28 18
         90.00
                     1 53 12 2105.36
12 46 21 5020.25
                                                                          34.68
                                                                                                                                                             -13.50
                                                                                                                                                                                27.54
                                                         -16.78
                                                                                                             73.20 14 10 2
                                                                                                                                             4420.3
         90.00
                                                         23.13
                                                                         220.94
                                                                                          155.50
                                                                                                                                                              20.61
                                                                                                                                                                               213.18
                                                                                                            114.39 3 43 20
71.95 15 28 56
                                                                                                                                          1249.6
4151.3
                      3 12 30 1849.56
                                                                          15.38
                                                                                         152.84
                                                                                                                                                             -14.40
       100.00
                                                         -17.84
                                                                                                                                                                                 8.28
       100.00
                     14 9 45
                                       4751.29
                                                         24.24
                                                                         200.78
                                                                                        155.12
                                                                                                                                                              21.55
                                                                                                                                                                               193.02
                                                                                                            117.85 4 43 34
68.47 16 38 4
                                                      -20.67
                                                                                        151.37
       110.00
                       4 16 3 1650.59
15 22 41 4523.02
                                                                         358.81
                                                                                                                                             1050.6
                                                                                                                                                             -16.78
                                                                                                                                                                              351.84
       110.00
                     15 22 41
                                                         27.21
                                                                         182.27
                                                                                          153.94
                                                                                                                                             3923.0
                                                                                                                                                              24.04
                                                                                                                                                                               174.54
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 1923.6 SGR 327.2 SG3 609.5

RRT -.7987 RRF -.8143 RTF .9270

SGB 1951.2 R23 .1101 R13 -.9286

SG1 1941.4 SG2 195.1 THA 172.18
                                                                                                                                        5T 521.4 SR 242.5 SS 551.9 CRT -.7678 CR5 .9702 CST -.8962
     TDE .2747 TRA-1.0939 TC3-1.4273 BAU .4293
    RDE -.1967 RRA .1198 RC3 .1800 FAU .17196
FDE 1.4730 FRA-2.1529 FC3-6.6688 BSP 5642
BDE .3379 BRA 1.1005 BC3 1.4386 FSP -1971
                                                                                                                                       LSA 771.5 MSA 199.8 55A 15.6
                                                                                                                                        EL1 556.3 EL2 145.7 ALF 158.83
LAUNCH DATE DEC 13 1965
                                                                                  FLIGHT TIME 112.00
                                                                                                                                                     ARRIVAL DATE APR 4 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 328.179
    RL 147.27 LAL -.00 LOL 80.78 VL 28.195 GAL -8.06 AZL 87.16 MCA 154.43 SMA 131.73 ECC .18251 INC 2.8396 V1 30.253
RP 108.39 LAP 1.23 LOP 235.23 VP 37.967 GAP 2.54 AZP 92.56 TAL 222.17 TAP 16.59 RCA 107.69 APO 155.78 VZ 34.964
RC 99.145 GL 17.24 GP 6.90 ZAL 143.96 ZAP 115.90 ETS .87 ZAE 151.79 ETE 174.25 ZAC 33.89 ETC 162.21 CLP-116.10
   C3 21.765 VHL 4.665 OLA -4.47 RAL 291.92 RAO 6567.9 VEL 11.964 PTH 2.13 VMP 3.325 OPA -15.80 RAP 300.51 ECC 1.3582 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 0 2095.71 -16.52 34.09 153.65 113.33 2 31 56 1495.7 -13.22 26.97 90.00 12 48 27 5017.65 23.08 220.77 155.85 73.13 14 12 5 4417.6 20.55 213.01 100.00 3 16 14 1840.08 -17.57 14.81 153.16 114.58 3 46 55 1240.1 -14.11 7.73 100.00 14 11 54 4748.51 24.18 200.60 155.47 71.87 15 31 2 4148.5 21.48 192.84 110.00 4 19 40 1641.50 -20.38 358.27 151.69 118.05 4 47 2 1041.5 -16.47 351.32 110.00 15 24 57 4519.85 27.13 182.05
   PLANETOCENTRIC CONIC
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TOE .2939 TRA-1.1446 TC3-1.6070 BAU .4717
                                                                             SGT 2089.7 SGR 335.2 SG3 589.6
RRT -.8425 RRF -.8591 RTF .9312
                                                                                                                                       ST 557.9 SR 229.4 SS 534.3
CRT -.7857 CRS .9752 CST -.8992
    ROE -.1851 RRA .1224 RC3 .2119 FAU .16532
FOE 1.3820 FRA-1.9961 FC3-6.5757 85P 6219
BOE .3463 BRA 1.1511 BC3 1.6209 FSP -1915
                                                                             SGB 2116.4 R23 .1275 R13 -.9328
SG1 2108.8 SG2 178.9 THA 172.25
                                                                                                                                        LSA 781.0 MSA 197.9 SSA 14.5
EL1 588.0 EL2 134.7 ALF 161.06
                                                                                                                                                    ARRIVAL DATE APR 6 1966
LAUNCH DATE DEC 13 1965
                                                                                  FLIGHT TIME 114.00
                                                                                  DISTANCE 334.337
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.158 GAL -7.91 AZL 87.25 MCA 157.62 SMA 131.46 ECC .18204 INC 2.7513 VI 30.253
RP 108.43 LAP 1.05 LOP 238.42 VP 37.928 GAP 2.87 AZP 92.54 TAL 221.23 TAP 18.85 RCA 107.53 APO 155.39 V2 34.951
RC 101.502 GL 16.91 GP 7.64 ZAL 143.39 ZAP 119.47 ETS 1.83 ZAE 149.32 ETE 173.13 ZAC 33.25 ETC 163.14 CLP-119.76
   PLANETOCENTRIC CONIC
    C3 21.174 VHL 4.602 DLA -4.68 RAL 292.73 RAD 6567.9 VEL 11.940 PTH 2.12 VMP 3.402 DPA -15.14 RAP 299.91 ECC 1.3485
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         113.57 2 36 31
73.12 14 13 48
114.82 3 51 24
71.86 15 32 51
118.32 4 51 18
                    2 1 48 2082.70
12 50 11 5017.40
3 20 57 1827.39
14 13 43 4747.95
4 24 9 1629.51
15 27 0 4518.59
                                                                                                                                          1482.7
                                                                         33.30
                                                                                      154.01
                                                                                                                                                           -12.84
                                                         -16.17
         90.00
                                                                                                                                             4417.4
                                                                                                                                                              20.55
                                                                                                                                                                              212.99
                                                                                         156.26
                                                                         220.75
         90.00
                                                         23.08
                                                                                                                                                             -13.72
                                                                                                                                          1227.4
                                                                                                                                                                                6.98
                                                                          14.04
                                                                                         153.52
       100.00
                                                         -17.21
                                                                                                                                             4147.9
                                                                                                                                                                              192.81
                                                                        200.56
                                                                                         155.89
                                                                                                                                                             21.47
       100.00
                                                         24.17
                                                                                                                                            1029.5
                                                                                                                                                             -16.06
                                                                                                                                                                              350.64
                                                                                         152.05
       110.00
                                                         -20.00
                                                                         357.55
                                                                                                                       16 42 19
                                                                                         154.71
                                                                                                             68.32
                                                                                                                                             3918.6
                                                                                                                                                              23.91
       110.00
                                                         27.10
                                                                         181.97
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .3074 TRA-1.1876 TC3-1.7906 BAU .5117
ROE -.1696 RRA .1244 RC3 .2482 FAU .15782
                                                                             SGT 2250.1 SGR 347.7 SG3 566.7
RRT -.8790 RRF -.8984 RTF .9337
SGB 2276.9 R23 .1535 R13 -.9353
SG1 2270.9 SG2 164.3 THA 172.22
                                                                                                                                       ST 589.1 SR 216.3 S5 514.7
CRT -.7996 CRS .9803 CST -.8981
    FDE 1.2867 FRA-1.8250 FC3-6.4525 BSP 6764
BDE .3511 BRA 1.1940 BC3 1.8077 FSP -1839
                                                                                                                                       LSA 787.3 MSA 196.8 SSA 13.3
                                                                                                                                       EL1 615.1 EL2 124.4 ALF 162.92
                                                                                  FLIGHT TIME 116.00
                                                                                                                                                     ARRIVAL DATE APR 8 1966
LAUNCH DÄTE DEC 13 1965
                                                                                  01STANCE 340.473
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 28.119 CAL -7.76 A7L 87.36 MCA 160.81 SMA 131.18 ECC .18161 INC 2.6352 VI 30.253
RP 108.46 LAP .87 LOP 241.60 VP 37.887 CAP 3.19 A7P 92.49 TAL 220.24 TAP 21.05 RCA 107.35 APO 155.00 V2 34.939
RC 103.862 GL 16.42 CP 8.63 ZAL 142.82 ZAP 122.75 ETS 3.07 ZAE 147.04 ETE 171.81 ZAC 32.80 ETC 164.56 CLP-125.17
   PLANETOCENTRIC CONIC
    C3 20.544 VHL 4.533 DLA -5.03 RAL 293.64 RAD 6567.8 VEL 11.913 PTH
                                                                                                               2.12 VHP 3.488 DPA -14.20 RAP 299.53 ECC 1.3381
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 8 5 2064.41
12 51 9 5021.20
3 27 3 1609.65
14 14 51 4751.20
                                                                                                                          2 42 29
                                                                          32.19
                                                                                         154.40
                                                                                                          113.89
                                                                                                                                           1464.4
                                                         -15.66
        90.00
                                                                                                             73.23 14 14 50
                                                                         221.01
                                                                                         156.77
                                                                                                                                             4421.2
                                                        23.15
         90.00
                                                                                                                          3 57 13
                                                                          12.97
                                                                                         153.91
                                                                                                            115.16
                                                                                                                                            1209.6
                                                                                                                                                              -13.17
                                                        -16.70
       100.00
                                                         24.24
                                                                         200.78
                                                                                         156.40
                                                                                                             71.95
                                                                                                                                             4151.2
       100.00
                     4 29 52 1612.99
15 28 32 4520.63
                                                                                                                         4 56 45
                                                        -19.46
                                                                         356.57
                                                                                         152.43
                                                                                                           118.67
                                                                                                                                            1013.0
                                                                                                                                                                              349.71
       110.00
                                                                                                             68.39 16 43 52
                                                                                                                                                             23.97
                                                                         182.11
                                                                                                                                          3920.6
                                                         27.15
                                                                                         155.23
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            SGT 2406.6 SGR 367.2 SG3 543.3
RRT -.9086 RRF -.9315 RTF ..9353
SGB 2434.5 R23 .1875 R13 -.9370
                                                                                                                                       ST 612.3 SR 202.9 SS 488.5
CRT -.8084 CRS .9847 CST -.8939
    TOE .3117 TRA-1.2227 TC3-1.9823 BAU .5504
    ROE -.1558 RRA .1262 RC3 .2926 FAU .15024
FOE 1.1734 FRA-1.6544 FC3-6.3310 BSP 7302
                                                                                                                                      LSA 785.0 MSA 195.4 SSA 12.1
    BOE .3485 BRA 1.2292 BC3 2.0038 FSP -1768
                                                                                                                                       EL1 634.6 EL2 115.2 ALF 164.48
```

SG1 2429.7 SG2 151.9 THA 172.08

```
ARRIVAL DATE APR 10 1966
                                                                                     FLIGHT TIME 118.00
LAUNCH DATE DEC 13 1965
    RL 147.27 LAL -.00 LOL 80.78 VL 28.078 GAL -7.59 AZL 87.52 HCA 164.00 SHA 130.88 ECC .18124 INC 2.4754 VI 30.253
RP 108.50 LAP .68 LOP 244.79 VP 37.845 GAP 3.50 AZP 92.38 TAL 219.19 TAP 23.19 RCA 107.16 APO 154.60 V2 34.926
RC 106.225 GL 15.65 GP 10.01 ZAL 142.28 ZAP 125.71 ETS 4.75 ZAE 144.90 ETE 170.11 ZAC 32.53 ETC 166.66 CLP-126.35
                                                                                     DISTANCE 346.586
   HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 19.859 VML 4.456 OLA -5.63 RAL 294.66 RAD 6567.8 VEL 11.884 PTH 2.11 VMP 3.586 OPA -12.83 RAP 299.32 ECC 1.3268

LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJR ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 2 16 44 2037.29 -14.91 30.56 154.82 114.36 2 50 41 1437.3 -11.50 23.54

90.00 12 50 37 5032.15 23.37 221.74 157.42 73.53 14 14 29 4432.2 20.89 213.94

100.00 3 35 24 1783.48 -15.94 11.40 154.32 115.63 4 5 8 1183.5 -12.36 4.44

100.00 14 14 37 4761.20 24.45 201.45 157.05 72.24 15 33 58 4161.2 21.79 193.66

110.00 4 37 33 1588.92 -18.67 355.15 152.84 119.17 5 4 2 988.9 -14.64 348.35

110.00 15 28 58 4528.52 27.35 182.64 155.91 68.64 16 44 26 3928.5 24.20 174.88
    PLANETOCENTRIC CONIC
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ST 624.1 SR 189.4 55 455.7

CRT -.8102 CRS .9887 CST -.8834

LSA 771.2 MSA 195.1 SSA 10.8

EL1 643.2 EL2 107.7 ALF 165.78
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 2557.0 SGR 396.5 SG3 517.7

RRT - .9295 RRF - .9379 RTF .9358

SGB 2567.6 R23 .2312 R13 - .9377

SG1 2583.5 SG2 144.7 THA 171.77
     TDE .3037 TRA-1.2469 TC3-2.1844 BAU .5873
     ROE -.1420 RRA .1277 RC3 .3489 FAU .14209
FOE 1.0464 FRA-1.4729 FC3-6.1940 85P 7819
BOE .3353 BRA 1.2535 BC3 2.2121 FSP -1683
                                                                                                                                                            APRIVAL DATE APR 12 1966
                                                                                       FLIGHT TIME 120.00
LAUNCH DATE DEC 13 1965
     RELIGENTATE CONTE.

RE 147.27 LAL -.00 LOL 80.78 VL 28.035 GAL -7.42 A7L 87.76 MCA 167.18 SMA 130.57 ECC .18092 INC 2.2383 VI 30.253

RP 108.54 LAP .50 LOP 247.97 VP 37.803 GAP 3.80 A7P 92.18 TAL 218.09 TAP 25.27 RCA 106.95 APO 154.19 V2 34.914

RC 108.588 GL 14.39 GP 12.07 7AL 141.82 7AP 128.29 ETS 7.17 7AE 142.80 ETE 167.74 7AC 32.41 ETC 169.86 CLP-129.32
                                                                                      DISTANCE 352.677
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                     2.10 VMP 3.699 DPA -10.76 RAP 299.22 ECC 1.3143
      C3 19.095 VHL 4.370 DLA -6.70 RAL 295.83 RAD 6567.8 VEL 11.852 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               115.04
                                                                                                                                3 2 49
                                                                              27.98
                                                                                             155.29
                       2 29 35 1994.11
12 47 5 5056.74
                                                             -13.68
                                                                                                                                                                                       215.53
                                                                                                                  74.24 14 11 21
                                                                                                                                                    4456.7
                                                                                                                                                                      21.44
                                                                                               158.28
                                                                             223.39
                                                            23.83
           90.00
                                                                                                                                                                                         2.06
                                                                                                                                                    1142.0
                                                                                                                                                                    -11.05
                                                                                                                                4 16 46
                                                                                                                 116.32
                                                                                               154.78
                                       1742.02
4784.07
                                                            -14.70
                                                                                8.94
         100.00
                          3 47 44
                                                                                                                 72.93 15 31 21
119.90 5 14 31
69.28 16 42 58
                                                                                                                                                                                       195.13
                                                                                                                                                    4184.1
                                                                                                                                                                     22.34
                                                                              202.99
                                                                                               157.93
                                                            24.92
                       14 11 37
         100.00
                                                                                                                                                                                       346.26
                                                                                                                                                     951.2
                                                                                                                                                                  -13.30
                                                                                              153.28
                         4 48 40 1551.24
15 27 10 4547.61
                                                            -17.40
                                                                              352.96
                                                                                                                                                    3947.6
                                                                                                                                                                      24.74
                                                                                              156.83
                                                                             183.93
                                                           27.81
                        15 27 10
         110.00
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 617.2 SR 174.6 S5 407.3
CRT -7981 CRS .9914 CST -.8636
LSA 734.6 MSA 194.0 S5A 9.5
                                                                                  SGT 2703.3 SGR 443.1 SG3 491.0
RRT -.9422 RRF -.9774 RTF .9359
      TOE .2736 TRA-1.2580 TC3-2.4057 BAU .6237
      ROE -.1270 RRA .1295 RC3 .4272 FAU .13370
                                                                                  SCB 2739.3 R23 .2776 R13 -.9382
SGI 2735.4 SGZ 146.7 THA 171.20
      FDE .8824 FRA-1.2878 FC3-6.0618 BSP 8332
                                                                                                                                               EL1 633.2 EL2 102.6 ALF 166.93
       BOE .3017 BRA 1.2647 BC3 2.4433 FSP -1600
                                                                                                                                                            ARRIVAL DATE APR 14 1966
                                                                                       FLIGHT TIME 122.00
  LAUNCH DATE DEC 13 1965
      RL 147.27 LAL -.00 LOL 80.78 VL 27.991 GAL -7.23 A7L 88.15 MCA 170.36 SMA 130.25 ECC .18065 INC 1.8488 VI 30.253 RP 108.58 LAP .31 LOP 251.15 VP 37.759 GAP 4.09 A7P 91.82 TAL 216.95 TAP 27.31 RCA 106.72 APO 153.79 VZ 34.903 RC 110.951 GL 12.12 GP 15.45 TAL 141.53 ZAP 130.28 ETS 10.98 ZAE 140.48 ETE 164.08 TAC 32.49 ETC 175.10 CLP-132.12
                                                                                      DISTANCE 358.749
     HELIOCENTRIC CONIC
       C3 18.208 VHL 4.267 DLA -8.75 RAL 297.25 RAD 6567.7 VEL 11.815 PTH 2.09 VHP 3.843 OPA -7.37 RAP 299.D6 ECC 1.2996
     PLANETOCENTRIC CONIC
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                  -7.83
                                                                                                              1NJ AZMTH 1NJ TIME P
116.0B 3 23 9
75.85 14 1 59
117.40 4 36 6
74.51 15 22 59
121.02 5 31 35
70.78 16 36 52
                                                                                                                                                1317.5
                                                                                            155.88
                                                                               23.48
                                                            -11.43
                          2 51 12 1917.45
12 36 48 5111.04
                                                                                                                                                                       22.60
                                                                                                                                                     4511.0
                                                                                              159.63
                                                             24.79
                                                                              227.08
                        12 36 48
                                                                                                                                                                                       357.91
            90.00
                                                                                                                                                                        -8.68
                                                                                                                                                     1068.8
                        4 8 17 1668.77
14 2 24 4834.96
5 6 50 1485.46
15 20 21 4591.03
                                                                                4.67
                                                                                              155.36
                                                            -12.45
                                                                                                                                                                                     198.46
          100.00
                                                                                                                                                                     23.51
                                                                                                                                                     4235.0
                                                                                             159.31
                                                             25.89
                                                                               206.45
                                                                                                                                                                                       342.66
          100.00
                                                                                                                                                                     -10.91
                                                                                             153.61
                                                                                                                                                     885.5
                                                                               349.21
                                                              -15.13
                                                                                                                                                                    25.93
          110.00
                                                                                                                                                    3991.0
                                                                                                                                                                                       178.91
                                                                               186.90
                                                                                               158.27
                                                             28.82
                                                                                                                                               ORBIT DETERMINATION ACCURACY
          110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ST 580.4 SR 155.5 SS 331.8
CRT -.7489 CRS .9923 CST -.8173
      DIFFERENTIAL CORRECTIONS
                                                                                   SGT 2844.1 SGR 520.3 SG3 459.0
RRT -.9459 RRF -.9902 RTF .9351
SGB 2891.2 R23 .3164 R13 -.9383
SG1 2886.5 SG2 166.3 THA 170.15
       TOE .2024 TRA-1.2472 TC3-2.6576 BAU .6605
       ROE -.1083 RRA .1310 RC3 .5470 FAU .12395
FOE .6590 FRA-1.0780 FC3-5.8934 BSP 8841
BOE .2295 BRA 1.2540 BC3 2.7133 FSP -1493
                                                                                                                                                LSA 659.2 MSA 191.3 55A 8.4
                                                                                                                                                EL1 592.3 EL2 101.0 ALF 168.51
                                                                                                                                                             APPIVAL DATE APR 16 1966
                                                                                        FLIGHT TIME 124.00
  LAUNCH DATE DEC 13 1965
       RE 147.27 EAL -.00 LOL 80.78 VL 27.946 GAL -7.04 AZE 88.92 MCA 173.54 SMA 129.93 ECC .18044 INC 1.0792 VI 30.253
RP 108.61 LAP .12 LOP 254.32 VP 37.716 GAP 4.36 AZP 91.07 TAL 215.76 TAP 29.30 RCA 106.49 APO 153.38 V2 34.892
RC 113.313 GL 7.26 GP 21.89 ZAL 141.54 ZAP 130.88 ETS 17.72 ZAE 137.11 ETE 157.73 ZAC 33.21 ETC 184.85 CLP-134.85
                                                                                        DISTANCE 364.799
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
                                                                                                                                                          -.94 RAP 298.48 ECC 1.2823
        C3 17.153 VHL 4.142 DLA -13.32 RAL 299.27 RAD 6567.7 VEL 11.770 PTH
                                                                                                                       2.08 VHP 4.081 DPA
       LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       3 37 2 1751.45

12 7 4 5249.31

4 51 25 1511.45

13 35 22 4964.54

5 44 1 1346.70

14 59 15 4702.06
                                                                                            157.17
162.40
                                                                                                                117.66
                                                                -6.31
                                                                                13.97
                                                                                                                                                                                         228.44
            90.00
                                                                                                                                                                         25.12
                                                                                                                    80.31 13 34 33
                                                                                                                                                      4649.3
                                                               26.74
                                                                                236.73
                                                                                                                                                                                         349.17
             90.00
                                                                                                                                                       911.5
                                                                                                                                                                          -3.44
                                                                                                                                 5 16 36
                                                                                              156.59
162.16
                                                                                                                   119.05
                                                                -7.37
                                                                                355.75
                                                                                                                  119.05 5 16 36
78.87 14 58 6
122.82 6 6 28
74.94 16 17 37
           100.00
                                                                                                                                                                                         207.21
                                                                                                                                                                        26.10
                                                                                                                                                      4364.5
                                                               27.92
                                                                                215.54
           100.00
                                                                                                                                                       746.7
                                                                                                                                                                         -5.73
                                                                                                                                                                                         335.25
                                                                                              154.92
                                                              -10.13
                                                                                341.58
           110.00
                                                                                                                                                                         28.68
                                                                                                                                                                                         186.38
                                                                                                                                                      4102.1
                                                                                194.77
                                                                                                 161.32
                                                               31.06
           110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 514.7 SR 112.8 SS 190.8
CRT -.5748 CRS .9761 CST -.7255
                                                                                  961 2979.4 SGR 665.1 563 412.9

RRT -.9413 RRF -.9972 RTF .9342

SGB 3052.7 R23 .3347 R13 -.9395
        TOE .0281 TRA-1.1909 TC3-2.9594 BAU .7008
        ROE -.0696 RRA .1303 RC3 .7824 FAU .11051
FDE 12823 FRA -.8155 FC3-5.5779 83P 9382
BDE .0751 BRA 1.1960 BC3 3.0560 FSP -1347
                                                                                                                                               LSA 538.9 MSA 153.2 SSA 9.0
EL1 518.9 EL2 91.6 ALF 172.59
                                                                                   SG1 3044.8 SG2 219.6 THA 168.07
```

```
LAUNCH DATE DEC 13 1965
                                                                                FLIGHT TIME 126.00
                                                                                                                                               ARRIVAL DATE APR 18 1966
     MELIOCENTRIC CONIC
                                                                               DISTARCE 370.828
      RL 147.27 LAL -.00 LOL 80.78 VL 27.900 GAL -6.84 AZL 91.17 MCA 176.72 SMA 129.60 ECC .18028 INC 1.1562 V1 30.255
RP 108.64 LAP -.07 LOP 257.50 VP 37.671 GAP 4.63 AZP 88.84 TAL 214.52 TAP 31.24 RCA 106.24 APO 152.97 V2 34.881
RC 115.673 GL -7.92 GP 37.96 ZAL 140.18 ZAP 125.99 ETS 31.46 ZAE 128.22 ETE 145.55 ZAC 38.24 ETC 206.05 CLP-138.19
     PLANETOCENTRIC CONTC.
      C3 16.722 VML 4.089 DLA -27.90 RAL 304.00 RAD 6567.7 VEL 11.752 PTH 2.07 VMP 4.850 DPA 14.91 RAP 295.79 ECC 1.2752
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                    989.60
          90.00
                       7 28 9
                                                        17.17
                                                                       330.34
                                                                                    168.29
                                                                                                     112.87 7 44 38
                                                                                                                                       389.6
                                                                                                                                                       20.12
          90.00
                        8 53 44
                                       711.42
                                                                                                                     9 5 36
8 15 32
                                                         23.56
                                                                       312.47
                                                                                       170.71
                                                                                                        106.18
                                                                                                                                         111.4
                                                                                                                                                         25.55
                                                                                                                                                                        304.36
         100.00
                      8 0 48
11 3 46 5580.26
8 5 49 868.28
                        8 0 48
                                      884.03
                                                        13.44
                                                                       320.81
                                                                                    166.50
                                                                                                       116.95
                                                                                                                                        284.0
                                                                                                                                                         16.95
                                                                                                                                                                        313.77
        100.00
                                                       27.54
                                                                       260.64
                                                                                       171.82
                                                                                                       102.11 12 36 47
123.35 8 20 17
95.69 14 41 24
                                                                                                                                      4980.3
                                                                                                                                                         28.93
         110.00
                                                          7.99
                                                                       316.40
                                                                                    163.28
                                                                                                                                        268.3
                                                                                                                                                         12.33
                                                                                                                                                                        309.98
                                     5168.78
        110.00
                      13 15 15
                                                        33.76
                                                                       230.53
                                                                                       172.96
                                                                                                                                      4568.8
                                                                                                                                                       34.18
     DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SCT 3089.2 SCR 972.0 SC3 302.3
RRT - 3267 RRF - .9993 RTF .9349
SCB 3238.5 R23 .3236 R13 - .9458
SCI 3219.5 SC2 350.6 THA 163.55
      TOE -.5530 TRA -.9622 TC3-3.1450 BAU
                                                            .7493
                                                                                                                                  ST 903.2 SR 166.7 SS 299.4
CRT -.9620 CRS .9993 CST -.9576
      ROE .1131 RRA .0916 RC3 1.1590 FAU .07990
     FDE -.4896 FRA -.3603 FC3-4.1364 BSP 9859
BDE .5645 BRA .9665 BC3 3.3518 FSP -982
                                                                                                                                 LSA 961.7 MSA 91.5 55A 4.8
EL1 917.4 EL2 44.8 ALF 169.91
 LAUNCH DATE DEC 13 1965
                                                                                FLIGHT TIME 128.00
                                                                                                                                               ARRIVAL DATE APR 20 1966
    HELIOCENTRIC CONIC
                                                                               DISTANCE 376.666
     RL 147.27 LAL -.00 LOL 80.78 VL 27.852 GAL -6.60 AZL 156.96 HCA 179.72 SMA 129.27 ECC .17980 INC66.8232 VI 30.253
RP 108.68 LAP -.25 LOP 260.67 VP 37.627 GAP 4.84 AZP 23.04 TAL 213.13 TAP 32.85 RCA 106.03 APO 152.51 V2 34.870
RC 118.029 GL -52.41 GP 57.64 ZAL 95.39 ZAP 94.11 ETS 172.04 ZAE 61.94 ETE 251.80 ZAC 76.44 ETC 3.81 CLP 97.69
    PLANETOCENTRIC CONIC
     C31032.272 VHL 32.129 DLA -53.35 RAL 13.72 RAD 6573.0 VEL 33.964 PTH 3.51 VHP 41.805 DPA 53.45 RAP 215.38 ECC17.9886 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     143.35 9 3 27
143.35 17 26 45
143.35 17 26 45
143.35 17 26 45
143.35 9 3 27
143.35 9 3 27
143.35 17 26 45
         42.69
                        8 24 15 2352.10
                                                         -.42
                                                                        66.31
                                                                                     284.02
                                                                                                                                     1752.1 5.99
                                                                                                                                                                       61.94
        137.51
                     17 13 53
                                       772.54
                                                          - .40
                                                                       300.16
                                                                                      284.04
                                                                                                                                        172.5
                                                                                                                                                          6.01
                                                                                                                                                                       295.79
                    8 24 15 2352.10
17 13 53 772.54
8 24 15 2352.10
         42.69
                                                                                      284.02
                                                          -.42
                                                                        66.31
                                                                                                                                       1752.1
                                                                                                                                                          5.99
                                                                                                                                                                        61.94
        137.31
                                                          -.40
                                                                       300.16
                                                                                      284.04
                                                                                                                                        172.5
                                                                                                                                                          6.01
                                                                                                                                                                       295.79
         42.69
                                                                       66.31 284.02
300.16 284.04
                                                         -.42
                                                                                                                                       1752.1
                                                                                                                                                         5.99
                                                                                                                                                                        61.94
        137.31
                     17 13 53
                                       772.54
                                                                                                                                        172.5
                                                                                                                                                         6.01
                                                                                                                                                                       295.79
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
     TOE 3.1627 TRA-1.5711 TC3 -.1035 BAU 4.5025
                                                                                                                                 ST 581.7 SR 1210.6 SS 844.5
CRT -.7683 CRS -.9986 CST .7336
LSA 1544.0 MSA 364.9 SSA .6
                                                                           5GT 990.3 SGR 3879.7 SG3 66.1
     ROE-3.9999 RRAIO.8920 RC3 .3094 FAU-.07035
FOE -.7159 FRA 2.1816 FC3 .0590 BSP 68949
BDE 5.0992 BRAII.0047 BC3 .3263 FSP 1092
                                                                         RRT -.8464 RRF .9996 RTF -.8320
SGB 4004.1 R23 -.0551 R13 .9985
                                                                          361 3970.8 362 515.2 THA 102.40
                                                                                                                                 EL1 1297.3 EL2 347.4 ALF 111.91
LAUNCH DATE DEC 13 1965
                                                                              FLIGHT TIME 130.00
                                                                                                                                             ARRIVAL DATE APR 22 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 382.865
    RL 147.27 LAL -.00 LOL 80.78 VL 27.804 GAL -6.43 AZL 81.79 HCA 183.09 SMA 128.93 ECC .18023 INC 8.2119 V1 30.253 RP 108.71 LAP -.44 LOP 263.84 VP 37.582 GAP 5.15 AZP 98.20 TAL 211.96 TAP 35.05 RCA 105.70 APO 152.17 VZ 34.860
     RC 120.382 GL
                          43.73 CP -38.10 ZAL 120.86 ZAP 128.77 ETS 317.80 ZAE 121.82 ETE 211.22 ZAC 62.12 ETC 126.65 CLP-142.73
   PLANETOCENTRIC CONIC
     C3 32.600 VML 5.710 DLA 23.60 RAL 297.30 RAD 6568.3 VEL 12.409 PTH 2.24 VMP 5.113 DPA -59.28 RAP 316.47 ECC 1.5365
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 22 5 11 3180.13
90.00 17 19 17 4133.32
100.00 23 45 18 2857.29
                                                                                                     79.24 22 58 11
61.76 18 28 10
80.71 24 32 56
60.11 19 27 22
84.24 2 17 11
                                                                                   176.31
                                                      -26.35
                                                                     109.35
                                                                                                                                    2580.1
                                                                                                                                                    -27.57
                                                                                                                                                                    100.89
                                                      -2.11
                                                                      168.26
                                                                                    167.54
                                                                                                                                      3533.3
                                                                                                                                                        -5.87
                                                                                                                                                                     161.60
                                                     -28.54
                                                                      86.03
                                                                                    176.74
                                                                                                                                     2257.3
                                                                                                                                                      -29.53
                                                                                                                                                                       77.37
       100.00
                    18 21 50 3931.39
                                                        -.17
                                                                     152.34
                                                                                    166.46
                                                                                                                                      3331.4
                                                                                                                                                      -4.15
                                                                                                                                                                    145.81
                                                                                   177.55
       110.00
                   1 35 5 2526.15
18 52 29 3835.30
                                                     -33.75
                                                                       61.68
                                                                                                       84.24 2 17 11
56.06 19 56 24
                                                                                                                                      1926.1
                                                                                                                                                     -34.18
                                                                                                                                                                       52.47
       110.00
                                                     4.29
                                                                     142.28
                                                                                    163.67
                                                                                                                                     3235.3
                                                                                                                                                        -.19
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SGT 3474.2 SGR 547.9 SG3 270.7
RRT .8351 RRF .9653 RTF .9494
SGB 3517.1 R23 .3027 R13 .9529
SGI 3504.4 SG2 298.8 THA 7.56
    TOE 2.0280 TRA-1.9122 TC3-1.6485 BAU .7327
                                                                                                                                 ST 2130.6 SR 396.9 SS 947.7
    ROE .3953 RRA -.0323 RC3 -.3296 FAU .D6831
                                                                                                                                 CRT .9631 CRS -.9934 CST -.9876
    FOE 2.1156 FRA -.9230 FC3-1.8141 88P 10819
                                                                                                                                 LSA 2359.5 MSA 166.3 SSA
    BOE 2.0662 BRA 1.9125 BC3 1.6811 FSP -917
                                                                                                                                 EL1 2164.7 EL2 105.2 ALF 10.20
LAUNCH DATE DEC 13 1965
                                                                              FLIGHT TIME 132.00
                                                                                                                                             ARRIVAL DATE APR 24 1966
  HELIOCENTRIC CONIC
                                                                             DISTANCE 388.842
    RL 147.27 LAL -.00 LOL 80.78 VL 27.756 GAL -6.20 AZL 84.24 MCA 186.26 SMA 128.60 ECC .18027 INC 5.7599 V1 30.253
RP 108.74 LAP -.63 LOP 267.01 VP 37.537 GAP 5.40 AZP 95.73 TAL 210.61 TAP 36.87 RCA 103.41 APO 151.78 V2 34.851
RC 122.731 GL 34.90 GP -20.41 ZAL 125.56 ZAP 138.93 ETS 332.21 ZAE 130.67 ETE 200.41 ZAC 50.99 ETC 137.78 CLP-143.55
  PLANETOCENTRIC CONIC
   C3 23.428 VHL 4.840 DLA 15.05 RAL 299.64 RAD 6568.0 VEL 12.034 PTH 2.15 VHP 4.467 DPA -41.74 RAP 311.62 ECC 1.3856 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 51 11 2740.02 -27.91 77.46 169.16 94.98 24 36 51 2140.0 -26.93 68.93 90.00 15 51 57 4409.10 6.74 183.70 162.23 62.43 17 5 26 3809.1 2.99 177.02 100.00 1 24 37 2451.37 -29.28 56.07 169.00 96.32 2 5 29 1851.4 -28.10 47.47 100.00 17 5 8 4172.98 7.95 165.68 161.58 61.09 18 14 41 3573.0 4.03 159.09
                 1 Z4 ...
17 5 8 417Z...
2 51 5 2180.85
- 44 10 4016.26
      110.00
                                                     -32.67
                                                                      34.93
                                                                                    168.4D
                                                                                                       99.95
                                                                                                                 3 27 26
                                                                                                                                     1580.9
                                                                                                                                                     -31.15
                                                                                                                                                                      26.13
      110.00
                                                    11.07
                                                                    151.92
                                                                                    159.70
                                                                                                       57.45
                                                                                                                  19 2 6
                                                                                                                                     3416.3
                                                                                                                                                        6.70
                                                                                                                                                                     145.55
  DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    TOE 1.3970 TRA-1.6805 TC3-2.4520 BAU .7710
                                                                                                                                ST 1766.8 SR 200.9 SS 867.4
CRT .9295 CRS -.9868 CST -.9769
                                                                         SGT 3551.3 SGR 292.4 SG3 347.6
   ROE .1696 RRA .0111 RC3 -.2192 FAU .08894
FOE 1.8777 FRA -.8659 FC3-3.2867 85P 11059
BOE 1.4072 BRA 1.6806 BC3 2.4617 FSP -1164
                                                                        RRT .7777 RRF .9407 RTF .9387
5GB 3563.4 R23 .3320 R13 .9398
                                                                                                                                LSA 1970.3 MSA 179.4 SSA 2.1
EL1 1776.7 EL2 73.7 ALF 6.04
                                                                         5G1 3558.6 SG2 183.4 THA 3.67
```

ARRIVAL DATE APR 26 1966

LAUNCH SATE DEC 13 1965

```
DISTANCE 394.807
    RL 147.27 LAL -.00 LOL 80.78 VL 27.706 CAL -5.97 AZL 85.05 HCA 189.43 SMA 128.26 ECC .18040 INC 4.9529 V1 30.253 RP 108.76 LAP -.81 LOP 270.17 VP 37.492 CAP 5.64 AZP 94.89 TAL 209.24 TAP 38.67 RCA 105.12 APO 151.39 V2 34.842
  HELIOCENTRIC CONIC
    RC 125.075 GL 31.46 GP -13.54 7AL 126.30 7AP 142.97 ETS 339.06 7AE 132.52 ETE 194.29 7AC 48.05 ETC 143.86 CLP-145.19
   PLANETOCENTRIC CONIC
    C3 20.780 VHL 4.558 CLA 11.96 RAL 301.51 RAC 6567.8 VEL 11.923 PTH 2.12 VHP 4.423 CPA -34.71 RAP 311.34 ECC 1.3420
    C3 20.780 VHL 4.558 DLA 11.96 RAL 301.51 RAC 6567.8 VEL 11.923 PTH 2.12 VHP 4.423 CPA -34.71 RAP 311.34 ECC 1.3420 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 0 29 39 Z604.01 -26.72 67.69 167.48 99.74 1 13 3 Z004.0 -25.10 59.39 90.00 15 32 Z2 4487.06 9.17 188.14 162.09 63.09 16 47 9 3887.1 5.48 181.39 100.00 1 5 7 5 Z322.03 -27.94 46.70 167.22 101.07 2 35 47 1722.0 -26.13 38.36 100.00 16 47 37 4244.27 10.27 169.70 161.50 61.77 17 58 21 3644.3 6.42 163.03 110.00 3 19 5 Z065.43 -31.19 Z6.36 166.37 104.76 3 53 31 1465.4 -28.85 17.94 110.00 17 42 6 4073.63 13.15 155.06 159.80 58.16 18 50 0 3473.6 8.85 148.60
       100.00 16 47 37 4244.27
110.00 3 19 5 2065.43
110.00 17 42 6 4073.63
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 1650.5 SR 135.8 SS 803.5
CRT .8927 CRS -.9754 CST -.9698
                                                                                       SGT 3659.8 SGR 169.0 SG3 356.9

RRT .6038 RRF .8130 RTF .9347

SGB 3663.7 R23 .3109 R13 .9350

SGI 3661.2 SG2 134.7 THA 1.60
     TOE 1.2174 TRA-1.5924 TC3-2.8743 BAU .7990
                                                                                                                                                          ROE .1076 RRA .0301 RC3 -.1028 FAU .09062
    FOE 1.6556 FRA -.7332 FC3-3.7752 BSP 11412
BDE 1.2222 BRA 1.5927 BC3 2.8761 FSP -1192
                                                                                                                                                             ELI 1655.0 EL2 61.0 ALF 4.21
                                                                                                                                                                             ARRIVAL DATE APR 28 1966
                                                                                               FLIGHT TIME 136.00
LAUNCH DATE DEC 13 1965
                                                                                              DISTANCE 400.757
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 27.657 GAL -5.73 A7L 85.45 HCA 192.60 SMA 127.92 ECC .18061 INC 4.5499 V1 30.253 RP 108.79 LAP -.99 LOP 273.34 VP 37.448 GAP 5.88 AZP 94.44 TAL 207.83 TAP 40.43 RCA 104.81 APO 151.02 V2 34.834
    RC 127.413 GL 29.74 GP -9.99 TAL 125.86 TAP 145.55 ETS 342.89 TAE 132.85 ETE 190.75 TAC 47.42 ETC 147.72 CLP-146.86
   PLANETOCENTRIC CONIC
    C3 19.370 VHL 4.401 CLA 10.61 RAL 303.24 RAC 6567.8 VEL 11.864 PTH 2.10 VHP 4.475 CPA -30.92 RAP 312.05 ECC 1.3188
     ENCH AZMTH LUCH TIME LEI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                1942.3
                                                                                                                          101.78
                                                                                                                                             1 30 6
                         0 47 43 2542.33
15 28 5 4515.29
                                                                                                       167.40
                                                                  -25.94
                                                                                      63.34
         90.00
                                                                                                                                                                                                            182.98
                                                                                                                                            16 43 20
                                                                                                                                                                    3915.3
                                                                                     189.76
                                                                                                         162.75
                                                                                                                              63.38
                                                                 10.03
          90.00
                                                                                                                                                                                                             34.32
                                                                                                                                                                                        -25.02
                          2 14 21 2262.93
16 44 8 4269.92
3 34 36 2011.83
17 40 23 4093.79
                                                                                                                                              2 52 4
                                                                                                                                                                    1662.9
                                                                                                         167.12
                                                                                                                              103.12
                                                                 -27.10
                                                                                       42.51
        100.00
                                                                                                                                                                 3669.9
1411.8
                                                                                                                                                                                                            164.46
                                                                                                                               62.06 17 55 18
                                                                                                                                                                                           7.27
                                                                                                         162.20
                                                                 11.09
                                                                                     171.16
        100.00
                       16 44 8
                                                                                                                                                                                                            14.27
                                                              -30.19
13.87
                                                                                                                                             4 8 8
                                                                                                                                                                                        -27.59
                                                                                                         166.17
                                                                                                                             106.85
                                                                                       22.50
         110.00
                                                                                                                              58.44 18 48 37
                                                                                                                                                                    3493.8
                                                                                                                                                                                           9.59
                                                                                                                                                                                                            149.68
                                                                                     156.17
                                                                                                        160.57
                         17 40 23
        110.00
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 1612.9 SR 114.5 55 763.8
CRT .8695 CR5 -.9681 CST -.9650
                                                                                          SGT 3774.8 SGR 124.7 SG3 351.8
RRT .2656 RRF .4916 RTF .9321
     TOE 1.1449 TRA-1.5370 TC3-3.1898 BAU .8261
     ROE .0872 RRA .0362 RC3 -.0216 FAU .08842
FOE 1.5038 FRA -.6096 FC3-3.9516 BSP 11828
                                                                                                                                                              LSA 1778.3 MSA 189.2 SSA 5.0
                                                                                          SGB 3776.8 R23 .2529 R13 .9321
                                                                                                                                                            ELI 1616.0 EL2 56.5 ALF 3.54
                                                                                                                                          . 50
                                                                                          561 3774.9 562 120.2 THA
     BDE 1.1482 BRA 1.5374 BC3 3.1898 FSP -1177
                                                                                                                                                                            ARRIVAL DATE APR 30 1966
                                                                                               FLIGHT TIME 138.00
LAUNCH DATE DEC 13 1965
                                                                                              DISTANCE 406.693
     RE 147.27 EAL -.00 EOE 80.78 VE 27.607 GAE -5.48 AZE 85.69 MCA 195.77 SMA 127.58 ECC .18090 INC 4.3069 VE 30.253 RP 108.81 EAP -1.17 EOP 276.51 VP 37.404 GAP 6.11 AZP 94.15 TAE 206.40 TAP 42.17 RCA 104.50 APO 150.66 V2 34.826 RC 129.747 GE 28.76 GP -7.85 ZAE 124.90 ZAP 147.61 ETS 345.31 ZAE 132.73 ETE 188.49 ZAC 47.74 ETC 150.45 CLP-148.47
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 18.404 VML 4.290 CLA 10.04 RAL 304.94 RAC 6567.7 VEL 11.823 PTH 2.09 VMP 4.557 CPA -28.47 RAP 313.18 ECC 1.3029
     C3 18.404 VML 4.290 CLA 10.04 RAL 304.94 RAC 6567.7 VEL 11.823 PTH 2.09 VMP 4.557 CPA -28.47 RAP 313.18 ECC 1.3029 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 59 10 2511.50 -25.49 61.20 167.99 102.77 1 41 1 1911.5 -23.48 53.10 100.00 15 30 15 4522.03 10.24 190.15 163.71 63.45 16 45 37 3922.0 6.59 183.37 100.00 2 25 28 2233.14 -26.62 40.42 167.69 104.12 3 2 41 1653.1 -24.42 32.32 100.00 16 46 37 4275.62 11.27 171.49 163.17 62.13 17 57 53 3675.6 7.46 164.78 110.00 3 45 0 1984.29 -29.63 20.55 166.71 107.88 4 18 4 1384.3 -26.90 12.42 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 110.00 17 43 35 4097.24 13.99 156.36 161.58 58.49 18 51 52 3497.2 9.72 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 149.87 1
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 1613.9 SR 110.0 55 739.9
CRT .8655 CRS -.9685 CST -.9618
                                                                                           SCT 3886.1 SCR 124.1 503 342.4
      TOE 1.1182 TRA-1.4879 TC3-3.4572 BAU .8507
                                                                                           RRT -.0711 RRF .1178 RTF .9298
SGB 3888.1 R23 -.1844 R13 -.9298
      RDE .0816 RRA .0366 RC3 .0381 FAU .08501
FDE 1.3970 FRA -.4953 FC3-3.9989 BSP 12195
                                                                                                                                                               LSA 1768.5 MSA 191.7 SSA 6.3
                                                                                                                                                              EL1 1616.8 EL2 55.0 ALF 3.38
                                                                                           501 3886.1 502 123.8 THA 179.87
      ECE 1.1212 BRA 1.4883 BC3 3.4574 FSP -1145
                                                                                                                                                                              ARRIVAL CATE MAY 2 1966
                                                                                                 FLIGHT TIME 140.00
TAUNCH DATE DEC 13 1965
                                                                                               DISTANCE 412.616
    HELIOCENTRIC CONIC
      RL 147.27 LAL -.00 LOL 80.78 VL 27.557 GAL -5.23 AZL 85.86 HCA 198.94 5MA 127.24 ECC .18128 INC 4.1438 VI 30.253 RP 108.84 LAP -1.34 LOP 279.67 VP 37.360 GAP 6.34 AZP 93.92 TAL 204.93 TAP 43.87 RCA 104.17 APO 150.30 V2 34.819
      RC 132.074 GL 28.16 GP -6.42 ZAL 123.62 ZAP 149.40 ETS 346.98 ZAE 132.47 ETE 186.93 ZAC 48.55 ETC 152.52 CLP-150.01
    PLANETOCENTRIC CONIC
                                                                                                                                   2.08 VHP 4.650 CPA -26.69 RAP 314.56 ECC 1.2905
      C3 17.653 VHL 4.202 CLA 9.89 RAL 306.68 RAC 6567.7 VEL 11.791 PTH
      ENCH AZMTH LINCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                 1896.9
                                                                                                                                                                                        -23.20
                                                                                                      168.96
                                                                                                                                                1 48 53
                          1 7 16 2496.92
15 35 57 4517.17
                                                                                                                             103.23
                                                                    -25.27
                                                                                        60.19
                                                                                                                                                                                            6.44
                                                                                                                                                                                                             183.09
                                                                                                                                63.40 16 51 14
                                                                                                                                                                      1917.2
                                                                                                         164.84
                                                                    10.09
                                                                                       189.87
           90.00
                                                                                                                                                                                                              31.36
                                                                                                                                               3 10 28
                                                                                                                                                                      1618.8
                                                                                                                                                                                          -24.12
                                                                                                                               104.59
                                                                                                          168.65
                           2 33 30 2218.83
                                                                  -26.38
                                                                                        39.43
                                                                                                                               100.00
                                                                                                                                                                                           7.29
                                                                                                                                                                                                            164.49
                                                                                                                                                                      3670.5
                                             4270.50
                                                                   11.11
                                                                                      171.20
                                                                                                         164.31
          100.00
                          16 52 25
                                                                                                                                                                                                              11.51
                                                                                                                                                                      1370.6
                                                                                                                                                                                        -26.55
                                                                                                         167.66
                           3 52 50 1970.56
17 49 34 4091.53
                                                                 -29.34
                                                                                        19.58
                                                                                                                                                                                            9.51
                                                                                                          162.74
                                                                                                                                                                     3491.5
                                                                                      156.05
          110.00
                                                                   13.79
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                          SGT 3997.0 SGR 141.0 SG3 331.8 ST 1634.8 SR 113.2 SS 725.5 RRT -.2564 RRF -.1144 RTF .9278 CRT .8749 CRS -.9742 CST -.9598 SGB 3999.5 R23 -.1281 R13 -.9277 LSA 1781.6 MSA 193.7 SSA 7.7 SG1 3997.2 SG2 136.2 THA 179.48 EL1 1637.8 EL2 54.7 ALF 3.47
       TOE 1.1136 TRA-1.4401 TC3-3.7057 BAU .8748
      RCE .0823 RRA .0340 RC3 .0846 FAU .08131
FDE 1.3169 FRA -.3909 FC3-3.9874 BSP 12583
BDE 1.1167 BRA 1.4405 BC3 3.7066 FSP -1109
```

FI 16HT TIME 134.00

```
LAUNCH DATE DEC 13 1965
                                                                                          FLIGHT TIME 142.00
                                                                                                                                                                  ARRIVAL DATE MAY 4 1966
    HELIOCENTRIC CONIC
                                                                                         DISTANCE 418.521
     RL 147.27 LAL -.00 LOL 80.78 VL 27.506 GAL -4.56 AZL 85.97 MCA 202.11 SMA 126.90 ECC .18175 INC 4.0258 V1 30.253
RP 108.86 LAP -1.51 LOP 282.83 VP 37.317 GAP 6.57 AZP 93.73 TAL 203.45 TAP 45.56 RCA 103.84 APO 149.97 VZ 34.812
RC 134.395 GL 27.79 GP -5.41 ZAL 122.14 ZAP 151.02 ETS 348.19 ZAE 132.15 ETE 185.80 ZAC 49.66 ETC 154.19 CLP-151.49
    PLANETOCENTRIC CONIC
     C3 17.031 VHL 4.127 DLA 10.00 RAL 308.46 RAD 6567.7 VEL 11.765 PTH 2.08 VHP 4.750 DPA -25.29 RAP 316.09 ECC 1.2803 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      103.37 1 55 0
63.27 16 59 2
                       1 13 26 2492.29
15 43 57 4505.20
                                                               -25.19
                                                                                59.87
                                                                                                170.17
          90.00
                                                                                                                     103.37
                                                                                                                                                        1892.3
                                                                                                                                                                         -23.11
                                                                                                                                                                                               51.82
          90.00
                                                                9.72
                                                                                189.18
                                                                                                  166.11
                                                                                                                                                         3905.2
                                                                                                                                                                             6.06
                                                                                                                                                                                              182.41
                                                                                                                     104.75 3 16 39
61.93 18 11 20
                      2 39 45 2213.99
17 0 21 4258.73
                                                              -26.30
         100.00
                                                                                 39.09
                                                                                                  169.86
                                                                                                                                                         1614.0
                                                                                                                                                                            -24.01
                                                                                                                                                                                               31.04
                                                                                               165.58
         100.00
                                                               10.73
                                                                               170.52
                                                                                                                                                         3658.7
                                                                                                                                                                             .6.90
                                                                                                                                                                                              163.84
                                                                                                                     108.57 4 31 59
58.25 19 5 22
                       3 59 14 1965.28
17 57 22 4080.20
                                                                               19.22 168.87
155.42 164.02
        110.00
                                                             -29.23
                                                                                                                                                         1365.3
                                                                                                                                                                          -26.41
                                                                                                                                                                                              11.15
        110.00
                                                               13.38
                                                                                                                                                         3480.2
                                                                                                                                                                             9.09
                                                                                                                                                                                             148.95
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFFRENTIAL CORRECTIONS
                                                                                    SGT 4148.9 SGR 160.6 SG3 326.4 ST 1639.1 SR 119.7 S5 692.9 RRT -.3445 RRT -.2539 RTF .9306 CRT .8852 CRS -.9788 CST -.9588 SGB 4152.0 R23 -.0716 R13 -.9306 LSA 1773.5 MSA 189.0 SSA 9.3 SG1 4149.3 SG2 150.7 THA 179.24 EL1 1642.6 EL2 55.6 ALF 3.70
     TOE 1.0968 TRA-1.4150 TC3-4.0027 BAU .9118
     ROE .0857 RRA .0288 RC3 .1209 FAU .07982
FDE 1.2095 FRA -.3424 FC3-4.0375 BSP 13577
BDE 1.1002 BRA 1.4153 BC3 4.0046 FSP -1170
                                                                                                                                                   ELI 1642.6 EL2 55.6 ALF 3.70
LAUNCH DATE DEC 13 1965
                                                                                          FLIGHT TIME 144.00
                                                                                                                                                                  ARRIVAL DATE MAY 6 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 424.420
    RL 147.27 LAL -.00 LOL 80.78 VL 27.456 GAL -4.69 A7L 86.06 MCA 205.27 SMA 126.57 ECC .18232 INC 3.9363 V1 30.253
RP 108.87 LAP -1.68 LOP 286.00 VP 37.274 GAP 6.79 A7P 93.56 TAL 201.93 TAP 47.20 RCA 103.49 APO 149.64 VZ 34.806
RC 136.709 GL 27.55 GP -4.66 ZAL 120.48 ZAP 152.52 ETS 349.12 ZAE 131.84 ETE 184.94 ZAC 50.98 ETC 155.58 CLP-152.88
    PLANETOCENTRIC CONIC
     C3 16.492 VHL 4.061 DLA 10.30 RAL 310.31 RAD 6567.7 VEL 11.742 PTH
    C3 16.492 VHL 4.061 DLA 10.30 RAL 310.31 RAD 6567.7 VEL 11.742 PTH 2.07 VHP 4.853 DPA -24.10 RAP 317.74 ECC 1.2714 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 18 27 2494.69 -25.25 60.03 171.60 103.30 2 0 2 1894.7 -25.15 51.98 97.00 15 53 46 4488.03 9.20 188.19 167.51 63.10 17 8 34 3868.0 5.52 181.45 100.00 2 44 54 2215.86 -26.33 39.22 171.29 104.69 3 21 50 1615.9 -24.05 31.16 100.00 17 10 0 4242.09 10.20 169.58 166.98 61.75 18 20 42 3642.1 6.34 162.91 110.00 4 4 4 6 1965.98 -29.24 19.26 170.31 108.55 4 37 31 1366.0 -26.43 11.21 110.00 18 6 38 4064.74 12.83 154.57 165.43 58.04 19 14 23 3464.7 8.51 148.13
                                                                                                                         2.07 VHP 4.853 DPA -24.10 RAP 317.74 ECC 1.2714
    DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
     TOE 1.1556 TRA-1.3200 TC3-4.1408 BAU .9136
                                                                                    $GT 4189.5 $GR 183.5 $G3 308.1
RRT -.3591 RRF -.2711 RTF .9219
                                                                                                                                                  ST 1729.3 SR 129.8 SS 723.8
CRT .9120 CRS -.9888 CST -.9586
     RDE .0917 RRA .0237 RC3 .1548 FAU .07299
     FDE 1.2204 FRA -.1847 FC3-3.8314 BSP 13016
BDE 1.1592 BRA 1.3202 BC3 4.1437 FSP -998
                                                                                    3GB 4193.5 R23 -.0649 R13 -.9219 LSA 1868.8 MSA 196.8 SSA 10.0
SGI 4190.0 SGZ 171.3 THA 179.10 ELI 1733.4 ELZ 53.1 ALF 3.92
                                                                                                                                                                ARRIVAL DATE MAY 8 1966
LAUNCH DATE DEC 13 1965
                                                                                         FLIGHT TIME 146.00
                                                                                        01STANCE 430.302
    RL 147.27 LAL -.00 LOL 80.78 VL 27.405 GAL -4.40 AZL 86.13 HCA 208.44 SMA 126.23 ECC .18299 INC 3.8655 VI 30.253
RP 108.89 LAP -1.84 LOP 289.16 VP 37.232 GAP 7.01 AZP 93.40 TAL 200.40 TAP 48.83 RCA 103.13 APO 149.33 VZ 34.801
RC 139.015 GL 27.40 GP -4.08 ZAL 118.67 ZAP 153.93 ETS 349.84 ZAE 131.54 ETE 184.27 ZAC 52.45 ETC 156.78 CLP-154.ZZ
    PLANETOCENTRIC CONIC
     C3 16.023 VHL 4.003 DLA 10.73 RAL 312.24 RAD 6567.6 VEL 11.722 PTH 2.07 VHP 4.960 DPA -23.05 RAP 319.48 ECC 1.2637
     LNCH AZMTH LNCH TIME L-I TINE INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 22 40 2502.19
16 4 57 4467.37
                                                                                            173.20
                                                             -25.35
                                                                                                                103.06 2 4 22
62.90 17 19 24
                                                                                                                                                    1902.2 -23.30
                                                                               60.55
                                                                8.56
                                                                               187.01
                                                                                                 169.04
                                                                                                                                                         3867.4
                                                                                                                                                                                             180.28
                        2 49 22 2222.57
                                                                                39.69
                                                                                             172.90
                                                                                                                     104.47
                                                                                                                                  3 26 24
                                                                                                                                                        1622.6
                                                                                                                                                                           -24.20
                                                                                                                                                                                              31.61
                                                                9.56
                                                                                                168.51
                                                                                                                      61.54
                                                                                                                                  18 31 18
        100.00
                       17 20 56
                                          4222.22
                                                                              168.45
                                                                                                                                                        3622.2
                                                                                                                                                                             5.68
                                                                                                                    108.36 4 42 36
57.81 19 24 28
                        4 9 45 1971.00
                                                            -29.35
                                                                                19.62
                                                                                                171.93
                                                                                                                                                        1371.0
                                                                               153.57
                       18 17 2
                                          4046.56
                                                              12.17
                                                                                                 166.96
                                                                                                                                                        3446.6
                                                                                                                                                                            7.83
    DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                    SGT 4293.7 SGR 203.5 SG3 298.3
RRT -.3623 RRF -.2943 RTF .9206
SGB 4298.6 R23 -.0429 R13 -.9206
     TOE 1.1820 TRA-1.2587 TC3-4.3649 BAU .9359
                                                                                                                                                   ST 1782.1 SR 140.3 55 721.6
                                                                                                                                                   CRT .9296 CRS -.9933 CST -.9591
     RDE .0979 RRA .0168 RC3 .1818 FAU .06963
    FOE 1.1744 FRA -.1044 FC3-3.7622 BSP 13386
BOE 1.1860 BRA 1.2588 BC3 4.3687 FSP -970
                                                                                                                                                   LSA 1917.8 MSA 195.5 SSA 11.2
EL1 1786.9 EL2 51.6 ALF 4.19
                                                                                    SG1 4294.4 SG2 189.6 THA 179.01
                                                                                         FLIGHT TIME 148.00
                                                                                                                                                                 ARRIVAL DATE HAY 10 1966
                                                                                        DISTANCE 436.170
    RL 147.27 LAL -.00 LOL 80.78 VL 27.355 GAL -4.11 AZL 86.19 HCA 211.60 SHA 125.90 ECC .18378 INC 3.8078 VI 30.253 RP 108.90 LAP -1.99 LOP 292.32 VP 37.191 GAP 7.23 AZP 93.24 TAL 198.84 TAP 50.44 RCA 102.77 APO 149.04 V2 34.797
    RC 141.312 GL 27.30 GP -3.62 ZAL 116.73 ZAP 155.26 ET8 350.43 ZAE 131.26 ETE 183.73 ZAC 54.04 ETC 157.83 CLP-155.51
   PLANETOCENTRIC CONIC
    C3 15.612 VHL 3.951 OLA 11.26 RAL 314.25 RAD 6567.6 VEL 11.705 PTH 2.06 VHP 5.069 OPA -22.08 RAP 321.30 ECC 1.2569
    CS 15.612 VML 3.951 OLA 11.26 RAL 314.25 RAD 6367.6 VEL 11.705 PTM 2.06 VMP 5.069 OPA -22.08 RAP 321.30 ECC 1.2569

LNCH A7MTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 26 20 2513.88 -25.53 61.36 174.98 102.69 2 8 14 1915.9 -23.52 53.26

90.00 16 17 20 4443.89 7.83 185.67 170.72 62.70 17 31 24 3843.9 4.11 178.97

100.00 2 53 20 2233.27 -26.62 40.43 174.69 104.12 3 30 34 1633.3 -24.42 32.32

100.00 17 33 1 4199.74 8.82 167.19 170.18 61.32 18 43 1 3599.7 4.93 160.56

110.00 4 14 25 1979.56 -29.53 20.22 173.74 108.05 4 47 25 1379.6 -26.78 12.11

110.00 18 28 26 4026.21 11.43 152.46 168.62 57.56 19 35 32 3426.2 7.07 146.08
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                  SCT 4397.2 SGR 222.4 SG3 289.0

RRT -.3534 RRF -.3015 RTF .9198

SGB 4402.8 R23 -.0260 R13 -.9197

SG1 4397.9 SG2 208.1 THA 178.97
    TOE 1.2126 TRA-1.1921 TC3-4.5865 BAU .9583
                                                                                                                                                   ST 1839.4 SR 151.7 55 720.4
     ROE .1045 RRA .0093 RC3 .2053 FAU .06647
                                                                                                                                                  CRT .9454 CRS -.9957 CST -.9601
                                                                                                                                               LSA 1971.8 MSA 193.2 SSA 12.4
EL1 1845.0 EL2 49.3 ALF 4.46
    FOE 1.1328 FRA -.0307 FC3-3.6861 85P 13794
```

BOE 1.2171 BRA 1.1922 BC3 4.5911 FSP -949

ARRIVAL DATE MAY 12 1966

LAUNCH DATE DEC 13 1965

```
DISTANCE 442.025
   RL 147.27 LAL -.00 LOL 80.78 VL 27.305 GAL -3.81 A7L 86.24 MCA 214.76 SHA 125.58 ECC .18468 INC 3.7597 V1 30.253 RP 108.92 LAP -2.14 LOP 295.48 VP 37.150 GAP 7.45 A7P 93.09 TAL 197.26 TAP 52.03 RCA 102.38 APO 148.77 V2 34.793 RC 143.598 GL 27.22 GP -3.25 7AL 114.67 ZAP 156.52 ETS 350.91 ZAE 131.02 ETE 183.30 ZAC 55.73 ETC 158.75 CLP-156.73
  HELTOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                          2.06 VHP 5.181 DPA -21.17 RAP 323.17 ECC 1.2510
    C3 15.253 VHL 3.906 OLA 11.87 RAL 316.36 RAD 6567.6 VEL 11.689 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      1929.2
                                                                                                     102.20
                                                                                                                     2 11 47
                     1 29 37 2529.16
16 30 51 4418.14
                                                       -25.75
                                                                       62.42
                                                                                     176.93
       90.00
                                                                                                                                                         3.28
                                                                                                                                                                        177.52
                                                                                                                                        3818.1
                                                                                                        62.50
                                                                                                                   17 44 29
                                                                                      172.53
                                                        7.02
                                                                      184.21
        90.00
                                                                                                                                       1647.4
                                                                                                                                                                        33.27
                                                                                                                                                        -24.71
                                                                                                                     3 34 27
                    2 57 0 2247.36
17 46 10 4175.18
                                                                        41.41
                                                                                      176.65
                                                                                                       103.65
                                                      -26.85
      100.00
                                                                                                                                       3575.2
                                                                                                                                                         4.10
                                                                                                                                                                        159.21
                                                                                                        61.11 18 55 45
                                                                                      171.99
                                                                      165.81
                                                        8.02
       100.00
                                                                                                                                                                        12.88
                                                                                                                                       1391.1
                                                                                                                                                        -27.08
                                                                                                       107.62 4 52 4
57.32 19 47 30
                                                                                      175.72
                                                      -29.77
                                                                       21.03
                     4 18 53 1991.13
18 40 46 4004.17
      110.00
                                                                                                                                       3404.2
                                                                                                                                                          6.24
                                                                                                                                                                        144.91
                                                                                      170.42
                                                                     151.26
                                                       10.62
                     18 40 46
      110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACGURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 1907.0 SR 163.5 S5 723.8
CRT .9596 CRS -.9964 CST -.9615
                                                                          SGT 4493.4 SGR 240.4 SG3 279.6
RRT -.3560 RRF -.2957 RTF .9165
SGB 4499.9 R23 -.0145 R13 -.9185
    TOE 1.2517 TRA-1.1158 TC3-4.7937 BAU .9786
    ROE .1114 RRA .0013 RC3 .2256 FAU .06323
FOE 1.1007 FRA .0428 FC3-3.5888 BSP 14129
                                                                                                                                   LSA 2037.3 MSA 190.6 SSA 13.5
                                                                                                                                   EL1 1913.4 EL2 45.8 ALF 4.71
    BOE 1.2567 BRA 1.1158 BC3 4.7990 FSP -920
                                                                          3G1 4494.2 3G2 226.4 THA 178.97
                                                                                                                                               ARRIVAL DATE HAY 14 1966
                                                                               FLIGHT TIME 152.00
LAUNCH DATE DEC 13 1965
                                                                               DISTANCE 447.868
   RL 147.27 LAL -.00 LOL 80.78 VL 27.255 GAL -3.49 A7L 86.28 MCA 217.92 SMA 125.25 ECC .18571 INC 3.7187 V1 30.253 RP 108.93 LAP -2.28 LOP 298.64 VP 37.111 GAP 7.67 A7P 92.94 TAL 195.67 TAP 53.59 RCA 101.99 APO 148.51 V2 34.790 RC 145.874 GL 27.16 GP -2.94 ZAL 112.48 ZAP 157.73 ETS 351.32 ZAE 130.80 ETE 182.94 ZAC 57.50 ETC 159.59 CLP-157.92
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC

C3 14.945 VHL 3.866 DLA 12.55 RAL 318.56 RAD 6567.6 VEL 11.676 PTH 2.05 VHP 5.295 DPA -20.29 RAP 325.D9 ECC 1.2460

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 32 39 2547.63 -26.01 65.71 179.06 101.61 2 15 6 1947.6 -24.15 55.54

90.00 16 45 24 4390.53 6.15 182.65 174.50 62.30 17 58 35 3790.5 2.39 175.98

100.00 3 0 27 2264.46 -27.12 42.61 178.78 103.07 3 38 11 1664.5 -25.05 34.43

100.00 18 0 17 4148.93 7.15 164.34 173.96 60.90 19 9 26 3548.9 3.22 157.76

110.00 42 31 55 2005.35 -30.06 22.04 177.88 107.09 4 56 40 1405.5 -27.43 13.83

110.00 18 53 58 3980.81 9.76 150.00 179.37 57 08 20 0 19 3380.8 5.38 143.88
   PLANETOCENTRIC CONIC
                                                                                                        107.09 4 56 40
57.08 20 0 19
                                                                                                                                        3380.8
                                                        9.76
                                                                      150.00
                                                                                       172.37
       110.00
                    18 53 58
                                     3980.81
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4586.4 SGR 257.3 SG3 270.6
RRT -.3143 RRF -.2838 RTF .9174
SGB 4593.6 R23 -.0057 R13 -.9174
                                                                                                                                    ST 1980.8 SR 175.6 SS 728.7
    TOE 1.2960 TRA-1.0316 TC3-4.9911 BAU .9984
                                                                                                                                    CRT .9715 CR5 -.9953 C9T -.9633
    RDE .1184 RRA -. 0071 RC3 .2429 FAU .06013
                                                                                                                                   LSA 2109.5 MSA 187.4 SSA 14.5
ELI 1988.I EL2 41.5 ALF 4.92
    FOE 1.0727 FRA .1127 FC3-3.4830 BSP 14447
BOE 1.3014 BRA 1.0316 BC3 4.9970 FSP -892
                                                                           SG1 4587.1 SG2 244.2 THA 178.99
                                                                                                                                               ARRIVAL DATE MAY 16 1966
                                                                               FLIGHT TIME 154.00
LAUNCH DATE DEC 13 1965
                                                                               DISTANCE 453.697
    RL 147.27 LAL -.00 LOL 80.78 VL 27.205 GAL -3.17 AZL 86.32 MCA 221.09 SMA 124.93 ECC .18687 INC 3.6831 V1 30.253 RP 108.93 LAP -2.42 LOP 301.80 VP 37.072 GAP 7.89 AZP 92.78 TAL 194.05 TAP 55.14 RCA 101.59 APO 148.28 VZ 34.787
   HELIOCENTRIC CONIC
                          27.08 CP -2.69 ZAL 110.18 ZAP 158.89 ETS 351.66 ZAE 130.61 ETE 182.63 ZAC 59.33 ETC 160.34 CLP-159.05
     RC 148.138 GL
   PLANETOCENTRIC CONIC
     C3 14.688 VHL 3.833 DLA 13.29 RAL 320.86 RAD 6587.6 VEL 11.665 PTH 2.05 VMP 5.412 DPA -19.42 RAP 327.05 ECC 1.2417
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG
                    1 35 28 2569.02
17 0 57 4361.40
3 3 45 2284.32
18 15 21 4121.34
4 27 35 2021.98
19 8 0 3956.44
                                                                                                                                       1969.0
                                                                                                                      2 18 17
                                                                                                        100.91
                                                                       65.22
                                                                                   181.36
                                                                                                          -26.29
         90.00
                                                                                                                                                                         174.36
                                                                                                                                        3761.4
                                                                                                                                                           1.46
                                                          5.23
                                                                       181.01
                                                                                       176.64
         90.00
                                                                                                                                                                          35.78
                                                                                                                                        1684.3
                                                                                                                                                         -25.44
                                                                                                         102.39
                                                        -27.42
                                                                        44.02
                                                                                       181.10
        100.00
                                                                                                                                     3521.3
                                                                                                                                                                         156.24
                                                                                                                                                          2.29
                                                                       162.80
                                                                                       176.08
                                                          6.24
        100.00
                                                                                                                                                                          14.96
                                                                                                                       5 1 17
                                                                                                                                         1422.0
                                                                                                                                                        -27.84
                                                                                                        106.46 5 1 17
56.85 20 13 57
                                                       -30.39
                                                                        23.22
                                                                                       180.22
        110.00
                                                                                                                                         3356.4
                                                                                                                                                           4.43
                                                                                                                                                                         142.40
                                                                       148.69
                                                                                       174.46
                                                        8.86
                                      3956.44
        110.00
                     19 8 D
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2063.6 SR 187.8 SS 736.5
CRT .9812 CRS -.9925 CST -.9653
                                                                           SGT 4672.4 SGR 273.2 SG3 261.7
RRT -.2090 RRF -.2657 RTF .9160
SGB 4680.4 R23 .0002 R13 -.9160
     TDE 1.3474 TRA -.9371 TC3-5.1695 BAU 1.0164
     ROE .1255 RRA -. 0157 RC3 .2573 FAU .05700
                                                                                                                                    LSA 2191.3 MSA 183.8 SSA 15.5
EL1 2071.8 EL2 36.1 ALF 5.10
    FOE 1.0507 FRA .1819 FC3-3.3593 BSP 14701
BOE 1.3533 BRA .9373 BC3 5.1759 FSP -858
                                                                            SG1 4673.0 SG2 261.5 THA 179.03
                                                                                                                                                 ARRIVAL DATE MAY 18 1966
                                                                                FLIGHT TIME 156.00
LAUNCH DATE DEC 13 1965
                                                                                DISTANCE 459.513
    RL 147.27 LAL -.00 LOL 80.78 VL 27.155 GAL -2.84 A7L 86.35 MCA 224.25 SNA 124.62 ECC .18817 INC 3.6518 V1 30.253 RP 108.94 LAP -2.55 LOP 304.97 VP 37.034 GAP 8.11 A7P 92.62 TAL 192.42 TAP 56.67 RCA 101.17 APO 148.06 V2 34.786 RC 150.390 GL 26.99 GP -2.47 ZAL 107.77 ZAP 160.00 ETS 351.94 ZAE 130.44 ETE 182.38 ZAC 61.23 ETC 161.03 CLP-160.15
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                             2.05 VHP 5.532 DPA -18.56 RAP 329.05 ECC 1.2384
     C3 14.484 VHL 3.806 DLA 14.07 RAL 323.27 RAD 6567.6 VEL 11.656 PTH
     ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        100.10 2 21 23
61.98 18 29 37
101.61 3 45 25
60.53 19 39 31
105.73 5 5 58
56.64 20 28 21
                     1 38 10 2593.1.06

17 17 26 4331.06

3 6 59 2306.73

18 31 19 4092.70

4 31 57 2040.83

19 22 49 3931.36
                                                                                                                                      1993.1
                                                                                      183.83
                                                        -26.59
                                                                        66.92
         90.00
                                                                                                                                                                           172.66
                                                                                                                                         3731.1
                                                                                                                                                             .48
                                                                        179.30
                                                                                        178.94
                                                          4.26
          90.00
                                                                                                                                                                           37.31
                                                                                                                                                          -25.86
                                                                                                                                         1706.7
                                                                         45.60
                                                                                        183.59
                                                        -27.74
        100.00
                                                                                                                                                                          154.67
                                                                                                                                         3492.7
                                                                                                                                                            1.31
                                                                                       178.38
                                                          5.28
                                                                        161.22
        100.00
                                                                                                                                                                           16.24
                                                                                                                                                        -28.28
                                                                                       182.75
                                                                                                                                         1440.8
                                                        -30.75
                                                                        24.57
        110.00
                                                                                                                                                                           141.08
                                                                                        176.75
                                                                                                                                         3331.4
                                                                                                                                                            3.48
                                                         7.92
                                                                        147.35
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 4759.5 SGR 288.3 SG3 253.6

RRT -.2631 RRF -.2475 RTF .9155

SGB 4768.2 R23 .0061 R13 -.9155

SG1 4760.1 SG2 278.1 THA 179.08

CRT .9883 CRS -.9885 CST -.9674

L5A 2274.3 M5A 179.3 SSA 16.5

EL1 2157.0 EL2 30.4 ALF 5.26
      TOE 1.4007 TRA -.8370 TC3-5.3396 BAU 1.0352
      RDE .1326 RRA -.0244 RC3 .2686 FAU .05417
     FOE 1.0278 FRA .2441 FC3-3.2380 BSP 15014
BDE 1.4069 BRA .8374 BC3 5.3463 FSP -835
```

FLIGHT TIME 150.00

-- ≣

```
LAUNCH DATE DEC 13 1965
                                                                                   FLIGHT TIME 158.00
                                                                                                                                                     ARRIVAL DATE MAY 20 1966
                                                                                   DISTANCE 465.316
    HELIOCENTRIC CONIC
     RL 147.27 LAL -.00 LOL 80.78 VL 27.106 GAL -2.49 AZL 86.38 MCA 227.41 SMA 124.30 ECC .18962 INC 3.6238 VI 30.253
RP 108.94 LAP -2.67 LOP 308.13 VP 36.997 GAP 8.33 AZP 92.45 TAL 190.77 TAP 58.18 RCA 100.73 APO 147.87 V2 34.785
RC 152.629 GL 26.88 GP -2.29 ZAL 105.26 ZAP 161.07 ETS 358.18 ZAE 130.31 ETE 182.16 ZAC 63.18 ETC 161.66 CLP-161.20
    PLANETOCENTRIC CONIC
     C3 14.334 VHL 3.786 DLA 14.90 RAL 325.78 RAD 6567.6 VEL 11.650 PTH 2.05 VHP 5.656 DPA -17.70 RAP 331.08 ECC 1.2359
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ MT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 40 47 2619.83
17 34 50 4299.77
3 10 11 2331.53
18 48 8 4063.29
4 36 24 2061.76
19 38 24 3905.83
                                                                                                           99.20 2 24 27
                                                                                                                                          2019.8
          90.00
                                                          -26.90
                                                                          68.81
                                                                                         186.50
                                                                                                                                                             -25.35
                                                                                                                                                                                60.49
                                                                                                           61.86 18 46 30 3699.8

100.74 3 49 2 1731.5

60.39 19 55 51 3463.3

104.91 5 10 46 1461.8

56.45 20 43 30 3305.8
          90.00
                                                            3.25
                                                                          177.55
                                                                                          181.42
                                                                                                                                                                -.53
                                                                                                                                                                               170.92
        100.00
                                                          -28.07
                                                                           47.38
                                                                                          186.27
                                                                                                                                                              -26.30
                                                                                                                                                                                39.02
                                                                                       180.85
        100.00
                                                           4.29
                                                                         159.59
                                                                                                                                                                               153.06
                                                                                                                                                                 .32
        110.00
                                                         -31.12
                                                                           26.09
                                                                                         185.47
                                                                                                                                                             -28.76
                                                                                                                                                                                17.68
                                                                                                                                                                              139.75
        110.00
                                                          6.96
                                                                         146.00
                                                                                         179.20
                                                                                                                                                               2.50
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            SGT 4842.8 SGR 302.5 SG3 245.6

RRT -.2362 RRF -.2272 RTF .9151

SG8 4852.2 R23 .0106 R13 -.9151

SG1 4843.3 SG2 293.9 TMA 179.15
                                                                                                                                       ST 2236.3 SR 212.3 SS 748.9
CRT .9931 CRS -.9833 CST -.9696
     TOE 1.4580 TRA -.7283 TC3-5.4903 BAU 1.0535
     RDE .1399 RRA -.0331 RC3 .2770 FAU .05142
     FOE 1.0072 FRA .3039 FC3-3.1057 BSP 15311
BOE 1.4647 BRA .7290 BC3 5.4973 FSP -811
                                                                                                                                       LSA 2361.4 MSA 174.6 SSA 17.4
EL1 2246.3 EL2 24.8 ALF 5.39
LAUNCH DATE DEC 13 1965
                                                                                   FLIGHT TIME 160.00
                                                                                                                                                     ARRIVAL DATE MAY 22 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 471.104
    RL 147.27 LAL -.00 LOL 80.78 VL 27.057 GAL -2.14 A7L 86.40 MCA 230.57 3MA 123.99 ECC .19122 INC 3.5985 V1 30.253 RP 108.94 LAP -2.78 LOP 311.29 VP 36.960 GAP 8.56 A7P 92.29 TAL 189.11 TAP 59.68 RCA 100.28 APO 147.70 V2 34.784 RC 154.855 GL 26.72 GP -2.13 ZAL 102.64 ZAP 162.11 ETS 352.38 ZAE 130.19 ETE 181.98 ZAC 65.17 ETC 162.24 CLP-162.23
   PLANETOCENTRIC CONIC
    C3 14.243 VML 3.774 DLA 15.75 RAL 328.39 RAD 6567.6 VEL 11.646 PTH 2.04 VMP 5.783 DPA -16.83 RAP 333.13 ECC 1.2344 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           98.20 2 27 30
61.76 19 4 14
99.76 3 52 42
60.27 20 12 59
                     1 43 21 2648.97
17 53 7 4267.82
         90.00
                                                         -27.20
                                                                           70.89
                                                                                         189.34
                                                                                                                                          2049.0
                                                                                                                                                             -25.78
                                                                                                                                                                               62.51
         90.00
                                                                                                                                                                               169.14
                                                           2.23
                                                                          175.76
                                                                                          184.08
                                                                                                                                              3667.8
                                                                                                                                                               -1.57
                     3 13 24 2358.60
19 5 46 4033.41
4 40 58 2084.62
19 54 41 3880.16
       100.00
                                                        -28.39
                                                                           49.32
                                                                                          189.13
                                                                                                                                             1758.6
                                                                                                                                                              -26.75
                                                                                                                                                                                40.90
                                                                                                                                           3433.4
       100.00
                                                           3.29
                                                                         157.94
                                                                                          183.49
                                                                                                                                                                -.70
                                                                                                                                                                               151.42
                                                                                                           103.99 5 15 42
56.26 20 59 21
                                                                                                                                           1484.6
       110.00
                                                         -31.51
                                                                                          188.37
                                                                           27.76
                                                                                                                                                             -29.27
                                                                                                                                                                                19.27
       110.00
                                                          5.99
                                                                          144.64
                                                                                          181.61
                                                                                                                                            3280.2
                                                                                                                                                                1.52
                                                                                                                                                                               138.41
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SGT 4922.7 SGR 315.8 SG3 238.0
RRT -.2084 RRF -.2054 RTF ..9150
SGB 4932.8 R23 .0142 R13 -.9150
SGI 4923.1 SG2 308.9 THA 179.23
     TOE 1.5202 TRA -.6102 TC3-5.6177 BAU 1.0711
                                                                                                                                        ST 2329.3 SR 224.6 55 755.6
CRT .9959 CRS -.9772 CST -.9719
    FOE .1473 RRA -.0417 RC3 .2023 FAU .04879
FOE .9888 FRA .3612 FC3-2.9657 BSP 15591
BOE 1.5273 BRA .6117 BC3 5.6248 FSP -788
                                                                                                                                        LSA 2453.2 MSA 169.8 SSA 18.2
                                                                                                                                        EL1 2340.1 EL2 20.3 ALF 5.49
                                                                                  FLIGHT TIME 162.00
                                                                                                                                                    ARRIVAL DATE MAY 24 1966
LAUNCH DATE DEC 13 1965
                                                                                 DISTANCE A76.879
   HELIOCENTRIC CONIC
     RL 147.27 LAL -.00 LOL 80.78 VL 27.008 GAL -1.77 AZL 86.42 MCA 233.73 SMA 123.69 ECC .19300 INC 3.5755 V1 30.253
RP 108.94 LAP -2.88 LOP 314.45 VP 36.925 GAP 8.79 AZP 92.12 TAL 187.43 TAP 61.17 RCA 99.82 APO 147.56 V2 34.785
RC 157.067 GL 26.52 GP -1.99 ZAL 99.94 ZAP 163.11 ETS 352.54 ZAE 130.10 ETE 181.83 ZAC 67.21 ETC 162.77 CLP-163.ZZ
   PLANETOCENTRIC CONIC
    C3 14.215 VHL 3.770 DLA 16.61 RAL 331.11 RAD 6567.6 VEL 11.645 PTH 2.04 VHP 5.914 DPA -15.96 RAP 335.20 ECC 1.2339 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 45 55 2680.42
18 12 13 4235.48
                                                                                                       97.10
                                                                                                                                          2080.4
                                                                          73.15
                                                                                         192.38
                                                                                                                         2 30 36
                                                                                                                                                             -26.21
         90.00
                                                         -27.48
                                                                                                                        19 22 48
                                                                         173.96
                                                                                         186.93
                                                                                                             61.71
                                                                                                                                            3635.5
                                                                                                                                                              -2.61
                                                          1.18
         90.00
                     3 16 40 2387.80
19 24 9 4003.33
                                                         -28.71
                                                                           51.43
                                                                                         192.18
                                                                                                             98.69
                                                                                                                          3 56 27
                                                                                                                                            1787.8
                                                                                                                                                             -27.21
                                                                                                                                                                                42.95
       100.00
                                                                                                             60.19 20 30 53
       100.00
                                                          2.27
                                                                         156.29
                                                                                         186.33
                                                                                                                                            3403.3
                                                                                                                                                             -1.72
                                                                                                                                                                              149.77
                                                                                                          102.98 5 20 50
56.14 21 15 52
                     4 45 41 2109.28
20 11 38 3854.62
                                                                                                                                           1509.3
                                                                                                                                                                               21.00
       110.00
                                                         -31.90
                                                                          29.57
                                                                                         191.47
                                                                                                                                                             -29.79
                                                                         143.30
                                                                                         184.61
                                                                                                                                            3254.6
                                                                                                                                                                .55
                                                                                                                                                                              137.08
       110.00
                                                         5.03
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                             SGT 4995.3 SGR 328.4 SG3 230.5 ST 2428.5 SR 237.0 55 764.1 RRT -.1792 RRF -.1803 RTF .9146 CRT .9968 CRS -.9703 CST -.9741 SGB 5006.1 R23 .0160 R13 -.9146 LSA 2551.5 MSA 165.3 SSA 19.0 SG1 4995.6 SGZ 323.1 TMA 179.32 EL1 2440.0 EL2 19.0 ALF 5.56
    TOE 1.5887 TRA -.4807 TC3-5.7107 BAU 1.0866
    RDE .1551 RRA -.0501 RC3 .2844 FAU .04612
FDE .9744 FRA .4186 FC3-2.8090 BSP 15801
BDE 1.5962 BRA .4833 BC3 5.7177 FSP -760
                                                                                  FLIGHT TIME 164.00
                                                                                                                                                    ARRIVAL DATE MAY 26 1966
LAUNCH DATE DEC 13 1965
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 482.638
    RL 147.27 LAL -.00 LOL 80.78 VL 26.959 GAL -1.39 A7L 86.45 MCA 236.89 SMA 123.39 ECC .19496 INC 3.5542 VI 30.253 RP 108.94 LAP -2.98 LOP 317.62 VP 36.891 GAP 9.03 A7P 91.94 TAL 185.75 TAP 62.64 RCA 99.33 APO 147.44 VZ 34.786 RC 159.265 GL 26.27 GP -1.87 ZAL 97.14 ZAP 184.08 ETS 352.67 ZAE 130.03 ETE 181.69 ZAC 69.29 ETC 163.26 CLP-164.19
   PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 31 2714.04 -27.74 75.58 195.59 95.91 2 33 45 2114.0 -28 43 47 00
                     18 32 4 4203.08
3 20 1 2418.94
19 43 15 3973.41
4 50 36 2135.56
20 29 10 3829.56
                                                                                                                        19 42 7
         90.00
                                                            .14
                                                                         172.15
                                                                                          189.97
                                                                                                             61.68
                                                                                                                                             3603.1
                                                                                                                                                              -3.65
                                                                                                                                                                              165.52
       100.00
                                                         -29.01
                                                                           53.70
                                                                                         195.42
                                                                                                             97.54
                                                                                                                                             1818.9
                                                                                                                                                             -27.67
                                                                                                                                                                                45.16
                                                                                                          60.13 20 49 28
101.89 5 26 11
56.03 21 32 59
       100.00
                                                           1.25
                                                                         154.65
                                                                                         189.34
                                                                                                                                            3373.4
                                                                                                                                                              -2.73
                                                                                                                                                                              148.13
                                                         -32.29
                                                                          31.53
                                                                                         194.77
                                                                                                                                            1535.6
                                                                                                                                                                               22.87
       110.00
                     20 29 10
                                                          4.08
                                                                         141.98
                                                                                         187.59
                                                                                                                                            3229.6
                                                                                                                                                                -.41
       110.00
                                      3829.56
                                                                                                                                                                              135.77
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5069-0 SGR 340-2 SG3 223.5

RRT -.1511 RRF -.1573 RTF .9151

SGB 5080-4 R23 .0186 R13 -.9151

SGB 5089-2 SG2 336.3 THA 179-42

ELI 2535.4 ELZ 22.4 ALF 5.62
     TOE 1.6569 TRA -.3456 TC3-5.7832 BAU 1.1034
    RDE .1633 RRA -.0581 RC3 .2834 FAU .04372
    FOE .9371 FRA .4699 FC3-2.6554 BSP 16085
BDE 1.6649 BRA .3504 BC3 5.7902 FSP -740
```

JPL TM 33-99

```
ARRIVAL DATE MAY 28 1966
                                                                         FLIGHT TIME 166.00
LAUNCH DATE DEC 13 1965
                                                                        DISTANCE 488.381
  HELIOCENTRIC CONIC
   RL 147.27 LAL -.00 LOL 80.78 VL 26.911 GAL -.99 ATL 86.47 MCA 240.05 SMA 123.09 ECC .19711 INC 3.5344 VI 30.253
RP 108.93 LAP -3.06 LOP 320.78 VP 36.858 GAP 9.27 ATP 91.77 TAL 184.05 TAP 64.10 RCA 98.83 APO 147.36 VZ 34.788
RC 161.449 GL 25.95 GP -1.76 TAL 94.28 TAP 165.03 ETS 352.76 TAE 129.98 ETE 181.58 TAC 71.39 ETC 163.72 CLP-165.13
   PLANETOCENTRIC CONIC
    C3 14.367 VML 3.790 DLA 18.36 RAL 336.83 RAD 6567.6 VEL 11.651 PTM 2.05 VMP 6.189 DPA -14.17 RAP 339.39 ECC 1.2365
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2149.7
                                                                                                                                          -27.03
                                                                 78.16
                                                                                              94.64 2 37 0
                                                                                                                                                           69.62
                                                                              198.99
                    1 51 10 2749.66
        90.00
                                                  -27.97
                                                                                                          20 2 8
                                                                                                                             3571.0
                                                                                                                                            -4.68
                                                                                                                                                           163.72
                   18 52 37 4170.96
3 23 31 2451.88
                                                                               193.19
                                                                                                 61.70
                                                                 170.36
        90.00
                                                    -.90
                                                                                                 96.30 4 4 22
                                                                                                                             1851.9
                                                                                                                                            -28.10
                                                                                                                                                           47.51
                                                                  56.11
                                                                               198.84
       100.00
                                                  -29.28
                                                                                                60.11 21 8 42
100.71 5 31 48
55.94 21 50 38
                  20 2 58 3943.97
4 55 44 2163.32
                                                                               192.55
                                                                                                                             3344.0
                                                                                                                                            -3.72
                                                                                                                                                           146.51
                                                                 153.03
       100.00
                                                     .26
                                                                                                                                           -30.84
                                                                                                                                                           24.86
                                                                               198.26
                                                                                               100.71
                                                                                                                           1563.3
                                                  -32.66
                                                                  33.61
      110.00
                                                                               190.74
                                                                                                                             3205.3
                                                                                                                                            -1.34
                                                                                                                                                           134.50
                  20 47 13 3805.30
                                                   3.15
                                                                 140.71
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2618.0 SR 261.9 SS 772.8
CRT .9937 CRS -.9553 CST -.9781
                                                                    $67 5138.1 $6R 351.2 $63 216.6

RRT -.1227 RRF -.1330 RTF .9157

$68 5150.1 R23 .0203 R13 -.9157
    TOE 1.7286 TRA -.1997 TC3-5.8207 BAU 1.1193
    ROE .1720 RRA -.0658 RC3 .2792 FAU .04137
                                                                                                                         LSA 2737.7 MSA 156.6 SSA 20.2
    FOE .9411 FRA .5205 FC3-2.4930 BSP 16333
                                                                    5G1 5138.2 5G2 348.5 THA 179.52
                                                                                                                        EL1 2630.9 EL2 29.2 ALF 5.68
    BOE 1.7371 BRA .2103 BC3 5.8274 FSP -719
                                                                                                                                    ARRIVAL DATE MAY 30 1966
                                                                         FLIGHT TIME 168.00
LAUNCH DATE DEC 13 1965
                                                                        DISTANCE 494.108
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.864 GAL -.58 AZL 86.48 MCA 243.22 SMA 122.80 ECC .19947 INC 3.5158 V1 30.253
RP 108.92 LAP -3.14 LOP 323.95 VP 36.825 GAP 9.52 AZP 91.59 TAL 182.34 TAP 65.55 RCA 98.31 APO 147.30 V2 ,34.791
RC 163.619 GL 25.58 GP -1.67 ZAL 91.35 ZAP 165.95 ETS 352.81 ZAE 129.94 ETE 181.49 ZAC 73.53 ETC 164.13 CLP-166.04
   PLANETOCENTRIC CONIC
    C3 14.561 VHL 3.816 DLA 19.23 RAL 339.82 RAD 6567.6 VEL 11.660 PTH 2.05 VHP 6.335 DPA -13.26 RAP 341.50 ECC 1.2396 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             2 40 22
                    1 53 55 2787.09
                                                  -28.14
                                                                 80.88
                                                                               202.56
                                                                                                93.28
                                                                                                                           2187.1
                                                                                                                                           -27.39
                                                                                                                                                            72.30
        90.00
                                                                                                          20 22 45
                  19 13 45 4139.46
3 27 10 2486.40
20 23 12 3915.38
5 1 9 2192.35
21 5 42 3782.20
                                                                                                 61.74
                                                                                                                             3539.5
                                                                                                                                             -5.68
                                                                                                                                                            161.95
                                                                 168.60
                                                                                196.60
        90.00
                                                   -1.92
                                                                                                 94.98
                                                                                                             4 8 36
                                                                                                                             1886.4
                                                                                                                                            -28.51
                                                                                                                                                            49.99
                                                  -29.51
                                                                  58.65
                                                                                202.45
                                                                                                 94.98 4 8 36
60.12 21 28 27
       100.00
                                                                                                                           3315.4
                                                                                                                                                           144.93
                                                                 151.46
                                                    -.71
                                                                               195.93
      100.00
                                                                                                99.45 5 or ...
99.45 22 8 44
                                                                                                                            1592.4
                                                                                                                                                            26.97
                                                                               201.93
      110.00
                                                 -33.00
                                                                  35.80
                                                                                                                             3182.2
                                                                 139.50
                                                                               194.07
      110.00
                                                   2.27
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2710.2 SR 274.5 SS 775.8
CRT .9903 CRS -.9476 CST -.9800
                                                                     SGT 5204.1 SGR 361.4 SG3 209.9

RRT -.0941 RRF -.1079 RTF .9168

SGB 5216.7 R23 .0213 R13 -.9168
    TOE 1.8027 TRA -.0451 TC3-5.8233 BAU 1.1348
    ROE .1813 RRA -.0729 RC3 .2719 FAU .03914
FOE .9260 FRA ..5680 FC3-2.3271 BSP 16608
                                                                                                                        LSA 2828.2 MSA 153.0 SSA 20.7
EL1 2723.8 EL2 37.9 ALF 5.73
                                                                     SG1 5204.2 SG2 359.8 THA 179.62
    BOE 1.8118 BRA .0857 BC3 5.8296 FSP -703
                                                                                                                                   ARRIVAL DATE JUN 1 1966
                                                                         FLIGHT TIME 170.00
LAUNCH DATE DEC 13 1965
                                                                       DISTANCE 499.816
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.817 GAL -.16 A7L 86.50 MCA 246.38 SMA 122.51 ECC .20205 INC 3.4982 VI 30.253
RP 108.91 LAP -3.20 LOP 327.12 VP 36.794 GAP 9.78 A7P 91.40 TAL 180.62 TAP 67.00 RCA 97.76 APO 147.27 V2 34.794
RC 165.775 GL 25.13 GP -1.59 7AL 88.37 7AP 166.85 ETS 352.83 7AE 129.92 ETE 181.41 7AC 75.70 ETC 164.52 CLP-166.94
   PLANETOCENTRIC CONIC
     C3 14.843 VML 3.853 DLA 20.07 RAL 342.89 RAD 6567.6 VEL 11.672 PTH 2.05 VMP 6.486 DPA -12.34 RAP 343.63 ECC 1.2443
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2226.1
                                                                                                             2 43 54
                                                                                                                                          -27.70
                                                                                                                                                            75.11
                                                                                                 91.86
                                                                               206.29
        90.00
                   1 56 48 2826.11
19 35 23 4108.97
                                                   -28.26
                                                                 83.73
                                                                                                 61.82 20 43 52
                                                                                                                                            -6.64
                                                                                                                                                           160.22
                                                                                                                             3509.0
                                                                                200.19
                                                                 166.90
        90.00
                                                  -2.90
                                                                                                             4 13 4
                                                                                                                             1922.3
                                                                                                                                            -28.88
                                                                                                                                                            52.59
                   3 31 1 2522.28
20 43 50 3888.04
                                                                                206.21
                                                                                                 93.59
       100.00
                                                  -29.70
                                                                  61.30
                                                                                                 60.15 21 48 38 3288.0
98.13 5 43 54 1622.4
55.84 22 27 10 3160.6
                                                                                                                             3288.0
                                                                                                                                            -5.60
                                                                                                                                                           143.42
                                                                               199.49
                                                   -1.64
                                                                 149.96
       100.00
                                                                                                                                           -31.84
-3.04
                                                                                                                                                           29.18
                   5 6 51 2222.45
21 24 29 3760.63
                                                                  38.09
                                                                               205.78
                                                 -33.32
       110.00
                                                                                                                                                          132.17
                                                                 134.36
                                                                               197.56
                                                   1,45
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2798.7 SR 287.1 SS 774.6
CRT .9861 CRS -.9397 CST -.9816
                                                                     SGT 5265.4 SGR 370.7 SG3 203.3
RRT -.0653 RRF -.0841 RTF .9185
SGB 5278.4 R23 .0239 R13 -.9185
     TOE 1.8793 TRA .1201 TC3-5.7861 BAU 1.1493
    ROE .1913 RRA -.0794 RC3 .2616 FAU .03703
FOE .9079 FRA .6131 FC3-2.1597 BSP 16857
                                                                                                                        LSA 2914.1 MSA 150.1 SSA 20.9
EL1 2813.0 EL2 47.5 ALF 5.78
                                                                     SG1 5265.5 SG2 369.9 THA 179.74
     BOE 1.8890 BRA .1440 BC3 5.7920 FSP -688
                                                                                                                                    ARRIVAL DATE JUN 3 1966
                                                                         FLIGHT TIME 172.00
LAUNCH DATE DEC 13 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 505.505
    RL 147.27 LAL -.00 LOL 80.78 VL 26.770 GAL .28 AZL 86.52 MCA 249.54 SMA 122.23 ECC .20487 INC 3.4815 V1 30.253
RP 108.90 LAP -3.26 LOP 330.28 VP 36.764 GAP 10.05 AZP 91.22 TAL 178.90 TAP 68.44 RCA 97.19 APO 147.27 V2 34.798
RC 167.915 GL 24.62 GP -1.51 TAL 85.35 ZAP 167.73 ETS 352.80 ZAE 129.91 ETE 181.34 ZAC 77.88 ETC 164.87 CLP-167.82
   PLANETOCENTRIC CONIC
     C3 15.222 VHL 3.902 DLA 20.88 RAL 346.03 RAD 6567.6 VEL 11.688 PTH 2.06 VHP 6.645 DPA -11.40 RAP 345.76 ECC 1.2505
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -27.96
                   1 59 51 2866.47
19 57 21 4079.91
                                                                                                 90.38 2 47 38
                                                                                                                             2266.5
                                                                                                                                                            78.03
                                                                  86.68
                                                                               210.18
        90.00
                                                   -28.31
                                                                                                         21 5 21
                                                                                                                              3479.9
                                                                                                                                             -7.56
                                                                                                                                                            158.58
                                                                  165.27
                                                                                203.95
                                                                                                 61.92
                                                    -3.83
        90.00
                                                                                                                              1959.3
                                                                                                                                            -29.20
                                                                                                                                                            55.29
                     3 35 8
                                   2559.25
                                                   -29.82
                                                                   64.04
                                                                                210.14
                                                                                                 92.16
                                                                                                           4 17 47
       100.00
                   21 4 45 3862.36
5 12 54 2253.38
                                                                                                 60.20 22 9 8
                                                                                                                              3262.4
                                                                                                                                             -6.46
                                                                                                                                                           141.99
                                                                  148.55
                                                                                203.22
                                                    -2.51
       100.00
                                                                                209.79
                                                                                                 96.75
                                                                                                           5 50 27
                                                                                                                             1653.4
                                                                                                                                           -32.29
                                                                                                                                                            31.48
                                                   -33.59
                                                                   40.47
       110.00
                                                                 137.35
                                                                                201.22
                                                                                                 55.82 22 45 50
                                                                                                                             3141.0
                                                                                                                                            -3.79
                                                                                                                                                           131.14
                                                    .10
                   21 43 29
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5313.6 SGR 379.4 SG3 196.9 ST 2889.5 SR 299.9 SS 782.3 RRT -.0347 RRF -.0507 RTF .9163 CRT .9810 CRS -.9315 CST -.9830 SGB 5327.1 R23 .0188 R13 -.9163 L5A 3004.7 MSA 150.3 SSA 21.0 SG1 5313.6 SG2 379.2 THA 179.86 ELI 2904.5 EL2 57.9 ALF 5.82
     TOE 1.9631 TRA .3047 TC3-5.6872 BAU 1.1585
    ROE .2024 RRA -.0851 RC3 .2491 FAU .03439
FOE .9020 FRA .6703 FC3-1.9558 BSP 16916
BOE 1.9735 BRA .3164 BC3 5.6927 FSP -651
```

≣

```
ARRIVAL DATE JUN 5 1966
                                                                               FLIGHT TIME 174.00
LAUNCH DATE DEC 13 1965
                                                                              OISTANCE 511.172
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.723 GAL .74 AZL 86.53 MCA 252.71 SMA 121.95 ECC .20795 INC 3.4654 V1 30.253
RP 108.89 LAP -3.31 LOP 333.45 VP 36.735 GAP 10.33 AZP 91.03 TAL 177.17 TAP 69.87 RCA 96.59 APO 147.31 VZ 34.803
RC 170.040 GL 24.05 GP -1.44 ZAL 82.32 ZAP 168.59 ETS 352.73 ZAE 129.91 ETE 181.29 ZAC 92.38 ETC 282.21 CLP-168.68
   PLANETOCENTRIC CONIC
    C3 15.709 VHL 3.963 DLA 21.64 RAL 349.22 RAD 6567.6 VEL 11.709 PTH 2.06 VHP 6.810 DPA -10.45 RAP 347.89 ECC 1.2585 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     2307.8
                                                                                                                                                      -28.15
                                                                                                     88.86 2 51 36
62.04 21 27 2
                                                                                                                     2 51 36
                                   2907.82
                                                                                    214.20
                       2 3 8
                                                       -28.30
                                                                       89.71
                                                                                                                                                                         A1.04
        90.00
                     20 19 29
                                   4052.75
                                                        -4.70
                                                                       163.75
                                                                                       207.86
                                                                                                                                         3452.7
                                                                                                                                                         -8.40
                                                                                                                                                                         157.03
         90.00
                      3 39 32 2596.96
21 25 46 3636.62
       100.00
                                                      -29.89
                                                                         66.85
                                                                                       214.21
                                                                                                          90.68
                                                                                                                     4 22 49
                                                                                                                                         1997.0
                                                                                                                                                         -29.47
                                                                                                                                                                          58.07
                                                                                       207.09
                                                                                                          60.27 22 29 45
95.33 5 57 23
55.62 23 4 34
       100.00
                    21 25 46
                                                         -3.31
                                                                       147.26
                                                                                                                                         3236.8
                                                                                                                                                          -7.24
                                                                                                                                                                         140.68
                                   2284.88
3723.68
                       5 19 18
                                                      -33.82
                                                                         42.90
                                                                                       213.96
                                                                                                                                         1684.9
                                                                                                                                                         -32.71
                                                                                                                                                                          33.64
       110.00
                                                                       136.45
                                                                                       205.01
                                                                                                                                        3123.7
                                                                                                                                                         -4.45
                                                                                                                                                                         130.24
       110.00
                    22 2 30
                                                           .03
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5376.5 SGR 367.2 SG3 191.0
RRT -.0061 RRF -.0264 RTF .9197
                                                                                                                                    ST 2951.8 SR 312.6 SS 775.6
CRT .9758 CRS -.9245 CST -.9844
    TOE 2.0339 TRA .4820 TC3-5.5992 BAU 1.1769
    ROE .2143 RRA -.0900 RC3 .2338 FAU .03279
FOE .8824 FRA .7069 FC3-1.8069 BSP 17342
BOE 2.0452 BRA .4904 BC3 5.6040 FSP -647
                                                                           SG8 5390.4 R23 .0209 R13 -.9197
SG1 5376.5 SG2 367.2 THA 179.97
                                                                                                                                    LSA 3064.3 MSA 148.7 SSA 21.0
                                                                                                                                    EL1 2967.6 EL2 67.9 ALF 5.90
                                                                                FLIGHT TIME 176.00
LAUNCH DATE DEC 13 1965
                                                                                                                                                 ARRIVAL DATE JUN 7 1966
                                                                               DISTANCE 516.816
  HELIOCENTRIC CONIC
   OISTANCE 516.816

RL 147.27 LAL -.00 LOL 80.78 VL 26.878 GAL 1.22 AZL 86.55 HCA 255.87 SMA 121.68 ECC .21132 INC 3.4498 VI 30.253

RP 108.87 LAP -3.35 LOP 336.82 VP 36.706 GAP 10.62 AZP 90.84 TAL 175.43 TAP 71.30 RCA 95.97 APO 147.39 V2 34.808

RC 172.148 GL 23.41 GP -1.38 ZAL 79.27 ZAP 169.43 ETS 352.60 ZAE 129.93 ETE 181.24 ZAC 91.94 ETC 282.49 CLP-169.52
   PLANETOCENTRIC CONIC
    C3 18.315 VHL 4.039 DLA 22.36 RAL 352.44 RAD 6567.7 VEL 11.735 PTH 2.07 VHP 6.984 OPA -9.49 RAP 350.04 ECC 1.2685 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 Z 6 42 2949.88 -28.20 92.78 218.34 87.32 2 55 52 2349.9 -28.27 84.12
                                                                                                                          6.984 OPA
                     20 41 39
                                   4027.90
                                                                                                                    21 48 47
                                                                                                                                         3427.9
        90.00
                                                       -5.49
                                                                       162.35
                                                                                       211.92
                                                                                                          62.18
                                                                                                                                                          -9.17
                                                                                                                                                                          155.61
                                                                                                                       4 28 12
                                                                                                                                         2035.2
       100.00
                       3 44 17
                                   2635.20
                                                       -29.88
                                                                         69.69
                                                                                       218.40
                                                                                                          89.19
                                                                                                                                                         -29.68
                                                                                                                                                                           60.89
                                                                                                          60.35 22 50 22
93.87 6 4 42
55.82 23 23 15
                                  3617.61
                                                                                                                                         3217.6
                                                                                                                                                          -7.93
       100.00
                   21 46 44
                                                        -4.01
                                                                       146.10
                                                                                       211.11
                                                                                                                                                                          139.51
                                                                                                                                                        -33.06
-5.01
                       5 26 5 2316.73
                                                                         45.37
                                                                                                                                         1716.7
                                                                                                                                                                           36.25
       110.00
                                                      -33.99
                                                                                       218.27
                     22 21 26
                                                                                                                                       3109.0
       110.00
                                                        -.53
                                                                       135.69
                                                                                       208.93
                                                                                                                                                                         129.47
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5423.2 SGR 394.2 SG3 184.9

RRT .0212 RRF -.0001 RTF .9212

SGB 5437.5 R23 -.0198 R13 .9212

SGI 5423.2 SG2 394.1 THA .09
                                                                                                                                    ST 3017.5 SR 325.2 SS 772.3
    TOE 2.1137 TRA .6813 TC3-5.4423 BAU 1.1880
    ROE .2278 RRA -.0940 RC3 .2169 FAU .03076
FDE .8663 FRA .7507 FC3-1.6323 BSP 17531
BOE 2.1259 BRA .6877 BC3 5.4466 FSP -630
                                                                                                                                    CRT .9701 CRS -.9173 CST -.9856
                                                                                                                                   LSA 3128.1 MSA 149.0 SSA 20.7
EL1 3034.0 EL2 78.4 ALF 5.97
                                                                               FLIGHT TIME 178.00
                                                                                                                                               ARRIVAL DATE JUN 9 1966
LAUNCH DATE DEC 13 1965
                                                                               DISTANCE 522.432
   HELTOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.632 GAL 1.72 AZL 86.57 HCA 259.04 SMA 121.41 ECC .21499 INC 3.4347 VI 30.253
RP 108.85 LAP -3.37 LOP 339.79 VP 36.679 GAP 10.92 AZP 90.65 TAL 173.70 TAP 72.73 RCA 95.31 APO 147.51 VZ 34.814
RC 174.239 GL 22.72 GP -1.33 ZAL 76.24 ZAP 170.27 ETS 352.40 ZAE 129.95 ETE 181.21 ZAC 91.49 ETC 282.75 CLP-170.36
   PLANETOCENTRIC CONIC
    C3 17.054 VHL 4.130 DLA 23.01 RAL 355.68 RAD 6567.7 VEL 11.766 PTH 2.08 VHP 7.167 DPA -8.51 RAP 352.18 ECC 1.2807
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIHE PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 10 36 2992.20
21 3 37 4005.91
3 49 26 2673.50
22 7 27 3799.85
5 33 17 2348.63
22 40 6 3697.48
                                                                                                                                     2392.2
                                                                                                                                                     -28.32
                                                      -28.03
                                                                       95.86
                                                                                    222.58
                                                                                                      85.79
                                                                                                                      3 0 28
                                                                                                                                                                         87.21
         90.00
         90.00
                                                        -6.19
                                                                       161.11
                                                                                       216.09
                                                                                                          62.31
                                                                                                                    22 10 23
                                                                                                                                        3405.9
                                                                                                                                                         -9.85
                                                                                                                                                                         154.35
                                                                                                                                                                          63.73
                                                      -29.81
                                                                        72.53
                                                                                       222.69
                                                                                                         87.69
                                                                                                                    4 34 0
                                                                                                                                       2073.5
                                                                                                                                                        -29.81
       100.00
                                                                                                          60.43 23 10 47
       100.00
                                                        -4.62
                                                                    145.11
                                                                                       215.23
                                                                                                                                        3199.8
                                                                                                                                                         -8.52
                                                                                                                                                                        138.50
                                                                                                                                                        -33.40
-5.45
                                                                                                                                                                          38.69
       110.00
                                                       -34.11
                                                                        47.86
                                                                                       222.69
                                                                                                          92.41
                                                                                                                     6 12 25
                                                                                                                                        1748.6
                                                                                                          55.83 23 41 44
                                                                       135.08
                                                                                       212.96
                                                                                                                                        3097.5
                                                                                                                                                                         128.85
                                                        -.97
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         SGT 5475.8 SGR 400.2 SG3 178.7 ST 3044.5 SR 337.5 SS 757.0 RRT .0458 RRF .0206 RTF .9247 CRT .9646 CRS -.9104 CST -.9866 SGB 5488.4 R23 -.0220 R13 .9247 LSA 3151.7 MSA 149.6 SSA 20.3 SG1 5475.8 SG2 399.7 THA .19 EL1 3061.9 EL2 88.5 ALF 6.11
    TOE 2.1738 TRA .8730 TC3-5.2962 BAU 1.2084
    ROE .2411 RRA -.0970 RC3 .1982 FAU .02937
FOE .8429 FRA .7828 FC3-1.4911 8SP 18155
BOE 2.1871 BRA .8784 BC3 5.2999 FSP -636
LAUNCH DATE DEC 13 1965
                                                                                FLIGHT TIME 180.00
                                                                                                                                                ARRIVAL DATE JUN 11 1966
                                                                               DISTANCE 528.024
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.587 GAL 2.24 AZL 86.58 MCA 262.20 SMA 121.14 ECC .21898 INC 3.4199 V1 30.253 RP 108.83 LAP -3.39 LOP 342.97 VP 36.653 GAP 11.24 AZP 90.46 TAL 171.96 TAP 74.16 RCA 94.62 APO 147.67 VZ 34.821 RC 176.312 GL 21.97 GP -1.28 ZAL 73.23 ZAP 171.09 ETS 352.12 ZAE 129.98 ETE 181.18 ZAC 91.02 ETC 282.99 CLP-171.18
   PLANETOCENTRIC CONIC
    C3 17.933 VHL 4.236 DLA 23.60 RAL 358.93 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 7.361 DPA -7.53 RAP 354.33 ECC 1.2953 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 14 54 3034.51 -27.78 98.93 226.90 84.27 3 5 28 2434.5 -28.28 90.30
                    2 14 54 3034.51
21 25 13 3987.15
                                                                                    226.90
                                                                                                                    22,31 40
         90.00
                                                        -6.78
                                                                       160.05
                                                                                       220.37
                                                                                                          62.44
                                                                                                                                         3387.1
                                                                                                                                                         -10.42
                                                                                                                                                                         153.26
                    3 55 2 2711.63
22 27 46 3785.26
5 40 54 2380.43
22 56 23 3689.22
                                                       -29.67
                                                                        75.36
                                                                                       227.08
                                                                                                          86.21
                                                                                                                      4 40 14
                                                                                                                                         2111.6
                                                                                                                                                         -29.88
                                                                                                                                                                           66.56
       100.00
                                                                       144.30
                                                                                       219.46
                                                                                                          60.51
                                                                                                                    23 30 51
                                                                                                                                         3185.3
                                                                                                                                                          -9.00
                                                                                                                                                                         137.68
       100.00
                                                        -5.11
                                                                                                                    6 20 34
23 59 53
                                                       -34.17
                                                                         50.34
                                                                                       227.21
                                                                                                          90.94
                                                                                                                                         1760.4
                                                                                                                                                         -33.66
                                                                                                                                                                          41.13
       110.00
                                                        -1.28
                                                                       134.65
                                                                                       217.08
                                                                                                          55.84
                                                                                                                                         3089.2
                                                                                                                                                         -5.76
                                                                                                                                                                         128.42
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5506.4 SGR 405.7 SG3 173.4
RRT .0790 RRF .0560 RTF .9248
                                                                                                                                 ST 3108.5 SR 349.6 SS 758.4
CRT .9584 CRS -.9036 CST -.9877
     TOE 2.2672 TRA 1.1113 TC3-5.0392 BAU 1.2096
    ROE .2564 RRA -.0967 RC3 .1792 FAU .02705
FOE .8378 FRA .8350 FC3-1.3053 BSP 17959
                                                                           SGB 5521.3 R23 -.0175 R13 .9248
                                                                                                                                   LSA 3215.0 MSA 152.6 SSA 19.8
                                                                           SG1 5506.5 SG2 404.4 THA .34
     BOE 2.2816 BRA 1.1157 BC3 5.0424 FSP -598
                                                                                                                                    EL1 3126.5 EL2 99.2 ALF 6.16
```

ARRIVAL CATE JUN 13 1966

LAUNCH DATE DEC 13 1965

```
DISTANCE 533.584
   RL 147.27 LAL -.00 LOL 80.78 VL 26.543 GAL 2.78 A7L 86.59 HCA 265.37 SHA 120.88 ECC .22334 INC 3.4053 VI 30.253 RP 108.81 LAP -3.39 LOP 346.14 VP 36.628 GAP 11.58 A7P 90.28 TAL 170.22 TAP 75.59 RCA 93.89 APO 147.88 V2 34.828 RC 178.366 GL 21.18 GP -1.24 ZAL 70.25 ZAP 171.90 ETS 351.74 ZAE 130.01 ETE 181.16 ZAC 89.10 ETC 166.21 CLP-171.99
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                                               -6.54 RAP 356.48 ECC 1.3127
                                                     2.16 RAD 6567.8 VEL 11.848 PTH 2.10 VHP 7.565 DPA
   C3 18.999 VHL 4.359 DLA 24.12 RAL
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          93.35
                                                                                                                          2476.3
                                                                                                          3 10 57
                  2 19 41 3076.27
21 46 13 3972.20
                                                  -27.46
                                                                101.95
                                                                             231.29
                                                                                               82.79
       90.00
                                                                                                                            3372.2
                                                                                                                                           -10.87
                                                                                                                                                          152.40
                                                               159.21
                                                                               224.72
                                                                                                62.55
                                                                                                          22 52 25
                                                  -7.25
       90.00
                                                                                                                                           -29.89
                                                                                                                                                           69.35
                                                                                                                            2149.2
                  4 1 8 2749.16
22 47 27 3774.54
                                                                 78.13
                                                                               231.54
                                                                                                84.76
                                                                                                           4 46 57
                                                 -29.47
      100.00
                                                                                                                                           -9.35
                                                                                                                                                         137.07
                                                                                                60.57 23 50 21
89.49 6 29 9
55.84 24 17 32
                                                                                                                            3174.5
                                                                143.71
                                                                               223.75
      100.00
                                                  -5.47
                                                                                                                                           -33.87
                                                                                                                                                           43.56
                  5 48 57 2411.84
23 16 7 3684.62
                                                                                                                            1811.8
                                                                               231.82
                                                 -34.18
                                                                 52.79
      110.00
                                                                                                                            3084.6
                                                                                                                                           -5.93
                                                               134.41
                                                                               221.27
      110.00
                                                 -1.46
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 3153.6 SR 361.2 S5 755.6
CRT .9522 CR5 -.8973 CST -.9888
                                                                    SGT 5539.1 SGR 410.4 SG3 168.2
RRT .1109 RRF .0894 RTF .9256
    TOE 2.3552 TRA 1.3590 TC3-4.7664 BAU 1.2113
   ROE .2728 RRA -.0990 RC3 .1599 FAU .02493
                                                                                                                        LSA 3259.2 MSA 156.0 SSA 19.3
                                                                   SGB 5554.3 R23 -.0139 R13 .9256
   FOE .8297 FRA .8842 FC3-1.1361 BSP 17835
                                                                                                                        EL1 3172.4 EL2 109.7 ALF 6.23
                                                                    SG1 5539.3 SG2 407.8 THA
                                                                                                         .47
    BOE 2.3710 BRA 1.3626 BC3 4.7691 FSP -567
                                                                                                                                   ARRIVAL DATE JUN 15 1966
                                                                        FLIGHT TIME 184.00
LAUNCH DATE DEC 13 1965
                                                                        DISTANCE 539.106
  HELIOCENTRIC CONIC
   RL 147.27 LAL -.00 LOL 80.78 VL 26.499 GAL 3.35 A7L 86.61 MCA 268.54 SMA 120.63 ECC .22809 INC 3.3909 V1 30.253
RP 108.78 LAP -3.39 LOP 349.32 VP 36.603 GAP 11.94 AZP 90.09 TAL 168.49 TAP 77.03 RCA 93.11 APO 148.14 V2 34.836
RC 180.400 GL 20.35 GP -1.20 ZAL 67.33 ZAP 172.70 ETS 351.22 ZAE 130.04 ETE 181.14 ZAC 91.38 ETC 166.40 CLP-172.80
   C3 20.244 VHL 4.499 DLA 24.57 RAL 5.36 RAD 6567.8 VEL 11.901 PTH 2.11 VHP 7.782 DPA -5.54 RAP 358.64 ECC 1.3332 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 25 2 3117.00 -27.08 104.87 235.72 81.37 3 12.80 257.70
  PLANETOCENTRIC CONIC
                 22 6 22 3961.57
4 7 47 2785.72
23 6 18 3768.08
5 57 26 2442.66
                                                                                               62.64
83.37 4 54 15
60.60 24 9 6
88.07 6 38 9
74 85 24 34 32
                                                                                                         23 12 24
                                                                               229.13
                                                    -7.58
                                                                158.60
       90.00
                                                                                                                             2185.7
                                                                                                                                           -29.83
                                                                                                                                                            72.07
                                                                               236.05
                                                   -29.21
                                                                  80.82
      100.00
                                                                                                                                                           136.71
                                                                                                                             3168.1
                                                                               228.10
                                                    -5.68
                                                                143.35
      100.00
                                                                                                                             1842.7
                                                                                                                                           -34.03
                                                                                                                                                            45.95
                                                                               236.48
                                                  -34.14
                                                                  55.20
      110.00
                                                                                                                             3083.9
                                                   -1.49
                                                                134.37
                                                                               225.49
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SCT 5570.2 SGR 414.1 SG3 162.9
RRT .1401 RRF .1187 RTF .9278
SCB 5585.6 R23 -.0122 R13 .9278
                                                                                                                         ST 3169.2 SR 372.0 SS 745.5
    TOE 2.4296 TRA 1.6080 TC3-4.4983 BAU 1.2180
                                                                                                                         CRT .9462 CRS -.8912 CST -.9896
    ROE .2903 RRA -.0981 RC3 .1403 FAU .02321
FDE .8150 FRA .9260 FC3 -.9927 BSP 17990
BOE 2.4469 BRA 1.6110 BC3 4.5005 FSP -552
                                                                                                                         LSA 3272.9 MSA 159.7 SSA 18.6
                                                                                                                        EL1 3188.7 EL2 119.6 ALF 6.35
                                                                    SG1 5570.5 SG2 410.0 THA .60
                                                                                                                                   ARRIVAL DATE JUN 17 1966
                                                                        FLIGHT TIME 186.00
LAUNCH DATE DEC 13 1965
                                                                        DISTANCE 544.588
  HELIOCENTRIC CONIC
   RL 147.27 LAL -.00 LOL 80.78 VL 26.455 GAL 3.95 AZL 86.62 HCA 271.71 SHA 120.38 ECC .23328 INC 3.3764 V1 30.253 RP 108.76 LAP -3.37 LOP 352.49 VP 36.580 GAP 12.32 AZP 89.90 TAL 166.76 TAP 78.48 RCA 92.29 APO 148.46 V2 34.845 RC 182.414 GL 19.49 GP -1.16 ZAL 64.48 ZAP 173.50 ETS 350.51 ZAE 130.08 ETE 181.14 ZAC 93.66 ETC 166.55 CLP-173.60
   PLANETOCENTRIC CONIC
                                                                                                  2.13 VHP 8.014 OPA -4.53 RAP
    C3 21.703 VHL 4.659 DLA 24.95 RAL 8.51 RAD 6567.9 VEL 11.962 PTH
    ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                80.04 3 23 39
62.68 23 31 24
                                                                                                                         2556.3
                  2 31 3 3156.28
22 25 28 3955.70
4 15 2 2821.03
23 24 10 3766.18
                                                                             240.19
                                                                107.66
                                                   -26.64
        90.00
                                                                                                                                                           151.44
                                                                                                                             3355.7
                                                                                                                                           -11.37
                                                                                233.56
                                                   -7.77
                                                                158.27
        90.00
                                                                                                 82.05 5 2 3
60.61 24 26 57
                                                                                                                                           -29.71
                                                                                                                             2221.0
                                                                                240.59
                                                  -28.91
                                                                 83.40
       100.00
                                                                                                                                                          136.60
                                                                                                                                            -9.62
                                                                                                                             3166.2
                                                   -5.75
                                                                143.25
                                                                                232.46
                                                                                                                                          -34.13
       100.00
                                                                                                 86.68 6 47 33
55.84 24 50 49
                  6 6 20 2472.79
23 49 21 3687.19
                                                                                                                             1872.8
                                               -34.04
                                                                                241.18
                                                                  57.54
       110.00
                                                                                                                                             -5.83
                                                                                                                             3087.2
                                                                 134.55
                                                                                229.74
                                                   -1.36
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 3177.2 SR 381.9 SS 736.3
CRT .9401 CRS -.8853 CST -.9904
                                                                    SGT 5597.0 SGR 417.1 SG3 157.9
RRT .1702 RRF .1496 RTF .9298
SGB 5612.5 R23 -.0097 R13 .9298
    TOE 2.5059 TRA 1.8752 TC3-4.2060 BAU 1.2209
    RDE .3089 RRA -.0957 RC3 .1214 FAU .02144
FDE .8027 FRA .9702 FC3 -.8551 BSP 18039
                                                                                                                        LSA 3279.6 MSA 163.9 SSA 17.9
                                                                                                                         EL1 3197.5 EL2 129.4 ALF
                                                                                                          .73
                                                                     SG1 5597.5 SG2 411.0 THA
    BDE 2.5249 BRA 1.8777 BC3 4.2078 FSP -532
                                                                                                                                    ARRIVAL DATE JUN 19 1966
                                                                         FLIGHT TIME 188.00
LAUNCH DATE DEC 13 1965
                                                                        DISTANCE 550.023
    RL 147.27 LAL -.00 LOL 80.78 VL 26.412 GAL 4.58 A7L 86.64 HCA 274.89 SMA 120.13 ECC .23894 INC 3.3620 VI 30.253
RP 108.73 LAP -3.35 LOP 355.67 VP 36.558 GAP 12.73 A7P 89.71 TAL 165.05 TAP 79.93 RCA 91.42 APO 148.83 V2 34.854
RC 184.407 GL 18.61 GP -1.13 TAL 61.70 TAP 174.29 ETS 349.54 TAE 130.12 ETE 181.13 TAC 95.96 ETC 166.69 CLP-174.40
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.406 VHL 4.838 DLA 25.26 RAL 11.59 RAD 6568.0 VEL 12.033 PTH 2.15 VHP 8.261 DPA -3.53 RAP
                                                                                                                                                2.95 ECC 1.3852
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 62.69 23 49 14
80.80
                                                                                                             3 31 1
                                                                                                                             2593.7
                                                                              244.67
                                                                 110.30
                     2 37 48
                                   3193.66
                                                   -26.18
        90.00
                                                                                                                              3355.0
                                                                                                                                             -11.39
                                                                                                                                                            151.40
                                                                  158.23
                                                                                237.99
                   22 43 19
                                                     -7.79
                                   3955.01
         90.00
                                                                                                                              2254.8
                                                                                                                                           -29.54
                                                                                                                                                            77.18
                                                                                245.16
                                                    -28.57
                                                                   85.85
                     4 22 54
                                  2854.82
        100.00
                                                                                                  60.60 24 43 43
                                                                                                                                                            136.77
                                                                                                                              3169.1
                                                                                                                                              -9.52
                                                                 143.41
                                                                                236.83
                                                   -5.65
                   23 4D 54
                                  3769.08
       100.00
                                                                                                 85.34 6 57 20
                                                                                                                                           -34.18
-5.56
                                                                                                                                                             50.59
                                                                                                                             1902.1
                                                   -33.90
                                                                   59.82
                                                                                245.91
                     6 15 38 2502.10
       110.00
                                                                                                                                                           128.71
                                                                                                                              3094.6
                                                                 134.93
                                                                                233.99
                                                                                                  55.83
                                                                                                             1 10 10
                                                   -1.08
       110.00
                    0 8 35
                                  3694.57
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 5619.3 SGR 419.2 SG3 152.9 ST 3167.1 SR 390.6 SS 724.1 RRT .1994 RRF .1790 RTF .9323 CRT .9340 CR5 -.8795 CST -.9912 SGB 5634.9 R23 -.0080 R13 .9323 LSA 3267.9 MSA 168.4 SSA 17.2 SG1 5619.9 SG2 410.7 THA .86 EL1 3188.1 EL2 138.7 ALF 6.58
    DIFFERENTIAL CORRECTIONS
     TOE 2.5754 TRA 2.1530 TC3-3.9117 BAU 1.2245
     ROE .3284 RRA -.0917 RC3 .1032 FAU .01985
FDE .7880 FRA 1.0122 FC3 -.7341 BSP 18188
     BOE 2.5962 BRA 2.1550 BC3 3.9131 FSP -518
```

FLIGHT TIME 182.00

-34.14 54.96 -4.53 130.13 -8.27 138.93 57.04 -34.06 -3.79 131.14

LAUNCH DATE DEC 13 1965 FLIGHT TIME 190.00 ARRIVAL CATE JUN 21 1966 HELIOCENTRIC CONIC DISTANCE 555.405 RL 147.27 LAL -.00 LOL 80.78 VL 26.370 GAL 5.25 AZL 86.65 MCA 278.06 SMA 119.89 ECC .24513 INC 3.3473 VI 30.253
RP 108.70 LAP -3.31 LOP 358.85 VP 36.536 GAP 13.16 AZP 89.53 TAL 163.34 TAP 81.40 RCA 90.50 APO 149.27 VZ 34.863
RC 186.379 GL 17.72 GP -1.10 ZAL 59.00 ZAP 175.07 ETS 348.19 ZAE 130.15 ETE 181.13 ZAC 98.25 ETC 166.79 CLP-175.20 PLANETOCENTRIC CONTC C3 25.389 VHL 5.039 DLA 25.49 RAL 14.59 RAD 6568.0 VEL 12.115 PTH 2.17 VHP 8.525 DPA -2.52 RAP 5.1D ECC 1.4178 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 249.17 2628.8 2 45 21 3228.77 22 59 44 3959.83 77.66 3 39 9 62.65 24 5 44 90.00 -25.69 112.75 -27.13 104.38 90.00 -7.64 158.50 242.40 3359.8 -11.24 151.68 88.16 249.73 79.64 5 19 30 43.84 241.18 60.55 1 3 16 62.02 250.65 84.05 7 7 28 35.53 238.23 55.82 1 24 40 MIO-COURSE EXECUTION ACCURACY 4 31 23 2886.89 0 0 19 3776.94 100.00 -28.20 88.16 2286.9 -29.34 79.55 100.00 -5.39 143.84 3176.9 -9.27 137.21 6 25 17 2530.54 0 22 54 3706.05 110.00 -33.72 62.02 1930.5 -34.18 52.81 -5.12 110.00 - . 54 135.53 3106.1 129.31 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 3146.9 SR 398.1 SS 712.2 CRT .9277 CRS -8738 CST -.9919 LSA 3246 3 Mea 1738 CST -.9919 SCT 5637.1 SGR 420.4 SG3 148.1 RRT .2287 RRF .2089 RTF .9348 SGB 5652.7 R23 -.0062 R13 .9348 TOE 2.6435 TRA 2.4478 TC3-3.6097 BAU 1.2256 ROE .3489 RRA -.0861 RC3 .0863 FAU .01829 FDE .7744 FRA 1.0555 FC3 -.6236 BSP 18308 BOE 2.6664 BRA 2.4494 BC3 3.6108 FSP -504 LSA 3246.3 MSA 173.2 S5A 16.6 EL1 3168.6 EL2 147.6 ALF 6.71 SG1 5637.9 SG2 409.2 THA .98 LAUNCH DATE DEC 13 1965 FLIGHT TIME 192.00 ARRIVAL DATE JUN 23 1966 HELIOCENTRIC CONIC DISTANCE 560.725 RL 147.27 LAL -.00 LOL 80.78 VL 26.328 GAL 5.95 AZL 86.67 MCA 281.24 SMA 119.65 ECC .25190 INC 3.3325 V1 30.253
RP 108.67 LAP -3.27 LOP 2.03 VP 36.516 GAP 13.63 AZP 89.35 TAL 161.65 TAP 82.89 RCA 89.51 APO 149.79 V2 34.873
RC 188.530 GL 16.81 GP -1.07 ZAL 56.40 ZAP 175.86 ETS 346.23 ZAE 130.18 ETE 181.13 ZAC 100.55 ETC 166.87 CLP-176.00 PLANETOCENTRIC CONIC C3 27.693 VHL 5.262 DLA 25.65 RAL 17.51 RAD 6568.1 VEL 12.209 PTH 2.19 VHP 8.810 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2661.3 2 53 44 3261.32 -25.19 115.01 253.66 76.63 3 48 5 -26.79 106.70 23 14 36 3970.35 4 40 29 2917.13 0 14 27 3789.78 6 35 14 2558.10 0 36 11 3721.57 90.00 -7.31 159.10 246.77 62.57 24 20 46 3370.4 -10.93 152.29 100.00 -27.81 90.33 2317.1 -29.10 81.76 100.00 -4.96 144.56 3189.8 -8.85 137.93 -33.51 64.15 1958.1 110.00 - .05 136.34 3121.6 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY RET .2581 REF .2387 REF .9376 SGB 5666.0 R23 -.0047 R13 .9376 SGB 56651.4 SG2 406.5 THA 1.11 TOE 2.7100 TRA 2.7600 TC3-3.3062 BAU 1.2243 5T 3117.2 SR 404.2 SS 700.1 CRT .9214 CRS -.8682 CST -.9925 ROE .3703 RRA -.0787 RC3 .0707 FAU .01679 FOE .7612 FRA 1.0997 FC3 -.5249 BSP .18413 BDE 2.7352 BRA 2.7611 BC3 3.3069 FSP -490 LSA 3215.3 MSA 178.1 SSA 15.9 EL1 3139.4 EL2 156.0 ALF 6.83 LAUNCH DATE DEC 13 1965 FLIGHT TIME 194.00 ARRIVAL DATE JUN 25 1966 DISTANCE 565.975 HELIOCENTRIC CONIC RL 147.27 LAL -.00 LOL 80.78 VL 26.287 GAL 6.69 AZL 86.68 HCA 284.42 SHA 119.41 ECC .25931 INC 3.3172 VI 30.253
RP 108.63 LAP -3.21 LOP 5.22 VP 36.496 GAP 14.13 AZP 89.17 TAL 159.98 TAP 84.40 RCA 88.45 APO 150.38 V2 34.884
RC 190.259 GL 15.91 GP -1.04 ZAL 53.90 ZAP 176.64 ETS 343.24 ZAE 130.21 ETE 181.14 ZAC 102.84 ETC 166.92 CLP-176.80 PLANETOCENTRIC CONIC C3 30.370 VHL 5.511 DLA 25.75 RAL 20.32 RAD 6568.2 VEL 12.318 PTH 2.22 VHP 9.116 DPA -.50 RAP 9.40 ECC 1.4998
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 2 57 3291.17 -24.71 117.06 258.15 75.71 3 57 48 2691.2 -26.43 108.82
90.00 23 27 48 3986.64 -6.79 160.02 251.07 62.44 24 34 15 3386.6 -10.43 153.24
100.00 4 50 10 2945.51 -27.41 92.34 258.86 77.57 5 39 16 2345.5 -28.84 83.83 0 27 12 3807.54 6 45 27 2584.82 249.74 60.40 1 30 40 7 28 32 3207.5 100.00 -4.36 145.54 81.62 -33.26 66.19 260.11 1984.8 110.00 1 50 46 0 48 25 .70 110.00 3740.99 137.35 246.59 55.82 3141.0 HID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SCT 3660.8 SCR 420.6 SC3 139.1 RRT .2882 RRF .2697 RTF .9404 SCB 5676.4 R23 -.0028 R13 .9404 SCI 5662.1 SCZ 402.6 THA 1.23 ST 3083.6 SR 408.8 SS 689.9 CRT .9149 CRS -.8629 CST -.9932 TOE 2.7794 TRA 3.0949 TC3-2.9999 BAU 1.2182 ROE .3925 RRA -.0693 RC3 .0569 FAU .01526 FDE .7507 FRA 1.1467 FC3 -.4350 BSP 18408 BDE 2.8070 BRA 3.0957 BC3 3.0004 FSP -472 LSA 3180.9 MSA 182.8 SSA 15.2 EL1 3106.3 EL2 163.8 ALF 6.94 FLIGHT TIME 196.00 LAUNCH DATE DEC 13 1965 ARRIVAL DATE JUN 27 1966 DISTANCE 571.140 HELIOCENTRIC CONIC RL 147.27 LAL -.00 LOL 80.78 VL 26.247 GAL 7.48 AZL 86.70 MCA 287.60 SMA 119.19 ECC .26745 INC 3.3016 V1 30.253
RP 108.60 LAP -3.15 LOP 8.40 VP 36.477 GAP 14.67 AZP 89.00 TAL 158.34 TAP 85.93 RCA 87.31 APO 151.06 V2 34.895
RC 192.167 GL 15.01 GP -1.02 ZAL 51.50 ZAP 177.41 ETS 338.30 ZAE 130.22 ETE 181.15 ZAC 105.13 ETC 166.94 CLP-177.61 PLANETOCENTRIC CONIC C3 33.479 VHL 5.786 DLA 25.79 RAL 23.02 RAD 6568.3 VEL 12.444 PTH 2.25 VHP 9.448 OPA .50 RAP 11.55 ECC 1.5510 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 12 58 3318.30 23 39 21 4008.57 -24.24 118.91 262.62 74.90 4 8 16 2718.3 -26.08 110.73 62.30 24 46 10 -6.10 161.26 255.29 -9.77 2972.05 100.00 5 0 21 -27.00 94.21 263.40 76.67 5 49 53 2372.1 -28.57 85.76 0 38 34 60.31 1 42 24 80.48 7 39 21 55.85 2 2 19 3830.05 100.00 -3.60 146.78 253.92 3230.0 140.19 6 55 50 2610.73 0 59 34 3764.13 110.00 -32.99 68.17 264.79 2010.7 250.69 138.56 3164.1 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 5665.2 SGR 419.4 SG3 134.7 RRT .3176 RRF .2296 RTF .9435 SGB 5680.7 R23 -.0017 R13 .9435 SGI 5666.8 SG2 397.5 THA 1.35 ST 3037.9 SR 411.7 SS 678.7 CRT .9083 CRS -.8575 CST -.9938 LSA 3134.3 MSA 187.2 SSA 14.6 TOE 2.8434 TRA 3.4457 TC3-2.7062 BAU 1.2114 ROE .4153 RRA -.0580 RC3 .0446 FAU .01386 FDE .7393 FRA 1.1938 FC3 -.3585 BSP 18503 EL1 3060.9 EL2 170.9 ALF 7.04 BDE 2.8736 BRA 3.4461 BC3 2.7066 FSP -459

ARRIVAL DATE JUN 29 1966

LAUNCH DATE DEC 13 1965

```
DISTANCE 576.208
   RL 147.27 LAL -.00 LOL 80.78 VL 26.207 GAL 8.33 AZL 86.71 HCA 290.78 SMA 118.96 ECC .27640 INC 3.2853 VI 30.253 RP 108.57 LAP -3.07 LOP 11.59 VP 36.459 GAP 15.26 AZP 88.83 TAL 156.72 TAP 87.50 RCA 86.08 APO 151.84 V2 34.906 RC 194.054 GL 14.12 GP -1.00 TAL 49.21 ZAP 178.15 ETS 329.02 ZAE 130.23 ETE 181.16 ZAC 107.41 ETC 166.93 CLP-178.44
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 37.096 VHL 6.091 CLA 25.77 RAL 25.61 RAD 6568.4 VEL 12.588 PTH 2.28 VHP 9.809 DPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO (
                                                                                                                                  1.49 RAP 13.69 ECC 1.6105
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -25.74
                                                                                                                                                         112.44
                                                                                                                              2742.8
                                                                             267.07
                   3 23 40 3342.83
23 49 15 4035.85
                                                  -23.79
                                                                 120.57
                                                                                                 74.18
                                                                                                            4 19 23
       90.00
                                                                                                                                                             156.06
                                                                                                                              3435.8
                                                                                                                                              -8.93
                                                                                                  62.13 24 56 31
                                                                 162.80
                                                                                259.43
                                                   -5.24
       90.00
                                                                                                                                             -28.29
                                                                                                                                                              87.55
                                                                                                  75.84
60.22 1 5c -
7 50 17
12 52
                                                                                                            6 0 55
                                                                                                                              2396.9
                                                                  95.95
                                                                                267.90
                  5 10 59 2996.90
                                                  -26.60
      100.00
                                                                                                                              3257.0
                                                                                                                                               -6.64
                                                                                                                                                           141.69
                                                                 148.26
                                                                                258.02
      100.00
                    0 48 34
                                  3857.02
                                                   -2.69
                                                                                                                              2035.9
                                                                                                                                            -33.80
                                                                                                                                                             61.01
                                                                                269.44
                                                  -32.69
                                                                   70.07
      110.00
                   7 6 21 2635.91
1 9 41 3790.77
                                                                                                           2 12 52
                                                                                                                              3190.8
                                                                                                                                              -1.89
                                                                                                                                                             133.75
                                                                 139.95
                                                                                254.73
                                                                                                 55.90
                                                   2.60
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                     SGT 5665.3 SGR 417.3 SG3 130.6
RRT .3471 RRF .3296 RTF .9468
                                                                                                                          ST 2987.1 SR 412.9 SS 668.7
CRT .9016 CRS -.8522 CST -.9945
    TOE 2.9078 TRA 3.8193 TC3-2.4208 BAU 1.2007
   ROE .4387 RRA -.0446 RC3 .0341 FAU .01250
FOE .7293 FRA 1.2432 FC3 -.2917 BSP 18580
                                                                                                                          LSA 3082.8 MSA 191.3 SSA 13.9
                                                                     SGB 5680.6 R23 -. 0006 R13 .9468
SG1 5667.1 SG2 391.3 THA 1.47
                                                                                                                          EL1 3010.3 EL2 177.3 ALF
    BOE 2.9407 BRA 3.8196 BC3 2.4211 FSP -446
                                                                                                                                      ARRIVAL DATE JUL 1 1966
                                                                          FLIGHT TIME 200.00
LAUNCH DATE DEC 13 1965
                                                                         DISTANCE 581.160
  HELIOCENTRIC CONIC
   RL 147.27 LAL -.00 LOL 80.78 VL 26.167 GAL 9.23 AZL 86.73 HCA 293.96 SMA 118.74 ECC .28627 INC 3.2684 VI 30.253 RP 108.53 LAP -2.99 LOP 14.77 VP 36.442 GAP 15.91 AZP 88.67 TAL 155.15 TAP 89.11 RCA 84.75 APO 152.74 V2 34.918 RC 195.918 GL 13.24 GP -.98 ZAL 47.03 ZAP 178.78 ETS 308.33 ZAE 130.21 ETE 181.17 ZAC 109.67 ETC 166.88 CLP-179.27
  PLANETOCENTRIC CONIC
   C3 41.312 VHL 6.427 OLA 25.69 RAL 28.07 RAD 6568.6 VEL 12.755 PTH 2.32 VHP 10.202 DPA 2.47 RAP 15.82 ECC 1.6799 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 34 58 3365.03 -23.37 122.06 271.48 73.55 4 31 3 2765.0 -25.41 113.98
                                                                                                                                                              157.90
                                                                                                              1 9 20
                                                                                                                               3468.0
                                                                                                                                               -7.93
                                                                                 263.46
                                                                                                  61.97
                                  4068.03
                                                     -4.21
                                                                  164.61
       90.00
                     0 1 32
                                                                                                            6 12 16
2 2 3
8 1 15
                                                                                                                               2420.2
                                                                                                                                              -28.00
                                                                                                                                                               89.22
                                                                   97.56
                                                                                 272.36
                                                                                                  75.08
                                  3020.18
                                                   -26.20
                     5 21 56
      100.00
                                                                                                                               3288.1
                                                                                                                                               -5.60
                                                                                                                                                              143.42
                                                                  149.97
                                                                                262.04
                                                                                                  60.15
                    0 57 15
                                  3888.11
                                                     -1.64
      100.00
                                                                                                                                                               62.90
                                                                                                                               2060.4
                                                                                                                                              -33.63
                     7 16 55 2660.42
                                                                   71.91
                                                                                274.02
                                                                                                  78.35
                                                   -32.37
      110.00
                                                                                                                                                             135.30
                                                                                                              2 22 26
                                                                                                                               3220.6
                                                                                                                                                -.75
                                                                  141.51
                                                                                                   56.00
                                   3820.63
                                                     3.74
                                                                                258.69
                     1 18 46
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2932.5 SR 412.4 SS 660.1
CRT .8947 CRS -.8471 CST -.9951
                                                                      SGT 5661.2 SGR 414.6 SG3 126.6
RRT .3766 RRF .3597 RTF .9503
SGB 5676.3 R23 .0002 R13 .9503
    TOE 2.9735 TRA 4.2177 TC3-2.1466 BAU 1.1856
    ROE .4625 RRA -.0290 RC3 .0232 FAU .D1116
FDE .7208 FRA 1.2954 FC3 -.2339 BSP 18621
                                                                                                                        LSA 3027.8 MSA 194.8 SSA 13.3
                                                                                                                          EL1 2955.7 ELZ 182.7 ALF
                                                                      SG1 5663.3 SG2 383.9 THA 1.59
    BDE 3.0092 BRA 4.2178 BC3 2.1467 FSP -433
                                                                                                                                      ARRIVAL DATE JUL 3 1966
                                                                          FLIGHT TIME 202.00
LAUNCH DATE DEC 13 1965
                                                                         DISTANCE 585.973
    RL 147.27 LAL -.00 LOL 8D.78 VL 26.129 GAL 10.20 A7L 86.75 HCA 297.15 SMA 118.53 ECC .29716 INC 3.2506 V1 3D.253 RP 108.49 LAP -2.89 LOP 17.96 VP 36.426 GAP 16.61 A7P 88.52 TAL 153.61 TAP 90.76 RCA 83.31 APO 153.75 V2 34.930 RC 197.761 GL 12.38 GP -.96 TAL 44.96 TAP 179.03 ETS 264.36 TAE 130.18 ETE 181.18 TAC 111.92 ETC 166.81 CLP 179.87
   HELIOCENTRIC CONTC
   PLANETOCENTRIC CONIC
    C3 46.237 VHL 6.800 DLA 25.57 RAL 30.40 RAD 6568.7 VEL 12.946 PTH 2.36 VHP 10.633 DPA
                                                                                                                                  3.45 RAP 17.95 ECC 1.7609
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             -25.09
                                                                                                                              2785.2
                                                                             275.85
                                                                                              72.98
                                                                                                             4 43 6
1 16 50
                    3 46 41 3385.17
0 8 26 4104.59
5 33 6 3042.08
                                                                 123.41
                                                   -22.98
        90.00
                                                                                                                                                              159.98
                                                                                                                               3504.6
                                                                  166.66
                                                                                 267.39
                                                                                                   61.83
                                                    -3.04
         90.00
                                                                                                             6 23 48
2 10 5
                                                                                                                                               -27.70
                                                                                                                                                               90.78
                                                                                                                               2442.1
                                                                   99.07
                                                                                 276.76
                                                                                                   74.37
                                                   -25.81
       100.00
                                                                                                                               3322.9
                                                                                                                                                              145.34
                                                                                                   60.11
                                                                  151.88
                                                                                 265.96
                     1 4 42 3922.91
7 27 27 2684.32
1 26 50 3853.44
                                                      -.46
       100.00
                                                                                                             8 12 11
                                                                                                                                              -33.43
                                                                                                                                                               64.74
                                                                                                                               2084.3
                                                                                                   77.35
                                                    -32.02
                                                                    73.69
                                                                                 278.55
       110.00
                                                                                                                               3253.4
                                                                                                                                                  .50
                                                                                                                                                             137.01
                                                                  143.23
                                                                                                   56.14
                                                                                                              2 31 4
                                                                                 262.58
                                                     4.98
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2879.2 SR 410.2 SS 654.0
CRT .8879 CRS -.8425 CST -.9957
                                                                      SGT 5657.1 SGR 411.1 SG3 122.8

RRT .4067 RRF .3906 RTF .9539

SGB 5672.0 R23 .0010 R13 .9539
    TOE 3.0457 TRA 4.6499 TC3-1.8818 BAU 1.1633
                                                                                                                           LSA 2974.4 MSA 197.6 SSA 12.8
    ROE .4869 RRA -.0109 RC3 .0180 FAU .00979
FOE .7152 FRA 1.3523 FC3 -.1833 BSP 18580
                                                                                                                           EL1 2902.3 EL2 187.2 ALF
                                                                       SG1 5659.6 SG2 375.4 THA 1.70
    BDE 3.0844 BRA 4.6499 BC3 1.8819 FSP -418
                                                                                                                                      ARRIVAL DATE JUL 5 1966
                                                                           FLIGHT TIME 204.00
 LAUNCH DATE DEC 13 1965
                                                                          DISTANCE 590.620
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 26.091 GAL 11.25 AZL 86.77 MCA 300.34 SMA 118.32 ECC .30922 INC 3.2317 V1 30.253 RP 108.45 LAP -2.79 LOP 21.15 VP 36.411 GAP 17.39 AZP 88.37 TAL 152.13 TAP 92.47 RCA 81.73 APO 154.91 V2 34.942 RC 199.580 GL 11.54 GP -.94 ZAL 43.01 ZAP 178.62 ETS 225.14 ZAE 130.12 ETE 181.19 ZAC 114.15 ETC 166.70 CLP 179.00
   PLANETOCENTRIC CONIC
    C3 52.012 VHL 7.212 DLA 25.41 RAL 32.60 RAD 6568.9 VEL 13.167 PTH 2.40 VHP 11.106 DPA 4.40 RAP 20.06 ECC 1.8560 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                2803.6
                                                                                                              4 55 25
                     3 58 42 3403.57
0 13 59 4144.96
                                                                   124.63
                                                                                 280.16
                                                                                                   72.48
                                                     -22.61
         90.00
                                                                                                                                                -5.50
                                                                                                                                                               162.26
                                                                                                              1 23 4
                                                                                                                                3545.0
                                                                                                   61.73
                                                                   168.91
                                                                                  271.21
                                                     -1.74
         90.00
                                                                                                             6 35 27
2 16 59
8 23 2
                                                                                                                                               -27.41
                                                                                                                                                                92.25
                                                                                                   73.72
                                                                                                                                2462.7
                                                    -25.42
                                                                   100.49
                                                                                  281.09
                     5 44 24
                                    3062.75
       100.00
                                                                                                                                                -3.15
                                                                                                                                                               147.44
                                                                                                                                3361.0
                     1 10 57 3961.02
                                                                   153.97
                                                                                  269.78
                                                                                                   60.12
                                                       .83
       100.00
                                                                                                                                2107.6
                                                                                                                                               -33.21
                                                                                                                                                                66.53
                                                   -31.66
                                                                    75.41
                                                                                  282.99
                                                                                                   76.39
                     7 37 54
                                    2707.64
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                3288.9
                                                                                                                                                 1.86
                                                                                                                                                               138.86
                      1 33 57 3888.89
                                                                   145.10
                                                     6.32
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 5642.6 SGR 406.7 SG3 119.1
RRT .4362 RRF .4205 RTF .9576
SGB 5657.2 R23 .0012 R13 .9576
SGI 5645.4 SG2 365.8 THA 1.81
                                                                                                                           ST 2818.8 SR 406.3 SS 648.6
CRT .8811 CRS -.8378 CST -.9962
     TOE 3.1159 TRA 5.1026 TC3-1.6361 BAU 1.1377
     ROE .5114 RRA .0094 RC3 .0123 FAU .00850
FDE .7099 FRA 1.4114 FC3 -.1415 BSP 18636
                                                                                                                           LSA 2914.0 MSA 199.5 SSA 12.2
                                                                                                                         EL1 2841.6 EL2 190.6 ALF 7.27
     BOE 3.1576 BRA 5.1027 BC3 1.6361 FSP
                                                         -406
```

FLIGHT TIME 198.00

```
LAUNCH DATE DEC 13 1965
                                                                           FLIGHT TIME 206.00
                                                                                                                                       ARRIVAL DATE JUL 7 1966
   HELIOCENTRIC CONIC
                                                                           01STANCE 595.066
    RL 147.27 LAL -.00 LOL 80.78 VL 26.054 GAL 12.39 ATL 86.79 HCA 303.53 SMA 118.12 ECC .32262 INC 3.2115 V1 30.253
RP 108.41 LAP -2.68 LOP 24.35 VP 36.397 GAP 18.24 AZP 88.22 TAL 130.72 TAP 94.24 RCA 80.01 APO 156.23 V2 34.955
RC 201.376 GL 10.71 GP -.93 ZAL 41.19 ZAP 177.88 ETS 207.93 ZAE 130.04 ETE 181.20 ZAC 116.35 ETC 166.56 CLP 178.09
   PLANETOCENTRIC CONIC
    C3 58.812 VHL 7.669 DLA 25.20 RAL 34.67 RAD 6569.1 VEL 13.423 PTH 2.45 VHP 11.629 DPA
    UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 10 50 3420.49 -22.26 125.74 284.39 72.03 5 7 51 2820.5 -24.51 117 An
                                                                                                            1 28 8
6 47 7
2 22 49
        90.00
                     0 18 20
                                   4188.58
                                                                                  274.91
                                                                                                                                3588.6
                                                      -.33
                                                                   171.34
                                                                                                    61.68
                                                                                                                                                 -4.11
                                                                                                                                                               164.71
                     5 55 44
       100.00
                                   3082.31
                                                    -25.04
                                                                   101.81
                                                                                  285.34
                                                                                                   73.12
                                                                                                                                2482.3
                                                                                                                                               -27.12
                                                                                                                                                                93.63
                    1 16 7 4002.00
7 48 13 2730.38
       100.00
                                                      2.22
                                                                   156.22
                                                                                  273.49
                                                                                                   60.18
                                                                                                                                3402.0
                                                                                                                                               -1.76
                                                                                                                                                               149.70
                                                                                                            <u>8 33 43</u>
                                                                    77.08
                                                                                  287.33
       110.00
                                                    7.75
                                                                                                                                2130.4
                                                                                                   75.47
                                                                                                                                              -32.96
                                                                                                                                                               68.26
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                   147.10
                      1 40 7
                                                                                                                                3326.7
      110.00
                                   3926.69
                                                                                                                                                 3.30
                                                                                                                                                               140.84
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SCT 5625.9 SCR 401.6 SC3 115.6
RRT .4657 RRF .4506 RTF .9614
SCB 5640.3 R23 .0012 R13 .9614
SCI 5629.1 SC2 355.2 THA 1.91
                                                                                                                            ST 2758.6 SR 400.6 55 645.3
CRT .8743 CRS -.8335 CST -.9967
    TOE 3.1918 TRA 5.5922 TC3-1.4048 BAU 1.1046
    RDE .5361 RRA .0323 RC3 .0080 FAU .00721
FDE .7068 FRA 1.4754 FC3 -.1062 BSP 18660
BDE 3.2365 BRA 5.5923 BC3 1.4048 FSP -395
                                                                                                                            LSA 2854.2 MSA 200.6 SSA 11.6
EL1 2780.8 EL2 192.9 ALF 7.27
LAUNCH DATE DEC 13 1965
                                                                           FLIGHT TIME 208.00
                                                                                                                                       ARRIVAL DATE JUL 9 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 599.266
    RL 147.27 LAL -.00 LOL 80.78 VL 26.019 GAL 13.62 AZL 86.81 MCA 306.72 SMA 117.92 ECC .33755 INC 3.1898 VI 30.253 RP 108.37 LAP -2.56 LOP 27.54 VP 36.384 GAP 19.19 AZP 88.09 TAL 149.38 TAP 96.10 RCA 78.12 APO 157.73 V2 34.968
                                         -.91 7AL 39.48 ZAP 177.01 ETS 199.88 7AE 129.91 ETE 181.22 ZAC 118.52 ETC 166.38 CLP 177.15
    RC 203.147 GL
                           9.91 GP
   PLANETOCENTRIC CONIC
    C3 66.858 VML 8.177 DLA 24.96 RAL 36.59 RAD 6569.3 VEL 13.719 PTH 2.51 VMP 12.210 DPA 6.25 RAP 24.22 ECC 2.1003 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 22 59 3436.14
0 21 32 4234.88
                                                                                                   71.62
        90.00
                                                    -21.92
                                                                   126.77
                                                                                 288.53
                                                                                                             5 20 15
                                                                                                                                2836.1
                                                                                                                                               -24.23
                                                                                                                                                               118.86
                                                      1.16
                                                                   173.93
                                                                                  278.49
                                                                                                    61.70
                                                                                                               1 32 7
                                                                                                                                3634.9
                                                                                                                                                 -2.63
                                                                                                                                                               167.30
                   6 6 59 3100.83
1 20 13 4045.43
7 58 19 2752.51
1 45 23 3966.51
                                                                                                   72.57 6 58 40
60.32 2 27 39
74.59 8 44 12
56.94 2 51 29
                                                    -24.67
                                                                   103.07
                                                                                  289.49
                                                                                                                                2500.8
                                                                                                                                                -26.82
                                                                                                                                                                94.93
       100.00
                                                      3.69
                                                                                  277.09
                                                                                                                                3445.4
                                                                                                                                                  -.29
                                                                                                                                                               152.08
       110.00
                                                    -30.90
                                                                    78.68
                                                                                  291.57
                                                                                                                                2152.5
                                                                                                                                               -32.70
                                                                                                                                                                69.93
       110.00
                                                     9.23
                                                                   149.23
                                                                                  273.69
                                                                                                                                3366.5
                                                                                                                                                  4.81
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 2698.4 SR 393.4 SS 644.5
CRT .8677 CRS -.8296 CST -.9972
    TOE 3.2742 TRA 6.1207 TC3-1.1889 BAU 1.0627
                                                                       SGT 5605.6 SGR 395.8 SG3 112.2
    RDE .5611 RRA .0580 RC3 .0049 FAU .00589
FOE .7063 FRA 1.5452 FC3 -.0763 BSP 18671
                                                                      RRT .4951 RRF .4807 RTF .9653
SGB 5619.5 R23 .0011 R13 .9653
SG1 5609.0 SG2 343.7 THA 2.01
                                                                                                                                  .8677 CRS -.8296 CST -.9972
                                                                                                                            LSA 2794.8 MSA 200.5 SSA 11.1
    BDE 3.3219 BRA 6.1209 BC3 1.1889 FSP -383
                                                                                                                            EL1 2720.0 EL2 194.0 ALF
                                                                          FLIGHT TIME 210.00
LAUNCH DATE DEC 13 1965
                                                                                                                                      ARRIVAL DATE JUL 11 1966
                                                                         DISTANCE 603.164
   HELIOCENTRIC CONIC
    RL 147.27 LAL -.00 LOL 80.78 VL 25.984 GAL 14.98 AZL 86.83 MCA 309.92 SMA 117.73 ECC .35424 INC 3.1662 VI 30.253
RP 108.33 LAP -2.43 LOP 30.74 VP 36.371 GAP 20.26 AZP 87.97 TAL 148.13 TAP 98.05 RCA 76.03 APO 159.44 VZ 34.981
RC 204.893 GL 9.12 GP -.90 ZAL 37.91 ZAP 176.07 ETS 195.42 ZAE 129.75 ETE 181.23 ZAC 120.64 ETC 166.16 CLP 176.17
   PLANETOCENTRIC CONIC
    C3 76.434 VHL 8.743 DLA 24.68 RAL 38.37 RAD 6569.5 VEL 14.064 PTH 2.56 VHP 12.857 DPA 7.14 RAP 26.26 ECC 2.2579 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 35 2 3450.62
0 23 42 4283.39
6 18 5 3118.34
1 23 20 4090.91
                                                                                                                            2850.6
                                                                                                                                                          119.84
        90.00
                                                    -21.61
                                                                  127.72
                                                                                 292.55
                                                                                                  71.24
                                                                                                               5 32 32
                                                                                                                                             -23.97
                                                                                                             5 32 32
1 35 6
        90.00
                                                     2.73
                                                                  176.63
                                                                                 281.95
                                                                                                   61.80
                                                                                                                               3663.4
                                                                                                                                               -1.06
                                                                                                                                                              170.00
                                                                                                             7 10 4
2 31 31
       100.00
                                                    -24.31
                                                                  104.24
                                                                                 293.52
                                                                                                   72.05
                                                                                                                               2518.3
                                                                                                                                               -26.54
                                                                                                                                                               96.15
      100.00
                                                     5.22
                                                                  161.12
                                                                                 280.57
                                                                                                   60.53
                                                                                                                               3490.9
                                                                                                                                                1.25
                                                                                                                                                              154.57
                                                                     DULES 295.67 73.76 8 54 24
51.47 277.20 57.36 2 56 32
MID-COURSE EXECUTION ACCURACY
SGT 5583.7 SCP 700
      110.00
                    8 8 10 2773.94
                                                  -30.50
                                                                    80.23
                                                                                                                               2173.9
                                                                                                                                                               71.54
                                                                                                                                               -32.42
      110.00
                     1 40 44
                                  4008.07
                                                    10.77
                                                                  151.47
                                                                                                                               3408.1
                                                                                                                                                6.39
                                                                                                                                                              145.12
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5583.7 SGR 389.4 SG3 109.1
RRT .5250 RRF .5114 RTF .9692
SGB 5597.3 R23 .0009 R13 .9692
    TOE 3.3698 TRA 6.6966 TC3 -.9865 BAU 1.0081
                                                                                                                           ST 2641.8 SR 384.8 SS 647.3
CRT .8617 CRS -.8265 CST -.9977
    ROE .5864 RRA .0867 RC3 .D030 FAU .D0447
FOE .7095 FRA 1.6229 FC3 -.0506 BSP 18566
BOE 3.4204 BRA 6.6972 BC3 .9865 FSP -370
                                                                                                                           LSA 2739.7 MSA 199.4 SSA 10.5
                                                                      SG1 5587.5 SG2 331.2 THA 2.10
                                                                                                                           EL1 2662.6 EL2 193.7 ALF 7.19
LAUNCH DATE OFC 13 1965
                                                                          FLIGHT TIME 212.00
                                                                                                                                       ARRIVAL DATE JUL 13 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 606.686
   RL 147.27 LAL -.00 LOL 80.78 VL 25.950 GAL 16.47 AZL 86.86 HCA 313.11 SMA 117.55 ECC .37297 INC 3.1402 V1 30.253
RP 108.29 LAP -2.29 LOP 33.93 VP 36.360 GAP 21.45 AZP 87.85 TAL 147.00 TAP 100.11 RCA 73.71 APO 161.40 V2 34.994
RC 206.614 GL 8.36 GP -.89 ZAL 36.47 ZAP 175.05 ETS 192.63 ZAE 129.52 ETE 181.24 ZAC 122.72 ETC 165.91 CLP 175.13
  PLANETOCENTRIC CONIC
    C3 87.907 VHL 9.376 DLA 24.36 RAL 40.00 RAD 6569.7 VEL 14.466 PTH 2.63 VHP 13.583 DPA
    0 24 52 4333.65
6 28 58 3134.75
                                                                                                               1 37 6
        90.00
                                                      4.34
                                                                  179.45
                                                                                 285.26
                                                                                                   61.99
                                                                                                                                3733.7
                                                                                                                                                  .56
                                                                                                                                                              172.81
                                                                                                             7 21 12
      100.00
                                                    -23.96
                                                                  105.34
                                                                                 297.41
                                                                                                   71.57
                                                                                                                                2534.8
                                                                                                                                               -26.26
                                                                                                                                                               97.29
      100.00
                    1 25 27
                                  4138.08
                                                                  163.74
                                                                                 283.92
                                                                                                   60.82
                                                                                                             2 34 25
9 4 17
                                                                                                                                3538.1
                                                      6.79
                                                                                                                                                2.85
                                                                                                                                                             157.16
                     8 17 42
                                 2794.53
                                                    -30.10
                                                                    81.70
                                                                                                   72.97
                                                                                                               9 4 17
                                                                                 299.61
                                                                                                                               2194.5
      110.00
                                                                                                                                               -32.13
                                                                                                                                                               73.07
                                                                     MIO-COURSE EXECUTION ACCURACY
                     1 53 12
                                   4051.07
                                                    12.34
                                                                  153.81
      110.00
                                                                                                                               3451.1
                                                                                                                                                 8.00
                                                                                                                                                              147.40
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     SGT 5554.5 SGR 382.1 SG3 106.0
RRT .5541 RRF .5413 RTF .9730
SGB 5567.7 R23 .0004 R13 .9730
SGI 5558.6 SG2 317.9 THA 2.19
                                                                                                                          ST 2582.4 SR 374.6 SS 652.0
CRT .8559 CRS -.8236 CST -.9981
    TOE 3.4708 TRA 7.3166 TC3 -.8026 BAU .9433
    RDE .6117 RRA .1182 RC3 .0021 FAU .00303
                                                                                                                        LSA 2682.4 MSA 197.1 55A 10.0
EL1 2602.3 EL2 192.2 ALF 7.12
    FOE .7145 FRA 1.7071 FC3 -.0299 BSP 18574
    BOE 3.5243 BRA 7.3176 BC3 .8026 FSP
```

-360

ARRIVAL DATE JUL 15 1966

FLIGHT TIME 214.00 LAUNCH DATE DEC 13 1965 RL 147.27 LAL -.00 LOL 80.78 VL 25.918 GAL 18.12 A7L 86.89 MCA 316.31 SMA 117.38 ECC .39407 INC 3.1114 VI 30.253 RP 108.25 LAP -2.15 LOP 37.13 VP 36.350 GAP 22.80 A7P 87.75 TAL 146.00 TAP 102.32 RCA 71.12 APO 163.64 VZ 35.007 RC 208.309 GL 7.62 GP -.88 7AL 35.18 ZAP 173.97 ETS 190.72 ZAE 129.24 ETE 181.24 ZAC 124.72 ETC 165.63 CLP 174.03 DISTANCE 609.737 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 1U1.755 VHL 10.087 CLA 24.00 RAL 41.47 RAO 6570.0 VEL 14.936 PTH 2.69 VHP 14.402 DPA 8.81 RAP 30.22 ECC 2.6746 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 58 24 3476.03 -21.05 129.36 300.16 70.61 5 56 20 2876.0 -23.50 121.55 90.00 0 25 3 4365.28 5.98 182.35 288.43 62.27 1 38 8 3785.3 2.23 175.69 100.00 6 39 32 3149.95 -23.63 106.34 301.13 71.14 7 32 2 2549.9 -25.99 98.34 100.00 1 26 36 4186.59 8.39 166.45 287.12 61.21 2 36 22 3586.6 4.49 159.84 110.00 8 26 53 2814.08 -29.70 83.08 303.38 72.24 9 13 47 2214.1 -31.84 74.52 110.00 1 55 44 4095.22 13.92 156.25 283.85 58.46 3 3 59 3495.2 9.65 149.76 8.81 RAP 30.22 ECC 2.6746 C3 101.755 VHL 10.087 CLA 24.00 RAL 41.47 RAO 6570.0 VEL 14.936 PTH 2.69 VHP 14.402 DPA MID-COURSE EXECUTION ACCURACY ST 2524.8 SR 363.1 SS 660.3 CRT .8507 CRS -.8214 CST -.9985 DIFFERENTIAL CORRECTIONS SCT 5521.6 SGR 374.2 SG3 103.1 RRT .5831 RRF .5712 RTF .9768 SGB 5534.3 R23 -.0001 R13 .9768 SGI 5525.9 SG2 303.8 THA 2.27 TOE 3.5864 TRA 7.9938 TC3 -.6338 BAU .8622 RDE .6372 RRA .1529 RC3 .0019 FAU .00146 FDE .7232 FRA 1.8011 FC3 -.0124 BSP 18558 BDE 3.6426 BRA 7.9952 BC3 .6338 FSP -350 LSA 2627.7 MSA 193.6 SSA 9.4 EL1 2543.7 ELZ 189.4 ALF 7.01 ARRIVAL DATE JUL 17 1966 FLIGHT TIME 216.00 LAUNCH DATE DEC 13 1965 RL 147.27 LAL -.00 LOL 80.78 VL 25.888 GAL 19.97 A7L 86.92 MCA 319.52 SMA 117.22 ECC .41793 INC 3.0789 V1 30.253
RP 108.21 LAP -2.00 LOP 40.34 VP 36.341 GAP 24.33 A7P 87.66 TAL 145.17 TAP 104.69 RCA 68.23 APO 166.21 V2 35.020
RC 209.976 GL 6.89 GP -.87 ZAL 34.05 ZAP 172.80 ETS 189.35 ZAE 128.87 ETE 181.25 ZAC 126.66 ETC 165.31 CLP 172.85 DISTANCE 612.191 HELIOCENTRIC CONIC C3 118.610 VML 10.891 DLA 23.62 RAL 42.77 RAD 6570.2 VEL 15.490 PTH 2.76 VMP 15.332 DPA 9.59 RAP 32.11 ECC 2.9520 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG PLANETOCENTRIC CONIC 6 7 41
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 38 11
62.65 1 3 6 19
62.65 1 3 6 19
63.65 1 3 6 19
64.65 1 3 6 19
65.65 1 3 6 19
65.65 1 3 6 19
65.65 1 3 6 19
65.65 1 3 6 19 70.34 6 7 41 90.00 5 9 34 3486.67 90.00 0 24 13 4437.93 -20.80 130.05 178.63 3837.9 3.92 185.33 7.64 99.28 2563.7 -25.74 6 49 44 3163.69 1 26 44 4236.14 107.25 -23.32 162.58 3636.1 6.15 10.01 169.24 100.00 75.87 2232.3 -31.55 8 35 39 2832.34 1 57 19 4140.25 -29.31 84.36 110.00 152.19 3540.3 11.30 158.78 15.51 ORBIT DETERMINATION ACCURACY 110.00 DIFFERENTIAL CORRECTIONS ST 2468.8 SR 350.4 SS 672.7 CRT .8464 CRS -.8201 CST -.9988 SGT 5484.7 SGR 365.7 SG3 100.3 RRT .6118 RRF .6008 RTF .9804 SGB 5496.9 R23 -.0008 R13 .9804 SGI 5489.3 SG2 289.0 THA 2.34 TOE 3.7197 TRA 8.7360 TC3 -.4798 BAU .7609 RDE .6631 RRA .1909 RC3 .0024 FAU-.00030 FDE .7363 FRA 1.9067 FC3 .0022 BSP 18523 BOE 3.7783 BRA 8.7380 BC3 .4798 FSP -341 LSA 2575.7 MSA 188.9 SSA 8.9 EL1 2486.6 EL2 185.3 ALF 6.89 ARRIVAL DATE JUL 19 1966 FLIGHT TIME 218.00 LAUNCH DATE DEC 13 1965 RL 147.27 LAL -.00 LOL 80.78 VL 25.859 GAL 22.04 AZL 86.96 MCA 322.72 SMA 117.07 ECC .44502 INC 3.0418 V1 30.253
RP 108.17 LAP -1.84 LOP 43.54 VP 36.334 GAP 26.09 AZP 87.58 TAL 144.55 TAP 107.27 RCA 64.97 APO 169.16 V2 35.034
RC 211.617 GL 6.19 GP -.86 ZAL 33.09 ZAP 171.53 ETS 188.31 ZAE 128.40 ETE 181.25 ZAC 128.49 ETC 164.97 CLP 171.57 01STANCE 613.881 HELIOCENTRIC CONIC C3 139.317 VHL 11.803 DLA 23.19 RAL 43.88 RAD 6570.5 VEL 16.145 PTH 2.84 VMP 16.394 DPA 10.32 RAP 33.92 ECC 3.2928 PLANETOCENTRIC CONIC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.13 6 18 34 63.13 1 37 11 70.43 7 52 27 62.26 2 37 15 70.97 9 31 26 59.93 3 7 38 2895.6 307.00 5 20 18 3495.59 0 22 20 4491.33 -20.60 130.63 90.00 5.62 181.63 3891.3 294.22 9.30 188.38 100.10 90.00 2575.7 -25.51 6 59 31 3175.70 1 25 48 4286.45 8 43 57 2848.99 1 57 52 4185.92 307.95 108.04 -23.05 165.38 100.00 3686.5 7.81 172.11 293.00 11.62 77.08 100.00 2249.0 -31.27 310.24 -28.95 85.52 12.96 3585.9 154.69 110.00 289.89 161.38 17.09 ORBIT DETERMINATION ACCURACY 110.00 HID-COURSE EXECUTION ACCURACY ST 2416.9 SR 336.7 SS 690.6 CRT .8432 CR5 -.8199 CST -.9990 DIFFERENTIAL CORRECTIONS SCT 5446.3 SCR 356.6 SC3 97.8 RRT .6404 RRF .6305 RTF .9838 SCB 5458.0 R23 -.0015 R13 .9838 TDE 3.8804 TRA 9.5575 TC3 -.3389 BAU .6313 RDE .6896 RRA .2326 RC3 .0035 FAU-.00240 FDE .7556 FRA 2.0272 FC3 .0149 BSP 18351 BDE 3.9412 BRA 9.5604 BC3 .3389 FSP -330 LSA 2529.4 MSA 182.9 SSA 8.4 EL1 2433.6 EL2 179.8 ALF 6.74 SG1 5451.1 SG2 273.7 THA 2.41 ARRIVAL DATE JUL 21 1966 FLIGHT TIME 220,00 LAUNCH DATE DEC 13 1965 DISTANCE 614.583 RL 147.27 LAL -.00 LOL 80.78 VL 25.834 GAL 24.40 AZL 87.00 HCA 325.93 SMA 116.93 ECC .47589 INC 2.9989 VI 30.253 RP 108.13 LAP -1.68 LOP 46.74 VP 36.328 GAP 28.11 AZP 87.52 TAL 144.17 TAP 110.10 RCA 61.28 APO 172.57 V2 35.047 HELIOCENTRIC CONIC -.84 ZAL 32.33 ZAP 170.14 ETS 187.49 ZAE 127.81 ETE 181.25 ZAC 130.21 ETC 164.60 CLP 170.17 5.50 GP RC 213.230 GL C3 165.015 VHL 12.846 DLA 22.72 RAL 44.78 RAD 6570.8 VEL 16.922 PTH 2.92 VHP 17.616 DPA 11.00 RAP 35.62 ECC 3.7157 PLANETOCENTRIC CONIC IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 2902.4 -22.99 69.97 6 28 55 310.03 131.06 90.00 5 30 33 3502.40 -20.44 184.68 3945.2 7.32 1 35 3 296.79 63.72 191.49 0 19 17 4545.25 10.94 100.77 90.00 B 1 54 2585.6 -25.32 70.16 310.96 108.68 -22.83 62.94 2 36 0 70.46 9 39 26 168.24 7 8 48 3185.57 100.00 3737.3 9.48 295.62 1 23 43 4337.32 13.21 175.04 78.15 -31.01 100.00 2263.6 313.26 86.53 8 51 43 2863.63 -28.62 110.00 3 7 50 3632.0 14.60 60.81 164.05 292.61 1 57 18 4232.01 18.54 ORBIT DETERMINATION ACCURACY 110.00 HID-COURSE EXECUTION ACCURACY ST 2363.1 SR 322.1 SS 712.9 CRT .8409 CRS -.8205 CST -.9993 DIFFERENTIAL CORRECTIONS SGT 5399.5 SGR 346.8 SG3 95.4 RRT .6679 RRF .6590 RTF .9868 SGB 5410.7 R23 -.0022 R13 .9868 SGI 5404.5 SG2 257.9 THA 2.46 ST 2300. CRT .8409 CRS -.8200 CS. LSA 2483.0 MSA 175.9 SSA 7.8 EL1 2378.7 EL2 173.1 ALF 6.57 TOE 4.0622 TRAID.4575 TC3 -.2141 BAU .4724 RDE .7164 RRA .2776 RC3 .0049 FAU-.00481 FDE .7797 FRA 2.1625 FC3 .0253 BSP 18311 BDE 4.1249 BRA10.4612 BC3 .2141 FSP -322

LAUNCH DATE DEC 14 1965

ARRIVAL DATE FEB 22 1966

```
HELIOCENTRIC CONIC
                                                                          DISTANCE 193.040
     RL 147.25 LAL -.00 LOL 81.79 VL 27.833 GAL -10.05 AZL 86.61 HCA 87.45 SHA 129.11 ECC .22266 INC 3.3934 V1 30.256
RP 107.63 LAP 3.39 LOP 169.24 VP 37.924 GAP -8.63 AZP 89.85 TAL 221.55 TAP 309.00 RCA 100.37 APO 157.86 V2 35.208
RC 54.462 GL 16.42 GP 1.92 ZAL 144.65 ZAP 21.47 ETS 354.04 ZAE 150.10 ETE 344.10 ZAC 62.86 ETC 163.90 CLP -21.38
    PLANETOCENTRIC CONIC
      C3 32.946 VHL 5.740 CLA -5.20 RAL 292.63 RAO 6568.3 VEL 12.422 PTH 2.24 VHP 6.272 DPA -13.44 RAP 330.50 ECC 1.5422
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 1 23 2175.71
12 41 54 5143.07
3 20 17 1921.21
14 5 42 4872.80
4 22 55 1725.12
15 19 33 4641.65
                                                                                                111.74 2 37 39
76.84 14 7 37
                                                                               161.01
                                                    -18.61
                                                                    39.03
                                                                                                                          1575.7
                                                                                                             2 37 39
         90.00
                                                    25.30
                                                                  229.29
                                                                                 164.23
                                                                                                                              4543.1
                                                                                                                                              23.24
                                                                                                112.87 3 52 18
75.73 15 26 55
116.04 4 51 40
72.62 16 36 55
        100.00
                                                    -19.80
                                                                    19.80
                                                                                 160.50
                                                                                                                              1321.2
        100.00
                                                     26.55
                                                                  209.07
                                                                                 163.89
                                                                                                                              4272.8
                                                                                                                                             24.33
                                                                                                                                                            200.98
        110.00
                                                   -22.97
                                                                    3.37
                                                                                 158.95
                                                                                                                              1125.1
                                                                                                                                                            356.18
        110.00
                                                                  190.44
                                                                                 162.81
                                                                                                                              4041.6
                                                                                                                                           27.24
    DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      SGT 579.6 SGR 393.0 SG3 162.1
RRT .0204 RRF -.0490 RTF -.5812
     TDE -.1875 TRA -.3173 TC3 .3893 BAU .1761
                                                                                                                        ST 210.5 SR 374.7 SS 275.2
CRT .8662 CRS .9310 CST .6417
LSA 489.8 MSA 141.3 SSA 24.5
     RCE -.3750 RRA .0588 RC3 -.0910 FAU .05611
     FCE .4652 FRA -.6624 FC3-1.4745 BSP 1499
BOE .4192 BRA .3227 BC3 .3998 FSP -434
                                                                      SGB 700.3 R23 -.0270 R13 -.5818
                                                                      SG1 579.7 SG2 392.9 THA 1.47
                                                                                                                          ELI 419.4 EL2 94.0 ALF 62.55
 LAUNCH DATE DEC 14 1965
                                                                          FLIGHT TIME 72.00
                                                                                                                                     ARRIVAL DATE FEB 24 1966
    HELIOCENTRIC CONIC
                                                                          DISTANCE 199.827
    RL 147.25 LAL -.00 LOL 81.79 VL 27.950 GAL -9.98 AZL 86.62 HCA 90.69 SHA 129.94 ECC .21742 INC 3.3752 V1 30.256 RP 107.66 LAP 3.38 LOP 172.48 VP 38.001 GAP -7.80 AZP 90.04 TAL 222.89 TAP 313.58 RCA 101.69 APO 158.19 V2 35.200
                        16.61 GP 2.06 TAL 145.46 TAP 24.83 ETS 354.46 TAE 150.84 ETE 344.50 TAC 62.69 ETC 163.95 CLP -24.75
     RC 56.291 GL
    PLANETOCENTRIC CONIC
    C3 32.149 VML 5.670 DLA -5.16 RAL 291.63 RAD 6568.3 VEL 12.390 PTH 2.24 VMP 5.855 DPA -13.35 RAP 330.33 ECC 1.5291 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   LNCH TIME L-1 1 IME

1 57 8 2170.68

12 38 12 5135.76

3 16 2 1916.12

14 1 58 4865.55

4 18 42 1719.92

15 15 47 4634.52
                                                   -18.48
                                                                  38.72
                                                                               159.61
                                                                                               111.84 2 33 18
                                                                                                                           1570.7
                                                                                                                                            -15.35
                                                                                                 76.61 14 3 47
112.98 3 47 58
         90.00
                                                    25.19
                                                                  228.78
                                                                                162.77
                                                                                                                             4535.8
                                                                                                                                             23.10
       100.00
                                                   -19.66
                                                                   19.49
                                                                                159.10
                                                                                                112.98
                                                                                                                             1316.1
                                                                                                                                             -16.38
       100.00
                                                                                                 75.49 15 23 4
116.17 4 47 22
                                                    26.43
                                                                  208.57
                                                                                162.42
                                                                                                                           4265.5
1119.9
                                                                                                                                            24.17
                                                                                                                                                            200.49
       110.00
                                                  -22.82
                                                                    3.05
                                                                                157.55
                                                                                                116.17
                                                                                                                                            -19.11
                                                                                                                                                           355.87
       110.00
                                                                                                 72.35 16 33 2
                                                   29.76
                                                                  189.94
                                                                                161.33
                                                                                                                                           27.06
                                                                                                                             4034.5
                                                                                                                                                          181.79
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
     TDE -.1846 TRA -.3098 TC3 .3955 BAU .1743
                                                                     SGT 578.6 SGR 392.0 SG3 185.0
RRT .0270 RRF -.0614 RTF -.5729
                                                                                                                         ST 209.5 SR 374.6 SS 296.5
CRT .8681 CRS .9259 CST .6331
    TOE -.1846 TRA -.3098 TC3 .3937 DAG .1143

ROE -.3703 RRA .0574 RC3 -.0893 FAU .06275

FOE .5270 FRA -.7810 FC3-1.6897 BSP 1482

BOE .4138 BRA .3151 BC3 .4054 FSP -504
                                                                      SGB 698.9 R23 -. 0328 R13 -. 5738
                                                                                                                         LSA 499.8 MSA 147.4 SSA 24.6
                                                                     5G1 578.8 SG2 391.8 THA 1.93
                                                                                                                        EL1 419.0 EL2 93.0 ALF 62.65
LAUNCH DATE DEC 14 1965
                                                                         FLIGHT TIME 74.00
                                                                                                                                   ARRIVAL DATE FER 26 1966
   HELIOCENTRIC CONTC
                                                                        DISTANCE 206.586
    RL 147.25 LAL -.00 LOL 81.79 VL 28.051 GAL -9.92 AZL 86.64 MCA 93.92 SMA 130.66 ECC .21294 INC 3.3571 V1 30.256
RP 107.69 LAP 3.35 LOP 175.72 VP 38.067 GAP -7.01 AZP 90.23 TAL 224.10 TAP 318.03 RCA 102.84 APO 158.48 V2 35.191
RC 58.184 GL 16.77 GP 2.22 ZAL 146.16 ZAP 28.39 ETS 354.79 ZAE 151.89 ETE 344.81 ZAC 62.34 ETC 163.98 CLP -28.31
   PLANETOCENTRIC CONIC
    C3 31.465 VML 5.609 DLA -5.13 RAL 290.75 RAD 6568.3 VEL 12.363 PTH 2.23 VMP 5.470 DPA -13.31 RAP 329.96 ECC 1.5178
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    1 53 26 2166.09
12 34 54 5129.52
                                                  -18.36
                                                                  38.43
                                                                             158.38
                                                                                           111.94 2 29 32
76.42 14 0 23
113.08 3 44 12
                                                                                                                                       -15.23
                                                                                                                         1566.1
        90.00
                                                   25.09
                                                                228.35
                                                                               161.48
                                                                                                                                            22.97
                                                                                                                            4529.5
                    3 12 21 1911.50
13 58 39 4859.35
      100.00
                                                 -19.54
                                                                  19.20
                                                                              157.86
                                                                                                                           1311.5
                                                                                                                                           -16.24
                                                                                                                                                           11.95
       100.00
                   13 58 39
                                                                                              75.29 15 19 39
116.29 4 43 38
72.13 16 29 35
                                                  26.32
                                                                208.14
                                                                               161.14
                                                                                                                           4259.4
                                                                                                                                           24.04
                   4 15 3 1715.20
15 12 27 4628.42
      110.00
                                                                                                                                        -18.5
26.91
                                                  -22.68
                                                                   2.76
                                                                              156.32
                                                                                                                           1115.2
                                                                                                                           4028.4
      110 00
                                                  29.63
                                                                189.51
                                                                               160.04
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 573.1 SGR 390.1 SG3 210.7
RRT .0337 RRF -.0762 RTF -.5560
SGB 693.3 R23 -.0414 R13 -.5575
SGI 573.4 SG2 389.7 THA 2.44
    TOE -.1801 TRA -.3063 TC3 .3946 BAU .1699
                                                                                                                       ST 207.1 SR 373.8 SS 318.8 CRT .8554 CRS .9216 CST .6194 LSA 509.9 MSA 154.0 SSA 24.5 EL1 417.1 EL2 93.0 ALF 62.93
    RDE -.3656 RRA .0569 RC3 -.0863 FAU .07023
    FDE .5970 FRA -.9139 FC3-1.9322 BSP 1440
BDE .4075 BRA .3116 BC3 .4039 FSP -584
LAUNCH DATE DEC 14 1965
                                                                        FLIGHT TIME 76.00
                                                                                                                                   ARRIVAL DATE FEB 28 1966
  HELTOCENTRIC CONTC
                                                                        DISTANCE 213.316
   RL 147.25 LAL -.00 LOL 81.79 VL 28.137 GAL -9.87 AZL 86.66 HCA 97.16 SMA 131.29 ECC .20910 INC 3.3388 V1 30.256 RP 107.72 LAP 3.31 LOP 178.96 VP 38.122 GAP -6.26 AZP 90.42 TAL 225.18 TAP 322.33 RCA 103.83 APO 158.74 VZ 35.181
   RC 60.133 GL 16.89 GP 2.39 ZAL 146.76 ZAP 32.15 ETS 355.06 ZAE 153.28 ETE 345.03 ZAC 61.79 ETC 163.99 CLP -32.07
  PLANETOCENTRIC CONIC
   C3 30.869 VHL 5.556 DLA -5.11 RAL 290.00 RAD 6568.2 VEL 12.339 PTH 2.22 VHP 5.115 DPA -13.31 RAP 329.39 ECC 1.5080 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            112.03 2 26 18
76.25 13 57 25
                                                                             157.30
                    1 50 16 2161.87
                                                  -18.26
                                                                 38.17
                                                                                                           2 26 18
                                                                                                                           1561.9
                                                                                                                                        -15.11
                                                                                                                                                           30.91
       90.00
                  12 32 1
                                 5124.13
                                                  25.00
                                                                227.98
                                                                              160.37
                                                                                                                            4524.1
                                                                                                                                           22.86
                                                                                                                                                          219.96
                    3 9 12 1907.24
      100.00
                                                  -19.42
                                                                  18.93
                                                                               156.79
                                                                                              113.18
                                                                                                            3 40 59
                                                                                                                            1307.2
                                                                                                                                          -16.12
                                                                                                                                                          11.70
                                                                                              75.12 15 16 40
116.40 4 40 26
71.93 16 26 35
      100.00
                  13 55 46 4853.99
                                                 26.23
                                                                207.77
                                                                               160.02
                                                                                                                            4254.0
                                                                                                                                           23.93
                                                                                                                                                         199.72
                                                                           155.25
158.92
      110.00
                 4 11 55 1710.88
15 9 32 4623.12
                                                 -22.54
                                                                  2.49
                                                                                                                            1110.9
                                                                                                                                          - 1 A . A 1
                                                                                                                                                         355.34
      110.00
                                               29.52
                                                                189.14
                                                                                                                            4023.1
                                                                                                                                           26.77
                                                                                                                                                         181.03
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   TOE -.1734 TRA -.3074 TC3 .3854 BAU .1626
                                                                    SGT 562.7 SGR 387.4 SG3 239.6
RRT .0397 RRF -.0939 RTF -.5277
                                                                                                                      ST 203.1 SR 372.3 SS 342.1
CRT .8565 CRS .9183 CST .5979
LSA 520.1 MSA 160.8 SSA 24.3
   RDE -.3606 RRA .0572 RC3 -.0820 FAU .07860
   FDE .6754 FRA-1.0615 FC3-2.2044 BSP 1372
BDE .4001 BRA .3127 BC3 .3940 FSP -675
                                                                  SGB 683.2 RZ3 -.0542 R13 -.5300
                                                                    5G1 563.1 5G2 386.8 THA 2.96
                                                                                                                      EL1 413.5 EL2 94.4 ALF 63.46
```

FLIGHT TIME 70.00

ARRIVAL DATE MAR 2 1966

```
FLIGHT TIME 78.00
LAUNCH DATE DEC 14 1965
                                                                   DISTANCE 220.015
   RL 147.25 LAL -.00 LOL 81.79 VL 28.210 GAL -9.81 AZL 86.68 MCA 100.39 SMA 131.82 ECC .20581 INC 3.3203 V1 30.256
RP 107.75 LAP 3.27 LOP 182.20 VP 38.166 GAP -5.54 AZP 90.60 TAL 226.10 TAP 326.49 RCA 104.69 APO 158.95 V2 35.171
RC 62.133 GL 17.00 GP 2.58 ZAL 147.27 ZAP 36.14 ETS 355.29 ZAE 154.99 ETE 345.15 ZAC 61.01 ETC 163.98 CLP -36.06
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 30.339 VHL 5.508 DLA -5.10 RAL 289.36 RAD 6568.2 VEL 12.317 PTH 2.22 VMP 4.791 DPA -13.38 RAP 328.59 ECC 1.4993
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                -15.00
                                                                                                                   1557.9
                                                                        156.38
                                                                                      112.11
                                                                                                   2 23 35
                  1 47 37 2157.93
12 29 33 5119.38
                                                             37.93
                                              -18.15
                                                                                                                                 22.77
                                                                                         76.11 13 54 53
                                                                                                                    4519.4
                                                                         159.40
                                              24.92
                                                            227.65
       90.00
                                                                                                                                  -16.00
                                                                         155.86
                                                                                        113.27
                                                                                                    3 38 16
                                                                                                                   1303.3
                                                             18.69
                   3 6 33 1903.28
                                              -19.32
                                                                                       74.97 15 14 7
116.50 4 37 44
71.76 16 24 2
                                                                      159.05
                                                                                                                                 23.82
                                                                                                                    4249.3
      100.00
                 13 53 18
                               4849.26
                                              26.14
                                                            207.44
                                                                                                                                 -18.68
                                                                                                                   1106.9
                                                                         154.32
                   4 9 17 1706.87
15 7 3 4618.43
                                                              2.24
                                              -22.42
                                                                                                                                  26.65
                                                                                                                   4018.4
                                                                         157.95
                                                            188.81
                 15 7 3
                                              29.42
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                              ST 196.2 SR 370.1 SS 365.3

CRT .8381 CRS .9151 CST .5624

LSA 529.4 MSA 167.6 SSA 24.1

EL1 407.5 EL2 97.2 ALF 64.48
                                                                SGT 547.7 SGR 383.9 SG3 272.1
RRT .0413 RRF -.1138 RTF -.4860
   TDE -.1630 TRA -.3126 TC3 .3683 BAU .1526
   RDE -.3553 RRA .0583 RC3 -.0763 FAU .08800
FDE .7596 FRA-1.2262 FC3-2.5110 BSP 1301
BDE .3910 BRA .3180 BC3 .3762 FSP -782
                                                                SGB 668.9 R23 -. 0744 R13 -. 4894
                                                                SG1 548.2 SG2 383.3 THA 3.25
                                                                                                                          ARRIVAL DATE MAR 4 1966
                                                                    FLIGHT TIME 80.00
                                                                    DISTANCE 226.681
  HELIOCENTRIC CONIC
   RL 147.25 LAL -.00 LOL 81.79 VL 28.270 GAL -9.76 AZL 86.70 HCA 103.62 SMA 132.27 ECC .20298 INC 3.3014 V1 30.256 RP 107.78 LAP 3.21 LOP 185.44 VP 38.201 GAP -4.85 AZP 90.78 TAL 226.88 TAP 330.50 RCA 105.42 APO 159.12 V2 35.160
        64.180 GL 17.08 GP 2.79 ZAL 147.69 ZAP 40.37 ETS 355.48 ZAE 157.05 ETE 345.14 ZAC 59.99 ETC 163.94 CLP -40.29
   PLANETOCENTRIC CONIC
    C3 29.857 VHL 5.464 DLA -5.09 RAL 288.83 RAD 6568.2 VEL 12.298 PTH 2.21 VHP 4.497 DPA -13.49 RAP 327.55 ECC 1.4914
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       112.19 2 21 21
                                                                                                                   1554.2
                                                                        155.59
                                                             37.70
                                               -18.06
                   1 45 26 2154.22
       90.00
                                                                                                                                                219.36
                  12 27 32 5115.06
3 4 23 1899.55
13 51 16 4844.96
4 7 8 1703.11
15 5 1 4614.16
                                                                                                                                   22.68
                                                                                          75.97
                                                                                                    13 52 47
                                                                                                                     4515.1
                                                             227.36
                                                                          158.58
                                                24.85
       90.00
                                                                                                   3 36 3
15 12 1
                                                                                                                                                 11.24
                                                                                                                                  -15.89
                                                                                         113.35
                                                                                                                     1299.6
                                                                          155.07
                                                              18.46
                                               -19.22
       100.00
                                                                                                                                  23.73
                                                                                                                     4245.0
                                                                                          74.83
                                               26.07
                                                             207.14
                                                                          158.23
       100.00
                                                                                                   4 35 31
16 21 55
                                                                                                                                  -18.56
                                                                                                                                                354.88
                                                                                                                   1103.1
                                                                                         116.60
                                               -22.31
                                                               2.01
                                                                        153.53
       110.00
                                                                                                                                                 180.44
                                                                                                                                   26.54
                                                                          157.12
                                                                                          71.60
                                                                                                                    4014.2
                                                             188.51
                                               29.33
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 189.4 SR 367.2.SS 389.9
CRT .8078 CRS .9139 CST .5139
LSA 540.1 MSA 174.5 SSA 23.8
                                                                SGT 529.3 SGR 379.8 SG3 307.3
RRT .0416 RRF -.1386 RTF -.4194
    TOE -.1512 TRA -.3257 TC3 .3392 BAU .1382
    RDE -.3497 RRA .0603 RC3 -.0691 FAU .09814
                                                                SGB 651.4 R23 -.1028 R13 -.4244
    FOE .8546 FRA-1.4002 FC3-2.8456 BSP 1159
BOE .3810 BRA .3312 BC3 .3462 FSP '-895
                                                                                                                 EL1 400.3 EL2 102.4 ALF 65.69
                                                                5G1 529.8 SG2 379.1 THA 3.51
                                                                                                                          APRIVAL DATE HAR 6 1966
                                                                    FLIGHT TIME 82.00
LAUNCH DATE DEC 14 1965
   RL 147.25 LAL -.00 LOL 81.79 VL 28.320 GAL -9.71 A7L 86.72 HCA 106.85 SMA 132.64 ECC .20053 INC 3.2820 VL 30.256 RP 107.81 LAP 3.14 LOP 188.67 VP 38.228 GAP -4.20 A7P 90.95 TAL 227.51 TAP 334.36 RCA 106.04 APO 159.24 V2 35.149 RC 66.258 GL 17.14 GP 3.01 7AL 148.01 7AP 44.83 ETS 355.67 7AE 159.44 ETE 344.96 7AC 58.74 ETC 163.87 CLP -44.75
                                                                   DISTANCE 233.314
   HELIOCENTRIC CONTC
   PLANETOCENTRIC CONIC
    C3 29.410 VHL 5.423 DLA -5.08 RAL 288.41 RAD 6568.2 VEL 12.279 PTH 2.21 VHP 4.233 OPA -13.67 RAP 326.28 ECC 1.4840
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1550.7
                                                                        154.92
                                                                                      112.26
                  1 43 43 2150.67
12 25 55 5111.04
3 2 40 1896.00
                                               -17.97
                                                             37.48
        90.00
                                                                                                   13 51 6
                                                                                                                     4511.0
                                                                                                                                   22.60
                                                                                                                                                219.09
                                                24.79
                                                             227.08
                                                                          157.89
                                                                                          75.85
        90.00
                                                                                                                                   -15.79
                                                                                                                                                 11.03
                                                                                                     3 34 16
                                                                                                                    1296.0
                                                              18.24
                                                                          154.41
                                                                                         113.42
                                               -19.12
       100.00
                                                                                                                                                198.86
                                                                                                   15 10 20
                                                                                                                     4240.9
                                                                                                                                  23.64
                                                                           157.53
                                                                                          74.70
                                                             206.87
                                               26.00
       100.00
                  13 49 40 4840.95
                                                                                                                                  -18.44
                                                                                                                                                354.67
                                                                                                   4 33 45
16 20 14
                                                                                                                    1099.5
       110.00 4 5 25 1699.53
110.00 15 3 24 4610.18
                                                                           152.87
                                                                                         116.69
                                               -22.20
                                                               1.79
                                                                                                                                 26.44
                                                                                                                                                180.17
                                                                                          71.46
                                                                                                                     4010.2
                                                                           156.42
                                                             188.23
                                               29.25
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                ST 180.2 SR 363.7 SS 413.7
CRT .7568 CRS .9128 CST .4382
LSA 550.0 MSA 181.1 SSA 23.6
                                                                 SGT 509.6 SGR 375.1 SG3 345.7
RRT .0314 RRF -.1668 RTF -.3252
    TOE -.1351 TRA -.3444 TC3 .3000 BAU .1203
    TOE -.3437 RRA .0633 RC3 -.0604 FAU .10920
FOE .9528 FRA-1.5878 FC3-3.2145 BSP 1004
BOE .3693 BRA .3502 BC3 .3060 FSP -1025
                                                                 SGB 632.8 R23 -.1445 R13 -.3307
                                                                                                                 ELI 390.8 EL2 109.6 ALF 67.58
                                                                 SG1 509.9 SG2 374.7 THA 2.88
                                                                                                                           ARRIVAL DATE MAR 8 1966
                                                                    FLIGHT TIME 84.00
LAUNCH DATE DEC 14 1965
                                                                    DISTANCE 239.914
    RL 147.25 LAL -.00 LOL 81.79 VL 28.359 GAL -9.65 A7L 86.74 MCA 110.08 SMA 132.93 ECC .19841 INC 3.2619 VI 30.256
RP 107.85 LAP 3.06 LOP 191.90 VP 38.246 GAP -3.58 A7P 91.12 TAL 228.00 TAP 338.08 RCA 106.56 APO 159.31 V2 35.138
RC 68.394 GL 17.19 GP 3.26 TAL 148.26 ZAP 49.53 ETS 355.84 ZAE 162.15 ETE 344.54 ZAC 57.26 ETC 163.79 CLP -49.45
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 28.984 VHL 5.384 DLA -5.08 RAL 288.10 RAD 6568.2 VEL 12.262 PTH 2.21 VHP 3.999 DPA -13.89 RAP 324.76 ECC 1.4770
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1547.3
                                                                                         112.33
                                                                                                      2 18 12
                   1 42 25 2147.25
12 24 43 5107.17
                                                -17.88
                                                              37.26
                                                                          154.37
        90.00
                                                                                                                                                 218.84
                                                                                                                      4507.2
                                                                                                                                   22.52
                                                                                           75.73
                                                                                                    13 49 51
                                                                           157.30
                                                             226.82
                                                24.72
        90.00
                                                                                                                                                  10.82
                                                                                                                     1292.6
                                                                                                                                   -15.69
                                                                                          113.50
                                                                                                      3 32 54
                                                              18.02
                                                                           153.85
                                1892.57
                                                -19.03
                    3 1 22
       100.00
                                                                                                                      4237.1
                                                                                                                                   23.56
                                                                                                                                                 198.60
                                                                                           74.57
                                                                                                    15 9 5
                                 4837.09
                                                              206.60
                                                                           156.95
                   13 48 28
                                                25.93
       100.00
                                                                                                                                                 354.47
                                                                                                                     1096.1
                                                                                          116.77
                                                                                                    4 32 23
                                                                                                                                  -18.32
                                                               1.58
                                                                           152.32
                                 1696.08
                                                -22.09
                    4 4 7
       110.00
                                                                                           71.32
                                                                                                   16 18 58
                                                                                                                     4006.3
                                                                                                                                   26.34
                                                                                                                                                 179.92
                                                                           155.83
                   15 2 11
                                                              187.96
                                 4606.34
                                                 29.16
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 172.5 SR 359.6 S5 438.1
CRT .6786 CRS .9135 CST .3349
LSA 561.6 MSA 187.3 SSA 23.2
                                                                 SCT 493.6 SCR 370.0 SG3 385.7
RRT .0106 RRF -.2008 RTF -.1880
     TDE -.1169 TRA -.3719 TC3 .2462 BAU .0973
     ROE - .3373 RRA .0670 RC3 - .0500 FAU .12064
                                                                SGB 616.9 R23 -.1963 R13 -.1907
     FOE 1.0588 FRA-1.7772 FC3-3.6033 BSP 777
                                                                                                               EL1 380.5 EL2 119.8 ALF 69.89
                                                                561 493.7 562 369.9 THA 1.04
     BDE .3570 BRA .3779 BC3 .2512 FSP -1157
```

Ξ

```
LAUNCH DATE DEC 14 1965
                                                                               FLIGHT TIME 86.00
                                                                                                                                              ARRIVAL DATE MAR 10 1966
    HELIOCENTRIC CONIC
                                                                              DISTANCE 246.478
    RL 147.25 LAL -.00 LOL 81.79 VL 28.388 GAL -9.59 A7L 86.76 MCA 113.30 SMA 133.16 ECC .19656 INC 3.2410 V1 30.256
RP 107.89 LAP 2.98 LOP 195.13 VP 38.257 GAP -2.99 A7P 91.28 TAL 228.35 TAP 341.65 RCA 106.98 APO 159.33 VZ 35.126
RC 70.553 GL 17.22 GP 3.51 ZAL 148.42 ZAP 54.46 ETS 356.02 ZAE 165.16 ETE 343.72 ZAC 55.55 ETC 163.67 CLP -54.38
    PLANETOCENTRIC CONIC
     C3 28.371 VHL 5.345 DLA -5.07 RAL 287.88 RAD 6568.1 VEL 12.245 PTH 2.20 VHP 3.795 DPA -14.15 RAP 323.01 ECC 1.4702 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 41 30 2143.91
12 23 56 5103.34
3 0 27 1889.21
13 47 39 4833.27
                                                                                                                                   1543.9
                                                                       37.06
                                                                                    153.92
                                                                                                     112.40
         90.00
                                                       -17.79
                                                                                                                    2 17 14
                                                                                                                                                    -14.60
                                                                                                                                                                       29.83
                                                                                                                  13 48 59
         90.00
                                                       24.66
                                                                      226.55
                                                                                      156.83
                                                                                                        75.62
                                                                                                                                      4503.3
                                                                                                                                                      22.44
                                                                                                                                                                      218.59
                                                                                                      113.57 3 32 77 74.45 15 8 13 116.86 4 31 26 71.19 16 18 5
        100.00
                                                      -18.94
                                                                       17.82
                                                                                     153.40
                                                                                                                                      1289.2
                                                                                                                                                      -15.59
                                                                                                                                                                       10.62
                                                                                                                                    4233.3
       100.00
                                                      25.86
                                                                      206.34
                                                                                     156.47
                                                                                                                                                      23.47
                                                                                                                                                                      198.35
                                                                                                                                    1092.7
                    4 3 13 1692.69
15 1 23 4602.56
        110.00
                                                     -21.99
                                                                        1.37
                                                                                     151.87
                                                                                                                                                      -14.21
                                                                                                                                                                      354.28
                                                                      187.70
                                                                                                                                                      26.24
       110.00
                                                      29.08
                                                                                     155.35
                                                                                                                                      4002.6
                                                                                                                                                                      179.67
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TDE -.0951 TRA -.4072 TC3 .1790 BAU .0699
RDE -.3305 RRA .0716 RC3 -.0379 FAU .13231
FDE 1.1666 FRA-1.9654 FC3-4.0091 BSP 523
                                                                          5GT 488.9 5GR 364.8 5G3 426.8
RRT -.0304 RRF -.2399 RTF -.0086
                                                                                                                                 ST 166.4 SR 355.0 SS 461.7
CRT .5596 CRS .9152 CST .1911
LSA 573.7 MSA 193.0 SSA 22.8
                                                                          SGB 610.0 R23 .2404 R13 -.0006
SG1 489.2 SG2 364.4 THA 177.08
                                                                                                                                  EL1 368.9 EL2 132.7 ALF 73.04
    BOE .3439 BRA .4134 BC3 .1829 FSP -1292
LAUNCH DATE DEC 14 1965
                                                                              FLIGHT TIME 88.00
                                                                                                                                              ARRIVAL DATE MAR 12 1966
                                                                              DISTANCE 253.008
  HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 28.409 GAL -9.52 ATL 86.78 HCA 116.52 SMA 133.32 ECC .19493 INC 3.2191 V1 30.256
RP 107.92 LAP 2.88 LOP 198.35 VP 38.262 GAP -2.42 AZP 91.44 TAL 228.56 TAP 345.08 RCA 107.33 APO 159.31 V2 35.114
RC 72.741 GL 17.25 GP 3.78 ZAL 148.51 ZAP 59.58 ETS 356.21 ZAE 168.45 ETE 342.15 ZAC 53.64 ETC 163.53 CLP -59.51
   PLANETOCENTRIC CONIC
    C3 28.164 VHL 5.307 DLA -5.06 RAL 287.76 RAD 6568.1 VEL 12.229 PTH
                                                                                                          2.20 VHP 3.621 DPA -14.44 RAP 321.04 ECC 1.4635
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 57 2140.59 -17.71 36.85 153.56 112.45 2 16 38 1540.6 -14.51 29.63
                    12 23 30 5099.49
2 59 55 1885.87
13 47 14 4829.43
                                                                                                                  13 48 30
3 31 20
         90.00
                                                       24.59
                                                                      226.29
                                                                                      156.44
                                                                                                        75.50
                                                                                                                                       4499.5
                                                                                                                                                      22.36
                                                                                                                                                                       218.33
                                                      -18.85
                                                                       17.61
                                                                                      153.05
                                                                                                       113.64
                                                                                                                                      1285.9
                                                                                                                                                       -15.49
                                                                                                                                                                        10.43
                                                                                                        74.33 15 7 44
116.94 4 30 51
71.05 16 17 35
       100.00
                                                      25.79
                                                                      206.07
                                                                                     156.09
                                                                                                                                      4229.4
                                                                                                                                                      23.39
                                                                                                                                                                      198.10
                     4 2 41 1689.33
                                                      -21.89
                                                                        1.16
                                                                                      151.52
                                                                                                      116.94
                                                                                                                                      1089.3
                                                                                                                                                      -18.10
                                                                                                                                                                      354.08
       110.00
                     15 0 57
                                     4598.74
                                                      29.00
                                                                      187.43
                                                                                      154.96
                                                                                                                                      3998.7
                                                                                                                                                       26.14
                                                                                                                                                                      179.42
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TDE -.0690 TRA -.4495 TC3 .0990 BAU .0384
                                                                          SGT 503.9 SGR 359.5 SG3 468.4
RRT -.0957 RRF -.2830 RTF .1973
SGB 619.0 R23 .2453 R13 -.2218
                                                                                                                                 ST 164.1 SR 349.7 SS 482.5
CRT .3892 CRS .9166 CST .0007
LSA 585.1 MSA 198.0 SSA 22.4
    ROE -.3231 RRA .0770 RC3 -.0240 FAU .14407
    FDE 1.2664 FRA-2.1496 FC3-4.4287 BSP 336
                                                                          SG1 506.3 SG2 356.2 THA 172.23
    BDE .3304 BRA .4560 BC3 .1019 FSP -1439
                                                                                                                                 EL1 356.7 EL2 148.2 ALF 77.45
                                                                              FLIGHT TIME 90.00
                                                                                                                                             ARRIVAL DATE MAR 14 1966
LAUNCH DATE DEC 14 1965
   HELIOCENTRIC CONIC
                                                                             01STANCE 259.504
    RL 147.25 LAL -.00 LOL 81.79 VL 28.423 GAL -9.45 AZL 86.80 MCA 119.74 SMA 133.42 ECC .19349 INC 3.1959 VI 30.256
RP 107.96 LAP 2.77 LOP 201.58 VP 38.260 GAP -1.88 AZP 91.59 TAL 228.64 TAP 348.38 RCA 107.60 APO 159.23 VZ 35.101
RC 74.954 GL 17.26 GP 4.06 ZAL 148.53 ZAP 64.87 ETS 356.41 ZAE 171.94 ETE 338.85 ZAC 51.57 EYC 163.36 CLP -64.80
   PLANETOCENTRIC CONIC
    C3 27.754 VML 5.268 DLA -5.05 RAL 287.73 RAD 6568.1 VEL 12.212 PTM 2.19 VMP 3.477 DPA -14.75 RAP 318.91 ECC 1.4568
    CS 27.754 VPL 5.288 ULA -5.05 KAL 287.75 KAD 6508.1 VEL 12.212 PPR 2.19 VPP 5.47 UPA -14.75 KAP 518.91 ECC 1.4568 ULA -5.05 KAP 518.91 ECC 1.4568 ULA -17.62 S6.64 ISS.29 II2.53 2 16 22 ISST..2 -14.41 29.43 90.00 12 23 27 5095.52 24.52 226.02 IS6.14 75.38 IS 48 23 4495.5 22.28 218.07 100.00 2 59 43 1882.52 -18.75 17.40 152.78 II3.71 3 31 5 1282.5 -15.39 10.23
                                                                                                      74.21 15 7 36
117.02 4 30 36
70.91 16 17 28
                    13 47 11
                                                      25.71
                                                                      205.80
                                                                                     155.79
       100.00
                                    4825.48
                                                                                                                                     4225.5
                                                                                                                                                      23.30
                                                                                                                                                                      197.84
       110.00
                    4 2 30 1685.93
15 0 53 4594.83
                                                      -21.78
                                                                                     151.25
                                                                                                                                     1085.9
                                                                                                                                                                      353.88
                                                                         .95
                                                                                                                                                      -17.98
                                                                      187.16
                                                                                                                                                       26.03
       110.00
                                                      28.91
                                                                                     154.66
                                                                                                                                      3994.8
                                                                                                                                                                      179.16
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 548.1 SGR 354.7 SG3 507.5
RRT -.1764 RRF -.3319 RTF .4021
                                                                                                                                 ST 169.7 SR 343.9 SS 502.5
CRT .1836 CRS .9199 CST -.2058
    TOE -.0407 TRA -.5003 TC3 .0035 BAU .0034
    ROE -.3152 RRA .0829 RC3 -.0085 FAU .15494
FDE 1.3641 FRA-2.3118 FC3-4.8330 BSP 460
                                                                                                                               LSA 598.4 MSA 202.3 SSA 22.0
EL1 345.8 EL2 166.0 ALF 83.26
                                                                          568 652.8 R23 .2161 R13 -.4304
    BDE .3179 BRA .5071 BC3 .0092 FSP -1571
                                                                          SG1 553.9 SG2 345.4 THA 169.28
LAUNCH DATE DEC 14 1965
                                                                              FLIGHT TIME 92.00
                                                                                                                                             ARRIVAL DATE MAR 16 1966
  HELIOCENTRIC CONIC
                                                                             DISTANCE 265.966
    RL 147.25 LAL -.00 LOL 81.79 VL 28.429 GAL -9.38 A7L 86.83 MCA 122.96 SMA 133.46 ECC .19220 INC 3.1712 V1 30.256 RP 108.00 LAP 2.66 LOP 204.80 VP 38.253 GAP -1.36 A7P 91.73 TAL 228.60 TAP 351.56 RCA 107.81 APO 159.11 V2 35.089 RC 77.191 GL 17.26 GP 4.35 ZAL 148.48 ZAP 70.27 ETS 356.65 ZAE 175.53 ETE 329.53 ZAC 49.39 ETC 163.17 CLP -70.21
   PLANETOCENTRIC CONIC
    C3 27.338 VHL 5.229 OLA -5.04 RAL 287.78 RAD 6568.1 VEL 12.195 PTH
                                                                                                          2.19 VHP 3.361 DPA -15.05 RAP 316.65 ECC 1.4499
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                  2133.82
5091.43
                                                      -17.53
                                                                                                                   2 16 27
                      1 40 53
                                                                      36.43
                                                                                     153.10
                                                                                                     112.60
                                                                                                                                    1533.8
        90.00
                    12 23 45
                                                     24.45
                                                                     225.74
                                                                                     155.92
                                                                                                       75.26
                                                                                                                  13 48 36
                      2 59 51 1879.08
13 47 28 4821.40
4 2 39 1682.46
15 1 9 4590.79
                                                     -18.66
                                                                       17.19
                                                                                     152.59
                                                                                                      113.79
                                                                                                                    3 31 10
                                                                                                                                     1279.1
                                                                                                                                                                       10.02
       100.00
                                                                                                                                                      -15.29
                                                                                                     74.08 15 7 49
117.10 4 30 42
70.77 16 17 40
                    13 47 28
                                                      25.64
                                                                     205.52
                                                                                     155.56
                                                                                                                                      4221.4
       100.00
                                                                                                                                                      23.21
                                                                                                                                                                      197.57
       110.00
                                                     -21.67
                                                                                     151.06
                                                                                                                                     1082.5
                                                                                                                                                     -17.87
                                                                                                                                                                      353.68
                                                                                                                                  3990.8
                                                                                                                                                    25.92
                                                                     186.88
       110.00
                                                                                     154.43
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                            ST 184.2 SR 337.4 SS 517.9 CRT -.0344 CRS .9226 CST -.4D79 LSA 61D.9 MSA 205.7 SSA 21.6 ELI 337.5 F.2 14.0 CT
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SGT 622.8 SGR 350.3 SG3 543.7

RRT -.2654 RRF -.3839 RTF .5707

SGB 714.5 R23 .1773 R13 -.5936
    TDE -.0089 TRA -.5572 TC3 -.1047 BAU .0384
    ROE - .3067 RRA .0892 RC3 .0087 FAU .16490
    FDE 1.4424 FRA-2.4531 FC3-5.2219 BSP 836
```

SG1 632.4 SG2 332.6 THA 168.20

EL1 337.5 EL2 184.0 ALF 91.53

BDE .3069 BRA .5643 BC3 .1051 FSP -1703

ARRIVAL DATE MAR 18 1966

LAUNCH DATE DEC 14 1965

```
RL 147.25 LAL -.00 LOL 81.79 VL 28.428 GAL -9.30 A7L 86.86 HCA 126.18 SMA 133.46 ECC .19103 INC 3.1447 V1 30.256
RP 108.04 LAP 2.54 LOP 208.01 VP 38.241 GAP -.86 A7P 91.86 TAL 228.44 TAP 354.61 RCA 107.96 APO 158.95 V2 35.076
RC 79.446 GL 17.26 GP 4.64 7AL 148.37 7AP 75.72 ETS 356.91 7AE 178.37 ETE 272.56 7AC 47.15 ETC 162.97 CLP -75.67
                                                                    DISTANCE 272.394
  HELIOCENTRIC CONIC
  PLANE TOCENTRIC CONIC
   C3 26.911 VHL 5.188 DLA -5.03 RAL 287.92 RAD 6568.1 VEL 12.177 PTH 2.19 VHP 3.273 DPA -15.33 RAP 314.33 ECC 1.4429
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       112.67 2 16 50

75.13 13 49 9

113.86 3 51 34

73.94 15 8 22

117.19 4 31 6

70.62 16 18 12
                                                                        152.97
                                                             36.21
                                              -17,44
                   1 41 20 2130.27
                                                                                                                                     22.10
                                                                                                                                                  217.52
                                                                                                                      4487.2
                                                                           155.77
                                                             225.45
                  12 24 22 5087.16
                                               24.38
                                                                                                                                                   9.81
               3 0 18 1875.51
13 48 5 4817.15
4 3 7 1678.85
15 1 45 4586.57
                                                                                                                      1275.5
                                                                                                                                    -15.18
                                                                           152.47
                                                              16.97
      100.00
                                               -18.56
                                                                                                                      4217.2
                                                                                                                                    23.11
                                                                                                                                                  197.29
                                                             205.23
                                                                           155.41
                                               25.56
                                                                       150.94
                                                                                                                      1078.9
                                                                                                                                    -17.74
                                                                                                                                                  353.47
                                                                . 52
                                              -21.56
      110.00
                                                                                                                                                  178.62
                                                                                                                      3986.6
                                                                                                                                    25.81
                                                             186.59
                                                                           154.27
                                              28.72
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 208.3 SR 330.4 SS 531.5
CRT -.2238 CRS .9269 CST -.5653
                                                                SGT 727.6 SGR 346.7 SG3 573.8

RRT -.3507 RRF -.4595 RTF .6932

SGB 805.9 R23 .1473 R13 -.7091

SG1 740.0 SG2 319.2 THA 168.31
   TOE .0243 TRA -.6205 TC3 -.2266 BAU .0821
   ROE -. 2977 RRA . 0957 RC3 . 0273 FAU . 17292
                                                                                                                 LSA 625.4 MSA 208.4 SSA 21.1
   FOE 1.5100 FRA-2.5536 FC3-5.5629 BSP 1315
BOE .2987 BRA .6279 BC3 .2282 FSP -1805
                                                                                                                 EL1 335.5 EL2 199.9 ALF 102.55
                                                                                                                             ARRIVAL DATE MAR 20 1966
                                                                     FLIGHT TIME 96.00
LAUNCH DATE DEC 14 1965
                                                                    DISTANCE 278.789
  HELIOCENTRIC CONIC.
   RL 147.25 LAL -.00 LOL 81.79 VL 28.421 GAL -9.21 AZL 86.88 HCA 129.39 SHA 133.41 ECC .18997 INC 3.1158 V1 30.256 RP 108.08 LAP 2.41 LOP 211.23 VP 38.224 GAP -.39 AZP 91.98 TAL 228.17 TAP 357.56 RCA 108.07 APO 158.75 V2 35.063
   RC 81.719 GL 17.24 GP 4.94 ZAL 148.20 ZAP 81.15 ETS 357.22 ZAE 176.12 ETE 194.72 ZAC 44.92 ETC 162.76 CLP -81.12
  PLANETOCENTRIC CONIC
   C3 26.471 VHL 5.145 DLA -5.02 RAL 288.13 RAD 6568.1 VEL 12.159 PTH 2.18 VHP 3.210 DPA -15.57 RAP 312.01 ECC 1.4357 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1526.5
                  1 42 5 2126.52
12 25 18 5082.73
3 1 4 1871.74
13 49 0 4812.75
4 3 54 1675.04
15 2 40 4582.21
                                                                                         112.74 2 17 32
                                                                           152.92
                                               -17.34
                                                               35.98
       90.00
                                                                                                                                                   217.23
                                                                                                      13 50 0
                                                                                                                       4482.7
                                                                                                                                      22.01
                                                                                            75.00
                                                              225.15
                                                                            155.68
                                                24.30
       90.00
                                                                                                                                                     9.59
                                                                                                                       1271.7
                                                                                                                                     -15.07
                                                                                                       3 32 16
                                                               16.74
                                                                           152.41
                                                                                           113.94
                                               -18.46
      100.00
                                                                                                                                                   197.00
                                                                                                                       4212.7
                                                                                                                                      23.01
                                                                                            73.81 15 9 13
117.28 4 31 49
                                                              204.93
                                                                           155.32
                                               25.47
      100.00
                                                                                                                                                   343.25
                                                                                                                      1075.0
                                                                                                                                     -17.62
                                                                                          117.28
                                                                 .29
                                                                           150.89
                                               -21.44
                                                                                                                                                   178.34
                                                                                           70.47 16 19 2
                                                                                                                       3982.2
                                                                                                                                      25.69
                                                              186.29
                                                                            154.18
                                               28.63
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 240.1 SR 322.4 SS 539.8
CRT -.3751 CRS .9307 CST -.6816
                                                                  SGT 855.3 SGR 343.8 SG3 598.3
RRT -.4315 RRF -.4963 RTF .7757
SGB 921.9 R23 .1247 R13 -.7863
    TOE .0591 TRA -.6876 TC3 -.3590 BAU .1281
    ROE -.2879 RRA .1022 RC3 .0472 FAU .17922
FOE 1.5504 FRA-2.6217 FC3-5.8614 BSP 1836
                                                                                                                  LSA 639.1 MSA 209.9 SSA 20.7
                                                                                                                  EL1 343.4 EL2 208.9 ALF 115.70
    BDE .2939 BRA .6952 BC3 .3621 FSP -1899
                                                                  SG1 870.0 SG2 305.0 THA 168.76
                                                                                                                             ARRIVAL DATE MAR 22 1966
                                                                    FLIGHT TIME 98.00
LAUNCH DATE DEC 14 1965
                                                                     DISTANCE 285.152
    RL 147.25 LAL -.00 LOL 81.79 VL 28.410 GAL -9.11 AZL 86.92 HCA 132.60 SMA 133.32 ECC .18901 INC 3.0843 V1 30.256
RP 108.12 LAP 2.27 LOP 214.44 VP 38.203 GAP .06 AZP 92.09 TAL 227.80 TAP .40 RCA 108.12 APO 158.52 V2 35.050
   HELIOCENTRIC CONIC
    RC 84.008 GL 17.21 GP 5.25 ZAL 147.97 ZAP 86.51 ETS 357.57 ZAE 172.44 ETE 182.70 ZAC 42.76 ETC 162.57 CLP -86.49
   PLANETOCENTRIC CONIC
    C3 26.015 VHL 5.101 DLA -5.01 RAL 288.41 RAD 6568.1 VEL 12.141 PTH 2.18 VHP 3.172 DPA -15.76 RAP 309.76 ECC 1.4281
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1522.5
                                                                                        112.82
                                                                           152.92
                                                               35.73
                  1 43 10 2122.47
12 26 30 5078.17
                                                -17.23
                                                                                                                                                   216.93
                                                                                                                                     21.91
                                                                                                     13 51 8
                                                                                                                       4478.2
                                                                                            74.86
                                                              224.84
                                                                            155.65
                                                24.22
        90.00
                                                                                                                                                     9.35
                                                                                                     3 33 17
                                                                                                                       1267.7
                                                                                                                                     -14.95
                                                                                           114.02
                  3 2 9 1867.68
13 50 12 4808.19
                                                                            152.41
                                                               16.49
                                               -18.35
      100.00
                                                                                          73.67 15 10 20
117.38 4 32 50
                                                                                                                                                   196.70
                                                                                                                                     22.91
                                                                                                                      4208.2
                                                                            155.29
                                                25.39
                                                              204.62
      100.00
                                                                                                                     1071.0
                                                                                                                                                   353.01
                                                                                                                                    -17.48
                  4 4 59 1670.96
15 3 51 4577.68
                                                                           150.90
                                               -21.32
28.52
                                                                 .04
      110.00
                                                                                                                                                   178.04
                                                                                            70.31
                                                                                                     16 20 9
                                                                                                                       3977.7
                                                                                                                                     25.57
                                                                           154.14
                                                              185.98
       110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 277.6 SR 313.9 SS 546.0

CRT - 4853 CRS .9360 CST - .7564

LSA 654.8 MSA 210.9 SSA 20.1
                                                                 SCT 1001.3 SCR 342.0 SC3 614.1
RRT - .5044 RRF - .5539 RTF .8294
SCB 1058.3 R23 .1122 R13 - .8366
     TOE .0938 TRA -.7577 TC3 -.5015 BAU .1760
    ROE -.2775 RRA .1084 RC3 .0680 FAU .18286
FOE 1.5768 FRA-2.6373 FC3-6.0850 BSP 2401
                                                                                                                   EL1 362.5 EL2 210.2 ALF 127.87
                                                                  SG1 1017.6 SG2 290.6 THA 169.35
    BDE .2930 BRA .7654 BC3 .5061 FSP -1949
                                                                                                                              ARRIVAL DATE MAR 24 1966
                                                                      FLIGHT TIME 100.00
LAUNCH DATE DEC 14 1965
                                                                      DISTANCE 291.485
    RL 147.25 LAL -.00 LOL 81.79 VL 28.393 GAL -9.01 AZL 86.95 HCA 135.81 SMA 133.19 ECC .18812 INC 3.0493 V1 30.256 RP 108.16 LAP 2.13 LOP 217.64 VP 38.178 GAP .50 AZP 92.19 TAL 227.34 TAP 3.15 RCA 108.14 APO 158.25 V2 35.036
   HELIOCENTRIC CONIC
    RC 86.309 GL 17.17 GP 5.57 ZAL 147.68 ZAP 91.72 ETS 357.96 ZAE 168.73 ETE 178.65 ZAC 40.73 ETC 162.42 CLP -91.73
   PLANETOCENTRIC CONIC
    C3 25.542 VHL 5.054 OLA -5.01 RAL 288.77 RAD 6568.0 VEL 12.121 PTH 2.17 VMP 3.157 OPA -15.87 RAP 307.64 ECC 1.4204
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     1518.0
                                                                                                        2 19 52
                                                                                           112.91
                                                                           152.98
                    1 44 34 2118.01
                                                 -17.11
                                                               35.46
        90.00
                                                                                                                                                    216.63
                                                                                                     13 52 30
                                                                                                                                       21.81
                                                                                             74.73
                                                                                                                        4473.6
                                                               224.53
                                                                             155.68
                                                  24.14
                   12 27 56
                                  5073.55
        90.00
                                                                                            114.11 3 34 36
73.52 15 11 42
                                                                                                                                                      9.09
                                                                                                                        1263.2
                                                                                                                                      -14.81
                     3 3 33 1863.22
                                                                            152.47
                                                                16.22
                                                  -18.22
       100.00
                                                                                                                                                    196.40
                                                                                                                        4203.6
                                                                                                                                      22.80
                                                               204.31
                                                                            155.32
                  13 51 38 4803.58
4 6 23 1666.49
15 5 17 4573.08
                                                 25.30
       100.00
                                                                                                                                                    352.76
                                                                                            117.48 4 34 10
70.15 16 21 30
                                                                                                                        1066.5
                                                                                                                                     -17.33
                                                                            150.96
                                                 -21.17
                                                               359.77
       110.00
                                                                                                                                    25.45
                                                                                                                        3973.1
                                                               185.66
                                               28.42
                                                                             154.17
       110.00
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                 SGT 1159.0 SGR 341.0 SG3 624.0 ST 318.5 SR 304.3 SS 545.0 RRT -.5731 RRF -.6099 RTF .8651 CRT -.3662 CRS .9397 CST -.8090 SGB 1208.1 R23 .1029 R13 -.8702 LSA 668.0 MSA 210.7 SSA 19.7 SG1 1176.3 SG2 275.4 THA 169.87 ELI 389.9 EL2 204.8 ALF 137.31
     TOE .1279 TRA -.8285 TC3 -.6512 BAU .2245
     ROE - .2662 RRA .1144 RC3 .0902 FAU .18478
FOE 1.5665 FRA-2.6252 FC3-6.2630 BSP 2983
BDE .2953 BRA .8364 BC3 .6574 FSP -2002
                                                                 SG1 1176.3 SG2 275.4 THA 169.87
```

FLIGHT TIME 94.00

```
LAUNCH DATE DEC 14 1965
                                                                       FLIGHT TIME 102.00
                                                                                                                               ARRIVAL DATE MAR 26 1966
    HELIOCENTRIC CONIC
                                                                      DISTANCE 297.787
     RL 147.25 LAL -.00 LOL 81.79 VL 28.372 GAL -8.90 AZL 86.99 MCA 139.01 SMA 133.03 ECC .18729 INC 3.0101 VI 30.256
RP 108.20 LAP 1.97 LOP 220.85 VP 38.150 GAP .91 AZP 92.27 TAL 226.78 TAP 5.80 RCA 108.12 APO 157.95 VZ 35.023
RC 88.623 GL 17.10 GP 5.91 ZAL 147.35 ZAP 96.74 ETS 358.41 ZAE 165.13 ETE 176.60 ZAC 38.88 ETC 162.33 CLP -96.77
    PLANETOCENTRIC CONTC.
     C3 25.050 VHL _ 5.005 CLA -5.01 RAL 289.20 RAD 6568.0 VEL 12.101 PTH 2.17 VHP 3.161 DPA -15.91 RAP 305.71 ECC 1.4123
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 46 19 2113.00
12 29 35 5068.96
        90.00
                                                                           153.09
                                                 -16.98
                                                                35.15
                                                                                         113.01 2 21 32 1513.0
                                                                                                                                     -13.72
                                                                                                                                                     27.99
                                                                                           74.59 13.54 4
114.22 3.36 16
73.38 15.13 16
117.60 4.35 49
69.99 16.23 5
        90.00
                                                  24.05
                                                               224.22
                                                                             155.76
                                                                                                                        4469.0
                                                                                                                                      21.71
                  3 5 18 1858.22
13 53 17 4798.98
4 8 8 1661.51
15 6 57 4568.45
                                                                                                                                                     216.33
       100.00
                                                -18.08
                                                               15.91
                                                                             152.59
                                                                                                                      1258.2
                                                                                                                                      -14.66
                                                                                                                                                      8.79
                                                                                                                     4199.0
1061.5
                                                                          155.40
151.07
       100.00
                                                  25.21
                                                               204.00
                                                                                                                                      22.59
                                                                                                                                                     196.10
       110.00
                                                -21.02
                                                               359.47
                                                                                                                                     -17.16
                                                                                                                                                    352.47
       110.00
                                                  28.31
                                                               185.35
                                                                             154.25
                                                                                                                        3968.5
                                                                                                                                       25.32
                                                                                                                                                     177.44
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                  SCT 1323.7 SGR 341.2 SG3 625.0
RRT -.6349 RRF -.6646 RTF .8885
SGB 1367.0 R23 .1008 R13 -.8923
    TOE .1607 TRA -.8985 TC3 -.8068 BAU .2728
                                                                                                                  ST 361.1 SR 294.1 SS 543.1
CRT -.6254 CRS .9453 CST -.8414
LSA 683.6 MSA 210.1 SSA 19.0
    RCE -.2543 RRA .1195 RC3 .1130 FAU .18398
FCE 1.5475 FRA-2.5626 FC3-6.3584 BSP 3574
BOE .3008 BRA .9064 BC3 .8147 FSP -2005
                                                                 SGI 1342.0 SG2 260.0 THA 170.34
                                                                                                                  EL1 422.3 EL2 196.2 ALF 144.15
LAUNCH DATE DEC 14 1965
                                                                      FLIGHT TIME 104.00
                                                                                                                               ARRIVAL DATE MAR 28 1966
                                                                     DISTANCE 304.060
   HELIOCENTRIC CONTC
    RL 147.25 LAL -.00 LOL 81.79 VL 28.347 GAL -8.78 AZL 87.03 MCA 142.22 SMA 132.84 ECC .18653 INC 2.9655 V1 30.256 RP 108.24 LAP 1.82 LOP 224.05 VP 38.120 GAP 1.31 AZP 92.34 TAL 226.15 TAP 8.36 RCA 108.06 APO 157.62 V2 35.010
    RC 90.946 GL 17.01 GP 6.28 TAL 146.96 TAP 101.52 ETS 358.92 TAE 161.71 ETE 175.30 TAC 37.23 ETC 162.34 CLP-101.59
   PLANETOCENTRIC CONIC
    C3 24.537 VHL 4.953 DLA -5.04 RAL 289.69 RAD 6568.0 VEL 12.079 PTH 2.16 VHP 3.183 DPA -15.85 RAP 304.00 ECC 1.4038
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 48 28 2107.22
12 31 24 5064.56
3 7 26 1852.47
13 55 6 4794.55
4 10 14 1655.83
15 8 47 4563.94
       90.00
                                                 -16.83
                                                               34.80
                                                                           153.25
                                                                                          113.12
                                                                                                        2 23 35
                                                                                                                      1507.2
                                                                                                                                     -13.55
                                                                                                                                                      27.65
        90.00
                                                                                                     13 55 48
                                                 23.97
                                                               223.92
                                                                             155.90
                                                                                             74.46
                                                                                                                        4464.6
                                                                                                                                       21.61
                                                                                                                                                     216.04
       100.00
                                                 -17.92
                                                               15.56
                                                                            152.74
                                                                                            114.33
                                                                                                        3 38 18
                                                                                                                        1252.5
                                                                                                                                     -14.49
                                                                                                                                                      8.45
                                                                                            73.25 15 15 1
117.73 4 37 50
69.83 16 24 51
       100.00
                                                25.12
                                                              203.69
                                                                            155.53
                                                                                                                                      22.59
                                                                                                                                                     195.81
      110.00
                                                -20.84
                                                              359.13
                                                                            151.23
                                                                                                                                    -16.96
25.20
                                                                                                                        1055.8
                                                                                                                                                    352.14
       110.00
                                               28.20
                                                              185.04
                                                                            154.38
                                                                                                                        3963.9
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
    TOE .1905 TRA -.9665 TC3 -.9674 BAU .3205
                                                                  SGT 1492.2 SGR 342.7 SG3 620.5
RRT -.6922 RRF -.7166 RTF ..9045
SGB 1531.1 R23 .1016 R13 -.9074
                                                                                                                   ST 403.4 SR 282.8 SS 535.5
CRT -.6685 CRS .9499 CST -.8634
    RDE -.2416 RRA .1243 RC3 .1373 FAU .18163
    FDE 1.5005 FRA-2.4754 FC3-6.4084 BSP 4173
BDE .3077 BRA .9745 BC3 .9771 FSP -2003
                                                                                                                   LSA 696.9 MSA 208.7 SSA
                                                                                                                                                       18.4
                                                                  SG1 1511.5 SG2 244.2 THA 170.72
                                                                                                                   EL1 456.2 EL2 186.0 ALF 149.24
LAUNCH DATE DEC 14 1965
                                                                     FLIGHT TIME 106.00
                                                                                                                              ARRIVAL DATE MAR 30 1966
   DISTANCE 310.305

RL 147.25 LAL -.00 LOL 81.79 VL 28.318 GAL -8.66 AZL 87.09 HCA 145.42 SMA 132.63 ECC .18583 INC 2.9140 V1 30.256

RP 108.29 LAP 1.65 LOP 227.25 VP 38.086 GAP 1.69 AZP 92.40 TAL 225.43 TAP 10.85 RCÀ 107.98 APO 157.27 V2 34.996
   HELIOCENTRIC CONTC.
    RC 93.279 GL 16.89 GP 6.69 7AL 146.53 7AP 106.04 ETS 359.51 7AE 158.50 ETE 174.31 7AC 35.82 ETC 162.49 CLP-106.15
   PLANETOCENTRIC CONIC
    C3 24.002 VHL 4.899 OLA -5.08 RAL 290.26 RAD 6568.0 VEL 12.057 PTH
                                                                                              2.16 VHP 3.220 OPA -15.68 RAP 302.54 ECC 1.3950
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 51 3 2100.38
12 33 18 5060.58
3 10 0 1845.70
13 57 2 4790.49
                                                -16.64
                                                                                                                     1500.4
       90.00
                                                                                        113.24
                                                                                                                                   -13.36
                                                               34.38
                                                                          153.45
                                                                                                       2 26 4
                                                                                                                                                     27.24
       90.00
                                                23.90
                                                              223.65
                                                                            156.09
                                                                                            74.35
                                                                                                      13 57 38
                                                                                                                       4460.6
                                                                                                                                     21.52
                                                                                                                                                    215.78
                                                                                                                     1245.7
       100.00
                                               -17.73
                                                               15.15
                                                                           152.95
                                                                                           114.47
                                                                                                        3 40 46
                                                                                                                                     -14.28
                                                                                                                                                     8.05
                                                                                          73.12 15 16 52
117.88 4 4D 15
69.69 16 26 46
       100.00
                                               25.04
                                                              203.42
                                                                           155.73
                                                                                                                      4190.5
                                                                                                                                     22.49
                                                                                                                                                    195.55
                  4 12 45 1649.22
15 10 46 4559.73
                                           -20.63
28.10
                                                                         151.44
154.57
      110.00
                                                              358.73
                                                                                                                      1049.2
3959.7
                                                                                                                                    -16.74
                                                                                                                                                    351.77
                                                                                                                                    25.08
                                                             184.75
      110.00
                                                                                                                                                    176.88
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE .2178 TRA-1.0305 TC3-1.1309 BAU .3666
                                                                  SGT 1660.3 SGR 345.6 SG3 609.3
RRT -.7435 RRF -.7656 RTF .9150
SGB 1695.9 R23 .1079 R13 -.9175
                                                                                                                  ST 444.7 SR 271.0 SS 526.8
CRT -.7019 CRS .9557 CST -.8765
    ROE -. 2285 RRA .1281 RC3 .1627 FAU .17724
    FOE 1.4469 FRA-2.3519 FC3-6.3931 BSP 4754
                                                                                                                   LSA 711.0 MSA 207.1 SSA 17.6
    BOE .3157 BRA 1.0385 BC3 1.1425 FSP -1965
                                                                  SGI 1680.5 SG2 228.3 THA 171.04
                                                                                                                   EL1 490.5 EL2 175.0 ALF 153.15
LAUNCH DATE DEC 14 1965
                                                                      FLIGHT TIME 108.00
                                                                                                                              ARRIVAL DATE APR 1 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 316.523
   RL 147.25 LAL -.00 LOL 81.79 VL 28.286 GAL -8.52 A7L 87.15 HCA 148.62 SMA 132.39 ECC .18517 INC 2.8535 V1 30.256
RP 108.33 LAP 1.49 LOP 230.44 VP 38.050 GAP 2.06 A7P 92.44 TAL 224.64 TAP 13.26 RCA 107.87 APO 156.90 VZ 34.983
RC 95.621 GL 16.72 GP 7.17 ZAL 146.07 ZAP 110.28 ETS .20 ZAE 155.50 ETE 173.44 ZAC 34.64 ETC 162.84 CLP-110.45
  PLANETOCENTRIC CONIC
   C3 23.443 VHL 4.842 DLA -5.16 RAL 290.89 RAD 6568.0 VEL 12.034 PTH 2.15 VHP 3.271 DPA -15.39 RAP 301.34 ECC 1.3858
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 54 11 2092.06
12 35 12 5057.38
3 13 6 1837.51
13 58 59 4787.16
4 15 46 1641.32
15 12 48 4556.12
       90.00
                                                                                         113.40 2 29 4
                                                              33.87
                                                                         153.70
                                                                                                                     1492.1
                                                -16.42
                                                                                                                                    -13.11
                                                                                                                                                     26.75
       90.00
                                                 23.84
                                                                                                      13 59 30
                                                              223.43
                                                                            156.34
                                                                                            74.25
                                                                                                                       4457.4
                                                                                                                                     21.45
                                                                                                                                                    215.58
      100.00
                                               -17.50
                                                               14.65
                                                                           153.19
                                                                                           114.63
                                                                                                                       1237.5
                                                                                                                                     -14.03
                                                                                                                                                      7.57
                                                                                          73.02 15 18 46
118.06 /4 43 7
      100.00
                                                 24.98
                                                              203.19
                                                                           155.97
                                                                                                                       4187.2
                                                                                                                                     22.41
                                                                                                                                                    195.33
      110.00
                                               -20.38
                                                              358.25
                                                                           151.69
                                                                                                                                    -16.47
                                                                                                                                                    351.31
      110.00
                                              28.02
                                                              184.50
                                                                           154.82
                                                                                            69.57 16 28 44
                                                                                                                       3956.1
                                                                                                                                      24.98
                                                                                                                                                   176.65
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                SCT 1828.0 SCR 350.6 SC3 594.9 ST 483.1 SR 258.3 SS 512.8 RRT -.7905 RRF -.8112 RTF .9225 CRT -.7264 CRS .9605 CST -.8849 SC8 1861.3 R23 .1175 R13 -.9247 LSA 721.7 MSA 204.9 SSA 16.8 SC1 1849.2 SC2 212.3 THA 171.26 EL1 522.7 EL2 164.1 ALF 156.30
   TOE .2403 TRA-1.0906 TC3-1.2987 BAU .4114
   ROE -.2146 RRA .1315 RC3 .1905 FAU .17200
FOE 1.3713 FRA-2.2175 FC3-6.3518 BSP 5344
BOE .3222 BRA 1.0985 BC3 1.3126 FSP -1929
```

ARRIVAL DATE APR 3 1966

JPL TM 33-99

LAUNCH DATE DEC 14 1965

DISTANCE 322.715 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 28.252 GAL -8.38 A7L 87.22 HCA 151.81 SNA 132.13 ECC .18457 INC 2.7808 VI 30.256 RP 108.37 LAP 1.31 LOP 233.63 VP 38.013 GAP 2.41 A7P 92.45 TAL 223.79 TAP 15.60 RCA 107.74 APO 156.52 V2 34.970 RC 97.969 GL 16.48 GP 7.75 TAL 145.57 ZAP 114.23 ETS 1.01 ZAE 152.73 ETE 172.57 ZAC 33.70 ETC 163.44 CLP-114.47 PLANETOCENTRIC CONIC C3 22.858 VHL 4.781 DLA -5.30 RAL 291.59 RAD 6567.9 VEL 12.010 PTH 2.14 VHP 3.334 DPA -14.95 RAP 300.40 ECC 1.3762 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 58 2 2081.66 12 36 59 5055.47 3 16 52 1827.32 14 0 50 4785.04 153.98 113.59 2 32 43 1481.7 -12.81 26.14 -16.14 33.24 74.20 14 1 15 4455.5 21.41 215.45 23.81 223.30 156.65 90.00 114.83 3 47 19 72.96 15 20 35 118.27 4 46 35 69.48 16 30 42 1227.3 -13.72 6.98 100.00 -17.21 14.03 153.48 4185.0 22.36 100.00 24.94 203.05 156.29 4 19 23 1631.59 15 14 48 4553.53 -20.06 27.96 -16.13 24.91 151.97 1031.6 3953.5 350.76 357.67 110.00 184.33 155.14 110.00 15 14 48 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1991.4 SCR 358.2 SC3 576.1 RRT -.8313 RRF -.8528 RTF .9273 SCB 2023.4 R23 .1337 R13 -.9294 SCI 2013.8 SC2 196.9 THA 171.41 ST 518.2 SR 245.3 SS 497.7 CRT -.7457 CRS .9663 CST -.8880 TOE .2587 TRA-1.1441 TC3-1.4691 BAU .4540 ROE -.2006 RRA .1340 RC3 .2207 FAU .16546 FOE 1.2928 FRA-2.0597 FC3-6.2668 BSP 5900 BOE .3274 BRA 1.1520 BC3 1.4856 FSP -1864 LSA 731.4 MSA 203.2 SSA 15.9 EL1 552.5 EL2 153.3 ALF 158.86 ARRIVAL DATE APR 5 1966 FLIGHT TIME 112.00 HELIOCENTRIC CONIC DISTANCE 328.882 RL 147.25 LAL -.00 LOL 81.79 VL 28.214 GAL -8.23 A7L 87.31 MCA 155.01 SMA 131.86 ECC .18401 INC 2.6913 V1 30.256
RP 108.41 LAP 1.14 LOP 236.82 VP 37.973 GAP 2.75 A7P 92.44 TAL 222.87 TAP 17.87 RCA 107.59 APO 156.12 V2 34.957
RC 100.323 GL 16.14 GP 8.48 7AL 145.04 7AP 117.89 ETS 2.00 7AE 150.17 ETE 171.62 7AC 32.99 ETC 164.37 CLP-118.23 PLANETOCENTRIC CONIC C3 22.244 VHL 4.716 DLA -5.52 RAL 292.37 RAD 6567.9 VEL 11.984 PTH 2.14 VHP 3.407 DPA -14.32 RAP 299.72 ECC 1.3661 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 2 47 2068.20 12 38 27 5055.69 3 21 31 1814.21 14 2 24 4784.91 4 23 46 1619.24 15 16 37 4552.65 1468.2 113.63 2 37 15 25.35 -15.77 32.42 154.30 90.00 74.21 14 2 43 4455.7 215.47 23.81 223.32 157.03 3 51 46 1214.2 115.07 -16.83 13.24 153.80 72.95 15 22 9 118.54 4 50 47 4184.9 22.36 195.19 24.93 203.04 156.67 100.00 1019.2 350.06 118.54 -19.66 356.94 152.29 110.00 69.45 16 32 30 3952.6 24.88 27.94 184.27 155.53 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2151.8 SGR 369.8 SG3 555.8 RRT -.8670 RRF -.8899 RTF .9306 SGB 2183.3 R23 .1550 R13 -.9326 SG1 2175.7 SG2 182.3 THA 171.46 ST 548.3 SR 231.5 SS 477.5 CRT -.7593 CRS .9712 CST -.8882 TOE .2706 TRA-1.1915 TC3-1.6448 BAU .4950 ROE -.1860 RRA .1362 RC3 .2555 FAU .15857 LSA 735.9 MSA 200.9 SSA 14.9 FOE 1.1975 FRA-1.8992 FC3-6.1715 BSP 6458 BOE .3284 BRA 1.1993 BC3 1.6645 FSP -1806 EL1 577.7 EL2 143.0 ALF 161.02 ARRIVAL DATE APR 7 1966 FLIGHT TIME 114.00 LAUNCH DATE DEC 14 1965 015TANCE 335.025 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 28.175 GAL -8.08 A7L 87.42 MCA 158.20 SHA 131.56 ECC .18350 INC 2.5776 V1 30.256 RP 108.44 LAP .96 LOP 240.01 VP 37.932 GAP 3.08 A7P 92.39 TAL 221.89 TAP 20.08 RCA 107.42 APO 155.71 V2 34.945 RC 102.682 GL 15.66 GP 9.41 TAL 144.51 TAP 121.25 ETS 3.23 TAE 147.80 ETE 170.48 TAC 32.49 ETC 165.71 CLP-121.73 PLANETOCENTRIC CONIC C3 21.593 VHL 4.647 DLA -5.86 RAL 293.24 RAD 6567.9 VEL 11.957 PTH 2.13 VHP 3.491 DPA -13.45 RAP 299.26 ECC 1.3554 LNCH ATHTH LNCH TIME LET TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 154.66 114.14 2 43 2 1450.2 157.50 74.31 14 3 36 4459.4 -11.88 90.00 2 8 52 2050.16 90.00 12 39 17 5059.37 100.00 3 27 26 1796.71 100.00 14 3 24 4788.06 110.00 4 29 19 1602.94 110.00 15 18 0 4554.59 24.29 31.33 -15.27 215.71 21.50 223.57 23.88 1196.7 5.20 115.39 3 57 22 -12.77 154.15 -16:32 12.19 73.05 15 23 12 118.88 4 56 2 69.51 16 33 55 195.39 4188.1 22.44 25.00 157.15 203.26 349.14 1002.9 -15.13 -19.13 152.64 355.97 24.94 176.55 3954.6 156.02 184.40 27.98 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 571.9 SR 217.5 SS 454.3 CRT -.7677 CRS .9765 CST -.8834 LSA 735.3 MSA 199.5 SSA 13.8 EL1 597.1 EL2 133.5 ALF 162.84 SCT 2307.2 SCR 386.6 SC3 533.0 RRT -.8958 RRF -.9220 RTF .9325 SCB 2339.3 R23 .1848 R13 -.9346 TOE .2750 TRA-1.2308 TC3-1.8262 BAU .5341 ROE -.1713 RRA .1377 RC3 .2961 FAU .15098 FOE 1.0964 FRA-1.7268 FC3-6.0534 BSP 6990 BOE .3240 BRA 1.2385 BC3 1.8501 FSP -1731 SG1 2333.2 SG2 169.9 THA 171.42 ARRIVAL DATE APR 9 1966 FLIGHT TIME 116.00 LAUNCH DATE DEC 14 1965 DISTANCE 341.145 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 28.134 GAL -7.91 AZL 87.57 MCA 161.39 SMA 131.26 ECC .18304 INC 2.4271 VI 30.256 RP 108.48 LAP .77 LOP 243.20 VP 37.890 GAP 3.39 AZP 92.30 TAL 220.85 TAP 22.24 RCA 107.23 APO 155.29 V2 34.932 RC 105.043 GL 14.96 GP 10.66 ZAL 143.99 ZAP 124.30 ETS 4.82 ZAE 145.58 ETE 169.04 ZAC 32.18 ETC 167.63 CLP-124.99 PLANETOCENTRIC CONIC C3 20.897 VHL 4.571 DLA -6.41 RAL 294.20 RAD 6567.8 VEL 11.928 PTH 2.12 VHP 3.585 DPA -12.23 RAP 298.99 ECC 1.3439 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 50 40 14 3 24 4 4 45 1424.9 -11.13 2 16 55 2024.87 12 38 55 5068.91 155.06 114.56 -14.56 29.81 2024.87 90.00 216.33 4468.9 21.71 158.10 74.59 24.05 224.21 90.00 -12.01 3 35 13 1772.30 14 3 19 4796.71 1172.3 154.55 115.82 -15.61 10.73 100.00 73.31 15 23 15 119.34 5 2 49 4196.7 22.64 195.95 157.75 25.17 203.84 100.00 4 36 29 1580.48 15 18 32 4561.30 980.5 -14.34 153.03 119.34 -18.39 354.66 110.00 69.74 16 34 33 3961.3 25.12 156.63 15 18 32 28.14 184.86 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2459.1 SGR 411.7 SG3 509.7 RRT -.9183 RRF -.9486 RTF ..9336 SGB 2493.3 RZ3 ..2213 R13 -.9359 SG1 2488.1 SG2 161.1 THA 171.22 ST 586.1 SR 202.5 SS 423.0 CRT - 7684 CRS .9803 CST - 8743 TDE .2678 TRA-1.2613 TC3-2.0179 BAU .5720 RDE -.1559 RRA .1391 RC3 .3469 FAU .14332 FDE .9747 FRA-1.5546 FC3-5.9373 BSP 7522 LSA 724.1 MSA 197.5 SSA 12.6 EL1 607.3 EL2 125.1 ALF 164.45 BOE .3099 BRA 1.2690 BC3 2.0475 FSP -1661

FLIGHT TIME 110.00

LAUNCH DATE DEC 14 1965 FLIGHT TIME 118.00 ARRIVAL DATE APR 11 1966 DISTANCE 347.244 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 28.090 GAL -7.74 A7L 87.78 HCA 164.57 SMA 130.95 ECC .18264 INC 2.2170 VI 30.256 RP 108.52 LAP .59 LOP 246.38 VP 37.847 GAP 3.69 A7P 92.14 TAL 219.77 TAP 24.34 RCA 107.03 APO 154.86 V2 34.920 RC 107.406 GL 13.88 GP 12.42 TAL 143.51 ZAP 127.00 ETS 6.99 ZAE 143.43 ETE 167.09 ZAC 32.06 ETC 170.41 CLP-128.04 PLANETOCENTRIC CONIC C3 20.140 VHL 4.488 OLA -7.31 RAL 295.30 RAD 6567.8 VEL 11.896 PTH 2.11 VHP 3.693 DPA -10.46 RAP 298.85 ECC 1.3315 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 28 14 1987.36 12 36 19 5088.77 3 46 4 1736.26 14 1 10 4815.10 115.14 3 1 22 75.18 14 1 8 -13.49 27.58 155.51 1387.4 90.00 225.56 158.88 4488.8 22.13 90.00 24.41 -14.53 154.99 116.42 4 15 1 1136.3 -10.86 8.60 100.00 116.42 4 15 1 73.88 15 21 25 119.96 5 12 6 70.26 16 33 42 4215.1 205.09 23.06 158.54 100.00 25.52 346.06 4 46 18 1547.66 352.75 153.45 947.7 -13.17 110.00 -17.28 157.46 3976.5 25.54 185.89 110.00 15 17 26 4576.46 28.49 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 2603.1 SGR 448.5 SG3 483.7 RRT -.9330 RRF -.9693 RTF ..9336 SGB 2641.5 R23 .2638 R13 -.9362 ST 587.8 SR 186.9 SS 383.6 CRT -.7583 CRS .9839 CST -.8564 TDE .2456 TRA-1.2783 TC3-2.2201 BAU .6080 RDE -.1399 RRA .1398 RC3 .4123 FAU .13491 FDE .8369 FRA-1.3682 FC3-5.7991 8SP 8007 BDE .2826 BRA 1.2859 BC3 2.2581 FSP -1572 LSA 699.3 MSA 196.0 55A 11.4 5G1 2636.7 5G2 159.3 THA 170.83 EL1 605.4 EL2 118.3 ALF 165.90 FLIGHT TIME 120.00 ARRIVAL DATE APR 13 1966 LAUNCH DATE DEC 14 1965 **DISTANCE 353.321** HELIOCENTRIC CONIC

RL 147.25 LAL -.00 LOL 81.79 VL 28.046 GAL -7.56 A7L 88.10 HCA 167.76 SMA 130.62 ECC .18228 INC 1.9012 V1 30.256 RP 108.56 LAP .40 LOP 249.56 VP 37.803 GAP 3.98 A7P 91.86 TAL 218.63 TAP 26.39 RCA 106.81 APO 154.43 V2 34.909 RC 109.770 GL 12.12 GP 15.08 ZAL 143.13 ZAP 129.22 ETS 10.13 ZAE 141.21 ETE 164.28 ZAC 32.14 ETC 174.59 CLP-130.90 PLANETOCENTRIC CONIC C3 19.298 VHL 4.393 OLA -8.87 RAL 296.58 RAD 6567.8 VEL 11.861 PTH 2.10 VMP 3.824 DPA -7.78 RAP 298.76 ECC 1.3176 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 45 35 1927.14 -11.72 24.04 156.06 115.96 3 17 42 1327.1 -8.13 17.20 13 54 42 4528.7 22.96 90.00 12 29 14 5128.70 25.07 228.30 160.00 76.39 220.27 117.26 4 30 34 75.07 15 15 46 1078.7 100.00 4 2 36 1678.67 -12.76 5.24 155.53 117.26 -9.00 358.47 13 54 54 207.66 159.68 4252.4 23.89 199.62 100.00 4852.40 26.20 5 0 59 895.8 -11.29 343.22 1495.82 -15.49 349.80 153.96 120.86

120.86 5 25 55 71.38 16 29 47 4008.0 110.00 15 12 59 4608.02 29.20 188.08 158.66 26.38 180.03 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE .1922 TRA-1.2803 TC3-2.4475 BAU .6448

RDE -.1204 RRA .1407 RC3 .5060 FAU .12609

FDE .6501 FRA-1.1767 FC3-5.6566 BSP .8529

BDE .2268 BRA 1.2880 BC3 2.4993 FSP -1486 SGT 2746.5 SGR 506.7 SG3 455.8 RRT -.9407 RRF -.9842 RTF .9334 ST 569.3 SR 167.1 SS 323.4 CRT -.7196 CRS .9845 CST -.8226 SGB 2792.8 R23 .3029 R13 -.9367 LSA 648.0 MSA 191.3 55A 10.5 SG1 2787.7 SG2 169.4 THA 170.12 EL1 582.3 EL2 113.5 ALF 167.59

LAUNCH DATE DEC 14 1965

FLIGHT TIME 122.00

ARRIVAL DATE APR 15 1966

EL1 536.1 EL2 106.7 ALF 170.68

DISTANCE 359.378 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 28.000 GAL -7.37 AZL 88.63 MCA 170.94 SMA 130.29 ECC .18198 INC 1.3671 V1 30.256
RP 108.59 LAP .22 LOP 252.73 VP 37.758 GAP 4.27 AZP 91.35 TAL 217.45 TAP 28.39 RCA 106.58 APO 154.00 V2 34.897
RC 112.133 GL 8.91 GP 19.50 ZAL 142.92 ZAP 130.58 ETS 15.05 ZAE 138.49 ETE 159.90 ZAC 32.62 ETC 181.39 CLP-133.64 PLANETOCENTRIC CONIC C3 18.341 VHL 4.283 OLA -11.84 RAL 298.22 RAG 6567.7 VEL 11.820 PTH 2.09 VHP 4.007 OPA -3.35 RAP 298.51 ECC 1.3019 LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.15 3 46 33 79.14 13 38 32 118.50 4 57 49 77.76 15 1 12 122.18 5 49 37 73.95 16 18 46 1217.5 156.97 3 16 15 1817.51 12 11 38 5214.41 4 31 35 1574.48 -8.38 17.72 90.00 234.27 161.92 4614.4 24.55 226.04 26.31 90.00 156.41 974.5 -5.56 352.65 -9.44 359.29 100.00 13 38 59 4932.67 5 26 13 1403.35 15 0 50 4676.57 4332.7 205.02 27.48 161.65 25.52 213.27 100.00 -12.20 154.76 803.3 338.25 344.66 110.00 160.75 4076.6 192.93 110.00 30.59 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 529.3 SR 136.5 SS 230.0 CRT -.6109 CRS .9757 CST -.7588 LSA 567.3 MSA 172.4 SSA 10.3 TOE .0833 TRA-1.2504 TC3-2.7007 BAU .6812 SGT 2878.3 SGR 601.4 SG3 419.1 FOE .0918 RRA .1393 RC3 .6504 FAU .11490 FOE .3892 FRA -.9470 FC3-5.4233 BSP 8988 BOE .1239 BRA 1.2581 BC3 2.7779 FSP -1361 RRT -.9404 RRF -.9936 RTF .9323 SGB 2940.5 R23 .3309 R13 -.9369

FLIGHT TIME 124.00 ARRIVAL DATE APR 17 1966 LAUNCH DATE DEC 14 1965 **DISTANCE 365.414**

SG1 2933.6 SG2 200.7 THA 168.83

HELIOCENTRIC CONIC

RL 147.25 LAL -.00 LOL 81.79 VL 27.953 GAL -7.17 AZL 89.73 HCA 174.12 SMA 129.96 ECC .18173 INC .2575 V1 30.256
RP 108.63 LAP .03 LOP 255.91 VP 37.713 GAP 4.54 AZP 90.27 TAL 216.23 TAP 30.34 RCA 106.34 APO 153.57 V2 34.886 1.78 GP 28:06 ZAL 142.70 ZAP 129:74 ETS 23.56 ZAE 133.86 ETE 152.48 ZAC 34.51 ETC 193.73 CLP-136.42 RC 114.493 GL PLANETOCENTRIC CONIC

C3 17.371 VHL 4.168 DLA -18.61 RAL 300.81 RAD 6567.7 VEL 11.779 PTH 2.08 VHP 4.362 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 29 34 1560.19 -.17 3.26 159.81 118.32 4 55 34 960.2 3.61 356.63 4 29 34 1560.19 11 19 0 5446.43 87.28 12 49 46 242.35 4846.4 28.20 250.95 166.38 27.52 90.00 5 39 39 1334.01 12 51 35 5147.85 6 1 53 734.0 345.95 159.13 119.86 2.57 339.43 -1.41 100.00 85.69 14 17 23 4547.8 28.70 220.20 29.61 228.89 166.28 100.00 6 43 22 596.9 327.41 1196.86 -4.51 333.62 157.20 123.92 -.02 110.00 6 23 25 123.92 6 43 22 81.49 15 45 16 4257.8 31.70 14 24 18 4857.75 33.23 206.38 165.81 197.49 110.00 ORBIT DETERMINATION ACCURACY

DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 3013.1 SGR 777.1 SG3 360.8 RRT -.9329 RRF -.9983 RTF .9319 ST 569.3 SR 66.2 55 120.5 CRT -.6185 CRS .7696 CST -.9541 TOE -. 1853 TRA-1.1572 TC3-2.9861 BAU .7246 RDE -.0193 RRA .1295 RC3 .9040 FAU .09791 FDE -. 0645 FRA -. 6477 FC3-4.8795 BSP 9572 SGB 3111.7 R23 .3381 R13 -.9393 LSA 582.3 MSA 59.2 55A 20.1 BDE .1863 BRA 1.1645 BC3 3.1200 FSP -1178 SG1 3099.8 SG2 272.0 THA 166.37 EL1 570.8 EL2 51.9 ALF 175.85

ARRIVAL DATE APR 19 1966

```
FLIGHT TIME 126.00
LAUNCH DATE DEC 14 1965
                                                                     DISTANCE 371.424
   RL 147.25 LAL -.00 LOL 81.79 VL 27.904 GAL -6.97 AZL 93.39 HCA 177.28 SHA 129.61 ECC .18153 INC 3.3899 VI 30.256 RP 108.66 LAP -.16 LOP 259.08 VP 37.668 GAP 4.80 AZP 86.61 TAL 214.96 TAP 32.24 RCA 106.09 APO 153.14 V2 34.875 RC 116.852 GL -21.63 GP 49.29 TAL 136.19 ZAP 120.47 ETS 39.42 ZAE 120.48 ETE 140.57 ZAC 44.07 ETC 217.51 CLP-141.03
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 19.782 VML 4.448 CLA -40.97 RAL 309.17 RAD 6567.8 VEL 11.881 PTH 2.11 VMP 5.846 DPA 25.95 RAP 292.88 ECC 1.3256
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       9.80
                                                                                         121.44
                                                                                                                        931.3
                   5 1 31 1531.30
11 53 43 5536.28
                                                  27.76
                                                               17.40
                                                                            181.85
                                                                                                        5 27 2
       59.06
                                                                                                                                        31.71
                                                                                                                                                     249.74
                                                                                            121.42 13 25 59
                                                                                                                         4936.3
                                                               257.35
                                                                             181.85
                                                  21.77
      120.94
                                                                                                                                                      9.80
                                                                                                                                        31.70
                                                                17.40
                                                                             181.85
                                                                                            121.44
                                                                                                        5 27 2
                                                                                                                         931.3
                  5 1 31 1531.30
11 53 43 5536.28
                                                  27.76
       59.06
                                                                                         121.42 13 25 59
121.44 5 27 2
121.42 13 25 59
                                                                                                                                                     249.74
                                                                                                                                        31.71
                                                                                                                         4936.3
                                                                             181.85
                                                               257.35
       120.94
                                                  27.77
                                                                                                                                        31.70
                   5 1 31 1531.30
11 53 43 5536.28
                                                                                                                         931.3
                                                  27.76
                                                                17.40
                                                                             181.85
       59.06
                                                                                                                                        31.71
                                                                                                                        4936.3
                                                              257.35
                                                                             181.85
                                                 27.77
       120.94
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1595.7 SR 455.3 SS 581.6
CRT -.9749 CRS .9994 CST -.9821
                                                                  SGT 3128.0 SGR 1086.0 SG3 217.7
RRT -.9134 RRF -.9975 RTF ..9381
SGB 3311.2 R23 .3065 R13 -.9516
    TOE-1.1999 TRA -.7613 TC3-2.6858 BAU .7684
    ROE .3526 RRA .0205 RC3 1.1083 FAU .05734
                                                                                                                     LSA 1753.1 MSA 135.9 SSA
                                                                                                                                                          1.5
    FOE -.8908 FRA -.1293 FC3-2.5092 BSP 10058
                                                                                                                     ELI 1656.5 ELZ 97.6 ALF 164.40
                                                                  SG1 3284.3 SG2 421.1 THA 162.10
    BOE 1.2506 BRA .7616 BC3 2.9055 FSP -706
                                                                                                                                ARRIVAL DATE APR 21 1966
                                                                       FLIGHT TIME 128.00
LAUNCH DATE DEC 14 1965
                                                                      DISTANCE 377.547
   RL 147.25 LAL -.00 LOL 81.79 VL 27.855 GAL -6.78 AZL 52.84 MCA 180.58 SMA 129.27 ECC .18169 INC37.1379 V1 30.256 RP 108.69 LAP -.35 LOP 262.25 VP 37.622 GAP 5.09 AZP 127.16 TAL 213.74 TAP 34.32 RCA 105.78 APO 152.76 V2 34.865 RC 119.206 GL 62.29 GP -76.84 ZAL 99.50 ZAP 98.49 ETS 210.56 ZAE 78.21 ETE 130.20 ZAC 96.06 ETC 30.03 CLP 130.41
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 356.173 VHL 18.873 DLA 45.27 RAL 306.04 RAD 6572.0 VEL 21.851 PTH 3.23 VHP 21.398 DPA -67.94 RAP 131.20 ECC 6.8617
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  16 18 1 4849.21

0 12 18 3410.91

16 18 1 4849.21

0 12 18 3410.91

16 18 1 4849.21

0 12 18 3410.91
                                                                                           43.83 17 38 50
                                                  -3.39
                                                              224.92
                                                                           212.81
       51.74
                                                                                                                         2810.9
                                                                                                                                         -9.12
                                                                                              43.83
                                                                                                         199
                                                  -3.37
                                                               113.00
                                                                             212.80
       128.26
                                                                                                                                                      219.74
                                                                                              43.83 17 38 50
43.83 1 9 9
                                                                                                                         4249.2
                                                                                                                                        -9.13
                                                               224.92
                                                                             212.81
                                                  -3.39
        51.74
                                                                                                                                                      107.82
                                                                                                                         2810.9
                                                                                                                                         -9.12
                                                                                              43.83
                                                  -3.37
                                                               113.00
                                                                             212.80
       128.26
                                                                                              43.83 17 38 50
                                                                                                                                                      219.74
                                                                                                                                        -9.13
                                                                                                                         4249.2
                                                  -3.39
                                                               224.92
                                                                             212.51
        51.74
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                         -9.12
                                                                                                                         2810.9
                                                  -3.37
                                                               113.00
                    0 12 18
                                 3410.91
      128.26
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 1090.7 SGR 3448.3 SG3 60.0
RRT -.8155 RRF -.9917 RTF .8832
                                                                                                                     ST 1065.2 SR 3173.1 SS 1232.4
    TOE 3.5003 TRA .5591 TC3 .0020 BAU .9437
                                                                                                                     CRT -.9837 CRS ..9992 CST -.9901
LSA 3562.1 MSA 183.8 SSA ..4
    RO-10.3866 RRA 2.6823 RC3 -.1982 FAU-.01307
    FOE 2.1900 FRA -.3612 FC3 .0318 BSP 8564
BDE10.9606 BRA 2.7400 BC3 .1982 FSP 119
                                                                   SGB 3616.7 R23 -.0833 R13 -.9965
                                                                                                                     EL1 3342.2 EL2 182.0 ALF 108.33
                                                                   SG1 3564.7 SG2 610.6 THA 104.91
                                                                                                                               ARRIVAL DATE APR 23 1965
                                                                      FLIGHT TIME 130.00
LAUNCH DATE DEC 14 1965
                                                                      DISTANCE 383.449
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.806 GAL -6.54 AZL 81.61 HCA 183.67 6MA 128.92 ECC .18145 INC 8.3854 V1 30.256 RP 108.72 LAP -.53 LOP 265.42 VP 37.576 GAP 5.32 AZP 98.37 TAL 212.35 TAP 36.02 RCA 105.53 APO 152.32 V2 34.856
                       43.91 GP -38.60 TAL 121.01 TAP 129.15 ETS 316.30 TAE 121.19 ETE 210.84 TAC 62.72 ETC 126.88 CLP-143.88
    RC 121.557 GL
   PLANETOCENTRIC CONIC
    C3 33.751 VHL 5.810 DLA 23.88 RAL 297.70 RAD 6568.3 VEL 12.455 PTH 2.25 VHP 5.245 DPA -59.64 RAP 317.42 ECC 1.5555
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              78.46 22 51 57
61.77 18 30 1
                                                                           177.40
                                                                                                                       2603.9
                                                                                                                                       -21.37
        90.00 21 58 33 3203.91
90.00 17 21 14 4127.04
100.00 23 39 22 2878.87
                                                -26.04
                                                              111.02
                                                                                                                         3527.0
                                                                                                                                        -6.07
                                                                                                                                                      151.24
                                                  -2.32
                                                               167.91
                                                                             168.63
                                                                                              79.92 24 27 21
60.11 19 28 34
83.42 2 12 34
56.05 19 56 38
                                                                                                                         2278.9
                                                                                                                                        -29.39
                                                 -28.29
                                                                87.59
                                                                             177.89
       100.00
                                                                                                                                                      145.59
                                                                                                                         3327.3
                                                                                                                                        -4.28
                                                   -.31
                                                                152.12
                                                                             167.52
                    18 23 6
                                 3927.30
       100.00
                                                                                                                         1944.5
                                                                                                                                        -34.16
                                                                                                                                                       53.90
                   1 30 10 2544.51
18 52 43 3834.43
                                                                             178.80
                                               -33.62
                                                                 63.10
       110.00
                                                                                                                                                      136.02
                                                                                                                        3234.4
                                                                                                                                         -.23
                                                                             164.67
                                                                142.24
                                                  4.26
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3498.0 SGR 519.9 SG3 256.1

RRT .8142 RRF .9554 RTF .9477

SGB 3536.4 R23 .3085 R13 .9509

SGI 3523.7 SG2 299.6 THA 6.95
                                                                                                                     ST 2137.4 SR 381.1 SS 919.9
CRT .9585 CRS -.9918 CST -.9871
     TDE 2.0665 TRA-1.9829 TC3-1.6122 BAU .7403
     RDE .3862 RRA -.0185 RC3 -.3041 FAU .06548
                                                                                                                     LSA 2352.0 MSA 167.5 SSA .8
EL1 2168.4 EL2 107.1 ALF 9.72
     FDE 2.0363 FRA -. 9004 FC3-1.6796 BSP 10886
     BDE 2.1023 BRA 1.9829 BC3 1.6406 FSP -867
                                                                                                                                ARRIVAL DATE APR 25 1966
                                                                       FLIGHT TIME 132.00
 LAUNCH DATE DEC 14 1965
                                                                      DISTANCE 389.413
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.756 GAL -6.31 A7L 83.95 HCA 186.84 SMA 128.57 ECC .18146 INC 6.0542 VI 30.256 RP 108.75 LAP -.72 LOP 268.59 VP 37.530 GAP 5.56 A7P 96.01 TAL 210.98 TAP 37.81 RCA 105.24 APO 151.91 V2 34.846 RC 123.903 GL 35.83 GP -22.40 TAL 125.36 TAP 138.93 ETS 329.26 TAE 129.45 ETE 201.46 TAC 52.64 ETC 137.01 CLP-144.62
    PLANETOCENTRIC CONIC
     C3 24.706 VHL 4.970 DLA 16.08 RAL 299.93 RAD 6568.0 VEL 12.086 PTH 2.16 VHP 4.608 DPA -43.54 RAP 312.93 ECC 1.4066
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               93.16 24 25 18
62.27 17 11 52
                                                                                                                       2190.4
                                                                                                                                                        72.53
                                                                                                                                        -27.42
                                                                             170.91
                   23 38 47 2790.37
15 58 47 4384.78
                                                  -28.15
                                                                81.12
                                                                                                                                          2.21
                                                                                                                          3784.8
                                                                              163.46
                                                                182.32
                                                    5.97
                                                                                               94.49 1 54 40
60.92 18 20.22
                                                                                                                                                        50.91
                                                                                                                                         -28.65
                  1 13 1 2499.15
17 11 10 4151.23
2 41 8 2223.45
17 59 33 3999.70
                                                                                                                          1899.2
                                                                 59.59
                                                                              170.80
                                                  -29.58
        100.00
                                                                                                                                                       157.89
                                                                                                                          3551.2
                                                                                                                                           3.30
                                                                164.47
                                                                              162.77
                                                    7.23
                                                                                                                                                        29.25
                                                                                               98.09 3 18 12
57.27 19 6 12
                                                                                                                                       -31.85
                                                                  38.17
                                                                              170.31
                                                                                                                          1623.4
                                                  -33.33
        110.00
                                                                                                                                          6.07
                                                                151.02
                                                                              160.81
                                                                                                                          3399.7
                                                  10.46
        110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1814.7 SR 216.4 SS 853.9
CRT .9291 CRS -.9864 CST -.9772
                                                                 SGT 3573.4 SGR 307.8 SG3 324.0 ST 1814.7 SR 216.4 SS 853.9

RRT .7659 RRF .9359 RTF .9368 CRT .9291 CRS -.9864 CST -.9772

SGB 3586.7 R23 .3363 R13 .9381 LSA 2009.2 MSA 179.5 SSA 2.2

SGI 3581.2 SGZ 197.5 THA 3.79 EL1 1825.8 EL2 79.5 ALF 6.33
     TOE 1.4743 TRA-1.7570 TC3-2.3459 BAU .7782
     ROE .1876 RRA .0137 RC3 -.2197 FAU .08389
FOE 1.8402 FRA -.8446 FC3-2.9395 BSP 11070
     BDE 1.4862 BRA 1.7570 BC3 2.3562 FSP -1081
```

```
LAUNCH DATE DEC 14 1965
                                                                          FLIGHT TIME 134.00
                                                                                                                                     ARRIVAL DATE APR 27 1966
    HELIOCENTRIC CONIC
                                                                          DISTANCE 395.366
     RL 147.25 LAL -.00 LOL 81.79 VL 27.705 GAL -6.07 AZL 84.80 MCA 190.00 SMA 128.23 ECC .18156 INC 5.1962 V1 30.256 RP 108.78 LAP -.90 LOP 271.76 VP 37.485 GAP 5.79 AZP 95.12 TAL 209.58 TAP 39.58 RCA 104.94 APO 151.51 V2 34.838 RC 126.245 GL 32.33 GP -15.35 ZAL 126.21 ZAP 143.22 ETS 336.13 ZAE 131.59 ETE 195.53 ZAC 49.56 ETC 143.01 CLP-146.16
    PLANETOCENTRIC CONIC
     C3 21.776 VHL 4.667 DLA 12.92 RAL 301.81 RAD 6567.9 VEL 11.965 PTH 2.13 VHP 4.537 DPA -36.32 RAP 312.59 ECC 1.3584
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 18 41 2648.02
15 37 49 4465.60
1 46 44 2364.09
16 52 27 4224.76
3 10 3 2103.36
17 45 37 4058.24
        90.00
                                                    -27.19
                                                                   70.82
                                                                                169.03
                                                                                                 98.23
                                                                                                             1 2 49
                                                                                                                              2048.0
                                                                                                                                             -25.77
                                                                                                                                                              62.44
        90.00
                                                     8.50
                                                                  186.91
                                                                                 163.12
                                                                                                   62.89
                                                                                                             16 52 14
                                                                                                                               3865.6
                                                                                                                                               4.80
                                                                                                                                                             180.18
       100.00
                                                    -28.46
                                                                   49.72
                                                                                 168.81
                                                                                                   99.56
                                                                                                             2 26 8
                                                                                                                               1764.1
                                                                                                                                              -26.84
                                                                                                                                                              41.29
                                                                                                61.57 18 2 52
103.23 3 45 6
57.96 18 53.16
                                                                                                                               3624.8
       100.00
                                                     9.64
                                                                  168.60
                                                                                 162.51
                                                                                                                                               5.77
                                                                                                                                                             161.95
       110.00
                                                  -31.81
                                                                   29.14
                                                                                 168.03
                                                                                                                              1503.4
                                                                                                                                                              20.56
                                                                                                                                              -29.66
                                                                                                                             3458.2
      110.00
                                                12.59
                                                                  154.21
                                                                                 160.76
                                                                                                                                             8.27
                                                                                                                                                             147.78
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 3679.2 SGR 189.9 SG3 336.0
RRT .6207 RRF .8300 RTF .9324
                                                                                                                          ST 1695.5 SR 151.9 55 794.8
CRT .8967 CRS -.9771 CST -.9702
     TOE 1.2810 TRA-1.6625 TC3-2.7686 BAU .8067
     ROE .1233 RRA .0313 RC3 -.1154 FAU .08636
                                                                                                                        LSA 1869.5 MSA 185.5 SSA 3.6
ELI 1700.9 EL2 67.0 ALF 4.60
     FOE 1.6343 FRA -.7212 FC3-3.4334 BSP 11422
                                                                     SGB 3684.1 R23 .3194 R13 .9328
SGI 3681.1 SGZ 148.9 THA 1.84
    BOE 1.2869 BRA 1.6628 BC3 2.7710 FSP -1119
LAUNCH DATE DEC 14 1965
                                                                          FLIGHT TIME 136.00
                                                                                                                                      ARRIVAL DATE APR 29 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 401.305
    RL 147.25 LAL -.00 LOL 81.79 VL 27.654 GAL -5.83 AZL 85.25 HCA 193.17 SMA 127.88 ECC .18174 INC 4.7488 V1 30.256 RP 108.80 LAP -1.08 LOP 274.92 VP 37.440 GAP 6.03 AZP 94.62 TAL 208.15 TAP 41.32 RCA 104.64 APO 151.12 V2 34.830 RC 128.581 GL 30.46 GP -11.52 ZAL 125.89 ZAP 145.96 ETS 340.22 ZAE 132.15 ETE 191.88 ZAC 48.79 ETC 147.00 CLP-147.75
   PLANETOCENTRIC CONIC
    C3 20.185 VHL 4.493 DLA 11.44 RAL 303.56 RAD 6567.8 VEL 11.898 PTH 2.11 VHP 4.575 DPA -32.24 RAP 313.27 ECC 1.3322 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 38 12 2579.74
15 32 16 4497.44
2 5 19 2298.77
16 47 50 4253.70
3 26 38 2044.31
17 43 1 4080.87
        90.00
                                                   -26.43
                                                                  65.97
                                                                                168.79
                                                                                                100.55
                                                                                                              1 21 12
                                                                                                                             1979.7
                                                                                                                                              -24.71
                                                                                                                                                              57.73
        90.00
                                                                  188.73
                                                                                                             16 47 14
                                                                                                                               3897.4
                                                     9.49
                                                                                 163.69
                                                                                                  63.19
                                                                                                                                                5.81
                                                                                                                                                             181.98
                                                                                                             2 43 38
       100.00
                                                   -27.63
                                                                   45.04
                                                                                                 101.89
                                                                                                                               1698.8
                                                                                 158.52
                                                                                                                                              -25.71
                                                                                                                                                              36.76
                                                                                                  61.88
                                                                                                            17 58 44
       100.00
                                                  10.57
                                                                  170.23
                                                                                 163.12
                                                                                                                              3653.7
                                                                                                                                               6.73
                                                                                                                                                             163.55
                                                                                                  105.60 4 0 43
58.26 18 51 2
       110.00
                                                   -30.81
                                                                   24.83
                                                                                                105.60
                                                                                 167.63
                                                                                                                              1444.3
                                                                                                                                              -28.36
                                                                                                                                                              16.48
                 17 43 1
       110.00
                                                  13.41
                                                                  155.46
                                                                                 161.45
                                                                                                                              3480.9
                                                                                                                                               9.11
                                                                                                                                                             148.99
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 3793.6 SGR 140.6 SG3 333.4
RRT .3468 RRF .5750 RTF .9295
SGB 3796.2 R23 .2689 R13 .9296
    TOE 1.1952 TRA-1.6027 TC3-3.0921 BAU .8345
                                                                                                                          ST 1649.8 SR 128.5 SS 755.4
CRT .8750 CRS -.9709 CST -.9650
    ROE .1001 RRA .0375 RC3 -.0370 FAU .08484
FOE 1.4851 FRA -.6031 FC3-3.6388 BSP 11868
                                                                                                                          LSA 1809.1 MSA 189.8 SSA 5.0
    BOE 1.1994 BRA 1.6031 BC3 3.0923 FSP -1114
                                                                      SG1 3793.9 SG2 131.9 THA
                                                                                                            .74
                                                                                                                          EL1 1653.6 EL2 62.0 ALF 3.90
                                                                         FLIGHT TIME 138.00
                                                                                                                                     ARRIVAL DATE MAY 1 1966
LAUNCH DATE DEC 14 1965
                                                                         DISTANCE 407.230
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.603 GAL -5.58 AZL 85.53 HCA 196.34 SMA 127.53 ECC .18201 INC 4.4724 V1 30.256
RP 108.82 LAP -1.26 LOP 278.09 VP 37.395 GAP 6.26 AZP 94.29 TAL 206.69 TAP 43.03 RCA 104.32 APO 150.74 V2 34.822
RC 130.911 GL 29.36 GP -9.15 TAL 125.01 TAP 148.09 ETS 342.90 TAE 132.18 ETE 189.48 TAC 49.01 ETC 149.87 CLP-149.30
   PLANETOCENTRIC CONIC
    C3 19.095 VHL 4.370 OLA 10.76 RAL 305.29 RAD 6567.8 VEL 11.852 PTH 2.10 VHP 4.648 OPA -29.55 RAP 314.38 ECC 1.3143
    LNCH APMTH LNCH TIME L-1 TIME INJILAT INJILONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             101.73 1 33 10
63.29 16 48 37
                                                                                                                           1943.7
                                                                                                                                         -24.08
        90.00
                                                                             169.26
                   0 50 46 2543.73
15 33 30 4507.13
                                                   -25.96
                                                                  63.44
                                                                                                             1 33 10
                                                                                                                                                            55.28
        90.00
                                                   9.78
                                                                 189.29
                                                                                164.59
                                                                                                                              3907.1
                                                                                                                                              6.12
                                                                                                                                                            182.52
                                                                                                103.09 2 55 13
61.97 18 0 30
      100.00
                   2 17 29 2264.06
16 49 28 4262.04
                                                  -27.12
                                                                   42.59
                                                                               168.97
                                                                                                                              1664.1
                                                                                                                                             -25.04
                                                                                                                                                             34.40
      100.00
                                                   10.84
                                                                 170.71
                                                                                164.04
                                                                                                                              3662.0
                                                                                                                                               7.01
                                                                                                                                                            164.02
                                                                                                106.83 4 11 27
58.34 18 53 38
       110.00
                   3 37 55 2012.38
17 45 32 4086.47
                                                  -30.20
                                                                  22.54
                                                                                168.03
                                                                                                                              1412.4
                                                                                                                                             -27.60
                                                                                                                                                             14.31
       110.00
                                                   13.61
                                                                 155.77
                                                                                162.41
                                                                                                                              3486.5
                                                                                                                                              9.32
                                                                                                                                                            144.29
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    SCT 3904.3 SGR 132.9 SG3 326.0

RRT .0399 RRF .2418 RTF .9271

SGB 3906.6 R23 .2049 R13 .9271

SGI 3904.3 SG2 132.8 THA .08
                                                                                                                         ST 1643.3 SR 122.1 SS 730.6
CRT .8697 CR5 -.9711 CST -.9614
    TOE 1.1586 TRA-1.5496 TC3-3.3669 BAU .8596
    ROE .0924 RRA .0381 RC3 .0226 FAU .08194
FOE 1.3774 FRA -.4924 FC3-3.7151 BSP 12255
                                                                                                                         LSA 1792.2 MSA 192.6 SSA 6.4
    BOE 1.1623 BRA 1.5501 BC3 3.3670 FSP -1090
                                                                                                                          EL1 1646.7 EL2 60.1 ALF
                                                                                                                                                              3.70
LAUNCH DATE DEC 14 1965
                                                                         FLIGHT TIME 140.00
                                                                                                                                     ARRIVAL DATE MAY 3 1966
                                                                         DISTANCE 413.142
   HELTOCENTRIC CONTC.
    RL 147.25 LAL -.00 LOL 81.79 VL 27.551 GAL -5.31 AZL 85.72 HCA 199.51 SMA 127.18 ECC .18237 INC 4.2839 VI 30.256 RP 108.85 LAP -1.43 LOP 281.25 VP 37.351 GAP 6.48 AZP 94.04 TAL 205.20 TAP 44.71 RCA 103.99 APO 150.38 VZ 34.816 RC 133.236 GL 28.66 GP -7.54 ZAL 123.80 ZAP 149.91 ETS 344.77 ZAE 132.03 ETE 187.80 ZAC 49.77 ETC 152.08 CLP-150.78
   PLANETOCENTRIC CONIC
                                                                                                    2.09 VHP 4.736 DPA -27.57 RAP 315.76 ECC 1.3004
    C3 18.254 VHL 4.272 DLA 10.51 RAL 307.04 RAD 6567.7 VEL 11.817 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 59 45 2525.17 -25.69 62.15 170.13 102.33 1 41 50 1925.2 -23.74 54.02
                   15 38 31
                                  4504.51
                                                     9.70
                                                                                165.69
                                                                                                63.27
103.70
                                                                                                            16 53 36
                                                                                                                                               6.04
       90.00
                                                                 189.14
                                                                                                                              3904.5
                                                                                                                                                            182.38
      100.00
                    2 26 19 2245.95
                                                   -26.83
                                                                   41.32
                                                                                169.84
                                                                                                              3 3 45
                                                                                                                              1645.9
                                                                                                                                             -24.68
                                                                                                                                                             33.18
                                                                                                                              3659.0
1395.2
                                                                                                 61.94 18 5 37
107.47 4 19 42
                  16 54 38 4258.97
3 46 26 1995.23
                                                  10.74
                                                                                165.14
       100.00
                                                                 170.54
                                                                                                                                               6.90
                                                                                                                                                            163.85
                                                                                                             4 19 42
                                                   -29.86
                                                                   21.32
                                                                               168.88
                                                                                                107.47
                                                                                                                                             -27.18
      110.00
                                                                                                                                                             13.15
                   17 51 0
                                                  13.46
                                                                                163.54
                                                                                                 58.28
                                  4082.45
                                                                 155.54
                                                                                                            18 59 2
                                                                                                                              3482.4
      110.00
                                                                                                                                               9.17
                                                                                                                                                            149.07
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                SGT 4011.3 SGR 145.2 SG3 316.7 ST 166D.3 SR 124.D SS 716.2 RRT -.1615 RRF -.0030 RTF .9248 CRT .8772 CRS -.9760 CST -.9592 SG8 4014.0 R23 -.1485 R13 -.9247 LSA 1801.9 MSA 194.7 SSA 7.8 SG1 4011.4 SG2 143.3 THA 179.66 EL1 1663.9 EL2 59.4 ALF 3.75
    TOE 1.1487 TRA-1.4964 TC3-3.6169 BAU .8828
    RDE :0918 RRA .0356 RC3 .0699 FAU .07852
    FDE 1.2980 FRA -.3885 FC3-3.7240 BSP 12599
80E 1.1524 BRA 1.4968 BC3 3.6176 FSP -1056
```

ARRIVAL DATE HAY 5-1966

LAUNCH DATE DEC 14 1965

DISTANCE 419.038 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 27.500 GAL -5.04 AZL 85.85 MCA 202.67 SMA 126.84 ECC .18283 INC 4.1465 V1 30.256 RP 108.87 LAP -1.60 LOP 284.41 VP 37.307 GAP 6.70 AZP 93.83 TAL 203.70 TAP 46.37 RCA 103.65 APO 150.03 V2 34.809 RC 135.553 GL 28.21 GP -6.39 TAL 122.36 TAP 151.54 ETS 346.16 TAE 131.79 ETE 186.56 TAC 50.85 ETC 153.86 CLP-152.20 PLANETOCENTRIC CONIC C3 17.561 VML 4.191 DLA 10.55 RAL 308.84 RAD 6567.7 VEL 11.787 PTH 2.08 VMP 4.832 DPA -26.01 RAP 317.29 ECC 1.2890 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG INJ AZMIH INJ 11EE
102.58 1 48 34
63.16 17 0 56
103.96 3 10 31
61.82 18 12 55
107.77 4 26 30
58.14 19 6 18 171.28 1917.4 -23.59 55.50 1 6 37 2517.44 15 46 1 4494.22 -25.58 61.61 3894.2 181.80 15 46 1 9.39 188.55 166.94 90.00 1638.1 -24.52 32.65 170.99 2 33 13 2238.15 -26.70 40.77 3648.7 6.57 163.28 100.00 4248.74 10.41 169.96 166.39 1387.3 3 53 23 1987.28 17 58 26 4072.38 -26.98 12.62 -29.69 20.76 170.02 110.00 8.80 3472.4 154.99 164.81 110.00 13.10 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1664.0 SR 129.4 SS 687.2 CRT .8865 CRS -.9803 CST -.9578 SGT 4155.D SGR 162.5 SG3 311.4 RRT - .2682 RRF - .1604 RTF .9268 SGB 4158.2 R23 - .0919 R13 - .9268 TOE 1.1297 TRA-1.4644 TC3-3.9083 BAU .9179 ROE .0942 RRA .0303 RC3 .1071 FAU .07690 LSA 1794.8 MSA 191.4 55A FDE 1.1977 FRA -.3329 FC3-3.7908 BSP 13514 BDE 1.1337 BRA 1.4648 BC3 3.9098 FSP -1103 EL1 1668.0 EL2 59.7 ALF 3.95 SG1 4155.2 SG2 156.6 THA 179.40 ARRIVAL DATE MAY 7 1966 FLIGHT TIME 144.00 LAUNCH DATE DEC 14 1965 HELIOCENTRIC CONIC DISTANCE 424.927 RL 147.25 LAL -.00 LOL 81.79 VL 27.448 GAL -4.76 A7L 85.96 HCA 205.84 SMA 126.50 ECC .18338 INC 4.0411 V1 30.256 RP 108.88 LAP -1.76 LOP 287.58 VP 37.264 GAP 6.92 A7P 93.64 TAL 202.16 TAP 48.00 RCA 103.30 APO 149.69 V2 34.804 RC 137.863 GL 27.91 GP -5.52 ZAL 120.72 ZAP 153.03 ETS 347.22 ZAE 131.55 ETE 185.62 ZAC 52.15 ETC 155.35 CLP-153.56 PLANETOCENTRIC CONIC 2.08 VHP 4.932 DPA -24.69 RAP 318.95 ECC 1.2792 C3 16.965 VHL 4.119 DLA 10.79 RAL 310.72 RAD 6567.7 VEL 11.762 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -23.59 1917.4 1 12 8 2517.38 15 55 28 4478.32 102.58 -25.58 61.60 172.66 1 54 5 90.00 5.21 180.90 8.90 187.64 168.32 63.01 17 10 6 3878.3 90.00 2 38 52 2237.64 17 11 24 4233.29 3 59 20 1985.81 18 7 25 4057.88 3 16 9 1637.6 -24.51 32.62 -26.70 40.74 172.37 103.97 100.00 3633.3 61.66 18 21 58 107.82 4 32 26 57.95 19 15 3 167.78 6.05 162.42 9.91 169.08 -26.94 12.53 -29.66 20.65 171.41 3457.9 8.26 12.58 154.19 166.20 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4202.8 SGR 184.8 SG3 295.7 RRT -.3014 RRF -.2016 RTF .9189 ST 1743.8 SR 138.9 SS 711.7 CRT .9105 CRS -.9891 CST -.9574 TOE 1.1794 TRA-1.3707 TC3-4.0633 BAU .9222 RDE .0995 RRA .0252 RC3 .1421 FAU .07084 LSA 1878.1 MSA 197.9 5SA 10.1 EL1 1748.3 EL2 57.3 ALF 4.15 5GB 4206.9 R23 -.0796 R13 -.9188 FOE 1.1975 FRA -.1878 FC3-3.6150 BSP 13052 BOE 1.1836 BRA 1.3710 BC3 4.0658 FSP -956 SG1 4203.2 SG2 176.2 THA 179.24 ARRIVAL DATE MAY 9 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 14 1965 DISTANCE 430.799 HELIOCENTRIC CONIC RL 147.25 LAL -.00 LOL 81.79 VL 27.397 GAL -4.47 AZL 86.04 HCA 209.00 SMA 126.16 ECC .18404 INC 3.9574 V1 30.256 RP 108.90 LAP -1.92 LOP 290.74 VP 37.222 GAP 7.14 AZP 93.46 TAL 200.61 TAP 49.61 RCA 102.94 APO 149.38 V2 34.799 RC 140.164 GL 27.70 GP -4.85 ZAL 118.94 ZAP 154.43 ETS 348.05 ZAE 131.30 ETE 184.88 ZAC 53.61 ETC 156.62 CLP-154.86 PLANETOCENTRIC CONIC C3 16.448 VML 4.056 DLA 11.17 RAL 312.66 RAD 6567.7 VEL 11.740 PTH 2.07 VHP 5.036 OPA -23.53 RAP 320.70 ECC 1.2707 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 102.40 1 58 48 62.83 17 20 40 103.81 3 21 6 61.46 18 32 19 107.70 4 37 50 57.73 19 24 57 -23.69 1922.9 174.23 53.87 1 16 46 2522.91 16 6 22 4458.59 61.99 -25.66 90.00 169.85 3858.6 4.58 179.79 186.51 90.00 B.29 1642.5 -24.61 32.94 173.94 41.07 2 43 43 2242.45 -26.77 100.00 3614.3 5.42 161.37 169.31 168.00 100.00 17 22 5 4214.28 9.30 4 4 41 1989.09 18 17 36 4040.40 1389.1 -27.02 12.74 172.99 -29.73 110.00 20.89 3440.4 7.60 146.83 167.72 11.95 153.23 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1792.2 SR 148.9 S5 708.9 CRT .9273 CR5 -.9934 CST -.9577 SGT 4305.7 SGR 204.5 SG3 286.8 RRT -.3149 RRF -.2371 RTF .9175 TOE 1.2018 TRA-1.3065 TC3-4.2914 BAU .9444 RDE .1052 RRA .0182 RC3 .1700 FAU .06767 FOE 1.1511 FRA -.1085 FC3-3.5617 BSP 13434 BOE 1.2064 BRA 1.3067 BC3 4.2948 FSP -933 LSA 1923.0 MSA 196.8 SSA 11.3 SGB 4310.6 R23 -. 0552 R13 -. 9175 EL1 1797.5 EL2 55.6 ALF SG1 4306.2 SG2 194.0 THA 179.14 4.41 ARRIVAL DATE MAY 11 1966 FLIGHT TIME 148.00 LAUNCH DATE DEC 14 1965 DISTANCE 436.658 RL 147.25 LAL -.00 LOL 81.79 VL 27.346 GAL -4.18 AZL 86.11 HCA 212.17 SMA 125.82 ECC .18482 INC 3.8889 VI 30.256 RP 108.91 LAP -2.07 LOP 293.90 VP 37.180 GAP 7.36 AZP 93.29 TAL 199.03 TAP 51.20 RCA 102.57 APO 149.08 V2 34.795 RC 142.456 GL 27.55 GP -4.32 ZAL 117.02 ZAP 155.74 ETS 348.72 ZAE 131.07 ETE 184.28 ZAC 55.20 ETC 157.72 CLP-156.11 PLANETOCENTRIC CONIC C3 15.996 VHL 4.000 DLA 11.67 RAL 314.69 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 5.144 DPA -22.47 RAP 322.52 ECC 1.2633 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 54.55 1 20 46 2533.01 16 18 34 4435.78 102.08 2 2 59 1933.0 -23.88 -25.81 62.69 175.98 90.00 3.85 178.51 62.63 17 32 29 3835.8 7.57 185.21 171.51 90.00 -24.80 33.56 2 48 1 2251.6D 17 33 59 4192.42 103.51 3 25 33 1651.6 41.71 175.70 -26.92 100.00 3592.4 160.16 4.68 61.26 18 43 52 17 33 59 166.77 170.97 100.00 8.58 13.22 4 9 38 1996.23 18 28 52 4020.56 -27.20 107.43 4 42 54 57.50 19 35 53 1396.2 -29.88 21.39 174.77 110.00 145.78 3420.5 6.86 18 28 52 11.22 152.15 169.38 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1846.3 SR 159.8 SS 707.6 CRT .9429 CRS -.9959 CST -.9586 LSA 1974.1 MSA 194.5 SSA 12.5 ELI 1852.5 EL2 53.0 ALF 4.67 SGT 4408.5 SGR 223.3 SG3 278.2 RRT -.3129 RRF -.2531 RTF .9166 SGB 4414.1 R23 -.0363 R13 -.9166 TDE 1.2295 TRA-1.2377 TC3-4.5169 BAU .9669 RDE .1114 RRA .0106 RC3 .1942 FAU .06468 FDE I.1098 FRA -.0363 FC3-3.5006 BSP 13844 SG1 4409.0 SG2 212.0 THA 179.09 BDE 1.2345 BRA 1.2377 BC3 4.5211 FSP -914

FLIGHT TIME 142.00

```
FLIGHT TIME 150.00
                                                                                                                                          ARRIVAL DATE MAY 13 1966
LAUNCH DATE DEC 14 1965
                                                                            DISTANCE 442.505
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.295 GAL -3.87 AZL 86.17 HCA 215.33 SMA 125.49 ECC .18571 INC 3.8314 V1 30.256
RP 108.92 LAP -2.21 LOP 297.06 VP 37.139 GAP 7.57 AZP 93.13 TAL 197.44 TAP 52.77 RCA 102.18 APO 148.79 V2 34.791
RC 144.737 GL 27.43 GP -3.88 ZAL 114.96 ZAP 156.99 ETS 349.27 ZAE 130.86 ETE 183.80 ZAC 56.89 ETC 158.70 CLP-157.31
   PLANETOCENTRIC CONIC
     C3 15.602 VHL 3.950 OLA 12.25 RAL 316.82 RAD 6567.6 VEL 11.704 PTH 2.06 VHP 5.254 OPA -21.48 RAP 324.41 ECC 1.2568
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  177.91
                   1 24 20 2546.99
16 31 56 4410.48
2 51 57 2264.44
17 47 1 4168.27
                                                                                                                 2 6 47
                                                                                                                                   1947.0
                                                                                                    101.63
                                                                                                                                                                    55.50
                                                                     63.67
                                                                                                                                                  -24.14
         90.00
                                                     -26.00
                                                                                                     101.63 2 6 47
62.44 17 45 27
                                                                                                                                   3810.5
         90.00
                                                      6.78
                                                                     183.78
                                                                                   173.33
                                                                                                                                                     3.04
                                                                                                                                                                   177.10
                                                                                                    103.07
                                                                                                                  3 29 41
                                                                                                                                                   -25.05
                                                                                                                                                                    34.42
       100.00
                                                     -27.12
                                                                     42.61
                                                                                   177.64
                                                                                                     103.07 3 29 41
61.05 18 56 29
                                                                                                                                   1664.4
       100.00
                                                       7.79
                                                                     165.42
                                                                                   172.78
                                                                                                                                   3568.3
                                                                                                                                                     3.87
                                                                                                                                                                   158.83
                                                                                 176.73
                    4 14 21 2006.62
18 41 7 3998.85
                                                                                                               4 47 47
19 47 45
                                    2006.62
                                                    -30.09
                                                                     22.13
                                                                                                    107.05
                                                                                                                                   1406.6
                                                                                                                                                   -27.46
                                                                                                                                                                    13.92
       110.00
                                                                                                                                   3398.9
                                                                                                                                                     6.04
                                                                                                                                                                   144.63
                                                     10.43
                                                                    150.97
                                                                                   171.18
                                                                                                     57.26
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 4503.3 SGR 241.2 SG3 269.6
RRT -.3005 RRF -.2538 RTF .9154
SGB 4509.8 R23 -.0231 R13 -.9154
                                                                                                                              ST 1911.2 SR 171.2 55 710.7
CRT .9572 CRS -.9967 CST -.9600
     TOE 1.2663 TRA-1.1586 TC3-4.7277 BAU
                                                          .9871
    ROE .118D RRA .0024 RC3 .2151 FAU .06160
FDE 1.0778 FRA .0362 FC3-3.4181 BSP 14172
BDE 1.2717 BRA 1.1586 BC3 4.7326 FSP -887
                                                                                                                               LSA 2037.1 MSA 192.0 SSA 13.6
                                                                                                                               EL1 1918.2 EL2 49.4 ALF 4.90
                                                                        SG1 4503.9 SG2 230.0 THA 179.08
LAUNCH DATE DEC 14 1965
                                                                             FLIGHT TIME 152.00
                                                                                                                                           ARRIVAL DATE MAY 15 1966
                                                                            DISTANCE 448.339
   HELIOCENTRIC CONIC
   RL 147.25 LAL -.00 LOL 81.79 VL 27.244 GAL -3.55 AZL 86.22 HCA 218.49 SNA 125.16 ECC .18673 INC 3.7823 V1 30.256 RP 108.93 LAP -2.35 LOP 300.22 VP 37.099 GAP 7.79 AZP 92.96 TAL 195.82 TAP 54.31 RCA 101.79 APO 148.53 VZ 34.788 RC 147.008 GL 27.33 GP -3.53 ZAL 112.78 ZAP 158.18 ETS 349.73 ZAE 130.67 ETE 183.40 ZAC 58.67 ETC 159.57 CLP-158.46
  PLANETOCENTRIC CONIC
                                                                                                        2.06 VHP 5.367 DPA -20.53 RAP 326.34 ECC 1.2512
    C3 15.262 VHL 3.907 DLA 12.91 RAL 319.04 RAD 6567.6 VEL 11.690 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 27 35 2564.41 -26.23 64.89 180.02 101.06 2 10 20 1964.4 -24.44 56.68
                      1 27 35 2564.41
                                                                                                     62.26 17 59 28
102.52 3 33 37
60.85 19 10 7
106.54 4 52 35
57.03 20 0 31
                   16 46 25 4383.16
2 55 37 2280.51
18 1 4 4142.28
4 18 55 2019.86
                                                                                                                                    3783.2
                                                                                                                                                      2.16
                                                                                                                                                                   175.57
        90.00
                                                       5.92
                                                                     182.23
                                                                                    175.30
                                                                                                    102.52
                                                                                                                                    1680.5
                                                                                                                                                   -25.37
                                                                                                                                                                    35.52
       100.00
                                                     -27.37
                                                                      43.75
                                                                                    179.76
                                                                     163.97
                                                                                 174.7<u>4</u>
178.87
                                                                                                                                    3542.3
                                                                                                                                                      2.99
                                                                                                                                                                   157.40
       100.00
                                                       6.93
                                                                     23.07
                                                                                                    106.54
                                                                                                                                   1419.9
                                                                                                                                                   -27.78
                                                                                                                                                                    14.81
                                                     -30.35
       110.00
                                                                                                                                   3375.7
                                                                                                                                                                   143.41
                                                                                                                                                      5.16
       110.00
                   18 54 16
                                   3975.70
                                                       9.57
                                                                     149.72
                                                                                    173.14
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 4595.1 SGR 258.1 SG3 261.3
RRT -.2826 RRF -.2470 RTF .9143
                                                                                                                              ST 1982.4 SR 183.0 SS 715.1
CRT .9694 CRS -.9957 CST -.9618
     TOF 1.3084 TRA-1.0718 TC3-4.9290 BAU 1.0068
    RDE .1247 RRA -.0061 RC3 .2329 FAU .05864
    FOE 1.3144 BRA 1.0718 BC3 4.9345 FSP -862
                                                                                                                              LSA 2106.9 MSA 188.6 55A 14.6
EL1 1990.3 EL2 44.8 ALF 5.12
                                                                        SGB 4602.3 R23 -.0127 R13 -.9143
                                                                        5G1 4595.7 SG2 247.6 THA 179.09
                                                                            FLIGHT TIME 154.00
                                                                                                                                          ARRIVAL DATE MAY 17 1966
LAUNCH DATE DEC 14 1965
                                                                            DISTANCE 454.160
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.193 GAL -3.22 AZL 86.26 MCA 221.65 SMA 124.84 ECC .18788 INC 3.7395 V1 30.256 RP 108.94 LAP -2.48 LOP 303.39 VP 37.060 GAP 8.01 AZP 92.80 TAL 194.19 TAP 55.84 RCA 101.38 APO 148.29 V2 34.786 RC 149.266 GL 27.23 GP -3.23 ZAL 110.48 ZAP 159.32 ETS 350.10 ZAE 130.51 ETE 183.06 ZAC 60.51 ETC 160.35 CLP-159.57
   PLANETOCENTRIC CONIC
    C3 14.977 VHL 3.870 DLA 13.63 RAL 321.36 RAD 6567.6 VEL 11.677 PTH 2.05 VHP 5.483 OPA -19.60 RAP 328.31 ECC 1.2465
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                  1 30 36 2584.96
17 1 56 4354.16
2 59 6 2299.54
18 16 7 4114.81
4 23 25 2035.70
19 8 17 3951.42
                                                                                                   100.38 2 13 41
62.09 18 14 30
101.86 3 37 26
60.66 19 24 42
105.93 4 57 21
                                                                                                                                1985.0
                                                                                                                                                                    58.08
                                                     -26.49
                                                                    66.34
                                                                                 182.31
                                                                                                                                                 -24.79
                                                                                                                                                                  173.95
                                                       4.99
                                                                    180.60
                                                                                   177.43
                                                                                                                                   3754.2
                                                                                                                                                     1.22
                                                                                                                                 1699.5
                                                                                                                                                                   36.82
                                                     -27.64
                                                                     45.09
                                                                                   182.06
                                                                                                                                                  -25.72
       100.00
                                                                                                                                                     2.06
                                                                                                                                                                  155.89
                                                       6.02
                                                                 162.44
                                                                                  176.87
                                                                                                                                  3514.8
       110.00
                                                     -30.65
                                                                     24.20
                                                                                   181.20
                                                                                                                                   1434.7
                                                                                                                                                  -28.16
                                                                                                                                                                   15.89
                                                                                                    56.80 20 14 8
                                                                    148.42
                                                                                   175.25
                                                                                                                                   3351.4
                                                                                                                                                     4.24
                                                                                                                                                                  142.13
       110.00
                                                       8.67
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 4678.8 SGR 274.1 SG3 253.1
RRY -.2599 RRF -.2325 RTF .9130
SGB 4686.9 R23 -.0058 R13 -.9130
                                                                                                                             ST 2053.8 SR 194.9 SS 723.0
CRT .9795 CRS -.9932 CST -.9639
     TOE 1.3589 TRA -.9736 TC3-5.1101 BAU 1.0244
    ROE .1315 RRA -.0148 RC3 .2477 FAU .05561
FOE 1.0283 FRA .1739 FC3-3.2146 BSP 14715
BOE 1.3652 BRA .9738 BC3 5.1161 FSP -829
                                                                                                                             LSA 2187.6 MSA 184.9 SSA 15.6
EL1 2072.6 EL2 39.0 ALF 5.29
                                                                        SG1 4679.4 SG2 264.7 THA 179.12
LAUNCH DATE DEC 14 1965
                                                                             FLIGHT TIME 156.00
                                                                                                                                          ARRIVAL DATE MAY 19 1966
                                                                            DISTANCE 459.968
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 27.143 GAL -2.88 AZL 86.30 MCA 224.81 SMA 124.51 ECC .18918 INC 3.7018 V1 30.256
RP 108.94 LAP -2.61 LOP 306.55 VP 37.022 GAP 8.23 AZP 92.63 TAL 192.54 TAP 57.36 RCA 100.96 APO 148.07 V2 34.785
RC 151.511 GL 27.11 GP -2.97 ZAL 108.07 ZAP 160.42 ETS 350.42 ZAE 130.38 ETE 182.78 ZAC 62.42 ETC 161.07 CLP-160.64
   PLANETOCENTRIC CONIC
    C3 14.748 VHL 3.840 DLA 14.40 RAL 323.79 RAD 6567.6 VEL 11.668 PTH 2.05 VHP 5.602 DPA -18.68 RAP 330.31 ECC 1.2427 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 184.78
                                                                                                   99.59
                    1 33 27 2608.41
17 18 27 4323.82
                                                                                                                 2 16 55
                                                                                                                                   2008.4
                                                                                                                                                                    59.70
                                                                                                                                                  -25.17
         90.00
                                                     -26.77
                                                                     68.00
                                                                                                      61.95 18 30 30
                                                                                                                                   3723.8
                                                                                                                                                      .24
                                                                                                                                                                   172.26
         90.00
                                                      4.03
                                                                    178.90
                                                                                   179.74
                                                                                                                  3 41 10
                                                                                                                                                                    38.31
                     3 2 29
                                    2321.28
                                                     -27.93
                                                                     46.64
                                                                                   184.55
                                                                                                    101.10
                                                                                                                                   1721.3
                                                                                                                                                   -26.12
       100.00
                                                                                                     101.10 3 41 10
60.50 19 40 12
                    18 32 6
                                    4086.18
                                                       5.06
                                                                    160.86
                                                                                    179.17
                                                                                                                                   3486.2
                                                                                                                                                     1.09
                                                                                                                                                                  154.31
       100.00
                     4 27 56
                                                                                                                  5 2 10
                                                                                                    105.22 5 2 10
56.60 20 28 34
                                                                                                                                   1453.9
                                                                                                                                                   -28.58
                                                                                                                                                                   17.14
                                    2053.89
                                                  -30.98
                                                                     25.52
                                                                                   183.73
       110.00
                                                                                                                                                                   140.82
                                                                                    177.53
                                                                                                                                   3326.3
                                                                                                                                                     3.29
       110.00
                     19 23 8
                                    3926.34
                                                      7.73
                                                                    147.09
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 4765.2 SCR 289.3 SG3 245.4
RRT -.2364 RRF -.2172 RTF .9125
SCB 4773.9 R23 .0008 R13 -.9125
                                                                                                                             ST 2145.8 SR 2D6.9 SS 729.0
CRT .9871 CRS -.9893 CST -.9661
LSA 2268.5 MSA 180.3 SSA 16.6
     TDE 1.4104 TRA -.8715 TC3-5.2850 BAU 1.0433
    ROE .1384 RRA -.0235 RC3 .2595 FAU .05289
FDE 1.0058 FRA .2350 FC3-3.1049 BSP 15035
BDE 1.4171 BRA .8718 BC3 5.2914 FSP -807
```

SG1 4765.7 SG2 281.0 THA 179.18

EL1 2155.5 EL2 33.0 ALF 5.44

ARRIVAL DATE MAY 21 1966

JPL TM 33-99

```
FLIGHT TIME 158.00
LAUNCH DATE DEC 14 1965
                                                                                          DISTANCE 465.762
     RL 147.25 LAL -.00 LOL 81.79 VL 27.092 GAL -2.53 AZL 86.33 MCA 227.97 SMA 124.20 ECC .19063 INC 3.6680 VI 30.256
RP 108.94 LAP -2.72 LOP 309.71 VP 36.984 GAP 8.45 AZP 92.46 TAL 190.88 TAP 58.85 RCA 100.52 APO 147.87 V2 34.784
RC 153.743 GL 26.97 GP -2.76 ZAL 105.55 ZAP 161.48 ETS 350.67 ZAE 130.26 ETE 182.54 ZAC 64.38 ETC 161.71 CLP-161.67
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 14.577 VHL 3.818 DLA 15.21 RAL 326.32 RAO 6567.6 VEL 11.660 PTH 2.05 VHP 5.724 DPA -17.77 RAP 332.34 ECC 1.2399
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      2 20 6
                                                                                                                      98.69
                                                                                                  187.44
          90.00
                          1 36 11 2634.61
                                                               -27.05
                                                                                 69.87
                                                                                                                                                                                                  170.51
                                                                                                                          61.83
                                                                                                                                      18 47 27
                                                                                                                                                            3692.4
                                                                                                    182.23
                         17 35 55 4292.43
                                                                  3.02
                                                                                  177.14
          90.00
                                                                                                                                                                                -26.54
                                                                                                                                                                                                   40.00
                                                                                                                                                            1745.6
                        3 5 48 2345.57
18 48 58 4056.69
4 32 31 2074.29
19 38 45 3900.74
                                                                                                                        100.23 3 44 54
                                                                                                    187.22
                                                               -28.24
                                                                                   48.38
        100.00
                                                                                                                                                                                  .09
                                                                                                                                                                                                  152.70
                                                                                                                                                            3456.7
                                                                                                                         60.36 19 56 35
                                                                                 159.23
                                                                                                    181.65
                                                                 4.07
        100.00
                                                                                                                      104.41 5 7 5
56.41 20 43 46
                                                                                                                                                                               -29.04
                                                                                                                                                                                                   18.55
                                                                                                                                                            1474.3
                                                                                                    186.44
                                                               -31.34
                                                                                  27.00
        110.00
                                                                                                                                                                                 2.31
                                                                                                                                                            3300.7
                                                                                                    179.98
                                                                                145.73
                                                               6.77
         110.00
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 2232.6 SR 218.9 SS 735.3
CRT .9924 CRS -.9843 CST -.9684
                                                                                      SGT 4847.6 SGR 303.6 SG3 238.0
RRT -.2113 RRF -.1995 RTF .9121
      TOE 1.4665 TRA -.7600 TC3-5.4406 BAU 1.0615
      RDE .1455 RRA -.0323 RC3 .2682 FAU .05025
                                                                                                                                                       LSA 2354.2 MSA 175.4 SSA 17.5
EL1 2243.1 EL2 26.9 ALF 5.56
                                                                                       SGB 4857.1 R23 .0062 R13 -.9121
     FOE .9855 FRA .2942 FC3-2.9847 BSP 15338
BOE 1.4737 BRA .7607 BC3 5.4472 FSP -786
                                                                                      5G1 4848.0 5G2 296.7 THA 179.24
                                                                                                                                                                      ARRIVAL DATE MAY 23 1966
                                                                                            FLIGHT TIME 160.00
LAUNCH DATE DEC 14 1965
                                                                                           DISTANCE 471.543
    HELIOCENTRIC CONIC
     RL 147.25 LAL -.00 LOL 81.79 VL 27.043 GAL -2.17 AZL 86.36 HCA 231.14 SHA 123.89 ECC .19224 INC 3.6375 VI 30.256 RP 108.94 LAP -2.83 LOP 312.87 VP 36.948 GAP 8.67 AZP 92.28 TAL 189.20 TAP 60.34 RCA 100.07 APO 147.70 V2 34.784
     RC 155.962 GL 26.79 GP -2.57 ZAL 102.92 ZAP 162.49 ETS 350.88 ZAE 130.17 ETE 182.34 ZAC 66.38 ETC 162.31 CLP-162.68
    PLANETOCENTRIC CONIC
      C3 14.466 VHL 3.803 DLA 16.05 RAL 328.96 RAD 6567.6 VEL 11.656 PTH 2.05 VHP 5.850 DPA -16.86 RAP 334.40 ECC 1.2381 ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                           2063.4
                                                                                                                          97.70
                                                                                                                                        2 23 15
                        1 38 51 2663.39
17 54 17 4260.27
                                                                                   71.93
                                                                                                   190.29
                                                               -27.33
                                                                                                                                                                                  -1.81
                                                                                                                                                                                                   168.72
                                                                                                                                                              3660.3
                                                                                                                                      19 5 17
                                                                                                     184.91
                                                                                                                           61.75
                                                                   1.98
                                                                                  175.34
           90.00
                                                                                                                                                                                                    41.86
                                                                                                                                                                                 -26.97
                                                                                                     190.09
                                                                                                                          99.26
                                                                                                                                       3 48 40
                                                                                                                                                             1772.3
                                                                                    50.31
                          398
                                            2372.26
                                                                -28.55
         100.00
                                                                                                                        60.25 20 13 48
103.50 5 12 8
56.25 20 59 42
                                                                                                                                                                                                   151.05
                                                                                                                                                                                    -.93
                                                                                                     184.31
                                                                                                                                                             3426.6
                                                                                  157.57
                        19 6 42 4026.63
                                                                  3.06
         100.00
                                                                                                                                                                                -29.53
                                                                                                                                                             1496.7
                                                                                                     189.35
                        4 37 11 2096.73
19 55 7 3874.93
                                                                                    28.65
                                                               -31.71
         110.00
                                                                                                                                                                                                   138.14
                                                                                                                                                             3274.9
                                                                                                                                                                                   1.32
                                                                                                     182.61
         110.00
                                                                 5.80
                                                                                  144.36
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ST 2324.4 SR 231.0 55 742.1
                                                                                       SGT 4926.4 SGR 317.0 SG3 230.9
      TDE 1.5277 TRA -.6397 TC3-5.5724 BAU 1.0790
                                                                                                                                                        CRT .9956 CRS -.9783 CST -.9707
                                                                                       RRT -.1850 RRF -.1796 RTF .9121
SGB 4936.6 R23 .0104 R13 -.9121
      RDE .1528 RRA -.0409 RC3 .2738 FAU .04770
                                                                                                                                                       LSA 2444.9 MSA 170.3 SSA 18.4
EL1 2335.7 EL2 21.6 ALF 5.65
      FOE .9675 FRA .3505 FC3-2.8548 BSP 15606
                                                                                       5G1 4926.8 SG2 311.5 THA 179.32
      BOE 1.5353 BRA .6410 BC3 5.5791 FSP -763
                                                                                                                                                                     ARRIVAL DATE MAY 25 1966
                                                                                            FLIGHT TIME 162.00
 LAUNCH DATE DEC 14 1965
                                                                                           01STANCE 477.310
      RL 147.25 LAL -.00 LOL 81.79 VL 26.993 GAL -1.80 AZL 86.39 HCA 234.30 SHA 123.58 ECC .19402 INC 3.6095 V1 30.256 RP 108.94 LAP -2.93 LOP 316.04 VP 36.913 GAP 8.90 AZP 92.11 TAL 187.51 TAP 61.81 RCA 99.60 APO 147.55 V2 34.785
      RC 158.168 GL 26.57 GP -2.40 ZAL 100.20 ZAP 163.48 ETS 351.04 ZAE 130.10 ETE 182.16 ZAC 68.43 ETC 162.85 CLP-163.65
      C3 14.421 VHL 3.798 DLA 16.91 RAL 331.70 RAD 6567.6 VEL 11.654 PTH 2.05 VHP 5.980 DPA -15.94 RAP 336.47 ECC 1.2373
     PLANETOCENTRIC CONIC
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          2094.6
                                                                                                                          96.60 2 26 24
                                                                                                    193.33
                                                                                    74.17
                         1 41 30 2694.62
18 13 32 4227.65
3 12 29 2401.19
                                                                 -27.60
                                                                                                                                      19 23 59
3 52 30
                                                                                                                                                                                 -2.86
                                                                                                                                                                                                   166.89
                                                                                                                                                              3627.6
                                                                                                                          61.70
                                                                                  173.52
                                                                                                     187.78
                                                                  .93
            90.00
                                                                                                                                                                                                    43.90
                                                                                                                                                             1801.2
                                                                                                                                                                                -27.41
                                                                                                     193.15
                                                                                                                          98.20
                                                              -28.85
                                                                                    52.41
          100.00
                                                                                                                         60.17 20 31 50
102.50 5 17 22
56.12 21 16 20
                                                                                                                                                                                 -1.95
                                                                                                                                                                                                   149.38
                                                                                                                                                             3396.3
                                                                  2.03
                                                                                  155.91
                                                                                                    187.16
                                           3996.32
          100.00
                         19 25 13
                                                                                                                                                                                -30.03
                                                                                                                                                             1521.1
                                                                                                                                                                                                    21.84
                         4 42 1 2121.06 -32.08
20 12 11 3849.20 4.82
                                                                                                                        102.50
                                                                                                     192.47
                                                                                    30.45
          110.00
                                                                                                                                                              3249.2
                                                                                                                                                                                    . 34
                                                                                                                                                                                                   136.79
                                                                                                   185.43
                                                                                  143.01
          110.00
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2422.6 SR 243.2 SS 750.6
CRT .9969 CRS -.9715 CST -.9731
                                                                                       SCT 4996.7 SGR 329.6 SG3 223.8

RRT -.1569 RRF -.1561 RTF ..9116

SGB 5007.6 R23 .0126 R13 -.9116

SG1 4997.0 SG2 325.5 THA 179.40
       TOE 1.5955 TRA -.5068 TC3-5.6682 BAU 1.0941
      ROE .1604 RRA -.0493 RC3 .2762 FAU .04509
FOE .9534 FRA .4080 FC3-2.7068 BSP 15812
BOE 1.6036 BRA .5092 BC3 5.6749 FSP -738
                                                                                                                                                         LSA 2542.4 MSA 165.7 SSA 19.1
                                                                                                                                                         EL1 2434.8 EL2 19.2 ALF 5.72
                                                                                                                                                                       ARRIVAL DATE MAY 27 1966
                                                                                             FLIGHT TIME 164.00
 LAUNCH DATE DEC 14 1965
                                                                                            DISTANCE 485.061
      RL 147.25 LAL -.00 LOL 81.79 VL 26.944 GAL -1.41 A7L 86.42 MCA 237.46 SMA 123.27 ECC .19599 INC 3.5837 VI 30.256
RP 108.94 LAP -3.02 LOP 319.20 VP 36.878 GAP 9.14 A7P 91.93 TAL 185.81 TAP 63.27 RCA 99.11 APO 147.44 V2 34.787
RC 160.359 GL 26.29 GP -2.26 TAL 97.39 ZAP 164.44 ETS 351.16 ZAE 130.04 ETE 182.02 ZAC 70.52 ETC 163.35 CLP-164.60
      PLANETOCENTRIC CONIC
       C3 14.446 VHL 3.801 DLA 17.78 RAL 334.55 RAD 6567.6 VEL 11.655 PTH 2.05 VHP 6.115 DPA -15.02 RAP 338.56 ECC 1.2377
       C3 14.446 VML 3.801 DEA 17.78 HAL 334.33 HAU 0307.0 VEL 11.035 FM END TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME PO CST TIME INJ 2 LONG LNCH AZMTH INJ TIME INJ 2 LONG LNCH AZMTH INJ TIME INJ 2 LONG LNCH AZMTH INJ TIME INJ 2 LONG LNCH A
                                                                                                                          95.41 2 29 37
61.68 19 43 29
97.04 3 56 27
60.12 20 50 35
101.40 5 22 49
56.01 21 33 35
                                                                                                                                          2 29 37
                                                                                                                                                              2128.1
                                                                                                   196.56
                                                                  -27.84
                                                                                    76.60
            90.00
                            1 44 9 2728.14
                                                                                                                                                                                                    165.06
                                                                                                                                                               3594.9
                                                                                                                                                                                   -3.91
                         18 33 34 4194.90
3 15 55 2432.18
19 44 29 3966.09
4 47 2 2147.11
                                                                                    171.70
                                                                                                      190.84
                                                                    -.13
            90.00
                                                                                                                                                                                                      46.10
                                                                                                                                                               1832.2
                                                                                                                                                                                  -27.85
                                                                                                      196.40
                                                                  -29.13
                                                                                     54.67
           100.00
                                                                                                                                                               3366.1
                                                                                                                                                                                  -2.98
                                                                                                                                                                                                    147.72
                                                                                   154.25
                                                                                                     190.21
           100.00
                                                                    1.01
                                                                                                                                                               1547.1
                                                                                                                                                                                  -30.54
                                                                                                                                                                                                      23.69
                                                                                                    195.77
                                                                  -32.45
                                                                                     32.39
           190.00
                                                                                                                                                                                                    135.46
                                                                                                                                                               3223.9
                                                                                                                                                                                    -.63
                                             3823.92
                                                                                    141.68
                                                                                                      188.43
                         20 29 51
          110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                    SCT 5070.4 SGR 341.4 SG3 217.2 ST 2516.7 SR 255.5 SS 755.9 SR 755.9 SRT -.1299 RRF -.1343 RFF ..9122 CRT ..9964 CRS -.9643 CST -.9752 SGB 5081.9 R23 .0154 R13 -.9123 LSA 2635.2 MSA 160.9 SSA 19.8 SGI 5070.6 SG2 338.5 THA 179.50 EL1 2529.5 EL2 21.6 ALF 5.78
      DIFFERENTIAL CORRECTIONS
       TOE 1.6632 TRA -.3690 TC3-5.7465 BAU 1.1111
       ROE .1685 RRA -.0574 RC3 .2754 FAU .04278
       FOE .9372 FRA .4592 FC3-2.5636 BSP 16081
BOE 1.6717 BRA .3734 BC3 5.7531 FSP -718
```

```
LAUNCH DATE DEC 14 1965
                                                                                                                                                           ARRIVAL DATE MAY 29 1966
                                                                                      FLIGHT TIME 166.00
    HELIOCENTRIC CONIC
                                                                                      DISTANCE 488.797
     RL 147.25 LAL -.00 LOL 81.79 VL 26.896 GAL -1.01 AZL 86.44 HCA-240.62 SMA 122.98 ECC .19816 INC 3.5596 V1 30.256
RP 108.93 LAP -3.10 LOP 322.37 VP 36.845 GAP 9.38 AZP 91.75 TAL 184.10 TAP 64.72 RCA 98.61 APO 147.34 V2 34.789
RC 162.536 GL 25.96 GP -2.13 ZAL 94.51 ZAP 165.37 ETS 351.23 ZAE 130.01 ETE 181.89 ZAC 72.63 ETC 163.81 CLP-165.52
    PLANETOCENTRIC CONIC
     C3 14.547 VHL 3.814 OLA 18.65 RAL 337.49 RAD 6567.6 VEL 11.659 PTH 2.05 VHP 6.255 OPA -14.09 RAP 340.66 ECC 1.2394
     14.04 PM 14.04 TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ ARTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 46 50 2763.77 -28.04 79.18 199.97 94.13 2 32 54 2163.8 -27.17 70.63 90.00 18 54 20 4162.36 -1.18 169.88 194.09 61.71 20 3 42 3562.4 -4.95 163.23 100.00 3 19 28 2465.05 -29.38 57.08 199.84 95.79 4 0 33 1865.1 -28.26 48.45
                      20 4 23 3936.31
4 52 16 2174.71
20 48 4 3799.42
                                                                                                               60.11 21 9 59
100.22 5 28 31
55.93 21 51 23
        100.00
                                                              -.00
                                                                            152.61
                                                                                              193.44
                                                                                                                                                   3336.3
                                                                                                                                                                    -3.98
                                                                                                                                                                                      146.08
                                                          -32.80
        110.00
                                                                              34.47
                                                                                              199.28
                                                                                                                                                  1574.7
                                                                                                                                                                   -31.04
                                                                                                                                                                                       25.68
        110.00
                                        3799.42
                                                           2.93
                                                                            140.40
                                                                                                                                                                                     134,20
                                                                                              191.61
                                                                                                                                                  3199.4
                                                                                                                                                                    -1.56
    DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                SGT 5138.4 SGR 352.5 SG3 210.7

RRT -.1024 RRF -.1115 RTF .9130

SGB 5150.5 R23 .0176 R13 -.9130

SGI 5138.5 SG2 350.6 THA 179.60
     TOE 1.7339 TRA -.2207 TC3-5.7884 BAU 1.1270
                                                                                                                                              ST 2610.2 SR 267.8 SS 759.8 CRT .9944 CRS -.9566 CST -.9773
     RDE .1770 RRA -.0650 RC3 .2715 FAU .04050
     FOE .9212 FRA .5090 FC3-2.4104 BSP 16373
BOE 1.7430 BRA .2301 BC3 5.7947 FSP -703
                                                                                                                                            LSA 2727.1 MSA 156.7 SSA 20.4
EL1 2623.8 EL2 28.1 ALF 5.83
LAUNCH DATE DEC 14 1965
                                                                                      FLIGHT TIME 168.00
                                                                                                                                                           ARRIVAL DATE MAY 31 1966
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 494.516
     RL 147.25 LAL -.00 LOL 81.79 VL 26.847 GAL -.60 AZL 86.46 HCA 243.78 SMA 122.68 ECC .20053 INC 3.5370 V1 30.256 RP 108.92 LAP -3.17 LOP 325.53 VP 36.813 GAP 9.63 AZP 91.56 TAL 182.38 TAP 66.16 RCA 98.08 APO 147.28 V2 34.792 RC 164.699 GL 25.56 GP -2.02 ZAL 91.56 TAP 166.28 ETS 351.25 TAE 129.98 ETE 181.78 ZAC 74.78 ETC 164.24 CLP-166.43
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 14.731 VHL 3.838 DLA 19.51 RAL 340.52 RAO 6567.6 VEL 11.667 PTH 2.05 VHP 6.400 DPA -13.14 RAP 342.78 ECC 1.2424
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 49 37 2801.32 -28.19 81.92 203.56 92.76 2 36 18 2201.3 -27.51 73.32
90.00 19 15 43 4130.39 -2.21 168.10 197.53 61.76 20 24 33 3530.4 -5.97 161.43
100.00 3 23 11 2499.60 -29.59 59.63 203.46 94.47 4 4 51 1899.6 -28.65 50.95
100.00 20 24 50 3907.34 -.99 151.02 196.85 60.12 21 29 57 3307.3 -4.95 144.48
110.00 4 57 47 2203.64 -33.13 36.66 202.97 98.96 5 34 30 1603.6 -31.54 27.80
110.00 21 6 43 3776.07 2.04 139.18 194.97 55.87 22 9 40 3176.1 -2.46 132.98
   DIFFERENTIAL CORRECTIONS
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5201.9 SGR 362.7 SG3 204.4
RRT -.0743 RRF -.0868 RTF .9138
SGB 5214.5 R23 .0186 R13 -.9138
                                                                                                                                              ST 2703.4 SR 280.3 SS 763.6
CRT .9913 CRS -.9489 CST -.9792
     TOE 1.8086 TRA -. 0621 TC3-5.7910 BAU 1.1417
     ROE .1863 RRA -.0720 RC3 .2644 FAU .03826
                                                                                 FOE .9073 FRA .5579 FC3-2.2485 BSP 16574
BOE 1.8182 BRA .0951 BC3 5.7970 FSP -680
                                                                                                                                              LSA 2818.9 MSA 153.2 SSA 20.8
                                                                                                                                           EL1 2717.6 EL2 36.8 ALF 5.87
LAUNCH DATE DEC 14 1965
                                                                                     FLIGHT TIME 170.00
                                                                                                                                                         ARRIVAL DATE JUN 2 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 500.217
    RL 147.25 LAL -.00 LOL 81.79 VL 26.800 GAL -.16 AZL 86.48 HCA 246.95 SMA 122.39 ECC .20313 INC 3.5155 VI 30.256
RP 108.91 LAP -3.23 LOP 328.70 VP 36.781 GAP 9.89 AZP 91.38 TAL 180.65 TAP 67.59 RCA 97.53 APO 147.25 V2 34.796
RC 166.847 GL 25.10 GP -1.92 ZAL 88.55 ZAP 167.17 ETS 351.23 ZAE 129.98 ETE 181.70 ZAC 76.95 ETC 164.62 CLP-167.31
   PLANETOCENTRIC CONIC
     C3 15.006 VHL 3.874 DLA 20.35 RAL 343.62 RAD 6567.6 VEL 11.679 PTH 2.05 VHP 6.551 DPA -12.19 RAP 344.90 ECC 1.2470
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           84.79 207.32 91.33 2 39 51
166.37 201.16 61.85 20 45 56
                       1 52 31 2840.56
19 37 37 4099.40
         90.00
                                                          -28.29
                                                                                                                              2 39 51
                                                                                                                                              2240.6 -27.80 76.15
         90.00
                                                          -3.20
                                                                                                                                                  3499.4
                                                                                                                                                                     -6.94
                                                                                                                                                                                     159.68
                                                                                                                 93.08 4 9 21
60.16 21 50 23
97.63 5 40 49
55.84 22 28 17
       100.00
                      3 27 6 2535.58
20 45 43 3879.61
                                                       -29.75
                                                                             62.29
                                                                                            207.26
                                                                                                                                                1935.6
                                                                                                                                                                   -29.00
                                                                                                                                                                                      53.56
       100.00
                                                            -1.93
                                                                           149.50
                                                                                            200.45
                                                                                                                                                  3279.6
                                                                                                                                                                    -5.88
                                                                                                                                                                                     142.95
                                                                          Jo . 96
138 . 04
                      5 3 35 2233.69
21 25 43 3754.27
       110.00
                                                          -33.42
                                                                                            206.85
                                                                                                                                                1633.7
       110 00
                                                          1.20
                                                                                            198.50
                                                                                                                                                  3154.3
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
    TOE 1.8848 TRA .1097 TC3-5.7607 BAU 1.1568
                                                                                SGT 5265.0 SGR 372.0 SG3 198.6
                                                                                                                                            ST 2791.4 SR 292.8 55 764.4
                                                                                RRT - .0466 RRF - .0643 RTF - .9152
SGB 5278.1 R23 .0214 R13 - .9152
SGI 5265.0 SG2 371.6 THA 179.81
    RDE .1963 RRA -.0784 RC3 .2543 FAU .03627
FDE .8915 FRA .6072 FC3-2.0925 BSP 16760
                                                                                                                                          CRT .9871 CRS -.9407 CST -.9808
                                                                                                                                           LSA 2905.0 MSA 150.9 SSA 21.0
Fit 2806.3 EL2 46.6 ALF 5.91
     BOE 1.8950 BRA .1348 BC3 5.7663 FSP -662
LAUNCH DATE DEC 14 1965
                                                                                     FLIGHT TIME 172.00
                                                                                                                                                          ARRIVAL DATE JUN 4 1966
  HELTOCENTRIC CONTC
                                                                                    DISTANCE 505.898
    RL 147.25 LAL -.00 LOL 81.79 VL 26.752 GAL .28 AZL 86.50 MCA 250.11 SMA 122.11 ECC .20598 INC 3.4951 V1 30.256
RP 108.89 LAP -3.29 LOP 331.87 VP 36.751 GAP 10.15 AZP 91.19 TAL 178.91 TAP 69.02 RCA 96.95 APO 147.26 V2 34.800
RC 168.980 GL 24.57 GP -1.83 ZAL 85.51 ZAP 168.03 ETS 351.15 ZAE 129.98 ETE 181.62 ZAC 79.15 ETC 164.98 CLP-168.17
  PLANETOCENTRIC CONIC
    C3 15.380 VHL 3.922 DLA 21.16 RAL 346.80 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 6.710 DPA -11.23 RAP 347.04 ECC 1.2531
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                       1 55 35 2881.19
                                                          -28.32
                                                                           87.76
                                                                                          211.23
                                                                                                                89.84
                                                                                                                               2 43 36
                                                                                                                                                 2281.2
                                                                                                                                                                   -28.04
                                                                                                                 61.96 21 7 42
                                                                                                                                                                    -7.87
        90.00
                      19 59 52
                                       4069.84
                                                           -4.15
                                                                           164.71
                                                                                            204.96
                                                                                                                                                  3469.8
                     3 31 15 2572.69
21 6 53 3853.57
5 9 44 2264.60
21 44 54 3734.42
                                                                                                                             4 14 8
       100.00
                                                         -29.85
                                                                            65.04
                                                                                            211.21
                                                                                                                 91.63
                                                                                                                                                  1972.7
                                                                                                                                                                   -29.31
                                                                                                                                                                                      56.28
                                                                                                                 60.23 22 11 6
       100.00
                                                          -2.81
                                                                           148.07
                                                                                            204.22
                                                                                                                                                  3253.6
                                                                                                                                                                                     141.50
32.32
                                                                                                                                                                    -6.75
                                                                                                                96.24 5 47 28
55.82 22 47 8
       110.00
                                                          -33.68
                                                                             41.33
                                                                                            210.90
                                                                                                                                                 1664.6
                                                                                                                                                                   -32.45
                                                             .44
       110.00
                                                                           137.01
                                                                                            202.19
                                                                                                                                               3134.4
                                                                                                                                                                   -4.04
                                                                             MID-COURSE EXECUTION ACCURACY
SGT 5315.4 SGR 380.8 SG3 192.3 ST 2879.4 SR 305.4 SS 768.8
RRT - .0168 RRF - .0335 RTF .9149 CRT .9823 CRS -.9331 CST -.9825
SGB 5329.0 R23 .0180 R13 -.9149 LSA 2992.1 MSA 149.7 SSA 21.2
SG1 5315.4 SG2 380.7 TMA 179.93 EL1 2895.0 EL2 56.9 ALF 5.95
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE 1.9665 TRA .2906 TC3-5.6720 BAU 1.1673
                                                                             SGT 5315.4 SGR 380.8 SG3 192.3
RRT -.0168 RRF -.0335 RTF .9149
    RDE .2073 RRA -.0839 RC3 .2419 FAU .03386
FDE .8824 FRA .6559 FC3-1.9057 BSP 16956
```

BOE 1.9774 BRA .3024 BC3 5.6771 FSP -638

```
ARRIVAL DATE JUN 6 1966
                                                                      FLIGHT TIME 174.00
LAUNCH DATE DEC 14 1965
                                                                     DISTANCE 511.557
  HELIOCENTRIC CONIC
   RL 147.25 LAL -.00 LOL 81.79 VL 26.706 GAL .75 A7L 86.52 MCA 253.27 SHA 121.83 ECC .20909 INC 3.4754 VI 30.256 RP 108.88 LAP -3.33 LOP 335.04 VP 36.722 GAP 10.43 A7P 91.00 TAL 177.17 TAP 70.44 RCA 96.35 APO 147.30 V2 34.805 RC 171.096 GL 23.98 GP -1.75 TAL 82.44 ZAP 168.88 ETS 351.01 ZAE 129.99 ETE 181.56 ZAC 81.37 ETC 165.31 CLP-169.02
   PLANETOCENTRIC CONIC
                                                                                               2.06 VMP 6.875 DPA -10.25 RAP 349.18 ECC 1.2611
    C3 15.865 VHL 3.983 DLA 21.92 RAL 350.02 RAD 6567.6 VEL 11.715 PTH
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            88.31 2 47 35
62.10 21 29 42
                                                                                                                                      -28.21
                                                                                                                     2322.9
                  1 58 52 2922.91
20 22 20 4042.15
                                                                            215.28
                                                               90.81
                                                 -28.27
                                                                                                                         3442.1
                                                                                                                                       -8.73
                                                                                                                                                     156.43
                                                                            208.92
                                                 -5.04
                                                              163.16
                                                                                             90.15 4 19 13
60.31 22 32 0
94.82 5 54 30
55.82 23 6 5
                                                                                                                                                      59.07
                                                                                                                         2010.6
                                                                                                                                       -29.55
                  3 35 43 2610.63
21 28 10 3829.65
                                                                            215.30
                                                -29.89
                                                               67.86
                                                                                                                                                     140.17
                                                                                                                         3229.7
                                                                                                                                       -7.54
      100.00
                                                  -3.62
                                                              146.76
                                                                            208.14
                                                                                                                         1696.1
                                                                                                                                      -32.85
                                                                                                                                                      34.69
                  5 16 14 2296.12 -53.88
22 4 8 3716.93 -.22
                                                                            215.10
                                                               43.77
      110.00
                                                                                                                      3116.9
                                                                                                                                       -4.71
                                                                                                                                                     129.88
                                                 - .22
                                                                            206.03
                                                              136.10
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 5367.0 SCR 388.6 $63 186.4
RRT .0113 RRF -.0074 RTF .9169
SGB 5381.0 R23 -.0179 R13 .9169
                                                                                                                    ST 2950.8 SR 318.0 SS 766.5
CRT .9770 CRS -.9257 CST -.9840
    TOE 2.0434 TRA .4793 TC3-5.5592 BAU 1.1801
    ROE .2192 RRA - .0886 RC3 .2270 FAU .03191
FDE .8676 FRA .6983 FC3-1.7413 BSP 17164
BDE 2.0551 BRA .4874 BC3 5.5638 FSP -622
                                                                                                                   LSA 3061.6 MSA 148.6 SSA 21.1
EL1 2967.1 EL2 67.4 ALF 6.01
                                                                  SG1 5367.0 SG2 388.6 THA
                                                                                                      .05
                                                                                                                                ARRIVAL DATE JUN 8 1966
                                                                      FLIGHT TIME 176.00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 517.193
   RL 147.25 LAL -.00 LOL 81.79 VL 26.659 GAL 1.23 AZL 86.54 HCA 256.44 SMA 121.55 ECC .21249 INC 3.4564 V1 30.256
RP 108.86 LAP -3.36 LOP 338.21 VP 36.693 GAP 10.72 AZP 90.81 TAL 175.42 TAP 71.86 RCA 95.72 APO 147.38 V2 34.811
RC 173.196 GL 23.32 GP -1.68 ZAL 79.37 ZAP 169.72 ETS 350.80 ZAE 130.02 ETE 181.51 ZAC 83.61 ETC 165.60 CLP-169.86
   PLANETOCENTRIC CONIC
                                                                                               2.07 VHP 7.050 OPA -9.27 RAP 351.32 ECC 1.2711
    C3 16.472 VHL 4.059 DLA 22.63 RAL 353.29 RAD 6567.7 VEL 11.741 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           86.76 2 51 51
62.24 21 51 46
88.64 4 24 40
60.39 22 52 53
93.36 6 1 57
55.82 23 24 58
                                                                           219.45
                                                                                                                                      -28.30
                                                                                                                      2365.4
                    2 2 25 2965.36
                                                 -28.15
                                                               93.91
        90.00
                                                                                                                         3416.8
                                                                                                                                        -9.51
                                                                                                                                                      154.97
                                                                             213.03
                  20 44 49
                                4016.81
                                                  -5.84
                                                               161.73
                 3 40 31 2649.06
21 49 24 3808.34
5 23 9 2327.98
22 23 16 3702.18
                                                                                                                         2049.1
                                                                                                                                       -29.73
                                                                                                                                                       61.92
                                                                70.72
                                                                             219.53
                                                 -29.86
       100.00
                                                                           212.20
219.44
                                                                                                                         3208.3
                                                                                                                                       -8.24
                                                                                                                                                      138.97
                                                  -4.33
                                                               145.58
       100.00
                                                                                                                         1728.0
                                                                                                                                    -33.20
                                                                                                                                                       37.11
                                                 -34.04
                                                                46.25
       110.00
                                                                             209.99
                                                                                                                         3102.2
                                                                                                                                        -5.27
                                                                                                                                                      129.11
                                                  -.79
                                                               135.33
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5415.4 SGR 395.6 SG3 180.8
RRT .0398 RRF .0194 RTF .9185
                                                                                                                     ST 3014.5 SR 330.5 S5 763.0
CRT .9714 CRS -.9184 CST -.9852
    TDE 2.1218 TRA .6811 TC3-5.4077 BAU 1.1918
    ROE .2321 RRA -.0923 RC3 .2103 FAU .02999
                                                                                                                     LSA 3123.5 MSA 149.1 55A 20.8
    FOE .8535 FRA .7426 FC3-1.5762 BSP 17367
BOE 2.1345 BRA .6873 BC3 5.4118 FSP -606
                                                                   SGB 5429.8 R23 -.0174 R13 .9185
                                                                                                                     EL1 3031.6 EL2 78.1 ALF 6.08
                                                                   SG1 5415.4 SG2 395.3 THA .17
                                                                                                                               ARRIVAL DATE JUN 10 1966
                                                                      FLIGHT TIME 178.00
LAUNCH DATE DEC 14 1965
                                                                      DISTANCE 522.804
    RL 147.25 LAL -.00 LOL 81.79 VL 26.613 GAL 1.74 AZL 86.56 MCA 259.61 SMA 121.28 ECC .21619 INC 3.4379 V1 30.256
RP 108.84 LAP -3.38 LOP 341.38 VP. 36.666 GAP 11.03 AZP 90.62 TAL 173.67 TAP 73.28 RCA 95.06 APO 147.50 V2 34.817
RC 175.278 GL 22.61 GP -1.82 ZAL 76.31 ZAP 170.54 ETS 350.50 ZAE 130.05 ETE 181.46 ZAC 85.86 ETC 165.87 CLP-170.68
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.216 VHL 4.149 DLA 23.28 RAL 356.57 RAD 6567.7 VEL 11.773 PTH 2.08 VHP 7.233 DPA -8.27 RAP 353.47 ECC 1.2833
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         85.21 2 56 27
62.39 22 13 42
87.14 4 30 32
60.48 23 13 34
91.89 6 9 49
55.84 23 43 39
                                                                          223.72
                                                                                                                      2408.2
                                                                                                                                     -28.31
                                                 -27.94
                                                               97.02
                     2 6 19
                                  3008.16
                                                                                                                                       -10.20
                                                                                                                         3394.3
                                                               160.46
                                                                             217.26
        90.00, 21 7 8
                                                  -6.55
                                 3994.31
                                                                                                                                                       64.78
                                                                                                                                       -29.85
                                                               73.58
                                                                          223.86
                                                                                                                         2087.6
                                                 -29.77
                    3 45 44 2687.62
       100.00
                                                                                                                         3190.1
                                                                                                                                       -8.84
                                                              144.57
                                                                             216.38
                                                  -4.95
       100.00
                   22 10 24 3790.09
                                                                                                                                       -33.50
                                                                                                                                                       39.55
                  5 30 29 2359.92
22 42 9 3690.54
                                                                                                                         1759.9
                                                                48.74
                                                                             223.90
                                                 -34.14
       110.00
                                                                                                                                        -5.71
                                                                                                                         3090.5
                                                               134.72
                                                                             214.07
                                                 -1.23
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 3071.5 SR 342.7 SS 759.4
CRT .9654 CRS -.9114 CST -.9864
                                                                   SGT 5456.5 SGR 401.8 SG3 175.3
RRT .D692 RRF .0486 RTF .9199
    TOE 2.2029 TRA .8981 TC3-5.2107 BAU 1.2001
    RDE .2462 RRA -.0949 RC3 .1923 FAU .02799
FDE .8411 FRA .7877 FC3-1.4074 BSP 17473
BOE 2.2166 BRA .9031 BC3 5.2142 FSP -586
                                                                                                                    LSA 3178.8 MSA 150.6 SSA 20.4
                                                                   SGB 5471.3 R23 -.0155 R13 .9199
                                                                                                                     EL1 3089.2 EL2 88.8 ALF
                                                                                                                                                          6.15
                                                                                                      .29
                                                                   SG1 5456.6 SG2 400.8 THA
                                                                                                                                ARRIVAL DATE JUN 12 1966
                                                                       FLIGHT TIME 180.00
LAUNCH DATE DEC 14 1965
                                                                       DISTANCE 528.385
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 26.568 GAL 2.27 AZL 86.58 HCA 262.77 SMA 121.01 ECC .22023 INC 3.4198 V1 30.256
RP 108.82 LAP -3.39 LOP 344.55 VP 36.640 GAP 11.35 AZP 90.43 TAL 171.93 TAP 74.70 RCA 94.36 APO 147.66 V2 34.824
RC 177.341 GL 21.84 GP -1.56 ZAL 73.27 ZAP 171.35 ETS 350.09 ZAE 130.08 ETE 181.43 ZAC 88.12 ETC 166.10 CLP-171.49
   PLANETOCENTRIC CONIC
                                                                                                                             -7.27 RAP 355.62 ECC 1.2981
                                                                                                2.09 VHP 7.427 DPA
     C3 18.113 VHL 4.256 DLA 23.87 RAL 359.86 RAD 6567.7 VEL 11.811 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2450.8
                                                                                                                                      -28.25
                                                                                                                                                      91.50
                                                               100.12
                                                                            228.07
                                                                                             83.69
                                  3050.85
                                                  -27.66
                     2 10 38
        90.00
                                                                                              62.53 22 35 17
                                                                                                                          3375.2
                                                                                                                                        -10.78
                                                                                                                                                      152.57
                   21 29 2 3975.21
                                                  -7.15
                                                               159.38
                                                                              221.59
        90.00
                                                                                                          4 36 51
                                                                                                                          2125.9
                                                                                                                                       -29.89
                                                                                                                                                        67.62
                   3 51 25 2725.90
22 30 56 3775.38
                                                                 76.41
                                                                              228.28
                                                                                              85.66
                                                  -29.60
       100.00
                                                                                              60.56 23 33 52
                                                                                                                          3175.4
                                                                                                                                         -9.32
                                                                                                                                                      137.12
                                                               143.76
                                                                              220.65
                                                   -5.44
       100.00
                                                                                                          6 18 7
                                                                                                                          1791.7
                                                                                                                                                       42.00
                   5 38 15 2391.68
23 Ø 36 3682.37
                                                                 51.22
                                                                             228.46
                                                                                             90.42 6 18 7
55.85 24 1 58
                                                  -34.18
       110.00
                                                                                                                                        -6.02
                                                                                                                                                       128.06
                                                                                                                          3082.4
                                                 -1.55
                                                                             218.23
                                                            134.30
                                                                MID-COURSE EXECUTION ACCURACY
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 3110.4 SR 354.6 S5 752.1
CRT .9595 CRS -.9046 CST -.9875
                                                                   SGT 5496.1 SGR 407.2 SG3 169.9
RRT .0976 RRF .0764 R1F .9219
     TOE 2.2788 TRA 1.1238 TC3-4.9925 BAU 1.2097
    RDE .2615 RRA -.0964 RC3 .1733 FAU .02619
FDE .8265 FRA .8301 FC3-1.2520 B9P 17650
                                                                  5GB 5511.2 R23 -.0142 R13 .9219
SGI 5496.3 SGZ 405.2 THA .42
                                                                                                                    LSA 3216.0 MSA 152.8 SSA 19.9
                                                                                                                      EL1 3129.0 EL2 99.3 ALF 6.25
     BOE 2.2938 BRA 1.1279 BC3 4.9955 FSP -569
```

ELI 3165.1 EL2 139.3 ALF 6.70

-508

ARRIVAL DATE JUN 22 1966

```
FLIGHT TIME 190.00
LAUNCH DATE DEC 14 1965
                                                                        DISTANCE 555.709
   RL 147.25 LAL -.00 LOL 81.79 VL 26.349 GAL 5.31 AZL 86.67 HCA 278.63 SMA 119.75 ECC .24672 INC 3.3304 VI 30.256
RP 108.68 LAP -3.29 LOP .44 VP 36.524 GAP 13.28 AZP 89.50 TAL 163.27 TAP 81.90 RCA 90.20 APO 149.29 V2 34.868
RC 187.357 GL 17.51 GP -1.34 ZAL 58.93 ZAP 175.28 ETS 344.65 ZAE 130.29 ETE 181.36 ZAC 99.58 ETC 166.88 CLP-175.47
  HEL TOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 25.674 VHL 5.067 DLA 25.70 RAL 15.70 RAD 6568.0 VEL 12.126 PTH 2.17 VHP 8.600 DPA -2.19 RAP
                                                                                                                                              6.39 ECC 1.4225
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2645.8
                                                                                                                                          -26.96
                                                                                                            3 35 44
                    2 41 38 3245.81
23 4 26 3948.30
                                                   -25.43
                                                                113.94
                                                                              250.48
                                                                                               77.12
                                  3245.81
        90.00
                                                                                                151.01
                                                                                                                             3348.3
                                                                                                                                           -11.59
                                                                               243.86
                                                   -8.00
                                                                157.85
        90.00
                                                                                                                                           -29.23
                                                                                                                                                           80.57
                                                                                                                             2300.9
                                                   -28.02
                                                                  89.17
                                                                               251.09
                   4 28 37
0 4 4
                                  2900.91
       100.00
                                                                                                                             3168.4
                                                                                                                                            -9.55
                                                                                                                                                          136.73
                                                                               242.60
                                                                143.37
                                                   -5.67
       100.00
                                  3768.44
                                                                                                                                                           53.63
                                                                                                                             1941.1
                                                                                                                                           -34.17
                    6 23 38 2541.08
0 25 33 3701.02
                                                   -33.65
                                                                               252.08
                                                                  62.84
       110.00
                                                                                                           1 27 14
                                                                                                                             3101.0
                                                                                                                                            -5.31
                                                                                                                                                           129.05
                                                                               239.60
                                                                                                55.83
                                                                 135.27
       110.00
                                                   -.83
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5625.1 SGR 421.5 SG3 145.3

RRT .2418 RRF .2215 RTF .9339

SGB 5640.9 R23 -.0056 R13 .9339

SGI 5626.0 SGZ 408.9 THA 1.04
                                                                                                                        ST 3120.6 SR 401.5 S5 699.8
CRT .9282 CRS -.8735 CST -.9916
    TOE 2.6329 TRA 2.4660 TC3-3.5853 BAU 1.2309
    ROE .3540 RRA -.0818 RC3 .0817 FAU .01795
FOE .7565 FRA 1.0450 FC3 -.6052 BSP 18279
                                                                                                                        LSA 3218.4 MSA 173.8 SSA 16.5
EL1 3142.8 EL2 148.3 ALF 6.83
    BOE 2.6566 BRA 2.4674 BC3 3.5863 FSP -494
                                                                                                                                    ARRIVAL DATE JUN 24 1966
                                                                         FLIGHT TIME 192.00
LAUNCH DATE DEC 14 1965
                                                                         DISTANCE 561.015
   HELIOCENTRIC CONIC
    RL 147.25 LAL -.00 LOL 81.79 VL 26.307 GAL 6.02 AZL 86.69 MCA 281.81 SNA 119.51 ECC .25358 INC 3.3120 V1 30.256
RP 108.65 LAP -3.24 LOP 3.62 VP 36.503 GAP 13.75 AZP 89.32 TAL 161.57 TAP 83.38 RCA 89.20 APO 149.82 V2 34.878
RC 189.297 GL 16.59 GP -1.30 ZAL 56.31 ZAP 176.05 ETS 341.97 ZAE 130.33 ETE 181.36 ZAC 101.88 ETC 166.95 CLP-176.27
   PLANETOCENTRIC CONIC
    C3 28.023 VHL 5.294 DLA 25.85 RAL 18.64 RAD 6568.1 VEL 12.223 PTH 2.20 VHP 8.887 DPA -1.18 RAP 8.55 ECC 1.4612
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 76.11
                                                                 116.16
                                                                              255.00
                                   3277.98
                                                   -24.93
        90.00
                     2 50 18
                                                                                                                                                           151.67
                                                                                                           24 25 14
                                                                                                                                            -11.25
                                                                                248.26
                                                                                                 62.65
                                   1959.59
                                                     -7.64
                                                                  158.49
        90.00
                   23 19 14
                                                                                                 78.08 5 26 50
60.52 1 21 11
                                                                                                                             2330.8
                                                                                                                                            -28.98
                                                                                                                                                            82.76
                                                                                255.69
                                                   -27.62
                                                                   91.30
                                  2930.77
       100.00
                    4 38 O
                                                                                                                             3182.0
                                                                                                                                             -9.10
                                                                                                                                                           137.50
                                                                 144.15
                                                                                246.94
                     0 18 9 3782.04
                                                     -5.22
       100.00
                                                                                                                                           -34.11
                                                                                                                                                             55.76
                                                                                                            7 16 37
                                                                                                                             1968.4
                                                                   64.94
                                                                                256.85
                                                                                                 82.35
                     6 33 49 2568.38
                                                   -33.42
       110.00
                                                                                                          1 40 47
                                                                                                                                            -4.70
                                                                                                                                                           129.90
                                                                                                                             3117.2
                                                                 136.11
                                                                                243.83
                                                                                                 55.82
                     0 38 49
                                   3717.19
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5637.4 SGR 421.8 SG3 140.8
RRT .2706 RRF .2509 RTF .9368
SGB 5653.1 R23 -.0041 R13 .9367
                                                                                                                         ST 3088.5 SR 407.2 SS 688.0
     TOE 2.6969 TRA 2.7822 TC3-3.2805 BAU 1.2293
                                                                                                                         CRT .9216 CRS -.8676 CST -.9923
     RDE .3754 RRA -.0739 RC3 .0666 FAU .01647
FDE .7436 FRA 1.0898 FC3 -.5088 BSP 18376
                                                                                                                        LSA 3185.2 MSA 178.8 SSA 15.8
EL1 3111.3 EL2 156.9 ALF 6.94
                                                                      SG1 5638.5 SGZ 406.0 THA 1.17
     BOE 2.7229 BRA 2.7832 BC3 3.2812 FSP -480
                                                                                                                                   ARRIVAL DATE JUN 26 1966
                                                                         FLIGHT TIME 194.00
LAUNCH DATE DEC 14 1965
                                                                        DISTANCE 566.248
    RL 147.25 LAL -.00 LOL 81.79 VL 26.266 GAL 6.78 AZL 86.71 HCA 284.99 SMA 119.28 ECC .26111 INC 3.2932 V1 30.256
RP 108.62 LAP -3.18 LOP 6.81 VP 36.483 GAP 14.26 AZP 89.15 TAL 159.90 TAP 84.89 RCA 88.13 APO 150.42 V2 34.889
RC 191.216 GL 15.68 CP -1.27 ZAL 53.79 ZAP 176.81 ETS 337.88 ZAE 130.35 ETE 181.36 ZAC 104.18 ETC 166.99 CLP-177.07
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                 -.17 RAP 10.70 ECC 1.5061
     C3 30.754 VHL 5.546 DLA 25.93 RAL 21.48 RAD 6568.2 VEL 12.334 PTH 2.22 VHP 9.198 DPA
     ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                75.23 3 54 20 62.52 24 38 36 77.12 5 37 17 60.43 1 34 9 7 27 30
                                                                              259.52
                                                   -24.43
                                                                  118.16
                      2 59 50 3307.23
        90.00
                                                                                                                                            -10.73
                                                                                                                             3376.9
                                                                                252.59
                                   3976.89
                                                   -7.10
                                                                 159.47
                    23 32 19
         90.00
                                                                                                                                            -28.71
                                                                                                                             2358.7
                                                                                260.28
                    4 47 58 2958.65
                                                   -27.21
                                                                   93.27
        100.00
                                                                                                                                             -8.49
                                                                                                                                                           138.55
                                                                                                                             3200.7
                                                    -4.59
                                                                  145.16
                                                                                251.22
                                  3800.70
                     0 30 49
        100.00
                                                                                                                                            -34.02
                                                                                                                             1994.8
                                                                                261.60
                                                   -33.16
                                                                   66.95
                      6 44 16 2594.79
       110.00
                                                                                                 55.82 1 53 18
                                                                                                                                              -3.93
                                                                                                                             3137.3
                                                                                248.02
                                                                  137.16
                                                    . 56
                      0 51 0
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                     SGT 5646.9 SGR 421.4 SG3 136.6
RRT .3001 RRF .2811 RTF .9397
SGB 5662.6 R23 -.0024 R13 .9397
SGI 5648.3 SG2 401.9 THA 1.29
                                                                                                                         ST 3052.4 SR 411.3 SS 677.7
CRT .9148 CRS -.8619 CST -.9930
     TOE 2.7631 TRA 3.1217 TC3-2.9735 BAU 1.2227
     RDE .3976 RRA -.0640 RC3 .0332 FAU .01497
FDE .7329 FRA 1.1374 FC3 -.4214 BSP 18378
                                                                                                                         LSA 3148.2 MSA 183.7 SSA 15.2
                                                                                                                          EL1 3075.5 EL2 164.8 ALF 7.05
     BDE 2.7915 BRA 3.1223 BC3 2.9740 FSP -464
                                                                                                                                     ARRIVAL DATE JUN 28 1966
                                                                          FLIGHT TIME 196.00
 LAUNCH DATE DEC 14 1965
     RL 147.25 LAL -.00 LOL 81.79 VL 26.225 GAL 7.58 AZL 86.73 HCA 288.17 SMA 119.05 ECC .26938 INC 3.2739 V1 30.256
RP 108.58 LAP -3.11 LOP 9.99 VP 36.465 GAP 14.81 AZP 88.98 TAL 158.25 TAP 86.42 RCA 86.98 APO 151.12 V2 34.900
RC 193.113 GL 14.77 GP -1.24 ZAL 51.38 ZAP 177.54 ETS 331.08 ZAE 130.37 ETE 181.36 ZAC 106.47 ETC 167.00 CLP-177.88
                                                                          DISTANCE 571.395
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                    .84 RAP 12.85 ECC 1.5584
     C3 33.931 VHL 5.825 DLA 25.95 RAL 24.20 RAD 6568.3 VEL 12.462 PTH 2.25 VHP 9.533 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               264.02
                                                                                                  74.45
                                                                  119.95
                      3 10 14 3333.58
                                                    -23.97
                                                                                                                                                            154.01
                                                                                                                               3400.0
                                                                                                                                             -10.03
                                                                                                             24 50 19
                    23 43 39 4000.04
4 58 28 2984.63
0 42 2 3824.23
6 54 53 2620.37
1 2 6 3761.25
                                                                                                   62.35
                                                                                 256.84
                                                    -6.37
                                                                   160.78
                                                                                                                               2384.6
                                                                                                                                             -28.43
                                                                                                                                                             86.67
                                                                                                            5 48 13
1 45 46
                                                                                                   76.24
                                                                    95.09
                                                                                 264.84
                                                    -26.80
        100.00
                                                                                                                                               -7.72
                                                                                                                                                            139.86
                                                                                                                               3224.2
                                                                                                   60.33
                                                                  146.46
                                                                                 255.43
                                                    -3.80
                                                                                                                                                             59.81
                                                                                                            7 38 34
2 4 47
                                                                                                                               2020.4
                                                                                                                                            -33.90
                                                                    68.90
                                                                                                   80.06
                                                    -32.88
                                                                                                                               3161.3
                                                                                                                                                            132.20
                                                                  138.41
                                                                                 252.15
                                                                                                   55.84
                                                    1.47
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 3004.7 SR 413.8 SS 666.8
CRT .9079 CRS -.8561 CST -.9937
      TOE 2.8243 TRA 3.4774 TC3-2.6788 BAU 1.2153
                                                                     SGT 5650.5 SGR 420.1 SG3 132.4
RRT .3289 RRF .3105 RTF .9430
SGB 5666.1 R23 -.0013 R13 .9430
     ROE .4203 RRA -.0522 RC3 .0414 FAU .01359
FDE .7217 FRA 1.1853 FC3 -.3468 BSP 18471
BDE 2.8554 BRA 3.4778 BC3 2.6791 FSP -451
                                                                                                                         LSA 3099.8 MSA 188.3 SSA 14.5
EL1 3028.2 EL2 172.1 ALF 7.15
                                                                      SG1 5652.2 SG2 396.6 THA 1.41
```

Ξ

 \equiv

ARRIVAL DATE JUL 8 1966

```
LAUNCH DATE DEC 14 1965
                                                                       DISTANCE 595.167
   RL 147.25 LAL -.0D LOL 81.79 VL 26.032 GAL 12.56 AZL 86.84 HCA 304.11 SMA 117.98 ECC .32551 INC 3.1619 VI 30.256 RP 108.39 LAP -2.62 LOP 25.94 VP 36.385 GAP 18.44 AZP 88.23 TAL 150.63 TAP 94.74 RCA 79.58 APO 156.38 V2 34.961 RC 202.264 GL 10.43 GP -1.14 ZAL 41.04 ZAP 177.55 ETS 209.73 ZAE 130.19 ETE 181.40 ZAC 117.70 ETC 166.57 CLP 177.83
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                                              5.68 RAP 23.47 ECC 1.9860
   C3 59.910 VHL 7.740 CLA 25.29 RAL 35.90 RAD 6569.1 VEL 13.464 PTH 2.46 VHP 11.747 OPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         5 7 17
       90.00 4 10 6 3430.89

90.00 0 21 2 4187.20

100.00 5 55 21 3091.56

100.00 1 18 28 4001.77
                                                                             285.92
                                                                                             71.75
                                                               126.43
                                                -22.04
                                                                                                         1 30 49
                                                                                                                                          -4.16
                                                                                                                                                        164.63
                                                                                                                          3587.2
                                                                                               61.69
                                                                              276.49
                                                               171.27
                                                  -.37
                                                                                               72.84 6 46 53
60.18 2 25 10
75.15 8 33 55
                                                                                                                                         -26.97
                                                                              286.90
                                                                                                                          2491.6
                                                               102.44
                                                -24.85
                                                                                                                                         -1.77
                                                                                                                                                        149.68
                                                                                                                          3401.8
                                                                              275.05
                                                               156.20
      100.00
                                                   2.22
                                                                                                                          2138.2
                                                                                                                                         -32.87
                   7 48 17 2738.23
1 42 2 3927.86
                                                                              288.94
                                                -31.15
                                                                 77.65
      110.00
                                                                                                                                            3.34
                                                                                                                                                        140.90
                                                                                                         2 47 29
                                                                                                                          3327.9
                                                                              271.61
                                                                                               56.61
                                                               147.17
                                                  7.79
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2718.1 SR 400.0 SS 634.8
CRT .8718 CRS -.8300 CST -.9967
                                                                   SGT 5607.1 SGR 401.4 SG3 113.9
RRT .4737 RRF .4584 RTF .9615
SGB 5621.5 R23 .0013 R13 .9615
    TOE 3.1552 TRA 5.6544 TC3-1.3784 BAU 1.1040
   ROE .5402 RRA .0407 RC3 .0067 FAU .00702
FCE .6893 FRA 1.4724 FC3 -.1015 BSP 18611
BOE 3.2011 BRA 5.6545 BC3 1.3784 FSP -389
                                                                                                                      LSA 2812.5 MSA 201.9 SSA 11.6
                                                                                                                      EL1 2740.5 EL2 194.4 ALF 7.35
                                                                    SG1 5610.4 SG2 353.3 THA 1.95
                                                                                                                                  ARRIVAL DATE JUL 10 1966
                                                                       FLIGHT TIME 208.00
                                                                       DISTANCE 599.315
   RL 147.25 LAL -.00 LOL 81.79 VL 25.996 GAL 13.82 AZL 86.87 HCA 307.30 SMA 117.78 ECC .34073 INC 3.1348 V1 30.256 RP 108.35 LAP -2.49 LOP 29.14 VP 36.372 GAP 19.41 AZP 88.10 TAL 149.30 TAP 96.60 RCA 77.65 APO 157.92 V2 34.974 RC 204.023 GL 9.62 GP -1.12 ZAL 39.34 ZAP 176.70 ETS 201.95 ZAE 130.06 ETE 181.41 ZAC 119.86 ETC 166.37 CLP 176.89
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                                               6.59 RAP 25.54 ECC 2.1222
    C3 68.190 VHL 8.258 DLA 25.03 RAL 37.83 RAD 6569.3 VEL 13.767 PTH
                                                                                                 2.52 VHP 12.338 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2845.6
                   4 22 34 3445.65

0 23 55 4234.78

6 6 51 3109.45

1 22 20 4046.21

7 58 33 2760.01

1 47 8 3968.42
                                                                                                         5 20 0
                                                                             290.07
                                                                                             71.37
                                                                127.39
                                                  -21.72
                                                                                                                                            -2.63
                                                                                                           1 34 30
                                                                                                                           3634.8
                                                                173.92
                                                                              280.07
                                                                                                61.70
                                                   1.16
                                                                                                        6 58 41
2 29 46
8 44 33
2 53 16
                                                                                                                           2509.5
                                                                                                                                          -26.68
                                                                              291.06
                                                                                                72.31
                                                                103.65
                                                  -24.50
                                                                                                                                            -.26
                                                                                                60.32
                                                                                                                           3446.2
                                                   3.72
                                                                158.65
                                                                              278.65
       100.00
                                                                                                                                                          70.49
                                                                                                                           2160.0
                                                                                                                                          -32.60
                                                                                                74.30
                                                 -30.76
                                                                 79.23
                                                                              293.18
       110.00
                                                                                                                                            4.89
                                                 9.30
                                                                              275.23
                                                                                                56.96
                                                                                                                           3368.4
                                                                149.33
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2657.4 SR 392.3 55 634.4
                                                                    SGT 5585.8 SGR 395.3 SG3 110.7
RRT .5025 RRF .4879 RTF .9655
SGB 5599.8 R23 .0011 R13 .9655
    TOE 3.2343 TRA 6.1906 TC3-1.1633 BAU 1.0605
                                                                                                                       CRT .8648 CRS -.8257 CST -.9972
    ROE .5649 RRA .0668 RC3 .0040 FAU .00571
FDE .6888 FRA 1.5437 FC3 -.0725 BSP 18612
BDE 3.2833 BRA 6.1910 BC3 1.1633 FSP -378
                                                                                                                       LSA 2752.7 MSA 201.9 SSA 11.0
                                                                                                                      EL1 2679.1 EL2 195.4 ALF
                                                                    SG1 5589.4 SG2 341.6 THA 2.04
                                                                                                                                 ARRIVAL DATE JUL 12 1966
                                                                       FLIGHT TIME 210.00
LAUNCH DATE DEC 14 1965
                                                                       DISTANCE 603.151
    RE 147.25 LAL -.00 LOL 81.79 VL 25.962 GAL 15.20 A7L 86.89 MCA 310.50 SMA 117.60 ECC .35776 INC 3.1053 V1 30.256 RP 108.31 LAP -2.36 LOP 32.34 VP 36.359 GAP 20.49 A7P 87.98 TAL 148.06 TAP 98.56 RCA 75.52 APO 159.67 V2 34.987 RC 205.757 GL 8.84 GP -1.10 ZAL 37.78 ZAP 175.76 ETS 197.32 ZAE 129.89 ETE 181.42 ZAC 121.98 ETC 166.14 CLP 175.90
   HELTOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                              7.47 RAP 27.58 ECC 2.2847
    C3 78.060 VHL 8.835 DLA 24.74 RAL 39.60 RAO 6569.5 VEL 14.121 PTH 2.57 VHP 12.998 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        5 32 33
1 37 11
7 10 16
2 33 24
8 54 52
2 58 10
                                                                                                                                         -23.81
                                                                                                                        2859.3
                                                                           294.10
                                                                                               71.02
                    4 34 53 3459.30
0 25 47 4284.44
6 18 10 3126.35
                                                  -21.42
                                                               128.28
        90.00
                                                                                                                                                        170.06
                                                                                                                           3684.4
                                                                                                                                           -1.03
                                                                                                61.81
                                                    2.76
                                                                176.69
                                                                              243.51
        90.00
                                                                                                                                                          96.70
                                                                                                                           2526.3
                                                                                                                                          -26.40
                                                                                                71.81
                                                  -24.14
                                                                104.78
                                                                              295.10
       100.00
                                                                                                                                                        154.67
                                                                                                                           3492.6
                                                                                                                                           1.31
                                                                                                60.53
                    1 25 12 4092.62
8 8 31 2781.08
1 51 19 4010.66
                                                                161.21
                                                                              282.13
                                                     5.28
       100.00
                                                                                                                                                         12.07
                                                                                                                           2181.1
                                                                                                                                         -32.32
                                                                  80.74
                                                                                                73.48
                                                                              297.28
       110,00
                                                  -30.36
                                                                                                                         3410.7
                                                                                                                                         6.48
                                                                                                                                                         145.25
                                                                                                57.39
                                                                151.61
                                                                              278.73
                                                   10.86
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2600.0 SR 383.1 SS 637.5
CRT .8582 CRS -.8222 CST -.9977
                                                                    SGT 5562.9 SGR 388.6 SG3 107.6
RRT .5316 RRF .5179 RTF .9694
SGB 5576.5 R23 .0009 R13 .9695
     TOE 3.3255 TRA 6.7754 TC3 -.9622 BAU 1.0041
    RDE .5899 RRA .0960 RC3 .0024 FAU .00430
                                                                                                                       LSA 2696.8 MSA 200.6 SSA 10.5
EL1 2620.8 EL2 195.1 ALF 7.25
    FOE .6920 FRA 1.6232 FC3 -.0477 BSP 18514
BDE 3.3774 BRA 6.7761 BC3 .9622 FSP -365
                                                                     SG1 5566.8 SG2 328.9 THA 2.13
                                                                                                                                   ARRIVAL DATE JUL 14 1966
                                                                        51 TOHT TIME 212.00
 LAUNCH DATE DEC 14 1965
                                                                        DISTANCE 606.594
    RL 147.25 LAL -.00 LOL 81.79 VL 25.928 GAL 16.73 AZL 86.93 MCA 313.70 SMA 117.41 ECC .37689 INC 3.0727 V1 30.256
RP 108.27 LAP -2.22 LOP 35.53 VP 36.348 GAP 21.71 AZP 87.88 TAL 146.94 TAP 100.64 RCA 73.16 APO 161.67 V2 35.000
RC 207.465 GL 8.07 GP -1.09 ZAL 36.35 ZAP 174.75 ETS 194.29 ZAE 129.66 ETE 181.42 ZAC 124.04 ETC 165.87 CLP 174.86
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 89.904 VML 9.482 DLA 24.41 RAL 41.22 RAD 6569.8 VEL 14.534 PTH 2.64 VMP 13.739 DPA
                                                                                                                               8.32 RAP 29.58 ECC 2.4796
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            5 44 49
                                                                              297.99
                                                                                                70.71
                                  3471.85
                                                   -21.14
                                                                 129.09
                      4 46 57
         90.00
                                                                                                                                              .63
                                                                                                            1 38 54
                                                                                                                            3735.7
                                                                               286.82
                                                                                                 62.00
                                                     4.41
                                                                 179.56
                    0 26 39
                                  4335.73
         90.00
                                                                                                                                                           97.80
                                                                                                                                           -26.12
                                                                                                         7 21 34
                                                                                                                            2542.2
                                                                               298.98
                                                                                                 71.36
                                                   -23.80
                                                                 105.83
                     6 29 12
                                  3142.18
        100.00
                                                                                                                                                          157.31
                                                                                                           2 36 5
                                                                                                                            3540.6
                                                                                                                                            2.94
                                                                               285.47
                                                                                                 60.84
                                                    6.88
                                                                 163.88
                     1 27 5
                                  4140.63
        100.00
                                                                                                                                           -32.03
                                                                                                 72.72
                                                                                                         9 4 51
                                                                                                                            2201.3
                                                                               301.22
                     8 18 10 2801.30
                                                   -29.96
                                                                  82.18
        110.00
                                                                                                 57.91
                                                                                                            3 2 11
                                                                                                                            3454.3
                                                                                                                                             8.12
                                                                               282.12
                                                                 153.99
                     1 54 37 4054.27
                                                   12.45
        110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                  RRT .5600 RRF .5472 RTF .9734 CRT .6520 CRS -.8190 CST -.9981 SG8 .5546.3 R23 .0003 R13 .9734 LSA 2639.6 M5A 198.2 SSA 9.9 SG1 .5537.3 SG2 .315.5 THA 2.22 EL1 .2560.6 EL2 .193.4 ALF 7.16
                                                                                                                        ST 2540.7 SR 372.4 SS 642.8
     TOE 3.4235 TRA 7.4058 TC3 -.7796 BAU .9370
     RDE .6148 RRA .1278 RC3 .0016 FAU .00286
     FDE .6971 FRA 1.7096 FC3 -.0275 BSP 18518
     BOE 3.4783 BRA 7.4069 BC3 .7796 FSP -355
```

FLIGHT TIME 206.00

```
LAUNCH DATE DEC 14 1965
                                                                                 FLIGHT TIME 214.00
                                                                                                                                                ARRIVAL DATE JUL 16 1966
    HELIOCENTRIC CONIC
                                                                                DISTANCE 609.547
     RL 147.25 LAL -.00 LOL 81.79 VL 25.896 GAL 18.41 AZL 86.96 MCA 316.90 SMA 117.24 ECC .39845 INC 3.0365 V1 30.256
RP 108.23 LAP -2.07 LOP 38.73 VP 36.338 GAP 23.09 AZP 87.78 TAL 145.97 TAP 102.87 RCA 70.53 APO 163.96 VZ 35.014
RC 209.146 GL 7.32 GP -1.07 ZAL 35.07 ZAP 173.66 ETS 192.17 ZAE 129.36 ETE 181.43 ZAC 126.04 ETC 165.57 CLP 173.75
    PLANETOCENTRIC CONIC
      C3 104.224 VHL 10.209 DLA 24.04 RAL 42.68 RAD 6570.0 VEL 15.019 PTH 2.70 VHP 14.576 DPA
                                                                                                                                             9.13 RAP 31.53 ECC 2.7153
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 58 41 3483.20
0 26 32 4388.25
6 39 55 3156.80
1 27 59 4189.88
8 27 25 2820.48
1 56 58 4098.97
          90.00
                                                         -20.88
                                                                        129.83
                                                                                       301.71
                                                                                                          70.43
                                                                                                                       5 56 44
                                                                                                                                        2883.2
                                                                                                                                                         -23.36
                                                                                                                                                                          122.03
          90.00
                                                          6.08
                                                                        182.52
                                                                                        289.96
                                                                                                           62.29
                                                                                                                      1 39 40
                                                                                                                                         3788.2
                                                                                                                                                           2.32
                                                                                                                                                                          175.85
                                                                                                                    7 32 32
2 37 49
         100.00
                                                        -23.48
                                                                        106.80
                                                                                        302.70
                                                                                                           70.95
                                                                                                                                         2556.8
                                                                                                                                                                           98.81
                                                                                                                                                          -25.86
        100.00
                                                          8.50
                                                                        166.63
                                                                                        288.65
                                                                                                          61.23
                                                                                                                                         3589.9
                                                                                                                                                           4.60
                                                                                                                                                                          160.02
                                                                                                                     9 14 25
        110.00
                                                        -29.57
                                                                         83.53
                                                                                        304.97
                                                                                                          72.01
                                                                                                                                         2220.5
                                                                                                                                                         -31.74
                                                                                                                                                                           74.99
        110.00
                                                       14.05
                                                                       156.46
                                                                                       285.37
                                                                                                          58.51
                                                                                                                       3 5 17
                                                                                                                                         3499.0
                                                                                                                                                           9.79
                                                                                                                                                                          149.96
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            SGT 5499.6 SGR 372.8 SG3 101.8
RRT .5883 RRF .5764 RTF .9772
SGB 5512.2 R23 -.0003 R13 .9772
     TOE 3.5358 TRA 8.0947 TC3 -.6120 BAU .8528
                                                                                                                                    ST 2483.2 SR 360.4 SS 651.7
CRT .8464 CRS -.8165 CST -.9984
     ROE .6399 RRA .1628 RC3 .0017 FAU .00126
     FOE .7059 FRA 1.8061 FC3 -.0105 BSP 18496
                                                                                                                                    LSA 2585.1 MSA 194.6 55A 9.4
     BDE 3.5932 BRA 8.0963 BC3 .6120 FSP -346
                                                                            5G1 55D3.9 SG2 3D1.2 THA 2.29
                                                                                                                                     EL1 2502.0 EL2 190.5 ALF 7.04
LAUNCH DATE DEC 14 1965
                                                                                FLIGHT TIME 216.00
                                                                                                                                                 ARRIVAL DATE JUL 18 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 611.876
    RL 147.25 LAL -.00 LOL 81.79 VL 25.866 GAL 20.30 AZL 87.00 MCA 320.10 SMA 117.08 ECC .42285 INC 2.9956 V1 30.256
RP 108.19 LAP -1.92 LOP 41.94 VP 36.329 GAP 24.66 AZP 87.70 TAL 145.16 TAP 105.26 RCA 67.57 APO 166.59 V2 35.027
RC 210.800 GL 6.60 GP -1.06 ZAL 33.96 ZAP 172.48 ETS 190.61 ZAE 128.98 ETE 181.43 ZAC 127.96 ETC 165.23 CLP 172.56
   PLANETOCENTRIC CONIC
    C3 121.687 VHL 11.031 DLA 23.64 RAL 43.96 RAD 6570.3 VEL 15.589 PTH 2.78 VHP 15.527 DPA 9.90 RAP 33.41 ECC 3.0027 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 10 0 3493.15 -20.65 130.47 305.23 70.19 6 8 13 2893.2 -23.17 122.70 90.00 0 25 26 4441.66 7.76 185.54 292.94 62.68 1 39 27 3841.7 4.04 178.84 100.00 6 50 14 3169.98 -23.18 107.66 306.20 70.58 7 43 4 2570.0 -25.62 99.71 100.00 1 27 53 4240.06 10.13 169.46 291.67 61.73 2 38 33 3540 .
                                                                                                                     2 38 33
9 23 32
                       8 36 14 2838.34
1 58 22 4144.47
       110.00
                                                       -29.18
                                                                         84.78
                                                                                       308.51
                                                                                                          71.36
                                                                                                                                         2238.3
                                                                                                                                                         -31.45
                                                                                                                                                                           76.31
                                                                         MID-COURSE EXECUTION ACCURACY
SGT 5461-9 SCP 3 T 26
       110.00
                                                        15.66
                                                                       159.01
                                                                                                                                         3544.5
                                                                                                                                                           11.46
                                                                                                                                                                          152.42
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5461.9 SGR 363.9 SG3 99.2
RRT .6163 RRF .6053 RTF .9808
    TOE 3.6663 TRA 8.8501 TC3 -.4595 BAU .7476
                                                                                                                                    ST 2427.6 SR 347.2 SS 664.8
CRT .8417 CRS -.8149 CST -.9988
    RDE .6653 RRA .2011 RC3 .0023 FAU-.00053
FDE .7192 FRA 1.9145 FC3 .0038 BSP 18455
BDE 3.7261 BRA 8.8524 BC3 .4595 FSP -337
                                                                           SGB 5474.1 R23 -.0009 R13 .9808
SG1 5466.6 SG2 286.3 THA 2.36
                                                                                                                                    LSA 2533.7 MSA 189.7 SSA
                                                                                                                                                                              8.8
                                                                                                                                    EL1 2445.2 EL2 186.1 ALF 6.90
LAUNCH DATE DEC 14 1965
                                                                               FLIGHT TIME 218.00
                                                                                                                                               ARRIVAL DATE JUL 20 1966
   HELIOCENTRIC CONIC
                                                                               DISTANCE 613.405
    RL 147.25 LAL -.00 LOL 81.79 VL 25.838 GAL 22.43 AZL 87.05 HCA 323.31 SMA 116.93 ECC .45058 INC 2.9488 V1 30.256 RP 108.15 LAP -1.76 LOP 45.14 VP 36.322 GAP 26.46 AZP 87.63 TAL 144.57 TAP 107.88 RCA 64.24 APO 169.62 VZ 35.040 RC 212.427 GL 5.89 GP -1.05 TAL 33.02 TAP 171.20 ETS 189.40 TAE 128.50 ETE 181.42 TAC 129.78 ETC 164.87 CLP 171.26
   PLANETOCENTRIC CONIC
    C3 143.184 VHL 11.966 OLA 23.20 RAL 45.05 RAO 6570.6 VEL 16.264 PTH 2.85 VHP 16.615 OPA 10.62 RAP 35.21 ECC 3.3565
                       1 58 43
                                                                                                         60.02
                                                                                                                      3 8 34
       110.00
                                     4190.53
                                                       17.24
                                                                                       291.37
                                                                                                                                        3590.5
                                                                                                                                                                        154.95
                                                                      161.64
                                                                                                                                                         13.13
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SGT 5422.4 SGR 354.4 SG3 96.8

RRT .6441 RRF .6342 RTF .9841

SGB 5433.9 R23 -.0016 R13 .9841

SGI 5427.2 SG2 270.9 THA 2.42
                                                                                                                                   ST 2375.7 SR 333.2 SS 683.3
CRT .8382 CRS -.8145 CST -.9990
    TOE 3.8236 TRA 9.8861 TC3 -.3203 BAU .6133
    ROE .6912 RRA .2428 RC3 .0035 FAU-.00267
FOE .7387 FRA 2.0381 FC3 .0161 RSP 18241
    FOE .7387 FRA 2.0381 FC3 .0161 BSP 18291
BDE 3.8856 BRA 9.6891 BC3 .3204 FSP -326
                                                                                                                                  LSA 2487.6 MSA 183.5 BSA 8.3
EL1 2392.2 EL2 180.4 ALF 6.74
LAUNCH DATE DEC 14 1965
                                                                               FLIGHT TIME 220.00
                                                                                                                                               ARRIVAL DATE JUL 22 1966
   HELIOCENTRIC CONIC
                                                                               DISTANCE 613.899
    RL 147.25 LAL -.00 LOL 81.79 VL 25.812 GAL 24.84 AZL 87.11 HCA 326.52 SMA 116.79 ECC .48220 INC 2.8943 V1 30.256
RP 108.11 LAP -1.60 LOP 48.35 VP 36.317 GAP 28.54 AZP 87.59 TAL 144.23 TAP 110.75 RCA 60.48 APO 173.11 V2 35.053
RC 214.027 GL 5.21 GP -1.04 ZAL 32.29 ZAP 169.79 ETS 188.44 ZAE 127.89 ETE 181.42 ZAC 131.48 ETC 164.49 CLP 169.84
   PLANETOCENTRIC CONIC
    C3 169.921 VHL 13.035 DLA 22.72 RAL 45.92 RAD 6570.8 VEL 17.066 PTH 2.93 VHP 17.869 DPA 11.29 RAP 36.90 ECC 3.7965
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 31 7 3507.53 -20.32 131.39 311.51 69.84 6 29 35 2907.5 -22.88 123.66
                                   4550.12
                                                                                                                      1 35 46
                      0 19 56
                                                      11.09
                                                                      191.77
                                                                                      298.24
                                                                                                         63.78
                                                                                                                                        3950.1
        90.00
                                                                                                                                                          7.47
                                                                                                                                                                        184.96
                     7 9 23 3190.68
1 24 21 4342.20
                                                      -22.71
                                                                       109.02
                                                                                       312.45
                                                                                                         70.02
                                                                                                                      8 2 34
       100.00
                                                                                                                                        2590.7
                                                                                                                                                        -25.22
                                                                                                                                                                        101.12
                                                                                                                      2 36 43
       100.00
                                                      13.36
                                                                      175.33
                                                                                      297.07
                                                                                                         63.01
                                                                                                                                        3742.2
                                                                                                                                                          9:54
                                                                                                                                                                        168.52
                      8 52 18
                                   2868.72
                                                      -28.50
                                                                        86.88
                                                                                      314.77
                                                                                                         70.28
                                                                                                                      9 40 6
                                                                                                                                        2268.7
       110.00
                                                                                                                                                        -30.92
                                                                                                                                                                          78.52
                      1 57 56
                                  4236.92
                                                                      164.34
       110.00
                                                      18.80
                                                                                      294.06
                                                                                                         60.91
                                                                                                                      3 8 33
                                                                                                                                        3636.9
                                                                                                                                                        14.78
                                                                                                                                                                        157.53
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 5374.8 SGR 344.1 SG3 94.4

RRT .6708 RRF .6620 RTF .9872

SGB 5385.8 R23 -.0024 R13 .9872

SGI 5379.8 SG2 255.0 THA 2.46

EL1 2337.7 EL2 173.6 ALF 6.57
                                                                                                                                 ST 2322.5 SR 318.1 SS 706.5
CRT .8356 CRS -.8148 CST -.9993
    TOE 4.0032 TRAID.6030 TC3 -.1971 BAU .4480
    ROE .7176 RRA .2876 RC3 .0050 FAU-.00515
FDE .7631 FRA 2.1773 FC3 .0263 BSP 18238
BDE 4.0671 BRA10.6069 BC3 .1972 FSP -319
```

ARRIVAL DATE FEB 23 1966

LAUNCH CATE DEC 15 1965

```
DISTANCE 194.060
  HELIOCENTRIC CONTC
   RL 147.24 LAL -.00 LOL 82.81 VL 27.959 GAL -10.36 A7L 86.61 MCA 88.05 SMA 129.98 ECC .22224 INC 3.3858 VI 30.259
RP 107.64 LAP 3.38 LOP 170.86 VP 38.010 GAP -8.22 A7P 89.88 TAL 223.66 TAP 311.71 RCA 101.10 APO 158.87 V2 35.204
RC 55.368 GL 16.14 GP 2.35 TAL 146.32 TAP 23.48 ETS 353.49 TAE 150.83 ETE 344.78 TAC 62.39 ETC 164.06 CLP -23.36
   PLANETOCENTRIC CONIC
    C3 34.129 VHL 5.842 DLA -5.58 RAL 291.94 RAD 6568.3 VEL 12.470 PTH 2.26 VHP 6.094 DPA -13.15 RAP 330.00 ECC 1.5617
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 38 2172.47 -18.52 38.83 160.84 111.81 2 33 51 1572.5 -15.40 31.55 90.00 12 32 18 5164.10 25.62 230.74 164.36 77.50 13 58 22 4564.1 23.64 222.63 100.00 3 16 20 1918.58 -19.73 19.64 160.32 112.93 3 48 19 1318.6 -16.45 12.38 100.00 13 56 17 4893.22 26.88 210.50 164.03 76.41 15 17 50 4293.2 24.75 202.35
                                                                                                   76.41 15 17 50
116.07 4 47 16
73.34 16 28 15
                                                                                                                                1123.8
                   4 18 33 1723.84
15 10 34 4660.73
                                                                                                                                                -19.24
                                                                    3.29
                                                                                  158.75
                                                                                                  116.07
                                                   -22.93
      110.00
                                                                                                                               4060.7
                                                                                                                                               27.71
                                                                                                                                                                183.55
                                                                   191.60
                                                                                  162.98
                                                     30.29
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 202.3 SR 376.2 S5 271.1
CRT .8585 CR5 .9193 CST .6048
                                                                       SGT 502.6 SGR 392.3 SG3 168.5
RRT .031/ RRF -.0669 RTF -.5558
    TOE -.1821 TRA -.3189 TC3 .3690 BAU .1724
    ROE - .3831 RRA .0613 RC3 - .0816 FAU .05906
                                                                       SGB 685.9 R23 -.0326 R13 -.5570
                                                                                                                            LSA 484.2 MSA 144.5 SSA 24.2
    FOE .4730 FRA -.7352 FC3-1.4981 BSP 1398
BOE .4241 BRA .3247 BC3 .3779 FSP -452
                                                                                                                            EL1 416.7 EL2 93.6 ALF 63.79
                                                                       SG1 562.9 SG2 391.9 THA 2.46
                                                                                                                                        ARRIVAL DATE FEB 25 1966
                                                                           FLIGHT TIME 72.00
LAUNCH DATE DEC 15 1965
                                                                           DISTANCE 200.839
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.067 GAL -10.29 AZL 86.64 HCA 91.29 SMA 130.76 ECC .21742 INC 3.3643 VI 30.259

RP 107.67 LAP 3.36 LOP 174.10 VP 38.082 GAP -7.41 AZP 90.08 TAL 224.94 TAP 316.23 RCA 102.33 APO 159.19 V2 35.195

RC 57.230 GL 16.30 GP 2.52 ZAL 147.06 ZAP 26.97 ETS 353.92 ZAE 151.76 ETE 345.20 ZAC 62.10 ETC 164.11 CLP -26.86
   PLANETOCENTRIC CONIC
    C3 33.347 VHL 5.775 DLA -5.56 RAL 291.03 RAO 6568.3 VEL 12.439 PTH 2.25 VHP 5.690 DPA -13.07 RAP 329.69 ECC 1.5488
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               1567.2
                                                                                                                                                                 31.23
                                                                                                  111.92 2 29 59
                                                                                                                                               -15.26
                    1 53 51 2167.17
12 28 47 5157.69
                                                     -18.39
                                                                    38.50
                                                                                 159.54
        90.00
                                                                                                    77.30 13 54 45
113.05 3 44 27
76.20 15 14 13
116.21 4 43 26
73.10 16 24 36
                                                                                                                                                                 222.20
                                                                                                                                  4557.7
                                                                                                                                                 23.52
                                                                   230.30
                                                                                   163.00
                                                     25.52
        90.00
                   3 12 34 1913.25
13 52 46 4886.85
4 14 47 1718.45
15 7 2 4654.41
                                                                                                                                                                 12.06
                                                                                                                                 1313.3
                                                                                                                                                 -16.30
                                                                                                   113.05
                                                    -19.58
                                                                    19.31
                                                                                   159.02
       100.00
                                                                                                                                                                 201.92
                                                                                                                                  4286.8
                                                                                                                                                 24.62
                                                     26.78
                                                                   210.05
                                                                                  162.67
       100.00
                                                                                                                                                                355.78
                                                                                                                                 1118.5
                                                                                                                                                -19.06
                                                                                                   116.21
       110.00
                                                   -22.77
                                                                     2.96
                                                                                  157.45
                                                                                                                                                27.55
                                                                                                                                  4054.4
                                                                                                                                                                183.13
                                                                    191.35
                                                                                  161.62
                                                   30.16
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 199.2 SR 376.3 SS 291.0
CRT .8562 CRS .9135 CST .5889
LSA 492.5 MSA 150.9 SSA 24.3
                                                                        SGT 559.7 SGR 391.4 SG3 192.4
RRT .0359 RRF -.0812 RTF -.5443
    TDE -.1768 TRA -.3129 TC3 .3727 BAU .1698
    RDE -.3788 RRA .0608 RC3 -.0787 FAU .06617
                                                                        SGB 683.0 R23 -.0431 R13 -.5461
SG1 560.1 SG2 390.9 THA 2.80
    FOE .5335 FRA -.8634 FC3-1.7178 BSP 1403
BDE .4180 BRA .3187 BC3 .3809 FSP -529
                                                                                                                             EL1 415.4 EL2 93.2 ALF 64.22
                                                                                                                                        ARRIVAL DATE FEB 27 1966
                                                                           FLIGHT TIME 74.00
LAUNCH DATE DEC 15 1965
                                                                          DISTANCE 207.589
   RL 147.24 LAL -.00 LOL 82.81 VL 28.160 GAL -10.22 A7L 86.66 HCA 94.53 SMA 131.43 ECC .21329 INC 3.3428 VI 30.259
RP 107.70 LAP 3.33 LOP 177.35 VP 38.141 GAP -6.63 A7P 90.26 TAL 226.08 TAP 320.61 RCA 103.40 APO 159.47 V2 35.186
RC 59.152 GL 16.42 GP 2.72 ZAL 147.69 ZAP 30.66 ETS 354.27 ZAE 153.02 ETE 345.53 ZAC 61.61 ETC 164.15 CLP -30.55
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 32.667 VHL 5.716 DLA -5.56 RAL 290.23 RAD 6568.3 VEL 12.411 PTH 2.24 VHP 5.318 DPA -13.04 RAP 329.18 ECC 1.5376
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                              -15.12
                                                                                               112.02 2 26 40 1562.3
                   1 50 38 2162.27
12 25 42 5152.22
3 9 21 1908.33
13 49 40 4881.39
                                                                               158.41
                                                   -18.27
                                                                   38.20
        90.00
                                                                                                                                                                221.84
                                                                                                    77.13
                                                                                                              13 51 34
                                                                                                                                 4552.2
                                                                                                                                                23.42
                                                                                  161.83
                                                    25.44
                                                                   229.92
        90.00
                                                                                                   113.15
                                                                                                              3 41 9
                                                                                                                                 1308.3
                                                                                                                                                -16.15
                                                                                                                                                                 11.76
                                                                                  157.88
                                                    -19.45
                                                                    19.00
       100.00
                                                                                                   76.02 15 11 1
116.34 4 40 8
72.89 16 21 24
                                                                                                                                 4281.4
                                                                                                                                                 24.51
                                                                                                                                                                201.55
                                                    26.69
                                                                   209.67
                                                                                  161.49
       100.00
                                                                                                                                                                355.49
                                                                                                                                 1113.5
                                                                                                                                                -18.90
                   4 11 34 1713.50
15 3 55 4648.99
                                                     -22.62
                                                                    2.65
                                                                                  156.32
       110.00
                                                                                                                                                                182.76
                                                                                                                                 4049.0
                                                                                                                                                27.42
                                                    30.06
                                                                   190.96
                                                                                  160.43
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 196.3 SR 375.6 SS 312.5
CRT .8489 CRS .9096 CST .5690
LSA 501.8 MSA 157.9 SSA 24.2
                                                                       SCT 552.2 SGR 389.6 SG3 219.0
RRT .0427 RRF -.0995 RTF -.5197
    TOE - .1712 TRA - .3127 TC3 .3674 BAU .1637
    ROE - .3743 RRA .D613 RC3 - .D745 FAU .D7408
                                                                       SGB 675.8 R23 -.0555 R13 -.5225
SG1 552.7 SG2 388.9 THA 3.42
    FOE .6035 FRA-1.0047 FC3-1.9632 BSP 1344
BDF .4115 BRA .3186 BC3 .3748 FSP -612
                                                                                                                             EL1 413.2 EL2 94.3 ALF 64.67
    BOE .4115 BRA .3186 BC3 .3748 FSP
                                                                                                                                         ARRIVAL DATE MAR 1 1966
                                                                           FLIGHT TIME 76.00
LAUNCH DATE DEC 15 1965
    RL 147.24 LAL -.00 LOL 82.81 VL 28.239 GAL -10.16 AZL 86.68 HCA 97.76 SMA 132.01 ECC .20975 INC 3.3210 V1 30.259
RP 107.75 LAP 3.29 LOP 180.58 VP 38.190 GAP -5.89 AZP 90.45 TAL 227.08 TAP 324.84 RCA 104.32 APO 159.70 V2 35.176
RC 61.127 GL 16.52 GP 2.93 ZAL 148.23 ZAP 34.57 ETS 354.57 ZAE 154.61 ETE 345.80 ZAC 60.90 ETC 164.16 CLP -34.46
                                                                           DISTANCE 214.308
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                       2.24 VHP 4.977 OPA -13.05 RAP 328.46 ECC 1.5277
    C3 32.067 VHL 5.663 DLA -5.55 RAL 289.56 RAD 6568.3 VEL 12.387 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               1557.7
                    1 47 55 2157.67
12 23 1 5147.47
3 6 38 1903.74
13 46 59 4876.64
                                                                                                                 2 23 52
                                                                                                                                                -14.99
                                                                                  157.42
                                                                                                  112.12
                                                                     37.91
                                                     -18.15
                                                                                                    76.98 13 48 49
                                                                                                                                                                 221.52
                                                                                                                                  4547.5
                                                                                                                                                 23.32
                                                                                   160.81
                                                                    229.59
         90.00
                                                     25.37
                                                                                                                                                -16.02
                                                                                                    113.26
                                                                                                                3 38 22
                                                                                                                                  1303.7
                                                                                   156.90
                                                     -19.33
                                                                     18.72
       100.00
                                                                                                     75.86 15 8 16
                                                                                                                                                                 201.23
                                                                                                                                                24.41
                                                                                                                                  4276.6
                                                                                   160.47
                    13 46 59
                                                     26.61
                                                                    209.34
       100.00
                                                                                                                                                -18.75
                                                                                                   116.45 4 37 21
72.71 16 18 39
                                                                                                                                                                 355.22
                                                                                                                                  1108.9
                                                                                   155.34
                      4 8 52
                                  1708.89
4644.25
                                                                      2.37
                                                  -22.48
       110.00
                                                                                                                                                  27.30
                                                                                                                                                                 182.44
                                                                                                                                 4044.3
                                                                                   159.40
                                                                    190.63
       110.00
                    15 1 15
                                                     29.96
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                       SGT 540.1 SGR 387.2 SG3 248.7
RRT .0477 RRF -.1213 RTF -.4807
SGB 664.6 R25 -.0744 R13 -.4850
SG1 540.8 SG2 386.3 THA 4.00
EL1 409.3 EL2 96.9 ALF 65.40
   DIFFERENTIAL CORRECTIONS
     TOE -.1632 TRA -.3176 TC3 .3534 BAU .1544
     RDE - 3695 RRA .0626 RC3 - .0689 FAU .08285
FDE .6816 FRA-1.1600 FC3-2.2369 BSP 1259
BDE .4039 BRA .3237 BC3 .3601 FSP -706
```

FLIGHT TIME 70.00

į

5G1 484.4 SG2 372.3 THA 178.29

EL1 377.4 EL2 128.3 ALF 72.93

BOE .3612 BRA .4093 BC3 .1967 FSP -1192

ARRIVAL DATE MAR 11 1966

LAUNCH CATE DEC 15 1965

DISTANCE 247.399 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.458 GAL -9.85 AZL 86.80 MCA 113.90 SHA 133.67 ECC .19809 INC 3.2043 V1 30.259 RP 107.90 LAP 2.93 LOP 196.74 VP 38.301 GAP -2.67 AZP 91.30 TAL 229.83 TAP 343.73 RCA 107.19 APO 160.15 V2 35.120 RC 71.643 GL 16.72 GP 4.26 TAL 149.64 ZAP 57.59 ETS 355.74 ZAE 167.48 ETE 345.08 ZAC 53.91 ETC 163.94 CLP -57.49 PLANETOCENTRIC CONIC C3 29.662 VHL 5.446 DLA -5.58 RAL 287.80 RAD 6568.2 VEL 12.290 PTH 2.21 VMP 3.733 DPA -13.86 RAP 321.30 ECC 1.4882 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -14.41 1 41 7 2137.20 12 15 48 5128.78 154.36 1537.2 90.00 -17.62 36.64 220.27 4528.8 22.96 228.30 157.63 25.08 90.00 2 59 50 1883.31 13 39 47 4857.91 10.27 17.45 153.84 113.70 3 31 13 1283.3 -15.41 -18.78 100.00 75.25 15 0 45 116.96 4 30 10 72.02 16 11 9 24.01 199.98 4257-9 208.04 157.29 100.00 26.30 354.03 -18.07 1088.6 1.11 152.29 116.96 110.00 4 2 2 1688.56 -21.86 26.83 181.18 156.20 4025.4 189.30 14 54 4 29.57 4625.42 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 163.1 SR 358.4 S5 444.8 CRT .4443 CRS .9067 CST .0375 LSA 559.5 MSA 198.6 SSA 22.6 EL1 367.0 EL2 142.7 ALF 76.49 SGT 493.6 SGR 368.5 SG3 434.2 RRT -.0757 RRF -.2934 RTF .1378 SGB 616.0 R23 .2698 R13 -.1635 SG1 495.4 SG2 366.2 THA 172.84 TOE -.0789 TRA -.4427 TC3 .1225 BAU .0490 ROE -.3398 RRA .0829 RC3 -.0167 FAU .13716 FOE 1.1461 FRA-2.0702 FC3-4.0033 BSP 394 BOE .3488 BRA .4504 BC3 .1237 FSP -1323 ARRIVAL DATE MAR 13 1966 FLIGHT TIME 88.00 LAUNCH DATE DEC 15 1965 DISTANCE 253.912 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.474 GAL -9.77 AZL 86.82 HCA 117.12 SHA 133.79 ECC .19654 INC 3.1780 V1 30.259 RP 107.94 LAP 2.83 LOP 199.97 VP 38.302 GAP -2.11 AZP 91.45 TAL 229.96 TAP 347.08 RCA 107.49 APO 160.08 V2 35.108 RC 73.845 GL 16.73 GP 4.58 ZAL 149.69 ZAP 62.82 ETS 355.99 ZAE 170.92 ETE 343.67 ZAC 51.89 ETC 163.84 CLP -62.72 PLANETOCENTRIC CONIC 2.21 VHP 3.576 DPA -14.12 RAP 319.23 ECC 1.4809 C3 29.220 VHL 5.406 OLA -5.59 RAL 287.74 RAD 6568.2 VEL 12.272 PTH LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.61 1533.2 -14.30 29.19 154.05 2 16 29 -17.51 36.40 1 40 56 2133.22 90.00 13 40 55 220.04 22.89 4525.2 228.06 157.29 76.29 90.00 12-15-30 5125.25 25.02 2 59 38 1879.34 13 39 29 4854.36 4 1 49 1684.62 113.78 3 30 57 75.13 15 0 23 10.04 1279.3 -15.29 17.21 153.53 -18.67 100.00 199.75 4254.4 23.93 26.23 207.79 156.95 100.00 117.05 4 29 54 71.89 16 10 49 353.81 151.98 1084.6 -17.94 -21.74 .87 110.00 180.95 189.05 155.86 4021.8 26.74 14 53 47 29.50 110.00 4621.85 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 166.2 SR 353.4 SS 462.7 CRT .2565 CRS .9087 CST -.1590 LSA 569.8 MSA 203.7 SSA 22.3 SGT 526.8 SGR 364.9 SG3 473.2 RRT -.1573 RRF -.3416 RTF .3391 TOE -.0523 TRA -.4903 TC3 .0383 BAU .0150 RDE -.3323 RRA .0894 RC3 -.0010 FAU .14835 FDE 1.2335 FRA-2.2437 FC3-4.3954 BSP 412 SGB 640.8 R23 .2441 R13 -.3750 ELI 356.6 EL2 159.2 ALF 81.39 561 532.5 562 356.5 THA 168.64 BOE .3364 BRA .4984 BC3 .0384 FSP -1462 ARRIVAL DATE MAR 15 1966 FLIGHT TIME 90.00 LAUNCH DATE DEC 15 1965 DISTANCE 260.391 RL 147.24 LAL -.00 LOL 82.81 VL 28.482 GAL -9.70 A7L 86.85 HCA 120.34 SMA 133.85 ECC .19515 INC 3.1502 V1 30.259 RP 107.98 LAP 2.72 LOP 203.19 VP 38.296 GAP -1.58 A7P 91.59 TAL 229.96 TAP 350.30 RCA 107.73 APO 159.97 V2 35.095 RC 76.070 GL 16.72 GP 4.90 ZAL 149.68 ZAP 68.17 ETS 356.27 ZAE 174.53 ETE 339.95 ZAC 49.75 ETC 163.72 CLP -68.08 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 28.773 VHL 5.364 DLA -5.59 RAL 287.77 RAD 6568.2 VEL 12.253 PTH 2.20 VHP 3.447 DPA -14.38 RAP 317.02 ECC 1.4735 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 153.82 1 41 5 2129.16 12 15 33 5121.61 2 59 46 1875.28 13 39 32 4850.72 112.69 2 16 34 76.17 13 40 54 36.14 -17.41 90.00 4521.6 22.81 219.79 24.96 227.81 157.04 90.00 -15.17 9.80 113.86 3 31 2 1275.3 153.30 -18.56 16.96 100.00 75.01 15 0 23 4250.7 23.86 199.50 26.17 207.54 156.70 13 39 32 100.00 -17.80 343.47 117.15 4 29 58 71.75 16 10 48 1080.6 1680.59 4618.17 .63 151.75 -21.62 4 1 58 110.00 26.64 180.70 155.60 4018.2 188.79 14 53 50 29.42 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 177.7 SR 347.8 SS 479.2 CRT .0547 CRS .9125 CST -.3487 SCT 590.2 SGR 361.9 SG3 508.7 RRT - .2473 RRF - .3941 RTF .5170 SGB 692.3 R23 .2047 R13 - .5486 TOE -.0239 TRA -.5461 TC3 -.0603 BAU .0240 RDE -.3243 RRA .0962 RC3 .0161 FAU .15836 LSA 581.7 MSA 208.0 SSA 21.9 FOE 1.3154 FRA-2.3879 FC3-4.7646 BSP 720 EL1 348.0 EL2 177.3 ALF 87.84 SG1 600.4 SG2 344.7 THA 167.04 BDE .3252 BRA .5545 BC3 .0624 FSP -1581 ARRIVAL DATE MAR 17 1966 FLICHT TIME 92.00 LAUNCH DATE DEC 15 1965 DISTANCE 266.835 RL 147.24 LAL -.00 LOL 82.81 VL 28.483 GAL -9.61 A7L 86.88 MCA 123.55 SMA 133.86 ECC .19390 INC 3.1205 V1 30.259 RP 108.02 LAP 2.60 LOP 206.40 VP 38.285 GAP -1.07 A7P 91.73 TAL 229.84 TAP 353.40 RCA 107.90 APO 159.81 V2 35.082 RC 78.316 GL 16.70 GP 5.23 TAL 149.60 TAP 73.59 ETS 356.58 TAE 178.15 ETE 319.82 TAC 47.52 ETC 163.60 CLP -73.52 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 28.318 VHL 5.321 DLA -5.60 RAL 287.87 RAD 6568.1 VEL 12.235 PTH 2.20 VHP 3.347 DPA -14.63 RAP 314.72 ECC 1.4660 CO 20.310 VPL 3.321 ULA -3.00 RAL ZBT.BT RAU D30B.I VEL 12.233 PIN Z.ZU VMP 3.341 UPA -14.03 RAP 314.72 ECC 1.4660 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 33 2124.94 -17.30 35.88 153.66 112.77 2 16 58 1524.9 -14.06 28.70 90.00 12 15 54 5117.86 24.90 227.55 156.86 76.06 13 41 12 4517.9 22.74 219.55 3 31 26 1271.1 3 0 15 1871.08 13 39 54 4846.95 4 2 25 1676.41 153.15 113.95 -18.44 16.70 100.00 199.26 15 0 41 4247.0 23.77 74.89 207.28 156.51 26.10 117.25 4 30 22 71.61 16 11 7 353.33 151.59 117.25 1076.4 -17.66 -21.49 .37 4014.4 26.55 160.45 14 54 12 4614.39 155.41 188.52 29.34 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 197.3 SR 341.4 55 491.3 CRT -.1380 CRS .9156 CST -.5162 LSA 593.0 NSA 211.3 55A 21.5 SGT 681.6 SGR 359.6 SG3 540.7 RRT -.3382 RRF -.4484 RTF .6522 TOE .0073 TRA -.6073 TC3 -.1706 BAU .0659 ROE -.3155 RRA .1034 RC3 .0349 FAU .16721 SGB 770.7 R23 .1684 R13 -.6750 SG1 695.7 SG2 331.6 THA 166.84 FOE 1.3766 FRA-2.5084 FC3-5.1118 BSP 1145 BOE .3156 BRA .6160 BC3 .1741 FSP -1700 EL1 343.0 EL2 194.5 ALF 96.74

FLIGHT TIME 86.00

```
LAUNCH DATE DEC 15 1965
                                                                        FLIGHT TIME 94.00
                                                                                                                                 ARRIVAL DATE MAR 19 1966
    HELIOCENTRIC CONIC
                                                                        DISTANCE 273.246
     RL 147.24 LAL -.00 LOL 82.81 VL 28.478 GAL -9.52 AZL 86.91 HCA 126.77 SMA 133.82 ECC .19275 INC 3.0886 VI 30.259
RP 108.06 LAP 2.47 LOP 209.62 VP 38.270 GAP -.58 AZP 91.85 TAL 229.61 TAP 356.38 RCA 108.03 APO 159.61 VZ 35.069
RC 80.581 GL 16.66 GP 5.56 ZAL 149.46 ZAP 79.02 ETS 356.93 ZAE 177.56 ETE 192.31 ZAC 45.28 ETC 163.47 CLP -78.97
    PLANETOCENTRIC CONIC
     C3 27.850 VHL 5.277 DLA -5.61 RAL 288.05 RAD 6568.1 VEL 12.216 PTM 2.20 VMP 3.274 DPA -14.85 RAP 312.41 ECC 1.4583
     LNCH AZMTH LNCH TIME L-I TÎME INJ LAT INJ LÖNG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           INJ Acm...
112.86 2 17 4;
75.94 13 41 48
3 32 9
                 1 42 21 2120.50

12 16 34 5113.98

3 1 2 1866.66

13 40 34 4843.06

4 3 12 1672.02

14 54 53 4610.47
        90.00
                                                  -17.18
                                                                35.61
                                                                             153.57
                                                                                                                       1520.5
                                                                                                                          4514.0
                                                  24.83
                                                                227.28
                                                                              156.74
                                                                                             114.04 3 32 9 1266.7
74.77 15 1 17 4243.1
117.35 4 31 4 1072.0
71.47 16 11 43 4010.5
        100.00
                                                  -18.32
                                                                 16.43
                                                                              153.05
                                                                                                                          1266.7
                                                  26.03
                                                                207.01
                                                                             156.39
                                                                                                                                       -17.51
26.44
                                                                                                                                                       353.08
       110.00
                                                  -21.35
                                                                   .11
                                                                             151.50
                                                                            155.29
                                                29.25
       110.00
                                                                188.25
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE .0393 TRA -.6739 TC3 -.2929 BAU .1110
ROE -.3061 RRA .1104 RC3 .0547 FAU .17390
                                                                    SGT 798.7 SGR 358.2 SG3 565.9
RRT -.4214 RRF -.5044 RTF .7460
                                                                                                                     ST 224.8 SR 334.3 SS 501.3
CRT -.2947 CRS .9204 CST -.6377
    FOE 1.4258 FRA-2.5842 FC3-5.4058 BSP 1641
                                                                    SGB 875.4 R23 .1437 R13 -.7615
                                                                                                                     LSA 606.1 MSA 213.9 SSA 21.1
    BOE .3086 BRA .6829 BC3 .2980 FSP -1785
                                                                    SG1 815.5 SG2 318.2 THA 167.34
                                                                                                                      EL1 344.9 EL2 208.3 ALF 107.95
                                                                        FLIGHT TIME 96.00
LAUNCH DATE DEC 15 1965
                                                                                                                                 ARRIVAL DATE MAR 21 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 279.624
    RL 147.24 LAL -.00 LOL 82.81 VL 28.467 GAL -9.43 AZL 86.95 MCA 129.98 SMA 133.74 ECC .19170 INC 3.0538 V1 30.259
RP 108.10 LAP 2.34 LOP 212.83 VP 38.250 GAP -.12 AZP 91.96 TAL 229.28 TAP 359.26 RCA 108.10 APO 159.37 V2 35.056
RC 82.862 GL 16.62 GP 5.90 ZAL 149.27 ZAP 84.40 ETS 357.33 ZAE 173.82 ETE 178.65 ZAC 43.10 ETC 163.36 CLP -84.37
   PLANETOCENTRIC CONIC
    C3 27.367 VHL 5.231 DLA -5.62 RAL 288.31 RAD 6568.1 VEL 12.196 PTH 2.19 VHP 3.225 DPA -15.01 RAP 31D.14 ECC 1.45D4
    ENCH AZMTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 43 28 2115.76
12 17 30 5110.02
3 2 9 1861.93
13 41 30 4839.07
4 4 18 1667.34
14 55 50 4606.43
        90.00
                                                                                                                        1515.8
                                                                                                                                       -13.80
                                                  -17.05
                                                                35.32
                                                                            153.54
                                                                                           112.95 2 18 44
                                                                                                                                                        28.15
                                                                                             75.82 13 42 40
114.14 3 33 11
74.64 15 2 9
117.46 4 32 5
71.33 16 12 36
                                                                                                                                                        219.03
                                                                                                                                         22.58
        90.00
                                                  24.77
                                                                227.01
                                                                              156.68
                                                                                                                          4510.0
       100.00
                                                 -18.19
                                                                 16.14
                                                                             153.02
                                                                                                                          1261.9
                                                                                                                                        -14.77
                                                                                                                                                         9.01
       100.00
                                                 25.96
                                                                206.74
                                                                             156.34
                                                                                                                          4239.1
                                                                                                                                         23.60
                                                                                                                                                        198.73
                                                                           151.48
       110.00
                                                 -21.20
                                                                359.82
                                                                                                                          1067.3
                                                                                                                                        -17.36
                                                                                                                                                       352.81
                                                                                                                                                        179.93
       110.00
                                                 29.17
                                                                187.97
                                                                              155.23
                                                                                                                          4006.4
                                                                                                                                        26.34
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 934.6 SGR 357.6 SG3 584.6
RRT -.4973 RRF -.5599 RTF .8086
SGB 1000.7 R23 .1267 R13 -.8191
                                                                                                                     ST 258.2 SR 326.3 SS 506.8
CRT -.4159 CRS .9250 CST -.7243
    TDE .0719 TRA -.7437 TC3 -.4248 BAU .1579
    RDE -.2959 RRA .1172 RC3 .0756 FAU .17856
FDE 1.4513 FRA-2.6221 FC3-5.6485 BSP 2174
BDE .3045 BRA .7528 BC3 .4315 FSP -1853
                                                                                                                     LSA 619.0 MSA 215.4 SSA 20.6
                                                                   SG1 953.4 SG2 304.2 THA 167.99
                                                                                                                   EL1 356.2 EL2 215.1 ALF 120.19
                                                                                                                                ARRIVAL DATE MAR 23 1966
                                                                       FLIGHT TIME 98.00
LAUNCH DATE DEC 15 1965
                                                                       DISTANCE 285.970
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.451 GAL -9.33 AZL 86.98 MCA 133.19 SMA 133.62 ECC .19073 INC 3.0157 V1 30.259
RP 108.14 LAP 2.20 LOP 216.04 VP 38.226 GAP .33 AZP 92.06 TAL 228.84 TAP 2.03 RCA 108.13 APO 159.10 V2 35.043
RC 85.157 GL 16.56 GP 6.24 ZAL 149.02 ZAP 89.65 ETS 357.77 ZAE 170.06 ETE 175.40 ZAC 41.01 ETC 163.28 CLP -89.65
   PLANETOCENTRIC CONIC
    C3 26.866 VHL 5.183 DLA -5.64 RAL 288.64 RAD 6568.1 VEL 12.175 PTH 2.19 VHP 3.200 DPA -15.12 RAP 307.98 ECC 1.4422
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                  1 44 55 2110.59
12 18 40 5106.01
3 3 35 1856.79
13 42 40 4835.04
                                                                                                                      1510.6
                                                                                          113.05 2 20 5
75.70 13 43 46
        90.00
                                                -16.92
                                                                35.00
                                                                          153.57
                                                                                                                                     -13.65
                                                                                                                                                       27.85
                                                                                                                                                      218.76
        90.00
                                                  24.70
                                                               226.74
                                                                              156.69
                                                                                                                          4506.0
                                                                                                                                         22.49
                                                                                             114.25 3 34 32
74.51 15 3 15
117.58 4 33 25
71.18 16 13 44
                                                                                                                        1256.8
       100.00
                                                -18.04
                                                                15.82
                                                                              153.05
                                                                                             114.25
                                                                                                                                       -14.62
                                                                                                                                                        8.71
                                                                              156.34
                                                                                                                          4235.0
                                                                                                                                         23.51
                                                                                                                                                      198.47
       100.00
                                                  25.89
                                                               206.46
                  4 5 43 1662.26
14 57 2 4602.33
                                                               359.51
                                                                             151.50
                                                                                             117.58
                                                                                                                          1062.3
                                                                                                                                                      352.51
       110.00
                                              -21.04
                                                                                                                                       -17.18
                                                 29.08
                                                               187.68
                                                                              155.23
                                                                                                                          4002.3
                                                                                                                                                      179.66
       110.00
                                                                                                                                       26.23
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 295.4 SR 317.4 SS 508.0
CRT -.5057 CRS .9294 CST -.7831
LSA 631.7 MSA 216.0 SSA 20.2
    TOE .1040 TRA -.8149 TC3 -.5646 BAU .2058
                                                                    SGT 1084.0 SGR 357.9 SG3 596.4
                                                                   RRT -.5661 RRF -.6140 RTF .8500
SGB 1141.6 R23 .1161 R13 -.8573
    ROE -.2847 RRA .1236 RC3 .0976 FAU .18110
    FOE 1.4528 FRA-2.6208 FC3-5.8359 BSP 2732
BOE .3031 BRA .8242 BC3 .5729 FSP -1903
                                                                                                                      EL1 376.7 EL2 214.7 ALF 130.96
                                                                   SG1 1104.2 SG2 289.7 THA 168.62
LAUNCH DATE DEC 15 1965
                                                                       FLIGHT TIME 100.00
                                                                                                                                 ARRIVAL DATE MAR 25 1966
                                                                      DISTANCE 292.284
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.431 GAL -9.22 ATL 87.03 HCA 136.40 SMA 133.46 ECC .18983 INC 2.9734 V1 30.259 RP 108.18 LAP 2.05 LOP 219.25 VP 38.198 GAP .75 AZP 92.15 TAL 228.32 TAP 4.71 RCA 108.12 APO 158.79 V2 35.030
                                      6.60 7AL 148.72 7AP 94.73 ETS 358.28 7AE 166.40 ETE 173.93 7AC 39.09 ETC 163.26 CLP -94.76
         87.465 GL 16.48 GP
   PLANETOCENTRIC CONIC
    C3 26.347 VHL 5.133 OLA -5.67 RAL 289.03 RAD 6568.1 VEL 12.154 PTH 2.18 VHP 3.197 DPA -15.15 RAP 305.98 ECC 1.4336
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    1 46 43 2104.86
                                                 -16.76
                                                                34.65
                                                                            153.64
                                                                                            113.16
                                                                                                        2 21 48
                                                                                                                       1504.9
                                                                                                                                      -13.49
                                                                                                                                                        27.51
                  12 20 2 5102.06
3 5 22 1851.10
13 44 3 4831.05
                                                                                                       13 45 4
        90.00
                                                 24.63
                                                               226.47
                                                                              156.74
                                                                                              75.58
                                                                                                                          4502.1
                                                                                                                                        22.41
                                                                                                                                                      218.50
       100.00
                                                 -17.88
                                                                15.48
                                                                              153.13
                                                                                             114.36
                                                                                                          3 36 13
                                                                                                                          1251.1
                                                                                                                                        -14.45
                                                                                                                                                        8.37
                                                                                              74.38 15 4 34
117.71 4 35 5
       100.00
                                                 25.82
                                                               206.19
                                                                              156.39
                                                                                                                          4231.0
                                                                                                                                        23.42
                                                                                                                                                       198.20
      110.00
                  4 7 28 1656.67
14 58 27 4598.24
                                                -20.87
                                                               359.18
                                                                             151.58
                                                                                             117.71
                                                                                              117.71 4 35 5
71.03 16 15 5
                                                                                                                         1056.7
                                                                                                                                        -16.99
                                                                                                                                                      352.19
                                                               187.40
      110.00
                                              24.99
                                                                             155.28
                                                                                                                         3998.2
                                                                                                                                        26.12
                                                                                                                                                      179.39
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 1242.4 SGR 359.1 SG3 601.4 ST 334.7 SR 307.4 SS 504.9 RRT -.6284 RRF -.6658 RTF .8776 CRT -.5715 CRS .9337 CST -.8226 SGB 1293.3 R23 .1105 R13 -.8830 LSA 643.9 MSA 215.6 SSA 19.7 SG1 1263.8 SG2 274.7 THA 169.19 EL1 403.4 EL2 209.3 ALF 139.23
    TOE .1346 TRA -.8862 TC3 -.7110 BAU .2540
    ROE - .2726 RRA .1294 RC3 .1205 FAU .18156
    FOE 1.4314 FRA-Z.5825 FC3-5.9657 BSP 3308
BOE 3040 BRA .8956 BC3 .7211 FSP -1933
```

ARRIVAL DATE MAR 27 1966

LAUNCH DATE DEC 15 1965

DISTANCE 298.569 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.406 GAL -9.10 AZL 87.07 HCA 139.60 SHA 133.27 ECC .18899 INC 2.9258 V1 30.259 RP 108.22 LAP 1.90 LOP 222.45 VP 38.168 GAP 1.16 AZP 92.23 TAL 227.70 TAP 7.30 RCA 108.08 APO 158.46 V2 35.016 RC 89.783 GL 16.37 GP 6.99 TAL 148.37 ZAP 99.58 ETS 358.84 ZAE 162.91 ETE 173.02 ZAC 37.37 ETC 163.33 CLP -99.65 PLANETOCENTRIC CONIC C3 25.807 VHL 5.080 OLA -5.71 RAL 289.50 RAD 6568.0 VEL 12.132 PTH 2.17 VHP 3.211 OPA -15.08 RAP 304.20 ECC 1.4247 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 153.77 2 23 52 1498.4 113.28 90.00 1 48 54 2098.36 -16.59 34.25 75.46 13 46 32 114.49 3 38 17 4498.3 22.33 90.00 12 21 34 5098.30 24.57 226.21 156.85 100.00 3 7 32 1844.68 100.00 13 45 36 4827.22 110.00 4 9 36 1650.40 110.00 15 0 2 4594.26 -14.25 153.25 1244.7 -17.70 15.09 74.26 15 6 3 117.85 4 37 6 70.89 16 16 37 4227.2 23.34 197.95 151.71 156.50 25.75 205.92 -16.78 1050.4 -20.67 358.80 3994.3 26.02 28.90 187.12 155.39 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1405.3 SGR 361.3 SG3 598.5 RRT -.6835 RRF -.7151 RTF .8960 ST 374.4 SR 296.8 SS 500.2 CRT -.6202 CRS .9394 CST -.8471 TOE .1632 TRA -.9559 TC3 -.8621 BAU .3015 ROE -.2600 RRA .1343 RC3 .1440 FAU .17958 SGB 1451.0 R23 .1110 R13 -.9001 SG1 1427.6 SG2 259.6 THA 169.69 LSA 657.3 MSA 214.7 SSA 19.1 FDE 1.3999 FRA-2.5005 FC3-6.0245 BSP 3886 BDE .3069 BRA .9653 BC3 .8740 FSP -1923 EL1 433.4 EL2 201.1 ALF 145.36 ARRIVAL DATE MAR 29 1966 FLIGHT TIME 104.00 LAUNCH DATE DEC 15 1965 HELIOCENTRIC CONIC DISTANCE 304.825 RL 147.24 LAL -.00 LOL 82.81 VL 28.378 GAL -8.97 AZL 87.13 MCA 142.80 SMA 133.06 ECC .18820 INC 2.8715 V1 30.259 RP 108.26 LAP 1.74 LOP 225.65 VP 38.134 GAP 1.55 AZP 92.29 TAL 227.01 TAP 9.81 RCA 108.01 APO 158.10 V2 35.003 RC 92.112 GL 16.23 GP 7.42 TAL 147.99 TAP 104.18 ETS 359.47 TAE 159.61 ETE 172.33 TAC 35.87 ETC 163.53 CLP-104.31 PLANETOCENTRIC CONIC 2.17 VHP 3.243 OPA -14.92 RAP 302.65 ECC 1.4155 C3 25.245 VHL 5.024 OLA -5.78 RAL 290.03 RAO 6568.0 VEL 12.109 PTH ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 51 32 2090.84 12 23 11 5094.95 3 10 8 1837.26 13 47 15 4823.76 4 12 7 1643.21 15 1 46 4590.58 153.93 90.00 -16.39 33.80 113.42 2 26 23 1490.8 -13.08 75.36 13 48 6 4495.0 22.26 24.51 225.98 157.02 90.00 114.63 3 40 45 74.15 15 7 39 118.02 4 39 30 70.76 16 18 17 1237.3 -14.02 7.56 153.42 100.00 -17.49 14.63 4223.8 23.26 25.68 156.67 205.69 100.00 -16.53 151.88 1043.2 351.42 -20.44 110.00 358.37 3990.6 25.92 28.81 186.87 155.55 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1570.4 SGR 364.8 SG3 591.2 RRT - .7341 RRF - .7613 RYF .9087 SGB 1612.2 R23 .1145 R13 - .9121 ST 413.2 SR 285.0 SS 490-5 CRT -.6562 CRS .9442 CST -.8639 TOE .1884 TRA-1.0227 TC3-1.0177 BAU .3482 FOE -.2463 RRA .1387 RC3 .1692 FAU .17631 FOE 1.3447 FRA-2.3975 FC3-6.0462 BSP 4471 BOE .3101 BRA 1.0321 BC3 1.0317 FSP -1911 LSA 668.4 MSA 213.0 SSA 18.6 SG1 1593.6 SG2 244.1 THA 170.09 EL1 464.0 EL2 191.5 ALF 150.04 ARRIVAL DATE HAR 31 1966 FLIGHT TIME 106.00 LAUNCH DATE DEC 15 1965 DISTANCE 311.054 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.346 GAL -8.84 AZL 87.19 HCA 146.00 SMA 132.81 ECC .18747 INC 2.8087 VI 30.259
RP 108.31 LAP 1.57 LOP 228.85 VP 38.099 GAP 1.92 AZP 92.33 TAL 226.24 TAP 12.25 RCA 107.92 APO 157.71 V2 34.990
RC 94.449 GL 16.04 GP 7.90 ZAL 147.56 ZAP 108.51 ETS .20 ZAE 156.53 ETE 171.69 ZAC 34.61 ETC 163.90 CLP-108.70 PLANETOCENTRIC CONIC C3 24.659 VHL 4.966 DLA -5.88 RAL 290.63 RAD 6568.0 VEL 12.085 PTH 2.16 VMP 3.288 DPA -14.64 RAP 301.37 ECC 1.4058 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 154.15 157.24 -12.82 2 29 23 1481.9 26.15 1 54 41 2081.92 12 24 49 5092.31 -16.14 33.25 90.00 217.86 225.80 4492.3 22.21 24.47 90.00 3 13 14 1828.50 13 48 57 4820.97 1228.5 -13.76 7.05 -17.24 14.10 153.63 100.00 74.06 15 9 18 118.20 4 42 21 70.65 16 20 1 156.89 4221.0 23.20 197.54 25.63 205.49 100.00 4 15 6 1634.80 15 3 34 4587.43 152.09 155.77 1034.8 -15.74 350.94 -20.17 357.86 110.00 25.83 28.74 3987.4 178.68 186.65 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1734.1 SGR 369.7 SG3 578.0 RRT -.7786 RRF -.8043 RTF .9172 SGB 1773.1 R23 .1234 R13 -.9201 ST 450.1 SR 272.6 S5 479.3 CRT -.6836 CRS .9500 CST -.8731 LSA 679.6 MSA 211.2 SSA 17.8 TOE .2103 TRA-1.0850 TC3-1.1761 BAU .3931 ROE -.2323 RRA .1420 RC3 .1955 FAU .17128 FDE 1.2835 FRA-2.2644 FC3-6.0133 BSP 5035 BOE .3133 BRA 1.0943 BC3 1.1923 FSP -1866 EL1 494.1 EL2 181.3 ALF 153.70 SG1 1758.2 SG2 228.8 THA 170.41 FLIGHT TIME 108.00 ARRIVAL DATE APR 2 1966 LAUNCH DATE DEC 15 1965 HELIOCENTRIC CONIC DISTANCE 317.255 RL 147.24 LAL -.00 LOL 82.81 VL 28.311 GAL -8.70 A7L 87.27 MCA 149.20 SMA 132.55 ECC .18678 INC 2.7346 V1 30.259
RP 108.35 LAP 1.40 LOP 232.04 VP 38.061 GAP 2.28 A7P 92.35 TAL 225.41 TAP 14.60 RCA 107.80 APO 157.31 V2 34.977
RC 96.794 GL 15.80 GP 8.47 ZAL 147.10 ZAP 112.55 ETS 1.04 ZAE 153.67 ETE 171.02 ZAC 33.59 ETC 164.51 CLP-112.82 PLANETOCENTRIC CONIC C3 24.049 VHL 4.904 OLA -6.03 RAL 291.30 RAC 6568.0 VEL 12.059 PTH 2.16 VHP 3.347 OPA -14.23 RAP 300.34 ECC 1.3958 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 58 29 2071.07 -15.85 32.59 154.40 113.78 2 33 1 1471.1 -12.50 25.52 217.76 5090.86 24.44 225.70 157.52 75.24 13 51 12 4490.9 22.18 90.00 12 26 21 3 16 58 1817.88 13 50 33 4819.27 4 18 41 1624.71 15 5 21 4585.21 115.00 3 47 16 74.01 15 10 53 153.88 13.46 1217.9 -13.43 6.43 100.00 -16.94 197.43 205.38 157.17 4219.3 23.16 25.60 118.42 4 45 45 70.57 16 21 46 350.37 1024.7 -19.84 357.26 152.34 -15.89 15 5 21 28.69 186.50 156.06 3985.2 25.78 178.53 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1896.4 SGR 377.0 SG3 562.4 ST 483.8 SR 259.2 SS 463.5 RRT -.8188 RRF -.8437 RTF .9232 CRT -.7035 CRS .9549 CST -.8785 SGB 1933.5 R23 .1360 R13 -.9259 LSA 687.3 MSA 208.6 SSA 17.1 TOE .2271 TRA-1.1425 TC3-1.3388 BAU .4365 ROE -.2175 RRA .1449 RC3 .2247 FAU .16556 FOE 1.2041 FRA-2.1221 FC3-5.9599 BSP 5602 BOE .3144 BRA 1.1517 BC3 1.3575 FSP -1824 SG1 1921.7 SG2 213.6 THA 170.64 EL1 521.6 EL2 170.9 ALF 156.70

FLIGHT TIME 102.00

ARRIVAL DATE APR 4 1966 FLIGHT TIME 110.00 LAUNCH CATE DEC 15 1965 DISTANCE 323.431 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.274 GAL -8.36 AZL 87.35 HCA 152.39 SMA 132.27 ECC .18614 INC 2.6452 V1 30.259
RP 108.39 LAP 1.23 LOP 235.23 VP 38.021 GAP 2.63 AZP 92.34 TAL 224.50 TAP 16.90 RCA 107.65 APO 156.89 V2 34.964
RC 99.145 GL 15.47 GP 9.17 ZAL 146.61 ZAP 116.30 ETS 2.04 ZAE 151.02 ETE 170.25 ZAC 32.80 ETC 165.40 CLP-116.67 PLANETOCENTRIC CONIC C3 23.410 VHL 4.838 DLA -6.25 RAL 292.05 RAD 6568.0 VEL 12.033 PTH 2.15 VHP 3.416 DPA -13.65 RAP 299.57 ECC 1.3853 UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 3 9 2057.49 -15.47 31.77 154.69 114.01 2 37 26 1457.5 -12.10 24.72 2 3 9 2057.49 12 27 38 5091.26 75.25 13 52 29 115.25 3 51 36 74.01 15 12 16 118.69 4 49 51 70.55 16 23 23 4491.3 22.19 225.73 157.87 24.45 90.00 3 21 31 1804.66 13 51 57 4819.32 4 22 58 1612.27 15 6 59 4584.48 1204.7 -13.02 115.25 100.00 -16.56 12.67 154.17 4219.3 23.16 197.43 157.52 25.60 205.38 100.00 -15.46 118.69 1012.3 349.67 110.00 -19.44 356.52 152.63 3984.5 25.76 178.49 156.41 28.68 186.45 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2054.0 SGR 387.1 SG3 542.9 RRT -.8531 RRF -.8793 RTF .9269 SGB 2090.2 R23 .1553 R13 -.9295 SG1 2080.7 SG2 199.4 THA 170.78 ST 513.7 SR 245.5 SS 446.3 CRT -.7183 CRS .9607 CST -.8787 TOE .2391 TRA-1.1930 TC3-1.5044 BAU .4776 ROE -.2024 RRA .1468 RC3 .2568 FAU .15872 FOE 1.1224 FRA-1.9601 FC3-5.8698 BSP 6136 BOE .3133 BRA 1.2020 BC3 1.5261 FSP -1758 LSA 693.2 MSA 206.4 55A 16.2 EL1 546.2 EL2 160.6 ALF 159.17 ARRIVAL DATE APR 6 1966 FLIGHT TIME 112.00 LAUNCH DATE DEC 15 1965 DISTANCE 329.582 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.234 GAL -8.40 AZL 87.47 HCA 155.59 SHA 131.98 ECC .18555 INC 2.5347 V1 30.259 RP 108.43 LAP 1.05 LOP 238.42 VP 37.980 GAP 2.96 AZP 92.31 TAL 223.54 TAP 19.13 RCA 107.49 APO 156.46 VZ 34.951 RC 101.502 GL 15.01 GP 10.04 ZAL 146.11 ZAP 119.75 ETS 3.25 ZAE 148.57 ETE 169.31 ZAC 32.24 ETC 166.66 CLP-120.26 PLANETOCENTRIC CONIC C3 22.739 VHL 4.769 DLA -6.58 RAL 292.87 RAD 6567.9 VEL 12.005 PTH 2.14 VHP 3.496 DPA -12.85 RAP 299.03 ECC 1.3742 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG LNCH AZMTH LNCH TIME L-I TIME 2 8 56 2039.94 12 28 23 5094.63 1439.9 23.70 -14.98 30.72 155.01 -11.58 90.00 22.26 218.01 24.51 225.96 158.30 4494.6 90.00 3 27 10 1787.64 13 52 52 4822.16 4 28 15 1596.42 15 8 16 4586.15 4.68 154.50 1187.6 -12.49 -16.06 11.65 100.00 157.95 152.95 156.86 205.58 4222.2 23.22 197.62 25.65 100.00 996.4 -14.90 25.80 348.77 -18.92 355.59 110.00 186.56 3986.2 178.60 28.71 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 537.6 SR 230.6 SS 423.2 CRT -.7257 CRS .9652 CST -.8755 SGT 2210.1 SGR 401.8 SG3 522.7 TOE .2428 TRA-1.2375 TC3-1.6775 BAU .5178 RDE -.1865 RRA .1485 RC3 .2946 FAU .15175 FDE 1.0226 FRA-1.7989 FC3-5.7775 BSP 6688 RRT -.8826 RRF -.9109 RTF .9296 SCB 2246.4 R23 .1799 R13 -.9321 SCI 2238.6 SC2 186.5 THA 170.82 LSA 692.6 MSA 203.7 SSA 15.3 LSA 692.6 M5A 203.7 GG. EL1 565.2 EL2 150.9 ALF 161.33 BDE .3062 BRA 1.2463 BC3 1.7032 FSP -1701 ARRIVAL DATE APR 8 1956 FLIGHT TIME 114.00 LAUNCH DATE DEC 15 1965 DISTANCE 335.709 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 28.192 GAL -8.24 AZL 87.61 HCA 158.78 SMA 131.67 ECC .185D0 INC 2.3930 VI 30.259
RP 108.46 LAP .87 LOP 241.60 VP 37.937 GAP 3.28 AZP 92.23 TAL 222.52 TAP 21.30 RCA 107.31 APO 156.03 V2 34.939
RC 103.862 GL 14.37 GP 11.17 ZAL 145.60 ZAP 122.90 ETS 4.77 ZAE 146.28 ETE 168.11 ZAC 31.89 ETC 168.41 CLP-123.61 PLANETOCENTRIC CONIC 2.13 VHP 3.587 OPA -11.75 RAP 298.69 ECC 1.3625 C3 22.028 VHL 4.693 DLA -7.08 RAL 293.79 RAD 6567.9 VEL 11.975 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.69 2 50 4 75.60 13 53 14 115.95 4 3 50 74.33 15 13 25 119.44 5 1 11 70.80 16 25 26 -10.87 1416.4 155.39 158.84 22.33 90.00 29.31 2 16 27 2016.40 -14.32 218.55 4502.8 22.43 226.52 90.00 12 28 11 5102.78 24.65 154.86 158.50 1164.9 -11.77 3.37 10.29 100.00 3 34 25 1764<u>.91</u> -15.39 4229.5 23.39 198.10 206.08 100.00 13 52 55 4829.50 25.79 153.31 975.5 -14.16 347.60 110.00 4 34 55 1575.47 15 8 54 4591.71 -18.22 354.37 3991.7 25.95 178.96 186.95 157.42 110.00 15 8 54 28.84 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RET - 9057 RRF - 9378 RTF - 9308 SGB 2396.9 R23 .2122 R13 - 9334 SG1 2390.4 SG2 176.7 THA 170.74 ST 554.8 SR 215.4 55 396.9 CRT -.7274 CRS .9701 CST -.8669 TOE .2386 TRA-1.2719 TC3-1.8557 BAU .5556 ROE -.1704 RRA .1493 RC3 .3392 FAU .14404 FOE .9178 FRA-1.6242 FC3-5.6611 BSP 7189 LSA 686.3 MSA 201.4 SSA 14.3 EL1 578.0 EL2 141.9 ALF 163.19 BDE .2932 BRA 1.2806 BC3 1.8864 FSP -1623 ARRIVAL DATE APR 10 1966 FLIGHT TIME 116.00 LAUNCH DATE DEC 15 1965 HELIOCENTRIC CONIC DISTANCE 341.814 RL 147.24 LAL -.00 LOL 82.81 VL 28.148 GAL -8.07 AZL 87.80 HCA 161.96 SMA 131.35 ECC .18451 INC 2.2044 VI 30.259
RP 108.50 LAP .68 LOP 244.79 VP 37.893 GAP 3.59 AZP 92.10 TAL 221.45 TAP 23.41 RCA 107.11 APO 155.58 VZ 34.926
RC 106.225 GL 13.44 GP 12.70 ZAL 145.12 ZAP 125.70 ETS 6.74 ZAE 144.09 ETE 166.52 ZAC 31.74 ETC 170.84 CLP-126.74 PLANETOCENTRIC CONIC C3 21.269 VHL 4.612 DLA -7.85 RAL 294.81 RAD 6567.9 VEL 11.944 PTH 2.13 VHP 3.690 DPA -10.23 RAP 298.52 ECC 1.3500 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 26 32 1983.31 -13.37 27.34 155.81 115.20 2 59 36 1383.3 -9.87 20.42 22.76 219.52 76.09 13 51 37 451A.9 24.92 227.62 159.54 12 26 18 5118.94 90.00 116.47 4 12 59 74.81 15 12 10 1133.1 -10.76 1.55 3 44 6 1733.10 -14.43 155.28 100.00 13 51 25 4844.39 4 43 43 1546.46 159.21 153.71 4244.4 23.72 199.09 26.06 207.10 100.00 119.98 5 9 29 71.23 16 25 2 -17.24 352.69 946.5 -13.12 345.99 110.00 187.79 158.16 4003.8 26.27 179.75 29.11 15 8 18 4603.80 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2507.6 SGR 452.6 SG3 476.8 ST 561.6 SR 198.3 SS 360.6 RRT -.9230 RRF -.9938 RTF .9316 CRT -.7165 CRS .9729 CST -.8521 SG8 2548.1 R23 .2492 R13 -.9344 LSA 667.4 MSA 198.0 SSA 13.3 SG1 2542.3 SG2 171.7 THA 170.50 ELI 580.3 EL2 133.9 ALF 164.99 TOE .2188 TRA-1.2975 TC3-2.0474 BAU .5930 ROE -.1528 RRA .1501 RC3 .3960 FAU .13630 FOE .7878 FRA-1.4514 FC3-5.5479 BSP 7724 BDE .2669 BRA 1.3061 BC3 2.0854 FSP -1556

```
ARRIVAL CATE APR 12 1966
                                                                           FLIGHT TIME 118.00
LAUNCH DATE DEC 15 1965
                                                                           DISTANCE 347.898
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.103 GAL -7.89 AZL 88.06 MCA 165.15 SMA 131.01 ECC .18406 INC 1.9379 V1 30.259 RP 108.54 LAP .50 LOP 247.97 VP 37.848 GAP 3.88 AZP 91.87 TAL 220.32 TAP 25.47 RCA 106.90 APO 155.13 V2 34.914 RC 108.588 GL 12.02 GP 14.88 ZAL 144.70 ZAP 128.10 ETS 9.43 ZAE 141.90 ETE 164.30 ZAC 31.81 ETC 174.31 CLP-129.67
   PLANETOCENTRIC CONIC
    C3 20.446 VHL 4.522 DLA -9.09 RAL 295.99 RAD 6567.8 VEL 11.909 PTH 2.12 VHP 3.811 DPA -8.04 RAP 298.44 ECC 1.3365
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 115.88 3 13 14
                                                                                                                                1333.9
                    2 41 1 1933.90
12 21 14 5149.42
        90.00
                                                    -11.92
                                                                    24.44
                                                                                 156.33
                                                                                                                                  4549.4
                                                                                                                                                  23.36
                                                                                                                                                                 221.65
                                                                                                               13 47 4
                                                                    229.73
                                                                                   160.50
                                                                                                    77.04
                                                    25.40
        90.00
                                                                                                               4 26 0
                   3 57 55 1685.80
13 47 1 4872.75
4 56 3 1503.77
15 5 23 4627.55
                                                                                                                                                   -9.23
                                                                                                                                  1085.8
                                                    -12.98
                                                                     5.66
                                                                                   155.78
                                                                                                   117.17
       100.00
                                                                                                   75.73 15 8 14
120.73 5 21 6
72.09 16 22 30
                                                                                                                                                  24.33
                                                                                                                                                                 200.97
                                                                                                                                  4272.8
                                                                    209.07
                                                                                   160.19
                                                    26.55
       100.00
                                                                                                                                  903.8
                                                                                                                                                 -11.58
                                                                                                                                                                 343.65
                                                   -15.77
                                                                    350.25
                                                                                  154.19
       110.00
                                                                                                                                 4027.6
                                                                                                                                                  26.88
                                                                                 159.19
                                                    29.62
                                                                   189.45
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 2648.1 SGR 496.6 SG3 450.5
RRT -.9333 RRF -.9766 RTF .9313
SGB 2694.3 R23 .2885 R13 -.9347
                                                                                                                             ST 555.7 SR 179.0 SS 313.8
CRT -.6859 CR5 .9741 CST -.8253
    TDE .1795 TRA-1.3073 TC3-2.2516 BAU .6288
    ROE -.1334 RRA .1497 RC3 .4707 FAU .12769
FOE .6365 FRA-1.2625 FC3-5.4067 BSP 8204
                                                                                                                              LSA 633.8 MSA 193.4 SSA 12.4
                                                                                                                              EL1 569.8 EL2 127.1 ALF 166.87
                                                                        SG1 2688.5 SG2 175.6 THA 170.03
    BDE .2237 BRA 1.3159 BC3 2.3003 FSP -1466
                                                                                                                                         ARRIVAL DATE APR 14 1966
                                                                            FLIGHT TIME 120.00
LAUNCH DATE DEC 15 1965
                                                                            DISTANCE 353.961
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.056 GAL -7.70 AZL 88.47 MCA 168.33 SMA 130.67 ECC .18367 INC 1.5302 V1 30.259
RP 108.58 LAP .31 LOP 251.15 VP 37.803 GAP 4.17 AZP 91.50 TAL 219.15 TAP 27.49 RCA 106.67 APO 154.68 V2 34.903
RC 110.951 GL 9.67 GP 18.19 ZAL 144.37 ZAP 129.88 ET5 13.32 ZAE 139.48 ETE 161.06 ZAC 32.17 ETC 179.48 CLP-132.44
   PLANETOCENTRIC CONIC
    C3 19.542 VML 4.421 DLA -11.22 RAL 297.42 RAD 6567.8 VEL 11.871 PTH 2.11 VMP 3.966 DPA -4.71 RAP 298.33 ECC 1.3216 LNCM AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 3 56 1853.28 -9.48 19.77 157.07 116.81 3 34 49 1253.3 -5.81 13.02
                                                                                                                                                   24.45
                                                                                                                                   4608.5
                                                                                   161.98
                                                                                                     78.94
                                                                                                               13 36 29
                    12 9 41
                                    5208.52
                                                      26.24
                                                                    233.85
        90.00
                   4 19 38 1608.88
13 36 40 4927.98
5 15 6 1435.35
                                                                                                    118.13 4 46 27
77.60 14 58 48
                                                                                                                                                                 354.57
                                                                                                                                  1008.9
                                                                                                                                                   -6.71
                                                                                   156.50
                                                     -10.55
                                                                     1.25
       100.00
                                                                                                                                                   25.43
                                                                                                                                 4328.0
                                                                                   161.70
       100.00
                                                     27.42
                                                                    212.94
                                                                                                    121.76 5 39 1
73.86 16 15 36
                                                                                                                                                                 339.96
                                                                                                                                                   -9.06
                                                     -13.35
                                                                                   154.85
                                                                                                                                   835.4
                                                                    346.42
       110.00
                                                                                                                                                   28.04
                                                                                                                                  4074.4
                    14 57 41
                                                    30.55
                                                                    192.78
                                                                                   160.79
                                    4674.45
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 534.7 SR 152.1 SS 243.6
CRT -.6084 CRS .9656 CST -.7840
LSA 579.9 MSA 178.8 SSA 12.0
                                                                        SGT 2787.1 SGR 565.5 SG3 420.6
RRT -.9373 RRF -.9884 RTF ..9309
SGB 2843.9 R23 ..3205 R13 -.9351
     TOE .1004 TRA-1.2978 TC3-2.4807 BAU .6655
    RDE -.1076 RRA .1488 RC3 .5786 FAU .11818
FDE .4289 FRA-1.0622 FC3-5.2352 BSP 8720
BDE .1471 BRA 1.3063 BC3 2.5472 FSP -1374
                                                                                                                             EL1 543.1 EL2 118.9 ALF 169.68
                                                                       SG1 2837.3 SG2 193.6 THA 169.18
                                                                                                                                         ARRIVAL DATE APR 16 1966
                                                                            FLIGHT TIME 122.00
LAUNCH DATE DEC 15 1965
                                                                            DISTANCE 360.003
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 28.008 GAL -7.51 AZL 89.18 HCA 171.51 SMA 130.33 ECC .18333 INC .8221 V1 30.259
RP 108.61 LAP .12 LOP 254.32 VP 37.757 GAP 4.44 AZP 90.81 TAL 217.94 TAP 29.45 RCA 106.44 APO 154.22 V2 34.892
RC 113.313 GL 5.31 GP 23.75 ZAL 144.13 ZAP 130.45 FTS 19.36 ZAF 136 21 FTE 186 04 ZAC 33 24 ETC 187 ZO CO 136 136
                            5.31 GP 23.75 ZAL 144.13 ZAP 130.45 ETS 19.36 ZAE 136.21 ETE 156.04 ZAC 33.24 ETC 187.79 CLP-135.14
    RC 113.313 GL
   PLANETOCENTRIC CONIC
                                                                                                                                         .86 RAP 297.93 ECC 1.3057
     C3 18.575 VHL 4.310 DLA -15.29 RAL 299.34 RAD 6567.8 VEL 11.830 PTH 2.10 VHP 4.204 DPA
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 47 7 1700.69
11 41 51 5337.16
5 0 6 1465.16
13 11 32 5047.92
5 49 45 1309.64
14 38 23 4776.20
                                                                                158.60
                                                                                                 117.96
                                                                                                                               1100.7
                                                                                                                  4 15 27
                                                      -4.69
                                                                    11.12
         90.00
                                                                                                              13 10 48
                                                                                                                                                                 234.56
                                                                                                                                  4737.2
                                                                                                                                                   26.38
                                                                                   164.71
                                                                                                     83.35
                                                      27.59
                                                                    243.02
         90.00
                                                                                                                                                                 346.62
                                                                                                                                   865.2
                                                                                                                                                   -1.87
                                                                                                    119.37
                                                                                                                 5 24 31
                                                                                   157.97
                                                      -5.83
                                                                    353.18
                                                                                                   119.37 5 24 31
81.90 14 35 40
123.18 6 11 35
77.97 15 57 59
        100.00
                                                                                                                                 4447.9
                                                                                                                                                   27.45
                                                                                                                                                                 213.04
                                                      28.87
                                                                    221.56
                                                                                   164.52
        100.00
                                                                                                                                   709.6
                                                                                                                                                   -4.33
                                                                                                                                                                 333.30
                                                      -8.75
                                                                    339.59
                                                                                   156.18
       110.00
                                                                                                                             4176.2
                                                                                                                                                  30.25
                                                                                                                                                                 191.58
                                                      32.24
                                                                    200.23
                                                                                   163.82
                    14 38 23
                                    4776.20
        110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 527.8 SR 104.1 SS 144.4
CRT -.4631 CRS .8745 CST -.8177
                                                                        5CT 2922.2 SGR 678.5 SG3 380.0
RRT -.9345 RRF -.9956 RTF ..9302
SGB 3000.0 R23 ..3386 R13 -.9362
     TOE -.0603 TRA-1.2501 TC3-2.7367 BAU .7044
    #DE -.0626 RRA .1438 RC3 .7466 FAU .10570
FDE .1222 FRA -.8216 FC3-4.9266 BSP 9251
BDE .0869 BRA 1.2583 BC3 2.8367 FSP -1246
                                                                                                                             LSA 543.6 MSA 120.4 SSA 14.6
                                                                        5G1 2990.7 SG2 235.9 THA 167.68
                                                                                                                              EL1 530.1 EL2 91.9 ALF 174.62
                                                                                                                                          ARRIVAL DATE APR 18 1966
                                                                             FLIGHT TIME 124.00
 LAUNCH DATE DEC 15 1965
                                                                            DISTANCE 366.023
    RL 147.24 LAL -.00 LOL 82.81 VL 27.959 GAL -7.30 AZL 90.72 MCA 174.68 SMA 129.98 ECC .18305 INC .7195 V1 30.259 RP 108.64 LAP -.07 LOP 257.50 VP 37.710 GAP 4.71 AZP 89.28 TAL 216.68 TAP 31.37 RCA 106.19 APO 153.77 V2 34.881 RC 115.673 GL -4.71 GP 34.61 ZAL 143.00 ZAP 127.78 ETS 29.41 ZAE 129.96 ETE 147.95 ZAC 36.77 ETC 202.21 CLP-138.11
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                        2.09 VHP 4.743 OPA 11.62 RAP 296.40 ECC 1.2961
     C3 17.993 VHL 4.242 DLA -24.85 RAL 302.80 RAD 6567.7 VEL 11.806 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   116.97
                                                                                                                  6 16 57
                                                                                                                                   673.1
                                                                                  165.06
                                    1273.10
                                                       8.95
                                                                     347.12
         90.00
                       5 55 44
                                                                                                    98.24 11 36 39
119.12 7 12 49
96.10 13 14 44
124.07 7 37 6
91.11 14 59 49
                                                                                                                                                                  264.46
                                                                                                                                   5149.9
                                                                                                                                                    28.05
                                                                     273.02
                                                                                    171.11
                     10 0 49 5749.87
                                                       27.19
                                                                                                                                                                  325.40
                                                                                                                                    482.5
                                                                                                                                                    10.90
                     6 54 46 1082.50
11 44 28 5415.69
                                                                                    164.03
                                                        7.07
                                                                     332.09
        100.00
                                                                                                                                   4815.7
                                                                                                                                                    29.86
                                                                                                                                                                  239.98
                                                                                    171.41
                                                       29.32
                                                                     248.74
                                                                                                                                                                  317.19
                                                                                                    124.07
                                                                                                                                   402.1
                                                                                                                                                     7.38
                    7 20 23 1002.14
13 35 21 5068.82
                                                                                   161.48
                                    1002.14
                                                       2.93
                                                                     323.45
        110.00
                                                                                                                                                                  213.52
                                                                                                                                   4468.8
                                                                                                                                                    33.94
                                                                                    171.77
                                                                     222.76
                                                      34.17
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 791.9 SR 101.2 55 234.4

CRT -.9806 CRS .9838 CST -.9569

LSA 829.2 MSA 66.9 SSA 11.6

EL1 798.1 EL2 19.7 ALF 172.85
                                                                        SGT 3055.2 SGR 874.2 SG3 306.8
RRT -.9242 RRF -.9986 RTF ..9306
SGB 3177.9 R23 ..3374 R13 -.9401
      TDE -.4551 TRA-1.1049 TC3-2.9472 BAU .7490
      ROE .0614 RRA .1165 RC3 1.0053 FAU .08425
      FOE -.3850 FRA -.4812 FC3-4.0539 BSP 9835
BOE .4593 BRA 1.1110 BC3 3.1139 FSP -1008
                                                                        SG1 3161.4 SG2 322.7 THA 165.03
```

LAUNCH DATE: DEC 15 1965

HELIOCENTRIC CONIC

ARRIVAL DATE APR 20 1966

```
RL 147.24 LAL -.0D LOL 82.81 VL 27.909 GAL -7.09 AZL 96.78 MCA 177.84 SMA 129.62 ECC .18279 INC 6.7758 V1 30.259
RP 108.68 LAP -.25 LOP 260.67 VP 37.664 GAP 4.96 AZP 83.23 TAL 215.38 TAP 33.22 RCA 105.93 APO 153.32 V2 34.870
RC 118.029 GL -37.35 GP 60.76 ZAL 127.47 ZAP 113.93 ETS 47.31 ZAE 111.57 ETE 139.09 ZAC 51.10 ETC 227.53 CLP-146.13
   PLANETOCENTRIC CONIC
     C3 29.026 VHL 5.388 DLA -55.31 RAL 319.30 RAD 6568.2 VEL 12.264 PTH
                                                                                                                     2.21 VMP 7.584 OPA 36.95 RAP 288.43 ECC 1.4777
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
40.28 4 32 22 1788.14 31.07 45.43 204.63 138.36 5 2 10 1188.1 36.88 39.21
                   13 35 48 5467.00
4 32 22 1788.14
13 35 48 5467.00
4 32 22 1788.14
13 35 48 5467.00
                                                                                                               138.35 15 6 55
138.36 5 2 10
138.35 15 6 55
138.36 5 2 10
138.35 15 6 55
        139.72
                                                              31.08
                                                                             253.85
                                                                                               204.65
                                                                                                                                                     4867.U
                                                                                                                                                                        36.89
                                                                                                                                                                                        247.63
         40.28
                                                              31.07
                                                                               45.43
                                                                                              204.63
                                                                                                                                                    1188.1
                                                                                                                                                                        36.88
                                                                                                                                                                                          39.21
                                                                                                                                                 4867.D
1188.1
        139.72
                                                             31.08
                                                                             253.85
                                                                                              204.65
                                                                                                                                                                        36.89
                                                                                                                                                                                        247.63
         40.28
                                                             31.07
                                                                               45.43
                                                                                              204.63
                                                                                                                                                                        36.88
                                                                                                                                                                                         39.21
                                                        31.08
                                                                                                                                                    4867.0
       139.72
                                                                             253.85
                                                                                              204.65
                                                                                                                                                                       36.89
                                                                                                                                                                                        247.63
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 3199.5 SCR 1092.4 SC3 147.0

RRT -.8930 RRF -.9888 RTF ..9499

SCB 3380.9 R23 .2705 R13 -.9626

SCI 3348.1 SC2 469.8 THA 162.69
                                                                                                                                                ST 2426.5 SR 717.6 SS 795.4
CRT -.9829 CRS .9980 CST -.9927
     TOE-2.2710 TRA -.4050 TC3-1.8166 BAU .7612
    ROE .6716 RRA -.1164 RC3 .7401 FAU .03695
FOE-1.1404 FRA .0594 FC3-1.1021 BSP 10289
BOE 2.3682 BRA .4214 BC3 1.9615 FSP -472
                                                                                                                                              LSA 2648.2 MSA 150.3 SSA .7
EL1 2527.2 EL2 126.7 ALF 163.75
                                                                                       FLIGHT TIME 128.00
                                                                                                                                                             ARRIVA: DATE APR 22 1966
LAUNCH DATE DEC 15 1965
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 378.105
    RL 147.24 LAL -.00 LOL 82.81 VL 27.858 GAL -6.89 AZL 66.74 MCA 181.12 SMA 129.27 ECC .18288 INC23.2598 VI 30.259
RP 108.71 LAP -.44 LOP 263.84 VP 37.617 GAP 5.25 AZP 113.26 TAL 214.12 TAP 35.24 RCA 105.63 APO 152.91 V2 34.866
RC 120.382 GL 62.04 GP -75.55 ZAL 104.89 ZAP 104.36 ETS 262.86 ZAE 90.68 ETE 181.07 ZAC 89.82 ETC 80.96 CLP-173.62
   PLANETOCENTRIC CONIC
    C3 152.902 VHL 12.365 DLA 43.59 RAL 299.52 RAD 6570.7 VEL 16.560 PTH 2.88 VHP 13.161 DPA -79.74 RAP 107.93 ECC 3.5164 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 A7.14 17 20 4
47.14 17 20 4
47.14 17 20 4
47.14 17 20 4
47.14 17 20 4
47.14 17 20 4
47.14 24 20 8
47.14 17 20 4
47.14 24 20 8
        55.37
                  23 24 40 3327.19
16 1 50 4693.74
23 24 40 3327.19
16 1 50 4693.74
23 24 40 3327.19
CARECTIONS
                       16 1 50 4693.74
                                                            -8.81
                                                                             216.00
                                                                                              200.17
                                                                                                                                                    4093.7
                                                                                                                                                                     -14.19
                                                                                                                                                                                       210.38
                                                                             110.68
                                                                                               200.16
                                                                                                                                                     2727.2
                                                              -8.79
                                                                                                                                                                                         105.06
       124.63
                                                                                                                                                                       -14.18
         55.37
                                                            -8.81
                                                                             216.00
                                                                                               200.17
                                                                                                                                                     4093.7
                                                                                                                                                                      -14.19
                                                                                                                                                                                         210.38
                                                            -8.79
                                                                                               200.16
                                                                                                                                                                      -14.18
                                                                             110.68
                                                                                                                                                     2727.2
       124.63
                                                                                                                                                                                       105.06
                                                                             216.00
                                                                                              200.17
                                                                                                                                                     4093.7
                                                             -8.81
                                                                                                                                                                     -14.19
                                                                                                                                                                                        210.38
         55.37
                                                                                                                                                                     -14.18
                                                            -8.79
                                                                             110.58
                                                                                              200.16
                                                                                                                                                     2727.2
        124.63
                                                                                                                                                                                         105.06
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                  SGT 3110.3 SGR 1704.1 SG3 76.9 ST 2716.1 SR 1211.9 SS 912.9
RRT -.9507 RRF -.9206 RTF ..9962 CRT -.9896 CRS ..9849 CST ..9996
SGB 3546.5 R23 -.1556 R13 -.9877 LSA 3106.7 MSA 166.3 SSA .6
SGI 3515.6 SG2 467.3 THA 151.95 EL1 2969.9 EL2 159.6 ALF 156.10
     TOE 5.7759 TRA-2.4121 TC3 -.1460 BAU .3021
    ROE-2.4862 RRA 1.9609 RC3 .0228 FAU .00969
FOE 1.7153 FRA -.5900 FC3 -.0549 B3P 10475
BOE 6.2862 BRA 3.1086 BC3 .1478 FSP -251
                                                                                      FLIGHT TIME 130.00
                                                                                                                                                           ARRIVAL CATE APR 24 1966
LAUNCH DATE DEC 15 1965
                                                                                      01STANCE 384.029
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 27.807 GAL -6.66 AZL 81.49 MCA 184.24 SMA 128.91 ECC .18269 INC 8.5072 V1 30.259
RP 108.74 LAP -.63 LOP 267.01 VP 37.570 GAP 5.48 AZP 98.49 TAL 212.73 TAP 36.97 RCA 105.36 APO 152.46 V2 34.851
RC 122.731 GL 43.92 GP -38.79 ZAL 121.26 ZAP 129.66 ETS 315.07 ZAE 120.78 ETE 210.40 ZAC 63.12 ETC 127.31 CLP-144.97
   PLANETOCENTRIC CONIC
    C3 34.703 VHL 5.891 DLA 24.00 RAL 298.13 RAD 6568.4 VEL 12.493 PTH 2.26 VMP 5.359 DPA -59.69 RAP 318.27 ECC 1.5711
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  78.01 22 48 2
61.77 18 29 45
79.47 24 23 44
60.11 19 28 0
82.91 2 9 24
56.06 19 55 37
                                                                                                                                                 2617.7
                                                                                                                                                                  -27.24
                                                                             111.98 178.37
         90.00 21 54 25 3217.70
90.00 17 20 58 4127.29
                                                           -25.85
                                                                                                                                                                                       103.59
                                                            -2.31
                                                                             167.92
                                                                                              169.57
                                                                                                                                                    3527.3
                                                                                                                                                                      -6.06
                                                                                                                                                                                       161.26
                                                                                          178.88
                   23 35 32 2891.64
18 22 31 3928.58
       100.00
                                                          -28.14
                                                                              88.50
                                                                                                                                                    2291.6
                                                                                                                                                                     -29.30
                                                                                                                                                                                         79.89
       100.00
                                                              - .27
                                                                             152.19
                                                                                              168.43
                                                                                                                                                    3328.6
                                                                                                                                                                      -4.24
                                                                                                                                                                                       145.66
                                                                                            179.86
        110.00
                        1 26 49 2555.81
                                                           -33.53
                                                                              63.97
                                                                                                                                                    1955.8
                                                                                                                                                                     -34.14
                                                                                                                                                                                         54.78
       110.00
                       18 51 40
                                        3837.17
                                                             4.37
                                                                            142.38
                                                                                              165.55
                                                                                                                                                    3237.2
                                                                                                                                                                        - .12
                                                                                                                                                                                        136.17
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 3510.4 SGR 490.5 SG3 243.5
RRT .7901 RRF .9458 RTF .9455
SGB 3544.5 R23 .3154 R13 .9485
    TOE 2.1005 TRA-2.0376 TC3-1.5750 BAU .7421
                                                                                                                                               ST 2144.8 SR 363.8 SS 895.8
                                                                                                                                             CRT .9536 CRS -.9900 CST -.9866
    RDE .3739 RRA -.0029 RC3 -.2793 FAU .06289
FDE 1.9679 FRA -.8716 FC3-1.5690 BSP 10680
BDE 2.1335 BRA 2.0376 BC3 1.5996 FSP -810
                                                                                                                                              LSA 2346.7 MSA 168.1 SSA
EL1 2172.8 EL2 108.1 ALF
                                                                                                                                                                                               . 9
                                                                                 SG1 3531.9 SG2 298.9 THA 6.34
                                                                                                                                                                                          9.21
LAUNCH DATE DEC 15 1965
                                                                                      FLIGHT TIME 132.00
                                                                                                                                                             ARRIVAL DATE APR 26 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 389.981
    RE 147.24 LAL -.00 LOL 82.81 VL 27.755 GAL -6.42 AZL 83.70 HCA 187.41 SMA 128.55 ECC .18267 INC 6.3005 V1 30.259 RP 108.76 LAP -.81 LOP 270.17 VP 37.524 GAP 5.71 AZP 96.25 TAL 211.33 TAP 38.73 RCA 105.07 APO 152.03 V2 34.842 RC 125.075 GL 36.51 GP -23.92 ZAL 125.27 ZAP 139.00 ETS 326.79 ZAE 128.43 ETE 202.13 ZAC 54.02 ETC 136.61 CLP-145.65
   PLANETOCENTRIC CONIC
    C3 25.877 VHL 5.087 DEA 16.87 RAL 300.27 RAD 6568.0 VEL 12.135 PTH 2.17 VHP 4.743 DPA -44.87 RAP 314.17 ECC 1.4259
    25.877 VML 5.087 DLA 16.87 KAL 300.27 KAU 6568.D VEL 12.155 PIH 2.17 VMP 4.743 UPA -44.87 KAP 314.17 ECC 1.4259 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 28 39 2830.97 -28.27 84.09 172.48 91.68 24 15 50 2251.0 -27.74 75.46 90.00 16 3 49 4367.04 5.40 181.32 164.63 62.16 17 16 36 3767.0 1.64 174.67 100.00 1 3 32 2537.65 -29.76 62.44 172.41 93.00 1 45 50 1937.6 -29.02 53.71
                                                                                            163.92
172.04
                    17 15 33 4135.59
                                                                             163.60
                                                                                                                   60.80 18 24 28
                                                                                                                                                    3535.6
                                                              6.71
                                                                                                                                                                        2.77
                                                                                                                                                                                       157.03
       100.00
                                                                              40.80
                                                                                                                                3 10 37
       110.00
                       2 33 0 2257.75
                                                           -33,62
                                                                                                                   96.55 3 10 37
57.15 19 9 3
                                                                                                                                                    1657.7
                                                                                                                                                                    -32.35
                                                                                                                                                                                         31.80
                                                                            150.40
                                                                                              161.89
                                                                                                                                                    3388.3
                                                           10.04
                                                                                                                                                                         5.64
       110.00
                     18 2 34
                                        3988.26
                                                                                                                                                                                       144.07
                                                                            MID-COURSE EXECUTION ACCURACY
SGT 3601.0 SGR 313.6 SG3 304.1 ST 1841.8 SR 225.0 SS 834.9
RRT .7474 RRF .9272 RTF .9349 CRT .9257 CRS -.9851 CST -.9768
SGB 3614.6 R23 .3404 R13 .9362 LSA 2026.7 MSA 180.5 SSA .2.4
SGI 3608.6 SG2 207.9 THA 3.74 ELI 1853.6 EL2 84.6 ALF 6.47
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.5294 TRA-1.8355 TC3-2.2697 BAU .7887
     ROE .1996 RRA .0180 RC3 -.2139 FAU .07980
    FDE 1.7887 FRA -.8279 FC3-2.6698 BSP 11235
BDE 1.5424 BRA 1.8356 BC3 2.2798 FSP -1021
```

FLIGHT TIME 126.00

DISTANCE 372.011

```
ARRIVAL DATE APR 28 1966
                                                                    FLIGHT TIME 134.00
LAUNCH DATE DEC 15 1965
                                                                   DISTANCE 395.922
   RL 147.24 LAL -.00 LOL 82.81 VL 27.703 GAL -6.18 AZL 84.59 MCA 190.58 SNA 128.19 ECC .18274 INC 5.4112 VI 30.259 RP 108.79 LAP -.99 LOP 273.34 VP 37.478 GAP 5.95 AZP 95.32 TAL 209.90 TAP 40.48 RCA 104.77 APO 151.62 V2 34.834 RC 127.413 GL 33.01 GP -16.85 ZAL 126.19 ZAP 143.46 ETS 333.55 ZAE 130.75 ETE 196.46 ZAC 50.94 ETC 142.47 CLP-147.09
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 22.728 VHL 4.767 DLA 13.72 RAL 302.15 RAD 6567.9 VEL 12.004 PTH 2.14 VHP 4.651 DPA -37.63 RAP 313.82 ECC 1.3741
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   0 53 58
                                                                                        96.91
                  0 9 12 2685.77
15 42 9 4448.58
                                               -27.53
                                                             73.54
                                                                         170.51
       90.00
                                                                                                                                   4.26
                                                                                                                                                179.23
                                                                                                   16 56 18
                                                                                                                     3848.6
                                                                                          62.74
                                                             185.94
                                                                          164.15
                                                 7.97
        90.00
                                                                                                                                  -27.40
                                                                                                                                                 43.82
                                                                                                                    1800.1
                  1 37 46 2400.15
16 56 17 4209.44
                                                                                                    2 17 46
                                               -28.84
                                                              52.33
                                                                          170.31
                                                                                          98.24
      100.00
                                                                                         61.42 18 6 26
101.87 3 37 49
                                                                                                                    3609.4
                                                                                                                                   5.25
                                                                                                                                                161.10
                                                                          163.53
                                                             167.73
                                                 9.14
      100.00
                                                                                                                                  -30.32
                                                                                                                                                 22.89
                                                                                        101.87
                                                                                                                    1535.9
                 3 2 13 2135.89
17 48 19 4046.46
                                                              31.55
                                                                          169.60
                                               -32.29
      110.00
                                                                                         57.81 18 55 45
                                                                                                                     3446.5
                                                                                                                                    7.83
                                                                                                                                                147.15
                                                                          161.72
                                                            153.56
      110.00
                                               12.17
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1722.9 SR 163.9 SS 780.7
CRT .8958 CRS -.9771 CST -.9697
                                                                SGT 3706.6 SGR 204.3 SG3 317.5
RRT .6163 RRF .8309 RTF .9300
    TOE 1.3280 TRA-1.7368 TC3-2.6893 BAU .8180
    ROE .1360 RRA .0337 RC3 -.1209 FAU .08274
FOE 1.5997 FRA -.7125 FC3-3.1516 BSP 11603
                                                                SGB 3712.2 R23 .3258 R13 .9305
SG1 3708.8 SG2 160.8 THA 1.95
                                                                                                                 LSA 1889.4 MSA 186.8 SSA 3.8
                                                                                                                 EL1 1729.2 EL2 72.6 ALF 4.88
    BOE 1.3349 BRA 1.7371 BC3 2.6921 FSP -1064
                                                                                                                           ARRIVAL DATE APR 30 1966
                                                                    FLIGHT TIME 136.00
LAUNCH DATE DEC 15 1965
                                                                    DISTANCE 401.850
    RL 147.24 LAL -.00 LOL 82.81 VL 27.651 GAL -5.93 AZL 85.07 HCA 193.74 SMA 127.84 ECC .18290 INC 4.9287 VI 30.259 RP 108.81 LAP -1.17 LOP 276.51 VP 37.432 GAP 6.17 AZP 94.79 TAL 208.45 TAP 42.19 RCA 104.45 APO 151.22 V2 34.826
   HELIOCENTRIC CONIC
    RC 129.747 GL 31.06 GP -12.85 ZAL 125.95 ZAP 146.33 ETS 337.78 ZAE 131.50 ETE 192.80 ZAC 50.08 ETC 146.51 CLP-148.61
   PLANETOCENTRIC CONIC
    C3 20.977 VHL 4.580 DLA 12.16 RAL 303.91 RAD 6567.9 VEL 11.931 PTH 2.12 VHP 4.675 DPA -33.35 RAP 314.47 ECC 1.3452 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 29 44 2612.88
15 35 44 4482.72
1 57 17 2330.51
16 50 52 4240.31
3 19 33 2073.09
17 45 5 4070.50
                                                                                                      1 13 16
                                                             68.32
                                                                         170.13
                                                -26.82
        90.00
                                                                                                                                     5.35
                                                                                                                                                 181.15
                                                                                                   16 50 27
                                                                                                                     3882.7
                                                                                           63.05
                                                                           164.64
                                                  9.03
                                                             187.89
        90.00
                                                                                                      2 36 7
                                                                                                                     1730.5
                                                                                                                                   -26.28
                                                                                                                                                  38.95
                                                                                          100.77
                                                                           169.88
                                                -28.05
                                                              47.30
                                                                                                  2 36 7
18 1 33
       100.00
                                                                                                                     3640.3
                                                                                                                                     6.28
                                                                                                                                                 162.81
                                                                                           61.73
                                                             169.48
                                                                           164.05
                                                 10.14
                                                                                         104.46 3 3-
       100.00
                                                                                                                     1473.1
                                                                                                                                   -29.02
                                                                                                                                                  18.47
                                                -31.32
                                                              26.91
                                                                          169.04
       110.00
                                                                                                                                    8.73
                                                                                                                                                 148.44
                                                                                                                     3470.5
                                 4070.50
                                                13.04
                                                             154.88
                                                                           162.34
       110.00
                  17 45 5
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1676.3 SR 139.9 SS 743.7
CRT .8762 CRS -.9720 CST -.9644
                                                                 SGT 3814.6 SGR 154.0 SG3 316.6
RRT .3815 RRF .6135 RTF .9268
SGB 3817.7 R23 .2806 R13 .9270
    TOE 1.2365 TRA-1.6687 TC3-3.0093 BAU .8440
    RDE .1112 RRA .0396 RC3 -.0464 FAU .08160
                                                                                                                 LSA 1829.2 MSA 190.8 SSA 5.2
EL1 1680.8 EL2 67.2 ALF 4.19
    FOE 1.4583 FRA -.5962 FC3-3.3676 BSP 11960
BOE 1.2415 BRA 1.6692 BC3 3.0097 FSP -1059
                                                                 5G1 3815.1 SG2 142.3 THA
                                                                                                    .88
                                                                                                                           ARRIVAL DATE MAY 2 1966
                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 15 1965
                                                                    015TANCE 407.764
    RL 147.24 LAL -.00 LOL 82.81 VL 27.598 GAL -5.67 AZL 85.38 MCA 196.91 SHA 127.48 ECC .18314 INC 4.6244 V1 30.259
RP 108.84 LAP -1.34 LOP 279.67 VP 37.386 GAP 6.40 AZP 94.43 TAL 206.97 TAP 43.88 RCA 104.13 APO 150.83 V2 34.819
   HELIOCENTRIC CONIC
    RC 132.074 GL 29.87 GP -10.30 ZAL 125.14 ZAP 148.52 ETS 340.64 ZAE 131.67 ETE 190.32 ZAC 50.24 ETC 149.48 CLP-150.09
    PLANETOCENTRIC CONIC
                                                                                            2.11 VMP 4.740 DPA -30.47 RAP 315.59 ECC 1.3254
    C3 19.773 VHL 4.447 DLA 11.38 RAL 305.66 RAD 6567.8 VEL 11.881 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  1972.9
                  0 43 10 2572.85
15 36 15 4494.52
2 10 15 2292.00
                                                                         170.50
                                                                                         100.78
                                                                                                      1 26 3
                                                -26.34
                                                              65.49
                                                                                                                                                 181.81
        90.00
                                                                                                                     3894.5
                                                                                           63.16
                                                                                                   16 51 9
                                                                           165.49
                                                             188.56
                                                 9.40
        90.00
                                                                                                                     1692.0
                                                                                                                                                  36.50
                                                                                          102.13
                                                                                                    2 48 27
                                                                           170.23
                                                                                           102.13 E = 5
61.84 18 2 41
108.85 4 5 27
                                                -27.53
                                                              44.56
       100.00
                                                                                                                                                 163.38
                                                                                                                                     6.63
                                                                                                                     3650.6
                                                                           164.92
                  16 51 51 4250.59
3 31 29 2037.78
17 47 6 4077.58
                                                 10.47
                                                             170.06
                                                                                                                                                  16.03
       100.00
                                                                                                                                   -28.21
                                                                                                                     1437.8
                                                                           169.33
                                                                                         105.85
                                               -30.69
                                                              24.35
       110.00
                                                                                          58.21 18 55 3
                                                                                                                                      8.99
                                                                                                                                                 148.81
                                                                                                                     3477.6
                                                                           163.26
                                                13.29
                                                             155.27
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1665.2 SR 132.5 SS 718.9
CRT .8708 CRS -.9723 CST -.9606
                                                                 SGT 3923.0 SGR 142.1 SG3 310.7
RRT .1072 RRF .3185 RTF .9243
SGB 3925.6 R23 .2206 R13 .9243
                                                    .8689
     TOE 1.1927 TRA-1.6109 TC3-3.2870 BAU
     RDE .1021 RRA .0400 RC3 .0119 FAU .07910
FDE 1.3522 FRA -.4883 FC3-3.4632 BSP 12334
                                                                                                                 LSA 1808.2 MSA 193.7 SSA 6.5
                                                                                                                  EL1 1669.2 EL2 65.0 ALF 3.97
                                                                 SG1 3923.0 SG2 141.2 THA
                                                                                                    .22
     BOE 1.1970 BRA 1.6114 BC3 3.2870 FSP -1040
                                                                                                                            ARRIVAL DATE MAY 4 1966
                                                                     FLIGHT TIME 140.00
 LAUNCH DATE DEC 15 1965
    RL 147.24 LAL -.00 LOL 82.81 VL 27.546 GAL -5.40 AZL 85.59 MCA 200.08 SMA 127.13 ECC .18348 INC 4.4141 V1 30.259
RP 108.86 LAP -1.51 LOP 282.83 VP 37.342 GAP 6.62 AZP 94.15 TAL 205.46 TAP 45.54 RCA 103.80 APO 150.45 V2 34.812
RC 134.395 GL 29.09 GP -8.55 ZAL 123.98 ZAP 150.37 ETS 342.68 ZAE 131.61 ETE 188.55 ZAC 50.96 ETC 151.78 CLP-151.53
                                                                     DISTANCE 413.665
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 18.846 VML 4.341 DLA 11.07 RAL 307.44 RAD 6567.8 VEL 11.842 PTH 2.10 VHP 4.823 DPA -28.33 RAP 316.96 ECC 1.3102
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       1 35 21
                                                                                                                      1951.0
                                                                          171.30
                                                                                         101.50
                                                              63.95
                     0 52 50
                                 2551.04
                                                 -26.06
         90.00
                                                                                                                      3893.6
                                                                                                                                      5.69
                                                                                                                                                  181.76
                                                                                                      16 55 37
                                                                            166.55
                                                                                            63.16
                                                              188.51
                                                   9.37
                    15 40 43
                                 4493.62
                                                                                           102.86 2 57 34
61.83 18 7 19
                                                                                                                      1670.8
                                                                                                                                    -25.18
                                                                                                                                                   34.85
                                                                          171.02
                                                 -27.22
                                                                43.06
                     2 19 44
                                 2270.78
        100.00
                                                                                                                                                  163.30
                                                                                                                      3649.1
                                                                                                                                      6.58
                                                              169.98
                                                                            166,00
                                                                                           106.62 4 14 ...
10 19 0 5
                    16 56 30 4249.10
                                                 10.42
        100.00
                                                                                                                                    -27.74
                                                                                                                                                   14.68
                                                                                                                      1417.8
                   3 40 34 2017.84
17 52 10 4074.81
                                                                22.93
                                                                            170.09
                                                 -30.31
        110.00
                                                                                                                                     8.89
                                                                                                                                                  148.66
                                                                                                                      3474.8
                                                              155.12
                                                                            164.37
                                                13.19
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                  SGT 4036.2 SGR 190.4 SG3 303.7
RRT -.0938 RRF .0748 RTF .9226
SGB 4039.0 R23 -.1622 R13 -.9226
                                                                                                                   ST 1671.8 SR 133.2 SS 700.1
     TDE 1.1715 TRA-1.5588 TC3-3.5510 BAU .8948
                                                                                                                         .8760 CRS -.9764 CST -.9580
                                                                                                              CRT
      RDE .1003 RRA .0371 RC3 .0586 FAU .07638
     FOE 1.2655 FRA -.3948 FC3-3.5087 BSP 12795
BDE 1.1758 BRA 1.5592 BC3 3.5515 FSP -1027
                                                                  SG1 4036.2 SG2 149.7 THA 179.80
```

```
LAUNCH DATE DEC 15 1965
                                                                                  FLIGHT TIME 142.00
                                                                                                                                                   ARRIVAL DATE MAY 5 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 419.549
     RL 147.24 LAL -.00 LOL 82.81 VL 27.493 GAL -5.13 AZL 85.74 MCA 203.24 SMA 126.77 ECC .18393 INC 4.2589 V1 3D.259 RP 108.87 LAP -1.68 LOP 286.00 VP 37.297 GAP 6.84 AZP 93.91 TAL 203.94 TAP 47.18 RCA 103.46 APO 150.09 VZ 34.806
     RC 136.709 GL 28.57 GP -7.28 7AL 122.58 7AP 152.02 ETS 344.20 7AE 131.45 ETE 187.24 7AC 52.01 ETC 153.65 CLP-152.91
    PLANETOCENTRIC CONIC
     C3 18.086 VHL 4.253 CLA 11.05 RAL 309.25 RAD 6567.7 VEL 11.810 PTH 2.09 VHP 4.915 DPA -26.63 RAP 318.50 FCC 1.2977
     LNCH A7MTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 D 16 2540.67 -25.91 63.23 172.39 101.83 1 42 36 1940.7 -24.02 55.07 90.00 15 47 47 4484.70 9.09 188.00 167.78 63.07 17 2 32 3884.7 5.41 181.26
                                                                                                                        17 2 32
                       2 27 9 2260.45
                                                                                                                       3 4 49
        100.00
                                                         -27.06
                                                                          42.33
                                                                                         172.11
                                                                                                           103.21
                                                                                                                                            1660.5
                                                                                                                                                             -24.97
                                                                                                                                                                               34.15
                     17 3 35 4240.15
3 47 57 2007.60
17 59 16 4065.76
        100.00
                                                                                                          61.73 18 14 15
107.01 4 21 25
58.05 19 7 2
                                                        10.14
                                                                         169.47
                                                                                                                                         3640.1
1407.6
                                                                                         167.23
                                                                                                                                                              6.28
                                                                                                                                                                             162.80
       110.00
                                                       -30.11
                                                                          22.20
                                                                                        171.17
                                                                                                                                                            -27.49
                                                                                                                                                                               13.99
        110.00
                                      4065.76
                                                       12.87
                                                                        154.62
                                                                                                                                                                             148.18
                                                                                         165.61
                                                                                                                                           3465.8
                                                                                                                                                             8.55
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
     TOE 1.1337 TRA-1.5377 TC3-3.8757 BAU .9374
                                                                             SGT 4201.9 SGR 164.1 SG3 302.1
RRT -.2121 RRF -.1038 RTF .9272
SG8 4205.1 R23 -.0954 R13 -.9272
                                                                                                                                       ST 1656.4 SR 137.2 SS 659.2
CRT .8812 CRS -.9790 CST -.9566
     ROE .1014 RRA .0311 RC3 .0944 FAU .07609
FDE 1.1447 FRA -.3640 FC3-3.6420 BSP 14044
                                                                                                                                      LSA 1778.0 MSA 188.9 SSA 9.7
     BDE 1.1382 BRA 1.5381 BC3 3.8769 FSP -1123
                                                                             SG1 4202.0 SG2 160.3 THA 179.52
                                                                                                                                       ELI 1660.8 EL2 64.7 ALF 4.18
LAUNCH DATE DEC 15 1965
                                                                                  FLIGHT TIME 144.00
                                                                                                                                                    ARRIVAL DATE MAY 8 1966
   MELIOCENTRIC CONIC
                                                                                 DISTANCE 425.431
    RL 147.24 LAL -.00 LOL 82.81 VL 27.441 GAL -4.84 AZL 85.86 HCA 206.41 SMA 126.43 ECC .18445 INC 4.1392 V1 30.259
RP 108.89 LAP -1.84 LOP 289.16 VP 37.254 GAP 7.05 AZP 93.71 TAL 202.38 TAP 48.79 RCA 103.11 APO 149.75 V2 34.801
                           28.21 GP -6.32 ZAL 120.97 ZAP 153.51 ETS 345.37 ZAE 131.27 ETE 186.23 ZAC 53.31 ETC 155.20 CLP-154.22
    RC 139.015 GL
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 17.433 VHL 4.175 OLA 11.24 RAL 311.15 RAO 6567.7 VEL 11.782 PTH 2.08 VHP 5.012 DPA -25.20 RAP 320.17 ECC 1.2869

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG

90.00 1 6 13 2558.55 -25.88 63.08 173.73 101.90 1 48 32 1938.5 -23.98 54.92

90.00 15 56 56 4469.72 8.63 187.14 169.15 62.93 17 11 26 3869.7 4.93 180.42

100.00 2 33 13 2257.96 -27.02 42.16 173.45 103.29 3 10 51 1658.0 -24.92 35.99

100.00 17 12 37 4225.53 9.66 168.64 168.60 61.57 18 23 3 3625.5 5.79 161.99

110.00 3 54 16 2004.33 -30.04 21.96 172.51 107.13 4 27 41 1404.3 -27.41 13.77

110.00 18 8 4 4051.93 12.37 153.86 167.00 57.88 19 15 35 3451.9 8.04 147.44
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            SGT 4213.3 SGR 187.5 SG3 283.7
RRT -.2532 RRF -.1418 RTF .9154
SGB 4217.5 R23 -.0934 R13 -.9154
     TOE 1.2014 TRA-1.4194 TC3-3.9880 BAU .9300
                                                                                                                                       ST 1755.8 SR 147.3 55 700.1
CRT .9087 CRS -.9893 CST -.9560
    ROE .1070 RRA .0269 RC3 .1321 FAU .06868
    FOE 1.1751 FRA -.1875 FC3-3.4108 BSP 13064
                                                                                                                                       LSA 1885.4 MSA 199.5 SSA 10.2
    BOE 1.2061 BRA 1.4196 BC3 3.9902 FSP -914
                                                                             561 4213.6 562 181.4 THA 179.35
                                                                                                                                     ELI 1760.9 ELZ 61.3 ALF 4.37
LAUNCH DATE DEC 15 1965
                                                                                FLIGHT TIME 146.00
                                                                                                                                                  ARRIVAL DATE MAY 10 1966
                                                                                DISTANCE 431.294
    RL 147.24 LAL -.00 LOL 82.81 VL 27.388 GAL -4.55 AZL 85.96 HCA 209.57 SMA 126.08 ECC .18510 INC 4.0435 VI 30.259 RP 108.90 LAP -1.99 LOP 292.32 VP 37.211 GAP 7.27 AZP 93.52 TAL 200.81 TAP 50.38 RCA 102.74 APO 149.42 V2 34.797
     RC 141.312 GL 27.95 GP -5.57 TAL 119.21 TAP 154.90 ETS 346.30 TAE 131.07 ETE 185.43 TAC 54.77 ETC 156.52 CLP-155.48
   PLANETOCENTRIC CONIC
    C3 16.869 VHL 4.107 DLA 11.58 RAL 313.11 RAD 6567.7 VEL 11.758 PTH 2.08 VHP 5.114 DPA -23.95 RAP 321.93 ECC 1.2776 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 11 13 2542.36
16 7 36 4450.73
2 38 25 2261.12
17 23 5 4207.20
                                                                                                       101.78 1 53 35
62.76 17 21 47
        90.00
                                                        -25.94
                                                                         63.35 175.26
                                                                                                                         1 53 35
                                                                                                                                       1942.4 -24.05
                                                                                                                                                                             55.16
         90.00
                                                       8.04
                                                                        186.06
                                                                                       170.66
                                                                                                                                           3850.7
                                                                                                                                                             4.33
                                                                                                                                                                            179.35
                                                                        42.38 174.98
167.61 170 · ·
                                                                                                        103.19 3 16 6
61.39 18 33 13
107.06 4 33 21
57.67 19 25 20
       100.00
                                                      -27.07
                                                                                                                                           1661.1
                                                                                                                                                            -24.99
                                                                                                                                                                             34.20
       100.00
                                                         9.07
                                                                                                                                           3607.2
                                                                                                                                                             5.18
                                                                                                                                                                            160.98
                                                   -30.08
                      3 59 55 2006.09
18 18 5 4035.00
                                                                         22.09 174.06
       110.00
                                                                                                                                           1406.1
                                                                                                                                                            -27.45
                                                                                                                                                                             13.88
                    18 18 5
       110.00
                                                                        152.94
                                                                                        168.51
                                                                                                                                           3435.0
                                                                                                                                                             7.40
                                                                                                                                                                             146.54
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    TOE 1.2192 TRA-1.3539 TC3-4.2219 BAU .9528
                                                                         SGT 4317.1 SGR 206.4 SG3 275.8
RRT -.2742 RRF -.1874 RTF .9143
SGB 4322.0 R23 -.0664 R13 -.9143
                                                                                                                                  ST 1799.4 SR 156.8 SS 696.1

CRT .9248 CRS -.9934 CST -.9562

LSA 1925.5 MSA 198.1 SSA 11.4

EL1 1805.3 EL2 59.4 ALF 4.61
    ROE .1122 RRA .0197 RC3 .1603 FAU .06578
FDE 1.1272 FRA -.1118 FC3-3.3760 BSP 13478
    BOE 1.2243 BRA 1.3540 BC3 4.2250 FSP -898
                                                                            SG1 4317.4 SG2 198.5 THA 179.25
_AUNCH DATE DEC 15 1965
                                                                                 FLIGHT TIME 148.00
                                                                                                                                                   ARRIVAL DATE MAY 12 1966
  HELIOCENTRIC CONIC
                                                                                DISTANCE 437.144
   RL 147.24 LAL -.00 LOL 82.81 VL 27.336 GAL -4.24 A7L 86.04 MCA 212.73 SMA 125.74 ECC .18587 INC 3.9649 V1 30.259
RP 108.92 LAP -2.14 LOP 295.48 VP 37.169 GAP 7.48 A7P 93.34 TAL 199.21 TAP 51.95 RCA 102.37 APO 149.11 V2 34.793
RC 143.598 GL 27.76 GP -4.97 7AL 117.30 7AP 156.20 ETS 347.04 7AE 130.88 ETE 184.79 7AC 56.36 ETC 157.67 CLP-156.70
  PLANETOCENTRIC CONIC
    C3 16.376 VHL 4.047 OLA 12.04 RAL 315.16 RAD 6567.7 VEL 11.737 PTH 2.07 VHP 5.219 DPA -22.81 RAP 323.76 ECC 1.2695
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
90.00 1 15 31 2551.06 -26.06 63.95 176.99 101.50 1 58 2 1951.1 -24.21 55.77
                                                                                     176.99
                                                                                                        101.50
                                                                                                          62.58 17 33 27
102.92 3 20 49
        90.00
                    16 19 39
                                     4428.44
                                                          7.34
                                                                        184.79
                                                                                        172.32
                                                                                                                                           3828.4
                                                                                                                                                             3.61
                                                                                                                                                                            178.10
       100.00
                      2 43 0 2268.91
                                                        -27.19
                                                                        42.93
                                                                                       176.71
                                                                                                                                           1668.9
                                                                                                                                                            -25.14
                                                                                                                                                                             34.73
                                                                                                         61.20 18 44 37
106.84 4 38 39
57.44 19 36 9
                    17 34 51 4185.81
4 5 7 2011.96
18 29 13 4015.53
       100.00
                                                          8.37
                                                                        166.40 171.77
22.51 175.81
                                                                                                                                                      -27.59
                                                                                                                                           3585.8
                                                                                                                                                                           159.79
                                                        -30.19
                                                                                                                                           1412.0
                                                                                                                                                                             14.28
       110.00
                                                                                        170.16
                                                       11.04
                                                                       151.88
                                                                                                                                           3415.5
                                                                                                                                                              6.67
                                                                      HID-COURSE EXECUTION ACCURACY

SGT 4418.7 SGR 224.9 SG3 268.1

RRT -.2776 RRF -.2104 RTF ..9135

SGB 4424.4 R23 -.0456 R13 -.9134

SGI 4419.1 SGZ 216.1 THA 179.19

SGI 4419.1 SGZ 216.1 THA 179.19

SGI 4419.1 SGZ 216.1 THA 179.19

SGI 3424.4 R23 -.0456 R13 -.9134

SGI 4419.1 SGZ 216.1 THA 179.19

SGI 4419.1 SGZ 216.1 THA 179.19

SGI 3427.2 SGZ 216.1 THA 179.19
  DIFFERENTIAL CORRECTIONS
    TDE 1.2441 TRA-1.2821 TC3-4.4509 BAU .9753
    ROE .1181 RRA .0118 RC3 .1847 FAU .06297
   FDE 1.0860 FRA -.0407 FC3-3.3287 BSP 13881
BDE 1.2497 BRA 1.2822 BC3 4.4547 FSP -880
```

ARRIVAL CATE MAY 14 1966

JPL TM 33-99

```
LAUNCH DATE DEC 15 1965
                                                                   DISTANCE 442.982
  HELIOCENTRIC CONIC
   RL 147.24 LAL -.00 LOL 82.81 VL 27.284 GAL -3.93 AZL 86.10 MCA 215.89 SMA 125.40 ECC .18675 INC 3.8987 VI 30.259 RP 108.93 LAP -2.28 LOP 298.64 VP 37.128 GAP 7.69 AZP 93.16 TAL 197.60 TAP 53.50 RCA 101.98 APO 148.82 VZ 34.790
    RC 145.874 GL 27.61 GP -4.48 ZAL 115.25 ZAP 157.44 ETS 347.65 ZAE 130.71 ETE 184.26 ZAC 58.06 ETC 158.69 CLP-157.86
  PLANETOCENTRIC CONIC
    C3 15.946 VML 3.993 DLA 12.60 RAL 317.30 RAD 6567.6 VEL 11.719 PTH 2.06 VMP 5.328 DPA -21.74 RAP 325.65 ECC 1.2624
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 -24.43
                                                                        178.90
                                                                                                    2 2 4
                                                                                                                    1963.9
                                                                                       101.08
                  1 19 20 2563.90
16 32 56 4403.48
                                               -26.23
                                                            64.86
                                                                                                                     3803.5
                                                                                                                                    2.81
                                                                                                                                                176.70
                                                                                          62.39
                                                                                                    17 46 19
                                                                          174.13
                                                6.56
                                                             183.38
                 2 47 10 2280.63
17 47 47 4161.97
4 10 2 2021.31
18 41 24 3994.06
                                                                                                                    1680.6
                                                                                                                                   -25.37
                                                                                                                                                 35.52
                                                                                         102.52
                                                                                                    3 25 10
                                                                          178.63
      100.00
                                               -27.37
                                                             43.75
                                                                                        61.00 18 57 9
106.49 4 43 44
57.21 19 47 58
                                                                                                                     3562.0
                                                                                                                                    3.66
                                                                                                                                                158.48
                                                                         173.58
                                                7.58
                                                            165.07
      100.60
                                                                                                                    1421.3
                                                                                                                                  -27.82
                                                                                                                                                 14.91
                                                                         177.74
      110.00
                                              -30.38
                                                             23.17
                                                                                                                     3394.1
                                                                                                                                    5.86
                                                                                                                                                144.38
                                                            150.71
                                                                          171.96
                                             10.25
      110.00
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                              ST 1913.5 SR 178.4 SS 697.7
CRT .9548 CRS -.9969 CST -.9584
                                                                SGT 4511.4 SGR 242.7 SG3 260.1
RRT -. 2690 RRF -. 2160 RTF .9121
    TOE 1.2793 TRA-1.1995 TC3-4.6638 BAU .9952
   ROE .1243 RRA .0035 RC3 .2060 FAU .06000
FOE 1.0549 FRA .0317 FC3-3.2575 BSP 14192
                                                                                                                LSA 2035.3 MSA 193.4 SSA 13.7
                                                                SGB 4517.9 R23 -.0311 R13 -.9120
                                                                                                              EL1 1921.0 EL2 52.8 ALF 5.09
                                                                SG1 4511.9 SG2 233.7 THA 179.17
    BOE 1.2853 BRA 1.1995 BC3 4.6683 FSP -854
                                                                                                                           ARRIVAL DATE MAY 15 1966
                                                                    FLIGHT TIME 152.00
LAUNCH DATE DEC 15 1965
                                                                   DISTANCE 448.807
  HELIOCENTRIC CONIC
   RL 147.24 LAL -.00 LOL 82.81 VL 27.232 GAL -3.61 AZL 86.16 HCA 219.06 SMA 125.07 ECC .18776 INC 3.8418 VI 30.259 RP 108.93 LAP -2.42 LOP 301.80 VP 37.087 GAP 7.91 AZP 92.99 TAL 195.97 TAP 55.03 RCA 101.58 APO 148.55 V2 34.787
    RC 148.138 GL 27.48 GP -4.08 TAL 113.07 TAP 158.61 ETS 348.15 TAE 130.56 ETE 183.83 TAC 59.84 ETC 159.59 CLP-158.99
  PLANETOCENTRIC CONIC
    C3 15.576 VHL 3.947 DLA 13.24 RAL 319.54 RAD 6567.6 VEL 11.703 PTH 2.06 VHP 5.439 DPA -20.72 RAP 327.58 ECC 1.2563
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 22 47 2580.39 -26.44 66.02 180.99 100.53 2 5 47 1980.4 -24.72 57.77
                 1 22 47 2580.39
16 47 21 4376.34
2 51 1 2295.80
18 1 47 4136.16
                                                                                                    18 0 17
                                                                                                                     3776.3
                                                                                                                                     1.94
                                                                                                                                                 175.19
                                                                           176.10
                                                                                           62.22
                                                 5.70
                                                             181.85
       90.00
                                                                                         101.99
                                                                                                      3 29 17
                                                                                                                     1695.8
                                                                                                                                   -25.65
                                                                                                                                                  36.56
                                                             44.83
                                                                           180.74
                                               -27.59
      100.00
                                                                                           60.81 19 10 44
                                                                                                                     3536.2
                                                                                                                                    2.79
                                                                                                                                                 157.06
                                                             163.63
                                                                          175.54
                                                6.73
      100.00
                 4 14 47 2033.69
18 54 31 3971.03
                                                                                         106.01 4 48 41
56.98 20 0 42
                                                                                                                     1433.7
                                                                                                                                   -28.11
                                                                                                                                                  15.75
                                                                          179.87
                                               -30.61
                                                              24.06
      110.00
                                                                                                                     3371.0
                                                                                                                                                 143.16
                                                                                                                                    4.99
                                                             149.47
      110.00
                                                9.40
                                                                          173.91
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 4601.5 SGR 259.6 SG3 252.4
                                                                                                                 ST 1982.9 SR 189.9 55 702.2
    TOE 1.3200 TRA-1.1096 TC3-4.8678 BAU 1.0147
                                                                RRT -.2539 RRF -.2129 RTF .9110
SGB 4608.8 R23 -.0197 R13 -.9110
                                                                                                                 CRT .9674 CRS -.9961 CST -.9602
    ROE .1308 RRA -.0051 RC3 .2241 FAU .05715
                                                                                                                LSA 2103.5 MSA 189.9 SSA 14.7
EL1 1991.4 EL2 47.9 ALF 5.30
    FDE 1.0275 FRA .0998 FC3-3.1765 BSP 14499
                                                                SG1 4602.0 SG2 251.0 THA 179.18
    BOE 1.3264 BRA 1.1096 BC3 4.8730 FSP -830
                                                                                                                           ARRIVAL CATE MAY 18 1966
                                                                   FLIGHT TIME 154.00
LAUNCH DATE DEC 15 1965
                                                                   DISTANCE 454.620
   RL 147.24 LAL -.00 LOL 82.81 VL 27.181 GAL -3.27 A7L 86.21 MCA 222.22 SMA 124.74 ECC .18891 INC 3.7923 V1 30.259 RP 108.94 LAP -2.55 LOP 304.97 VP 37.048 GAP 8.12 A7P 92.81 TAL 194.32 TAP 56.54 RCA 101.17 APO 148.30 V2 34.786 RC 150.390 GL 27.35 GP -3.74 7AL 110.77 7AP 159.74 ETS 348.56 7AE 130.43 ETE 183.46 7AC 61.69 ETC 160.40 CLP-160.07
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.263 VHL 3.907 DLA 13.94 RAL 321.88 RAD 6567.6 VEL 11.690 PTH 2.06 VHP 5.554 DPA -19.74 RAP 329.56 ECC 1.2512
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    2000.2
                                                                                                                                                 59.13
                  1 25 57 2600.19
17 2 52 4347.40
                                                                         183.27
                                                                                         99.87
                                                                                                     2 9 17
                                               -26.68
                                                              67.42
       90.00
                                                                                         62.06 18 15 19
101.35 3 33 14
                                                                                                                                     1.00
                                                                                                                                                 173.57
                                                                                                                     3747.4
                                                4.78
                                                             180.22
                                                                          178.24
       90.00
                                                                                                                                   -25.99
                                                                                                                                                 37.82
                   2 54 40 2314.08
18 16 50 4108.74
                                                                                                                     1714.1
                                                                           183.03
                                               -27.84
                                                              46.13
      100.00
                                                                                                                     3508.7
                                                                                                                                     1.86
                                                                                                                                                155.55
                                                                                          60.63 19 25 18
                                                 5.82
                                                                          177.67
                                                             162.10
      100.00
                  18 16 50
                                                                                                                     1448.8
                                                                                                                                   -28.47
                                                                                                                                                 16.79
                                                                                         105.42 4 53 36
56.76 20 14 19
                                                                          182.19
                   4 19 27 2048.80
                                              -30.89
                                                              25.15
      110.00
                                                                                                                     3346.8
                                                                                                                                     4.07
                                                                                                                                                 141.89
                                                                          176.03
                                               8.50
                                                            148.18
      110.00
                  19 A 32
                                3946.79
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 4684.9 SGR 275.6 SG3 244.7

RRT -.2336 RRF -.2017 RTF .9097

SGB 4693.0 R23 -.0118 R13 -.9097
                                                                                                                 ST 2051.9 SR 201.6 SS 709.9
CRT .9779 CRS -.9937 CST -.9624
    TOE 1.3685 TRA-1.0099 TC3-5.0536 BAU 1.0324
    ROE .1373 RRA -.0139 RC3 .2392 FAU .05426
FDE 1.0063 FRA .1666 FC3-3.0775 BSP 14739
                                                                                                                 LSA 2182.0 MSA 186.0 SSA 15.7
                                                                                                                 EL1 2071.3 EL2 42.0 ALF 5.46
                                                                SG1 4685.4 SG2 267.9 THA 179.21
    BOE 1.3753 BRA 1.0100 BC3 5.0592 FSP -801
                                                                                                                            ARRIVAL DATE MAY 20 1966
                                                                    FLIGHT TIME 156.00
AUNCH DATE DEC 15 1965
                                                                    DISTANCE 460.420
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 27.130 GAL -2.93 AZL 86.25 MCA 225.38 SMA 124.41 ECC .19021 INC 3.7484 VI 30.259

RP 108.94 LAP -2.67 LOP 308.13 VP 37.009 GAP 8.34 AZP 92.63 TAL 192.66 TAP 58.04 RCA 100.75 APO 148.08 V2 34.785

RC 152.629 GL 27.21 GP -3.45 ZAL 108.36 ZAP 160.82 ETS 348.89 ZAE 130.31 ETE 183.16 ZAC 63.61 ETC 161.13 CLP-161.12
   PLANE TOCENTRIC CONIC
    C3 15.009 VHL 3.874 DLA 14.70 RAL 324.33 RAD 6567.6 VEL 11.679 PTH 2.05 VHP 5.671 DPA -18.77 RAP 331.57 ECC 1.2470
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 28 56 2623.07 -26.93 69.04 185.74 99.09 2 12 39 2023.1 -25.40 60.71
                                                                                                                                      .02
                                                                                                    18 31 21
                                                                                                                      3717.0
                                                                                           61.92
                                 4317.01
                                                  3.81
                                                             178.51
                                                                           180.56
                  17 19 24
        90.00
                                                                                                      3 37
                                                                                                                      1735.2
                                                                                                                                    -26.36
                                                                                                                                                  19 28
                                                                                          100.60
                                                                           185.51
                                                -28.11
                                                              47.64
       100.00
                   2 58 11 2335.24
                                                                                                    19 40 50
                                                                                                                      3480.1
                                                                                                                                                  153.98
                                                                                                                                      .89
                                                                                           60.47
                                4080.07
                                                 4.86
                                                             160.52
                                                                           179.98
       100.00
                  18 32 50
                                                                                                                      1466.4
                                                                                                                                   -28.87
                                                                                                                                                  18.00
                                                                                          104.72
                                                                                                      4 58 32
       110.00
                   4 24 6
                                 2066.41
                                                -31.20
                                                              26.43
                                                                           184.71
                                                                                           56.56 20 28 46
                                                                                                                      3321.7
                                                                                                                                   3.11
                                                                                                                                                 140.58
       110.00
                  19 23 25
                                 3921.66
                                                 7.56
                                                             146.84
                                                                           178.32
                                                               MID-COURSE EXECUTION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
SGT 4770.0 SGR 290.7 SG3 237.6 ST 2142.1 SR 213.4 SS 427.6
RRT -2119 RRF -1894 RTF .9094 CRT .9858 CRS -.9900 CST -.9647
SGB 4778.9 R23 -.0041 R13 -.9093 LSA 2261.2 MSA 181.2 SSA 16.7
EL1 2152.4 EL2 35.6 ALF 5.61
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE 1.4186 TRA -.9048 TC3-5.2325 BAU 1.0512
    ROE .1441 RRA -.0228 RC3 .2512 FAU .05164
FOE .9837 FRA .2270 FC3-2.9788 BSP 15053
BDE 1.4259 BRA .9050 BC3 5.2385 FSP -781
```

FLIGHT TIME 150.00

Ē

```
FLIGHT TIME 158.00
                                                                                                                                                                  ARRIVAL DATE MAY 22 1966
LAUNCH DATE DEC 15 1965
                                                                                         DISTANCE 466.206
    HELIOCENTRIC CONIC
     RL 147.24 LAL -.00 LOL 82.81 VL 27.079 GAL -2.57 AZL 86.29 HCA 228.54 SMA 124.09 ECC .19166 INC 3.7091 VI 30.259 RP 108.94 LAP -2.78 LOP 311.29 VP 36.972 GAP 8.56 AZP 92.46 TAL 190.98 TAP 59.52 RCA 100.31 APO 147.88 V2 34.784
                             27.04 GP -3.20 ZAL 103.83 ZAP 161.86 ETS 349.16 ZAE 130.22 ETE 182.90 ZAC 65.58 ETC 161.79 CLP-162.13
     RC 154.855 GL
    PLANETOCENTRIC CONIC
     C3 14.816 VHL 3.849 DLA 15.50 RAL 326.88 RAD 6567.6 VEL 11.671 PTH 2.05 VHP 5.793 DPA -17.81 RAP 333.60 ECC 1.2438

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 31 46 2648.83 -27.20 70.88 188.40 98.20 2 15 55 2048.8 -25.78 62.50

90.00 17 36 57 4285.46 2.79 176.75 183.06 61.81 18 48 22 3685.5 -1.00 170.12

100.00 3 1 37 2359.08 -28.40 49.36 188.19 99.74 3 40 56 1759.1 -26.76 40.94

100.00 18 49 47 4050.44 3.86 158.88 182.47 60.33 19 57 17 3450.4 -.12 152.35

110.00 4 28 47 2086.33 -31.54 27.88 187.43 103.92 5 3 34 1486.3 -29.30 19.39

110.00 19 39 6 3895.95 6.59 145.47 180.78 56.38 20 44 2 3296.0 2.13 139.23
    DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                     SGT 4851.6 SGR 305.0 SG3 230.8
RRT -.1883 RRF -.1737 RTF .9091
SGB 4861.2 R23 .0019 R13 -.9091
SGI 4852.0 SG2 299.5 THA 179.32
                                                                                                                                                   ST 2228.0 SR 225.3 SS 722.2
CRT .9916 CRS -.9851 CST -.9671
     TOF 1.4740 TRA -. 7905 TC3-5.3924 BAU 1.0694
     ROE .1510 RRA -.0317 RC3 .2602 FAU .04912
                                                                                                                                                    LSA 2346.3 MSA 176.2 SSA 17.6
EL1 2239.2 EL2 29.0 ALF 5.73
     FOE .9643 FRA .2856 FC3-2.8699 BSP 15342
BDE 1.4818 BRA .7911 BC3 5.3986 FSP -761
                                                                                          FLIGHT TIME 160.00
                                                                                                                                                                   ARRIVAL DATE MAY 24 1966
LAUNCH DATE DEC 15 1965
                                                                                         DISTANCE 471.979
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 27.028 CAL -2.21 AZL 86.33 MCA 231.70 SMA 123.78 ECC .19327 INC 3.6734 VI 30.259 RP 108.94 LAP -2.88 LOP 314.45 VP 36.935 CAP 8.78 AZP 92.28 TAL 189.29 TAP 60.99 RCA 99.85 APO 147.70 V2 34.785 RC 157.067 GL 26.84 CP -2.99 ZAL 103.19 ZAP 162.86 ETS 349.37 ZAE 130.15 ETE 182.68 ZAC 67.59 ETC 162.40 CLP-163.12
    PLANETOCENTRIC CONIC
     C3 14.687 VHL 3.832 DLA 16.33 RAL 329.55 RAD 6567.6 VEL 11.665 PTH
                                                                                                                         2.05 VHP 5.918 OPA -16.86 RAP 335.66 ECC 1.2417
    C3 14.687 VML 3.832 DLA 16.33 RAL 329.55 RAD 6567.6 VEL 11.665 PTH 2.05 VMP 5.918 DPA -16.86 RAP 335.66 ECC 1.2417 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 17 55 26 4252.98 1.75 174.94 185.75 61.73 19 6 19 3653.0 -2.04 168.31 100.00 3 5 2 2385.43 -28.69 51.26 191.06 98.78 3 44 48 1785.4 -27.18 42.78 100.00 19 7 37 4020.18 2.84 157.22 185.15 60.23 20 14 37 3420.2 -1.15 150.69 110.00 4 33 35 2108.40 -31.89 29.51 190.34 103.02 5 8 43 1508.4 -29.77 20.94 110.00 19 55 34 3869.97 5.61 144.10 183.43 56.22 21 D 4 3270.0 1.13 137.88
    DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                     SGT 4929.2 SGR 318.4 SG3 224.1

RRT -.1635 RRF -.1559 RTF .9091

SGB 4939.5 R23 .0068 R13 -.9091

SGI 4929.5 SG2 314.1 THA 179.39
                                                                                                                                                    ST 2317.1 SR 237.2 SS 728.4
CRT .9952 CRS -.9792 CST -.9695
     TOE 1.5334 TRA -.6677 TC3-5.5291 BAU 1.0869
     RDE .1581 RRA -.0404 RC3 .2660 FAU .04665
                                                                                                                                                    LSA 2434.4 MSA 170.9 SSA 18.5
EL1 2329.1 EL2 23.1 ALF 5.82
     FOE .9460 FRA .3415 FC3-2.7500 BSP 15633
     BDE 1.5415 BRA .6689 BC3 5.5355 FSP -741
                                                                                         FLIGHT TIME 162.00
                                                                                                                                                                 ARRIVAL DATE MAY 26 1966
LAUNCH DATE DEC 15 1965
                                                                                        DISTANCE 477.738
    HELIOCENTRIC CONIC
     RL 147.24 LAL -.00 LOL 82.81 VL 26.978 GAL -1.83 AZL 86.36 HCA 234.86 SMA 123.47 ECC .19506 INC 3.6407 VI 30.259
RP 108.94 LAP -2.98 LOP 317.62 VP 36.900 GAP 9.01 AZP 92.10 TAL 187.58 TAP 62.45 RCA 99.38 APO 147.55 VZ 34.786
RC 159.265 GL 26.60 GP -2.80 ZAL 100.45 ZAP 163.84 ETS 349.53 ZAE 130.10 ETE 182.49 ZAC 69.65 ETC 162.95 CLP-164.08
    PLANETOCENTRIC CONIC
     C3 14.625 VHL 3.824 DLA 17.19 RAL 332.32 RAD 6567.6 VEL 11.662 PTH 2.05 VHP 6.047 OPA -15.90 RAP 337.74 ECC 1.2407
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                     2108.4
                       1 37 14 2708.37
18 14 50 4220.12
                                                                                                194.30
                                                                                                                       96.11
                                                                                                                                    2 22 22
                                                                                                                                                                           -26.57
                                                                                                                                                                                               66.68
                                                              -27.70
                                                                                 75.17
          90.00
                                                                 .69
                                                                               173.10
                                                                                                  188.64
                                                                                                                       61.69
                                                                                                                                  19 25 10
                                                                                                                                                         3620.1
                                                                                                                                                                            -3.10
                                                                                                                                                                                              166.47
          90.00
                       3 8 28 2414.14
19 26 17 3989.58
                                                                                                 194.13
                                                                                                                       97.72
                                                                                                                                   3 48 42
                                                                                                                                                         1814.1
                                                                                                                                                                            -27.60
                                                                                                                                                                                               44.81
                                                              -28.97
                                                                                 53.35
        100.00
                                                                                                                    60.16 20 32 46 3389.6
102.02 5 14 3 1532.5
56.09 21 16 48 3244.0
                                                                                                                                                                            -2.18
                                                                                                                                                                                              149.01
        100.00
                                                               1.80
                                                                               155.54
                                                                                                188.02
                                                                                              193.46
                                                                                                                                                                                               22.65
                                                            -32.24
                                                                                 31.29
                                                                                                                                                                           -30.25
        110.00
                         4 38 30 2132.45
                       20 12 44
                                          3844.04
                                                             4.63
                                                                               142.74
                                                                                                  186.26
                                                                                                                                                                                             136.52
        110.00
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                    SCT 4999.0 SGR 331.1 SG3 217.4
RRT -.1363 RRF -.1336 RTF .9087
SGB 5010.0 R23 .0093 R13 -.9087
     TOE 1.6009 TRA -.5323 TC3-5.6297 BAU 1.1020
                                                                                                                                                    ST 2415.0 SR 249.3 SS 737.4
    ROE .1656 RRA -.0488 RC3 .2686 FAU .04412
FOE .9328 FRA .3983 FC3-2.6115 BSP 15833
BDE 1.6094 BRA .5345 BC3 5.6361 FSP -717
                                                                                                                                                   CRT .9969 CRS -.9725 CST -.9720
                                                                                                                                                   LSA 2531.8 MSA 166.2 SSA 19.3
EL1 2427.7 EL2 19.6 ALF 5.87
                                                                                     SG1 4999.2 SG2 328.0 THA 179.48
                                                                                                                                                                  ARRIVAL DATE MAY 28 1966
LAUNCH DATE DEC 15 1965
                                                                                         FLIGHT TIME 164.00
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 483.482
    RL 147.24 LAL -.00 LOL 82.81 VL 26.929 GAL -1.44 A7L 86.39 MCA 238.02 SMA 123.16 ECC .19704 INC 3.6104 V1 30.259 RP 108.93 LAP -3.06 LOP 320.78 VP 36.866 GAP 9.25 A7P 91.91 TAL 185.87 TAP 63.89 RCA 98.89 APO 147.43 V2 34.788 RC 161.449 GL 26.30 GP -2.64 ZAL 97.63 ZAP 164.78 ETS 349.63 ZAE 130.06 ETE 182.33 ZAC 71.75 ETC 163.46 CLP-165.01
    PLANETOCENTRIC CONIC
     C3 14.635 VHL 3.826 DLA 18.06 RAL 335.19 RAD 6567.6 VEL 11.663 PTH 2.05 VHP 6.181 DPA -14.94 RAP 339.83 ECC 1.2409
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 56 2741.83 -27.92 77.59 197.54 94.92 2 25 37 2141.8 -26.95 69.06 90.00 18 35 3 4186.99 -.38 171.26 191.72 61.69 19 44 50 3587.0 -4.16 164.62
                                                              -29.23
                         3 11 58 2445.02
                                                                                                  197.39
                                                                                                                       96.56
                                                                                                                                   3 52 43
                                                                                                                                                         1845.0
                                                                                                                                                                           -28.01
                                                                                                                                                                                               47.01
        100.00
                                                                                55.61
                       19 45 42 3959.03
4 43 37 2158.30
                                                                                                  191.08
                                                                                                                       60.12
                                                                                                                                  20 51 41
                                                                                                                                                         3359.0
                                                                                                                                                                            -3.21
                                                                                                                                                                                              147.34
        100.00
                                                                 .77
                                                                               153.86
                                                                                                                     100.92 5 19 35
55.99 21 34 11
        110.00
                                                              -32.59
                                                                                 33.23
                                                                                                  196.79
                                                                                                                                                         1558.3
                                                                                                                                                                           -30.74
                                                                                                                                                                                               24.50
        110.00
                       20 30 33
                                          3818.51
                                                               3.66
                                                                               141.40
                                                                                                  189.28
                                                                                                                                                         3218.5
                                                                                                                                                                              - .83
                                                                                                                                                                                              135.19
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
SGT 5071.0 SGR 342.9 SG3 211.2 ST 2507.8 SR 261.4 55 742.4
RRT -.1102 RRF -.1134 RTF .9094 CRT .9967 CRS -.9653 CST -.9743
SGB 5082.6 R23 .0128 R13 -.9094 LSA 2623.4 M5A 161.2 SSA 20.0
SGI 5071.1 SG2 340.8 THA 179.57 ELI 2521.3 EL2 21.1 ALF 5.93
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
     TOE 1.6676 TRA -.3914 TC3-5.7115 BAU 1.1188
     ROE .1735 RRA -.0568 RC3 .2679 FAU .04188
     FOE .9165 FRA .4491 FC3-2.4771 BSP 16097
     BDE 1.6766 BRA .3955 BC3 5.7178 FSP -698
```

ARRIVAL DATE MAY 30 1966

```
FLIGHT TIME 166.00
LAUNCH DATE DEC 15 1965
                                                                                   DISTANCE 489.210
    RL 147.24 LAL -.00 LOL 82.81 VL 26.879 GAL -1.03 A7L 86.42 MCA 241.19 SNA 122.86 ECC .19922 INC 3.5822 VI 30.259 RP 108.92 LAP -3.14 LOP 323.95 VP 36.832 GAP 9.49 A7P 91.73 TAL 184.14 TAP 65.33 RCA 98.38 APO 147.33 V2 34.791 RC 163.619 GL 25.95 GP -2.49 TAL 94.72 TAP 165.70 ETS 349.67 ZAE 130.04 ETE 182.19 TAC 73.88 ETC 163.92 CLP-165.91
   HELIOCENTRIC CONIC
    C3 .14.725 VHL 3.837 OLA 18.93 RAL 338.16 RAD 6567.6 VEL 11.667 PTM 2.05 VHP 6.321 OPA -13.98 RAP 341.94 ECC 1.2423
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG
90.00 1 42 39 2777.52 -28.10 80.19 200.97 93.63 2 28.57 2177.5 -27.30 71.61
90.00 18 56 2 4154.00 -1.45 169.42 195.00 61.72 20 5 16 3554.0 -5.22 162.76
100.00 3 15 35 2477.87 -29.46 58.02 200.85 95.30 3 56.52 1877.9 -28.41 49.37
   PLANETOCENTRIC CONIC
                                                                                                                60.11 21 11 17
                      20 5 48 3928.88
4 48 57 2185.76
20 48 56 3793.75
                                                            - . 26
                                                                           152.21
        100.00
                                                                                                                                                                                  26.49
                                                                                                               99.74 5 25 22
55.91 21 52 9
                                                                                                                                               1585.8
                                                                                                                                                                -31.24
                                                         -32.93
                                                                           35.30
                                                                                            200.31
       110.00
                                                                                                                                                                 -1.78
                                                                                                                                                                                  133.90
                                                                                                                                              3193.8
                                                                                           192.49
                                                                           140.11
                                                            2.71
        110.00
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 5136.4 SGR 353.9 SG3 205.0
RRT -.0829 RRF -.0902 RTF .9099
SGB 5148.5 R23 .0145 R13 -.9099
SGI 5136.4 SG2 352.7 THA 179.67
                                                                                                                                           ST 2603.4 SR 273.6 SS 748.1
CRT .9950 CRS -.9577 CST -.9764
     TOE 1.7396 TRA -.2389 TC3-5.7529 BAU 1.1337
     ROE .1820 RRA -. 0643 RC3 .2641 FAU .03958
                                                                                                                                           LSA 2717.9 MSA 157.0 SSA 20.5
EL1 2617.6 EL2 27.1 ALF 5.97
     FOE .9029 FRA .5002 FC3-2.3273 BSP 16327
BDE 1.7491 BRA .2474 BC3 5.7590 FSP -679
                                                                                                                                                        ARRIVAL DATE JUN 1 1966
                                                                                    FLIGHT TIME 168.00
LAUNCH DATE DEC 15 1965
                                                                                   DISTANCE 494.922
    RL 147.24 LAL -.00 LOL 82.81 VL 26.831 GAL -.61 A7L 86.44 MCA 244.35 SNA 122.56 ECC .20161 INC 3.5556 V1 30.259
RP 108.91 LAP -3.20 LOP 327.12 VP 36.800 GAP 9.74 A7P 91.54 TAL 182.41 TAP 66.76 RCA 97.85 APO 147.27 V2 34.794
RC 165.775 GL 25.54 GP -2.36 TAL 91.75 ZAP 166.60 ETS 349.66 ZAE 130.03 ETE 182.08 ZAC 76.03 ETC 164.35 CLP-166.80
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 14.899 VML 3.860 DLA 19.79 RAL 341.23 RAD 6567.6 VEL 11.674 PTH 2.05 VMP 6.465 DPA -13.01 RAP 344.06 ECC 1.2452 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                92.26 2 32 22
                                                                                                                                             2215.2
                                                                                            204.58
                       1 45 27 2815.22
19 17 41 4121.55
                                                           -28.23
                                                                            82.94
          90.00
                                                                                                                                                                                   160.94
                                                                                                                           20 26 22
                                                                                                                                                 3521.5
                                                                                                                                                                   -6.25
                                                                                            198.48
                                                                                                                61.78
                                                            -2.49
                                                                            167.60
                                                                                                                93.97 4 1 13
60.13 21 31 28
98.48 5 31 27
55.86 22 10 36
          90.00
                                                                                                                                                                  -28.79
                                                                                                                                                                                    51.88
                                                                                                                                                 1912.5
                      3 19 20 2512.47
20 26 29 3899.53
4 54 32 2214.62
21 7 46 3770.14
                                                                                            204.49
                                                           -29.65
                                                                             60.58
         100.00
                                                                                                                                                                                   144.05
                                                                                                                                                 3299.5
                                                                                                                                                                  -5.22
                                                                                            197.79
                                                            -1.25
                                                                            150.60
        100.00
                                                                                                                                                                                    28.60
                                                                                                                                                 1614.6
                                                                                                                                                                 -31.71
                                                                                            204.03
                                                           -33.24
                                                                             37.50
         110.00
                                                                                                                                                                                    132.67
                                                                                                                                                3170.1
                                                                                                                                                                  -2.6A
                                                                           138.87
                                                                                            195.88
                                                            1.81
        110.00
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 2697.7 SR 285.9 SS 752.4
CRT .9921 CRS -.9502 CST -.9786
                                                                                SGT 5200.1 SGR 364.1 SG3 199.2
RRT -.0550 RRF -.0666 RTF .9116
     TDE 1.8150 TRA -.0775 TC3-5.7593 BAU 1.1483
     ROE .1912 RRA -.0713 RC3 .2371 FAU .03749
FDE .8898 FRA .5467 FC3-2.1786 BSP 16537
BDE 1.8250 BRA .1053 BC3 5.7650 FSP -662
                                                                                SGB 5212.8 R23 .0162 R13 -.9116
SG1 5200.1 SG2 363.6 THA 179.78
                                                                                                                                            LSA 2810.9 MSA 152.9 SSA 20.9
                                                                                                                                            EL1 2712.6 EL2 35.7 ALF 6.00
                                                                                                                                                        ARRIVAL DATE JUN 3 1966
                                                                                    FLIGHT TIME 170.00
 LAUNCH DATE DEC 15 1965
     RL 147.24 LAL -.00 LOL 82.81 VL 26.783 GAL -.17 A7L 86.47 MCA 247.51 SMA 122.27 ECC .20423 INC 3.5304 VI 30.259
RP 108.90 LAP -3.26 LOP 330.28 VP 36.768 GAP 9.99 A7P 91.35 TAL 180.67 TAP 68.18 RCA 97.30 APO 147.24 V2 34.798
RC 167.915 GL 25.05 GP -2.25 TAL 88.72 TAP 167.47 ETS 349.59 TAE 130.03 ETE 181.98 TAC 78.22 ETC 164.74 CLP-167.67
                                                                                   DISTANCE 500.615
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 15.167 VHL 3.894 DLA 20.62 RAL 344.37 RAD 6567.6 VEL 11.686 PTH 2.06 VMP 6.617 DPA -12.03 RAP 346.18 ECC 1.2496
      LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             2254.7
                                                                                                                              2 35 56
                                                                                         208,36
                      1 48 21 2854.68
19 39 51 4090.05
3 23 18 2548.56
                                                           -28.31
                                                                           85.82
          90.00
                                                                                                                61.88 20 48 1
                                                                                                                                                                                   159.15
                                                                                                                                                 3490.1
                                                                                                                                                                  -7.24
                                                                           165.84
                                                                                             202.15
                                                            -3.50
                                                                                                                                                                                    54.51
                                                                                                                              4 5 46
                                                                                                                                                 1948.6
                                                                                                                                                                  -29.12
                                                           -29.79
                                                                             63.25
                                                                                             208.31
                                                                                                                92.57
                                                                                                                92.57 4 5 46
60.18 21 52 7
97.14 5 37 51
55.83 22 29 25
                                                                                                                                                                                   142.49
                                                                                                                                                 3271.4
                                                                                                                                                                  -6.16
                                                                                             201.43
                                                                           149.05
                       20 47 36 3871.41
5 0 26 2244.63
21 26 57 3748.10
                                                            -2.20
                                                                                                                                                                 -32.17
-3.52
                                                                                                                                                                                    30.82
                                                                                                                                                 1644.6
                                                                                             207.93
                                                                              39.80
                                                           -33.52
         110.00
                                                                                                                                                                                   131.52
                                                                                                                                                 3148.1
                                                                                             199.44
                                                             .97
                                                                            137.72
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ST 2781.1 SR 298.2 53 751.5

CRT .9882 CRS -.9425 CST -.9804

LSA 2892.3 MSA 149.6 55A 21.2

EL1 2796.7 EL2 45.5 ALF 6.05
     DIFFERENTIAL CORRECTIONS
                                                                                SCT 5261.2 SGR 373.5 SG3 193.3

RRT - .0282 RRF - .0446 RTF .9138

SGB 5274.5 R23 .0188 R13 - .9138

SGI 5261.2 SG2 373.3 THA 179.88
      TOE 1.8879 TRA .0911 TC3-5.7339 BAU 1.1637
      ROE .2011 RRA -.0775 RC3 .2472 FAU .03554
FOE .8727 FRA .5899 FC3-2.0289 BSP 16877
BOE 1.8986 BRA .1196 BC3 5.7392 FSP -656
                                                                                                                                                         ARRIVAL DATE JUN 5 1966
                                                                                      FLIGHT TIME 172.00
  LAUNCH DATE DEC 15 1965
                                                                                    DISTANCE 506.288
      RL 147.24 LAL -.00 LOL 82.81 VL 26.735 GAL .28 A7L 86.49 MCA 250.68 SMA 121.98 ECC .20710 INC 3.5063 V1 30.259
RP 108.89 LAP -3.31 LOP 333.45 VP 36.738 GAP 10.26 A7P 91.16 TAL 178.92 TAP 69.59 RCA 96.72 APO 147.24 V2 34.803
RC 170.040 GL 24.51 GP -2.15 TAL 85.66 ZAP 168.33 ETS 349.46 ZAE 130.05 ETE 181.89 ZAC 80.42 ETC 165.10 CLP-168.52
      C3 15.537 VML 3.942 DLA 21.43 RAL 347.58 RAD 6567.6 VEL 11.701 PTH 2.06 VMP 6.775 OPA -11.04 RAP 348.32 ECC 1.2557 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     PLANETOCENTRIC CONIC
                                                                                                                 89.31
                                                             -28.31
                                                                             88.82
                                          2895.65
           90.00
                          1 51 25
                                                                                                                                                                                    157.44
                                                                                                                            21 10 5
                                                                                                                                                                    -8.18
                                                                                                                                                  3459.9
                                                                                                                  62.01
                                                                             164.16
                                                                                              205.99
                                                              -4.47
                                          4059.95
           90.00
                        20 2 25
                                                                                                                                                                                      57.25
                                                                                                                                                                   -29.40
                                                                                                                                4 10 36
                                                                                                                                                  1985.9
                                                                                                                  91.12
                                                                               66.02
                                                                                              212.28
                                                             -29.87
                                          2585.86
          100.00
                          3 27 30
                                                                                                                                                                                    141.02
                                                                                                                  60.25 22 13 7
                                                                                                                                                  3245.0
                                                                                                                                                                   -7.04
                                                                             147.60
                                                                                              205.23
                                                              -3.10
          100.00
                        21 9 2
                                         3844.96
                                                                                                                                                                                      33.14
                                                                                                                                                                  -32.59
                                                                                                                  95.75
                                                                                                                                5 44 36
                                                                                                                                                  1675.6
                                                                              42.18
                                                                                              212.01
                           5 6 41
                                          2275.55
                                                            -33.75
          110.00
                                                                                                                  55.82 22 48 28
                                                                                                                                                  3128.0
                                                                                                                                                                    -4.29
                                        3728.03
                                                                             136.68
                                                                                              203.17
                        21 46 20
                                                                                                                                             ORBIT DETERMINATION ACCURACY
          110.00
                                                                                MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                             ST 2866.5 SR 310.8 SS 755.9
                                                                                 SGT 5307.7 SGR 382.3 SG3 187.3
RRT .0003 RRF -.0154 RTF .9119
       TOE 1.9678 TRA .2798 TC3-5.6443 BAU 1.1734
                                                                                                                                             CRT .9834 CRS -.9340 CST -.9818
       RDE .2121 RRA -.0828 RC3 .2351 FAU .03307
FDE .8632 FRA .6454 FC3-1.8430 BSP 16946
BDE 1.9792 BRA .2918 BC3 5.6492 FSP -621
                                                                                                                                             LSA 2976.9 MSA 149.6 SSA 21.3
                                                                                  SGB 5321.4 R23 -. 0157 R13 .9119
                                                                                                                                              EL1 2882.8 EL2 56.1 ALF 6.09
                                                                                  SG1 5307.7 SG2 382.3 THA .00
```

```
LAUNCH DATE DEC 15 1965
                                                                                 FLIGHT TIME 174.00
                                                                                                                                                ARRIVAL DATE JUN 7 1966
                                                                                DISTANCE 511.939
     RL 147.24 LAL -.00 LOL 82.81 VL 26.688 GAL .75 AZL 86.52 MCA 253.84 SMA 121.70 ECC .21024 INC 3.4831 V1 30.259
RP 108.87 LAP -3.35 LOP 336.62 VP 36.709 GAP 10.54 AZP 90.97 TAL 177.16 TAP 71.00 RCA 96.11 APO 147.29 VZ 34.808
RC 172.148 GL 23.89 GP -2.06 ZAL 82.56 ZAP 169.17 ETS 349.24 ZAE 130.07 ETE 181.82 ZAC 82.65 ETC 165.42 CLP-169.36
    PLANETOCENTRIC CONIC
     C3 16.020 VHL 4.003 DLA 22.19 RAL 350.85 RAD 6567.6 VEL 11.722 PTH 2.07 VHP 6.941 DPA -10.04 RAP 350.46 ECC 1.2636 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 54 42 2937.75
20 25 12 4031.72
3 32 0 2624.02
21 30 35 3820.68
         90.00
                                                                                       216.37
                                                                                                                                     2337.8
                                                        -28.24
                                                                                                          87.77
                                                                        91.89
                                                                                                                      2 43 40
                                                                                                                                                         -28.25
                                                                                                                                                                          83.23
                                                                                                          62.16 21 32 24
         90.00
                                                        -5.37
                                                                        162.57
                                                                                        210.00
                                                                                                                                         3431.7
                                                                                                                                                          -9.05
                                                                                                                                                                          155.83
                                                                                                          89.62 4 15 44
60.34 22 34 16
94.32 5 51 45
55.62 23 7 37
        100.00
                                                       -29.89
                                                                         68.86
                                                                                        216.41
                                                                                                                                         2024.0
                                                                                                                                                         -29.62
                                                                                                                                                                           60.06
        100.00
                                                         -3.92
                                                                        146.26
                                                                                        209.20
                                                                                                                                         3220.7
                                                                                                                                                          -7.84
                                                                                                                                                                          139.67
                                                                         44.62
        110.00
                       5 13 18 2307.09
                                                      -33.94
                                                                                        216.25
                                                                                                                                         1707.1
                                                                                                                                                         -32.97
                                                                                                                                                                           35.52
        110.00
                     22 5 47
                                      3710.37
                                                        - .48
                                                                       135.76
                                                                                       207.05
                                                                                                                                         3110.4
                                                                                                                                                         -4.96
                                                                                                                                                                          129.54
    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 5363.1 SGR 390.1 SG3 182.0
RRT .0281 RRF .0100 RTF .9146
SG8 5377.2 R23 -.0159 R13 .9146
     TDE 2.0459 TRA .4718 TC3-5.5381 BAU 1.1870
                                                                                                                                    ST 2939.8 SR 323.2 SS 754.7 CRT .9782 CRS -.9268 CST -.9835
    ROE .2240 RRA -.0873 RC3 .2203 FAU .03126
FOE .8500 FRA .6875 FC3-1.6895 BSP 17154
BOE 2.0581 BRA .4798 BC3 5.5424 FSP -606
                                                                                                                                    LSA 3048.7 MSA 148.4 SSA 21.3
                                                                            SG1 5363.1 SG2 389.9 THA
                                                                                                                   .12
                                                                                                                                    EL1 2956.8 EL2 66.8 ALF 6.14
LAUNCH DATE DEC 15 1965
                                                                                FLIGHT TIME 176.00
                                                                                                                                                 ARRIVAL' DATE JUN 9 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 517.567
    RL 147.24 LAL -.00 LOL 82.81 VL 26.641 GAL 1.25 AZL 86.54 HCA 257.01 SMA 121.42 ECC .21367 INC 3.4607 VI 30.259
RP 108.85 LAP -3.37 LOP 339.79 VP 36.681 GAP 10.83 AZP 90.78 TAL 175.41 TAP 72.41 RCA 95.48 APO 147.37 VZ 34.814
RC 174.239 GL 23.22 GP -1.97 ZAL 79.47 ZAP 169.99 ETS 348.94 ZAE 130.11 ETE 181.77 ZAC 84.89 ETC 165.72 CLP-170.18
   PLANETOCENTRIC CONIC
    C3 16.629 VHL 4.078 DLA 22.90 RAL 354.15 RAD 6567.7 VEL 11.748 PTH 2.07 VHP 7.116 DPA -9.03 RAP 352.60 ECC 1.2737
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 58 15 2980.63 -28.08 95.02 220.56 86.21 2 47.56 2380.6 -28.31 86.36
an on 20 48 1 4008 88 -6.10 161.11 214.15 62.31 21.54.47 3405.9 -9.85 154.34
                    20 48 1 4005.86
3 36 52 2662.68
21 52 6 3799.05
5 20 20 2338.98
22 25 7 3695.52
         90.00
                                                         -6.19
                                                                                        214.15
                                                                                                                     21 54 47
                                                                        161.11
                                                                                                          62.31
                                                                                                                                         3405.9
                                                                                                                                                           -9.85
                                                                                                                                                                          154.34
                                                        -29.84
                                                                        71.73
                                                                                        220.66
                                                                                                                      4 21 15
                                                                                                                                         2062.7
                                                                                                          88.11
                                                                                                                                                         -29.78
                                                                                                                                                                           62.93
                                                                                                          60.44 22 55 25
92.85 5 59 19
55.83 23 26 43
        100.00
                                                         -4.65
                                                                       145.07
                                                                                       213.31
                                                                                                                                         3199.1
                                                                                                                                                         -A.55
                                                                                                                                                                          138.45
                                                       -34.08
                                                                         47.10
                                                                                       220.62
                                                                                                                                         1739.0
                                                                                                                                                         -33.31
                                                                                                                                                                           37.95
        110.00
                                                        -1.04
                                                                       134.98
                                                                                       211.07
                                                                                                                                         3095.5
                                                                                                                                                          -5.52
                                                                                                                                                                         128.76
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           SGT 5408.6 SGR 397.0 SG3 176.5
RRT .0560 RRF .0358 RTF .9163
SGB 5423.2 R23 -.0158 R13 .9163
    TOE 2.1227 TRA .6763 TC3-5.3858 BAU 1.1982
                                                                                                                                    ST 3001.4 SR 335.5 SS 750.4
CRT .9725 CRS -.9193 CST -.9848
    ROE .2370 RRA -.0908 RC3 .2037 FAU .02937
    FOE .8351 FRA .7311 FC3-1.5288 BSP 17348
BOE 2.1359 BRA .6824 BC3 5.3897 FSP -591
                                                                                                                                   LSA 3108.3 MSA 148.8 SSA 21.0
EL1 3019.1 EL2 77.6 ALF 6.21
                                                                           SG1 5408.7 SG2 396.4 THA
                                                                                                                    .24
LAUNCH DATE DEC 15 1965
                                                                                FLIGHT TIME 178.00
                                                                                                                                                ARRIVAL DATE JUN 11 1966
                                                                               DISTANCE 523.169
    RL 147.24 LAL -.00 LOL 82.81 VL 26.595 GAL 1.76 AZL 86.56 MCA 260.17 SMA 121.15 ECC .21742 INC 3.4388 V1 30.259
RP 108.83 LAP -3.39 LOP 342.97 VP 36.653 GAP 11.14 AZP 90.59 TAL 173.65 TAP 73.82 RCA 94.81 APO 147.49 V2 34.821
RC 176.312 GL 22.49 GP -1.90 ZAL 76.37 ZAP 170.80 ETS 348.52 ZAE 130.15 ETE 181.72 ZAC 87.15 ETC 165.98 CLP-171.00
   PLANETOCENTRIC CONIC
    C3 17.377 VHL 4.169 OLA 23.34 RAL 357.48 RAO 6567.7 VEL 11.780 PTH 2.08 VHP 7.300 DPA -8.02 RAP 354.75 ECC 1.2860
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                    2 2 9 3023.88
21 10 40 3982.90
3 42 9 2701.46
22 13 21 3780.56
5 27 48 2370.93
22 44 11 3683.85
                                                                                                     84.65 2 52 33
62.47 22 17 2
        90.00
                                                      -27.85
                                                                                   224.86
                                                                                                                      2 52 33
                                                                                                                                     2423.9
                                                                                                                                                      -28.30
                                                                       98.16
                                                                                                                                                                     69.53
         90.00
                                                                                      218.43
                                                        -6.91
                                                                       159.81
                                                                                                                                        3382.9
                                                                                                                                                        -10.55
                                                                                                                                                                        153.02
                                                      -29.72
                                                                                                                     4 27 10
       100.00
                                                                                     225.03
                                                                                                         86.60
                                                                        74.61
                                                                                                                                       2101.5
                                                                                                                                                        -29.87
                                                                                                                                                                         65.80
       100.00
                                                                                                         60.55 23 16 21
91.38 6 7 19
55.85 23 45 35
                                                        -5.27
                                                                      144.04
                                                                                      217.53
                                                                                                                                        3180.6
                                                                                                                                                         -9.15
                                                                                                                                                                        137.41
       110.00
                                                      -34.16
                                                                        49.50
                                                                                      225.12
                                                                                                                                        1770.9
                                                                                                                                                       -33.50
                                                                                                                                                                          40.40
                                                                                                                                                      -5.96
       110.00
                    22 44 11
                                     3683.85
                                                       -1.49
                                                                      134.37
                                                                                      215.19
                                                                                                                                        3083.9
                                                                                                                                                                        128.14
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SCT 5450.8 SGR 403.2 SG3 171.4
RRT .0848 RRF .0639 RTF .9181
SGB 5465.7 R23 -.0144 R13 .9181
                                                                                                                                   ST 3056.7 SR 347.7 SS 746.8
CRT .9666 CRS -.9122 CST -.9860
    TOE 2.2025 TRA .8960 TC3-5.1926 BAU 1.2071
    ROE .2511 RRA -.0931 RC3 .1839 FAU .02747
FOE .8229 FRA .7761 FC3-1.3685 BSP 17465
BOE 2.2168 BRA .9009 BC3 5.1960 FSP -573
                                                                                                                                  LSA 3162.1 MSA 150.3 85A 20.6
EL1 3075.1 EL2 88.5 ALF 6.28
                                                                           SG1 5450.9 SG2 401.8 THA
                                                                                                                   .36
LAUNCH DATE DEC 15 1965
                                                                               FLIGHT TIME 180.00
                                                                                                                                                ARRIVAL DATE JUN 13 1966
   MELIOCENTRIC CONIC
                                                                              DISTANCE 528.741
    RL 147.24 LAL -.00 LOL 82.81 VL 26.549 GAL 2.29 ATL 86.58 HCA 263.34 SMA 120.88 ECC .22150 INC 3.4173 V1 30.259
RP 108.81 LAP -3.39 LOP 346.14 VP 36.627 GAP 11.46 AZP 90.40 TAL 171.89 TAP 75.23 RCA 94.11 APO 147.66 V2 34.828
RC 178.366 GL 21.70 GP -1.83 ZAL 73.31 ZAP 171.60 ETS 347.97 ZAE 130.19 ETE 181.68 ZAC 89.43 EYC 166.22 CLP-171.80
   PLANETOCENTRIC CONIC
    C5 18.283 VHL 4.276 DLA 24.12 RAL
                                                              .81 RAO 6567.7 VEL 11.818 PTH 2.09 VHP 7.495 DPA -7.00 RAP 354.90 ECC 1.3009
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                    3067.01
                      2 6 28
                                                       -27.53
                                                                      101.28
                                                                                      229.25
                                                                                                        83.11
                                                                                                                      2 57 35
                                                                                                                                        2467.0
                                                                                                                                                        -28.20
                                                                                                                                                                         92.68
                     21 32 53
                                                       -7.52
                                   3963.40
                                                                                                         62.62 22 38 56
                                                                      158.71
                                                                                      222.82
                                                                                                                                        3363.4
                                                                                                                                                        -11.14
                                                                                                                                                                         151.69
       100.00
                      3 47 55
                                    2739.94
                                                       -29.53
                                                                        77.45
                                                                                      229.48
                                                                                                         85.12
                                                                                                                      4 33 35
                                                                                                                                        2139.9
                                                                                                                                                        -29.89
                                                                                                                                                                          68.67
                                   3765.71
                                                                                                         60.62 23 36 53
                                                        -5.76
                                                                      143.22
                                                                                      221.86
                                                                                                                                        3165.7
                                                                                                                                                         -9.63
                                                                                                                                                                        136.57
                                                                                                         89.91 6 15 46
55.86 24 4 4
                      5 35 43
                                    2402.67
                                                      -34.18
                                                                        52.07
                                                                                      229.72
                                                                                                                                        1802.7
                                                                                                                                                        -33.82
                                                                                                                                                                          42.85
                                   3675.74
                     23 2 49
                                                      -1.80
                                                                      133.95
                                                                                      219.40
                                                                                                                                        3075.7
                                                                                                                                                         -6.27
                                                                                                                                                                         127.71
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SCT 5488.9 SGR 408.5 SG3 166.2
RRT .1128 RRF .0912 RTF .9202
SGB 5504.1 R23 -.0133 R13 .9202
SGI 5489.1 SG2 405.9 THA .48
                                                                                                                                ST 3094.4 SR 359.3 SS 739.5

CRT .9606 CRS -.9053 CST -.9871

LSA 3198.1 MSA 152.7 SSA 20.0

EL1 3113.7 EL2 99.3 ALF 6.37
    TOE 2.2775 TRA 1.1253 TC3-4.9729 BAU 1.2162
    RDE .2663 RRA -.0942 RC3 .1671 FAU .02570
FOE .8083 FRA .8186 FC3-1.2169 BSP 17630
    BOE 2.2930 BRA 1.1293 BC3 4.9757 FSP -557
```

ARRIVAL DATE JUN 15 1966

LAUNCH DATE DEC 15 1965

DISTANCE 534.281 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 26.504 GAL 2.85 A7L 86.60 HCA 266.51 SHA 120.62 ECC .22596 INC 3.3961 V1 30.259 RP 108.78 LAP -3.39 LOP 349.32 VP 36.602 GAP 11.80 A7P 90.21 TAL 170.14 TAP 76.65 RCA 93.36 APO 147.87 V2 34.836 RC 180.400 GL 20.88 GP -1.77 ZAL 70.28 ZAP 172.39 ETS 347.24 ZAE 130.24 ETE 181.65 ZAC 91.71 ETC 166.43 CLP-172.60 PLANETOCENTRIC CONIC 4.12 RAD 6567.8 VEL 11.864 PTH 2.10 VHP 7.701 DPA -5.98 RAP 359.06 ECC 1.3187 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG C3 19.363 VHL 4.400 DLA 24.63 RAL -28.03 3 3 9 2509.5 2 11 19 3109.53 21 54 26 3947.92 -27.15 104.33 233.69 81.63 90.00 62.75 23 0 14 83.67 4 40 32 150.99 3347.9 -11.60 157.83 227.28 90.00 21 54 26 -8.01 71.47 2177.7 -29.84 3 54 14 2777.72 22 54 13 3754.96 -29.28 80.23 234.00 100.00 60.68 23 56 48 88.47 6 24 41 55.87 24 22 1 3155.0 -9.98 135.97 142.63 226.25 -6.12 100.00 1834.0 45.28 -33.99 5 44 7 2433.97 23 20 50 3671.48 54.52 234.39 110.00 -34.15 3071.5 127.49 133.73 223.68 -1.96 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 3117.9 SR 370.3 35 730.5 CRT .9544 CRS -.8985 CST -.9881 SGT 5522.3 SGR 413.0 SG3 161.2 RRT .1407 RRF .1188 RTF .9225 TOE 2.3498 TRA 1.3666 TC3-4.7265 BAU 1.2241 RDE .2827 RRA -.0939 RC3 .1480 FAU .02400 FDE .7936 FRA .8607 FC3-1.0728 BSP 17805 SGB 5537.7 R23 -.0119 R13 .9225 LSA 3219.9 MSA 155.9 55A 19.4 ELI 3137.9 ELZ 109.8 ALF 6.48 SG1 5522.6 SG2 408.9 THA .61 BDE 2.3667 BRA 1.3698 BC3 4.7288 FSP -543 FLIGHT TIME 184.00 LAUNCH DATE DEC 15 1965 DISTANCE 539.783 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 26.459 GAL 3.44 AZL 86.62 MCA 269.68 SMA 120.36 ECC .23083 INC 3.3750 V1 30.259 RP 108.76 LAP -3.37 LOP 352.49 VP 36.578 GAP 12.16 AZP 90.02 TAL 168.39 TAP 78.07 RCA 92.58 APO 148.14 V2 34.845 RC 182.414 GL 20.01 GP -1.71 ZAL 67.31 ZAP 173.17 ETS 346.27 ZAE 130.29 ETE 181.62 ZAC 94.00 ETC 166.61 CLP-173.39 PLANETOCENTRIC CONIC -4.95 RAP 7.39 RAD 6567.8 VEL 11.917 PTH 2.12 VHP 7.921 DPA C3 20.643 VHL 4.543 DLA 25.06 RAL LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 16 48 3150.88 -26.71 107.28 238.18 80.22 3 9 19 2550.9 -27.79 98.78 23 20 42 3337.0 150.35 22 15 5 3937.02 157.21 231.79 62.84 90.00 -8.35 4 1 10 2814.41 23 13 25 3748.73 5 52 58 2464.61 23 38 6 3671.29 2214.4 -29.73 74.19 4 48 4 82.92 238.58 82.29 -28.97 100.00 60.72 24 15 53 3148.7 -10.18 135.61 -6.33 142.28 230.69 100.00 87.05 6 34 3 55.87 24 39 17 1864.6 -34.10 47.66 -34.07 56.91 239.13 110.00 3071.3 -6.44 -1.97 133.72 227.99 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 3129.9 SR 380.6 SS 720.8 CRT .9482 CRS -.8920 CST -.9890 SGT 5551.6 SGR 416.7 SG3 156.3 RRT .1690 RRF .1471 RTF .9248 SGB 5567.2 R23 -.0102 R13 .9248 TOE 2.4211 TRA 1.6230 TC3-4.4557 BAU 1.2302 ROE .3002 RRA -.0923 RC3 .1291 FAU .02232 LSA 3230.3 MSA 159.9 SSA 18.7 Fil 3150.7 EL2 120.2 ALF 6.59 FOE .7794 FRA .9035 FC3 -.9360 BSP 17950 EL1 3150.7 EL2 120.2 ALF SG1 5552.0 SG2 410.6 THA BOE 2.4397 BRA 1.6256 BC3 4.4576 FSP -529 ..73 ARRIVAL DATE JUN 19 1966 FLIGHT TIME 186.00 LAUNCH DATE DEC 15 1965 DISTANCE 545.243 RL 147.24 LAL -.00 LOL 82.81 VL 26.415 GAL 4.05 A7L 86.65 MCA 272.86 SMA 120.10 ECC .23615 INC 3.3539 VI 30.259 RP 108.73 LAP -3.35 LOP 355.67 VP 36.555 GAP 12.55 A7P 89.83 TAL 166.65 TAP 79.50 RCA 91.74 APO 148.47 V2 34.854 RC 184.407 GL 19.12 GP -1.66 ZAL 64.41 ZAP 173.94 ETS 345.00 ZAE 130.34 ETE 181.61 ZAC 96.30 ETC 166.76 CLP-174.18 PLANETOCENTRIC CONIC C3 22.147 VHL 4.706 DLA 25.41 RAL 10.61 RAD 6567.9 VEL 11.980 PTH 2.14 VHP 8.156 DPA -3.92 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG 2 23 1 3190.5.24
4 8 45 2649.64
23 31 31 3747.37
6 2 16 2494.45
23 54 29 3675.32 3 16 11 2590.5 78.90 110.08 242.70 -26.22 90.00 -12.10 150.01 236.32 62.90 23 40 6 3331.2 90.00 -6.53 156.88 -29.57 76.80 4 56 14 2249.6 80.99 243.18 -28.62 85.48 100.00 135.54 -10.23 60.73 24 33 59 3147.4 -6.37 142.20 235.15 100.00 49.99 85.69 6 43 51 55.86 24 55 44 6 43 51 1894.5 -34.17 243.91 -33.94 59.23 110.00 -6.28 127.69 3075.3 232.33 -1.82 133.93 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 3132.8 SR 389.9 SS 711.2 CRT .9417 CRS -.8856 CST -.9898 SGT 5576.6 SGR 419.5 SG3 151.6 RRT .1979 RRF .1765 RTF .9272 SGB 5592.4 R23 -.0082 R13 .9272 TOE 2.4929 TRA 1.8975 TC3-4.1619 BAU 1.2327 RDE .3189 RRA -.0890 RC3 .1108 FAU .02064 FDE .7667 FRA .9460 FC3 -.8066 BSP 17990 LSA 3231.9 HSA 164.5 SSA 18.0 EL1 3154.3 EL2 130.2 ALF 6.70 SG1 5577.2 SG2 411.2 THA .86 BDE 2.5133 BRA 1.8996 BC3 4.1634 FSP -511 ARRIVAL DATE JUN 21 1966 FLIGHT TIME 188.00 LAUNCH DATE DEC 15 1965 DISTANCE 550.654 HELIOCENTRIC CONIC RL 147.24 LAL -.00 LOL 82.81 VL 26.371 GAL 4.70 AZL 86.67 MCA 276.03 SMA 119.86 ECC .24197 INC 3.3327 VI 30.259 RP 108.70 LAP -3.31 LOP 358.85 VP 36.532 GAP 12.96 AZP 89.65 TAL 164.91 TAP 80.94 RCA 90.85 APO 148.86 V2 34.863 RC 186.379 GL 18.21 GP -1.62 ZAL 61.59 ZAP 174.71 ETS 343.27 ZAE 130.38 ETE 181.59 ZAC 98.61 ETC 166.88 CLP-174.96 PLANETOCENTRIC CONIC C3 23.908 VHL 4.890 DLA 25.69 RAL 13.76 RAD 6568.0 VEL 12.053 PTH 2.15 VHP 8.407 DPA -2.89 RAP 5.53 ECC 1.3935 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG 247.25 77.68 3 23 52 112.70 2 30 4 3227.95 -25.70 90.00 150.01 -12.10 23 58 11 5551.1 156.87 240.84 62.90 22 52 39 3931.10 -8.53 90.00 79.27 5 5 4 -29.36 79.77 2283.1 4 17 1 2883.13 23 48 23 3751.16 6 12 0 2523.38 -28.24 87.89 247.81 100.00 135.75 60.71 24 50 54 3151.2 -10.10 142.42 239.61 -6.25 6 54 3 100.00 52.25 -34.18 248.71 84.37 1923.4 61.47 -33.77 110.00 134.36 236.66 55.85 1 15 13 3083.7 -5.97 -1.50 0 13 50 3683.67 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 3118.4 SR 398.0 SS 699.6 CRT .9352 CRS -.8793 CST -.9906 SGT 5597.0 SGR 421.5 SG3 147.0 RRT .2260 RRF .2050 RTF .9300 TOE 2.5583 TRA 2.1831 TC3-3.8644 BAU 1.2355 RRT .2260 RRF .2050 RTF .9300 CRT .9352 CRS -.8793 CST -.9906 SGB 5612.9 R23 -.0065 R13 .9300 LSA 3216.1 MSA 169.3 SSA 17.3 SGI 5597.8 SG2 410.5 THA .98 EL1 3140.6 EL2 139.9 ALF 6.82 ROE .3385 RRA -.0841 RC3 .0934 FAU .01910 FOE .7527 FRA .9911 FC3 -.6915 BSP 18122 BOE 2.5806 BRA 2.1847 BC3 3.8655 FSP -497

FLIGHT TIME 182.00

```
LAUNCH DATE DEC 15 1965
                                                                                         FLIGHT TIME 190.00
                                                                                                                                                                ARRIVAL DATE JUN 23 1966
    HELIOCENTRIC CONIC
                                                                                         DISTANCE 556.009
     RL 147.24 LAL -.00 LOL 82.81 VL 26.329 GAL 5.38 A7L 86.69 HCA 279.21 SMA 119.61 ECC .24833 INC 3.3112 V1 30.259
RP 108.67 LAP -3.27 LOP 2.03 VP 36.511 GAP 13.40 A7P 89.47 TAL 163.20 TAP 82.40 RCA 89.91 APO 149.31 V2 34.873
RC 188.330 GL 17.29 GP -1.57 TAL 58.85 TAP 175.47 ETS 340.86 TAE 130.43 ETE 181.59 TAC 100.91 ETC 166.97 CLP-175.75
    PLANETOCENTRIC CONIC
      C3 25.964 VHL 5.095 DLA 25.90 RAL 16.83 RAD 6568.0 VEL 12.138 PTH
                                                                                                                        2.18 VHP 8.676 DPA
                                                                                                                                                            -1.87 RAP
     C3 25.964 VML 5.095 OLA 25.90 RAL 16.83 RAD 6568.0 VEL 12.138 PTM 2.18 VMP 8.676 DPA -1.87 RAP 7.69 ECC 1.4273 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 8 2 3262.69 -25.17 115.10 251.80 76.59 3 32 25 2662.7 -26.77 106.80 90.00 23 9 9 3936.97 -8.35 157.20 245.33 62.84 24 14 45 3337.0 -11.93 150.35 100.00 4 25 59 2914.64 -27.84 90.15 252.45 78.65 5 14 34 2314.6 -29.12 81.58 100.00 0 7 48 3760.25 -5.94 142.92 244.03 60.65 1 10 28 3160.3 -9.81 136.27 110.00 6 22 6 2551.35 -33.56 63.63 253.52 83.11 7 4 38 1951.3 -34.15 54.43 110.00 0 28 11 3696.31 -1.01 135.02 240.97 55.83 1 29 47 3096.3 -5.49 128.80
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5612.7 SGR 422.6 SG3 142.5
RRT .2542 RRF .2335 RTF .9329
SGB 5628.6 R23 -.0050 R13 .9329
SGI 5613.8 SG2 408.6 THA 1.10
                                                                                                                                                  ST 3092.8 SR 404.7 SS 687.4
CRT .9285 CRS -.8729 CST -.9913
     TOE 2.6208 TRA 2.4853 TC3-3.5606 BAU 1.2362
     TOE .7387 FRA 1.0350 FC3 .0772 FAU .01761
FDE .7387 FRA 1.0350 FC3 -5870 83P 18249
BDE 2.6453 BRA 2.4865 BC3 3.5614 FSP -485
                                                                                                                                                  LSA 3189.2 MSA 174.5 S9A 16.5
EL1 3115.6 EL2 149.2 ALF 6.94
LAUNCH DATE DEC 15 1965
                                                                                         FLIGHT TIME 192.00
                                                                                                                                                                 ARRIVAL CATE JUN 25 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 561.300
     RL 147.24 LAL -.00 LOL 82.81 VL 26.286 GAL 6.10 AZL 86.71 MCA 282.38 SMA 119.37 ECC .25530 INC 3.2893 V1 30.259
RP 108.63 LAP -3.21 LOP 5.22 VP 36.491 GAP 13.88 AZP 89.29 TAL 161.49 TAP 83.88 RCA 88.90 APO 149.85 V2 34.884
RC 190.259 GL 16.36 GP -1.54 ZAL 56.22 ZAP 176.21 ETS 337.37 ZAE 130.47 ETE 181.58 ZAC 103.22 ETC 167.04 CLP-176.54
   PLANETOCENTRIC CONIC
     C3 28.359 VHL 5.325 DLA 26.04 RAL 19.80 RAD 6568.1 VEL 12.237 PTH 2.20 VHP 8.966 DPA -.84 RAP 9.85 ECC 1.4667 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      24 6 58 3294.42
23 23 53 3949.10
4 35 38 2944.08
0 21 50 3774.66
6 32 32 2578.36
0 41 26 3713.16
          90.00
                                                              -24.65
                                                                               117.28
                                                                                                256.35
                                                                                                                    75.61
                                                                                                                                    3 41 53
                                                                                                                                                       2694.4
                                                                                                                                                                         -26.39
                                                                                                                                                                                           109.05
                                                               -7.97
                                                                                                                                 24 29 42
          90.00
                                                                               157.89
                                                                                                 249.77
                                                                                                                      62.74
                                                                                                                                                         3349.1
                                                                                                                                                                                             151.06
                                                                                                                                                                           -11.56
                                                                                                                                5 24 43
1 24 44
7 15 30
1 43 19
        100.00
                                                             -27.43
                                                                                 92.24
                                                                                                 257.08
                                                                                                                      77.62
                                                                                                                                                        2344.1
                                                                                                                                                                          -28.86
                                                                                                                                                                                              83.73
        100.00
                                                              -5.46
                                                                               143.72
                                                                                                 248.41
                                                                                                                      60.57
                                                                                                                                                        3174.7
                                                                                                                                                                           -9.34
                                                                                                                                                                                            137.08
                                                                                                                                                                         -34.08
        110.00
                                                             -33.32
                                                                                 65.70
                                                                                                 258.32
                                                                                                                      81.91
                                                                                                                                                        1978.4
                                                                                                                                                                                              56.54
                                                                                                                                                                         -4.85
                                                                               135.90
                                                                                                 245.25
                                                                                                                      55.82
                                                                                                                                                        3113.2
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5624.5 SGR 422.8 SG3 138.2
RRT .2825 RRF .2624 RTF .9359
SGB 5640.4 R23 -.0035 R13 .9359
SGI 5625.8 SG2 405.5 THA 1.22
     TOE 2.6823 TRA 2.8065 TC3-3.2543 BAU 1.2340
                                                                                                                                                  ST 3058.8 SR 410.0 SS 675.8
     RDE .3803 RRA -.0692 RC3 .0625 FAU .01615
FDE .7260 FRA 1.0805 FC3 -.4931 BSP 18338
                                                                                                                                                   CRT .9216 CRS -.8667 CST -.9921
                                                                                                                                                  LSA 3154.1 MSA 179.6 55A 15.8
     BOE 2.7092 BRA 2.8073 BC3 3.2549 FSP -471
                                                                                                                                                  EL1 3082.1 EL2 157.9 ALF 7.06
                                                                                        FLIGHT TIME 194.00
                                                                                                                                                               ARRIVAL DATE JUN 27 1966
LAUNCH DATE DEC 15 1965
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 566.516
     RL 147.24 LAL -.00 LOL 82.81 VL 26.245 GAL 6.87 AZL 86.73 HCA 285.56 SMA 119.14 ECC .26294 INC 3.2669 VI 30.259
RP 108.60 LAP -3.15 LOP 8.40 VP 36.471 GAP 14.39 AZP 89.12 TAL 159.81 TAP 85.38 RCA 87.81 APO 150.46 VZ 34.895
RC 192.167 GL 15.43 GP -1.50 ZAL 53.68 ZAP 176.94 ETS 332.04 ZAE 130.50 ETE 181.58 ZAC 105.52 ETC 167.07 CLP-177.34
   PLANETOCENTRIC CONIC
     C3 31.146 VHL 5.581 DLA 26.10 RAL 22.66 RAD 6568.2 VEL 12.350 PTH 2.23 VHP 9.279 DPA .17 RAP 12.00 ECC 1.5126 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       2 56 52 3323.01
23 36 48 3967.49
4 45 55 2971.45
0 34 22 3794.28
                                                                                                                                                    2723.0
                                                                              119.23
                                                                                                260.90
                                                                                                                    74.76
                                                                                                                                   3 52 15
          90.00
                                                             -24.16
                                                                                                                                                                         -26.02
                                                                                                                                                                                          111.06
                                                                                                                     62.59 24 42 56
76.69 5 35 27
60.46 1 37 36
                                                             -7.40
                                                                                                 254.13
          90.00
                                                                              158.94
                                                                                                                                                       3367.5
                                                                                                                                                                         -11.01
                                                                                                                                                                                           152.13
                                                                                                                                                       2371.4
3194.3
                                                                                                                     76.69
60.46
                                                                                                 261.70
        100.00
                                                            -27.01
                                                                                94.17
                                                                                                                                                                         -28.58
                                                                                                                                                                                             85.71
                                                                             144.80
                                                                                                 252.72
                                                                                                                                                                           -8.70
        100.00
                                                              -4.81
                                                                                                                                                                                           138.19
                                                                                                                                                       2004.4
                                                                                                                                                                        -33.98
                                                                                                                                7 26 <u>37</u>
1 55 48
                                                                                                                     80.76
        110.00
                          6 43 13 2604.45
                                                            -33.06
                                                                                67.69
                                                                                                263.10
                                                                                                                                                                                             58.57
                                                                                                                                                                                           130.78
        110.00
                         0 53 34
                                                                              136.99
                                                                                                249.46
                                                                                                                     55.82
                                                                                                                                                       3134.0
                                                                                                                                                                           -4.06
                                         3734.05
                                                                .43
                                                                                  HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5633.0 5GR 422.3 5G3 134.2
RRT .3114 RRF .2921 RTF .9390
SGB 5648.9 R23 -.0019 R13 .9390
SGI 5634.6 SG2 401.2 THA 1.34
     TOE 2.7455 TRA 3.1500 TC3-2.9466 BAU 1.2272
                                                                                                                                                  ST 3020.2 SR 413.7 55 665.7
     RDE .4025 RRA -.0588 RC3 .0496 FAU .01468
FOE .7153 FRA 1.1287 FC3 -.4079 BSP 18339
                                                                                                                                                  CRT .9146 CRS -.8607 CST -.9928
                                                                                                                                                 LSA 3114.7 MSA 184.7 SSA 15.1
EL1 3043.9 EL2 166.0 ALF 7.16
     BDE 2.7748 BRA 3.1506 BC3 2.9471 FSP
                                                                   -455
                                                                                                                                                                ARRIVAL DATE JUN 29 1966
LAUNCH DATE DEC 15 1965
                                                                                        FLIGHT TIME 196.00
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 571.644
    RL 147.24 LAL -.00 LOL 82.81 VL 26.204 GAL 7.68 AZL 86.76 MCA 288.75 SHA 118.91 ECC .27133 INC 3.2437 V1 30.259
RP 108.57 LAP -3.07 LOP 11.59 VP 36.452 GAP 14.95 AZP 88.96 TAL 158.16 TAP 86.91 RCA 86.64 APO 151.17 V2 34.906
RC 194.054 GL 14.51 GP -1.47 ZAL 51.26 ZAP 177.63 ETS 323.26 ZAE 130.52 ETE 181.58 ZAC 107.81 ETC 167.07 CLP-178.14
   PLANETOCENTRIC CONIC
                                                                                                                        2.26 VHP 9.619 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 7 39 3348:50 -23.69 120.95 265.43 74.02 4 3 28 2748.5 -25.66 112.83
     C3 34.393 VML 5.865 DLA 26.11 RAL 25.40 RAD 6568.4 VEL 12.481 PTH
                                                                                                                                                            1.18 RAP 14.15 ECC 1.5660
                      23 47 54 3991.95
4 56 45 2996.81
0 45 25 3818.87
6 54 5 2629.68
1 4 34 3758.76
         90.00
                                                               -6.63
                                                                              160.33
                                                                                                258.40
                                                                                                                     62.41
                                                                                                                                 24 54 25
                                                                                                                                                        3392.0
                                                                                                                                                                         -10.27
                                                                                                                                                                                           153.54
                                                                                                                                  5 46 42
        100.00
                                                             -26.60
                                                                                95.94
                                                                                                266.30
                                                                                                                     75.84
                                                                                                                                                       2396.8
                                                                                                                                                                         -28.29
                                                                                                                                 1 49 4
        100.00
                                                              -3.98
                                                                              146.16
                                                                                                256.95
                                                                                                                     60.35
                                                                                                                                                        3218.9
                                                                                                                                                                           -7.90
                                                                                                                                                                                           139.57
                                                            -32.76
                                                                                69.60
                                                                                                                     79.66
                                                                                                                                                       2029.7
        110.00
        110.00
                                                               1.38
                                                                              138.28
                                                                                                253.62
                                                                                                                     55.84
                                                                                                                                  2 7 13
                                                                                                                                                       3158.8
                                                                                                                                                                          -3.12
                                                                                                                                                                                           132.07
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5635.2 SGR 420.8 SG3 130.1 ST 2969.9 SR 415.6 SS 654.8 RRT .3395 RRF .3207 RTF .9424 CRT .9073 CRS -.8545 CST -.9935 SGB 5650.9 R23 -.0009 R13 .9424 LSA 3063.6 MSA 189.4 SSA 14.5 SG1 5637.0 SG2 395.7 THA 1.46 ELI 2993.9 EL2 173.4 ALF 7.26
     TOE 2.8030 TRA 3.5100 TC3-2.6515 BAU 1.2193
     ROE .4251 RRA -.0465 RC3 .0382 FAU .01333
FOE .7039 FRA 1.1771 FC3 -.3355 8SP 18432
     BOE 2.8350 BRA 3.5103 BC3 2.6517 FSP -443
```

ARRIVAL DATE JUL 1 1966

LAUNCH DATE DEC 15 1965

DISTANCE 576.668 RL 147.24 LAL -.00 LOL 82.81 VL 26.163 GAL 8.55 A7L 86.78 MCA 291.93 SNA 118.68 ECC .28057 INC 5.2197 V1 30.259 RP 108.53 LAP -2.99 LOP 14.77 VP 36.435 GAP 15.56 A7P 88.80 TAL 156.54 TAP 88.47 RCA 85.38 APO 151.98 V2 34.918 RC 195.918 GL 13.60 GP -1.44 ZAL 48.95 ZAP 178.22 ETS 307.62 ZAE 130.53 ETE 181.58 ZAC 110.10 ETC 167.04 CLP-178.96 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.18 RAP 16.30 ECC 1.6283 C3 38.177 VML 6.179 CLA 26.06 RAL 28.02 RAC 6568.5 VEL 12.631 PTH 2.29 VMP 9.989 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -25.31 2771.1 73.37 4 15 24 3 19 12 3371.13 0 1 10 4022.06 -23.26 122.47 269.94 90.00 -9.35 155.27 3422.1 1 8 12 262.56 62.21 -5.67 162.03 0 1 10 90.00 -21.99 89.23 2420.3 5 58 21 97.58 270.85 75.07 -26,20 100.00 5 8 1 3020.35 3848.08 3020.35 3248.1 -6.93 141.20 60.24 1 59 10 261.09 147.77 100.00 0 55 2 -2.99 -33.68 62.42 7 49 17 2054.2 272.53 78.61 7 5 3 2654.15 1 14 29 3787.04 -32.45 71.44 110.00 -2.04 2 17 36 3187.0 133.55 139.75 257.70 55.89 2.46 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5633.7 SGR 418.5 SG3 126.2 RRT .3677 RRF .3496 RTF .9460 SGB 5649.2 R23 .0000 R13 .9460 SGI 5635.8 SG2 389.0 THA 1.57 ST 2915.3 SR 415.8 SS 645.2 CRT .8998 CRS -.8484 CST -.9941 TOE 2.8608 TRA 3.8938 TC3-2.3655 BAU 1.2074 ROE .4482 RRA -.0320 RC3 .0285 FAU .01201 FDE .6940 FRA 1.2283 FC3 -.2723 BSP 18502 LSA 3008.4 MSA 193.7 SSA 13.8 EL1 2939.3 EL2 180.0 ALF 7.34 BDE 2.8957 BRA 3.8939 BC3 2.3657 FSP -431 ARRIVAL DATE JUL 3 1966 FLIGHT TIME 200.00 LAUNCH DATE DEC 15 1965 DISTANCE 581.569 RL 147.24 LAL -.00 LOL 82.81 VL 26.124 GAL 9.49 A7L 86.81 MCA 295.12 SMA 118.46 ECC .29077 INC 3.1945 V1 30.259 RP 108.49 LAP -2.89 LOP 17.96 VP 36.418 GAP 16.22 A7P 88.64 TAL 154.96 TAP 90.08 RCA 84.02 APO 152.91 V2 34.930 RC 197.761 GL 12.71 GP -1.41 ZAL 46.75 ZAP 178.57 ETS 280.30 ZAE 130.52 ETE 181.59 ZAC 112.37 ETC 166.98 CLP-179.79 HELIOCENTRIC CONIC C3 42.597 VML 6.527 DLA 25.96 RAL 30.50 RAD 6568.6 VEL 12.805 PTH 2.33 VMP 10.394 DPA 3.17 RAP 18.44 ECC 1.7010 ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 31 21 3391.27 -22.86 123.81 274.41 72.82 4 27 53 2791.3 -25.00 115.79 PLANETOCENTRIC CONIC 1 16 29 266.62 62.02 0 8 51 4057.24 5 19 37 3042.26 -4.55 164,00 90.00 6 10 19 2 7 59 8 0 41 2 26 59 2442.3 -27.70 90.80 275.36 74.37 99.08 -25.81 100.00 3281.5 -5.82 143.05 265.13 60.16 1 3 17 3881.48 -1.86 149.60 100.00 64.25 2077.9 -33.49 277.16 77.61 -32.12 73.22 7 16 3 2677.94 110.00 135.20 3218.6 -.83 141.40 261.69 55.99 1 23 20 3.66 110.00 3818.57 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2857.5 SR 414.2 SS 637.1 CRT .8921 CRS -.8424 CST -.9948 TOE 2.9197 TRA 4.3034 TC3-2.0914 BAU 1.1911 SGT 5628.2 SGR 415.3 SG3 122.5 RDE .4718 RRA -.0154 RC3 .0204 FAU .01071 FDE .6855 FRA 1.2824 FC3 -.2177 BSP 18559 BDE 2.9576 BRA 4.3035 BC3 2.0915 FSP -419 RRT .3960 RRF .3785 RTF .9497 SGB 5643.5 R23 .0007 R13 .9497 LSA 2950.2 MSA 197.4 SSA 13.2 EL1 2881.4 EL2 185.6 ALF 7.40 5G1 5630.6 SG2 381.2 THA 1.68 ARRIVAL DATE JUL 5 1966 FLIGHT TIME 202.00 LAUNCH DATE DEC 15 1965 DISTANCE 586.322 RE 147.24 EAL -.00 LOE 82.81 VE 26.085 GAE 10.49 AZE 86.83 HCA 298.31 SHA 118.25 ECC .30205 INC 3.1680 VI 30.259
RP 108.45 EAP -2.79 EOP 21.15 VP 36.402 GAP 16.95 AZP 88.50 TAE 153.43 TAP 91.73 RCA 82.53 APO 153.97 V2 34.942
RC 199.580 GE 11.83 GP -1.39 ZAE 44.68 ZAP 178.47 ETS 247.12 ZAE 130.49 ETE 181.59 ZAC 114.62 ETC 166.88 CLP 179.36 HELTOCENTRIC CONIC C3 47.774 VHL 6.912 DLA 25.81 RAL 32.86 RAD 6568.8 VEL 13.005 PTH 2.37 VHP 10.837 DPA 4.14 RAP 20.57 ECC 1.7862 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG PLANETOCENTRIC CONIC 1 4 40 45 1 23 21 6 22 28 2 15 34 8 12 2 2 35 22 278.83 72.33 125.01 -22.49 3 43 55 3409.33 90.00 -7.03 61.86 3496.8 270.56 4096.82 -3.29 166.22 0 15 4 4096.82 5 31 25 3062.78 90.00 -27.41 2462.8 73.72 279.81 -25.42 100.49 100.00 -4.58 145.11 1 10 15 3318.6 60.11 151.64 269.07 - .60 3918.61 100.00 -33.27 7 27 0 2701.12 2101.1 76.65 281.72 -31.77 74.93 110.00 .49 3253.0 265.61 56.14 143.21 4.97 3853.04 110.00 1 31 9 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RRT .4249 RRF .4080 RTF .9535 SGB 5635.1 R23 .0012 R13 .9536 SGI 5622.8 SGZ 372.3 THA 1.79 ST 2800.9 SR 411.0 SS 631.6 TOE 2.9847 TRA 4.7449 TC3-1.8267 BAU 1.1668 CRT .8845 CRS -.8369 CST -.9954 ROE .4958 RRA .0037 RC3 .0141 FAU .00938 FOE .6799 FRA 1.3413 FC3 -.1699 BSP 18489 LSA 2893.5 MSA 200.3 SSA 12.6 EL1 2824.5 EL2 190.2 ALF 7.43 BOE 3.0256 BRA 4.7449 BC3 1.8268 FSP -405 ARRIVAL DATE JUL 7 1966 FLIGHT TIME 204.00 LAUNCH DATE DEC 15 1965 01STANCE 590.898 RL 147.24 LAL -.00 LOL 82.81 VL 26.047 GAL 11.57 A7L 86.86 HCA 301.50 SHA 118.04 ECC .31455 INC 3.1397 VI 30.259
RP 108.41 LAP -2.68 LOP 24.35 VP 36.387 GAP 17.75 A7P 88.36 TAL 151.95 TAP 93.45 RCA 80.91 APO 155.17 VZ 34.955
RC 201.376 GL 10.98 GP -1.36 TAL 42.73 ZAP 177.96 ETS 223.96 ZAE 130.43 ETE 181.60 ZAC 116.84 ETC 166.74 CLP 178.48 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 53.860 VHL 7.339 DLA 25.61 RAL 35.07 RAD 6568.9 VEL 13.237 PTH 2.42 VHP 11.326 DPA 5.09 RAP 22.69 ECC 1.8864 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 53 49 283.18 71.89 3425.70 -22.15 126.09 3 56 43 90.00 161.98 3540.1 61.74 1 26 56 274.38 168.64 -1.89 0 19 56 4140.13 6 34 40 2 22 1 8 23 14 90.00 -27.12 93.61 2482.1 73.13 101.80 284.18 -25.05 5 43 18 3082.08 100.00 -3.22 147.33 60.12 3359.0 272.90 153.86 . 77 1 16 2 3958.98 100.00 -33.04 67.75 2123.7 75.74 7 37 50 2723.72 1 37 59 3890.11 286.19 -31.40 76.59 110.00 1.90 6.37 56.34 2 42 49 3290.1 269.43 145.17 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5606.1 SGR 406.7 SG3 115.6 ST 2738.8 SR 405.9 S5 626.8 RRT .4530 RRF .4368 RTF .9575 CRT .8767 CRS -.8314 CST -.9960 SGB 5620.8 R23 .0014 R13 .9575 LSA 2831.5 MSA 202.4 SSA 12.0 SG1 5609.1 SG2 362.3 THA 1.89 EL1 2762.0 EL2 193.7 ALF 7.44 TOE 3.0480 TRA 5.2137 TC3-1.5818 BAU 1.1390 RDE .5199 RRA .0251 RC3 .0091 FAU .00812 FDE .6747 FRA 1.4029 FC3 -.1305 BSP 18541 BDE 3.0920 BRA 5.2137 BC3 1.5818 FSP -394

FLIGHT TIME 198.00

LAUNCH DATE DEC 15 1965

ARRIVAL DATE JUL '9 1966

ST 2498.8 SR 370.0 55 633.8 CRT .8477 CRS -.8140 CST -.9980 LSA 2596.6 MSA 199.5 SSA 9.8 EL1 2518.5 EL2 194.7 ALF 7.20

FLIGHT TIME 206.00

TOE 3.3739 TRA 7.4978 TC3 -.7563 BAU .9300

ROE .6176 RRA .1374 RC3 .0013 FAU .00267 FDE .6797 FRA 1.7128 FC3 -.0251 BSP 18457 BOE 3.4299 BRA 7.4991 BC3 .7563 FSP -351

ARRIVAL DATE JUL 17 1966

LAUNCH DATE DEC 15 1965

```
DISTANCE 609.335
   RL 147.24 LAL -.00 LOL 82.81 VL 25.874 GAL 18.72 A7L 87.04 HCA 317.49 SHA 117.11 ECC .40292 INC 2.9578 V1 30.259 RP 108.21 LAP -2.00 LOP 40.34 VP 36.326 GAP 23.38 A7P 87.82 TAL 145.93 TAP 103.42 RCA 69.92 APO 164.29 V2 35.020 RC 209.976 GL 7.03 GP -1.27 TAL 34.97 ZAP 173.35 ETS 193.47 ZAE 129.49 ETE 181.61 ZAC 127.36 ETC 165.51 CLP 173.47
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 106.791 VHL 10.334 OLA 24.07 RAL 43.89 RAD 6570.0 VEL 15.104 PTH 2.72 VHP 14.753 OPA
                                                                                                                                        9.45 RAP 32.84 ECC 2.7575
    LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 2889.8
                                                                                                                                                                    122.48
                                                                                 303.27
                                                                                                                                                    -23.23
                                                                                                  70.27 5 57 18
                                                     -20.73
                                                                    130.26
                     4 59 8 3489.84
        90.00
                                                                                                       62.31 1 41 4
70.77 7 33 10
61.27 2 39 8
                     0 27 52 4391.81
6 40 26 3163.20
1 29 15 4193.68
8 28 3 2826.54
1 58 8 4103.10
                                                                                                                                     3791.8
                                                                                                                                                      2.44
                                                                                                                                                                     176.05
                                                                     182.72
                                                                                    291.50
                                                       6.19
        90.00
                                                                                                                                                                      99.25
                                                                                    304.26
                                                                                                                                     2563.2
                                                                                                                                                     -25.74
                                                                     107.22
                                                    -23.34
       100.00
                                                                                    290.18
                                                                                                                                     3593.7
                                                                                                                                                       4.72
                                                                                                                                                                    160.23
                                                                     166.84
                                                       8.63
       100.00
                                                                                                                  9 15 9
3 6 31
                                                                                                                                     2226.5
                                                                                                                                                    -31.64
                                                                                                                                                                      75.44
                                                                                    306.57
                                                                                                       71.78
                                                                      83.96
       110.00
                                                     -29.44
                                                                                                       58.57
                                                                                                                                     3503.1
                                                                                                                                                      9.94
                                                                                                                                                                     150.18
                                                                    156.69
                                                                                    286.89
                                                      14.20
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 5477.2 SGR 371.2 SG3 100.6
RRT .5930 RRF .5811 RTF .9775
SGB 5489.7 R23 -.0004 R13 .9775
SGI 5481.6 SGZ 298.7 THA 2.31
                                                                                                                                ST 2441.3 SR 357.5 SS 643.2
CRT .8417 CRS -.8111 CST -.9984
    TDE 3.4825 TRA 8.1979 TC3 -.5904 BAU .8429
    RDE .6423 RRA .1727 RC3 .0015 FAU .00107
FDE .6885 FRA 1.8117 FC3 -.0086 8SP 18438
BDE 3.5412 BRA 8.1997 BC3 .5904 FSP -342
                                                                                                                                LSA 2542.3 MSA 195.7 SSA 9.3
ELI 2459.9 ELZ 191.6 ALF 7.07
                                                                                                                                             ARRIVAL DATE JUL 19 1966
                                                                             FLIGHT TIME 216.00
LAUNCH DATE DEC 15 1965
                                                                             DISTANCE 611.533
  HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 25.844 GAL 20.65 A7L 87.09 HCA 320.69 SMA 116.94 ECC .42788 INC 2.9082 VI 30.259 RC 211.617 GL 6.30 GP -1.26 ZAL 33.87 ZAP 172.16 ETS 191.75 ZAE 129.09 ETE 181.60 ZAC 129.27 ETC 165.15 CLP 172.26
   PLANETOCENTRIC CONIC
    C3 124.891 VHL 11.175 DLA 23.66 RAL 45.15 RAD 6570.3 VEL 15.692 PTH 2.79 VHP 15.727 DPA 10.21 RAP 34.72 ECC 3.0554 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                    123.10
                                                                                                       70.04
                                                                                                                    6 8 53
                                                                                                                                    2899.1
                                                                                                                                                     -23.05
                                                      -20.52
                                                                     130.85
                                                                                     306.77
                    5 10 34 3499.13
0 26 29 4445.93
        90.00
                                                                                                       62.72 1 40 35
70.42 7 43 46
61.77 2 39 39
71.15 9 24 18
59.29 3 8 29
                                                                                                                                     3845.9
                                                                                                                                                       4.17
                                                                                                                                                                     179.08
                                                                     185.79
                                                                                     294.45
                                                       7.89
        90.00
                     0 26 29 4445.93
6 50 51 3175.83
1 28 54 4244.46
8 36 54 2844.01
1 59 20 4149.05
                                                                                                                                     2575.8
                                                                                                                                                      -25.51
                                                                                                                                                                     100.11
                                                                     108.05
                                                                                     307.75
                                                     -23.05
       100.00
                                                                                                                                                                     163.04
                                                                                                                                     3644.5
                                                                                                                                                       6.42
                                                                     169.71
                                                                                     293.18
                                                      10.27
       100.00
                                                                                                                                                     -31.35
                                                                                                                                                                      76.72
                                                                                                                                     2244.0
                                                    -29.06
                                                                                     310.08
       110.00
                                                                       85.17
                                                                                                                                     3549.0
                                                                                                                                                     11.63
                                                                                                                                                                     152.67
                                                                     159.27
                                                                                     289.97
       110.00
                                                     15.82
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5438.7 SGR 361.9 SG3 98.1
RRT .6202 RRF .6094 RTF .9812
SGB 5450.7 R23 -.0010 R13 .9812
SGI 5443.4 SG2 283.6 THA 2.37
                                                                                                                                 ST 2386.0 SR 343.9 SS 657.0 CRT .8366 CRS -.8092 CST -.9987
    TOE 3.6098 TRA 8.9667 TC3 -.4394 BAU .7336
    ROE .6672 RRA .2111 RC3 .0023 FAU-.00076
FOE .7020 FRA 1.9229 FC3 .0053 BSP 18390
BOE 3.6710 BRA 8.9692 BC3 .4394 FSP -333
                                                                                                                               LSA 2491.3 MSA 190.6 SSA 8.7
EL1 2403.4 EL2 187.0 ALF 6.92
                                                                                                                                            ARRIVAL DATE JUL 21 1966
                                                                             FLIGHT TIME 218.00
LAUNCH DATE DEC 15 1965
                                                                             DISTANCE 612.895
   HELIOCENTRIC CONIC
    RL 147.24 LAL -.00 LOL 82.81 VL 25.816 GAL 22.82 A7L 87.15 MCA 323.90 SHA 116.80 ECC .45627 INC 2.8511 V1 30.259 RP 108.13 LAP -1.68 LOP 46.74 VP 36.310 GAP 26.84 A7P 87.70 TAL 144.59 TAP 108.49 RCA 63.51 APO 170.09 V2 35.047 RC 213.230 GL 5.60 GP -1.24 TAL 32.96 TAP 170.87 ETS 190.40 TAE 128.59 ETE 181.60 TAC 131.07 ETC 164.76 CLP 170.95
   PLANETOCENTRIC CONIC
    C3 147.218 VHL 12.133 DLA 23.21 RAL 46.21 RAD 6570.6 VEL 16.387 PTH 2.86 VMP 16.842 DPA 10.92 RAP 36.51 ECC 3.4228
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     5 21 29 3506.70
0 24 3 4500.55
7 0 44 3186.70
1 27 29 4295.80
8 45 14 2859.79
1 59 29 4195.47
                                                                                                                                  2906.7 -22.90 123.60
                                                                                                   69.86 6 19 56
                                                                                  310.03
                                                    -20.34
                                                                     131.34
        90.00
                                                                                                                  1 39 4
7 53 51
2 39 5
                                                                                                                                     3900.5
                                                                                                                                                       5.91
                                                                                                                                                                     182.15
                                                                                                       63.23
                                                        9.58
                                                                     188.91
                                                                                     297.19
        90.00
                                                                                                                                     2586.7
                                                                                                                                                     -25.30
                                                                                                                                                                     100.65
                                                                                                       70.13
                                                                     108.76
                                                                                     310.99
                                                      -22.80
       100.00
                                                                                                                                                                     165.91
                                                                                                                                     3695.8
                                                                                                                                                        8.12
                                                     11.91
                                                                     172.65
                                                                                     295.97
                                                                                                       62.38
       100.00
                                                                                                                    9 32 54
                                                                                                                                                                      77.87
                                                                                                                                     2259.8
                                                                                                                                                     -31.08
                                                      -28.71
                                                                       86.27
                                                                                     313.33
                                                                                                       70.49
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     145.22
                                                                                                                                     3595.5
                                                                                                                                                      13.30
                                                                     161.93
                                                      17.41
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5398.2 SGR 352.0 SGS 95.7
RRT .6473 RRF .6375 RTF .9845
SGB 5409.7 R23 -.0017 R13 .9845
SGI 5403.0 SG2 268.1 THA 2.42
                                                                                                                                 ST 2334.5 SR 329.4 SS 676.2
    TOE 3.7642 TRA 9.8178 TC3 -.3020 BAU .5943
                                                                                                                                 CRT .8327 CRS -.8085 CST -.9990
    RDE .6926 RRA .2528 RC3 .0036 FAU-.00295
FDE .7216 FRA 2.0499 FC3 .0173 BSP 18231
                                                                                                                                LSA 2445.8 MSA 184.2 SSA 8.2
                                                                                                                                 EL1 2350.7 EL2 181.1 ALF 6.74
    BOE 3.8273 BRA 9.8210 BC3 .3020 FSP -323
                                                                                                                                             ARRIVAL DATE JUL 23 1966
                                                                              FLIGHT TIME 220.00
LAUNCH DATE DEC 15 1965
                                                                              DISTANCE 613.169
    RL 147.74 LAL -.00 LOL 82.81 VL 25.790 GAL 25.30 A7L 87.22 MCA 327.11 SNA 116.66 ECC .48866 INC 2.7845 V1 30.259
RP 108.09 LAP -1.51 LOP 49.95 VP 36.305 GAP 28.97 A7P 87.66 TAL 144.31 TAP 111.41 RCA 59.65 APO 173.67 V2 35.060
RC 214.816 GL 4.91 GP -1.23 TAL 32.26 TAP 169.44 ETS 189.31 ZAE 127.96 ETE 181.58 ZAC 132.74 ETC 164.36 CLP 169.51
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 175.048 VHL 13.231 OLA 22.71 RAL 47.05 RAD 6570.9 VEL 17.215 PTH 2.94 VHP 18.129 OPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     6 30 21
                                                                                                                                     2912.2
                                                                                                                                                     -22.79
                                                                                                        69.73
                    5 31 49 3512.19
0 20 26 4555.44
                                                                                     312.99
                                                       -20.21
                                                                      131.69
                                                                                                                   1 36 22
                                                                                                                                      3955.4
                                                                                                                                                        7.64
                                                                                                                                                                      185.26
                                                                                                        63.84
                                                                                      299.68
                                                        11.25
                                                                      192.08
         90.00
                                                                                                                  8 3 19
2 37 20
                                                                                                                                      2595.4
                                                                                                                                                      -25.13
                                                                                                                                                                      101.44
                                                                                                        69.90
                     7 10 4 3195.38
                                                       -22.60
                                                                      109.32
                                                                                      313.93
       100.00
                                                                                                                                      3747.5
                                                                                                                                                       9.81
                                                                                                                                                                      168.82
                                                                                                        63.09
                                                        13.52
                                                                      175.64
                                                                                      298.52
                      1 24 52
                                    4347.48
        100.00
                                                                                                                  9 40 51
                                                                                                                                      2273.5
                                                                                                                                                     -30.63
                                                                                                                                                                       78.86
                       8 52 57 2873.49
1 58 28 4242.14
                                                                                     316.26
                                                                                                        70.11
                                                    -28.39
                                                                       87.21
       110.00
                                                                                                                                   3642.1
                                                                                                                                                     14.96
                                                                                                                                                                      157.82
                                                                                                                     3 9 10
                                                                                                        61.02
        110.00
                                                       18.97
                                                                      164.64
                                                                                     295.51
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 5349.8 SGR 341.3 SG3 93.4
RRT .6732 RRF .6645 RTF .9876
SGB 5360.6 R23 -.0025 R13 .9876
SGI 5354.7 SG2 252.1 THA 2.46
                                                                                                                            ST 2281.8 SR 313.9 SS 700.2
CRT .8299 CRS -.8086 CST -.9993
     TOE 3.9413 TRAID.7520 TC3 -. 1804 BAU .4223
     ROE .7184 RRA .2974 RC3 .0052 FAU-.00551
FOE .7463 FRA 2.1930 FC3 .0273 BSP 18177
BOE 4.0063 BRA10.7561 BC3 .1805 FSP -316
                                                                                                                           LSA 2400.9 MSA 176.7 SSA 7.6
EL1 2296.7 EL2 174.0 ALF 6.55
```

FLIGHT TIME 214.00

≡

```
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 70.00
                                                                                                                                     ARRIVAL DATE FEB 24 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 195.088
    RL 147.22 LAL -.00 LOL 83.83 VL 28.085 GAL -10.67 AZL 86.62 MCA 88.66 SMA 130.86 ECC .22220 INC 3.3759 V1 30.262
RP 107.66 LAP 3.38 LOP 172.48 VP 38.096 GAP -7.82 AZP 89.92 TAL 225.76 TAP 314.42 RCA 101.78 APO 159.94 V2 35.200
RC 56.291 GL 15.85 GP 2.80 ZAL 147.92 ZAP 25.59 ETS 353.01 ZAE 151.69 ETE 345.50 ZAC 61.83 ETC 164.23 CLP -25.45
   PLANETOCENTRIC CONIC
    C3 35.401 VHL 5.950 DLA -5.97 RAL 291.33 RAD 6568.4 VEL 12.521 PTH
                                                                                                   2.27 VMP 5.922 DPA -12.87 RAP 329.40 ECC 1.5826
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 54 13 2169.44
12 22 56 5185.61
                                                   -18.45
                                                                   38.64
                                                                               160.77
                                                                                                111.87
                                                                                                              2 30 23
                                                                                                                             1569.4
        90.00
                                                                                                          13 49 23
                                                                                 164.59
                                                                                                  78.20
                                                                                                                              4585.6
                                                                                                                                              24.04
                                                   25.93
                                                                  232.24
        90.00
                   3 12 44 1916.16
13 47 6 4914.12
                                                                                 160.24
                                                                                                              3 44 40
                                                                                                                              1316.2
                                                                                                                                                              12.23
                                                   -19.66
                                                                   19.49
                                                                                                 112.98
                                                                                                                                              -16.38
      100.00
                                                                                                  77.12 15 9 2
                                                                                                                                              25.16
                                                                  211.96
                                                                                 164.28
                                                                                                                              4314.1
      100.00
                                                   27.21
                    4 14 30 1722.79
15 1 51 4680.26
                                                                    3.23
                                                                                158.65
                                                                                                 116.10
                                                                                                            4 43 13
                                                                                                                              1122.8
                                                                                                                                             -19.21
                                                                                                                                                             356.04
      110.00
                                                   -22.90
                                                                                                          16 19 52
                                                                                                                                             28.18
                                                                  193.20
                                                                                 163.26
                                                                                                  74.09
                                                                                                                              4080.3
      110.00
                   15 1 51
                                                    30.66
                                                                  MID-COURSE EXECUTION ACCURACY
SGT 545.7 SGR 391.7 SG3 175.2
RRT .0395 RRF -.0852 RTF -.5286
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
   TOE -.1749 TRA -.3216 TC3 .3489 BAU .1686

ROE -.3916 RRA .0646 RC3 -.0720 FAU .06225

FOE .4782 FRA -.8121 FC3-1.5224 BSP 1328

BOE .4289 BRA .3281 BC3 .3563 FSP -475
                                                                                                                          ST 193.0 3R 377.6 55 266.2

CRT .8470 CRS .9059 CST .5597

LSA 477.8 HSA 147.7 SSA 23.9
                                                                      SGB 671.7 R23 -.0423 R13 -.5308
                                                                      SG1 546.1 SG2 391.1 THA 3.34
                                                                                                                          ELI 413.6 EL2 93.7 ALF 65.24
                                                                          FLIGHT TIME 72.00
                                                                                                                                     ARRIVAL DATE FEB 26 1966
LAUNCH DATE DEC 16 1965
                                                                         DISTANCE 201.858
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 28.184 GAL -10.59 AZL 86.65 MCA 91.89 SMA 131.59 ECC .21776 INC 3.3510 V1 30.262
RP 107.69 LAP 3.35 LOP 175.73 VP 38.161 GAP -7.02 AZP 90.11 TAL 226.98 TAP 318.87 RCA 102.93 APO 160.24 V2 35.191
RC 58.184 GL 15.97 GP 3.01 ZAL 148.59 ZAP 29.22 ETS 353.45 ZAE 152.82 ETE 345.94 ZAC 61.40 ETC 164.28 CLP -29.07
  PLANETOCENTRIC CONIC
                                                                                                    2.26 VHP 5.532 OPA -12.80 RAP 328.95 ECC 1.5698
   C3 34.625 VHL 5.884 DLA -5.97 RAL 290.50 RAD 6568.4 VEL 12.490 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 50 55 2163.86 -18.31 38.30 159.57 111.99 2 26 59 1563.9 -15.16 31.03 90.00 12 19 40 5179.99 25.85 231.85 163.35 78.01 13 46 0 4580.0 23.94 223.70 100.00 3 9 25 1910.59 -19.51 19.14 159.04 113.10 3 41 16 1310.6 -16.22 11.90 100.00 13 43 50 4908.50 27.12 211.57 163.03 76.93 15 5 38 4308.5 25.05 203.38
                                                                                                 113.10 3 41 16
76.93 15 5 38
116.24 4 39 49
73.87 16 16 28
                   4 11 11 1717.21
14 58 33 4674.64
      110.00
                                                   -22.74
                                                                               157.45
                                                                                                 116.24
                                                                                                                              1117.2
      110.00
                   14 58 33
                                                    30.56
                                                                  192.79
                                                                                 162.01
                                                                                                                              4074.6
                                                                                                                                              28.04
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 540.5 SGR 391.0 SG3 199.7
RRT .0464 RRF -.1038 RTF -.5072
                                                                                                                    ST 190.7 SR 377.8 SS 286.1
CRT .8411 CRS .9014 CST .5408
LSA 486.3 MSA 154.8 SSA 25.9
    TOE -.1699 TRA -.3201 TC3 .3468 BAU .1636
    ROE -.3875 RRA .0651 RC3 -.0680 FAU .06968
   FOE .5408 FRA -.9465 FC3-1.7422 BSP 1283
BOE .4232 BRA .3267 BC3 .3534 FSP -551
                                                                      SGB 667.1 R23 -.0547 R13 -.5106
                                                                                                                   EL1 412.6 EL2 94.5 ALF 65.64
                                                                      SG1 541.2 SG2 390.1 THA 4.01
                                                                         FLIGHT TIME 74.00
LAUNCH DATE DEC 16 1965
                                                                                                                                     ARRIVAL DATE FEB 28 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 208.598
   RL 147.22 LAL -.00 LOL 83.83 VL 28.269 GAL -10.52 AZL 86.67 MCA 95.13 SMA 132.22 ECC .21396 INC 3.3261 V1 30.262
RP 107.72 LAP 3.31 LOP 178.96 VP 38.215 GAP -6.25 AZP 90.30 TAL 228.04 TAP 323.17 RCA 103.93 APO 160.51 V2 35.181
RC 60.133 GL 16.07 GP 3.24 ZAL 149.16 ZAP 33.05 ETS 353.82 ZAE 154.29 ETE 346.33 ZAC 60.76 ETC 164.32 CLP -32.91
  PLANETOCENTRIC CONIC
    C3 33.944 VHL 5.826 DLA -5.98 RAL 289.79 RAD 6568.3 VEL 12.463 PTH 2.25 VHP 5.173 DPA -12.77 RAP 328.29 ECC 1.5586
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 48 8 2158.63
12 16 46 5175.19
3 6 38 1905.37
                                                                                             112.10 2 24 6
77.86 13 43 2
                                                                                                                          1558.6
                                                   -18.17
                                                                  37.97
                                                                              158.53
                                                                                                                                           -15.02
                                                                                                                                                             30.71
        90.00
        90.00
                                                   25.78
                                                                 231.52
                                                                                162.27
                                                                                                                              4575.2
                                                                                                                                             23.85
                                                                                                                                                            223.38
                                                                                                                          1305.4
       100.00
                                                   -19.37
                                                                   18.82
                                                                                158.00
                                                                                                113.22
                                                                                                           3 38 24
                                                                                                                                             -16.07
                                                                                                                                                             11.59
                   13 40 57
                                                                                                 76.77
                                                                                                           15 2 41
                                                                                                                              4303.7
                                                                                                                                              24.96
                                                                                                                                                            203.05
      100.00
                                  4903.69
                                                   27.05
                                                                 211.23
                                                                                161.95
                                                                                                           4 36 56
                     4 8 24 1712.01
                                                   -22.58
      110.00
                                                                    2.56
                                                                                                116.37
                                                                                                                              1112.0
                                                                                                                                             -18.85
                                                                                                                                                            355.40
                                                                                                           16 13 31
      110.00
                   14 55 41
                                  4669.81
                                                   30.46
                                                                 192.45
                                                                                160.92
                                                                                                 73.68
                                                                                                                              4069.8
                                                                                                                                             27.93
                                                                                                                                                            184.17
  DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 531.6 SGR 389.5 SG3 227.3
RRT .0492 RRF -.1247 RTF -.4757
                                                                                                                         ST 185.9 SR 377.4 SS 305.9
CRT .8268 CRS .8968 CST .5092
LSA 493.7 MSA 162.1 55A 23.9
    TOE -.1617 TRA -.3222 TC3 .3387 BAU .1563
    RDE -.3832 RRA .0666 RC3 -.0625 FAU .07809
   FDE .6081 FRA-1.0975 FC3-1.9918 BSP 1244
BDE .4159 BRA .3290 BC3 .3444 FSP -641
                                                                     SGB 659.0 R23 -.0744 R13 -.4807
                                                                                                                          EL1 409.5 EL2 95.4 ALF 66.46
                                                                     SG1 532.3 SG2 388.4 THA 4.42
                                                                         FLIGHT TIME 76.00
                                                                                                                                     ARRIVAL DATE MAR 2 1966
                                                                         DISTANCE 215.305
   RL 147.22 LAL -.00 LOL 83.83 VL 28.340 GAL -10.45 AZL 86.70 MCA 98.36 SMA 132.75 ECC .21070 INC 3.3009 V1 30.262 RP 107.75 LAP 3.27 LOP 182.20 VP 38.258 GAP -5.52 AZP 90.48 TAL 228.96 TAP 327.32 RCA 104.78 APO 160.72 V2 35.171 RC 62.133 GL 16.14 GP 3.49 ZAL 149.64 ZAP 37.11 ETS 354.15 ZAE 156.08 ETE 346.66 ZAC 59.90 ETC 164.35 CLP -36.97
  PLANETOCENTRIC CONIC
   C3 33.334 VHL 5.774 DLA -5.99 RAL 289.19 RAD 6568.3 VEL 12.438 PTH 2.25 VHP 4.847 DPA -12.80 RAP 327.41 ECC 1.5486
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 45 51 2153.67
                                                  -18.05
                                                                  37.66
                                                                               157.62
                                                                                               112.20
                                                                                                             2 21 45
                                                                                                                            1553.7
                                                                                                                                            -14.88
                                                                                                                                                             30 42
       90.00
                   12 14 18 5171.00
                                                  25.72
                                                                 231.23
                                                                                161.34
                                                                                                 77.73
                                                                                                           13 40 29
                                                                                                                              4571.0
                                                                                                                                             23.77
                                                                                                                                                            223.10
       90.00
                                                                                                             3 36 1
                    3 4 21
                                  1900.42
                                                  -19.24
                                                                  18.51
                                                                                157.09
                                                                                                113.33
                                                                                                                              1300.4
                                                                                                                                             -15.92
                                                                                                                                                             11.29
      100.00
                  3 4 21 1900.42
13 38 29 4899.48
                                                   26.98
                                                                 210.94
                                                                                161.02
                                                                                                 76.62
                                                                                                           15 0 9
                                                                                                                              4299.5
                                                                                                                                             24.87
                                                                                                                                                            202.77
      100.00
                                                                                                            4 34 33
                    4 6 6
                                  1707.11
                                                  -22.43
                                                                   2.25
                                                                                155.51
                                                                                                116.50
                                                                                                                              1107.1
                                                                                                                                             -18.69
                                                                                                                                                            355.12
      110.00
                                                                                                           16 10 59
                  14 53 14
                                 4665.56
                                                   30.38
                                                                 192.14
                                                                                159.99
                                                                                                 73.52
                                                                                                                             4065.6
                                                                                                                                             27.83
                                                                                                                                                            183.88
      110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE -.1527 TRA -.3315 TC3 .3201 BAU .1448
                                                                    SGT 518.6 SGR 387.4 SG3 257.6
RRT .0519 RRF -.1506 RTF -.4233
                                                                                                                         ST 181.5 SR 376.3 SS 327.2
CRT .8035 CRS .8948 CST .4690
    RDE -.3786 RRA .0690 RC3 -.0556 FAU .08725
                                                                                                                       LSA 502.2 MSA 169.8 SSA 23.7
EL1 405.6 EL2 100.2 ALF 67.36
   FDE .6850 FRA-1.2593 FC3-2.2660 BSP 1138
BDE .4083 BRA .3386 BC3 .3249 FSP -737
                                                                    SGB 647.3 R23 -.1011 R13 -.4308
```

SG1 519.5 SG2 386.2 THA 4.98

ARRIVAL DATE MAR 4 1966

```
LAUNCH DATE DEC 16 1965
                                                                              DISTANCE 221.979
    RL 147.22 LAL -.00 LOL 83.83 VL 28.398 GAL -10.38 A7L 86.72 HCA 101.59 SHA 133.19 ECC .20789 INC 5.2753 V1 30.262 RP 107.78 LAP 3.21 LOP 185.44 VP 38.292 GAP -4.83 A7P 90.66 TAL 229.72 TAP 331.31 RCA 105.50 APO 160.86 V2 35.160 RC 64.180 GL 16.19 GP 3.77 TAL 150.03 TAP 41.40 ETS 354.43 TAE 158.21 ETE 346.94 TAC 58.80 ETC 164.35 CLP -41.26
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                          2.24 VHP 4.552 OPA -12:87 RAP 326.29 ECC 1.5394
    C3 32.776 VHL 5.725 DLA -6.01 RAL 288.71 RAD 6568.3 VEL 12.416 PTH
    C3 32.776 VHL 5.725 DLA -6.DI RAL 288.71 RAD 6568.3 VEL 12.416 PTM 2.24 VHP 4.552 DPA -12:87 RAP 326.29 ECC 1.5394
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 44 2 2148.90 -17.92 37.37 156.85 112.30 2 19.51 1548.9 -14.74 30.13
90.00 12 12 15 5167.26 25.66 230.96 160.95 77.61 13 38 22 4567.3 23.70 222.85
100.00 3 2 32 1895.68 -19.11 18.22 156.33 113.43 3 34 8 1295.7 -15.78 11.01
100.00 13 36 26 4895.71 26.92 210.67 160.22 76.50 14 58 2 4295.7 24.80 202.52
110.00 4 4 16 1702.43 -22.29 1.97 154.74 116.61 4 32 38 1102.4 -18.53 354.84
110.00 14 51 12 4661.73 30.31 191.87 159.19 73.38 16 8 54

ATO-COMPRES EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 176.1 SR 374.6 SS 348.6
CRT .7653 CRS .8937 CST .4104
LSA 510.7 MSA 177.4 SSA 23.5
                                                                         SGT 503.6 SGR 384.8 SG3 290.6
RRT .0480 RRF -.1806 RTF -.3469
    TDE -.1410 TRA -.3470 TC3 .2919 BAU .1296
ROE -.3737 RRA .0724 RC3 -.0471 FAU .09722
                                                                          SGB 633.8 R23 -.1408 R13 -.3570
SG1 504.4 SG2 383.7 THA 4.99
    FOE .7681 FRA-1.4329 FC3-2.5679 BSP 1000
                                                                                                                                  EL1 400.1 EL2 106.1 ALF 68.64
    BOE .3994 BRA .3545 BC3 .2957 FSP
                                                           -843
                                                                                                                                               ARRIVAL DATE MAR 6 1966
                                                                               FLIGHT TIME 80.00
LAUNCH DATE DEC 16 1965
                                                                               DISTANCE 228.617
    RL 147.22 LAL -.00 LOL 83.83 VL 28.446 GAL -10.31 AZL 86.75 MCA 104.82 SMA 133.55 ECC .20545 INC 3.2491 VI 30.262 RP 107.81 LAP 3.14 LOP 188.67 VP 38.317 GAP -4.16 AZP 90.83 TAL 230.32 TAP 335.14 RCA 106.11 APO 160.99 V2 35.149 RC 66.268 GL 16.22 GP 4.06 ZAL 150.34 ZAP 45.93 ETS 354.71 ZAE 160.68 ETE 347.15 ZAC 57.48 ETC 164.35 CLP -45.79
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 32.255 VML 5.679 DLA -6.02 RAL 288.33 RAD 6568.3 VEL 12.395 PTH 2.24 VMP 4.288 DPA -12.99 RAP 324.93 ECC 1.5308 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2 18 25
                                                                                                                                     1544.3
                                                                                     156.21
                                                                                                      112.39
                      1 42 40 2144.28
                                                       -17.80
                                                                       37.08
         90.00
                                                                                                                                                                        222.61
                                                                                                                    13 36 39
                                                                                                                                        4563.8
                                                                                                                                                        23.64
                     12 10 36 5163.82
3 1 9 1891.09
13 34 48 4892.24
4 2 52 1697.90
14 49 35 4658.20
                                                                                                         77.50
                                                        25.61
                                                                       230.73
                                                                                       159.88
         90.00
                                                                                                                                                                         10.74
                                                                                                       113.53
                                                                                                                    3 32 40
                                                                                                                                        1291.1
                                                                                                                                                        -15.64
                                                                                       155.68
                                                                                                         113.53 3 32 40
76.38 14 56 20
116.73 4 31 10
73.24 16 7 13
                                                       -18.99
                                                                       17.93
        100.00
                                                                                                                                                                        202.28
                                                                                                                                        4292.2
                                                                                                                                                        24.73
                                                                                       159.55
                                                        26.87
                                                                      210.43
        100.00
                                                                                                                                       1097.9
                                                                                                                                                        -18.38
                                                                                                                                                                        354.58
                                                                                                       116.73
                                                                                       154.09
                                                       -22.15
                                                                         1.69
       110.00
                                                                                                                                        4058.2
                                                                                                                                                        27.65
                                                                                                                                                                        183.38
                                                                       191.62
                                                       30.24
                                                                                       158.51
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 169.3 SR 372.2 55 369.1
CRT .7041 CRS .8926 CST .3231
LSA 518.4 MSA 184.7 95A 23.3
                                                                           SGT 489.3 SGR 381.9 SG3 326.5
RRT .0308 RRF -.2144 RTF -.2417
     TOE -.1254 TRA -.3686 TC3 .2544 BAU .1109
     ROE -. 3682 RRA .0768 RC3 -. 0369 FAU .10801
                                                                           SGB 620.6 R23 -.1953 R13 -.2513
     FOE .8529 FRA-1.6181 FC3-2.8990 BSP 852
BDE .3890 BRA .3765 BC3 .2571 FSP -965
                                                                                                                                   EL1 392.7 EL2 114.0 ALF 70.53
                                                                           SG1 489.6 SG2 381.4 THA 3.51
                                                                                                                                               ARRIVAL DATE MAR 8 1966
                                                                               FLIGHT TIME 82.00
 LAUNCH DATE DEC 16 1965
                                                                               DISTANCE 235.221
     RL 147.22 LAL -.00 LOL 83.83 VL 28.482 GAL -10.25 AZL 86.78 HCA 108.05 SMA 133.83 ECC .20332 INC 3.2222 V1 30.262
RP 107.85 LAP 3.06 LOP 191.90 VP 38.333 GAP -3.53 AZP 91.00 TAL 230.78 TAP 338.83 RCA 106.62 APO 161.04 V2 35.138
    HELIOCENTRIC CONIC
     RC 68.394 GL 16.23 GP 4.37 ZAL 150.57 ZAP 50.69 ETS 354.98 ZAE 163.46 ETE 347.28 ZAC 55.92 ETC 164.33 CLP -50.55
    PLANETOCENTRIC CONIC
     C3 31.758 VHL 5.635 DLA -6.04 RAL 288.05 RAD 6568.3 VEL 12.375 PTH 2.23 VHP 4.055 DPA -13.15 RAP 323.34 ECC 1.5227
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       112.48 2 17 23
                      1 41 43 2139.73
12 9 20 5160.54
                                                                        36.80
                                                                                      155.67
                                                        -17.68
          90.00
                                                                                                                                                                        222.39
                                                                                                                   13 35 21
3 31 38
                                                                                                                                        4560.5
                                                                                                                                                        23.57
                                                                                       159.32
                                                                                                         77.39
                                                        25.57
                                                                       230.50
          90.00
                                                                                                                                                                         10.47
                                                                                                                                        1286.6
                                                                                                                                                        -15.51
                                                                                                        113.63
                                                                         17.65
                                                                                       155.14
                     3 0 12 1886.58
13 33 33 4888.94
                                                        -18.86
         100.00
                                                                                                                                                                        202.06
                                                                                                         76.27 14 55 2
116.84 4 30 6
73.11 16 5 56
                                                                                                                                        4288.9
                                                                                                                                                        24.66
                                                                       210.20
                                                                                       159.00
                                                        26.81
                                      4888.94
         100.00
                                                                                                                                                                        354.32
                                    1693.46
                                                                                                                                       1093.5
                                                                                                                                                       -18.24
                                                                                                        116.84
                                                                                       153.55
                                                       -22.01
                                                                         1.41
        110.00
                       4 1 52
                                                                                                                                                                        183.15
                                                                                                                                       4054.8
                                                                                                                                                        27.56
                                                                        191.38
                                                                                      157.95
         110.00
                                                        30.17
                      14 AR 21
                                      4654.82
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 154.6 SR 369.3 SS 390.1
CRT .6152 CRS .8939 CST .2103
LSA 527.6 MSA 191.8 SSA 23.0
                                                                           SCT 480.8 SGR 378.9 SG3 363.6

RRT -.0013 RRF -.2541 RTF -.0955

SGB 612.2 R23 .2544 R13 .0949

SG1 480.8 SG2 378.9 THA 179.85
      TOE -.1081 TRA -.3990 TC3 .2037 BAU .0871
      RDE -. 3624 RRA . . 0821 RC3 -. 0250 FAU . 11909
      FDE .9442 FRA-1.8037 FC3-3.2465 BSP 646
                                                                                                                                   EL1 384.6 EL2 124.6 ALF 72.80
      BDE .3781 BRA .4074 BC3 .2052 FSP -1087
                                                                                                                                                ARRIVAL DATE MAR 10 1966
                                                                                FLIGHT TIME 84.00
  LAUNCH DATE DEC 15 1965
                                                                                DISTANCE 241.788
    HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 28.509 GAL -10.17 A7L 86.81 HCA 111.27 SHA 134.04 ECC .20145 INC 3.1942 V1 30.262 RP 107.89 LAP 2.98 LOP 195.13 VP 38.343 GAP -2.93 A7P 91.16 TAL 231.10 TAP 342.37 RCA 107.04 APO 161.04 V2 35.126 RC 70.553 GL 18.24 GP 4.70 ZAL 150.72 ZAP 55.66 ETS 355.25 ZAE 166.55 ETE 347.30 ZAC 54.15 ETC 164.30 CLP -55.53
    PLANETOCENTRIC CONIC
      C3 31.275 VHL 5.592 DLA -6.07 RAL 287.87 RAD 6568.2 VEL 12.355 PTH 2.23 VMP 3.853 DPA -13.35 RAP 321.53 ECC 1.5147
                                                     INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      UNCH AZMTH LNCH TIME L-1 TIME
90.00 1 41 9 2135.21
                                                                                                                                      1535.2
                                                                                                                                                       -14.36
                                                                                      155.23
                                                                                                                       2 16 44
                                                                                                        112.57
                                                         -17.57
                                                                         36.52
                                                                                                          77.29 13 34 24
113.72 3 30 59
76.16 14 54 6
116.94 4 29 26
72.99 16 5 1
                                                                                                                                                                         222.18
                                                                                                                                                         23.51
                                                                                                                                         4557.4
                                                                                       158.86
                      12 8 27
                                                          25.52
                                                                        230.28
                                       5157.35
          90.00
                                                                                                                                                                          10.20
                                                                                                                                                         -15.38
                                                                                                         113.72
                                                                                                                                         1282.1
                                                                                       154.70
                        2 59 37
                                                         -18.74
                                                                         17.38
                                      1882.09
         100.00
                                                                                                                                                                         201.84
                                                                                                                                         4285.7
                                                                                                                                                         24.59
                      13 32 40 4885.71
                                                          26.76
                                                                        209.97
                                                                                       158.54
         100.00
                                                                                                                                                                         354.06
                                                                                                                                         1089.0
                                                                                                                                                         -18.09
                                                                                                         116.94
                                                                                        153.12
                        4 1 16 1689.04
                                                         -21.88
                                                                          1.14
         110.00
                                                                                                                                                         27.48
                                                                                                                                         4051.5
                                                                                        157.49
                      14 47 30
                                       4651.52
                                                         30.11
                                                                        191.14
         110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 161.5 SR 365.7 SS 408.8

CRT .4854 CRS .8946 CST .0566

LSA 535.7 MSA 198.4 SSA 22.7

EL1 375.3 EL2 137.5 ALF 75.98
                                                                            SGT 484.8 SGR 376.0 SG3 402.1
       TOE -.0866 TRA -.4362 TC3 .1419 BAU .0595
                                                                            RRT -. 0579 RRF -. 2975 RTF . 0828
       ROE -.3559 RRA .0883_RC3 -.0113 FAU .13053
                                                                            SGB 613.6 R23 .2850 R13 -.1075
      FOE 1.0304 FRA-1.9908 FC3-3.6132 BSP 464
BDE .3663 BRA .4451 BC3 .1424 FSP -1222
                                                                           SG1 486.1 SG2 374.5 THA 173.65
```

FLIGHT TIME 78.00

```
LAUNCH DATE DEC 16 1965
                                                                        FLIGHT TIME 86.00
                                                                                                                                 ARRIVAL DATE MAR 12 1966
    HELIOCENTRIC CONIC
                                                                       DISTANCE 248.320
    RL 147.22 LAL -.00 LOL 83.83 VL 28.527 GAL -10.10 AZL 86.83 MCA 114.49 SMA 134.18 ECC .19979 INC 3.1650 V1 30.262 RP 107.92 LAP 2.88 LOP 198.35 VP 38.345 GAP -2.36 AZP 91.31 TAL 231.27 TAP 345.77 RCA 107.37 APO 160.99 V2 35.114
                         16.23 GP 5.04 7AL 150.81 7AP 60.81 ETS 355.55 7AE 169.89 ETE 347.09 7AC 52.19 ETC 164.25 CLP -60.69
    PLANETOCENTRIC CONTC
    C3 30.796 VML 5.549 DLA -6.09 RAL 287.78 RAD 6568.2 VEL 12.336 PTM 2.22 VMP 3.682 DPA -13.56 RAP 319.52 ECC 1.5068
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 40 57 2130.66
12 7 55 5154.16
        90.00
                                                  -17.45
                                                                 36.24
                                                                             154.88
                                                                                                          2 16 28
                                                                                            112.66
                                                                                                                         1530.7
                                                                                                                                        -14.23
                                                                                                                                                        29.04
                                                   25.47
                                                                230.05
                                                                              158.50
                                                                                                        13 33 49
                                                                                               77.19
                                                                                                                          4554.2
                                                                                                                                         23.45
                                                                                                                                                       221.97
       100.00 2 59 24 1877.57
100.00 13 32 9 4882.48
110.00 4 1 2 1684.60
110.00 14 47 0 4648.22
                                                                                                        3 30 42
14 53 31
                                                  -18.62
                                                                 17.10
                                                                              154.35
                                                                                             113.82
                                                                                                                          1277.6
                                                                                                                                        -15.24
                                                                                                                                                        9.93
                                                 26.71
                                                                209.75
                                                                              158.17
                                                                                              76.05
                                                                                                                          4282.5
                                                                                                                                         24.53
                                                                                                                                                       201.63
                                                                                             117.05 4 29 7
72.86 16 4 28
                                                  -21.74
                                                                   .87
                                                                              152.77
                                                                                                                          1084.6
                                                                                                                                        -17.94
                                                                                                                                                       353.80
                                                                190.91
                                                   30.04
                                                                              157.12
                                                                                                                          4048.2
                                                                                                                                         27.40
                                                                                                                                                       182.71
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 510.3 SGR 373.6 SG3 439.4

RRT -.1345 RRF -.3460 RTF .2796

SGB 632.5 R23 .2680 R13 -.3213
    TDE -.0631 TRA -.4823 TC3 .0661 BAU .0273
RDE -.3489 RRA .0951 RC3 .0041 FAU .14149
                                                                                                                      ST 163.8 SR 361.5 SS 427.1
CRT .3215 CRS .8976 CST -.1169
LSA 545.6 MSA 204.4 SSA 22.4
    FOE 1.1175 FRA-2.1627 FC3-3.9775 BSP 403
                                                                    5G1 515.4 SG2 366.5 THA 168.50
    BOE .3546 BRA .4916 BC3 .0662 FSP -1345
                                                                                                                     EL1 366.1 EL2 153.1 ALF 79.93
LAUNCH DATE DEC 16 1965
                                                                        FLIGHT TIME 88.00
                                                                                                                                 ARRIVAL DATE MAR 14 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 254.816
    RL 147.22 LAL -.00 LOL 83.83 VL 28.538 GAL -10.02 AZL 86.87 MCA 117.71 SMA 134.26 ECC .19830 INC 3.1343 VI 30.262 RP 107.96 LAP 2.77 LOP 201.58 VP 38.341 GAP -1.81 AZP 91.46 TAL 231.32 TAP 349.03 RCA 107.64 APO 160.88 V2 35.101 RC 74.954 GL 16.20 GP 5.39 ZAL 150.82 ZAP 66.11 ETS 355.87 ZAE 173.45 ETE 346.34 ZAC 50.08 ETC 164.20 CLP -66.00
   PLANETOCENTRIC CONIC
    C3 30.317 VHL 5.506 DLA -6.11 RAL 287.77 RAD 6568.2 VEL 12.316 PTH 2.22 VHP 3.541 DPA -13.79 RAP 317.36 ECC 1.4989

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 41 6 2126.02

12 7 44 5150.92

2 59 33 1872.96

13 31 58 4879.21

4 1 9 1680.07

14 46 51 4644.86
        90.00
                                                 -17.33
                                                                35.95
                                                                            154.61
                                                                                           112.75 2 16 32
                                                                                                                        1526.0
                                                                                                                                       -14.09
                                                                                                                                                        28.76
        90.00
                                                  25.42
                                                                229.83
                                                                              158.21
                                                                                               77.09
                                                                                                        13 33 35
                                                                                                                          4550.9
                                                                                                                                         23.39
                                                                                                                                                       221.75
      100.00
                                                 -18.49
                                                                 16.82
                                                                              154.08
                                                                                             113.91
                                                                                                         3 30 46
                                                                                                                          1273.0
                                                                                                                                         -15.10
                                                                                                                                                         9.66
                                                                                             75.95 14 53 17
117.16 4 29 9
72.74 16 4 16
      100.00
                                                  26.66
                                                                209.52
                                                                              157.88
                                                                                                                          4279.2
                                                                                                                                         24.46
                                                                                                                                                       201.41
      110.00
                                                -21.60
                                                                   .60
                                                                              152.50
                                                                                                                         1080.1
                                                                                                                                         -17.79
                                                                                                                                                       353.54
      110.00
                                                                190.67
                                                                                                                          4044.9
                                                  29.97
                                                                              156.83
                                                                                                                                         27.32
                                                                                                                                                       182.48
   DIFFERENTIAL CORRECTIONS
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 561.8 SGR 371.7 SG3 475.3
RRT -.2261 RRF -.3973 RTF .4615
                                                                                                                      ST 172.2 SR 356.5 SS 441.9
CRT .1307 CRS .9000 CST -.3040
    TOE -.0364 TRA -.535; TC3 -.0215 BAU .0122
    ROE -.3412 RRA .1025 RC3 .0212 FAU .15195
    FOE 1.1909 FRA-2.3208 FC3-4.3391 BSP 620
                                                                   SGB 673.6 R23 .2264 R13 -.5021
                                                                                                                     LSA 554.7 MSA 209.5 SSA 22.1
    BOE .3432 BRA .5448 BC3 .0302 FSP -1475
                                                                SG1 572.2 SG2 355.5 THA 165.99
                                                                                                                     EL1 357.5 EL2 170.3 ALF 85.32
LAUNCH DATE DEC 16 1965
                                                                       FLIGHT TIME 90.00
                                                                                                                                ARRIVAL DATE MAR 16 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 261.278
    RL 147.22 LAL -.00 LOL 83.83 VL 28.541 GAL -9.94 AZL 86.90 MCA 120.93 SMA 134.28 ECC .19695 INC 3.1018 V1 30.262
RP 108.00 LAP 2.66 LOP 204.80 VP 38.332 GAP -1.29 AZP 91.60 TAL 231.25 TAP 352.18 RCA 107.84 APO 160.73 VZ 35.089
RC 77.191 GL 16.17 GP 5.74 ZAL 150.78 ZAP 71.50 ETS 356.22 ZAE 177.17 ETE 342.91 ZAC 47.88 ETC 164.14 CLP -71.40
  PLANETOCENTRIC CONIC
    C3 29.830 VHL 5.462 DLA -6.13 RAL 287.85 RAD 6568.2 VEL 12.296 PTH
                                                                                                2.21 VHP 3.428 OPA -14.00 RAP 315.10 ECC 1.4909
    ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEATH INJETHE PO CST TIM INJEET INJE LONG
                  1 41 35 2121.22
12 7 51 5147.59
3 0 1 1868.21
13 32 7 4875.84
4 1 36 1675.40
14 47 1 4641.42
                                                                           154.41
       90.00
                                                 -17.20
                                                               35.66
                                                                                           112.85
                                                                                                        2 16 56
                                                                                                                        1521.2
                                                                                                                                     -13.96
                                                                                                                                                      28.48
                                                                                           76.98 13 33 39
114.01 3 31 9
75.83 14 53 22
117.27 4 29 31
72.61 16 4 22
        90.00
                                                 25.37
                                                               229.60
                                                                             158.00
                                                                                                                         4547.6
                                                                                                                                       23.33
                                                                                                                                                      221.53
                                                 -18.36
                                                                16.52
                                                                            153.89
                                                                                                                         1268.2
                                                                                                                                        -14.96
                                                                                                                                                       9.36
      100.00
                                                 26,60
                                                              209.28
                                                                          152.31
                                                                            157.67
                                                                                                                         4275.8
                                                                                                                                       24.39
                                                                                                                                                      201.18
                                                 -21.45
                                                                  .31
                                                                                                                         1075.4
                                                                                                                                        -17.63
                                                                                                                                                      353.27
                                                29.90
                                                               190.43
                                                                             156.61
                                                                                                                         4041.4
                                                                                                                                         27.23
                                                                                                                                                      182.25
                                                                HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SCT 642.2 SGR 370.6 SG3 507.0
RRT -.3182 RRF -.4513 RTF .6080
SGB 741.4 R23 .1886 R13 -.6388
SG1 657.1 SG2 343.3 TMA 165.58
    TOE -. 0082 TRA -. 5952 TC3 -. 1223 BAU . 0513
                                                                                                                   5T 188.7 SR 351.0 55 455.2
CRT -.0537 CRS .9043 CST -.4659
    ROE -.3329 RRA .1101 RC3 .0397 FAU .16094
   FOE 1.2572 FRA-2.4457 FC3-4.6709 BSP 1005
BOE .3330 BRA .6053 BC3 .1286 FSP -1582
                                                                                                                     LSA 565.5 MSA 213.9 SSA 21.8
                                                                                                                     EL1 351.2 ELZ 188.3 ALF 92.32
                                                                                                                                ARRIVAL DATE MAR 18 1966
LAUNCH DATE DEC 16 1965
                                                                       FLIGHT TIME 92.00
  HELIOCENTRIC CONIC
                                                                      DISTANCE 267.704
   RL 147.22 LAL -.00 LOL 83.83 VL 28.537 GAL -9.85 AZL 86.93 MCA 124.15 SMA 134.25 ECC .19571 INC 3.0670 V1 30.262 RP 108.04 LAP 2.54 LOP 208.01 VP 38.318 GAP -.79 AZP 91.72 TAL 231.05 TAP 355.20 RCA 107.98 APO 160.53 V2 35.076
   RC 79.446 GL 16.13 GP 6.10 ZAL 150.67 ZAP 76.92 ETS 356.61 ZAE 178.95 ETE 186.73 ZAC 45.65 ETC 164.09 CLP -76.84
  PLANETOCENTRIC CONIC
   C3 29.332 VHL 5.416 OLA -6.16 RAL 288.01 RAD 6568.2 VEL 12.276 PTH 2.21 VHP 3.344 OPA -14.19 RAP 312.79 ECC 1.4827
   LNCH AZMTH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 42 24 2116.20 -17.07 35.35 154.29 112.94 2 17 40 1516.2 -13.81 28.18
                                                -17.07
                                                                35.35
                                                                            154.29
                                                                                            112.94
                                                                                                         2 17 40
       90.00
                   12 8 17
                                5144.18
                                                 25.32
                                                               229.36
                                                                             157.85
                                                                                             76.88 13 34 1
                                                                                                                                         23.26
                                                                                           114.11 3 31 52
75.72 14 53 45
117.39 4 30 13
72.48 16 4 47
                                                -18.22
      100.00
                   3 0 49
                                1863.23
                                                                16.22
                                                                             153.76
                                                                                                                         1263.2
                                                                                                                                        -14.81
      100.00
                 13 32 33 4872.39
                                                26.54
                                                               209.04
                                                                             157.52
                                                                                                                         4272.4
                                                                                                                                        24.32
      110.00
                 4 2 22 1670.51
14 47 29 4637.88
                                                -21.30
                                                                  .01
                                                                             152.18
                                                                                                                         1070.5
      110.00
                                                29.83
                                                               190.18
                                                                             156.46
                                                                                                                         4037.9
                                                                                                                                        27.14
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ST 212.3 SR 344.6 SS 465.3

CRT -.2147 CRS .9089 CST -.5947

LSA 576.8 MSA 217.3 SSA 21.4

EL1 349.2 EL2 204.6 ALF 101.54
    TOE .0214 TRA -.6607 TC3 -.2344 BAU .0948
                                                                 SGT 747.8 SGR 370.3 SG3 533.5
                                                                 RRT -.4048 RRF -.5061 RTF .7134
SGB 834.5 R23 .1601 R13 -.7347
SG1 766.3 SG2 330.5 THA 166.01
    RDE -.3238 RRA .1177 RC3 .0593 FAU .16824
   FOE 1.3075 FRA-2.5361 FC3-4.9657 B5P 1464
BOE .3245 BRA .6711 BC3 .2418 F3P -1672
```

ARRIVAL DATE MAR 20 1966

LAUNCH DATE DEC 16 1965

```
DISTANCE 274.097
  HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 28.527 GAL -9.75 AZL 86.97 HCA 127.36 SMA 134.18 ECC .19458 INC 3.0295 VI 30.262 RP 108.08 LAP 2.41 LOP 211.23 VP 38.298 GAP -.31 AZP 91.84 TAL 230.75 TAP 358.11 RCA 108.07 APO 160.29 V2 35.063
    RC 81.719 GL 16.07 GP 6.47 7AL 150.51 7AP 82.31 ETS 357.05 ZAE 175.14 ETE 173.23 ZAC 43.44 ETC 164.05 CLP -82.26
   PLANETOCENTRIC CONIC
                                                                                                              2.20 VMP 3.285 DPA -14.34 RAP 310.51 ECC 1.4743
    C3 28.820 VML 5.368 DLA -6.19 RAL 288.23 RAD 6568.2 VEL 12.255 PTH
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 32 2110.87 -16.92 35.02 154.22 113.05 2 18 43 1510.9 -13.66 27.86 90.00 12 8 58 5140.71 25.26 229.12 157.77 76.77 13 34 39 4540.7 23.19 221.07
                                                                                                          76.77 13 34 39
114.22 3 32 54
                                                                                                                                           1257.9
                                                                                                                                                           -14.65
                   3 1 56 1857.94
13 33 15 4868.87
4 3 27 1665.32
14 48 13 4634.25
                                                                                        153.70
                                                        -18.07
                                                                         15.89
       100.00
                                                                                                       75.60 14 54 24
117.51 4 31 13
72.34 16 5 27
                                                                                                                                           4268.9
                                                                                                                                                            24.24
                                                                                                                                                                            200.71
                                                                                       157.44
                                                       26.48
                                                                        208.80
       100.00
                                                                                                                                                          -17.29
                                                                                                                                                                            352.69
                                                                                                                                           1065.3
                                                       -21.14
                                                                        359.70
                                                                                       152.12
       110.00
                                                                                                                                           4034.3
                                                                                                                                                            27.05
                                                                                                                                                                            181.77
                                                                        189.92
                                                                                        156.37
                                                      29.76
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 873.1 SGR 370.8 SG3 554.7
RRT - .4840 RRF - .5599 RTF .7852
                                                                                                                                      ST 241.7 SR 337.2 SS 470.5
CRT -.3450 CRS .9126 CST -.6920
LSA 587.2 MSA 219.6 SSA 21.1
    TOE .0521 TRA -.7296 TC3 -.3557 BAU .1405
    ROE -.3136 RRA .1251 RC3 .0802 FAU .17386
                                                                            SGB 948.6 R23 .1392 R13 -.7996
SG1 894.1 SG2 316.9 THA 166.68
    FOE 1.3325 FRA-2.5939 FC3-5.2228 BSP 1962
                                                                                                                                      EL1 354.2 EL2 216.0 ALF 112.76
    BDE .3179 BRA .7402 BC3 .3646 FSP -1755
                                                                                                                                                   ARRIVAL DATE MAR 22 1966
                                                                                 FLICHT TIME 96.00
LAUNCH DATE DEC 16 1965
                                                                                 DISTANCE 280.457
  HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 28.512 GAL -9.65 AZL 87.01 HCA 130.57 SMA 134.06 ECC .19353 INC 2.9886 V1 30.262
RP 108.12 LAP 2.27 LOP 214.44 VP 38.275 GAP .15 AZP 91.94 TAL 230.35 TAP .92 RCA 108.12 APO 160.01 V2 35.050
                          15.99 GP 6.84 ZAL 150.30 ZAP 87.59 ETS 357.54 ZAE 171.34 ETE 171.68 ZAC 41.32 ETC 164.04 CLP -87.57
    RC 84.008 GL
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 28.291 VHL 5.319 DLA -6.22 RAL 288.53 RAD 6568.1 VEL 12.234 PTH 2.20 VHP 3.250 DPA -14.44 RAP 308.32 ECC 1.4656
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 14 50 0 2105.11 -16.77 34.67 154.22 113.16 2 20 5 1505.1 -13.49 27.52
90.00 12 9 53 5137.21 25.21 228.88 157.75 76.66 13 35 31 4537.2 23.12 220.83
100.00 3 3 23 1852.24 -17.91 15.55 153.69 114.34 3 34 16 1252.2 -14.48 8.44
100.00 13 34 11 4865.31 26.42 208.55 157.41 75.49 14 55 17 4265.3 24.17 200.48
110.00 4 4 52 1659.75 -20.96 359.36 152.11 117.64 4 32 32 1059.8 -17.10 352.37
110.00 14 49 12 4630.57 29.68 189.66 156.34 72.21 16 6 22 4030.6 26.96 181.53
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 1014.2 SGR 372.1 SG3 568.1
RRT -.5534 RRF -.6124 RTF .8329
SGB 1080.3 R23 .1273 R13 -.8429
                                                                                                                                       ST 275.5 SR 329.0 SS 473.7
CRT -.4427 CRS .9180 CST -.7563
     TOE .0823 TRA -.8011 TC3 -.4858 BAU .1877
     ROE -.3028 RRA .1319 RC3 .1017 FAU .17696
     FOE 1.3448 FRA-2.6031 FC3-5.4154 BSP 2496
BOE .3137 BRA .8119 BC3 .4964 FSP -1801
                                                                                                                                      LSA 599.4 MSA 221.0 SSA 20.6
                                                                                                                                      EL1 367.9 EL2 220.9 ALF 124.04
                                                                             SG1 1036.9 SG2 303.2 THA 167.43
                                                                                                                                                   ARRIVAL DATE HAR 24 1966
                                                                                 FLIGHT TIME 98.00
LAUNCH DATE DEC 16 1965
                                                                                 DISTANCE 286.785
    RL 147.22 LAL -.00 LOL 83.83 VL 28.493 GAL -9.54 AZL 87.06 MCA 133.78 SMA 133.91 ECC .19254 INC 2.9437 VI 30.262 RP 108.16 LAP 2.13 LOP 217.64 VP 38.248 GAP .59 AZP 92.04 TAL 229.85 TAP 3.63 RCA 108.13 APO 159.69 V2 35.036 RC 86.309 GL 15.90 GP 7.22 ZAL 150.04 ZAP 92.72 ETS 358.09 ZAE 167.64 ETE 171.08 ZAC 39.34 ETC 164.08 CLP -92.74
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 27.743 VHL 5.267 DLA -6.27 RAL 288.90 RAD 6568.1 VEL 12.211 PTH 2.19 VMP 3.238 DPA -14.46 RAP 306.28 ECC 1.4566
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          -13.31
                                                                                      154.26
                                                                                                       113.27
                                                                                                                                        1498.8
                      1 46 49 2098.80
12 11 1 5133.78
3 5 11 1846.00
13 35 20 4861.81
                                                                                                                        2 21 48
                                                       -16.60
                                                                          34.28
                                                                                                                                                            23.06
                                                                                                                                                                             220.60
                                                                                                                                           4533.8
                                                                                         157.78
                                                                                                            76.55 13 36 34
                                                                         228.65
         90.00
                                                         25.16
                                                                                                                                                                              8.07
                                                                                                                                           1246.0
                                                                                                                                                            -14.29
                                                                                                          114.46
                                                                                                                        3 35 57
                                                                                         153.73
        100.00
                                                       -17.74
                                                                          15.17
                                                                                                          75.37 14 56 22
117.78 4 34 11
72.07 16 7 30
                                                                                                                                                            24.09
                                                                                                                                                                             200.24
                                                                                                                                           4261.8
                                                                                         157.44
                                                         26.36
                                                                         208.31
        100.00
                                                                                                                                                            -16.89
                                                                                                                                                                             352.02
                                                                                                                                           1053.7
                     4 6 37 1653.67
14 50 24 4626.90
                                                                                        152.16
                                                                         359.00
                                                       -20.77
        110.00
                                                                                                                                                           26.87
                                                                                                                                           4026.9
                                                                                         156.37
                                                                         189.40
                                                        29.60
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 311.8 SR 319.5 SS 471.4

CRT -.5156 CRS .9220 CST -.8020

LSA 610.0 MSA 221.3 SSA 20.2

EL1 388.6 EL2 219.6 ALF 133.65
                                                                             SGT 1165.3 SGR 374.2 SG3 575.8
RRT -.6162 RRF -.6623 RTF .8650
SGB 1223.9 R23 .1197 R13 -.8723
     TOE .1112 TRA -.8732 TC3 -.6226 BAU .2355
     ROE - .2907 RRA .1382 RC3 .1242 FAU .17827
     FOE 1.3290 FRA-2.5810 FC3-5.5631 BSP 3050
     BOE .3112 BRA .8840 BC3 .6349 FSP -1841
                                                                              SG1 1189.3 SG2 288.7 THA 168.10
                                                                                                                                                    ARRIVAL DATE MAR 26 1966
                                                                                  FLIGHT TIME 100.00
LAUNCH DATE DEC 16 1965
                                                                                 DISTANCE 293.082
   HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 28.468 GAL -9.42 A7L 87.11 NCA 136.98 SNA 133.72 ECC .19162 INC 2.8937 V1 30.262 RP 108.20 LAP 1.97 LOP 220.85 VP 38.218 GAP 1.00 A7P 92.12 TAL 229.26 TAP 6.25 RCA 108.10 APO 159.35 V2 35.023 RC 88.623 GL 15.78 GP 7.62 TAL 149.73 ZAP 97.64 ETS 358.69 ZAE 164.08 ETE 170.70 ZAC 37.55 ETC 164.20 CLP -97.71
    PLANETOCENTRIC CONIC
     C3 27.176 VML 5.213 DLA -6.33 RAL 289.34 RAD 6568.1 VEL 12.188 PTH 2.19 VMP 3.245 DPA -14.40 RAP 304.42 ECC 1.4472 LNCH AZWITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZWITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          1491.7
                     1 49 1 2091.75
12 12 17 5130.54
3 7 21 1839.04
13 36 39 4858.47
4 8 43 1646.93
14 51 46 4623.35
                                                                                                                         2 23 53
                                                                                        154.35
                                                                                                          113.40
                                                         -16.41
                                                                           33.85
         90.00
                                                                                                                                                                              220.39
                                                                                                                                             4530.5
                                                                                          157.86
                                                                                                            76.45
                                                                                                                         13 37 48
                                                                          228.42
                                                         25.10
          90.00
                                                                                                            114.60 3 38 0
75.26 14 57 37
                                                                                                                                                             -14.08
                                                                                                                                                                                7.66
                                                                                                                                            1239.0
                                                          -17.54
                                                                           14.74
                                                                                          153.82
         100.00
                                                                                                                                                                              200.02
                                                                                                                                                             24.02
                                                                                                                                             4258.5
                                                                                          157.53
                                                         26.30
                                                                          208.08
         100.00
                                                                                                                                                            -16.66
26.78
                                                                                                                                                                              351.63
                                                                                                            117.93 4 36 10
71.94 16 8 50
                                                                                                                                             1046.9
                                                         -20.56
                                                                          358.59
                                                                                         152.25
         110.00
                                                                                                                                             4023.4
                                                                                                                                                                              181.05
                                                        29.53
                                                                          189.15
                                                                                          156.45
        110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 349.0 SR 309.0 SS 465.9
CRT -.5694 CRS .9264 CST -.8323
                                                                           SGT 1322.8 SGR 377.0 SG3 576.8

RRT -.6719 RRF -.7094 RTF .8868

SGB 1375.5 R23 .1172 R13 -.8923

SG1 1347.9 SG2 274.0 THA 168.69
      TOE .1381 TRA -.9444 TC3 -.7650 BAU .2830
     ROE -.2777 RRA .1438 RC3 .1476 FAU .17750
FDE 1.2964 FRA-2.5216 FC3-5.6546 BSP 3617
BOE .3102 BRA .9553 BC3 .7791 FSP -1856
                                                                                                                                      LSA 620.7 MSA 220.6 SSA 19.8
                                                                                                                                     EL1 414.0 EL2 214.1 ALF 141.05
```

FLIGHT TIME 94.00

LAUNCH DATE DEC 16 1965

ARRIVAL DATE MAR 28 1966

```
HELIOCENTRIC CONIC
                                                                                     DISTANCE 299.349
     RL 147.22 LAL -.00 LOL 83.83 VL 28.440 GAL -9.30 AZL 87.16 MCA 140.19 SMA 133.51 ECC .19075 INC 2.8374 V1 30.262
RP 108.24 LAP 1.82 LOP 224.05 VP 38.185 GAP 1.40 AZP 92.18 TAL 228.59 TAP 8.78 RCA 108.04 APO 158.97 VZ 35.010
RC 90.946 GL 15.63 GP 8.05 ZAL 149.37 ZAP 102.32 ETS 359.37 ZAE 160.72 ETE 170.37 ZAC 35.97 ETC 164.44 CLP-102.45
    PLANETOCENTRIC CONIC
     C3 26.586 VML 5.156 OLA -6.41 RAL 289.84 RAO 6568.1 VEL 12.164 PTH 2.18 VMP 3.270 OPA -14.25 RAP 302.80 ECC 1.4375 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 51 39 2083.72 -16.19 33.36 154.49 113.55 2 26.23 1483.7 -12.87 26.26 90.00 12 15 40 5127.67 25.06 228.22 158.00 76.36 13 39 8 4527.7 22.93 220.20 100.00 3 9 57 1831.15 -17.32 14.26 153.96 114.75 3 40 28 1231.1 -13.84 7.20 100.00 13 38 4 4855.47 26.25 207.87 157.86 75.17 14 58 59 4255.5 23.96 199.82 110.00 4 11 13 1639.32 -20.31 358.13 152.39 118.10 4 38 32 1039.3 -16.40 351.20 110.00 14 53 17 4620.06 29.46 188.92 156.59 71.82 16 10 17 4020.1 26.69 180.83
     C3 26.586 VHL 5.156 OLA -6.41 RAL 289.84 RAD 6568.1 VEL 12.164 PTH
                                                                                                                    2.18 VHP 3.270 OPA -14.25 RAP 302.80 ECC 1.4375
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                 SGT 1482.9 SGR 380.7 SG3 570.9

RRT -.7208 RRF -.7536 RTF .9013

SGB 1531.0 R23 .1203 R13 -.9057
                                                                                                                                      ST 385.8 SR 297.8 SS 458.9
CRT -.6096 CRS .9322 CST -.8506
LSA 632.2 MSA 219.4 SSA 19.3
     TOE .1625 TRA-1.0130 TC3 -.9113 BAU .3296
     ROE -.2642 RRA .1482 RC3 .1715 FAU .17458
     FOE 1.2556 FRA-2.4237 FC3-5.6850 BSP 4178
     BOE .3101 BRA 1.0238 BC3 .9273 FSP -1836
                                                                                 SG1 1508.9 SG2 259.3 THA 169.19
                                                                                                                                             EL1 441.6 EL2 206.3 ALF 146.63
LAUNCH DATE DEC 16 1965
                                                                                      FLIGHT TIME 104.00
                                                                                                                                                           ARRIVAL DATE MAR 30 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 305.588
    RL 147.22 LAL -.00 LOL 83.83 VL 28.408 GAL -9.17 A7L 87.23 MCA 143.39 SMA 133.27 ECC .18993 INC 2.7730 V1 30.262
RP 108.29 LAP 1.65 LOP 227.25 VP 38.149 GAP 1.79 A7P 92.23 TAL 227.85 TAP 11.23 RCA 107.95 APO 158.58 V2 34.996
RC 93.279 GL 15.44 GP 8.53 ZAL 148.98 ZAP 106.73 ETS .13 ZAE 157.56 ETE 170.00 ZAC 34.63 ETC 164.83 CLP-106.93
   PLANETOCENTRIC CONIC
     C3 25.973 VHL 5.096 DLA -6.52 RAL 290.41 RAD 6568.1 VEL 12.139 PTH 2.18 VHP 3.310 DPA -13.99 RAP 301.43 ECC 1.4275 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                      1 54 47 2074.39
12 15 5 5125.45
                                                                                          154.67
                                                           -15.94
                                                                             32.80
                                                                                                              113.72
                                                                                                                                2 29 22
                                                                                                                                               1474.4
                                                                                                               76.29 13 40 30
114.93 3 43 23
75.09 15 0 25
118.30 4 41 21
71.72 16 11 50
         90.00
                                                             25.02
                                                                            228.07
                                                                                             158.19
                                                                                                                                                   4525.5
                                                                                                                                                                     22.89
                                                                                                                                                                                      220.05
                     3 13 1 1822.00
13 39 32 4853.08
4 14 10 1630.57
14 54 53 4617.27
        100.00
                                                           -17.06
                                                                             13.71
                                                                                             154.14
                                                                                                                                                  1222.0
                                                                                                                                                                    -13.56
                                                                                                                                                                                        6.67
        100.00
                                                                            207.70
                                                                                           157.85
152.57
                                                            26.21
                                                                                                                                                   4253.1
                                                                                                                                                                    23.91
                                                                                                                                                                                      199.66
        110.00
                                                           -20.03
                                                                             357.61
                                                                                                                                                  1030.6
                                                                                                                                                                   -16.09
                                                                                                                                                                                      350.70
        110.00
                                                            29.40
                                                                             188.73
                                                                                             156.78
                                                                                                                                                   4017.3
                                                                                                                                                                      26.62
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                SGT 1644.D SGR 385.6 SG3 561.2
RRT -.7653 RRF -.7947 RTF .9116
                                                                                                                                            ST 421.1 SR 285.3 SS 447.2
CRT -.6388 CRS .9368 CST -.8632
     TOE .1828 TRA-1.0784 TC3-1.0618 BAU .3750
    ROE -.2495 RRA .1520 RC3 .1972 FAU .17054
FOE 1.1935 FRA-2.3089 FC3-5.6842 BSP 4745
BDE .3093 BRA 1.0890 BC3 1.0800 FSP -1815
                                                                                SGB 1688.6 R23 .1263 R13 -.9153
                                                                                                                                             LSA 641.2 MSA 217.3 55A 18.7
                                                                                SG1 1670.8 SG2 244.2 THA 169.60
                                                                                                                                           EL1 468.9 EL2 197.1 ALF 151.00
LAUNCH DATE DEC 16 1965
                                                                                     FLIGHT TIME 106.00
                                                                                                                                                          ARRIVAL DATE APR 1 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 311.799
     RL 147.22 LAL -.00 LOL 83.83 VL 28.373 GAL -9.03 AZL 87.30 HCA 146.58 SMA 133.00 ECC .18916 INC 2.6982 V1 30.262
RP 108.33 LAP 1.49 LOP 230.44 VP 38.111 GAP 2.15 AZP 92.25 TAL 227.03 TAP 13.61 RCA 107.84 APO 158.16 VZ 34.983
RC 95.621 GL 15.19 GP 9.09 ZAL 148.56 ZAP 110.86 ETS .99 ZAE 154.61 ETE 169.56 ZAC 33.53 ETC 165.43 CLP-111.14
   PLANETOCENTRIC CONIC
     C3 25.336 VHL 5.034 OLA -6.68 RAL 291.05 RAD 6568.0 VEL 12.113 PTH 2.17 VHP 3.363 OPA -13.61 RAP 300.32 ECC 1.4170
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            113.91 2 32 55

76.26 13 41 50

115.13 3 46 52

75.04 15 1 49

118.52 4 44 39

71.65 16 13 24
                     1 58 32 2063.30
12 16 26 5124.27
3 16 41 1811.16
13 40 57 4851.64
          90.00
                                                           -15.63
                                                                            32.12
                                                                                         154.89
                                                                                                                               2 32 55 1463.3
          90.00
                                                            25.00
                                                                            227.99
                                                                                             158.44
                                                                                                                                                  4524.3
                                                                                                                                                                     22.67
                                                                                                                                                                                     219.97
        100.00
                                                          -16.74
                                                                             13.06
                                                                                           154.36
                                                                                                                                               1211.2
                                                                                                                                                                   -13.22
        100.00
                                                            26.19
                                                                            207.60
                                                                                             158.10
                                                                                                                                                  4251.6
                                                                                                                                                                   23.88
                      4 17 39 1620.29
14 56 29 4615.28
        110.00
                                                          -19.70
                                                                            357.00
                                                                                            152.79
                                                                                                                                                 1020.3
                                                                                                                                                                                     350.12
       110.00
                                                           29.36
                                                                            188.59
                                                                                            157.03
                                                                                                                                                 4015.3
   DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 1802.7 SGR 392.1 SG3 546.6

RRT -.8040 RRF -.8325 RTF ..9164

SGB 1844.9 R23 ..1379 R13 -.9217

SGI 1830.5 SG2 229.6 THA 169.92
                                                                                                                                            ST 454.0 SR 272.3 S5 434.3
CRT -.6608 CRS .9427 CST -.8689
     TOE .1995 TRA-1.1384 TC3-1.2150 BAU .4185
    RDE -.2345 RRA .1548 RC3 .2243 FAU .16499
FOE 1.1280 FRA-2.1677 FC3-5.6376 BBP 5289
BDE .3078 BRA 1.1489 BC3 1.2355 FSP -1765
                                                                                                                                             LSA 649.8 MSA 215.1 SSA 18.0
                                                                                                                                             EL1 495.1 EL2 187.4 ALF 154.47
LAUNCH DATE DEC 16 1965
                                                                                     FLIGHT TIME 108.00
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 317.984
    RL 147.22 LAL -.00 LOL 83.83 VL 28.336 GAL -8.88 AZL 87.39 MCA 149.78 SMA 132.72 ECC .18844 INC 2.6096 V1 30.262 RP 108.37 LAP 1.31 LOP 233.63 VP 38.071 GAP 2.51 AZP 92.26 TAL 226.14 TAP 15.92 RCA 107.71 APO 157.72 VZ 34.970 RC 97.969 GL 14.87 GP 9.75 ZAL 148.10 ZAP 114.70 ETS 2.00 ZAE 151.89 ETE 168.99 ZAC 32.67 ETC 166.28 CLP-115.09
   PLANETOCENTRIC CONIC
     C3 24.673 VHL 4.967 DLA -6.90 RAL 291.76 RAD 6588.0 VEL 12.085 PTH
                                                                                                                   2.16 VMP 3.429 DPA -13.07 RAP 299.46 ECC 1.4060
     ENCH AZMTH ENCH TIME E-I TIME. INJ. LAT. INJ. LONG. INJ. AZMTH. INJ. TIME. PO CST. TIM. INJ. 2 LAT. INJ. 2 LONG
                     2 3 3 2049.77
12 17 33 5124.72
3 21 6 1797.99
13 42 11 4851.74
4 21 48 1607.88
        90.00
                                                           -15.26
                                                                             31.31
                                                                                            155.15
                                                                                                              114.15
                                                                                                                               2 37 13
                                                                                                                                                1449.8
                                                                                                                                                  4524.7
         90.00
                                                           25.01
                                                                            228.02
                                                                                             158.76
                                                                                                                76.27 13 42 58
                                                                                                                                                                   22.88
                                                                                                                             3 51 4
       100.00
                                                           -16.36
                                                                             12.27
                                                                                             154.62
                                                                                                               115.37
                                                                                                                                                  1198.0
                                                                                                                                                                    -12.81
                                                                                                                75.05 15 3 3
118.78 4 48 36
71.62 16 14 53
       100.00
                                                           26.19
                                                                            207.61
                                                                                             158.42
                                                                                                                                                  4251.7
                                                                                                                                                                   23.88
       110.00
                                                          -19.29
                                                                            356.27
                                                                                             153.05
                                                                                                               118.78
                                                                                                                                                 1007.9
                                                                                                                                                                   -15.30
                                                                                                                                                                                    349.42
                                                                                                                                               4014.6
       110.00
                     14 57 58
                                       4614.59
                                                           29.34
                                                                            188.54
                                                                                            157.36
                                                                                                                                                                  26.55
                                                                                                                                                                                    180.47
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SCT 1960.1 SGR 4D1.1 SG3 530.2 ST 483.2 SR 258.0 SS 416.6

RRT -.8387 RRF -.8672 RTF .9232 CRT -.6753 CR3 .9473 CST -.8714

SG8 2000.7 R23 .1533 R13 -.9262 LSA 654.5 MSA 212.0 SSA 17.4

SG1 1989.1 SG2 215.2 TMA 170.14 EL1 518.2 EL2 177.4 ALF 157.38
     TDE .2102 TRA-1.1933 TC3-1.3731 BAU .4606
     ROE -.2185 RRA .1570 RC3 .2548 FAU .15894
    FOE 1.0453 FRA-2.0205 FC3-5.5770 BSP 5842
BDE .3032 BRA 1.2036 BC3 1.3965 FSP -1722
```

FLIGHT TIME 102.00

```
ARRIVAL DATE APR 5 1966
                                                                                       FLIGHT TIME 110.00
LAUNCH DATE DEC 16 1965
                                                                                      DISTANCE 324.143
    RE 147.22 EAL -.00 LOL 83.83 VL 28.295 GAL -8.73 A7L 87.50 MCA 152.97 SHA 132.41 ECC .18776 INC 2.5024 VI 30.262 RP 108.41 LAP 1.14 LOP 236.82 VP 38.029 GAP 2.84 A7P 92.23 TAL 225.20 TAP 18.17 RCA 107.55 APO 157.27 V2 34.957 RC 100.323 GL 14.44 GP 10.56 TAL 147.63 ZAP 118.24 ETS 3.18 ZAE 149.36 ETE 168.25 TAC 32.05 ETC 167.46 CLP-118.77
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.979 VHL 4.897 DLA -7.21 RAL 292.54 RAD 6568.0 VEL 12.056 PTH 2.15 VMP 3.505 DPA -12.35 RAP 298.84 ECC 1.3946
    C3 23.979 VHL 4.897 DLA -7.21 RAL 292.54 RAD 6568.0 VEL 12.056 PTH 2.15 VHP 3.505 DPA -12.35 RAP 298.84 ECC 1.3946 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 8 35 2032.81 -14.78 30.29 155.45 114.43 2 42 28 1432.8 -11.36 23.28 90.00 12 18 16 5127.68 25.06 228.22 159.15 76.36 13 43 43 4527.7 22.93 220.20 100.00 3 26 29 1781.54 -15.88 11.28 154.92 115.66 3 56 10 1181.5 -12.30 4.32 100.00 13 43 3 4854.18 26.23 207.78 158.82 75.12 15 3 58 4254.2 23.93 199.74 110.00 4 26 50 1592.58 -18.79 355.37 153.34 119.10 4 53 22 992.6 -14.77 348.56 110.00 14 59 12 4615.91 29.37 188.63 157.76 71.67 16 16 8 4015.9 26.59 180.55
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 508.2 SR 243.3 SS 397.3
CRT - 6843 CRS .9528 CST - 8685
LSA 656.7 MSA 209.2 SSA 16.6
                                                                                  SGT 2112.6 SGR 413.2 SG3 510.6
RRT -.8679 RRF -.8983 RTF .9261
SGB 2152.7 R23 .1754 R13 -.9290
     TOE .2155 TRA-1.2406 TC3-1.5345 BAU .5006
     ROE -.2022 RRA .1582 RC3 .2887 FAU .15196
FDE .9607 FRA-1.8569 FC3-5.4864 BSP 6357
BDE .2955 BRA 1.2507 BC3 1.5615 FSP -1654
                                                                                                                                                EL1 537.9 EL2 167.6 ALF 159.82
                                                                                   SG1 2143.1 SG2 202.4 THA 170.28
                                                                                                                                                               ARRIVAL DATE APR 7 1966
                                                                                        FLIGHT TIME 112.00
LAUNCH DATE DEC 16 1965
     RL 147.22 LAL -.00 LOL 83.83 VL 28.253 GAL -8.57 AZL 87.63 MCA 156.16 SMA 132.10 ECC .18713 INC 2.3688 VI 30.262 RP 108.44 LAP .96 LOP 240.01 VP 37.986 GAP 3.17 AZP 92.17 TAL 224.19 TAP 20.36 RCA 107.38 APO 156.81 VZ 34.945 RC 102.682 GL 13.86 GP 11.58 ZAL 147.14 ZAP 121.48 ETS 4.63 ZAE 147.00 ETE 167.28 ZAC 31.64 ETC 169.05 CLP-122.21
                                                                                       DISTANCE 330.278
    HELIOCENTRIC CONIC
     C3 23.251 VHL 4.822 OLA -7.66 RAL 293.41 RAD 6567.9 VEL 12.026 PTH 2.15 VHP 3.591 DPA -11.37 RAP 298.44 ECC 1.3827 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 15 34 2010.85 -14.16 28.98 155.79 114.78 2 49 4 1410.8 -10.70 22.01
    PLANETOCENTRIC CONIC
                       2 15 34 2010.85
12 18 13 5134.58
3 33 13 1760.32
13 43 14 4860.34
4 33 3 1573.00
14 59 54 4620.43
                                                                                                                               13 43 47
                                                                                                                     76.58
                                                                               228.70
                                                                                                159.64
                                                              25.17
          90.00
                                                                                                                    116.02 4 2 33
75.32 15 4 15
119.48 4 59 16
                                                                                                                                                                        -11.63
                                                                                                                                                                                             3.10
                                                                                                                                                      1160.3
                                                              -15.25
                                                                                10.02
                                                                                                155.26
                                                                                                                    116.02
         100.00
                                                                                                                                                                        24.06
                                                                                                                                                                                           200.14
                                                                                                                                                       4260.3
                                                             26.34
                                                                               208.21
                                                                                                159.32
         100.00
                                                                                                                                                                        -14.07
                                                                                                                                                                                          347.46
                                                                                                153.67
                                                                                                                    119.48
                                                              -18.14
                                                                               354.22
                                                                                                                                16 16 55
                                                                                                                                                                        26.70
                                                                                                                                                                                          180.85
                                                                                                                                                       4020.4
                                                                                                158.27
                                                                                                                     71.83
                                                                               188.95
                                                             29.47
         110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SCT 2263.0 SGR 430.6 SG3 490.4
RRT -.8926 RRF -.9257 RTF .9281
SCB 2303.6 R23 .2026 R13 -.9310
                                                                                                                                                ST 527.2 SR 227.2 SS 372.1
CRT -.6852 CRS .9566 CST -.8623
LSA 652.3 MSA 205.3 SSA 15.8
      TOE .2116 TRA-1.2810 TC3-1.7036 BAU .5394
      ROE -.1849 RRA .1592 RCJ .3290 FAU .14486
FOE .8591 FRA-1.6940 FCJ-5.3935 BSP 6883
                                                                                                                                                  EL1 551.9 EL2 158.1 ALF 162.02
                                                                                   5G1 2295.6 8G2 191.4 THA 170.29
      BDE .2810 BRA 1.2908 BC3 1.7351 FSP -1596
                                                                                                                                                              ARRIVAL DATE APR 9 1966
                                                                                        FLIGHT TIME 114.00
 LAUNCH DATE DEC 16 1965
                                                                                       01STANCE 336.390
     RL 147.22 LAL -.00 LOL 83.83 VL 28.208 GAL -8.40 A7L 87.80 MCA 159.35 SMA 131.77 ECC .18654 INC 2.1969 VI 30.262 RP 108.48 LAP .77 LOP 243.20 VP 37.941 GAP 3.48 A7P 92.06 TAL 223.13 TAP 22.48 RCA 107.19 APO 156.35 V2 34.932 RC 105.043 GL 13.04 GP 12.93 ZAL 146.66 ZAP 124.40 ETS 6.45 ZAE 144.77 ETE 165.98 ZAC 31.45 ETC 171.21 CLP-125.42
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 22.482 VHL 4.742 DLA -8.33 RAL 294.38 RAD 6567.9 VEL 11.994 PTH 2.14 VMP 3.690 DPA -10.05 RAP 298.22 ECC 1.3700
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
                                                                                                                 115.23 2 57 39

76.99 13 42 39

116.48 4 10 48

75.72 15 3 26

119.97 5 6 46

72.19 16 16 51
                                                                                                                                                   1381.3
                       2 24 38 1981.27
12 16 51 5147.79
3 41 57 1731.87
13 42 14 4872.43
                                                              -13.31
                                                                               27.22
           90.00
                                                                                                                                                                          23.33
                                                                                                                                                                                           221.54
                                                                                                                                                       4547.8
                                                                                                160.27
                                                              25.37
                                                                               229.61
           90.00
                                                                                                                                                                        -10.72
                                                                                                                                                                                            1.48
                                                                                                                                                      1131.9
                                                                                                155.65
                                                                                 8.34
                                                              -14.39
         100.00
                                                                                                                                                                        24.32
                                                                                                                                                                                          200.95
                                                                                                                                                      4272.4
                                                                                                159.95
                                                                                                                                                                       -13.14
                                                                               209.05
                                                              26.54
         100.00
                                                                                                                                                                                           346.02
                                                                                                                                                       947.0
                                                                                               154.05
                         4 40 59 1547.00
14 59 41 4430 07
                                                                               352.72
                                                              -17.26
         110.00
                                                                                                                                                                                           181.49
                                                                                                                                                       4030.1
                                                                                                158.94
                                                                               189.62
         110.00
                        14 59 41
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                CRT - .6767 CRS .9602 CST - .8493
LSA 640.9 MSA 201.9 S5A 14.9
EL1 558.8 EL2 149.3 ALF 164.04
     DIFFERENTIAL CORRECTIONS
                                                                                   SGT 2407.8 SGR 454.5 SG3 467.9
RRT -.9113 RRF -.9488 RTF ..9288
      TOE .1973 TRA-1.3109 TC3-1.8798 BAU .5763
      RDE -.1669 RRA .1591 RC3 .3774 FAU .13711
FDE .7495 FRA-1.5196 FC3-5.2797 BSP 7375
                                                                                   SGB 2450.3 R23 .2364 R13 -.9320
SG1 2443.4 SG2 184.4 THA 170.18
       BOE .2584 BRA 1.3205 BC3 1.9173 FSP -1519
                                                                                                                                                                ARRIVAL DATE APR 11 1966
                                                                                         FLIGHT TIME 116.00
  LAUNCH DATE DEC 16 1965
                                                                                        DISTANCE 342.480
      RL 147.22 LAL -.00 LOL 83.83 VL 28.162 GAL -8.22 AZL 88.03 MCA 162.54 SMA 131.43 ECC .18600 INC 1.9656 V1 30.262
RP 108.52 LAP .59 LOP 246.38 VP 37.896 GAP 3.78 AZP 91.88 TAL 222.02 TAP 24.56 RCA 106.98 APO 155.87 V2 34.920
RC 107.406 GL 11.85 GP 14.75 ZAL 146.22 ZAP 126.94 ETS 8.82 ZAE 142.59 ETE 164.21 ZAC 31.48 ETC 174.15 CLP-128.42
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 21.664 VHL 4.654 DLA -9.35 RAL 295.47 RAD 6567.9 VEL 11.960 PTH 2.13 VMP 3.803 DPA -8.21 RAP 298.13 ECC 1.3565
                                                            INI LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                                    1339.5
                                                                                                                                   3 9 22
                                                                                                                   115.80
                                                                                 24.76
                                                                                                156.67
                          2 37 3 1939.46
                                                               -12.08
           90.00
                                                                                                                    77.75 13 39 23
117.08 4 22 0
76.46 15 0 41
120.61 5 16 48
72.87 16 15 15
                                                                                                                                                                                            223.14
                                                                                                                                                                           23.78
                                                                                                                                                        4571.7
                                                                                231.27
                                                                                                  161.11
                         12 13 11
                                                                25.73
                                           5171.65
            90.00
                                                                                                                                                                                            359.21
                                                                                                                                                                            -9.43
                                                                                                                                                        1091.8
                                                                                                156.12
                                                                                  6.00
                           3 53 48 1691.81
                                                              -13.16
          100.00
                                                                                                                                                                                            202.44
                                                                                                                                                                           24.77
                                                                                                                                                        4294.5
                                                                                                  160.81
                                                                                210.59
                         13 39 6 4894.53
                                                               26.90
          100.00
                                                                                                                                                                                            344.03
                                                                                                                                                                          -11.83
                                                                                                                                                         910.8
                                                                                                  154.49
                                                                                350.64
                          4 51 38 1510.75
                                                              -16.01
          110.00
                                                                                                                                                                                            182.72
                                                                                                                                                        4048.4
                                                                                                  159.83
                                                                                190.92
                         14 57 46
                                                              30.04
          110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                   SGT 2550.8 SGR 489.4 SG3 444.6 ST 540.8 SR 190.5 S5 302.0 RRT -.9247 RRF -.9675 RTF .9291 CRT -.6504 CRS .9601 CST -.8297 SG8 2597.3 R23 .2727 R13 -.9327 LSA 617.7 MSA 195.7 SSA 14.1 SG1 2590.9 SGZ 183.5 THA 169.89 EL1 555.8 ELZ 140.8 ALF 166.19
      DIFFERENTIAL CORRECTIONS
       TOE .1651 TRA-1.3301 TC3-2.0697 BAU .6128
       RDE -.1467 RRA .1588 RC3 .4398 FAU .12919
       FOE .6137 FRA-1.3447 FC3-5.1628 BSP 7885
BOE .2209 BRA 1.3395 BC3 2.1159 FSP -1449
```

. .

22

```
LAUNCH DATE DEC 18 1965
                                                                          FLIGHT TIME 118.00
                                                                                                                                     ARRIVAL DATE APR 13 1966
    HELIOCENTRIC CONIC
                                                                         DISTANCE 348.548
     RL 147.22 LAL -.00 LOL 83.83 VL 28.114 GAL -8.04 ATL 88.36 MCA 165.72 SMA 131.08 ECC .18552 INC 1.6349 VI 30.262
RP 108.58 LAP .40 LOP 249.56 VP 37.850 GAP 4.07 AZP 91.58 TAL 220.86 TAP 26.58 RCA 106.76 APO 155.40 V2 34.909
RC 109.770 GL 10.03 GP 17.37 ZAL 145.83 ZAP 128.99 ETS 12.06 ZAE 140.32 ETE 161.72 ZAC 31.78 ETC 178.30 CLP-131.25
    PLANETOCENTRIC COMIC
     C3 20.784 VML 4.559 OLA -10.97 RAL 296.75 RAD 6567.8 VEL 11.923 PTH 2.12 VMP 3.941 OPA -5.57 RAP 298.08 ECC 1.3421
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 55 17 1876.28
12 5 10 5214.89
4 11 8 1631.58
13 32 0 4934.83
5 6 55 1456.86
14 52 42 4682.31
         90.00
                                                  -10.18
                                                                  21.09
                                                                               157.30
                                                                                              116.56 3 26 33
                                                                                                                            1276.3
         90.00
                                                    26.32
                                                                  234.30
                                                                                 162.30
                                                                                                 79.15
                                                                                                            13 32 5
                                                                                                                               4614.9
                                                                                                                                               24.56
                                                                                                                                                            226.07
       100.00
                                                  -11.27
                                                                   2.53
                                                                                 156.74
                                                                                                117.87 4 38 19
                                                                                                                              1031.6
                                                                                                                                               -7.45
                                                                                                                                                            355.82
                                                                                                77.83 14 54 15
121.46 5 31 12
74.17 16 10 44
       100.00
                                                    27.52
                                                                  213.43
                                                                                 162.03
                                                                                                                              4334.8
                                                                                                                                              25.56
                                                                                                                                                            205.17
       110.00
                                                  -14.12
                                                                  347.61
                                                                                 155.07
                                                                                                                                               -9.86
                                                                                                                                                            341.11
       110.00
                                                  30.70
                                                                  193.34
                                                                                 161.12
                                                                                                                              4082.3
                                                                                                                                              28.22
                                                                                                                                                            185.02
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      5GT 2687.D SGR 539.9 SG3 417.6
RRT -.9316 RRF -.9815 RTF .9286
     TOE .1075 TRA-1.3314 TC3-2.2735 BAU .6482
                                                                                                                          ST 532.5 SR 166.5 5S 249.0
CRT -.5931 CRS .9533 CST -.7994
    ROE -.1230 RRA .1569 RC3 .5228 FAU .12027
FOE .4502 FRA-1.1527 FC3-5.0099 BSP 8353
BOE .1634 BRA 1.3406 BC3 2.3328 FSP -1357
                                                                      SG8 2740.6 R23 .3081 R13 -.9328
                                                                                                                          LSA 582.3 MSA 184.4 55A
                                                                                                                                                               13.6
                                                                      SG1 2734.0 SGZ 192.9 THA 169.34
                                                                                                                          EL1 542.2 EL2 131.7 ALF 168.83
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 120.00
                                                                                                                                     ARRIVAL DATE APR 15 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 354.596
    RL 147.22 LAL -.00 LOL 83.83 VL 28.065 GAL -7.84 AZL 88.88 MCA 168.90 SMA 130.72 ECC .18509 INC 1.1194 V1 30.262
RP 108.59 LAP .22 LOP 252.73 VP 37.803 GAP 4.35 AZP 91.10 TAL 219.66 TAP 28.56 RCA 106.53 APO 154.92 V2 34.897
    RC 112.133 GL
                          7.01 GP 21.39 7AL 145.51 7AP 130.25 ETS 16.71 7AE 137.62 ETE 158.08 7AC 32.52 ETC 184.44 CLP-133.94
   PLANETOCENTRIC CONIC
    C3 19.845 VHL 4.455 DLA -13.75 RAL 298.35 RAD 6567.8 VEL 11.884 PTH
                                                                                                    2.11 VHP 4.127 DPA -1.53 RAP 297.93 ECC 1.3266
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                     3 25 20 1770.77
                                                    -6.92
                                                                  15.07
                                                                               158.37
                                                                                               117.53
                                                                                                             3 54 50
                                                                                                                             1170.8
                                                                                                                                              -3.17
                                                                                                                                                              8.38
                                 5298.34
1531.69
        90.00
                   11 47 51
                                                    27.25
                                                                  240.23
                                                                                 164.24
                                                                                                  81.99
                                                                                                                              4698.3
                                                                                                                                               25.86
                                                                                                                                                            231.84
       100.00
                     4 39 25
                                                    -8.04
                                                                  356.88
                                                                                157.76
                                                                                                118.89
                                                                                                             5 4 57
                                                                                                                               931.7
                                                                                                                                               -4.12
                                                                                                                                                            350.28
                   13 16 26 5012.65
5 31 25 1368.87
14 40 56 4748.24
       100.00
                  13 16 26
                                                                                                  80.60 14 39 59
                                                   28.51
                                                                 219.00
                                                                                164.03
                                                                                                                              4412.6
                                                                                                                                              26.91
                                                                                                                                                            210.56
                                                                                                122.59 5 54 13
76.81 16 0 5
       110.00
                                                   -10.94
                                                                  342.78
                                                                                156.01
                                                                                                                               768.9
                                                                                                                                               -6.57
                                                                                                                                                            336.42
       110.00
                                                  31.62
                                                                  198.15
                                                                                163.26
                                                                                                                              4148.2
                                                                                                                                              29.68
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-GOURSE EXECUTION ACCURACY
    TOE -.0018 TRA-1.3083 TC3-2.5007 BAU .6851
                                                                                                                          ST 524.0 SR 130.1 SS 174.0
CRT -.4768 CRS .9042 CST -.7929
LSA 546.9 MSA 149.7 SSA 14.6
                                                                     SGT 2822.2.SGR 618.4 SG3 385.5
                                                                     RRT -.9327 RRF -.9912 RTF .9280
5G8 2889.2 R23 .3338 R13 -.9333
    ROE -. 0884 RRA .1531 RC3 .6432 FAU .10996
    FOE .2215 FRA -.9436 FC3-4.7969 BSP 8861
BOE .0884 BRA 1.3172 BC3 2.5821 FSP -1258
                                                                     5G1 2880.9 SG2 218.6 THA 168.38
                                                                                                                          EL1 527.8 EL2 113.5 ALF 172.92
LAUNCH DATE DEC 16 1965
                                                                         FLIGHT TIME 122.00
                                                                                                                                    ARRIVAL DATE APR 17 1966
   HELIOCENTRIC CONTC
                                                                         DISTANCE 360.623
    RL 147.22 LAL -.00 LOL 83.83 VL 28.015 GAL -7.84 AZL 89.80 HCA 172.08 SMA 130.36 ECC .18471 INC .1922 V1 30.262
RP 108.63 LAP .03 LOP 255.91 VP 37.755 GAP 4.82 AZP 90.20 TAL 218.41 TAP 30.49 RCA 106.28 APO 154.44 V2 34.886
RC 114.493 GL 1.27 GP 28.19 ZAL 145.02 ZAP 129.86 ETS 23.82 ZAE 133.63 ETE 152.53 ZAC 34.36 ETC 194.09 CLP-136.65
                        1.27 GP
   PLANETOCENTRIC CONIC
    C3 18.960 VHL 4.354 DLA -19.16 RAL 300.65 RAO 6567.8 VEL 11.847 PTH 2.10 VHP 4.443 DPA
                                                                                                                                 5.26 RAP 297.32 ECC 1.3120
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 26 58 1558.50 -.12 3.17 161.03 118.32 4 52 56 958.5 3.67 356.53 90.00 11 4 35 5489.00 28.29 254.06 168.03 88.83 12 36 4 4889.0 27.83 245.43
                                                                                            118.32 4 52 56

88.83 12 36 4

119.86 5 58 43

87.27 14 4 14

123.90 6 39 7

83.14 15 33 11
                                                   28.29
                   5 36 28 1334.20
12 37 45 5188.53
                                                                 345.96
       100.00
                                                    -1.42
                                                                                160.31
                                                                                                                              734.2
                                                                                                                                              2.57
                                                                                                                                                           339.44
                                                 29.78
       100.00
                                                                 231.90
                                                                                167.97
                                                                                                                             4588.5
                                                                                                                                             29.08
                                                                                                                                                           223.17
                                                                             158.30
                   5 19 7 1200.59
14 11 37 4894.90
                                                   -4.65
       110.00
                                                                 333.82
                                                                                                                              600.6
                                                                                                                                               -.16
                                                                                                                                                           327.60
                                                 33.57
                                                                                                                                              32.26
       110.00
                                                                 209.23
                                                                                167.60
                                                                                                                             4294.9
                                                                                                                                                           200.24
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SGT 2951.2 SGR 743.1 SG3 338.0
RRT --9269 RRF --9967 RTF -9273
SGB 3043.4 R23 .3459 R13 --9348
SG1 3031.2 SG2 271.5 THA 166.75
                                                                                                                         ST 596.5 SR 69.1 SS 131.2
CRT -.5600 CRS .6198 CST -.9757
    TOE -.2215 TRA-1.2336 TC3-2.7348 BAU .7239
    ROE -.0225 RRA .1401 RC3 .8227 FAU .09537
    FOE -.1148 FRA -.6811 FC3-4.3550 BSP 9358
BOE .2227 BRA 1.2415 BC3 2.8558 FSP -1103
                                                                                                                         LSA 611.4 MSA 58.3 SSA 25.2
EL1 597.8 EL2 57.1 ALF 176.26
LAUNCH DATE DEC 16 1965
                                                                         FLIGHT TIME 124.00
                                                                                                                                    ARRIVAL DATE APR 19 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 366.627
    RL 147.22 LAL -.00 LOL 83.83 VL 27.965 GAL -7.43 A7L 91.94 MCA 175.25 SMA 130.00 ECC .18438 INC 1.9394 V1 30.262
RP 108.66 LAP -.16 LOP 259.08 VP 37.708 GAP 4.88 A7P 88.06 TAL 217.12 TAP 32.37 RCA 106.03 APO 153.97 V2 34.875
RC 116.852 GL -12.34 GP 41.48 ZAL 141.87 ZAP 125.03 ETS 35.10 ZAE 125.45 ETE 144.30 ZAC 39.90 ETC 209.88 CLP-140.02
   PLANETOCENTRIC CONIC
    C3 19.339 VHL 4.398 DLA -32.14 RAL 305.47 RAD 6567.8 VEL 11.863 PTH 2.10 VHP 5.265 DPA 18.36 RAP 295.00 ECC 1.3183
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              113.72
                                                                                                             6 22 52
       74.13
                     6 1 32 1279.86
                                                   22.35
                                                                 354.17
                                                                              174.58
                                                                                                                                           25.36
                                                                                                                                                        346.48
                                                                                               113.71 11 44 45
113.72 6 22 52
113.71 11 44 45
121.21 9 16 53
106.35 13 34 3
      105.87
                  10 8 28
                                  5776.99
                                                    22.36
                                                                 273.48
                                                                                174.58
                                                                                                                              5177.0
                                                                                                                                             25.37
                                                                                                                                                           265.79
       74.13
                    6 1 32 1279.86
                                                   22.35
                                                                 354.17
                                                                               174.58
                                                                                                                               679.9
                                                                                                                                              25.36
                                                                                                                                                           346.48
      105.87
                   10 8 28 5776.99
                                                   22.36
                                                                 273.46
                                                                                174.58
                                                                                                                             5177.0
                                                                                                                                             25.37
                                                                                                                                                           265.79
                  9 5 28
12 3 42
      110.00
                                   684.20
                                                  14.71
                                                                 306.37
                                                                             170.40
                                                                                                                               84.2
                                                                                                                                             18.73
                                                                                                                                                           299.56
                                  5420.65
                                                   30.45
                                                                 249.37
                                                                  249.37 177.0. HID-COURSE EXECUTION ACCURACY SGT 3078.6 SGR 943.7 SG3 251.9 RRT -.9134 RRF -.9981 RTF ..9300 GCR 3220.0 R23 ..3345 R13 -.9415
                                                                                177.87
                                                                                                                             4820.6
                                                                                                                                             32.38
                                                                                                                                                           240.69
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1136.5 SR 232.8 SS 395.3
CRT -.9662 CRS ..9998 CST -.9669
LSA 1220.7 MSA 109.2 SSA 4.4
EL1 1158.6 EL2 58.8 ALF 168.78
    TOE -.7929 TRA-1.0143 TC3-2.7792 BAU .7664
    ROE .1749 RRA .0843 RC3 1.0307 FAU .06974
    FDE -.6546 FRA -.3142 FC3-3.1219 BSP 9898
BDE .8119 BRA 1.0178 BC3 2.9642 FSP -825
                                                                SGB 3220.0 R23 .3345 R13 -.9415
SGI 3198.7 SGZ 369.7 THA 164.14
```

JPL TM 33-99

```
ARRIVAL DATE APR 21 1966
LAUNCH DATE DEC 16 1965
                                                                                                                                     FLIGHT TIME 126.00
                                                                                                                                    DISTANCE 372.580
     HELIOCENTRIC CONIC
       RL 147.22 LAL -.00 LOL 83.83 VL 27.913 GAL -7.21 A7L 102.47 MCA 178.39 SMA 129.63 ECC .18403 INC12.4705 V1 30.282 RP 108.69 LAP -.35 LOP 262.25 VP 37.660 GAP 5.13 A7P 77.53 TAL 215.78 TAP 34.16 RCA 105.78 APO 153.49 V2 34.865 RC 119.206 GL -52.17 GP 71.58 7AL 116.21 7AP 107.17 ETS 59.21 7AE 101.64 ETE 144.76 7AC 58.35 ETC 240.79 CLP-159.05
     PLANETOCENTRIC CONIC
       C3 57.326 VHL 7.571 OLA -66.57 RAL 340.82 RAD 6569.0 VEL 13.367 PTH 2.44 VHP 10.793 OPA 47.18 RAP 280.74 ECC 1.9434
      C3 57.326 VHL 7.571 OLA -66.57 RAL 340.82 RAD 6569.0 VEL 13.367 PTH 2.44 VHP 10.793 OPA 47.18 RAP 280.74 ECC 1.9434 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 26.86 5 20 51 2019.05 24.85 65.93 239.23 154.01 5 54 30 1419.1 31.99 62.23 153.14 15 31 35 5577.49 24.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.85 65.93 239.25 154.00 17 4 11 4977.5 31.99 62.23 153.14 15 31 13 5577.49 24.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.85 65.93 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.85 65.93 239.25 154.01 5 54 30 1419.1 31.99 62.23 153.14 15 31 13 5577.49 24.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.85 65.93 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 5 20 51 2019.05 24.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 258.07 239.25 154.00 17 4 11 4977.5 31.99 254.37 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26.86 26
                                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                            SGT 3348.9 SGR 782.5 SG3 96.4

RRT -.8066 RRF -.9183 RTF .9747

SGB 3439.1 R23 .1985 R13 -.9801
                                                                                                                                                                                                                          ST 3038.2 SR 462.5 SS 860.3

CRT -.9567 CRS .9768 CST -.9968

LSA 3188.0 MSA 146.5 SSA .4
       TOE-4.0075 TRA .3135 TC3 -.8514 BAU .6791
       ROE .5730 RRA -.2809 RC3 .2458 FAU .02098
FOE-1.2072 FRA .2233 FC3 -.3169 BSP 10695
BOE 4.0483 BRA .4209 BC3 .8861 FSP -310
                                                                                                                                                                                                                            ELI 3070.3 ELZ 133.2 ALF 171.70
                                                                                                                             5G1 34D8.9 5G2 454.4 THA 169.13
                                                                                                                                     FLIGHT TIME 128.00
                                                                                                                                                                                                                                                 ARRIVAL DATE APR 23 1966
LAUNCH DATE DEC 16 1965
                                                                                                                                     DISTANCE 378.682
     HELIOCENTRIC CONIC
      RL 147.22 LAL -.00 LOL 83.83 VL 27.861 GAL -7.01 A7L 71.46 MCA 181.68 SNA 129.26 ECC .18415 INC18.5360 V1 30.262
RP 108.72 LAP -.53 LOP 265.42 VP 37.612 GAP 5.41 A7P 108.53 TAL 214.50 TAP 36.18 RCA 105.46 APO 153.07 V2 34.856
RC 121.557 GL 59.48 GP -69.78 ZAL 108.52 ZAP 108.84 ETS 282.88 ZAE 97.01 ETE 199.65 ZAC 85.28 ETC 101.09 CLP-159.17
     PLANETOCENTRIC CONIC
       C3 104.144 VHL 10.205 OLA 40.37 RAL 298.18 RAO 6570.0 VEL 15.016 PTH 2.70 VMP 10.447 OPA -84.57 RAP 63.28 ECC 2.7140
      C3 104.144 VML 10.205 OLA 40.37 RAL 298.18 RAD 6570.0 VEL 15.016 PTM 2.70 VMP 10.447 UPA -84.57 RAP 65.28 ECC 2.7140 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 59.93 16 11 53 4565.81 -11.51 207.20 194.34 51.03 17 27 59 3965.8 -16.46 201.14 120.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 120.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 199.93 16 11 53 4565.81 -11.51 207.20 194.34 51.03 17 27 59 3965.8 -16.46 201.14 190.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.33 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 23 51 6 2705.3 -16.44 105.09 190.07 22 56 1 3305.32 -11.49 111.14 194.35 51.03 20.07 22 50 10.07 22 50 10.07
                                                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                                            ST 2804.6 SR 334.2 SS 861.8

CRT -.9124 CRS .8818 CST -.9976

LSA 2949.2 MSA 149.2 SSA .5
                                                                                                                              SGT 3479.1 SGR 717.2 SG3 94.8
RRT -.8294 RRF -.7148 RTF .9835
        TOE 4.8770 TRA-2.7440 TC3 -.3524 BAU .4908
       ROE -.4776 RRA .9024 RC3 -.0066 FAU .01777
                                                                                                                              5GB 3552.2 R23 -.1996 R13 -.9798
       FDE 1.6818 FRA -.6397 FC3 -.1477 BSP 10407
                                                                                                                                                                                                                        EL1 2821.2 EL2 136.0 ALF 173.78
       BDE 4.9003 BRA 2.8886 BC3 .3525 FSP -308
                                                                                                                              SG1 3530.2 SG2 394.9 THA 170.17
                                                                                                                                                                                                                                               ARRIVAL DATE APR 25 1966
                                                                                                                                    FLIGHT TIME 130.00
LAUNCH DATE DEC 16 1965
                                                                                                                                    DISTANCE 384.605
     HELIOCENTRIC CONIC
      RL 147.22 LAL -.00 LOL 83.83 VL 27.808 GAL -6.77 AZL 81.40 MCA 184.82 SMA 128.90 ECC .18395 INC 8.5970 V1 30.262
RP 108.75 LAP -.72 LOP 268.59 VP 37.565 GAP 5.64 AZP 98.57 TAL 213.09 TAP 37.90 RCA 105.19 APO 152.61 V2 34.846
RC 123.903 GL 43.84 GP -38.79 ZAL 121.57 ZAP 130.25 ETS 314.00 ZAE 120.50 ETE 209.92 ZAC 63.40 ETC 127.85 CLP-146.00
     PLANETOCENTRIC CONIC
       C3 35.524 VHL 5.980 DLA 24.03 RAL 298.59 RAD 6568.4 VEL 12.526 PTH 2.27 VHP 5.461 DPA -59.54 RAP 319.08 ECC 1.5846 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            179.27
                                                                                                                                                                                                                             2625.1
                                                                                                                                                                                                                                                          -27.17
             90.00 21 51 54 3225.06

90.00 17 19 17 4131.74

100.00 23 33 6 2898.78

100.00 18 20 46 3933.25

110.00 18 20 46 3933.25

110.00 18 48 49 3842.16
                                                                                                                                                                               77.78 22 45 39
                                                                                                                      112.49
                                                                                          -25.74
                                                                                                                      168.17
                                                                                                                                                 170.40
                                                                                                                                                                                 61.76 18 28 9
                                                                                                                                                                                                                                   3531.7
                                                                                                                                                                                                                                                                -5.92
                                                                                                                                                                                                                                                                                          161.51
                                                                                            -2.16
                                                                                                                                                                                79.21 24 21 25
60.11 19 26 20
                                                                                                                                                                                                                                   2298.8
                                                                                                                                                                                                                                                               -29.25
                                                                                                                                                                                                                                                                                            80.42
                                                                                          -28.05
                                                                                                                         89.02
                                                                                                                                                179.80
           100.00
                                                                                                                                                                                                                                  3333.3
1962.6
                                                                                                                                                                                                                                                               -4.08
                                                                                                                                                                                                                                                                                        145.92
                                                                                                                      152.45
                                                                                                                                                169.26
            100.00
                                                                                               -.11
                                                                                                                                                                               82.60 2 7 11
56.09 19 53 51
                                                                                                                                                                                                                                                             -34.13
                                                                                                                                                                                                                                                                                           44.32
                                                                                          -33.47
                                                                                                                         64.50
                                                                                                                                                180.81
            110.00
                                                                                                                                                                                                                                 3242.2
                                                                                                                                                                                                                                                                    .07
                                                                                                                                                                                                                                                                                          136.43
                                                                                            4.55
                                                                                                                      142.64
                                                                                                                                                 166.35
            110.00
                                   18 49 49
                                                              3842.16
                                                                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFFRENTIAL CORRECTIONS
                                                                                                                           SGT 3534.3 SGR 462.9 SG3 233.4

RRT .7627 RRF .9129 RTF .9433

SGB 3564.5 R23 .3221 R13 .9460

SGI 3552.1 SGZ 297.9 THA 5.75
                                                                                                                                                                                                                          ST 2131.5 SR 345.5 $$ 868.5
CRT .9469 CRS -.9876 CST -.9856
       TOE 2.1058 TRA-2.1059 TC3-1.5652 BAU .7534
      ROE .3593 RRA .0111 RC3 -.2584 FAU .06128
FOE 1.8932 FRA -.8565 FC3-1.4935 89P 10883
                                                                                                                                                                                                                         LSA 2321.2 MSA 170.3 SSA 1.1
EL1 2156.5 EL2 109.8 ALF 8.75
       BOE 2.1363 BRA 2.1059 BC3 1.5864 FSP
                                                                                                   -783
                                                                                                                                                                                                                                                 ARRIVAL DATE APR 27 1966
                                                                                                                                     FLIGHT TIME 132.00
LAUNCH DATE DEC 16 1965
                                                                                                                                     DISTANCE 390.545
     HELIOCENTRIC CONIC
      RL 147.22 LAL -.00 LOL 83.83 VL 27.755 GAL -6.53 AZL 83.49 MCA 187.98 SMA 128.53 ECC .18390 INC 6.5076 V1 30.262
RP 108.78 LAP -.90 LOP 271.76 VP 37.517 GAP 5.87 AZP 96.45 TAL 211.66 TAP 39.64 RCA 104.89 APO 152.16 V2 34.838
RC 126.245 GL 37.01 GP -25.09 ZAL 125.26 ZAP 139.15 ETS 324.69 ZAE 127.58 ETE 202.54 ZAC 55.19 ETC 136.49 CLP-146.64
     PLANETOCENTRIC CONIC
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 20 15 2864.05 -28.31 86.50 173.92 90.47 24 7 59 2264.0 -27.95 77.86
                                                                                                                                                                                                  17 20 1
                                                                                                                                                  165.75
                                   16 7 27
                                                             4354.23
                                                                                                5.00
                                                                                                                       180.60
              90.00
                                  0 55 41 2568.99
17 18 36 4124.52
                                                                                                                                                                                 91.78 1 38 30
60.73 18 27 23
                                                                                                                                                                                                                                                                                             56.01
                                                                                                                         64.77
                                                                                                                                                  173.89
                                                                                                                                                                                                                                    1969.0
                                                                                                                                                                                                                                                                -29.28
            100.00
                                                                                             -29.84
                                                                                                 6.34
                                                                                                                      162.98
                                                                                                                                                  165.01
                                                                                                                                                                                                                                    3524.5
                                                                                                                                                                                                                                                                  2.39
                                                                                                                                                                                                                                                                                           156.42
            100.00
                                                                                                                                                                                 95.29 3 4 19
57.07 19 10 55
                                                                                                                                                                                                                                                                                             33.90
                                                                                                                                                                                                                                    1685.7
                                                                                                                                                                                                                                                             -32.72
            110.00
                                    2 26 14
                                                          2285.70
                                                                                           -33.82
                                                                                                                         42.96
                                                                                                                                                  173.60
                                                                                                                              143.67
            110.00
                                   18 4 35
                                                               3980.58
                                                                                               9.75
                                                                                                                       149.99
                                                                                                                          HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                            SGT 3621.5 SGR 313.0 SG3 286.3 ST 1862.8 SR 229.1 SS 815.7 RRT .7233 RRF .9153 RTF .9326 CRT .9210 CR3 -.9835 CST -.9763 SGB 3635.0 R23 .3452 R13 .9338 LSA 2038.4 MSA 181.5 SSA 2.5 SG1 3628.6 SG2 215.7 THA 3.59 EL1 1874.8 EL2 88.7 ALF 6.48
        TOE 1.5768 TRA-1.9058 TC3-2.2015 BAU .7968
        ROE .2074 RRA .0244 RC3 -.2039 FAU .07611
       FOE 1.7363 FRA -.8060 FC3-2.4441 89P 11291
       BOE 1.5904 BRA 1.9060 BC3 2.2109 FSP -960
```

```
ARRIVAL DATE APR 29 1966
                                                                                             FLIGHT TIME 134.00
LAUNCH DATE DEC 16 1965
                                                                                            DISTANCE 396.474
    HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 27.701 GAL -6.28 A7L 84.40 HCA 191.15 SMA 128.16 ECC .18394 INC 5.6003 VI 30.262
RP 108.80 LAP -1.08 LOP 274.92 VP 37.470 GAP 6.10 A7P 95.50 TAL 210.21 TAP 41.36 RCA 104.59 APO 151.73 V2 34.830
RC 128.581 GL 33.55 GP -18.11 ZAL 126.21 ZAP 143.71 ETS 331.25 ZAE 130.01 ETE 197.17 ZAC 52.20 ETC 142.18 CLP-147.99
    PLANETOCENTRIC CONIC
     C3 23.638 VHL 4.862 OLA 14.38 RAL 302.53 RAD 6568.0 VEL 12.042 PTH 2.15 VHP 4.763 OPA -38.67 RAP 315.03 ECC 1.3890
     23.638 VML 4.862 DLA 14.58 RAL 502.53 RAD 6586.0 VEL 12.022 M. 2.03 VML 14.58 RAL 502.53 RAD 6586.0 VEL 12.022 M. 2.03 VML 14.58 RAL 502.53 RAD 6586.0 VEL 12.022 M. 2.03 VML 14.68 PO CST TIM INJ 2 LAT INJ 2 LONG 10.03 PM 10.03 P
                       0 0 57 2718.34
15 45 35 4435.15
1 29 58 2431.25
16 59 15 4197.47
2 55 24 2163.96
17 50 19 4037.52
                                                                                                                                       16 59 30
          90.00
                                                                                                                                                               3635.1
                                                                                                                                                                                     3.63
                                                                                                                           62.63
          90.00
                                                                  7.55
                                                                                   185.17
                                                                                                     165.18
                                                                                                                                         2 10 29
                                                                                                                                                               1831.3
                                                                                                                                                                                   -27.83
                                                                                                                                                                                                       46.03
                                                                                                     171.74
                                                                                                                           97.08
         100.00
                                                                -29.12
                                                                                    54.60
                                                                                                                           61.30 18 9 13
100.68 3 31 28
                                                                                                                                                               3597.5
                                                                                                                                                                                     4.85
                                                                                                                                                                                                     160.44
                                                                                                     164.54
                                                                  8.75
                                                                                   167.06
         100.00
                                                                                                                                                              1564.0
                                                                                                                                                                                  -30.85
                                                                                                                                                                                                      24.91
                                                                                                                         100.68
                                                               -32.67
                                                                                    33.65
                                                                                                     171.09
         110.00
                                                                                                                                      18 57 36
                                                                                                                           57.70
                                                                                                                                                                3437.5
                                                                                                                                                                                     7.50
                                                                                                                                                                                                     146.68
                                                               11.84
                                                                                   153.07
                                                                                                     162.68
         110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SGT 3722.5 SGR 213.4 SG3 300.1
RRT .6008 RRF .8236 RTF .9274
                                                                                                                                                          ST 1748.7 SR 172.7 SS 766.4
CRT .8937 CRS -.9765 CST -.9692
     TOE 1.3735 TRA-1.8014 TC3-2.6087 BAU .8253
     ROE .1460 RRA .0374 RC3 -.1210 FAU .07918
                                                                                        SGB 3728.6 R23 .3318 R13 .9279
SG1 3724.7 SG2 170.5 THA 1.98
                                                                                                                                                          LSA 1907.9 MSA 187.5 SSA
                                                                                                                                                                                                           3.9
     FOE 1.5639 FRA -.6955 FC3-2.9000 85P 11603
                                                                                                                                                          EL1 1755.6 EL2 77.2 ALF 5.05
     BOE 1.3813 BRA 1.8018 BC3 2.6115 FSP -1002
                                                                                                                                                                        ARRIVAL CATE MAY 1 1966
                                                                                             FLIGHT TIME 136.00
LAUNCH DATE DEC 16 1965
                                                                                            DISTANCE 402.391
   HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 27.647 GAL -6.02 AZL 84.91 HCA 194.31 SMA 127.79 ECC .18407 INC 5.0913 V1 30.262
RP 108.82 LAP -1.26 LOP 278.09 VP 37.424 GAP 6.32 AZP 94.93 TAL 208.74 TAP 43.05 RCA 104.27 APO 151.32 V2 34.822
     RC 130.911 GL 31.55 GP -14.00 ZAL 126.04 ZAP 146.67 ETS 335.55 ZAE 130.90 ETE 193.55 ZAC 51.30 ETC 146.21 CLP-149.44
    PLANETOCENTRIC CONIC
     C3 21.745 VHL 4.663 DLA 12.77 RAL 304.31 RAD 6567.9 VEL 11.963 PTH 2.13 VHP 4.776 DPA -34.28 RAP 315.68 ECC 1.3579 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     171.44
                       0 22 9 2642.33
15 38 35 4470.59
1 50 5 2358.72
16 53 20 4229.43
                                                                                                                         98.43
                                                                -27.13
                                                                                    70.42
                                                                                                                                           1 6 11
                                                                                                                                                               2042.3
                                                                                                                                                                                 -25.69
                                                                                                                                                                                                       62.05
         90.00
                                                                                                                            62.93 16 53 6
                                                                                   187.19
                                                                                                      165.59
                                                                                                                                                                3870.6
                                                                                                                                                                                                      180.47
          90.00
                                                                   8.66
                                                                                                                           99.76 2 29 24
61.61 18 3 49
                                                                                                                                                                1758.7
                                                                                                                                                                                                        40.91
                                                                -28.40
                                                                                    49.33
                                                                                                     171.21
        100.00
                                                                                                                                                                3629.4
                                                                                                                                                                                     5.92
                                                                                                                                                                                                      162.21
                                                                  9.79
                                                                                   168.86
                                                                                                     164.99
        100.00
                                                                                                                        103.42 3 40 ...
10 11 16 54 25
                                                                -31.74
                                                                                                     170.42
                                                                                                                                                                1498.7
                                                                                                                                                                                 -29.57
                                                                                                                                                                                                       20.26
        110.00
                                                                                    28.79
                         3 13 11 2098.68
                                                                                                                                                                3462.2
                                                                12.74
                                                                                   154.43
                                                                                                      163.24
        110.00
                        17 46 43
                                           4062.24
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SGT 3831.0 SGR 164.6 SG3 300.7
RRT .3903 RRF .6282 RTF .9239
SGB 3834.5 R23 .2901 R13 .9241
                                                                                                                                                          ST 1698.0 SR 149.1 SS 730.8
CRT .8753 CRS -.9722 CST -.9637
     TOE 1.2735 TRA-1.7308 TC3-2.9312 BAU .8523
     ROE .1207 RRA .0424 RC3 -.0512 FAU .07848
FDE 1.4283 FRA -.5851 FC3-3.1243 B3P .11997
BDE 1.2792 BRA 1.7313 BC3 2.9317 FSP -1004
                                                                                                                                                          LSA 1844.6 MSA 191.9 SSA 5.3
EL1 1703.0 EL2 71.9 ALF 4.40
                                                                                        5G1 3831.5 SG2 151.6 THA
                                                                                                                                        .96
                                                                                             FLIGHT TIME 138.00
                                                                                                                                                                       ARRIVAL DATE MAY 3 1966
LAUNCH DATE DEC 16 1965
                                                                                            DISTANCE 408.295
    HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 27.594 GAL -5.76 AZL 85.24 MCA 197.48 SMA 127.43 ECC .18429 INC 4.7639 VI 30.262 RP 108.85 LAP -1.43 LOP 281.25 VP 37.378 GAP 6.54 AZP 94.54 TAL 207.24 TAP 44.72 RCA 103.94 APO 150.91 VZ 34.816 RC 133.236 GL 30.29 GP -11.33 7AL 125.28 ZAP 148.92 ETS 338.52 ZAE 131.19 ETE 191.04 ZAC 51.43 ETC 149.24 CLP-150.87
    PLANETOCENTRIC CONIC
     C3 20.436 VHL 4.521 DLA 11.94 RAL 306.07 RAD 6567.8 VEL 11.909 PTH
                                                                                                                              2.12 VHP 4.833 OPA -31.25 RAP 316.79 ECC 1.3363
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        0 36 14 2599.23
15 38 33 4483.86
2 3 39 2317.30
16 53 49 4241.02
                                                                                                                                           1 19 34
                                                                                                                                                            1999.2
                                                                                                                                                                                 -25.03
                                                                                                                                                                                                       59.07
                                                                                                    171.72
                                                                                                                         99.90
                                                                 -26.67
                                                                                    67.35
          90.00
                                                                                                                            63.06
                                                                                                                                                               3883.9
                                                                                                                                                                                    5.38
                                                                                                                                                                                                     181.21
                                                                                   187.95
                                                                                                     166.40
          90.00
                                                                  9.07
                                                                                                                                         2 42 17
                                                                                                                                                                                                       38.04
                                                                                                     171.47
                                                                                                                         101.24
                                                                                                                                                               1717.3
                                                                                                                                                                                   -26.05
                                                                                    46.36
         100.00
                                                                -27.88
                                                                                                                          162.85
                                                                                   169.52
                                                                                                     165.82
                                                                                                                                                               3641.0
                                                                                                                                                                                    6.31
         100.00
                                                                 10.16
                                                                                                                                                                                                      17.62
                        3 25 38 2060.80
17 48 20 4070.29
                                                                                                     170.61
                                                                                                                         104.95
                                                                                                                                                               1460.8
                                                                                                                                                                                  -28.74
                                                                                    26.02
         110.00
                                                               -31.11
                                                                                                                                                               3470.3
                                                                                   154.87
                                                                                                     164.12
                                                                                                                                                                                    8.72
                                                                                                                                                                                                     148.42
         110.00
                                                                13.03
                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SGT 3939.3 SGR 150.8 SG3 296.3
RRT .1440 RRF .3636 RTF .9212
SGB 3942.2 R23 .2332 R13 .9213
                                                                                                                                                         ST 1682.3 SR 141.4 SS 706.4
      TDE 1.2226 TRA-1.6702 TC3-3.2124 BAU .8777
     RDE .1108 RRA .0423 RC3 .0051 FAU .07636
FDE 1.3247 FRA -.4815 FC3-3.2346 BSP 12394
BDE 1.2276 BRA 1.6707 BC3 3.2124 FSP -992
                                                                                                                                                          CRT .8699 CRS -.9728 CST -.9596
                                                                                                                                                         LSA 1819.6 MSA 195.1 55A
                                                                                                                                                                                                        6.6
                                                                                        5G1 3939.3 5G2 149.2 THA
                                                                                                                                        . 32
                                                                                                                                                          EL1 1686.8 EL2 69.5 ALF 4.19
                                                                                                                                                                        ARRIVAL DATE MAY 5 1966
                                                                                             FLIGHT TIME 140.00
LAUNCH DATE DEC 16 1965
                                                                                             DISTANCE 414.185
    HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 27.540 GAL -5.49 AZL 85.47 HCA 200.65 SMA 127.07 ECC .18461 INC 4.5342 V1 30.262 RP 108.87 LAP -1.60 LOP 284.41 VP 37.332 GAP 6.76 AZP 94.24 TAL 205.71 TAP 46.36 RCA 103.61 APO 150.52 V2 34.809 RC 135.553 GL 29.45 GP -9.47 ZAL 124.17 ZAP 150.80 ETS 340.69 ZAE 131.22 ETE 189.21 ZAC 52.12 ETC 151.60 CLP-152.25
    PLANETOCENTRIC CONIC
      C3 19.428 VML 4.408 DLA 11.57 RAL 307.86 RAD 6567.8 VEL 11.866 PTH 2.11 VMP 4.910 DPA -28.99 RAP 318.17 ECC 1.3197
     UNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 46 28 2574.79 -26.37 65.62 172.46 100.72 1 29 23 1974.8 -24.62 57.39
                                                                                                                                        16 57 20
                                                                                                                                                                3884.2
                                                                                                                                                                                                      181.23
                                                                                   187.97
                                                                                                      167.43
                                                                                                                            63.06
                                                                                                                                                                                     5.39
                         15 42 36
                                            4484.23
                                                                    9.08
          90.00
                                                                                                                                                                1693.6
                           2 13 40
                                            2293.58
                                                                 -27.55
                                                                                     44.67
                                                                                                      172.19
                                                                                                                          102.07
                                                                                                                                          2 51 53
                                                                                                                                                                                   -25.61
                                                                                                                                                                                                      36.41
         100.00
                        16 58 5 4240.67
3 35 8 2038.62
                                                                                                                                        18 8 46
                                                                                                                                                                3640.7
                                                                                                                                                                                    6.30
                                                                                                                                                                                                      162.83
                                                                  10.15
                                                                                   169.50
                                                                                                      166.86
                                                                                                                            61.73
         100.00
                                                                                                                                                                                                      16.09
                                                                 -30.70
                                                                                     24.42
                                                                                                      171.29
                                                                                                                          105.82
                                                                                                                                          4 9 7
                                                                                                                                                                1438.6
                                                                                                                                                                                 -28.23
         110.00
                                                                 12.96
                                                                                   154.77
                                                                                                      165.20
                                                                                                                            58.09
                                                                                                                                        19 0 54
                                                                                                                                                                3468.4
                                                                                                                                                                                    8.65
                                                                                                                                                                                                      148.32
                                            4068.40
                         17 53 6
         110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                SGT 4090.1 SGR 156.5 SG3 290.4
RRT -.0464 RRF .1326 RTF .9196
SGB 4053.1 R23 -.1756 R13 -.9196
                                                                                                                                                         ST 1686.1 SR 141.5 SS 687.7
CRT .8749 CRS -.9768 CST -.9568
      TOE 1.1971 TRA-1.6139 TC3-3.4772 BAU .9032
      RDE .1082 RRA .0391 RC3 .0508 FAU .07393
      FDE 1.2394 FRA -.3905 FC3-3.2942 BSP 12842
BDE 1.2020 BRA 1.6144 BC3 3.4776 FSP -983
                                                                                                                                                      LSA 1815.8 MSA 196.4 SSA 8.0
EL1 1690.6 EL2 68.4 ALF 4.21
                                                                                      SG1 4050.1 SG2 156.3 THA 179.90
```

ARRIVAL DATE MAY 7 1966

```
FLIGHT TIME 142.00
LAUNCH DATE DEC 16 1965
                                                                                DISTANCE 420.061
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 27.486 GAL -5.21 AZL 85.64 HCA 203.81 SMA 126.71 ECC .18503 INC 4.3634 VI 30.262 RP 108.88 LAP -1.76 LOP 287.58 VP 37.288 GAP 6.97 AZP 93.99 TAL 204.16 TAP 47.97 RCA 103.26 APO 150.15 V2 34.804
    RC 137.863 GL 28.87 GP 18.10 7AL 122.80 7AP 152.46 ETS 342.32 7AE 131.14 ETE 187.84 7AC 53.16 ETC 153.52 CLP-153.59
    C3 18.602 VHL 4.313 CLA 11.50 RAL 309.69 RAC 6567.8 VEL 11.831 PTH 2.10 VHP 4.998 CPA -27.17 RAP 319.72 ECC 1.3061
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        1962.3
                                                                                                                        1 37 3
                    0 54 21 2562.26 -26.21
15 49 21 4476.27 8.83
2 21 30 2281.19 -27.38
17 4 53 4232.58 9.89
3 42 54 2026.50 -30.48
17 59 59 4060.03 12.66
                                                                                                          101.13
                                                                                       173.50
                                                                         64.74
         90.00
                                                                                                                      17 3 57
                                                                                                                                                                            160.78
                                                                                                                                                             5.14
                                                                                                                                           3876.3
                                                                                         168.64
                                                                                                            62.99
                                                                         187.52
         90.00
                                                                                                          -25.38
                                                                                                                                                                             35.56
                                                                                                                                           1681.2
                                                                                        173.23
                                                                          43.79
        100.00
                                                                                                                                          3632.6
                                                                                                                                                             6.03
                                                                                                                                                                            162.38
                                                                        169.04
                                                                                         168.07
        100.00
                                                                                                                                                           -27.94
                                                                                                                                          1426.5
                                                                                                                                                                             15.27
                                                                                        172.32
                                                                         23.54
        110.00
                                                                                                                                                           8.34
                                                                                                                                                                            147.87
                                                                                                                                           3460.0
                                                                        154.31
                                                                                         166.43
       110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 4194.2 SGR 169.1 SG3 287.3
RRT -.1639 RRF -.0381 RTF .9222
SGB 4197.6 R23 -.1148 R13 -.9221
                                                                                                                                       ST 1680.9 SR 145.4 SS 657.2
     TOE 1.1672 TRA-1.5777 TC3-3.7766 BAU .9395
                                                                                                                                       CRT .8821 CRS -.9805 CST -.9551
     RDE .1089 RRA .0331 RC3 .0871 FAU .07287
                                                                                                                                     LSA 1800.3 MSA 192.7 SSA 9.6
ELI 1685.8 EL2 68.3 ALF 4.37
     FOE 1.1390 FRA -.3402 FC3-3.3913 BSP 13797
BDE 1.1722 BRA 1.5780 BC3 3.7777 FSP -1039
                                                                            5G1 4194.3 5G2 166.8 THA 179.62
                                                                                                                                                   ARRIVAL DATE MAY 9 1966
                                                                                  FLIGHT TIME 144.00
LAUNCH DATE DEC 16 1965
                                                                                 DISTANCE 425.932
    RL 147.22 LAL -.00 LOL 83.83 VL 27.433 GAL -4.92 A7L 85.77 MCA 206.97 SMA 126.35 ECC .18554 INC 4.2307 V1 30.262 RP 108.90 LAP -1.92 LOP 290.74 VP 37.243 GAP 7.18 A7P 93.77 TAL 202.59 TAP 49.56 RCA 102.91 APO 149.80 V2 34.799 RC 140.164 GL 28.47 GP -7.06 TAL 121.21 TAP 153.95 ETS 343.58 TAE 131.01 ETE 186.78 TAC 54.45 ETC 155.13 CLP-154.86
   HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 17.895 VHL 4.230 OLA 11.65 RAL 311.60 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 5.092 OPA -25.65 RAP 321.39 ECC 1.2945

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 1 0 41 2558.32 -26.15 64.46 174.80 101.26 1 43.20 1958.3 -24.34 56.27

90.00 15 58 14 4462.10 8.39 186.71 169.99 62.86 17 12.36 3862.1 4.69 179.99

100.00 2 27 56 2276.94 -27.31 43.49 174.52 102.65 3 5.53 1676.9 -25.30 35.27

100.00 17 13 40 4218.71 9.44 168.25 169.44 61.51 18 23.59 3618.7 5.56 161.61

110.00 3 49 32 2021.63 -30.38 23.20 173.61 106.47 4 23.13 1421.6 -27.83 14.93

110.00 18 8 34 4046.79 12.18 153.58 167.80 57.81 19.16 1 3446.8 7.84 147.17
    PLANETOCENTRIC CONIC
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 4224.7 SGR 191.0 SG3 272.4
RRT -.2148 RRF -.0932 RTF .9120
                                                                                                                                        ST 1763.4 SR 155.0 SS 687.5
     TOE 1.2197 TRA-1.4680 TC3-3.9196 BAU .9382
                                                                                                                                        CRT .9063 CRS -.9894 CST -.9544
     ROE .1141 RRA .0285 RC3 .1242 FAU .06667
FOE 1.1507 FRA -.1869 FC3-3.2255 BSP 13100
                                                                                                                                    LSA 1888.4 MSA 201.1 SSA 10.3
EL1 1769.0 EL2 65.3 ALF 4.56
                                                                            SGB 4229.0 R23 -.1055 R13 -.9120
                                                                             SG1 4224.9 SG2 186.5 THA 179.44
     BOE 1.2250 BRA 1.4683 BC3 3.9216 FSP -876
                                                                                                                                                   ARRIVAL DATE MAY 11 1966
                                                                                  FLIGHT TIME 146.00
 LAUNCH DATE DEC 16 1965
                                                                                 DISTANCE 431.785
     RL 147.22 LAL -.00 LOL 83.83 VL 27.379 GAL -4.62 AZL 85.88 MCA 210.14 SMA 126.00 ECC .18618 INC 4.1240 VI 30.262 RP 108.91 LAP -2.07 LOP 293.90 VP 37.200 GAP 7.40 AZP 93.57 TAL 201.00 TAP 51.13 RCA 102.54 APO 149.46 VZ 34.795 RC 142.456 GL 28.17 GP -6.24 ZAL 119.47 ZAP 155.34 ETS 344.59 ZAE 130.86 ETE 185.94 ZAC 55.92 ETC 156.49 CLP-156.09
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 17.285 VHL 4.158 DLA 11.96 RAL 313.58 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 5.192 DPA -24.30 RAP 323.16 ECC 1.2845
      ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         176.30
                       1 6 0 2560.64
16 8 43 4443.68
                                                          -26.19
                                                                          64.63
          90.00
                                                                                                                                                               4.10
                                                                                                                                                                              178.95
                                                                                                                                             3843.7
                                                                                          171.50
                                                            7.82
                                                                          185.66
          90.00
                                                                                                                                                                               35.39
                                                                                                                                                             -25.33
                                                                                                                                            1678.7
                       2 33 26 2278.67
17 23 58 4200.89
                                                                                          176.03
                                                          -27.34
                                                                          43.62
         100.00
                                                                                                                                                               4.97
                                                                                                                                            3600.9
                                                                                          170.94
                                                                          167.25
                                                            8.86
         100.00
                                                                                                         106.46
                                                                                                                                                             -27.84
                                                                                                                                            1422.1
                         3 55 26 2022.07
18 18 27 4030.25
                                                                                          175.13
                                                          -30.39
                                                                          23.23
         110.00
                                                                                                                                                                7.22
                                                                                                                                            3430.3
                                                                                          169.31
                                                                         152.68
                       18 18 27
                                                         11.58
         110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 1804.1 SR 164.1 55 682.9
                                                                              SGT 4327.3 SGR 209.2 SG3 265.4
RRT -.2402 RRF -.1451 RTF .9110
      TOE 1.2345 TRA-1.3996 TC3-4.1562 BAU .9611
                                                                                                                                         CRT .9222 CRS -.9935 CST -.9545
      RDE .1189 RRA .0210 RC3 .1523 FAU .06397
                                                                                                                                       LSA 1925.7 MSA 199.6 58A 11.5
                                                                               SGB 4332.3 R23 -.0765 R13 -.9109
      FDE 1.1026 FRA -.1131 FC3-3.2041 BSP 13503
                                                                                                                                        EL1 1810.5 EL2 63.2 ALF
                                                                               SG1 4327.6 SG2 203.0 THA 179.33
      BOE 1.2402 BRA 1.3998 BC3 4.1590 FSP
                                                               -862
                                                                                                                                                     ARRIVAL DATE MAY 13 1966
                                                                                   FLIGHT TIME 148.00
  LAUNCH DATE DEC 16 1965
                                                                                  DISTANCE 437.626
      RL 147.22 LAL -.00 LOL 83.83 VL 27.326 CAL -4.31 AZL 85.96 HCA 213.30 SMA 125.65 ECC .18693 INC 4.0359 VI 30.262 RP 108.92 LAP -2.21 LOP 297.06 VP 37.158 GAP 7.61 AZP 93.38 TAL 199.39 TAP 52.68 RCA 102.17 APO 149.14 V2 34.791
     HELLOCENTRIC CONIC
      RC 144.737 GL 27.94 GP -5.58 ZAL 117.57 ZAP 196.63 ETS 345.39 ZAE 130.71 ETE 185.26 ZAC 57.51 ETC 157.68 CLP-157.27
     PLANETOCENTRIC CONIC
      C3 16.752 VHL 4.093 DLA 12.39 RAL 315.65 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 5.295 DPA -23.09 RAP 325.00 ECC 1.2757
      C3 16.752 VHL 4.093 DLA 12.39 RAL 315.65 RAD 6567.7 VEL 11.753 PTH 2.07 VHP 5.295 DPA -23.09 RAP 325.00 ECC 1.2757
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 10 34 2566.11 -26.28 65.15 178.00 100.94 1 53 22 1968.1 -24.51 56.93
90.00 16 20 37 4421.78 7.13 184.42 173.15 62.52 17 34 19 3821.8 3.40 177.73
100.00 2 38 16 2285.27 -27.44 44.08 177.73 102.36 3 16 21 1685.3 -25.46 35.84
100.00 17 35 36 4179.86 8.17 166.07 172.59 61.15 18 45 16 3579.9 4.26 159.47
110.00 4 0 51 2026.83 -30.48 23.57 176.85 106.27 4 34 38 1426.8 -27.95 15.29
110.00 18 29 30 4011.06 10.88 151.63 170.96 57.39 19 36 21 3411.1 6.50 145.27
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                              MID-COURSE EXECUTION ACCUMAN-
SGT 4427.1 SGR 227.2 SG3 258.3
RRT -.2469 RRF -.1725 RTF .9101
SGB 4432.9 R23 -.0544 R13 -.9101
     BIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 1853.6 SR 174.3 55 681.7
CRT .9378 CRS -.9960 CST -.9553
       TOE 1.2577 TRA-1.3248 TC3-4.3865 BAU .9832
       RDE .1244 RRA .0130 RC3 .1768 FAU .06128
FDE 1.0628 FRA -.0431 FC3-3.1666 BSP 13901
                                                                                                                                         LSA 1972.8 MSA 197.3 SSA 12.7
                                                                                                                                         EL1 1860.8 EL2 60.3 ALF 5.05
                                                                               SG1 4427.4 SG2 220.2 THA 179.27
       BOE 1.2638 BRA 1.3249 BC3 4.3901 FSP -847
```

```
LAUNCH DATE DEC 16 1965
                                                                                      FLIGHT TIME 150.00
                                                                                                                                                           ARRIVAL DATE MAY 15 1966
    HELIOCENTRIC CONIC
                                                                                     DISTANCE 443.455
     RL 147.22 LAL -.00 LOL 83.83 VL 27.273 GAL -3.99 ATL 86.04 MCA 216.46 SMA 125.31 ECC .18780 INC 3.9615 V1 30.262
RP 108.93 LAP -2.35 LOP 300.22 VP 37.116 GAP 7.82 AZP 93.19 TAL 197.76 TAP 54.22 RCA 101.78 APO 148.85 VZ 34.788
RC 147.008 GL 27.76 GP -5.05 ZAL 115.53 ZAP 157.86 ETS 346.05 ZAE 130.58 ETE 184.70 ZAC 59.22 ETC 158.72 CLP-158.41
    PLANETOCENTRIC CONIC
     C3 16.287 VHL 4.036 OLA 12.93 RAL 317.80 RAD 6567.7 VEL 11.733 PTH 2.07 VHP 5.402 OPA -21.95 RAP 326.89 ECC 1.2680
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           179.89
         90.00
                        1 14 35 2579.94
16 33 49 4397.06
                                                           -26.43
                                                                             65.99
                                                                                                             100.54
62.35
                                                                                                                                                1979.9
                                                                                                                                                                  -24.71
                                                                                                                                1 57 35
                                                                                                                                                                                       57.74
          90.00
                                                              6.36
                                                                             183.02
                                                                                              174.95
                                                                                                                               17 47 6
                                                                                                                                                   3797.1
                                                                                                                                                                      2.60
                                                                                                                                                                                       176.35
                    16 33 49 4397,00
2 42 37 2296.00
17 48 28 4156.24
4 5 57 2035.25
18 41 37 3989.75
                                                                                         179.63
                                                                                                               101.99 3 20 53
60.95 18 57 44
        100.00
                                                          -27.59
                                                                             44.84
                                                                                                                                                   1696.0
                                                                                                                                                                     -25.66
                                                                                                                                                                                       36.57
                                                             7.39
        100.00
                                                                             164.75
                                                                                             174.39
                                                                                                                                                   3556.2
                                                                                                                                                                       3.46
                                                                                                                                                                                      158.16
                                                                             24.17 178.76 105.95 4 39 53 1435.2 -28.15
150.48 172.75 57.17 19 48 7 3389.8 5.70
                                                          -30.64
10.09
        110.00
                                                                                                                                                                                       15.86
        110.00
                                                                             150.48
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                              SGT 4519.4 SGR 244.7 SG3 251.0 ST 1913.1 SR 185.2 55 684.1 RRT -.2414 RRF -.1829 RTF .9089 CRT .9524 CR5 -.9970 CST -.9567 SG8 4526.1 R23 -.0383 R13 -.9088 LSA 2030.8 M5A 194.6 S5A 13.8 SG1 4519.8 SG2 237.5 THA 179.25 EL1 1921.2 EL2 56.2 ALF 5.27
     TOE 1.2899 TRA-1.2402 TC3-4.6038 BAU 1.0034
     ROE .1304 RRA .0045 RC3 .1981 FAU .05848
FOE 1.0311 FRA .0271 FC3-3.1086 BSP 14223
     BDE 1.2965 BRA 1.2402 BC3 4.6081 FSP -825
                                                                            5G1 4519.8 SG2 237.5 THA 179.25
LAUNCH DATE DEC 16 1965
                                                                                      FLIGHT TIME 152.00
                                                                                                                                                            ARRIVAL DATE MAY 17 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 449.272
    RL 147.22 LAL -.00 LOL 83.83 VL 27.221 GAL -3.66 A7L 86.10 MCA 219.62 SMA 124.97 ECC .18881 INC 3.8974 V1 30.262 RP 108.94 LAP -2.48 LOP 303.39 VP 37.076 GAP 8.03 A7P 93.00 TAL 196.11 TAP 55.73 RCA 101.38 APO 148.57 VZ 34.786
     RC 149.266 GL
                             27.60 GP -4.60 ZAL 113.36 ZAP 159.02 ETS 346.58 ZAE 130.45 ETE 184.24 ZAC 61.01 ETC 159.64 CLP-159.51
   PLANETOCENTRIC CONIC
     C3 15.886 VHL 3.986 OLA 13.55 RAL 320.06 RAD 6567.6 VEL 11.716 PTH 2.06 VHP 5.512 DPA -20.88 RAP 328.84 ECC 1.2614 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 18 12 2595.61 -26.62 67.09 181.97 100.02 2 1 28 1995.6 -24.97 58.82
       90.00 1 18 12 2595.61

90.00 16 48 13 4370.03

100.00 2 46 39 2310.35

100.00 18 2 27 4130.52

110.00 4 10 52 2046.85

110.00 18 54 43 3966.79
                                                                                                            100.02 2 1 28
62.18 18 1 3
101.49 3 25 9
60.77 19 11 17
105.50 4 44 59
56.94 20 0 50
                                                                                          181.97
                                                                                              176.92
                                                              5.50
                                                                             181.49
                                                                                                                                                   3770.0
                                                                                                                                                                       1.73
                                                                                                                                                                                       174.84
                                                           -27.79
                                                                             45.86
                                                                                             161.72
                                                                                                                                                   1710.4
                                                                                                                                                                     -25.92
                                                                                                                                                                                       37.56
                                                               6.54
                                                                            163.31
                                                                                              176.36
                                                                                                                                                   3530.5
                                                                                                                                                                      2.60
                                                                                                                                                                                      156.75
                                                           -30.86
                                                                              25.01
                                                                                             180.88
                                                                                                                                                  1446.9 -28.42
3366.8 4.82
                                                                                                                                                                                       16.66
                                                          9.24
                                                                             149.25
                                                                                              174.71
                                                                                                                                                                                      142.94
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                            TOE 1.3289 TRA-1.1479 TC3-4.8113 BAU 1.0228
     ROE .1366 RRA -.0043 RC3 .2164 FAU .05575
FOE 1.0042 FRA .0939 FC3-3.0382 BSP 14531
BOE 1.3359 BRA 1.1479 BC3 4.8162 FSP -803
LAUNCH DATE DEC 16 1965
                                                                                    FLIGHT TIME 154.00
                                                                                                                                                         ARRIVAL DATE MAY 19 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 455.077
    RL 147.22 LAL -.00 LOL 83.83 VL 27.168 GAL -3.32 ATL 86.16 MCA 222.78 SMA 124.64 ECC .18995 INC 3.8414 V1 30.262
RP 108.94 LAP -2.61 LOP 306.55 VP 37.036 GAP 8.24 ATP 92.82 TAL 194.44 TAP 57.23 RCA 100.96 APO 148.32 V2 34.785
RC 151.511 GL 27.44 GP -4.22 TAL 111.06 TAP 160.13 ETS 347.02 TAE 130.35 ETE 183.85 TAC 62.87 ETC 160.47 CLP-160.57
   PLANETOCENTRIC CONIC
     C3 15.546 VHL 3.943 DLA 14.24 RAL 322.42 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 5.625 DPA -19.84 RAP 330.82 ECC 1.2558
    C3 15.546 VHL 3.943 DLA 14.24 RAL 322.42 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 5.625 DPA -19.84 RAP 330.82 ECC 1.2558 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 21 31 2614.76 -26.84 68.45 184.24 99.37 2 5 6 2014.8 -25.27 60.14 90.00 17 3 44 4341.09 4.58 179.87 179.07 62.03 18 16 5 3741.1 .80 173.22 100.00 2 50 26 2327.98 -28.02 47.12 184.01 100.66 3 29 14 1728.0 -26.24 38.77 100.00 18 17 30 4103.10 5.63 161.79 178.49 60.59 19 25 53 3503.1 1.67 155.24 110.00 4 15 40 2061.32 -31.11 26.06 183.19 104.93 4 50 1 1461.3 -28.75 17.65 110.00 19 8 46 394.52 8.34 147.95 176.83 56.73 20 14 28 334.5 3.90 141.67 CIEFFERNIIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4690.8 SGR 277.4 SG3 236.8

RRT -.2101 RRF -.1743 RTF ..9065

SGB 4699.0 R23 -.0172 R13 -.9065

SG1 4691.2 SG2 271.2 THA 179.29
     TOE 1.3760 TRA-1.0450 TC3-5.0008 BAU 1.0404
                                                                                                                                           ST 2057.4 SR 208.0 S5 696.3
CRT .9761 CRS -.9941 CST -.9608
    ROE .1451 RRA -.0132 RC3 .2316 FAU .05298
FOE .9835 FRA .1605 FC3-2.9504 89P 14772
BOE 1.3834 BRA 1.0451 BC3 5.0062 FSP -775
                                                                                                                                            LSA 2173.9 MSA 187.2 SSA 15.8
                                                                                                                                            EL1 2067.4 EL2 44.9 ALF
LAUNCH DATE DEC 16 1965
                                                                                     FLIGHT TIME 156.00
                                                                                                                                                          ARRIVAL DATE MAY 21 1966
  HELIOCENTRIC CONIC
                                                                                    DISTANCE 460.868
    RL 147.22 LAL -.00 LOL 83.83 VL 27.116 GAL -2.97 AZL 86.21 MCA 225.94 SMA 124.31 ECC .19125 INC 3.7916 V1 30.262
RP 108.94 LAP -2.72 LOP 309.71 VP 36.997 GAP 8.46 AZP 92.64 TAL 192.77 TAP 58.71 RCA 100.54 APO 148.08 V2 34.784
RC 153.743 GL 27.28 GP -3.90 ZAL 108.63 ZAP 161.20 ETS 347.37 ZAE 130.26 ETE 183.52 ZAC 64.80 ETC 161.21 CLP-161.59
   PLANETOCENTRIC CONIC
    C3 15.267 VHL 3.907 OLA 14.99 RAL 324.89 RAD 6567.6 VEL 11.690 PTH 2.06 VMP 5.741 DPA -18.82 RAP 332.83 ECC 1.2513
    LNCH AZMTH LNCH TIME L-I TIME
                                                        INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 LNCH TIME L-1 TIME
1 24 37 2637.13
17 20 20 4310.59
2 54 4 2348.62
18 33 33 4074.33
4 20 26 2078.41
19 23 41 3917.31
                                                                                                             98.61 2 8 34
61.89 18 32 10
100.12 3 33 13
60.44 19 41 27
104.24 4 55 4
56.53 20 28 58
         90.00
                                                                            70.05
                                                                                          186.71
                                                                                                                                               2037.1
                                                           -27.08
                                                                                                                                                                 -25.61
                                                                                                                                                                                      61.69
         90.00
                                                            3.60
                                                                            178.16
                                                                                            181.39
                                                                                                                                                  3710.6
                                                                                                                                                                      -.19
                                                                                                                                                                                     171.52
       100.00
                                                          -28.28
                                                                                        186.48
                                                                                                                                                                                      40.21
                                                                             48.60
                                                                                                                                                  1748.6
                                                                                                                                                                  -26.59
       100.00
                                                            4.66
                                                                           160.20
                                                                                                                                                  3474.3
                                                                                                                                                                      .69
                                                                                                                                                                                    153.66
       110.00
                                                          -31.41
                                                                                         185.70
                                                                             27.30
                                                                                                                                                  1478.4
                                                                                                                                                                  -29.13
                                                                                                                                                                                     18.84
       110.00
                                                           7.39
                                                                           146.61
                                                                                             179.12
                                                                                                                                                  3317.3
                                                                                                                                                                     2.94
                                                                                                                                                                                    140.35
                                                                            MID-COURSE EXECUTION ACCURACY

SGT 4774.8 SGR 292.4 SG3 230.3

RRT -.1897 RRF -.1640 RTF .9061

SGB 4783.7 R23 -.0087 R13 -.9061

SGI 4775.1 SG2 287.1 THA 179.33

EL1 2147.6 EL2 38.2 ALF 5.78
  DIFFERENTIAL CORRECTIONS
    TOE 1.4254 TRA -.9369 TC3-5.1833 BAU 1.0591
    ROE .1496 RRA -.0223 RC3 .2437 FAU .05047
FDE .9620 FRA .2204 FC3-2.8618 BSP 15067
    BDE 1.4332 BRA .9372 BC3 5.1890 FSP -756
```

ARRIVAL CATE MAY 23 1966

```
FLIGHT TIME 158.00
LAUNCH DATE DEC 16 1965
                                                                    DISTANCE 466.647
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 27.065 GAL -2.61 AZL 86.25 HCA 229.11 SMA 123.99 ECC .19270 INC 3.7469 V1 30.262 RP 108.94 LAP -2.83 LOP 312.87 VP 36.960 GAP 8.67 AZP 92.46 TAL 191.07 TAP 60.18 RCA 100.09 APO 147.88 V2 34.784
   RC 155.962 GL 27.09 GP -3.63 ZAL 106.10 ZAP 162.22 ETS 347.65 ZAE 130.19 ETE 183.24 ZAC 66.78 ETC 161.89 CLP-162.59
   PLANETOCENTRIC CONIC
    C3 15.053 VHL 3.880 DLA 15.78 RAL 327.47 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 5.862 DPA -17.82 RAP 334.87 ECC 1.2477
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -25.97
                                                                          189.36
                                                                                         97.73
                                                                                                      2 11 55
                                                -27.33
                                                              71.86
       90.00
                    1 27 33 2662.52
                                                                                                                                       -1.21
                                                                                                                                                    169.75
                                                                                            61.79
                                                                                                      18 49 16
                                                                                                                       3678.8
                                                                            183.90
                                                              176.38
                   17 37 57
                                 4278.84
                                                  2.58
                                                                                            99.27 3 37 9
60.31 19 57 59
                                                                                                                       1772.1
                                                                                                                                      -26.97
                                                                                                                                                     41.85
                                                                            189.16
                                                               50.29
                    2 57 37 2372.07
                                                -28.55
                                                                                                                                                   152.03
                                                                                                                                        - . 32
                                                                            183.30
                                                                                                                       3444.5
                  18 50 34 4044.52
4 25 14 2097.91
                                                              158.56
                                                 3,66
                                                                                            103.45 5 0 12
56.35 20 44 18
                                                                                                                                                     20.20
                                                                                                                       1497.9
                                                                                                                                      -29.55
                                                               28.73
                                                                            188.42
                                                                                           103.45
                                               -31.73
      110.00
                                                                                                                                       1.95
                                                              145.24
                                                                            181.59
                                                                                                                       3291.4
                 19 39 26 3891.45
                                                 6.42
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2221.5 SR 231.4 S5 709.1
CRT .9908 CRS -.9857 CST -.9657
                                                                 SGT 4854.5 SGR 306.7 SG3 223.8
RRT -.1671 RRF -.1496 RTF .9059
    TOE 1.4800 TRA -.8202 TC3-5.3455 BAU 1.0769
    ROE .1563 RRA -. 0312 RC3 .2528 FAU .04798
                                                                                                                   LSA 2336.6 MSA 177.0 SSA 17.7
                                                                 SGB 4864.2 R23 -. 0024 R13 -. 9059
    FOE .9432 FRA .2780 FC3-2.7597 BSP 15361
BOE 1.4882 BRA .8208 BC3 5.3515 FSP -737
                                                                                                                   EL1 2233.3 EL2 31.2 ALF 5.89
                                                                 SG1 4854.8 SG2 302.4 THA 179.39
                                                                                                                              ARRIVAL DATE MAY 25 1966
                                                                      FLIGHT TIME 160.00
LAUNCH DATE DEC 16 1965
                                                                     DISTANCE 472.412
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 27.014 GAL -2.24 AZL 86.29 MCA 232.27 SNA 123.67 ECC .19432 INC 3.7063 V1 30.262 RP 108.94 LAP -2.93 LOP 316.04 VP 36.923 GAP 8.90 AZP 92.27 TAL 189.37 TAP 61.63 RCA 99.64 APO 147.70 V2 34.785 RC 158.168 GL 26.87 GP -3.39 ZAL 103.45 ZAP 163.22 ETS 347.86 ZAE 130.14 ETE 183.01 ZAC 68.81 ETC 162.50 CLP-163.55
   PLANETOCENTRIC CONIC
    C3 14.904 VHL 3.861 DLA 16.61 RAL 330.15 RAD 6567.6 VEL 11.674 PTH 2.05 VHP 5.986 DPA -16.83 RAP 336.93 ECC 1.2453
    LNCH AZETH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      2090.8
                                                                                                                                     -26.35
                                                                                            96.74
                                                                                                        2 15 13
                  1 30 22 2690.76
17 56 34 4246.17
                                                 -27.57
                                                               73.89
                                                                           192.22
        90.00
                                                                                                                                                     167.93
                                                                                                                                        -2.26
                                                                                             61.72 19 7 20
                                                                                                                        3646.2
                                                              174.56
                                                                             186.61
                                                  1.53
        90.00
                                                                                                                                                      43.68
                                                                                                        3 41 4
                                                                                             98.31
                                                                                                                        1798.1
                                                                                                                                      -27.37
                  3 1 6
19 8 31
                                                               52.18
                                                                             192.03
                                 2398.14
                                                 -28.82
       100.00
                                                                                             60.21 20 15 25
                                                                                                                                                     150.36
                                                                                                                        3414.0
                                                                                                                                       -1.35
                                                                             185.99
                                                              156.88
                                 4014.01
                                                  2.63
       100.00
                                                                                           102.55 5 5 27
56.20 21 0 25
                                                                                                                                                      21.74
                   4 30 7 2119.65
19 56 0 3865.27
                                                                                                                        1519.6
                                                                                                                                      -30.00
                                                                            191.34
                                                -32.06
                                                                30.34
       110.00
                                                                                                                        3265.3
                                                                                                                                          .95
                                                                                                                                                     137.63
                                                                             184.25
                                                               143.86
       110.00
                                                 5.43
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2310.7 SR 243.2 SS 716.1
CRT .9948 CRS -.9799 CST -.9683
                                                                  5GT 4931.5 SGR 320.1 SG3 217.6
RRT -.1430 RRF -.1331 RTF .9060
SGB 4941.9 R23 .0030 R13 -.9060
    TOE 1.5394 TRA -.6941 TC3-5.4864 BAU 1.0944
    ROE .1633 RRA -.0399 RC3 .2586 FAU .04562
FOE .9262 FRA .3337 FC3-2.6499 BSP 15625
                                                                                                                   LSA 2425.2 MSA 171.6 SSA 18.6
EL1 2323.4 EL2 24.7 ALF 5.98
                                                                 SG1 4931.7 SG2 316.8 THA 179.47
    BOE 1.5480 BRA .6952 BC3 5.4925 FSP -717
                                                                                                                              ARRIVAL DATE MAY 27 1966
                                                                     FLIGHT TIME 162.00
LAUNCH DATE DEC 16 1965
                                                                     DISTANCE 478.164
    RL 147.22 LAL -.00 LOL 83.83 VL 26.963 GAL -1.86 A7L 86.33 MCA 235.43 SMA 123.35 ECC .19611 INC 3.6690 VI 30.262 RP 108.94 LAP -3.02 LOP 319.20 VP 36.888 GAP 9.12 A7P 92.08 TAL 187.65 TAP 63.08 RCA 99.16 APO 147.54 V2 34.787 RC 160.359 GL 26.61 GP -3.18 TAL 100.70 TAP 164.18 ETS 348.00 TAE 130.10 ETE 182.81 TAC 70.88 ETC 163.06 CLP-164.49
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 14.826 VHL 3.850 OLA 17.46 RAL 332.95 RAD 6567.6 VEL 11.671 PTH 2.05 VHP 6.114 OPA -15.84 RAP 339.01 ECC 1.2440
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2121.7
                  1 33 8 2721.69
18 16 7 4212.88
3 4 36 2426.68
19 27 19 3983.12
4 35 8 2143.45
20 13 17 3839.11
                                                                                           95.64 2 18 29
61.69 19 26 20
                                                                                                                                     -26.72
                                                                           195.28
                                                 -27.80
                                                               76.13
        90.00
                                                                                                                                                     166.07
                                                                                                                        3612.9
                                                                                                                                       -3.33
                                                              172.70
                                                                             189.51
                                                   .45
        90.00
                                                                                                                        1826.7
                                                                                                                                      -27.77
                                                                                                                                                     45.71
                                                                                             97.25
                                                                                                        3 45 3
                                                                             195.11
                                                 -29.08
                                                                54.26
       100.00
                                                                                             60.15 20 33 43
                                                                                                                                       -2.40
                                                                                                                                                     148.66
                                                                                                                        3383.1
                                                                             188.88
                                                  1.58
                                                              155.18
       100.00
                                            -32.40
                                                                                                                                      -30.47
                                                                                            101.55 5 10 51
56.07 21 17 17
                                                                                                                        1543.5
                                                                                                                                                     23.43
                                                                            194.47
                                                                                           101.55
                                                                32.12
       110.00
                                                                                                                        3239.1
                                                                                                                                       -.05
                                                                                                                                                     136.27
                                                                            187.10
                                                 4.44
                                                               142.48
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 5000.3 SGR 332.7 SG3 211.3
RRT -.1170 RRF -.1128 RTF .9057
SGB 5011.4 R23 .0064 R13 -.9057
SGI 5000.5 SG2 330.4 THA 179.55
                                                                                                                    ST 2406.1 SR 255.1 SS 724.1
     TOE 1.6051 TRA -.5565 TC3-5.5921 BAU 1.1096
                                                                                                                    CRT .9968 CRS -.9733 CST -.9709
    RDE .1707 RRA -.0483 RC3 .2614 FAU .04318
FDE .9121 FRA .3893 FC3-2.5215 BSP 15826
BDE 1.6142 BRA .5586 BC3 5.5982 FSP -695
                                                                                                                   LSA 2520.1 MSA 166.5 SSA 19.4
EL1 2419.5 EL2 20.2 ALF 6.03
                                                                                                                               ARRIVAL DATE MAY 29 1966
                                                                       FLIGHT TIME 164.00
 LAUNCH DATE DEC 16 1965
                                                                      DISTANCE 483.900
   HELIOCENTRIC CONIC
    RL 147.22 LAL __.00 LOL 83.83 VL 26.913 GAL -1.46 A7L 86.37 MCA 238.59 SMA 123.04 ECC .19810 INC 3.6345 V1 30.262 RP 108.93 LAP -3.10 LOP 322.37 VP 36.853 GAP 9.36 A7P 91.90 TAL 185.92 TAP 64.51 RCA 98.67 APO 147.42 V2 34.789 RC 162.536 GL 26.29 GP -3.00 TAL 97.86 ZAP 165.11 ETS 348.08 TAE 130.08 ETE 182.63 TAC 72.98 ETC 163.58 CLP-165.41
   PLANETOCENTRIC CONIC
     C3 14.822 VHL 3.850 DLA 18.33 RAL 335.85 RAD 6567.6 VEL 11.671 PTH 2.05 VHP 6.248 DPA -14.85 RAP 341.11 ECC 1.2439
     UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 35 52 2755.13 -28.00 78.56 198.53 94.44 2 21 47 2155.1 -27.09 70.01
                                                                                                                                        -4.41
                                                                                                      19 46 12
                                                                                                                         3579.3
                                                                                              61.69
                                                               170.83
                                                                             192.62
                                  4179.33
                                                   -.63
                   18 36 33
        90.00
                                                                                                         3 49 7
                                                                                                                         1857.5
                                                                                                                                       -28.17
                                                                                                                                                      47.91
                                                                             198.39
                                                                                              96.08
                     3 8 10 2457.47
                                                  -29.32
                                                                 56.52
       100.00
                                                                                              60.11 20 52 48
                                                                                                                                        -3.44
                                                                                                                                                     146.96
                                                                                                                         3352.2
                   19 46 55 3952.22
4 40 19 2169.13
                                                               153.49
                                                                             191.97
                                                    . 54
       100.00
                                                                                                                                       -30.94
                                                                                                                                                       25.28
                                                                                                         5 16 29
                                                                                                                         1569.1
                                                                                            100.46 5 16 29
55.97 21 34 48
                                                  -32.73
                                                                 34.04
                                                                             197.81
       110.00
                                                                                                                     3213.3
                                                                                                                                       -1.03
                                                                                                                                                     134.92
                                  3813.32
                                                   3.46
                                                               141.13
                                                                             190.15
                   20 31 15
       110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                 SGT 5071.2 SGR 344.5 SG3 205.4 ST 2498.7 SR 267.1 S5 729.7 SGB 5082.8 R23 .0099 R13 -.9065 L5A 2611.7 H5A 161.4 S5A 20.1 SGI 5071.3 SG2 343.1 THA 179.64 ELI 2512.9 ELZ 20.7 ALF 6.08
                                                                                                                   ST 2498.7 SR 267.1 SS 729.7
     TOE 1.6716 TRA -.4127 TC3-5.6772 BAU 1.1262
     ROE .1785 RRA -.0563 RC3 .2608 FAU .04098
     FOE .8968 FRA .4399 FC3-2.3933 BSP 16097
BOE 1.6811 BRA .4165 BC3 5.6832 FSP -678
```

```
LAUNCH DATE DEC 16 1965
                                                                   FLIGHT TIME 166.00
                                                                                                                         ARRIVAL CATE MAY 31 1966
   HELIOCENTRIC CONIC
                                                                  DISTANCE 489.620
    RL 147.22 LAL -.00 LOL 83.83 VL 26.863 GAL -1.05 A7L 86.40 HCA 241.75 SMA 122.74 ECC .20029 INC 3.6022 V1 30.262 RP 108.92 LAP -3.17 LOP 325.53 VP 36.819 GAP 9.60 A7P 91.71 TAL 184.18 TAP 65.93 RCA 98.16 APO 147.32 V2 34.792
    RC 164.699 GL 25.92 GP -2.84 7AL 94.93 7AP 166.01 ETS 348.10 7AE 130.07 ETE 182.49 7AC 75.12 ETC 164.05 CLP-166.30
   PLANETOCENTRIC CONIC
    C3 14.899 VHL 3.860-OLA 19.20 RAL 338.86 RAD 6567.6 VEL 11.674 PTH 2.05 VHP 6.387 DPA -13.85 RAP 343.22 ECC 1.2452
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 38 37 2790.91
18 57 45 4145.87
3 11 49 2490.33
20 7 14 3921.68
4 45 44 2196.49
20 49 48 3788.29
                                                                                                                2190.9
                                              -28.16
                                                            81.16
                                                                       201.97
                                                                                      93.14 2 25 7
        90.00
                                                                                                                               -27.42
                                                                                                                                               72.57
                                                                                         61.73 20 6 51
94.83 3 53 20
        90.00
                                                -1.71
                                                            168.96
                                                                          195.93
                                                                                                                   3545.9
                                                                                                                                 -5.47
      100.00
                                                             58.94
                                                                         201.86
                                                                                                                   1890.3
                                                                                                                                 -28.55
                                                                                         60.11 21 12 35
99.27 5 22 21
55.90 21 52 56
      100.00
                                                 -.50
                                                           151.81
                                                                         195.26
                                                                                                                   3321.7
                                                                                                                                 -4.47
                                                                                                                                              145.28
                                               -33.05
                                                                         201.35
                                                             36.12
                                                                                                                   1596.5
                                                                                                                                -31.42
      110.00
                                                2.50
                                                            139.82
                                                                         193.38
                                                                                                                   3188.3
                                                                                                                                 -1.99
   DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SCT 5135.9 SCR 355.5 SC3 199.5
RRT -.0651 RRF -.0716 RTF .9073
    TDE 1.7422 TRA -.2586 TC3-5.7238 BAU 1.1413
                                                                                                               ST 2592.3 SR 279.1 SS 734.6
CRT .9955 CRS -.9586 CST -.9756
    RDE .1869 RRA -.0637 RC3 .2571 FAU .03878
                                                                SGB 5148.2 R23 .0123 R13 -.9073
          .8826 FRA .4894 FC3-2.2532 BSP 16335
                                                                                                               LSA 2704.2 MSA 156.9 SSA 20.7
    BOE 1.7522 BRA .2663 BC3 5.7296 FSP -660
                                                               SG1 5136.0 SG2 354.8 THA 179.74
                                                                                                              EL1 2607.1 EL2 26.2 ALF 6.12
LAUNCH DATE DEC 16 1965
                                                                   FLIGHT TIME 168.00
                                                                                                                          ARRIVAL DATE JUN 2 1966
  HELIOCENTRIC CONIC
                                                                  DISTANCE 495.324
   RL 147.22 LAL -.00 LOL 83.83 VL 26.814 GAL -.62 AZL 86.43 MCA 244.91 SMA 122.44 ECC .20270 INC 3.5717 VI 30.262 RP 108.91 LAP -3.23 LOP 328.70 VP 36.787 GAP 9.84 AZP 91.52 TAL 182.43 TAP 67.35 RCA 97.62 APO 147.26 VZ 34.796
    RC 166.847 GL 25.49 GP -2.69 7AL 91.94 7AP 166.90 ETS 348.05 7AE 130.08 ETE 182.36 7AC 77.29 ETC 164.48 CLP-167.17
   PLANETOCENTRIC CONIC
    C3 15.064 VHL 3.881 OLA 20.05 RAL 341.95 RAD 6567.6 VEL 11.681 PTH 2.05 VHP 6.531 CPA -12.85 RAP 345.33 ECC 1.2479
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   1 41 25 2828.80
                                              -28.27
                                                            83.93
                                                                        205.60
                                                                                        91.76
                                                                                                    2 28 34
                                                                                                                 2228.8
                                                                                                                                -27.72
                19 19 39 4112.92
3 15 37 2525.02
20 28 8 3891.92
4 51 25 2225.30
21 8 49 3764.41
       90.00
                                               -2.77
                                                            167.12
                                                                         199.44
                                                                                         61.81
                                                                                                  20 28 12
                                                                                                                   3512.9
                                                                                                                                  -6.52
      100.00
                                              -29.71
                                                             61.51
                                                                         205.52
                                                                                         93.49
                                                                                                   3 57 42
                                                                                                                   1925.0
                                                                                                                                 -28.91
                                                                                                                                                52.79
                                                                                         60.14 21 33 0
98.00 5 28 31
55.85 22 11 34
      100.00
                                               -1.51
                                                           150.18
                                                                         198.74
                                                                                                                   3291.9
                                                                                                                                 -5.47
                                                                                                                                               143.63
      110.00
                                              -33.34
                                                             38.31
                                                                         205.10
                                                                                                                   1625.3
                                                                                                                                -31.88
                                                                                                                                               29.39
      110.00
                                              1.59
                                                            138.57
                                                                         196.81
                                                                                                                   3164.4
                                                                                                                                -2.90
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               SGT 5198.2 SGR 365.8 SG3 193.9
RRT -.0384 RRF -.0491 RTF .9086
SGB 5211.0 R23 .0141 R13 -.9086
                                                                                                               ST 2682.9 SR 291.3 SS 738.3
CRT .9928 CRS -.9510 CST -.9777
    TOE 1.8150 TRA -.0952 TC3-5.7352 BAU 1.1562
    RDE .1960 RRA -.0706 RC3 .2503 FAU .03670
                                                                                                              LSA 2793.6 MSA 153.0 SSA 21.2
Fit 2698.5 EL2 34.7 ALF 6.15
   FOE .8689 FRA .5365 FC3-2.1088 BSP 16580
    80E 1.8255 BRA .1185 8C3 5.7407 FSP -645
                                                               SG1 5198.2 SG2 365.5 THA 179.84
                                                                   FLIGHT TIME 170.00
LAUNCH DATE DEC 16 1965
                                                                                                                        ARRIVAL DATE JUN 4 1966
                                                                 DISTANCE 501.009
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 26.765 GAL -.18 A7L 86.46 HCA 248.08 SMA 122.15 ECC .20534 INC 3.5428 VI 30.262 RP 108.89 LAP -3.29 LOP 331.87 VP 36.756 GAP 10.10 A7P 91.32 TAL 180.68 TAP 68.76 RCA 97.06 APO 147.23 V2 34.800 RC 168.980 GL 24.99 GP -2.57 ZAL 88.89 ZAP 167.76 ETS 347.92 ZAE 130.10 ETE 182.25 ZAC 79.48 ETC 164.87 CLP-168.03
   PLANETOCENTRIC CONIC
    C3 15.325 VHL 3.913 DLA 20.89 RAL 345.13 RAD 6567.6 VEL 11.692 PTH 2.06 VMP 6.682 DPA -11.85 RAP 347.46 ECC 1.2522
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                1 44 19 2868.53
19 42 6 4080.89
3 19 37 2561.25
20 49 30 3863.40
                                                                        209.40
                                                                                       90.30
                                                                                                   2 32 8
                                                                                                                 2268.5
                                              -28.32
                                                            86.83
                                                                                                                              -27.97
                                                                                         61.92 20 50 7
                                                                                                                                -7.53
                                              -3.80
                                                           165.33
                                                                         203.15
                                                                                                                  3480.9
                                                             64.19
                                                                                                   4 2 18
                                             -29.83
                                                                         209.36
                                                                                         92.08
                                                                                                                  1961.3
                                                                                                                                -29.22
                                                                                                                                               55.44
                                                                                        60.20 21 53 53
96.66 5 35 0
55.82 22 30 34
                                               -2.48
                                                           148.61
                                                                         202.41
                                                                                                                  3263.4
                                                                                                                                             142.05
                 4 57 25 2255.29
21 28 12 3742.13
                                             -33.61
                                                             40.62
                                                                        209.03
                                                                                                                 1655.3
                                                                                                                                - 32 . 32
                                                                                                                                               31.62
                                                                                                               3142.1
                                                                       200.41
                                                                                                                               -3.75
                                                           137.41
   DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                               SCT 5259.4 SCR 374.9 SC3 188.6
RRT -.0126 RRF -.0314 RTF .9115
SCB 5272.8 R23 .0198 R13 -.9115
                                                                                                            ST 2763.7 SR 303.5 55 735.2
CRT .9890 CRS -.9429 CST -.9795
LSA 2871.9 MSA 149.7 55A 21.4
    TOE 1.8859 TRA .0790 TC3-5.7158 BAU 1.1721
   ROE .2098 RRA -.0767 RC3 .2402 FAU .03496
FOE .8492 FRA .5809 FC3-1.9751 BSP 16873
BDE 1.8971 BRA .1101 BC3 5.7209 FSP -640
                                                               SG1 5259.4 SG2 374.9 THA 179.95
                                                                                                              EL1 2780.0 EL2 44.6 ALF
LAUNCH DATE DEC 16 1965
                                                                   FLIGHT TIME 172.00
                                                                                                                         ARRIVAL DATE JUN 6 1966
  HELIOCENTRIC CONIC
                                                                 DISTANCE 506.675
   RL 147.22 LAL -.00 LOL 83.83 VL 26.717 GAL .28 A7L 86.48 MCA 251.24 SMA 121.86 ECC .20824 INC 3.5151 V1 30.262
RP 108.88 LAP -3.33 LOP 335.04 VP 36.725 GAP 10.37 A7P 91.13 TAL 178.92 TAP 70.16 RCA 96.48 APO 147.23 V2 34.805
   RC 171.096 CL 24.43 GP -2.45 ZAL 85.79 ZAP 168.60 ETS 347.72 ZAE 130.12 ETE 182.16 ZAC 81.69 ETC 165.23 CLP-168.87
  PLANETOCENTRIC CONIC
   C3 15.691 VHL 3.961 DLA 21.69 RAL 348.38 RAD 6567.6 VEL 11.708 PTH 2.06 VHP 6.841 DPA -10.83 RAP 349.60 ECC 1.2582
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 47 23 2909.85 -28.29 89.85 213.36 88.79 2 35 53 2309.8 -28.16 81.19
                                                                                                                              -28.16
                 20 4 59
                              4050.22
                                               -4.78
                                                           163.61
                                                                         207.03
                                                                                         62.06
                                                                                                 21 12 30
                                                                                                                   3450.2
                                                                                                                                 -8.48
                                                                                                                                              156.89
       90.00
                                                            66.98
                                                                                                                   1998.8
                                                                                                                                               58.20
      100.00
                  3 23 52 2598.76
                                              -29.89
                                                                         213.37
                                                                                         90.61
                                                                                                  4 7 10
                                                                                                                                -29.48
                                                                                         60.28
                              3836.54
                                              -3.38
                                                           147.13
                                                                         206.26
                                                                                                 22 15 8
                                                                                                                   3236.5
                                                                                                                                 -7.31
      100.00
                 21 11 12
                                                                                                                                              140.55
      110.00
                  5 3 45
                             2286.24
3721.83
                                              -33.82
                                                            43.00
                                                                        213.13
                                                                                         95.27
                                                                                                   5 41 51
                                                                                                                  1686.2
                                                                                                                               -32.73
                                                                                                                                              33.94
                                                                                         55.82 22 49 49
                 21 47 48
                                               -.04
                                                           136.35
                                                                         204.18
                                                                                                                  3121.8
                                                                                                                                -4.52
                                                                                                                                              130.14
  DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                               SGT 5307.8 SGR 383.9 SG3 183.0 ST 2855.3 SR 316.1 SS 744.6
RRT .0167 RRF .0018 RTF .9102 CRT .9844 CRS -.9353 CST -.9814
SGB 5321.7 R23 -.0136 R13 .9102 LSA 2963.9 MSA 148.9 SSA 21.5
    TOE 1.9700 TRA .2686 TC3-5.6277 BAU 1.1816
   RDE .2169 RRA -.0818 RC3 .2283 FAU .03251
FDE .8462 FRA .6330 FC3-1.7938 BSP 16924
```

SG1 5307.8 SG2 383.8 THA .07

BDE 1.9819 BRA .2808 BC3 5.6324 FSP -603

EL1 2872.2 EL2 55.3 ALF 6.22

```
ARRIVAL CATE JUN 8 1966
                                                                     FLIGHT TIME 174.00
LAUNCH DATE DEC 16 1965
                                                                    DISTANCE 512.318
   HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 26.669 GAL .76 A7L 86.51 MCA 254.41 SMA 121.57 ECC .21141 INC 3.4885 VI 30.262 RP 108.86 LAP -3.36 LOP 338.21 VP 36.696 GAP 10.65 A7P 90.94 TAL 177.16 TAP 71.56 RCA 95.87 APO 147.27 V2 34.811 RC 173.196 GL 23.80 GP -2.35 TAL 82.67 TAP 169.43 ETS 347.42 TAE 130.16 ETE 182.09 TAC 83.93 ETC 165.55 CLP-169.69
   PLANETOCENTRIC CONIC
    C3 16.174 VHL 4.022 CLA 22.45 RAL 351.69 RAC 6567.6 VEL 11.728 PTH 2.07 VHP 7.007 CPA -9.81 RAP 351.74 ECC 1.2662
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 50 39 2952.37
20 28 6 4021.44
3 28 25 2637.15
21 33 2 3811.89
                                                                                                                     2352.4
                                                                                                                                    -28.28
                                                                                                                                                    84.30
                                                                                           87.23 2 39 51
                                                 -28.19
                                                               92.96
                                                                           217.46
        90.00
                                                                                                                                       -9.37
                                                                            211.09
                                                                                             62.21
                                                                                                     21 35 8
                                                                                                                        3421.4
                                                  -5.69
                                                              161.99
        90.00
                                                                                                                       2037.2
                                                                                                                                      -29.68
                                                -29.88
                                                               69.83
                                                                            217.53
                                                                                             89.11
                                                                                                       4 12 22
      100.00
                                                                                            60.38 22 36 34
93.82 5 49 7
55.82 23 9 11
                                                                                                                                                    139.17
                                                                                                                       3211.9
                                                                                                                                       -0.13
                                                                            210.28
                                                              145.78
                                                  -4.21
      100.00
                                                                                                                                      -33.09
                                                                                                                                                     36.33
                                                                                                                       1717.8
                    5 10 29 2317.81
22 7 27 3703.99
                                               -33.99
                                                                45.45
                                                                            217.40
      110.00
                                                                                                                                                    129.20
                                                                                                                       3104.0
                                                                                                                                       -5.20
                                                              135.42
                                                                            208.10
      110.00
                  22 7 27
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2926.2 SR 328.3 55 741.8
CRT .9792 CRS -.9276 CST -.9829
                                                                  SGT 5357.4 SGR 391.6 SG3 177.7
RRT .0439 RRF .0257 RTF .9122
    TOE 2.0463 TRA .4648 TC3-5.5168 BAU 1.1938
    RCE .2287 RRA -.0860 RC3 .2137 FAU .03063
FOE .8310 FRA .6769 FC3-1.6394 85P 17133
                                                                                                                   LSA 3032.9 HSA 148.2 55A 21.4
EL1 2943.8 EL2 66.3 ALF 6.27
                                                                  568 5371.7 R23 -.0146 R13 .9122
                                                                  SG1 5357.5 SG2 391.2 THA .18
    BOE 2.0590 BRA .4727 BC3 5.5210 FSP -591
                                                                                                                              ARRIVAL DATE JUN 10 1966
                                                                      FLIGHT TIME 176.00
LAUNCH DATE DEC 16 1965
                                                                     DISTANCE 517.938
   HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 26.622 GAL 1.26 AZL 86.54 MCA 257.57 SMA 121.29 ECC .21487 INC 3.4626 VI 30.262
RP 108.84 LAP -3.38 LOP 341.38 VP 36.668 GAP 10.94 AZP 90.75 TAL 175.39 TAP 72.96 RCA 95.23 APO 147.35 VZ 34.817
RC 175.278 GL 23.10 GP -2.26 ZAL 79.55 ZAP 170.25 ETS 347.01 ZAE 130.20 ETE 182.02 ZAC 86.18 ETC 165.84 CLP-170.51
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 11 2995.71 -28.01 96.12 221.69 85.66 2 44 7 2395.7 -28.32 87.47 90.00 20 51 16 3995.05 -6.53 160.50 215.29 62.39 21 57 51 3395.1 -10.18 142 70
                                                                                             87.59 4 17 56
60.48 22 57 58
92.36 5 56 48
55.84 23 28 28
                                                                                                                                                      63.92
                                                                                                                        2076.1
                                                                                                                                      -29.82
                    3 33 19
                                 2676.06
                                                 -29.80
                                                               72.72
                                                                             221.81
       100.00
                                                                                                                                                     137.94
                                                                                                                                       -8.85
                                                                            214.43
                                                                                                                        3189.9
       100.00
                  21 54 48
                                 3789.94
                                                  -4.95
                                                              144.56
                                                                                                                                                      38.77
                    5 17 38 2349.73
                                                                                                                        1749.7
                                                                                                                                     -33.41
                                                 -34.11
                                                                47.94
                                                                             221.81
       110.00
                                                                                                                                       -5.76
                  22 26 59
                                 3689.04
                                                 -1.29
                                                              134.64
                                                                             212.16
                                                                                                                        3089.0
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 2987.9 SR 340.5 SS 738.6
                                                                  SGT 5403.3 SGR 398.5 SG3 172.5
RRT .0715 RRF .0516 RTF .9142
    TOE 2.1231 TRA .6728 TC3-5.3662 BAU 1.2049
                                                                                                                    CRT .9736 CRS -.9201 CST -.9843
    ROE .2417 RRA -. 0892 RC3 .1973 FAU .02878
                                                                                                                    LSA 3093.0 MSA 148.5 55A 21.1
    FOE .8176 FRA .7206 FC3-1.4844 BSP 17324
BOE 2.1368 BRA .6787 BC3 5.3698 FSP -576
                                                                  5GB 5418.0 R23 -.0141 R13 .9142
                                                                  SG1 54D3.4 SG2 397.5 THA .30
                                                                                                                   EL1 3006.3 ELZ 77.3 ALF 6.34
                                                                                                                              ARRIVAL DATE JUN 12 1966
                                                                      FLIGHT TIME 178.00
LAUNCH DATE DEC 16 1965
                                                                     OISTANCE 523.531
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.575 GAL 1.78 A7L 86.56 MCA 260.74 SMA 121.02 ECC .21866 INC 3.4374 V1 30.262 RP 108.82 LAP -3.39 LOP 344.55 VP 36.641 GAP 11.25 A7P 90.55 TAL 173.62 TAP 74.36 RCA 94.56 APO 147.48 V2 34.824 RC 177.341 GL 22.35 GP -2.17 TAL 76.43 TAP 171.05 ETS 346.47 TAE 130.25 ETE 181.97 TAC 88.45 ETC 166.10 CLP-171.31
   PLANETOCENTRIC CONIC
    C3 17.538 VML 4.188 DLA 23.79 RAL 358.40 RAD 6567.7 VEL 11.786 PTH 2.08 VMP 7.367 DPA -7.76 RAP 356.03 ECC 1.2886
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 58 4 3039.44
21 14 14 3971.61
3 38 40 2715.08
                                                                           226.02
                                                                                                                     2439.4
                                                                                             84.09
                                                                                                        2 48 44
                                                 -27.74
                                                               99.29
        90.00
                                                                                             62.56 22 20 26
                                                                                                                                                     152.37
                                                                                                                        3371.6
                                                                                                                                      -10.89
                                                  -7.27
                                                              159.17
                                                                             219.63
        90.00
                                                                                                                        2115.1
                                                                                                                                      -29.89
                                                                                                                                                      66.82
                                                                                             86.08
                                                                                                         4 23 56
       100.00
                                                -29.66
                                                               75.61
                                                                             226.21
                                                                                             60.59 23 19 10
                                                                                                                                                     136.89
                                                                                                                        3171.2
                                                                                                                                       -9.46
                  22 16 19 3771.21
5 25 14 2381.69
22 46 15 3677.36
                                                  -5.58
                                                               143.53
                                                                             218.71
       100.00
                                                                                                                        1781.7
                                                                                                                                     -33.67
                                                                                                                                                     41.23
                                                                                                         6 4 56
                                                                             226.35
                                                                                             90.88
                                                -34.17
                                                                50.44
                                                                                             90.88 6 4 56
55:86 23 47 32
       110.00
                                                                                                                      3077.4
                                                                                                                                       -6.21
                                                                                                                                                    127.80
                                                                             216.32
                                                  -1.74
                                                               134.03
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 3041.2 SR 352.4 S5 734.4
CRT .9677 CRS -.9129 CST -.9856
                                                                 SGT 5443.7 SGR 404.7 SG3 167.6
RRT .0997 RRF .0788 RTF .9161
SGB 5458.7 R23 -.0131 R13 .9161
     TOE 2.2013 TRA .8954 TC3-5.1727 BAU 1.2136
     RDE .2558 RRA -.0912 RC3 .1796 FAU .02693
                                                                                                                    LSA 3144.7 MSA 150.1 SSA 20.7
EL1 3060.3 EL2 88.4 ALF 6.40
    FOE .8049 FRA .7651 FC3-1.3292 BSP 17439
BOE 2.2162 BRA .9001 BC3 5.1758 FSP -559
                                                                   561 5443.8 SGZ 402.7 THA
                                                                                                                               ARRIVAL DATE JUN 14 1966
                                                                      FLIGHT TIME 180.00
                                                                      DISTANCE 529.095
    RL 147.22 LAL -.00 LOL 83.83 VL 26.529 GAL 2.32 A7L 86.59 HCA 263.91 SNA 120.75 ECC .22279 INC 3.4126 V1 30.262 RP 108.79 LAP -3.39 LOP 347.73 VP 36.615 GAP 11.57 A7P 90.36 TAL 171.85 TAP 75.77 RCA 93.85 APO 147.65 V2 34.832 RC 179.385 GL 21.55 GP -2.10 TAL 73.34 ZAP 171.84 ETS 345.76 ZAE 130.30 ETE 181.92 ZAC 90.73 ETC 166.34 CLP-172.11
   PLANE TOCENTRIC CONIC
     C3 18.452 VML 4.296 DLA 24.37 RAL 1.77 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 7.562 DPA -6.72 RAP 358.19 ECC 1.3037
                                              INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                      -28.15
                                                                                                                                                     93.85
                                                                            230.43
                                                                                              82.55
                                                                                                         2 53 47
                                                                                                                        2483.0
                                                              102.43
                     2 2 24
                                  3083.04
                                                  -27.40
        90.00
                                                                                                      22 42 38
4 30 25
                                                                                                                                                     151.21
                                                                                                                         3351.7
                                                                                                                                       -11.49
                                                                             224.07
                                                                                              62.72
                                                  -7.89
                                                               158.04
                   21 36 47
                                 3951.71
        90.00
                                                                                                                                       -29.88
                                                                                                                                                      69.69
                                                                                                                         2153.8
                                 2753.76
                                                  -29.44
                                                                78.47
                                                                             230.69
                                                                                              84.59
                     3 44 32
       100.00
                                                                                              60.68 23 39 56
89.42 6 13 32
55.87 24 6 12
                                                                                                                         3156.2
                                                                                                                                       -9.94
                                                                                                                                                     136.04
                                                               142.70
                                                                             223.08
                                                  -6.08
                   22 37 20 3756.22
       100.00
                                                                                                                                                       43.68
                                                                                                                                      -33.88
                                                                             230.98
                                                                                                                         1813.4
                                                                52.91
                    5 33 19 2413.42
                                                 -34.18
       110.00
                                                                                                                                                     127.37
                                                                             220.58
                                                                                                                         3069.3
                                                                                                                                        -6.51
                                                               133.61
                                                  -2.04
       110.00
                   23 5 2
                                 3669.33
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 3076.7 SR 363.9 55 727.1
     TOE 2.2746 TRA 1.1275 TC3-4.9539 BAU 1.2227
                                                                   SGT 5481.2 SGR 410.0 SG3 162.6
                                                                                                                    CRT .9616 CRS -.9058 CST -.9867
                                                                  RRT .1271 RRF .1055 RTF .9184
     ROE .2711 RRA -.0920 RC3 .1611 FAU .02520
     FOE .7905 FRA .8077 FC3-1.1823 BSP 17620
BOE 2.2907 BRA 1.1312 BC3 4.9565 FSP -545
                                                                                                                     LSA 3178.6 MSA 152.6 SSA 20.1
                                                                  SGB 5496.5 R23 -.0120 R13 .9184
                                                                                                                    EL1 3096.5 EL2 99.3 ALF 6.50
                                                                  SG1 5481.4 SG2 406.6 THA .55
```

```
ARRIVAL DATE JUN 16 1966
                                                                               FLIGHT TIME 182.00
LAUNCH DATE DEC 16 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 534.624
    RL 147.22 LAL -.00 LOL 83.83 VL 26.484 GAL 2.89 AZL 86.61 HCA 267.08 SMA 120.48 ECC .22730 INC 3.3881 VI 30.262 RP 108.77 LAP -3.38 LOP 350.90 VP 36.589 GAP 11.91 AZP 90.17 TAL 170.09 TAP 77.17 RCA 93.10 APO 147.87 V2 34.840 RC 181.409 GL 20.71 GP -2.03 ZAL 70.29 ZAP 172.61 ETS 344.83 ZAE 130.35 ETE 181.89 ZAC 93.02 ETC 166.54 CLP-172.90
   PLANETOCENTRIC CONIC
                                                            5.12 RAD 6567.8 VEL 11.871 PTH 2.11 VHP 7.770 OPA -5.69 RAP
    C3 19.547 VHL 4.421 DLA 24.87 RAL 5.12 RAD 6567.8 VEL 11.871 PTH 2.11 VHP 7.770 DPA -5.69 RAP .34 ECC 1.3217 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 16 3125.98 -26.98 105.51 234.90 81.07 2 59.22 2526.0 -27.94 96.97 90.00 21 58 38 3935.93 -8.38 157.14 228.58 62.85 23 4 14 3335.9 -11.96 150.29 100.00 3 50 57 2791.68 -29.17 81.26 235.25 83.15 4 37 29 2191.7 -29.81 72.51 100.00 22 57 38 3745.46 -6.44 142.10 227.53 60.75 24 0 3 3145.5 -10.29 135.43 110.00 5 41 52 2444.66 -34.13 55.35 235.70 87.97 6 22 37 1844.7 -34.03 46.11 110.00 23 23 12 3665.24 -2.20 133.40 224.91 55.88 24 24 17 3065.2 -6.66 127.16
    C3 19.547 VHL 4.421 DLA 24.87 RAL
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SCT 5513.9 SCR 414.4 SC3 157.8

RRT .1547 RRF .1324 RTF .9209

SCB 5529.5 R23 -.0109 R13 .9209

SCI 5514.3 SC2 409.4 THA .67
                                                                                                                                   ST 3098.8 SR 374.7 SS 718.3
CRT .9553 CRS -.8988 CST -.9877
    TOE 2.3457 TRA 1.3728 TC3-4.7062 BAU 1.2304
    ROE .2875 RRA -.0914 RC3 .1422 FAU .02354
FOE .7759 FRA .8502 FC3-1.0426 BSP 17787
                                                                                                                                   LSA 3199.1 MSA 156.0 55A 19.5
    BOE 2.3633 BRA 1.3758 BC3 4.7084 FSP -532
                                                                                                                                    EL1 3119.5 EL2 110.0 ALF 6.60
                                                                               FLIGHT TIME 184.00
                                                                                                                                                ARRIVAL DATE JUN 18 1966
LAUNCH DATE DEC 16 1965
                                                                               DISTANCE 540.116
  HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.439 GAL 3.48 AZL 86.64 MCA 270.25 SMA 120.22 ECC .23224 INC 3.3636 V1 30.262 RP 108.74 LAP -3.36 LOP 354.08 VP 36.565 GAP 12.28 AZP 89.99 TAL 168.33 TAP 78.59 RCA 92.30 APO 148.14 V2 34.849 RC 183.413 GL 19.82 GP -1.97 ZAL 67.29 ZAP 173.38 ETS 343.62 ZAE 130.41 ETE 181.86 ZAC 95.32 ETC 166.72 CLP-173.68
   PLANETOCENTRIC CONIC
    C3 20.844 VHL 4.566 DLA 25.29 RAL
                                                           8.43 RAD 6567.8 VEL 11.926 PTH
                                                                                                            2.12 VHP 7.991 OPA -4.65 RAP
                                                                                                                                                            2.50 FCC 1.3430
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 12 48 3167.66
22 19 32 3924.90
3 58 1 2828.42
23 16 59 3739.37
5 50 55 2475.21
23 40 35 3665.35
        90.00
                                                                                                         79.66
                                                                                                                                      2567.7
                                                      -26.51
                                                                      108.47
                                                                                     239.42
                                                                                                                     3 5 36
                                                                                                                                                        -27.67
                                                                                                                                                                          99.99
        90.00
                                                        -8.72
                                                                       156.51
                                                                                       233.14
                                                                                                          62.95
                                                                                                                     23 24 56
                                                                                                                                         3324.9
                                                                                                                                                         -12.28
                                                                                                                                                                          149.64
       100.00
                                                      -28.84
                                                                       83.94
                                                                                       239.85
                                                                                                          81.77
                                                                                                                      4 45 10
                                                                                                                                        2228.4
                                                                                                                                                         -29.68
                                                                                                                                                                          75.23
                                                                                                          60.79 24 19 19
       100.00
                                                       -6.64
                                                                       141.76
                                                                                       232.02
                                                                                                                                         3139.4
                                                                                                                                                         -10.48
                                                                                                                                                                         135.08
                                                                                                         86.57 6 32 10
55.88 24 41 40
       110.00
                                                      -34.03
                                                                        57.73
                                                                                       240.47
                                                                                                                                        1875.2
                                                                                                                                                        ~34.13
                                                                                                                                                                          48.49
       110.00
                                                       -2.20
                                                                       133.41
                                                                                       229.27
                                                                                                                                        3065.4
                                                                                                                                                         -6.66
                                                                                                                                                                         127.16
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5541.8 SGR 418.0 SG3 153.1
RRT .1824 RRF .1602 RTF .9233
SGB 5557.6 R23 -.0093 R13 .9233
    TOE 2.4150 TRA 1.6329 TC3-4.4337 BAU 1.2360
                                                                                                                                    ST 3108.4 SR 384.7 SS 708.4 CRT .9489 CRS -.8920 CST -.9886
    ROE .3051 RRA -.0893 RC3 .1236 FAU .02188
FDE .7617 FRA .8933 FC3 -.9089 BSP 17909
BOE 2.4342 BRA 1.6353 BC3 4.4354 FSP -517
                                                                                                                                    LSA 3207.2 MSA 160.1 55A 18.8
                                                                           SG1 5542.4 SG2 410.9 THA .79
                                                                                                                                 EL1 3129.8 EL2 120.6 ALF 6.71
                                                                                                                                               ARRIVAL DATE JUN 20 1966
                                                                               FLICHT TIME 186.00
LAUNCH DATE DEC 16 1965
                                                                              DISTANCE 545.565
    RL 147.22 LAL -.00 LOL 83.83 VL 26.394 GAL 4.10 AZL 86.66 MCA 273.43 SMA 119.97 ECC .23762 INC 3.3392 V1 30.262
RP 108.71 LAP -3.33 LOP 357.26 VP 36.542 GAP 12.67 AZP 89.80 TAL 166.58 TAP 80.01 RCA 91.46 APO 148.48 VZ 34.858
RC 185.395 GL 18.92 GP -1.91 ZAL 64.37 ZAP 174.14 ETS 342.01 ZAE 130.46 ETE 181.84 ZAC 97.63 ETC 166.86 CLP-174.46
   PLANETOCENTRIC CONIC
    C3 22.373 VHL 4.730 DLA 25.63 RAL 11.69 RAD 6567.9 VEL 11.990 PTH 2.14 VHP 8.227 OPA -3.61 RAP
                                                                                                                                                            4.66 FCC 1.3682
    ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                      2 19 7 3207.50
22 39 12 3919.19
4 5 47 2863.59
                                                      -25.99
                                                                                                    78.34 3 12 34
63.01 23 44 31
                                                                      111.27 243.97
                                                                                                                                    2607.5 -27.34 102.86
        90.00
                    22 39 12
                                                        -8.90
                                                                      156.19
                                                                                      237.72
                                                                                                                                        3319.2
                                                                                                                                                        -12.45
                                                                                                                                                                        149.31
         90.00
                                                      -28.47
                                                                        86.49
                                                                                    244.49
                                                                                                         80.48
                                                                                                                     4 53 31
                                                                                                                                        2263.6
                                                                                                                                                        -29.49
                                                                                                                                                                         77.83
       100.00
                                                                                                         60.79 24 37 31
                      23 35 12 3738.34
6 0 26 2504.89
                                                                      141.70
                                                                                      236.52
                                                                                                                                        3138.3
                                                                                                                                                        -10.52
                                                                                                                                                                        135.02
       100.00
                    23 35 12
                                                        -6.67
                                                                                 245.29
                                                                                                         85.21 6 42 11
55.87 1 2 9
       110.00
                                                      -33.89
                                                                        60.04
                                                                                                                                        1904.9
                                                                                                                                                       -34.18
                                                                                                                                                                          50.81
                                                                                                                                                                         127.40
                      0 0 59
                                     3669.80
                                                       -2.03
                                                                      133.64
                                                                                       233.65
                                                                                                                                        3069.8
                                                                                                                                                        -6.49
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 3108.7 SR 393.7 $$ 698.8
CRT .9423 CRS -.8854 CST -.9895
                                                                          SGT 5565.9 SGR 420.8 SG3 148.6
RRT .2107 RRF .1890 RTF .9259
SGB 5581.8 R23 -.0074 R13 .9259
    TOE 2.4845 TRA 1.9104 TC3-4.1394 BAU 1.2385
    ROE .3238 RRA -.0856 RC3 .1057 FAU .02025
FDE .7490 FRA .9376 FC3 -.7834 BSP 17970
BDE 2.5055 BRA 1.9123 BC3 4.1408 FSP -501
                                                                                                                                  LSA 3206.2 MSA 164.8 35A 18.0
                                                                           SG1 5566.6 SG2 411.3 THA
                                                                                                                   .92
                                                                                                                                    EL1 3130.8 EL2 130.8 ALF 6.82
                                                                               FLIGHT TIME 188.00
                                                                                                                                                ARRIVAL DATE JUN 22 1966
LAUNCH DATE DEC 16 1965
                                                                               DISTANCE 550.964
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.350 GAL 4.76 A7L 86.69 MCA 276.60 SMA 119.72 ECC .24352 INC 3.3146 V1 30.262
RP 108.68 LAP -3.29 LOP .44 VP 36.520 GAP 13.08 A7P 89.62 TAL 164.84 TAP 81.45 RCA 90.57 APO 148.87 V2 34.868
RC 187.357 GL 17.99 GP -1.86 ZAL 61.52 ZAP 174.89 ETS 339.83 ZAE 130.52 ETE 181.82 ZAC 99.94 ETC 166.98 CLP-175.24
   PLANETOCENTRIC CONIC
    C3 24.165 VHL 4.916 DLA 25.90 RAL 14.87 RAD 6568.0 VEL 12.064 PTH 2.16 VHP 8.480 OPA -2.57 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 26 19 3244.91
22 57 23 3919.37
                                                       -25.45
                                                                      113.87
                                                                                     248.54
                                                                                                         77.14
                                                                                                                      3 20 24
                                                                                                                                       2644.9
                                                                                                                                                       -26.97
                                                                                                                                                                        105 54
        90.00
                                                        -8.89
                                                                      156.20
                                                                                      242.29
                                                                                                          63.01
                                                                                                                    24 2 42
                                                                                                                                        3319.4
                                                                                                                                                        -12.45
                                                                                                                                                                         149.32
        90.00
                      4 14 16 2896.88
23 52 7 3742.63
6 10 23 2533.61
                                                      -28.07
                                                                        88.88
                                                                                      249.16
                                                                                                         79.28
                                                                                                                      5 2 33
                                                                                                                                        2296.9
                                                                                                                                                         -29.26
                                                                                                                                                                          80.28
                                                                                       241.02
                                                                                                          60.77 24 54 29
                                                                                                                                        3142.6
                                                                                                                                                        -10.38
                                                                                                                                                                        135.27
                     23 52 7
                                                        -6.53
                                                                      141.94
                                                      -33.70
                                                                        62.26
                                                                                     250.13
                                                                                                         83.91
                                                                                                                     6 52 36
                                                                                                                                        1933.6
                                                                                                                                                        -34.18
                                                                                                                                                                         53.05
                      0 16 26 3678.67
                                                                                    238.02
                                                                                                                                                        -6.16
                                                                                                         55.85
                                                                                                                                      3078.7
       110.00
                                                                      134.10
                                                                                                                     1 17 44
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         SGT 5585.6 SGR 422.6 SG3 144.2 ST 3092.3 SR 401.5 S5 687.2 RRT .2384 RRF .2169 RTF .9288 CRT .9356 CR5 -.8788 CST -.9903 SGB 5601.5 R23 -.0059 R13 .9288 LSA 3188.5 MSA 169.9 SSA 17.3 SG1 5586.5 SG2 410.4 THA 1.04 EL1 3115.0 EL2 140.7 ALF 6.94
    TOE 2.5477 TRA 2.2002 TC3-3.8401 BAU 1.2409
    RDE .3434 RRA -.0803 RC3 .0886 FAU .01873
FDE .7349 FRA .9813 FC3 -.6710 8SP 18096
    BOE 2.5708 BRA 2.2017 BC3 3.8412 FSP -488
```

```
ARRIVAL DATE JUN 24 1966
LAUNCH DATE DEC 16 1965
                                                                         FLIGHT TIME 190.00
                                                                        DISTANCE 556.306
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.307 GAL 5.45 A7L 86.71 HCA 279.78 SMA 119.47 ECC .24997 INC 3.2897 V1 30.262 RP 108.65 LAP -3.24 LOP 3.62 VP 36.498 GAP 13.53 A7P 89.44 TAL 163.12 TAP 82.90 RCA 89.61 APO 149.34 V2 34.878 RC 189.297 GL 17.05 GP -1.81 ZAL 58.77 ZAP 175.63 ETS 336.81 ZAE 130.57 ETE 181.81 ZAC 102.25 ETC 167.06 CLP-176.02
   PLANETOCENTRIC CONIC
    C3 26.259 VHL 5.124 DLA 26.09 RAL 17.97 RAD 6568.1 VEL 12.151 PTH 2.18 VHP 8.752 DPA -1.54 RAP
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 34 32 3279.40
23 13 52 3925.86
4 23 30 2928.08
0 11 31 3752.41
                                                                                                                          2679.4
        90.00
                                                   -24.90
                                                                 116.25
                                                                              253.12
                                                                                                76.07
                                                                                                           3 29 11
                                                                                                                                          -26.58
                                                                                                                                                         107.99
                                                                                                          24 19 18
                                                                                246.82
                                                                                                                             3325.9
                                                                                                                                           -12.25
                                                                                                                                                          149.70
                                                   -8.69
                                                                156.57
                                                                                                 62.94
        90.00
                                                                                                78.18 5 12 18
60.70 1 14 3
82.66 7 3 24
55.83 1 32 19
                                                   -27.66
                                                                  91.11
                                                                                253.83
                                                                                                                             2328.1
                                                                                                                                            -29.01
                                                                                                                                                            82.56
       100.00
                                                                                                                             3152.4
                                                                                                                                            -10.06
                                                                                                                                                          135.82
                                                    -6.21
                                                                 142.48
                                                                               245.48
       100.00
                    6 20 43 2561.32
0 30 47 3691.93
                                                                                                                             1961.3
                                                                                                                                            -34.13
                                                                                                                                                           55.21
       110.00
                                                 -33.48
                                                                  64.39
                                                                               254.97
                                                                                                                           3091.9
                                                                                                                                           -5.66
                                                                                                                                                          128.57
                                                                 134.79
                                                                               242.37
       110.00
                                                  -1.18
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5600.4 SGR 423.6 SG3 139.9
RRT .2661 RRF .2451 RTF .9319
                                                                                                                        ST 3064.4 SR 407.8 SS 675.4
CRT .9287 CRS -.8722 CST -.9911
    TOE 2.6079 TRA 2.5065 TC3-3.5349 BAU 1.2412
    ROE .3639 RRA -.0733 RC3 .0729 FAU .01726
FOE .7214 FRA 1.0257 FC3 -.5691 BSP 18211
                                                                                                                        LSA 3159.5 MSA 175.2 SSA 16.5
EL1 3087.8 EL2 150.1 ALF 7.06
                                                                    SGB 5616.4 R23 -.0043 R13 .9318
                                                                     SG1 5601.6 SG2 408.3 THA 1.16
    BOE 2.6332 BRA 2.5075 BC3 3.5357 FSP -475
                                                                                                                                    ARRIVAL DATE JUN 26 1966
                                                                         FLIGHT TIME 192.00
LAUNCH DATE DEC 16 1965
                                                                        DISTANCE 561.581
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.265 GAL 6.18 A7L 86.74 MCA 282.96 SMA 119.23 ECC .25703 INC 3.2643 VI 30.262 RP 108.62 LAP -3.18 LOP 6.81 VP 36.478 GAP 14.01 A7P 89.27 TAL 161.41 TAP 84.37 RCA 88.59 APO 149.88 V2 34.889 RC 191.216 GL 16.11 GP -1.77 ZAL 56.12 ZAP 176.35 ETS 332.44 ZAE 130.61 ETE 181.80 ZAC 104.55 ETC 167.12 CLP-176.81
   PLANETOCENTRIC CONIC
    C3 28.701 VHL 5.357 DLA 26.21 RAL 20.96 RAD 6568.2 VEL 12.251 PTH
                                                                                                   2.20 VHP 9.045 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2710.6
                                                                                                                                                         110.19
        90.00 2 43 46 3310.62
                                                                              257.71
                                                                                               75.13 3 38 57
                                                                                                                                           -26.18
                                                  -24.38
                                                                118.39
                  23 28 31 3938.89
4 33 27 2957.06
0 25 28 3767.69
6 31 23 2588.03
0 44 0 3709.48
                                                                                                          24 34 10
                                                                                                                             3338.9
                                                                                                                                            -11.87
                                                                                                                                                           150.46
        90.00
                                                    -8.29
                                                                 157.31
                                                                                251.29
                                                                                                 62.83
                                                                                                         5 22 44
1 28 15
7 14 31
1 45 50
                                                                                                                             2357.1
                                                                                                                                            -28.73
                                                                                                                                                            84.67
                                                   -27.23
                                                                   93.16
                                                                                258.49
                                                                                                 77.18
                                                                                                                             3167.7
                                                                                                                                             -9.57
                                                                                                                                                           136.69
       100.00
                                                    -5.70
                                                                 143.33
                                                                                249.89
                                                                                                 60.61
                                                                                                                             1988.0
                                                                                                                                           -34.05
                                                                                                                                                            57.29
      110.00
                                                  -33.23
                                                                   66.44
                                                                               259.80
                                                                                                 81.48
       110.00
                                                    -.51
                                                                 135.71
                                                                                246.67
                                                                                                 55.82
                                                                                                                             3109.5
                                                                                                                                            -4.99
                                                                                                                                                           129.49
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 5611.2 SGR 423.7 SG3 135.7
RRT .2938 RRF .2733 RTF .9350
SGB 5627.1 R23 -.0029 R13 .9350
                                                                                                                        ST 3027.8 SR 412.6 SS 663.7
CRT .9215 CRS - 78655 CST - .9918
     TOE 2.6663 TRA 2.8317 TC3-3.2275 BAU 1.2386
    ROE .3852 RRA -.0644 RC3 .0586 FAU .01583
FOE .7085 FRA 1.0718 FC3 -.4776 BSP 18303
                                                                                                                         LSA 3121.8 MSA 180.5 SSA 15.8
                                                                     5G1 5612.6 SG2 404.9 THA 1.28
    BOE 2.6940 BRA 2.8325 BC3 3.2281 FSP -462
                                                                                                                        EL1 3051.7 EL2 159.0 ALF 7.18
                                                                                                                                   ARRIVAL DATE JUN 28 1966
                                                                        FLIGHT TIME 194.00
LAUNCH DATE DEC 16 1965
                                                                        DISTANCE 566.780
   HELIOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.223 GAL 6.96 AZL 86.76 HCA 286.14 SMA 119.00 ECC .26479 INC 3.2382 V1 30.262 RP 108.58 LAP -3.11 LOP 9.99 VP 36.459 GAP 14.53 AZP 89.10 TAL 159.73 TAP 85.87 RCA 87.49 APO 150.51 V2 34.900 RC 193.113 GL 15.18 GP -1.73 ZAL 53.57 ZAP 177.04 ETS 325.79 ZAE 130.65 ETE 181.80 ZAC 106.86 ETC 167.15 CLP-177.60
   PLANETOCENTRIC CONIC
    C3 31.548 VHL 5.617 DLA 26.27 RAL 23.84 RAD 6568.3 VEL 12.366 PTH 2.23 VHP 9.362 DPA .52 RAP 13.30 ECC 1.5192 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2738.5
                                                                                                74.31
                                                                                                           3 49 41
                                                                                                                                          -25.80
                                                                                                                                                       112.14
                                                                               262.29
                                                                 120.28
        90.00
                   2 54 3 3338.46
23 41 14 3958.47
                                                  -23.88
                                                                                                                            3358.5
                                                                                                                                                          151.60
                                                                               255.68
                                                                                                 62.66 24 47 13
                                                                                                                                           -11.28
                                                                158.43
                                                  -7.68
        90.00
                   4 44 2 2983.86
0 37 52 3788.31
                                                                                                                                                           86.61
                                                                                                 76.27
                                                                                                           5 33 46
                                                                                                                            2383.9
                                                                                                                                           -28.44
                                                                  95.04
                                                                               263.14
                                                 -26.82
      100.00
                                                                                                          1 41 0
                                                                                                                                            -8.90
                                                                                                                                                          137.85
                                                                 144.47
                                                                                                 60.49
                                                                                                                            3188.3
                                                                               254.22
      100.00
                                                   -5.01
                                                                                                80.35 7 25 53
55.82 1 58 16
                                                                                                                                           -33.93
                                                                                                                                                           59.30
                                                                                                                            2013.8
                                                                  68.40
                                                                               264.60
      110.00
                                                 -32.95
                    6 42 19 2613.79
                                                                                                                                           -4.17
                                                                                                                                                          130.63
                                                                                                                            3131.1
                                                                136.84
                                                                               250.92
      110.00
                    0.56.5
                                  3731.14
                                                   .32
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                    SGT 5618.7 SGR 423.1 SG3 131.8
RRT .3221 RRF .3024 RTF .9384
SGB 5634.6 R23 -.0015 R13 .9384
SGI 5620.4 SG2 400.4 THA 1.40
                                                                                                                        ST 2986.7 SR 415.8 SS 653.6
CRT .9141 CRS -.8591 CST -.9926
    TOE 2.7261 TRA 3.1796 TC3-2.9194 BAU 1.2315
    ROE .4073 RRA -.0535 RC3 .0461 FAU .01439
FOE .6977 FRA 1.1205 FC3 -.3950 BSP 18309
                                                                                                                        LSA 3079.8 MSA 185.7 SSA 15.1
EL1 3010.8 EL2 167.3 ALF 7.28
    BOE 2.7563 BRA 3.1801 BC3 2.9198 FSP -447
                                                                                                                                    ARRIVAL DATE JUN 30 1966
                                                                         FLIGHT TIME 196.00
LAUNCH DATE DEC 16 1965
                                                                        DISTANCE 571.888
   HELLOCENTRIC CONIC
    RL 147.22 LAL -.00 LOL 83.83 VL 26.182 GAL 7.79 AZL 86.79 MCA 289.32 SMA 118.77 ECC .27332 INC 3.2112 VI 30.262

RP 108.55 LAP -3.03 LOP 13.18 VP 36.440 GAP 15.09 AZP 88.94 TAL 158.07 TAP 87.39 RCA 86.31 APO 151.23 VZ 34.912

RC 194.989 GL 14.25 GP -1.69 ZAL 51.13 ZAP 177.67 ETS 315.05 ZAE 130.67 ETE 181.80 ZAC 109.16 ETC 167.14 CLP-178.40
   PLANETOCENTRIC CONIC
    C3 34.866 VHL 5.905 DLA 26.26 RAL 26.61 RAD 6568.4 VEL 12.499 PTH 2.26 VMP 9.706 DPA
                                                                                                                                1.53 RAP 15.46 ECC 1.5738
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            2763.0
                                                                                                                                           -25.44
                                                   -23.41
                                                                               266.85
                                                                                                73.60
                                                                                                            4 1 18
                     3 5 15 3363.01
                                                                 121.93
        90.00
                                                                                                           24 58 28
                                                                                                                             3384.3
                                                                                                                                            -10.50
                                                                                259.97
                                                                                                 62.46
                    23 52 4
                                  3984.34
                                                    -6.87
                                                                 159.89
        90.00
                                                                                                          5 45 21
1 52 18
7 37 24
                   4 55 12 3008.57
0 48 44 3814.01
6 53 25 2638.67
                                                                                                                             2408.6
                                                                                                                                            -28.14
                                                                                267.76
                                                                                                 75.45
       100.00
                                                   -26.40
                                                                   96.76
                                                                                                                                                           139.29
                                                                                                                             3214.0
                                                                                                                                            -8.06
                                                    -4.14
                                                                 145.89
                                                                                258.48
                                                                                                 60.37
       100.00
                                                                                                                                           -33.79
                                                                                                                             2038.7
                                                   -32.65
                                                                  70.28
                                                                                269.37
                                                                                                 79.27
       110.00
                                                                                                                                           -3.20
                                                                                                                             3156.7
                     1 7 0
                                  3756.68
                                                    1.30
                                                                 138.17
                                                                               255.09
                                                                                                 55.84
                                                                                                            2 9 37
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2935.1 SR 417.3 SS 643.1 CRT .9064 CRS -.8525 CST -.9933 LSA 3027.6 MSA 190.7 SSA 14.4 EL1 2959.5 EL2 174.8 ALF 7.37
                                                                     SGT 5620.8 SGR 421.4 SG3 127.9
RRT .3497 RRF .3306 RTF .9419
SGB 5636.6 R23 -.0005 R13 .9419
    TOE 2.7810 TRA 3.5454 TC3-2.6232 BAU 1.2229
    RDE .4298 RRA -.0406 RC3 .0351 FAU .01306
    FDE .6864 FRA 1.1698 FC3 -.3243 BSP 18379
```

SG1 5622.8 SG2 394.7 THA 1.51

BDE 2.8141 BRA 3.5456 BC3 2.6234 FSP -435

ARRIVAL DATE JUL 2 1966

LAUNCH DATE DEC 16 1965

HELIOCENTRIC CONIC

```
RL 147.22 LAL -.00 LOL 83.83 VL 26.141 GAL 8.67 AZL 86.82 HCA 292.51 SHA 118.54 ECC .28271 INC 3.1831 VI 30.262
RP 108.51 LAP -2.94 LOP 16.37 VP 36.422 GAP 15.71 AZP 88.78 TAL 156.45 TAP 88.96 RCA 85.03 APO 152.06 V2 34.924
RC 196.842 GL 13.33 GP -1.66 TAL 48.81 ZAP 178.17 ETS 297.10 ZAE 130.68 ETE 181.80 ZAC 111.44 ETC 167.10 CLP-179.22
   PLANETOCENTRIC CONIC
     C3 38.739 VHL 6.224 DLA 26.19 RAL 29.24 RAD 6568.5 VEL 12.653 PTM 2.30 VMP 10.081 DPA
                                                                                                                                                           2.53 RAP 17.61 ECC 1.6375
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 17 16 3384.57 -22.99 123.37 271.39 73.00 4 13 40 2784.6 -25.10 115.33 90.00 0 5 0 4016.00 -5.87 161.68 264.15 62.25 1 11 56 3416.0 -9.54 154.93
                                                                                                                                 1 11 56
5 57 20
                        5 6 49 3031.41
0 58 8 3844.40
7 4 37 2662.77
1 16 48 3785.80
                                                                                                                                                       2431.4
                                                                                                                                                                         -27.85
        100.00
                                                             -26.00
                                                                               98.34
                                                                                                272.35
                                                                                                                     74.71
                                                                                                                                2 2 12
7 49 0
                                                                                                                                                       3244.4
                                                                                                                                                                         -7.05
                                                                                                                                                                                           140.99
                                                                              147.57
                                                                                                262.63
                                                                                                                     60.26
                                                              -3.12
        100.00
                                                                                                                                                                         -33.61
                                                                                                                                                                                            63.09
                                                                                                                                                       2062.8
                                                             -32.33
                                                                                72.09
                                                                                                274.09
                                                                                                                     78.25
        110.00
                                                                                 39.69 259.19 55.89 2 19 54
HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                           133.49
                                                                                                                                                       3185.8
                                                                                                                                                                          -2.08
                                                                              139.69
        110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2878.5 SR 416.9 SS 633.6
CRT .8985 CRS -.8460 CST -.9939
                                                                                   SGT 5618.3 SGR 418.9 SG3 124.2

RRT .3773 RRF .3588 RTF .9456

SGB 5633.9 R23 .0003 R13 .9456

SGI 5620.5 SG2 387.8 THA 1.62
     TOE 2.8352 TRA 3.9344 TC3-2.3369 BAU 1.2104
    RDE .4528 RRA -.0257 RC3 .0258 FAU .01176
FOE .6765 FRA 1.2217 FC3 -.2628 BSP 18449
                                                                                                                                                  LSA 2970.3 MSA 195.1 SSA 13.8
EL1 2902.8 EL2 181.5 ALF 7.44
     BOE 2.8711 BRA 3.9344 BC3 2.3371 FSP
                                                                -423
                                                                                                                                                               ARRIVAL DATE JUL 4 1966
                                                                                        FLIGHT TIME 200.00
LAUNCH DATE DEC 16 1965
   HELIOCENTRIC CONIC
                                                                                       DISTANCE 581.764
    RL 147.22 LAL -.00 LOL 83.83 VL 26.101 GAL 9.62 ATL 86.85 HCA 295.70 SMA 118.32 ECC .29308 INC 3.1537 V1 30.262 RP 108.47 LAP -2.84 LOP 19.56 VP 36.406 GAP 16.38 ATP 88.63 TAL 154.87 TAP 90.56 RCA 83.65 APO 153.00 V2 34.936 RC 198.673 GL 12.43 GP -1.62 TAL 46.61 TAP 178.37 ETS 270.00 TAE 130.68 ETE 181.80 TAC 113.71 ETC 167.02 CLP 179.95
   PLANETOCENTRIC CONIC
    C3 43.267 VHL 6.578 DLA 26.07 RAL 31.74 RAD 6568.6 VEL 12.831 PTH 2.34 VHP 10.491 DPA 3.52 RAP 19.75 ECC 1.7121
LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 29 52 3403.59 -22.61 124.63 275.89 72.48 4 26 35 2803.6 -24.79 116.64
90.00 D 12 20 4052.79 -4.70 163.75 268.21 62.04 1 19 53 3452.8 -8.40 157.03
100.00 5 18 44 3052.60 -25.62 99.79 276.88 74.04 6 9 37 2452.6 -27.56 91.53
100.00 1 6 9 3879.01 -1.95 149.47 266.69 60.17 2 10 48 3279.0 -5.90 142.92
                                                                                   9.19 276.88 74.04 6 9 37

9.47 266.69 60.17 2 10 48

3.83 278.74 77.27 8 0 37

1.38 263.21 55.99 2 29 10

MID-COURSE EXECUTION ACCURACY

SGT 5603.8 SGR 414 6 672
                       7 15 51 2686.19
1 25 31 3818.19
                                                                                                                                                       2086.2
                                                                                                                                                                        -33.41
                                                                                                                                                                                             64.89
                                                            -31.99
                                                                                73.83
        110.00
                                                                                                                                                       3218.2
                                                                                                                                                                           -.85
        110.00
                                                               3.64
                                                                               141.38
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SCT 5603.8 SGR 415.6 SG3 120.6

RRT .4051 RRF .3866 RTF .9492

SCB 5619.2 R23 .0003 R13 .9492

SCI 5606.3 SG2 379.8 THA 1.73
                                                                                                                                                  ST 2817.3 SR 414.8 SS 625.8
CRT .8907 CRS -.8395 CST -.9945
     TOE 2.8901 TRA 4.3389 TC3-2.0624 BAU 1.1930
     RDE .4762 RRA -.0088 RC3 .0182 FAU .01049
FDE .6680 FRA 1.2768 FC3 -.2098 BSP 18494
BDE 2.9290 BRA 4.3389 BC3 2.0625 FSP -412
                                                                                                                                                  LSA 2908.8 MSA 198.8 SSA 13.2
EL1 2841.5 EL2 186.9 ALF 7.50
                                                                                        FLIGHT TIME 202.00
                                                                                                                                                               ARRIVAL DATE JUL 6 1966
LAUNCH DATE DEC 16 1965
                                                                                       DISTANCE 586.486
   HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 26.062 GAL 10.64 AZL 86.88 HCA 298.89 SMA 118.11 ECC .30456 INC 3.1227 VI 30.262
RP 108.43 LAP -2.73 LOP 22.75 VP 36.390 GAP 17.12 AZP 88.49 TAL 153.33 TAP 92.22 RCA 82.14 APQ 154.08 V2 34.948
RC 200.481 GL 11.55 GP -1.60 ZAL 44.53 ZAP 178.17 ETS 242.64 ZAE 130.64 ETE 181.80 ZAC 115.96 ETC 166.91 CLP 179.10
    PLANETOCENTRIC CONIC
     C3 48_578 VML 6.970 OLA 25.91 RAL 34.10 RAO 6568.8 VEL 13.036 PTH 2.38 VMP 10.941 DPA
                                                                                                                                                            4.49 RAP 21.88 ECC 1.7995
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                     72.03 4 39 52
61.87 1 26 24
73.43 6 22 4
60.11 2 18 9
76.33 8 12 9
56.14 2 37 26
                                                                                                                                                                      -24.51
                                                                                                                                                   2820.5
                                                                                                                                                                                          117.80
          90.00
                                                                              125.75
                                                                                               280.34
                                                             -22.26
                      3 42 52 3420.55
0 18 10 4093.95
                                                                                                272.15
                                                                                                                                                       3494.0
                                                                                                                                                                         -7.12
                                                                                                                                                                                           159.37
                                                                              166.06
          90.00
                                                             -3.38
                                                                                                                                                       2472.4
                                                                                                                                                                         -27.27
                                                                                                                                                                                            92.93
                                                                                                281.35
                       5 30 51 3072.40
1 12 52 3917.33
                                                                              101.14
        100.00
                                                            -25.24
                                                                                                                                                       3317.3
                                                                                                                                                                         -4.62
                                                                                                                                                                                           145.04
                                                                              151.57
                                                                                                270.63
        100.00
                                                               - .65
                                                                                                                                                    2109.0
3253.5
                                                                                                                                                                         -33.19
                                                                                                                                                                                            66.63
                                                                                                283.32
        110.00
                        7 27 0 2709.00
1 33 12 3853.50
                                                            -31.64
                                                                                75.51
                                                                                                                                                                                           137.02
                                                                              143.24
                                                                                                267.13
                                                                                                                                                                            .50
        110.00
                                                              4.99
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   RET .4332 RRF .411.5 SG3 117.2
RRT .4332 RRF .4161 RTF .9535
SGB 5618.0 R23 .0013 R13 .9535
SG1 5605.7 SG2 370.7 THA 1.83
                                                                                                                                                  ST 2760.9 SR 411.0 SS 620.5

CRT .8823 CRS -.8336 CST -.9953

LSA 2852.3 MSA 201.9 SSA 12.6

EL1 2784.8 EL2 191.8 ALF 7.52
     TOE 2.9516 TRA 4.7970 TC3-1.7986 BAU 1.1681
     RDE .5000 RRA .0111 RC3 .0123 FAU .00917
FDE .6623 FRA 1.3367 FC3 -.1634 BSP 18448
     BDE 2.9937 BRA 4.7970 BC3 1.7986 FSP -398
                                                                                                                                                                ARRIVAL DATE JUL 8 1966
                                                                                        FLIGHT TIME 204.00
LAUNCH DATE DEC 16 1965
                                                                                        DISTANCE 591.024
   HELIOCENTRIC CONIC
     RL 147.22 LAL -.00 LOL 83.83 VL 26.024 GAL 11.74 AZL 86.91 MCA 302.08 SMA 117.90 ECC .31729 INC 3.0897 VI 30.262

RP 108.39 LAP -2.62 LOP 25.94 VP 36.375 GAP 17.93 AZP 88.36 TAL 151.86 TAP 93.94 RCA 80.49 APO 155.31 VZ 34.961

RC 202.264 GL 10.69 GP -1.57 ZAL 42.58 ZAP 177.63 ETS 223.59 ZAE 130.58 ETE 181.80 ZAC 118.19 ETC 166.76 CLP 178.23
    PLANETOCENTRIC CONIC
     C3 54.828 VHL 7.405 DLA 25.70 RAL 36.32 RAD 6569.0 VEL 13.274 PTH 2.43 VHP 11.438 DPA
                                                                                                                                                           5.44 RAP 24.00 ECC 1.9023
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 4 53 20
                                                                                                                                                                                         118.84
                                                                                                                                                    2835.9
                         3 56 4 3435.86
                                                                              126.75
                                                                                               284.71
                                                                                                                     71.62
                                                                                                                                                                         -24.24
                                                             -21.93
          90.00
                                                                                1 31 39
203.74 72.86 6 34 33
153.85 274.47 60.12 2 24 22
77.14 287.80 75.43 8 23 32
145.23 270.96 56.35 2 44 44
MIO-COURSE EXECUTION ACCURACY
SGT 5587.8 SGR 406.5 SG3
                                                                                                                                   1 31 39
                                                                                                                                                        3538.8
                                                                                                                                                                          -5.70
                                                                                                                                                                                            161.91
                                                                               168.57
                        0 22 40 4138.77
5 43 2 3091.01
                                                               -1.94
          90.00
                                                                                                                                                       2491.0
                                                                                                                                                                         -26.98
                                                                                                                                                                                             94.24
                                                             -24.87
                                                                               102.40
         100.00
                                                                                                                                                       3358.9
                                                                                                                                                                          -3.22
                                                                                                                                                                                            147.33
                        1 18 23 3958.85
7 38 1 2731.23
                                                                 .76
                                                                               153.85
         100.00
                                                             -31.27
                                                                                                                                                       2131.2
                                                                                                                                                                         -32.95
                                                                                                                                                                                             68.32
        110.00
                                                                               145.23
                                                                                                                                                       3291.4
                                                                                                                                                                           1.95
                                                                                                                                                                                            138.99
                                                               6.42
                          1 39 53
                                         3891.39
        110.00
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5587.8 SGR 406.5 SG3 113.9
RRT .4607 RRF .4443 RTF .9576
SGB 5602.5 R23 .0014 R13 .9576
                                                                                                                                                 ST 2697.8 SR 405.4 SS 616.0
CRT .8740 CRS -.8276 CST -.9959
     TOE 3.0111 TRA 5.2723 TC3-1.5542 BAU 1.1393
     ROE .5238 RRA .0330 RC3 .0077 FAU .00793
FOE .6571 FRA 1.3996 FC3 -.1252 BSP 18488
                                                                                                                                                  LSA 2789.3 MSA 203.9 SSA 12.0
                                                                                    SG1 5590.9 SG2 360.6 THA 1.93
                                                                                                                                               EL1 2721.1 EL2 195.3 ALF 7.52
      BOE 3.0563 BRA 5.2724 BC3 1.5543 FSP
                                                                 -388
```

FLIGHT TIME 198.00

DISTANCE 576.890

ARRIVAL CATE JUL 10 1966

LAUNCH DATE DEC 16 1965

```
DISTANCE 595.338
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 25.987 GAL 12.93 A7L 86.95 HCA 305.27 SMA 117.70 ECC .33146 INC 3.0542 V1 30.262 RP 108.35 LAP -2.49 LOP 29.14 VP 36.360 GAP 18.83 A7P 88.24 TAL 150.46 TAP 95.73 RCA 78.69 APO 156.71 V2 34.974 RC 204.023 GL 9.85 GP -1.55 TAL 40.75 TAP 176.90 ETS 212.12 TAE 130.49 ETE 181.80 TAC 120.38 ETC 166.57 CLP 177.32
  PLANETOCENTRIC CONIC
   C3 62.215 VHL 7.888 CLA 25.45 RAL 38.39 RAD 6569.2 VEL 13.549 PTH 2.48 VHP 11.988 OPA
                                                                                                                        6.36 RAP 26.10 ECC 2.0239
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   5 6 47
                                                                                                                   2849.9
                                                                                                                                 -23.99
                  4 9 17 3449.89
0 25 58 4186.53
                                               -21.63
                                                            127.67
                                                                         289.00
                                                                                         71.26
       90.00
                                                                                          61.69 1 55 72.33 6 46 57 60.19 2 29 31 74.57 8 34 43
                                                                                                                                                 164.59
                                                                                                                     3586.5
                                                                          279.66
                                                 -.40
                                                            171.23
       90.00
                                                                                                                     2508.6
                                                                                                                                                  95.47
                  5 55 9 3108.59
1 22 47 4003.07
                                               -24.51
                                                             103.59
                                                                          290.04
      100.00
                                                                                                                     3403.1
                                                                                                                                    -1.72
                                                                                                                                                 149.76
                                                                          278.19
                                                 2.26
                                                            156.28
      100.00
                                                                                                                     2152.9
                                                                                                                                  -32.69
                                                                                                                                                  69.96
                  7 48 50 2752.91
1 45 36 3931.51
                                                                          292.17
                                               -30.89
                                                              78.71
      110.00
                                                                                                                     3331.5
                                                                                                                                     3.48
                                                                                                                                                 141.09
                                                                                                     2 51 7
                                                                        274.69
                                                                                          56.64
                                                             147.36
                                                7.93
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
. DIFFERENTIAL CORRECTIONS
                                                                SGT 5568.9 SGR 400.6 SG3 110.7
RRT .4883 RRF .4726 RTF .9617
SGB 5583.3 R23 .0013 R13 .9617
                                                                                                                 ST 2635.3 SR 398.1 SS 613.9
CRT .8657 CRS -.8220 CST -.9965
    TOE 3.0759 TRA 5.7843 TC3-1.3251 BAU 1.1022
   ROE .5478 RRA .0574 RC3 .0044 FAU .00666
FOE .6542 FRA 1.4679 FC3 -.0927 BSP 18504
                                                                                                                 LSA 2727.3 MSA 205.0 SSA 11.4
                                                                                                                 EL1 2657.8 EL2 197.6 ALF 7.49
                                                                SG1 5572.3 SG2 349.4 THA 2.02
    BOE 3.1243 BRA 5.7846 BC3 1.3251 FSP -377
                                                                                                                            ARRIVAL DATE JUL 12 1966
                                                                    FLIGHT TIME 208.00
LAUNCH DATE DEC 16 1965
                                                                    DISTANCE 599.379
  HELIOCENTRIC CONIC
   RL 147.22 LAL -.00 LOL 83.83 VL 25.951 GAL 14.24 AZL 86.98 HCA 308.47 SMA 117.51 ECC .34729 INC 3.0157 V1 30.262 RP 108.31 LAP -2.36 LOP 32.34 VP 36.347 GAP 19.84 AZP 88.12 TAL 149.14 TAP 97.61 RCA 76.70 APO 158.31 V2 34.987 RC 205.757 GL 9.04 GP -1.52 TAL 39.06 ZAP 176.06 ETS 205.02 TAE 130.36 ETE 181.80 TAC 122.54 ETC 166.35 CLP 176.37
  PLANETOCENTRIC CONIC
                                                                                                                         7.26 RAP 28.17 ECC 2.1684
    C3 70.995 VHL 8.426 DLA 25.16 RAL 40.31 RAD 6569.4 VEL 13.869 PTH 2.53 VHP 12.601 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                               -21.34
                                                            128.51
                                                                         293.18
                 4 22 22 3462.87
       90.00
                                                                                                                                                  167.40
                                                                                                      1 38 49
                                                                                                                      3636.6
                                                                                                                                     -2.57
                                                             174.02
                                                                           283.22
                                                                                           61.71
                   0 28 12
                                4236.63
                                                  1.22
       90.00
                                                                                           71.85 6 59 11
60.33 2 33 39
                                                                                                                     2525.2
                                                                                                                                    -26.42
                                                                                                                                                   96.63
                                                             104.70
                                                                           294.21
                                                -24.16
                   6 7 6
                                3125.23
      100.00
                                                                                                                     3449.5
                                                                                                                                                  152.30
                                                             158.83
                                                                           281.78
      100.00
                   1 26 10 4049.51
                                                  3.83
                                                              80.23 296.42 73.75 8 45 36
149.61 278.31 57.01 2 56 36
MID-COURSE EXECUTION ACCURACY
                                                                                                                     2174.0
                                                                                                                                    -32.42
                                                                                                                                                  71.54
                                                              80.23
                   7 59 22 2773.98
                                                -30.50
      110.00
                                                                                                                     3373.5
                                                                                                                                      5.08
                    1 50 23
                                3973.53
                                                 9.49
                                                             149.61
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2573.8 SR 389.3 SS 614.5
CRT .8577 CRS -.8169 CST -.9970
                                                                 SGT 5546.2 SGR 394.0 SG3 107.7
    TOE 3.1476 TRA 6.3375 TC3-1.1118 BAU 1.0552
                                                                 RRT .5158 RRF .5009 RTF .9659
SGB 5560.1 R23 .0011 R13 .9659
    ROE .5718 RRA .0844 RC3 .0023 FAU .00535
FOE .6538 FRA 1.5427 FC3 -.0653 BSP 18498
BOE 3.1991 BRA 6.3381 BC3 1.1118 FSP -367
                                                                                                                 LSA 2666.8 MSA 204.8 SSA 10.8
                                                                                                                 EL1 2595.5 EL2 198.5 ALF
                                                                 SG1 5549.9 SGZ 337.3 THA 2.11
                                                                                                                           ARRIVAL DATE JUL 14 1966
                                                                    FLIGHT TIME 210.00
LAUNCH DATE DEC 16 1965
                                                                    DISTANCE 603.080
    RL 147.22 LAL -.00 LOL 83.83 VL 25.916 GAL 15.68 AZL 87.03 HCA 311.67 SMA 117.32 ECC .36502 INC 2.9738 V1 30.262 RP 108.27 LAP -2.22 LOP 35.53 VP 36.335 GAP 20.97 AZP 88.02 TAL 147.93 TAP 99.59 RCA 74.49 APO 160.14 V2 35.000 RC 207.465 GL 8.24 GP -1.50 ZAL 37.51 ZAP 175.13 ETS 200.34 ZAE 130.17 ETE 181.80 ZAC 124.65 ETC 166.08 CLP 175.37
   PLANETOCENTRIC CONIC
                                                                                                                        8.13 RAP 30.21 ECC 2.3411
                                                                                            2.59 VHP 13.287 DPA
    C3 81.490 VHL 9.027 DLA 24.83 RAL 42.07 RAD 6569.6 VEL 14.242 PTH
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  2874.9
                                                                                           70.63
                                                                                                     5 33 8
                                                                          297.23
       90.00 4 35 13 3474.91
                                               -21.07
                                                             129.29
                                                                                                     1 40 55
                                                                                                                     3688.5
                                                                                                                                      -.90
                                                                                           61.82
                                                                           286.65
        90.00
                   0 29 26
                                4288.54
                                                2.89
                                                             176.92
                                                                                                                                    -26.15
                                                                                                      7 11 9
                                                                                                                     2540.9
                                                                           298.26
                                                                                           71.40
      100.00
                   6 18 48
                                3140.94
                                                -23.83
                                                             105.75
                                                                                                  2 36 50
                                                                                                                                                 154.95
                                                                                                                                     1.49
                                                                                           60.56
                                                                                                                     3497.7
                                                                           285.24
                                4097.73
                                                 5.45
                                                            161.49
      100.00
                   1 28 32
                                                                281.81 57.46 3 1 12

MID-COURSE EXECUTION ACCURACY

SGT 5521.4 SGR 388 7
                                                                                                                                    -32.13
                                                                                                     8 56 9
                                                                                                                     2194.3
                                                              81.68
                    8 9 35 2794.34
                                               -30.10
      110.00
                                                                                                                                      6.73
                                                                                                                     3417.1
                                                             151.96
                    1 54 15 4017.09
                                               11.10
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 5521.4 SGR 386.7 SG3 104.8
RRT .5435 RRF .5296 RTF .9700
SGB 5534.9 R23 .0007 R13 .9700
SGI 5525.4 SG2 324.4 THA 2.19
                                                                                                                  ST 2515.8 SR 379.1 SS 618.5
    TOE 3.2313 TRA 6.9404 TC3 -.9132 BAU .9949
                                                                                                                 CRT ... .8502 CRS -.8125 CST -.9976
    ROE .5960 RRA .1143 RC3 .0013 FAU .00394
FOE .6570 FRA 1.6257 FC3 -.0419 BSP 18401
                                                                                                                 LSA 2610.4 MSA 203.4 SSA 10.3
                                                                                                                 EL1 2536.5 EL2 197.9 ALF
    BOE 3.2858 BRA 6.9414 BC3 .9132 FSP -355
                                                                                                                            ARRIVAL DATE JUL 16 1966
                                                                     FLIGHT TIME 212.00
                                                                     DISTANCE 606.357
    RL 147.22 LAL -.00 LOL 83.83 VL 25.883 GAL 17.26 A7L 87.07 HCA 314.87 SMA 117.14 ECC .38497 INC 2.9273 V1 30.262 RP 108.23 LAP -2.07 LOP 38.73 VP 36.324 GAP 22.24 A7P 87.93 TAL 146.84 TAP 101.71 RCA 72.04 APO 162.23 V2 35.014 RC 209.146 GL 7.48 GP -1.48 ZAL 36.11 ZAP 174.12 ETS 197.06 ZAE 129.93 ETE 181.79 ZAC 126.70 ETC 165.78 CLP 174.31
   PLANETOCENTRIC CONIC
                                                                                                                         8.96 RAP 32.21 ECC 2.5491
    C3 94.126 VHL 9.702 DLA 24.48 RAL 43.67 RAD 6569.8 VEL 14.679 PTH 2.66 VHP 14.059 DPA
    ENCH AZHTH -LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      2886.D
                                                                           301.12
                                                                                            70.36
                                                -20.82
                                                             130.01
        90.00
                   4 47 42 3485.97
                                                                                                                      3741.8
                                                                                                                                        .82
                                                                                                                                                  173.26
                                                                                                       1 42 5
                                                                            289.92
                                                                                            62.03
                                                              179.90
                                4341.78
                                                  4.60
        90.00
                    0 29 43
                                                                                                                      2555.6
                                                                                                                                    -25.88
                                                                                                                                                   98.73
                                                                                                       7 22 45
                                                                            302.14
                                                                                            70.98
                   6 30 9 3155.64
1 29 57 4147.35
8 19 24 2813.85
                                                -23.50
                                                              106.72
       100.00
                                                                                                     2 39 4
                                                                                                                      3547.3
                                                                                                                                       3.16
                                                                                                                                                  157.67
                                                                           288.56
                                                                                            60.89
       100.00
                                                  7.10
                                                             164.25
                                                                                                                                                   74.51
                                                                                                                      2213.8
                                                                                                                                    -31.84
                                                                                                       9 6 18
                                                -29.70
                                                               83.06
                                                                           304.44
                                                                                            72.25
       110.00
                                                                                                                                                  147.97
                                                                                                       3 4 53
                                                                                                                      3461.9
                                                12.73
                                                              154.41
                                                                           285.19
                                                                                            58.00
                                 4061.89
       110.00
                    1 57 11
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2456.5 SR 367.4 55 624.8
CRT .8430 CRS -.8085 CST -.9980
                                                                 SGT 5490.1 SGR 378.4 SG3 102.1
RRT .5705 RRF .5576 RTF .9741
     TOE 3.3218 TRA 7.5919 TC3 -.7332 BAU .9227
    RDE .6202 RRA .1469 RC3 .0010 FAU .00248
                                                                                                                  LSA 2553.3 MSA 200.7 SSA 9.7
    FOE .6621 FRA 1.7165 FC3 -.0229 BSP 18400
                                                                 SGB 5503.1 R23 .0001 R13 .9741
                                                                SG1 5494.4 SG2 310.6 THA 2.26
                                                                                                                  EL1 2476.1 EL2 196.0 ALF
    BDE 3.3792 BRA 7.5933 BC3 .7532 FSP -346
```

FLIGHT TIME 206.00

```
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 214.00
                                                                                                                                      ARRIVAL DATE JUL 18 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 609.100
    RL 147.22 LAL -.00 LOL 83.83 VL 25.851 GAL 19.02 AZL 87.12 MCA 318.07 SMA 116.97 ECC .40750 INC 2.8754 V1 30.262 RP 108.19 LAP -1.92 LOP 41.94 VP 36.314 GAP 23.68 AZP 87.86 TAL 145.90 TAP 103.97 RCA 69.30 APO 164.63 VZ 35.027 RC 210.800 GL 6.73 GP -1.47 TAL 34.86 TAP 173.03 ETS 194.64 TAE 129.61 ETE 181.79 TAC 128.68 ETC 165.43 CLP 173.18
   PLANE FOCENTRIC CONIC
    C3 109.459 VHL 10.462 DLA 24.09 RAL 45.10 RAD 6570.1 VEL 15.192 PTH
                                                                                                    2.73 VHP 14.934 DPA
                                                                                                                                  9.76 RAP 34.15 ECC 2.8014
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 59 45 3495.94 -20.59 130.65 304.83 70.12 5 58 1 2895.9 -23.11 122.88
        90.00
                     D 29 3 4395.96
                                                     6.32
                                                                  182.95
                                                                                 293.03
                                                                                                   62.34
                                                                                                              1 42 19
                                                                                                                               3796.0
                                                                                                                                               2.57
                     6 41 7 3169.15
1 30 23 4197.98
8 28 47 2832.28
1 59 12 4107.62
       100.00
                                                   -23.20
                                                                  107.61
                                                                                 305.83
                                                                                                   70.60
                                                                                                              7 33 56
                                                                                                                               2569.2
                                                                                                                                              -25.63
                                                                                                                                                               99.65
                                                                                                  61.31 2 40 21
71.57 9 15 59
       100.00
                                                     8.77
                                                                  167.09
                                                                                 291.71
                                                                                                                               3598.0
                                                                                                                                                4.87
                                                                                                                                                             160.47
                                                                                                                                              -31.55
      110.00
                                                   -29.31
                                                                   84.36
                                                                                 308.17
                                                                                                              9 15 59
                                                                                                                               2232.3
                                                                                                                                                               75.86
                                                                                                             3 7 39
      110.00
                                                  14.36
                                                                  156.94
                                                                                288.41
                                                                                                  58.64
                                                                                                                            3507.6
                                                                                                                                             10.11
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5454.9 SGR 369.5 SG3 99.4

RRT .5973 RRF .5855 RTF .9779

SGB 5467.4 R23 -.0005 R13 .9779

SGI 5459.4 SG2 296.1 THA 2.32
                                                                                                                           ST 2399.5 SR 354.4 SS 634.9
CRT .8365 CRS -.8053 CST -.9984
    TOE 3.4272 TRA 8.3046 TC3 -.5686 BAU .8321
    ROE .6444 RRA .1824 RC3 .0014 FAU .00086
FOE .6711 FRA 1.8180 FC3 -.0068 BSP 18373
                                                                                                                          LSA 2499.5 MSA 196.8 55A 9.2
    BOE 3.4873 BRA 8.3066 BC3 .5686 FSP -338
                                                                                                                           EL1 2417.9 EL2 192.7 ALF
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 216.00
                                                                                                                                      ARRIVAL DATE JUL 20 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 611.162
    RL 147.22 LAL -.00 LOL 83.83 VL 25.821 GAL 21.00 A7L 87.18 MCA 321.28 SMA 116.81 ECC .43304 INC 2.8164 V1 30.262 RP 108.15 LAP -1.76 LOP 45.14 VP 36.306 GAP 25.33 A7P 87.80 TAL 145.15 TAP 106.43 RCA 66.23 APO 167.39 V2 35.040 RC 212.427 GL 6.00 GP -1.45 ZAL 33.78 ZAP 171.83 ETS 192.79 ZAE 129.20 ETE 181.78 ZAC 130.57 ETC 165.06 CLP 171.96
   PLANETOCENTRIC CONIC
    C3 128.228 VHL 11.324 OLA 23.66 RAL 46.34 RAD 6570.4 VEL 15.798 PTH 2.80 VHP 15.931 DPA 10.51 RAP 36.02 ECC 3.1103 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     5 11 18 3504.58
                                                  -20.39
                                                                                308.31
                                                                                                                                             -22.94
                                                                  131.20
                                                                                                  69.91
                                                                                                              6 9 43
                                                                                                                              2904.6
                                                                                                                                                             123.46
                                                                                 295.96
                     0 27 24 4450.76
        90.00
                                                     8.04
                                                                  186.06
                                                                                                   62.76
                                                                                                              1 41 35
                                                                                                                               3850.8
                                                                                                                                                4.33
                                                                                                                                                              179.35
                                                                                                  70.27 7 44 36
61.83 2 40 37
      100.00
                    6 51 35 3181.24
1 29 48 4249.33
                                                   -22.93
                                                                                                                                              -25.41 -
                                                                  108.40
                                                                                 309.30
                                                                                                                               2581.2
                                                                                                                                                              100.48
      100.00
                                                                  169.99
                                                                                 294.69
                                                   10.43
                                                                                                                               3649.3
                                                                                                                                                6.58
                                                                                                                                                             163.31
                    8 37 40 2849.35
2 0 12 4153.99
      110.00
                                                   -28.54
                                                                   85.55
                                                                                 311.65
                                                                                                   70.96 9 25 10
                                                                                                                               2249.4
                                                                                                                                             -31.26
                                                                                                                                                              77.11
       110.00
                                                   15.99
                                                                  159.55
                                                                                                                               3554.0
                                                                                 291.47
                                                                                                   59.38
                                                                                                              3 9 26
                                                                                                                                               11.81
                                                                                                                                                             152.94
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5415.8 SGR 359.8 SG3 97.0
RRT .6239 RRF .6131 RTF .9816
SG8 5427.7 R23 -.0012 R13 .9816
    TOE 3.5515 TRA 9.0871 TC3 -.4192 BAU .7186
                                                                                                                           ST 2344.8 SR 340.4 SS 649.4
CRT .8310 CRS -.8031 CST -.9987
    ROE .6688 RRA .2209 RC3 .0024 FAU-.00101
FOE .6847 FRA 1.9323 FC3 .0068 BSP 18318
BOE 3.6139 BRA 9.0898 BC3 .4192 FSP -329
                                                                                                                          LSA 2449.2 MSA 191.5 55A 8.6
                                                                      SG1 5420.4 SG2 280.9 THA 2.38
                                                                                                                          EL1 2361.9 EL2 188.0 ALF
                                                                                                                                                               6.92
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 218.00
                                                                                                                                     ARRIVAL DATE JUL 22 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 612.347
    RL 147.22 LAL -.00 LOL 83.83 VL 25.793 GAL 23.23 AZL 87.25 HCA 324.49 SMA 116.66 ECC .46210 INC 2.7485 V1 30.262 RP 108.11 LAP -1.60 LOP 48.35 VP 36.299 GAP 27.22 AZP 87.76 TAL 144.63 TAP 109.11 RCA 62.75 APO 170.57 V2 35.053 RC 214.027 GL 5.30 GP -1.43 ZAL 32.90 ZAP 170.53 ETS 191.32 ZAE 128.68 ETE 181.77 ZAC 132.35 ETC 164.65 CLP 170.63
   PLANETOCENTRIC CONIC
    C3 151.428 VML 12.306 OLA 23.20 RAL 47.38 RAO 6570.6 VEL 16.515 PTM 2.88 VMP 17.075 OPA 11.20 RAP 37.80 ECC 3.4921
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             311.54
                                                                                                                           2911.5
        90.00
                     5 22 17 3511.55
                                                   -20.23
                                                                  131.65
                                                                                              69.75 6 20 48
63.28 1 39 47
                                                                                                                                           -22.80 123.92
        90.00
                     0 24 42
                                 4505.91
                                                    9.75
                                                                  189.22
                                                                                298.66
                                                                                                                               3905.9
                                                                                                                                               6.08
                                                                                                                                                             182.45
                                                                                                  70.00 7 54 43
62.45 2 39 49
                                                                             312.51
      100.00
                    7 1 31 3191.56
                                                  -22.69
                                                                  109.07
                                                                                                                               2591.6
                                                                                                                                             -25.21
                                                                                                                                                             101.18
      100.00
                    1 28 8
                                  4301.13
                                                    12.08
                                                                  172.95
                                                                                297.45
                                                                                                                               3701.1
                                                                                                                                               8.30
                                                                                                                                                             166.21
                                                                   86.61 314.87 70.42 9 33 44
62.23 294.33 60.21 3 10 10
MID-COURSE EXECUTION ACCURACY
      110.00
                   8 46 0 2864.71
                                                  -28.60
                                                                                                                               2264.7
                                                                                                                                             -30.99
                                                                   86.61
                                                                                                                                                              78.23
      110.00
                     2 0 9
                                  4200.74
                                                   17.59
                                                                  162.23
                                                                                                                              3600.7
                                                                                                                                             13.49
                                                                                                                                                             155.51
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 2293.6 SR 325.5 SS 669.3
CRT .8268 CRS -.8022 CST -.9990
                                                                     SGT 5374.3 SGR 349.4 SG3 94.7
RRT .6501 RRF .6405 RTF .9850
SGB 5385.6 R23 -.0019 R13 .9850
    TOE 3.7027 TRA 9.9536 TC3 -.2835 BAU .5739
    ROE .6937 RRA .2625 RC3 .0038 FAU-.00324
FOE .7044 FRA 2.0626 FC3 .0185 BSP 18156
BDE 3.7671 BRA 9.9570 BC3 .2835 FSP -319
                                                                                                                         LSA 2404.3 MSA 184.8 SSA 8.1
                                                                      SGI 5379.1 SG2 265.3 THA 2.43
                                                                                                                         ELI 2309.5 ELZ 181.8 ALF 6.73
LAUNCH DATE DEC 16 1965
                                                                          FLIGHT TIME 220.00
                                                                                                                                      ARRIVAL DATE JUL 24 1966
  HELIOCENTRIC CONIC
                                                                          DISTANCE 612.392
    RL 147.22 LAL -.00 LOL 83.83 VL 25.768 GAL 25.77 AZL 87.33 MCA 327.70 SMA 116.53 ECC .49529 INC 2.6691 VI 30.262 RP 108.07 LAP -1.43 LOP 51.55 VP 36.294 GAP 29.42 AZP 87.74 TAL 144.39 TAP 112.09 RCA 58.81 APO 174.25 V2 35.067 RC 215.599 GL 4.61 GP -1.41 ZAL 32.23 ZAP 169.08 ETS 190.12 ZAE 128.03 ETE 181.75 ZAC 134.00 ETC 164.23 CLP 169.17
  PLANETOCENTRIC CONIC
    C3 180.408 VHL 13.432 DLA 22.70 RAL 48.19 RAD 6570.9 VEL 17.370 PTH 2.96 VHP 18.396 DPA 11.84 RAP 39.46 ECC 3.9691
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     5 32 37 3516.39
                                                   -20.11
                                                                 131.96
                                                                               314.46
                                                                                                  69.64
                                                                                                              6 31 13
                                                                                                                              2916.4
                                                                                                                                             -22.70
                                                                                                                                                            124.24
                     0 20 48
        90.00
                                  4561.21
                                                   11.42
                                                                 192.42
                                                                                301.12
                                                                                                  63.91
                                                                                                             1 36 49
                                                                                                                               3961.2
                                                                                                                                               7.82
                                                                                                                                                             185.59
                    7 10 50 3199.68
      100.00
                                                   -22.50
                                                                 109.60
                                                                                315.41
                                                                                                  69.78
                                                                                                              8 4 10
                                                                                                                               2599.7
                                                                                                                                              -25.05
                                                                                                                                                             101.73
                    1 25 16 4353.16
8 53 41 2877.94
1 58 55 4247.66
                                                                                                           2 37 49
9 41 39
                                                                                                              2 37 49
      100.00
                                                   13.70
                                                                 175.97
                                                                                299.96
                                                                                                  63.17
                                                                                                                               3753.2
                                                                                                                                               9.99
                                                                                                                                                             169.14
      110.00
                                                   -28.29
                                                                  87.52
                                                                                317.76
                                                                                                  69.96
                                                                                                                               2277.9
                                                                                                                                             -30.75
                                                                                                                                                              79.18
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                 164.97
                                                                                                                              3647.7
      110.00
                                                   19.15
                                                                                                                                              15.16
                                                                                                                                                             158.13
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5324.7 SGR 338.2 SG3 92.5 ST 2241.4 SR 309.6 SS 694.2 RRT .6752 RRF .6666 RTF .9880 CRT .8236 CRS -.8020 CST -.9992 SGB 5335.5 R23 -.0026 R13 .9880 LSA 2360.1 M5A 177.1 SSA 7.5 SG1 5329.7 SG2 249.2 THA 2.46 EL1 2256.0 EL2 174.5 ALF 6.53
    TDE 3.8773 TRAID.9048 TC3 -.1637 BAU .3951
    ROE .7190 RRA .3067 RC3 .0054 FAU-.00589
FOE .7294 FRA 2.2097 FC3 .0283 BSP 18098
BOE 3.9434 BRA10.9092 BC3 .1638 FSP -312
```

ARRIVAL DATE FEB 25 1966

```
LAUNCH DATE DEC 17 1965
                                                                       DISTANCE 196.123
  HELIOCENTRIC CONIC
   RL 147.21 LAL -.00 LOL 84.85 VL 28.209 GAL -10.98 AZL 86.64 MCA 89.26 SMA 131.75 ECC .22254 INC 3.3637 VI 30.264 RP 107.67 LAP 3.36 LOP 174.10 VP 38.182 GAP -7.42 AZP 89.96 TAL 227.85 TAP 317.11 RCA 102.43 APO 161.07 V2 35.195 RC 57.230 GL 15.55 GP 3.29 ZAL 149.45 ZAP 27.81 ETS 352.60 ZAE 152.69 ETE 346.27 ZAC 61.16 ETC 164.40 CLP -27.63
  PLANETOCENTRIC CONIC
    C3 36.761 VML 6.063 DLA -6.36 RAL 290.79 RAD 6568.4 VEL 12.575 PTH 2.28 VMP 5.758 DPA -12.60 RAP 328.69 ECC 1.6050
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          111.93
                                                                                                                        1566.6
                                                                                                                                                         31.19
                                                 -18.38
                                                                 38.47
                                                                              160.79
                                                                                                         2 27 14
                                                                                                                                       -15.24
                   1 51 8 2166.61
12 13 53 5207.49
       90.00
                                                                                                                                                        225.57
                                                                                              78.91
                                                                                                         13 40 41
                                                                                                                           4607.5
                                                                                                                                         24.43
                                                                233.78
                                                                              164.93
                                                 26.22
       90.00
                                                                                                                                                         12.10
                                                                 19.35
                                                                              160.26
                                                                                              113.03
                                                                                                         3 41 21
                                                                                                                          1314.0
                                                                                                                                         -16.32
                                                 -19.60
                   3 9 27 1913.96
13 38 15 4935.37
      100.00
                                                                                              77.85 15 0 31
116.12 4 39 28
74.87 16 11 45
                                                                                                                         4335.4
                                                                                                                                                        205.21
                                                                                                                                         25.57
                                                                213.47
                                                                              164.63
      100.00
                                                 27.52
                                                                                                                         1122.0
                                                                                                                                                        355.99
                                                                                             116.12
                                                                                                                                         -19.18
                  4 10 46 1721.96
14 53 25 4700.14
                                                -22.88
                                                                  3.17
                                                                              158.65
      110.00
                                                                                                                                                        186.25
                                                                                                                          4100.1
                                                                                                                                         28.63
                                                                              163.65
      110.00
                                                 31.02
                                                                194.63
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 184.0 SR 379.0 SS 261.1
CRT .8315 CRS .8915 CST .5072
LSA 471.4 MSA 151.3 SSA 23.6
EL1 410.6 EL2 94.4 ALF 66.72
                                                                   SGT 528.4 SGR 391.4 SG3 182.0
RRT .D462 RRF -.1051 RTF -.4957
    TOE -.1673 TRA -.3272 TC3 .3272 BAU .1637
    ROE -.4005 RRA .0689 RC3 -.0622 FAU .06562
   FDE .4822 FRA -.8915 FC3-1.5454 BSP 1250
BDE .4340 BRA .3344 BC3 .3330 FSP -498
                                                                   SGB 657.6 R23 -. 0546 R13 -. 4995
                                                                    SG1 529.1 SG2 390.5 THA 4.31
                                                                                                                                  ARRIVAL DATE FFB 27 1966
                                                                        FLIGHT TIME 72.00
LAUNCH DATE DEC 17 1965
                                                                       DISTANCE 202.884
  HELIOCENTRIC CONIC
   RL 147.21 LAL -.00 LOL 84.85 VL 28.300 GAL -10.89 AZL 86.66 HCA 92.49 SMA 132.43 ECC .21845 INC 3.3355 VI 30.264 PP 107.70 LAP 3.33 LOP 177.35 VP 38.241 GAP -6.63 AZP 90.15 TAL 228.99 TAP 321.49 RCA 103.50 APO 161.36 V2 35.186 RC 59.152 GL 15.64 GP 3.53 ZAL 150.05 ZAP 31.58 ETS 353.05 ZAE 154.02 ETE 346.76 ZAC 60.59 ETC 164.46 CLP -31.40
  PLANETOCENTRIC CONIC
    C3 35.985 VHL 5.999 DLA -6.38 RAL 290.04 RAD 6568.4 VEL 12.544 PTH 2.27 VHP 5.381 DPA -12.54 RAP 328.10 ECC 1.5922 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1560.7
                                                                                            112.05 2 24 17
                    1 48 16 2160.75
                                                  -18.23
                                                                38.10
                                                                             159.69
       90.00
                  12 10 48 5202.56
3 6 35 1908.12
13 35 11 4930.42
4 7 53 1716.17
14 50 22 4695.13
                                                                                                         13 37 31
                                                                                                                                                         225.23
                                                                                                                           4602.6
                                                                                                                                          24.34
                                                                233.43
                                                                               163.79
                                                                                               78.75
        90.00
                                                  26.16
                                                                                              1308.1
                                                                                                                                          -16.15
                                                                                                                                                          11.75
                                                                 18.99
                                                                              159.15
                                                  -19.45
      100.00
                                                                                                                                                         204.87
                                                                                                                           4330.4
                                                                                                                                          25.48
                                                  27.45
                                                                213.12
                                                                              163.48
      100.00
                                                                                                                          1116.2
                                                                                                                                         -18.99
                                                                                                                                                         355.65
                                                  -22.70
                                                                   2.82
                                                                              157.54
      110.00
                                                                                                                                          28.52
                                                  30.93
                                                                194.27
                                                                               162.50
                                                                                                                           4095.1
                                                                                                                                                        185.90
      110.00
                   14 50 22
                                 4695.13
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 181.4 SR 379.4 S5 280.2
CRT .8201 CRS .8874 CST .4811
LSA 479.1 MSA 158.9 SSA 23.6
                                                                    SGT 521.8 SGR 390.9 SG3 207.2
RRT .0521 RRF -.1270 RTF -.4654
    TOE -.1614 TRA -.3293 TC3 .3210 BAU .1569
    RDE -.3966 RRA .0704 RC3 -.0571 FAU .07345
    FOE .5444 FRA-1.0333 FC3-1.7671 BSF 1191
BDE .4282 BRA .3367 BC3 .3260 FSP -576
                                                                    SGB 651.9 R23 -. 0721 R13 -. 4712
                                                                                                                      EL1 409.4 EL2 96.2 ALF 67.26
                                                                    SG1 522.7 SG2 389.7 THA 5.04
                                                                                                                                 ARRIVAL DATE MAR 1 1966
                                                                        FLIGHT TIME 74.00
LAUNCH DATE DEC 17 1965
                                                                        DISTANCE 209.612
   RL 147.21 LAL -.00 LOL 84.85 VL 28.377 GAL -10.81 A7L 86.69 MCA 95.73 SMA 133.01 ECC .21494 INC 3.3071 V1 30.264 RP 107.73 LAP 3.29 LOP 180.58 VP 38.288 GAP -5.87 A7P 90.33 TAL 229.97 TAP 325.70 RCA 104.42 APO 161.60 V2 35.176 RC 61.127 GL 15.70 GP 3.80 ZAL 150.56 ZAP 35.56 ETS 353.45 ZAE 155.69 ETE 347.21 ZAC 59.80 ETC 164.51 CLP -35.38
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 35.294 VHL 5.941 DLA -6.40 RAL 289.41 RAD 6568.4 VEL 12.517 PTH 2.27 VHP 5.038 OPA -12.52 RAP 327.28 ECC 1.5809
    LNCH ATMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1555.2
                                                                                           112.17 2 21 50
78.61 13 34 46
                                                                                                                                        -14.92
                                                                                                                                                         30.51
                                                                           158.73
                   1 45 55 2155.18
12 8 8 5198.33
3 4 13 1902.59
                                                  -18.08
                                                                37.76
        90.00
                                                                                                                                          24.27
                                                                                                                           4598.3
                                                  26.10
                                                                233.14
                                                                               162.80
        90.00
                                                                                               113.28 3 35 56
77.53 14 54 37
                                                                                                                                          -15.98
                                                                                                                                                          11.42
                                                                                                                           1302.6
                                                  -19.30
                                                                 18.65
                                                                              158.19
                                                                                              113.28
       100.00
                                                                                                                                         25.40
                                                                                                                                                         204.58
                                                                               162.50
                                                                                                                           4326.2
                                                  27.39
                                                                212.81
                   13 32 31 4926.16
       100.00
                                                                                                                                         -18.81
28.42
                   4 5 30 1710.72
14 47 43 4690.80
                                                                                                        4 34 1
16 5 54
                                                                                                                                                         355.33
                                                                                                                          1110.7
                                                                                              116.41
                                                  -22.54
                                                                   2.48
                                                                              156.59
       110.00
                                                                                                                           4090.8
                                                                                               74.50
                                                  30.85
                                                                193.96
                                                                               161.51
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 177.8 SR 379.1 SS 299.9
CRT .7996 CRS .8847 CST .4440
LSA 486.8 MSA 166.7 SSA 23.5
                                                                    SGT 511.5 SGR 389.7 SG3 235.2
RRT .0554 RRF -.1527 RTF -.4192
    TOE -.1534 TRA -.3366 TC3 .3069 BAU .1468
    ROE -.3925 RRA .0729 RC3 -.0505 FAU .08212
FOE .6134 FRA-1.1884 FC3-2.0143 BSP 1104
BOE .4214 BRA .3444 BC3 .3111 FSP -664
                                                                    SGB 643.1 R23 -.0978 R13 -.4277
                                                                                                                       EL1 406.8 EL2
                                                                                                                                             99.5 ALF 68.06
                                                                    SGI 512.6 SGZ 388.3 THA 5.69
                                                                                                                                  ARRIVAL DATE MAR 3 1966
                                                                        FLIGHT TIME 76.00
LAUNCH DATE DEC 17 1965
                                                                        DISTANCE 216.307
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 28.440 GAL -10.74 AZL 86.72 HCA 98.96 SMA 133.49 ECC .21193 INC 3.2785 VI 30.264 RP 107.76 LAP 3.24 LOP 183.82 VP 38.326 GAP -5.15 AZP 90.51 TAL 230.80 TAP 329.76 RCA 105.20 APO 161.78 V2 35.166 RC 63.151 GL 15.75 GP 4.09 ZAL 150.98 ZAP 39.77 ETS 353.79 ZAE 157.69 ETE 347.65 ZAC 58.78 ETC 164.55 CLP -39.59
   PLANETOCENTRIC CONIC
    C3 34.668 VHL 5.888 DLA -6.42 RAL 288.90 RAD 6568.4 VEL 12.492 PTH 2.26 VHP 4.726 DPA -12.55 RAP 326.24 ECC 1.5706
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -14.77
                                                                                                                                                          30.19
                                                                                                           2 19 53
                                                                                                                         1549.8
                                                   -17.95
                                                                  37.42
                                                                              157.91
                                                                                              112.28
                                  2149.84
                   1 44 3
12 5 52
        90.00
                                                                                               78.49 13 32 27
113.40 3 33 58
77.40 14 52 18
116.54 4 32 1
74.35 16 3 37
                                                                                                                                                         224.70
                                                                                                                            4594.6
                                                                                                                                           24.20
                                                                 232.88
                                                                               161.96
                                  5194.64
                                                   26.05
        90.00
                                                                                                                                                          11.10
                    3 2 20 1897.29
13 30 16 4922.42
                                                                                               113.40
                                                                                                                            1297.3
                                                                                                                                         -15.83
                                                                  18.32
                                                                               157.37
                                                   -19.16
       100.00
                                                                                                                                                         204.33
                                                                                                                            4322.4
                                                                                                                                          25.32
                                                                 212.55
                                                                               161.65
                                  4922.42
                                                   27.33
       100.00
                                1705.51
                                                                                                                          1105.5
                                                                                                                                                         355.02
                                                                               155.76
                                                                                              116.54
                                                 -22.38
                                                                  2.16
                     4 3 36
       110.00
                                                                                                                            4087.0
                                                                                                                                            28.33
                                                                                                                                                         185.34
                                                30.78
                                                                               160.66
                    14 45 30
                                  4686.97
                                                                 193.68
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 172.2 SR 378.2 55 319.1

CRT .7644 CRS .8819 CST .3860

LSA 493.4 HSA 174.6 SSA 23.4

EL1 402.2 EL2 104.4 ALF 69.35
                                                                     SGT 498.9 SGR 388.1 SG3 266.2
RRT .D507 RRF -.1816 RTF -.3542
     TOE -.1419 TRA -.3490 TC3 .2855 BAU .1338
     RDE -. 3879 RRA .0764 RC3 -. 0422 FAU .09174
                                                                   SGB 632.0 R23 -.1364 R13 -.3656
     FOE .6853 FRA-1.3586 FC3-2.2910 BSP 1012
                                                                     5G1 499.8 SG2 386.8 THA 5.64
```

FLIGHT TIME 70.00

BDE .4131 BRA .3573 BC3 .2886 FSP

```
FLIGHT TIME 78.00
                                                                                                                                ARRIVAL DATE MAR 5 1966
LAUNCH DATE DEC 17 1965
  HELIOCENTRIC CONTC
                                                                       DISTANCE 222.966
    RL 147.21 LAL -.00 LOL 84.85 VL 28.492 GAL -10.66 A7L 86.75 HCA 102.19 SMA 133.88 ECC .20931 INC 3.2493 V1 30.264
RP 107.80 LAP 3.18 LOP 187.05 VP 38.354 GAP -4.47 A7P 90.69 TAL 231.47 TAP 333.66 RCA 105.86 APO 161.91 V2 35.155
RC 65.219 GL 15.77 GP 4.40 ZAL 151.32 ZAP 44.21 ETS 354.12 ZAE 160.03 ETE 348.08 ZAC 57.53 ETC 164.58 CLP -44.04
   PLANETOCENTRIC CONIC
    C3 34.089 VML 5.839 DLA -6.45 RAL 288.49 RAD 6568.3 VEL 12.468 PTH
                                                                                                2.26 VHP 4.446 OPA -12.62 RAP 324.96 ECC 1.5610
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 42 38 2144.66 -17.81 37.10 157.21 112.38 2 18 23 1544.7 -14 62 20 44
                  12 4 0 5191.31
                                                 26.01
                                                               232.64
                                                                              161.25
                                                                                              78.38 13 30 32
                                                                                                                          4591.3
                                                                                                                                         24.14
        90.00
                                                                                                                                                       224.47
                 3 0 55 1892.16
13 28 25 4919.04
4 2 8 1700.48
14 43 41 4683.48
       100.00
                                                 -19.02
                                                                 18.00
                                                                              156.67
                                                                                             113.51
                                                                                                          3 32 27
                                                                                                                          1292.2
                                                                                                                                         -15.68
                                                                                                                                                        10.80
                                                                                            77.29 14 50 24
116.66 4 30 28
74.21 16 1 45
                                                               212.31
                                                                              160.94
                                                                                                                          4319.0
      100.00
                                                 27.28
                                                                                                                                        25.26
                                                                                                                                                       204.10
                                                 -22.23
                                                                              155.07
                                                                                                                          1100.5
                                                                                                                                        -18.47
                                                                                                                                                       354.73
      110.00
                                                                 1.85
                                                               193.43
                                                                             159.94
                                                                                                                        4083.5
                                                                                                                                       28.25
                                                  30.72
                                                                                                                                                      185.10
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 486.1 SGR 386.2 SG3 299.3
RRT .0386 RRF -.2161 RTF -.2575
                                                                                                                      ST 167.6 SR 376.6 SS 339.D
CRT .7122 CRS .8815 CST .3115
    TOE -.1291 TRA -.3695 TC3 .2527 BAU .1161
    RDE -.3830 RRA .0810 RC3 -.0324 FAU .10193
                                                                   SGB 620.8 R23 -.1890 R13 -.2704
SG1 486.7 SG2 385.4 THA 4.72
                                                                                                                   LSA 501.0 MSA 182.5 SSA 23.2
    FOE .7650 FRA-1.5355 FC3-2.5888 BSP 859
    BDE .4042 BRA .3783 BC3 .2547 FSP
                                                     -875
                                                                                                                      EL1 396.8 EL2 111.7 ALF 70.84
                                                                       FLIGHT TIME 80.00
                                                                                                                                 ARRIVAL DATE MAR 7 1966
LAUNCH DATE DEC 17 1965
  HELIOCENTRIC CONIC
                                                                       DISTANCE 229.590
   RL 147.21 LAL -.00 LOL 84.85 VL 28.532 GAL -10.59 AZL 86.78 MCA 105.42 SMA 134.19 ECC .20703 INC 3.2194 V1 30.264
RP 107.83 LAP 3.10 LOP 190.29 VP 38.374 GAP -3.82 AZP 90.86 TAL 231.99 TAP 337.41 RCA 106.41 APO 161.98 VZ 35.143
RC 67.327 GL 15.78 GP 4.73 ZAL 151.58 ZAP 48.88 ETS 354.43 ZAE 162.69 ETE 348.51 ZAC 56.05 ETC 164.60 CLP -48.71
  PLANETOCENTRIC CONIC
    C3 33.540 VHL 5.791 DLA -6.48 RAL 288.18 RAD 6568.3 VEL 12.446 PTH 2.25 VHP 4.199 DPA -12.74 RAP 323.45 ECC 1.5520
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ 2 LONG
                  1 41 39 2139.57
12 2 32 5188.21
                                                                                           112.48
                                                                                                                        1539.6
                                                                                                                                       -14,48
       90.00
                                                 -17.68
                                                                36.79
                                                                            156.62
                                                                                                         2 17 18
                                                                                                                                                       29.57
       90.00
                                                 25.96
                                                               232.43
                                                                              160.65
                                                                                              78.28
                                                                                                        13 29 0
                                                                                                                          4588.2
                                                                                                                                         24.09
                                                                                                                                                       224.26
                113.62 3 31 21
77.18 14 48 53
      100.00
                                                -18.88
                                                                17.69
                                                                             156.09
                                                                                                                          1287.1
                                                                                                                                        -15.53
                                                                                                                                                        10 50
      100.00
                                                 27.24
                                                               212.09
                                                                             160.34
                                                                                                                          4315.9
                                                                                                                                         25.20
                                                                                                                                                       203.88
      110.00
                                                                                            116.79 4 29 21
74.09 16 0 16
                                                -22.08
                                                                 1.54
                                                                            154.48
                                                                                                                         1095.6
                                                                                                                                       -18.31
                                                                                                                                                       354.44
      110.00
                                                30.66
                                                               193.19
                                                                             159.33
                                                                                                                          4080.2
                                                                                                                                         28.17
                                                                                                                                                       184.88
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE -.1124 TRA -.3963 TC3 .2105 BAU .0948
                                                                   SCT 476.9 SGR 384.1 SG3 334.8
RRT .0089 RRF -.2544 RTF -.1293
SGB 612.4 R23 -.2511 R13 -.1334
                                                                                                                    $T 162.6 SR 374.4 55 357.8
CRT .6319 CRS .8810 CST .2045
LSA 507.9 MSA 190.2 SSA 23.0
   ROE -.3776 RRA .0866 RC3 -.0208 FAU .11282
   FOE .8447 FRA-1.7212 FC3-2.9121 BSP 699
BOE .3939 BRA .4056 BC3 .2115 FSP -996
                                                                   SG1 477.0 SG2 384.1 THA 1.17
                                                                                                                   EL1 389.9 EL2 121.0 ALF 72.97
LAUNCH DATE DEC 17 1965
                                                                      FLIGHT TIME 82.00
                                                                                                                                ARRIVAL DATE MAR 9 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 236.177
   RL 147.21 LAL -.00 LOL 84.85 VL 28.562 GAL -10.51 AZL 86.81 HCA 108.64 SMA 134.43 ECC .20503 INC 3.1886 V1 30.264
RP 107.87 LAP 3.02 LOP 193.52 VP 38.386 GAP -3.20 AZP 91.02 TAL 232.36 TAP 341.00 RCA 106.87 APO 161.99 V2 35.132
RC 69.470 GL 15.78 GP 5.08 ZAL 151.77 ZAP 53.77 ETS 354.75 ZAE 165.65 ETE 348.98 ZAC 54.35 ETC 164.61 CLP -53.61
  PLANETOCENTRIC CONIC
    C3 33.012 VHL 5.746 DLA -6.52 RAL 287.97 RAD 6568.3 VEL 12.425 PTH 2.25 VMP 3.982 DPA -12.69 RAR 321.71 ECC 1.5433
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         1 41 3 2134.52
12 1 26 5185.25
2 59 18 1882.12
13 25 53 4912.88
                                                                                                                      1534.5
                                                -17.55
                                                               36.48 156.14
                                                                                                                                    -14.34
                                                                                                                                                       29.27
       90.00
       90.00
                                                  25.92
                                                               232.22
                                                                             160.15
                                                                                                                         4585.2
                                                                                                                                        24.03
                                                                                                                                                      224.06
                                                                         155.60
      100.00
                                               -18.74
                                                                17.38
                                                                                                                         1282.1
                                                                                                                                       -15.38
                                                                                                                                                       10.20
                                                                             159.84
                                                                                                                         4312.9
                                                                                                                                        25.14
                                                                                                                                                      203.68
      100.00
                                                  27.19
                                                               211.88
                  4 0 26 1690.68
14 41 13 4677.09
                                                                         154.00
      110.00
                                                -21.93
                                                                                                                         1090.7
                                                                                                                                       -18.14
                                                                                                                                                      354.16
                                                                                                                         4077.1
      110.00
                                                30.60
                                                               192.97
                                                                             158.83
                                                                                                                                         28.10
                                                                                                                                                      184.67
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                  SGT 478.3 SGR 382.3 SG3 370.9

RRT -.0399 RRF -.2982 RTF .0367

SGB 612.3 R23 .2937 R13 -.0573

SG1 478.9 SG2 381.4 THA 174.99
                                                                                                                   5T 15D.4 SR 371.7 SS 376.7
CRT .5214 CRS .8829 CST .D732
LSA 516.0 MSA 197.5 SSA 22.7
    TOE -.0940 TRA -.4321 TC3 .1554 BAU .0687
   ROE -.3716 RRA .0930 RC3 -.0075 FAU .12381
FDE .9287 FRA-1.9032 FC3-3.2470 BSP 508
    BDE .3833 BRA .4420 BC3 .1556 FSP -1115
                                                                                                                     EL1 382.3 EL2 133.1 ALF 75.52
                                                                       FLIGHT TIME 84.00
                                                                                                                                ARRIVAL DATE MAR 11 1966
LAUNCH DATE DEC 17 1965
  HELIOCENTRIC CONIC
                                                                      DISTANCE 242.728
   RL 147.21 LAL -.00 LOL 84.85 VL 28.583 GAL -10.44 AZL 86.84 HCA 111.87 SMA 134.59 ECC .20325 INC 3.1566 VI 30.264
RP 107.90 LAP 2.93 LOP 196.74 VP 38.390 GAP -2.61 AZP 91.18 TAL 232.59 TAP 344.45 RCA 107.24 APO 161.95 V2 35.120
RC 71.643 GL 15.76 GP 5.44 ZAL 151.88 ZAP 58.86 ETS 355.08 ZAE 168.89 ETE 349.55 ZAC 52.45 ETC 164.61 CLP -58.70
  PLANETOCENTRIC CONIC
   C3 32.492 VHL 5.700 DLA -6.55 RAL 287.84 RAD 6568.3 VEL 12.404 PTH 2.24 VHP 3.797 DPA -13.07 RAP 319.77 ECC 1.5347
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           155.75
                                                                                          112.69 2 16 20
78.09 13 27 4
113.83 3 30 21
                    1 40 50 2129.45
                                                 -17.42
                                                               36.16
                                                                                                                         1529.4
                                                                                                                                      -14.19
                                                                                                                                                       28 97
       90.00
                                                                                                                                                      223.86
       90.00
                 12 0 41
                                5182.34
                                                 25.88
                                                               232.02
                                                                            159.75
                                                                                                                         4582.3
                                                                                                                                        23.98
                   2 59 3
                                1877.10
                                                -18.61
                                                               17.07
                                                                             155.22
                                                                                                                         1277.1
                                                                                                                                        -15.23
                                                                                                                                                        9.91
      100.00
                                                                                            76.98 14 46 59
117.02 4 28 16
73.85 15 58 26
                 15 25 9 4909.91
                                                27.15
                                                               211.67
                                                                          159.44
                                                                                                                         4309.9
                                                                                                                                        25.08
                                                                                                                                                      203.48
      100.00
                 4 0 10 1685.78
14 40 32 4674.00
                                                -21.78
                                                                  .94
                                                                             153.61
                                                                                                                         1085.8
                                                                                                                                       -17.98
                                                                                                                                                      353.87
      110.00
                                                  30.54
                                                               192.75
                                                                             158.43
                                                                                                                         4074.0
                                                                                                                                        28.03
                                                                                                                                                      184.46
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 497.0 SGR 380.8 SG3 407.0
RRT -.1115 RRF -.3459 RTF .2243
SGB 626.2 R23 .2864 R13 -.2694
SGI 501.2 SG2 375.3 THA 168.76
                                                                                                                  ST 161.8 SR 368.3 SS 394.1

CRT .3764 CRS .8856 CST -.0846

L5A 524.3 MSA 204.3 SSA 22.5

EL1 374.2 EL2 147.6 ALF 78.85
   TDE -.0727 TRA -.4756 TC3 .0883 BAU .0385
ROE -.3651 RRA .1002 RC3 .0075 FAU .13469
   FDE 1.0101 FRA-2.0773 FC3-3.5887 BSP 411
```

BOE .3723 BRA .4861 BC3 .0886 FSP -1235

```
ARRIVAL DATE MAR 13 1966
                                                                             FI IGHT TIME 86.00
LAUNCH DATE DEC 17 1965
                                                                             01STANCE 249.242
   RL 147.21 LAL -.00 LOL 84.85 VL 28.596 GAL -10.35 AZL 86.88 MCA 115.09 SNA 134.69 ECC .20165 INC 3.1232 VI 30.264
RP 107.94 LAP 2.83 LOP 199.97 VP 38.388 GAP -2.04 AZP 91.33 TAL 232.68 TAP 347.77 RCA 107.53 APO 161.85 V2 35.108
RC 73.845 GL 15.73 GP 5.82 ZAL 151.93 ZAP 64.10 ETS 355.44 ZAĒ 172.37 ETE 350.39 ZAC 50.40 ETC 164.61 CLP -63.95
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 31.975 VHL 5.655 DLA -6.59 RAL 287.81 RAD 6568.3 VEL 12.383 PTH 2.24 VMP 3.642 DPA -13.25 RAP 317.67 ECC 1.5262
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  1524.3
                   1 40 58 2124.29
12 0 17 5179.42
2 59 11 1872.00
13 24 46 4906.94
                                                                      35.84
                                                                                    155.45
                                                                                                   112.79 2 16 23
                                                      -17.28
        90.00
                                                                                                      78.00 13 26 36
113.93 3 30 23
                                                                                                                                                     23.93
                                                                                                                                                                     223.67
                                                                                                                                     4579.4
                                                                     231.81
                                                                                    159.43
                                                      25.84
        90.00
                                                                                                                                    1272.0
                                                                                                                                                     -15.08
                                                                      16.76
                                                                                    154.91
                                                                                                      113.93
                                                     -18.46
       100.00
                                                                                                     76.88 14 46 33
117.14 4 28 15
73.73 15 58 2
                                                                                                                                                    25.02
                                                                                                                                                                     203.27
                                                                                                                                    4306.9
                                                                                    159.12
                                                                     211.46
       100.00
                                                     27.10
                                                 -21.62
                                                                                                                                                    -17.81
                                                                                                                                                                    353.58
                                                                                                                                    1080.8
                    4 0 15 1680.80
14 40 11 4670.91
                                                                         .64
                                                                                     153.30
       110.00
                                                                                                                                                      27.95
                                                                                  158.11
                                                                                                                                    4070.9
                                                                     192.53
                                                      30.46
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 168.2 SR 364.0 S5 408.5
CRT .2017 CRS .8876 CST -.2610
                                                                         SGT 538.9 SGR 379.9 SG3 442.3
RRT -.2009 RRF -.3963 RTF .4065
SGB 659.3 R23 .2464 R13 -.4557
     TOE -.0481 TRA -.5260 TC3 .0103 BAU .0113
    ROE -.3578 RRA .1080 RC3 .0243 FAU .14525
FOE 1.0800 FRA-2.2406 FC3-3.9326 BSP 554
                                                                                                                                LSA 531.9 MSA 210.4 SSA
                                                                                                                                EL1 366.0 EL2 163.8 ALF 83.34
                                                                         SG1 548.8 SG2 365.4 THA 165.30
     BOE .3610 BRA .5370 BC3 .0263 FSP -1361
                                                                                                                                             ARRIVAL DATE MAR 15 1966
                                                                              FLIGHT TIME 88.00
                                                                             01STANCE 255.721
    RL 147.21 LAL -.00 LOL 84.85 VL 28.601 GAL -10.27 A7L 86.91 HCA 118.31 SMA 134.73 ECC .20020 INC 3.0880 V1 30.264 RP 107.98 LAP 2.72 LOP 203.19 VP 38.381 GAP -1.51 A7P 91.47 TAL 232.65 TAP 350.95 RCA 107.76 APO 161.70 V2 35.095 RC 76.070 GL 15.68 GP 6.20 7AL 151.91 ZAP 69.45 ETS 355.84 ZAE 176.02 ETE 352.35 ZAC 48.23 ETC 164.62 CLP -69.32
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 31.454 VHL 5.608 DLA -6.62 RAL 287.86 RAD 6568.3 VEL 12.362 PTH 2.23 VHP 3.517 OPA -13.44 RAP 315.45 ECC 1.5176
ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                   1519.0
                   1 41 27 2118.98

12 0 12 5176.45

2 59 38 1866.75

13 24 42 4903.91

4 0 40 1675.68

14 40 9 4667.75
                                                                                   155.22
                                                                                                    112.89 2 16 46
                                                                      35.52
                                                      -17.14
        90.00
                                                                                                      77.90 13 26 28
114.04 3 30 45
76.77 14 46 25
117.27 4 28 35
73.61 15 57 57
                                                                                                                                                      23.87
                                                                                                                                      4576.5
                                                      25.80
                                                                      231.61
                                                                                     159.19
         90.00
                                                                                                                                                     -14.92
                                                                                                                                     1266.8
                                                                      16.43
                                                                                     154.68
                                                      -18.32
        100.00
                                                                                                                                                     24.96
                                                                                   158.88
153.08
                                                                                                                                     4303.9
       100.00
                                                      27.05
                                                                     211.25
                                                                                                                                     1075.7
                                                                                                                                                    -17.64
       110.00
                                                      -21.46
                                                                         .33
                                                                                                                                                      27.88
                                                                                                                                      4067.7
                                                                      192.30
                                                                                     157.86
                                                      30.42
        110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
ST 181.7 SR 359.2 S5 421.7
CRT .0253 CRS .8917 CST -.4202
LSA 541.2 MSA 215.7 SSA 21.9
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RRI -.2941 RRF -.4493 RTF .5616
SGB 716.8 R23 .2060 R13 -.6011
SGI 623.3 SGZ 354.1 THA 164.46
     TOE -.0222 TRA -.5841 TC3 -.0808 BAU .0384
     ROE - .3498 RRA .1161 RC3 .0423 FAU .15456
FOE 1.1450 FRA-2.3752 FC3-4.2540 BSP 884
BOE .3505 BRA .5955 BC3 .0912 FSP -1469
                                                                                                                               EL1 359.2 EL2 181.6 ALF 89.02
                                                                                                                                            APRIVAL DATE MAR 17 1966
                                                                             FLIGHT TIME 90.00
LAUNCH DATE DEC 17 1965
    RL 147.21 LAL -.00 LOL 84.85 VL 28.599 GAL -10.18 A7L 86.95 MCA 121.52 SHA 134.71 ECC .19887 INC 3.0506 V1 30.264
RP 108.02 LAP 2.60 LOP 206.40 VP 38.367 GAP -.99 A7P 91.60 TAL 232.49 TAP 354.01 RCA 107.92 APO 161.50 V2 35.082
RC 78.316 GL 15.63 GP 6.59 ZAL 151.84 ZAP 74.85 ETS 356.27 ZAE 179.68 ETE 40.69 ZAC 46.01 ETC 164.63 CLP -74.74
                                                                             DISTANCE 262.164
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 30.923 VHL 5.561 DLA -6.66 RAL 287.99 RAD 6568.2 VEL 12.341 PTH 2.23 VHP 3.421 DPA -13.61 RAP 313.16 ECC 1.5089
ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  113.00 2 17 29
77.80 13 26 37
114.15 3 31 27
76.67 14 46 36
117.39 4 29 15
73.48 15 58 10
                                                                                                                                   1513.4
                                                                                                                                                   -13.73
                                                                                  155.06
                                                      -16.99
                                                                      35.18
                       1 42 16 2113.45
         90.00
                                                                                                                                      4573.4
                                                                                                                                                     23.82
                                                                                                                                                                      223.26
                                                       25.75
                                                                     231.40
                                                                                    159.02
                                    5173.44
         90.00
                     12 0 24
                                                                                                                                                     -14.75
                                                                                                                                                                       8.97
                                                                                  154.52
                                                                                                                                     1261.3
                                                       -18.17
                                                                      16.10
                      3 0 26 1861.28
        100.00
                                                                                                                                                     24.90
                                                                                                                                                                      202.86
                                                                                                                                    4300.8
                                                                                    158.70
                                                      27.00
                                                                     211.03
        100.00
                     13 24 55 4900.84
                                                                                                                                                    -17.46
27.80
                                                                                                                                                                     142.98
                                                                                                                                      1070.4
                                                                                    152.92
                                                       -21.30
                                                                          .01
        110.00
                      4 1 24
                                    1670.36
                                                                                                                                                                     183.81
                    14 40 25 4664.53
                                                                                                                                      4064.5
                                                                                      157.68
                                                                      192.07
                                                       30.36
        110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 701.6 SGR 380.4 SGS 502.3
RRT -.3846 RRF --5025 RTF .6778
SGB 798.1 R23 .1729 R13 -.7058
SG1 721.3 SG2 341.5 THA 164.72
                                                                                                                                 ST 201.7 SR 353.3 SS 430.6
CRT -.1389 CRS .8948 CST -.5581
     TDE .0058 TRA -.6475 TC3 -.1822 BAU .0795
     ROE - 3408 RRA .1243 RC3 .0619 FAU .16265
FOE 1.1893 FRA-2.4842 FC3-4.5537 BSP 1297
BOE .3409 BRA .6593 BC3 .1924 FSP -1575
                                                                                                                               LSA 549.5 MSA 220.0 SSA 21.6
EL1 354.9 EL2 198.8 ALF 96.62
                                                                                                                                              ARRIVAL DATE MAR 19 1966
                                                                               FLIGHT TIME 92.00
 LAUNCH DATE DEC 17 1965
                                                                               DISTANCE 268.572
     RL 147.21 LAL -.00 LOL 84.85 VL 28.590 GAL -10.08 A7L 86.99 MCA 124.74 SMA 134.65 ECC .19765 INC 3.0106 V1 30.264
RP 108.06 LAP 2.47 LOP 209.62 VP 38.349 GAP -.50 A7P 91.72 TAL 232.23 TAP 356.96 RCA 108.04 APO 161.26 V2 35.069
RC 80.581 GL 15.56 GP 6.98 ZAL 151.71 ZAP 80.23 ETS 356.75 ZAE 176.37 ETE 165.10 ZAC 43.79 ETC 164.65 CLP -80.16
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                          2.22 VHP 3.351 OPA -13.74 RAP 310.88 ECC 1.5000
     C3 30.380 VHL 5.512 DLA -6.71 RAL 288.19 RAD 6568.2 VEL 12.319 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     113.11
                                                                                                                                                    -13.57
                                                                                                                     2 18 32
                       1 43 24 2107.61
12 0 52 5170.37
                                                                       34.82
                                                                                     154.96
                                                       -16.84
         90.00
                                                                                                       77.71 13 27 2
114.27 3 32 28
                                                                                                                                                                       223.05
                                                                                                                                       4570.4
                                                                                                                                                       23.76
                                                                                      158.91
                     12 0 52
                                                       25.71
                                                                      231.18
          90.00
                                                                                                                                                                        8.63
                       3 1 33 1855.51
13 25 24 4897.70
4 2 29 1664.74
14 40 58 4661.23
                                                                                                                                       1255.5
                                                                                                                                                     -14.58
                                                                        15.75
                                                                                      154.43
                                                       -18.01
        100.00
                                                                                                                                       4297.7
                                                                                                                                                       24.84
                                                                                                                                                                      202.65
                                                                                                        76.56 14 47 2
                                                                                      158.59
                                                                       210.81
                     13 25 24
                                                       26.96
        100.00
                                                                                                         117.52 4 30 13
73.36 15 58 39
                                                                                                                                                                       352.66
                                                                                                                                                     -17.27
                                                                                                       117.52
                                                                                                                                       1064.7
                                                      -21.12
                                                                       359.66
                                                                                      152.82
                       4 2 29
        110.00
                                                                                                                                      4061.2
                                                                                                                                                       27.72
                                                    30.30
                                                                    191.83
                                                                                      157.57
                      14 40 58
        110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 227.8 SR 346.7 SS 437.7

CRT -.2729 CRS .8998 CST -.6581

LSA 559.8 MSA 223.3 55A 21.3
                                                                          SGT 817.3 SGR 381.8 SG3 524.1
RRT -.4652 RRF -.5555 RTF .7589
      TDE .0341 TRA -.7160 TC3 -.2942 BAU .1241
      RDE - .3311 RRA .1321 RC3 .0822 FAU .16861
                                                                          SCB 902.1 R23 .1509 R13 -.7781
SG1 840.1 SG2 328.9 THA 165.46
      FDE 1.2241 FRA-2.5492 FC3-4.8049 BSP 1770
                                                                                                                                  EL1 355.6 EL2 213.7 ALF 106.13
      BDE .3329 BRA .7281 BC3 .3055 FSP -1648
```

.

```
LAUNCH DATE DEC 17 1965
                                                                                   FLIGHT TIME 94.00
                                                                                                                                                     ARRIVAL DATE MAR 21 1966
                                                                                   DISTANCE 274.947
    HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 28.576 GAL -9.98 AZL 87.03 MCA 127.95 SMA 134.54 ECC .19651 INC 2.9674 VI 30.264
RP 108.10 LAP 2.34 LOP 212.83 VP 38.327 GAP -.03 AZP 91.83 TAL 231.85 TAP 359.80 RCA 108.10 APO 160.98 V2 35.056
RC 82.862 GL 15.47 GP 7.37 ZAL 151.53 ZAP 85.54 ETS 357.28 ZAE 172.56 ETE 167.26 ZAC 41.64 ETC 164.70 CLP -85.51
    PLANETOCENTRIC CONIC
     C3 29.821 VML 5.461 DLA -6.76 RAL 288.46 RAD 6568.2 VEL 12.296 PTH
                                                                                                                2.21 VHP 3.307 DPA -13.83 RAP 308.67 ECC 1.4908
    CS 29.821 VML 5.461 DLA -6.76 RAL 288.46 RAD 6568.2 VEL 12.296 PTM 2.21 VMP 3.307 DPA -13.83 RAP 308.67 ECC 1.4908 LNCM AZMTH LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 12 1 34 52 2101.36 -16.67 34.44 154.92 113.23 2 19 54 1501.4 -13.38 27.30 90.00 12 1 34 5167.31 25.67 230.97 158.86 77.61 13 27 41 4567.3 23.70 222.85 100.00 3 3 0 1849.35 -17.83 15.37 154.39 114.39 3 33 49 1249.3 -14.39 8.27 100.00 13 26 8 4894.55 26.91 210.59 158.54 76.46 14 47 42 4294.6 24.77 202.44 110.00 4 3 52 1658.75 -20.93 359.30 152.78 117.66 4 31 31 1058.8 -17.06 352.31 110.00 14 41 45 4657.91 30.23 191.60 157.51 73.23 15 59 23 4057.9 27.64 183.36
    DIFFERENTIAL CORRECTIONS
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SGT 948.9 SGR 383.9 SG3 541.2
RRT -.5383 RRF -.6063 RTF .8142
                                                                                                                                         ST 258.3 SR 338.7 S5 439.0
CRT -.3791 CRS .9026 CST -.7344
     TOE .0627 TRA -.7870 TC3 -.4142 BAU .1702
     ROE - 3200 RRA .1397 RC3 .1037 FAU .17305
FOE 1.2286 FRA-2.5863 FC3-5.0239 BSP 2275
BOE .3261 BRA .7993 BC3 .4270 FSP -1725
                                                                                                                                        LSA 568.2 MSA 225.5 SSA 21.0
EL1 362.9 EL2 223.1 ALF 117.06
                                                                              SGB 1023.6 R23 .1344 R13 -.8274
                                                                              SG1 973.8 SG2 315.2 THA 166.24
LAUNCH DATE DEC 17 1965
                                                                                   FLIGHT TIME 96.00
                                                                                                                                                     ARRIVAL DATE MAR 23 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 281.288
    RL 147.21 LAL -.00 LOL 84.85 VL 28.557 GAL -9.87 AZL 87.08 MCA 131.16 SMA 134.39 ECC .19544 INC 2.9203 V1 30.264 RP 108.14 LAP 2.20 LOP 216.04 VP 38.300 GAP .42 AZP 91.92 TAL 231.38 TAP 2.54 RCA 108.12 APO 160.65 V2 35.043
                                            7.76 ZAL 151.30 ZAP 90.72 ETS 357.86 ZAE 168.83 ETE 167.97 ZAC 39.62 ETC 164.80 CLP -90.72
    RC 85.157 GL 15.37 GP
   PLANETOCENTRIC CONIC
     C3 29.243 VML 5.408 DLA -6.82 RAL 288.80 RAD 6568.2 VEL 12.273 PTH 2.21 VMP 3.285 DPA -13.85 RAP 3D6.58 ECC 1.4813 LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        1 46 42 2094.57
                                                                                         154.94
         90.00
                                                         -16.49
                                                                           34.02
                                                                                                          113.35
                                                                                                                           2 21 36
                                                                                                                                            1494.6
                                                                                                                                                             -13.19
                                                                                                                                                                                 26.90
       90.00 12 2 28 5164.29
100.00 3 4 47 1842.66
100.00 13 27 4 4891.44
110.00 4 5 35 1652.28
110.00 14 42 45 4654.59
                                                                          230.76
                                                          25.62
                                                                                          158.86
                                                                                                             77.51
                                                                                                                         13 28 32
                                                                                                                                              4564.3
                                                                                                                                                              23.65
                                                                                                                                                                               222.65
                                                         -17.64
                                                                           14.96
                                                                                          154.40
                                                                                                            114.53
                                                                                                                           3 35 30
                                                                                                                                            1242.7
                                                                                                                                                              -14.19
                                                                                                                                                                                  7.88
                                                        26.86
                                                                         210.37
                                                                                          158.54
                                                                                                             76.35 14 48 35
                                                                                                                                                              24.71
                                                                                                                                            4291.4
                                                                                                                                                                               202.23
                                                                                                           117.81 4 33 8
73.10 16 0 19
                                                         -20.73
                                                                          358.91
                                                                                          152.80
                                                                                                                           4 33 B
                                                                                                                                            1052.3
                                                                                                                                                              -16.84
                                                                                                                                                                               351.94
                                                         30.17
                                                                          191.36
                                                                                          157.51
                                                                                                                                             4054.6
                                                                                                                                                                27.56
                                                                                                                                                                               183.14
   DIFFERENTIAL CORRECTIONS
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGT 1092.8 SGR 386.6 SG3 549.6
RRT -.6003 RRF -.6550 RTF .8509
SGB 1159.2 R23 .1273 R13 -.8604
                                                                                                                                        ST 291.8 SR 330.2 55 440.1
CRT -.4578 CRS .9089 CST -.7813
    TOE .0900 TRA -.8597 TC3 -.5420 BAU .2175
    RDE -.3084 RRA .1461 RC3 .1253 FAU .17463
    FOE 1.2306 FRA-2.5677 FC3-5.1698 BSP 2807
BDE .3213 BRA .8720 BC3 .5563 FSP -1748
                                                                                                                                        LSA 579.6 MSA 226.7 SSA
                                                                                                                                                                                  20.6
                                                                              SG1 1119.2 SG2 301.9 THA 167.05
                                                                                                                                        EL1 377.8 EL2 226.7 ALF 127.43
LAUNCH DATE DEC 17 1965
                                                                                 FLIGHT TIME 98.00
                                                                                                                                                    ARRIVAL DATE MAR 25 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 287.598
    RL 147.21 LAL -.00 LOL 84.85 VL 28.533 GAL -9.75 AZL 87.13 HCA 134.36 SMA 134.20 ECC .19443 INC 2.8683 VI 30.264 RP 108.18 LAP 2.05 LOP 219.25 VP 38.271 GAP .84 AZP 92.01 TAL 230.82 TAP 5.19 RCA 108.11 APO 160.30 V2 35.030
    RC 87.465 GL 15.24 GP 8.17 7AL 151.02.7AP 95.70 ETS 358.50 7AE 165.24 ETE 168.29 7AC 37.76 ETC 164.97 CLP -95.76
   PLANETOCENTRIC CONIC
     C3 28.646 VHL 5.352 OLA -6.89 RAL 289.21 RAD 6568.2 VEL 12.248 PTH
                                                                                                               2.20 VHP 3.284 DPA -13.80 RAP 304.67 ECC 1.4714
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A9C INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 53 2087.09 -16.28 33.57 155.00 113.49 2 23 40 1487.1 -12.97 26.46 90.00 12 3 32 5161.47 25.58 230.56 158.92 77.42 13 29 33 4561.5 23.59 222.46 100.00 3 6 56 1835.29 -17.44 14.52 154.46 114.67 3 37 32 1235.3 -13.96 7.45 100.00 13 28 10 4888.50 26.81 210.17 158.60 76.25 14 49 38 4288.5 24.65 202.03 110.00 4 7 40 1645.17 -20.50 358.49 152.86 117.97 4 35 5 1045.2 -16.60 351.53 110.00 14 43 56 4651.38 30.10 191.13 157.57 72.98 16 1 27 4051.4 27.48 182.92
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          SGT 1244.1 SGR 389.9 SG3 553.2

RRT -.6564 RRF -.7006 RTF .8761

SGB 1303.8 R23 .1231 R13 -.8832

SGI 1271.7 SG2 287.8 THA 167.74
                                                                                                                                       ST 326.6 SR 320.1 SS 435.6
CRT -.5168 CRS .9129 CST -.8161
    TOE .1154 TRA -.9320 TC3 -.6754 BAU .2648
     ROE - .2954 RRA .1521 RC3 .1480 FAU .17465
    FOE 1.2038 FRA-2.5235 FC3-5.2783 BSP 3355
                                                                                                                                       LSA 589.1 MSA 226.8 SSA 20.3
    BDE .3172 BRA .9443 BC3 .6914 FSP -1772
                                                                                                                                        EL1 398.3 EL2 224.7 ALF 136.11
LAUNCH DATE DEC 17 1965
                                                                                  FLIGHT TIME 100.00
                                                                                                                                                    ARRIVAL DATE MAR 27 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 293.877
    RL 147.21 LAL -.DD LOL 84.85 VL 28.505 GAL -9.63 AZL 87.19 MCA 137.57 SMA 133.99 ECC .19348 INC 2.8104 VI 30.264 RP 108.22 LAP 1.90 LOP 222.45 VP 38.237 GAP 1.25 AZP 92.08 TAL 230.18 TAP 7.75 RCA 108.06 APO 159.91 VZ 35.016
    RC 89.783 GL 15.09 GP 8.61 7AL 150.70 ZAP 100.45 ETS 359.21 ZAE 161.81 ETE 168.40 ZAC 36.11 ETC 165.24 CLP-100.57
   PLANETOCENTRIC CONIC
    C3 28.028 VHL 5.294 DLA -6.98 RAL 289.68 RAD 6568.1 VEL 12.223 PTH 2.20 VHP 3.302 DPA -13.66 RAP 302.97 ECC 1.4613
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        113.64 2 26 8
77.34 13 30 41
114.83 3 39 57
76.17 14 50 49
118.15 4 37 24
72.87 16 2 44
        90.00
                                                                                       155.11
                       1 51 30 2078.68
                                                                         33.06
                                                         -16.06
                                                                                                                                            1478.7
                                                                                                                                                                               25.96
                     12 4 42
                                      5158.97
                                                                         230.39
                                                                                         159.03
         90.00
                                                          25.54
                                                                                                                                             4559.0
                                                                                                                                                              23.54
                                                                                                                                                                              222.29
                       3 9 30 1827.04
                                                                                         154.57
       100.00
                                                       -17.20
                                                                          14.02
                                                                                                                                            1227.0
                                                                                                                                                              -13.71
                                                                                                                                                                                6.96
                     13 29 23
                                     4885.85
                                                         26.76
                                                                         209.98
                                                                                         158.71
       100.00
                                                                                                                                             4285.9
                                                                                                                                                             24.60
                                                                                                                                                                              201.85
                                                                                        152.97
       110.00
                      4 10 7 1637.26
                                                       -20.25
                                                                         358.01
                                                                                                                                            1037.3
                                                                                                                                                          -16.33
                                                                                                                                                                              351.08
       110.00
                     14 45 16
                                     4648.40
                                                       30.04
                                                                         190.92
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                         157.68
                                                                                                                                            4048.4
                                                                                                                                                              27.41
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 1399.5 SGR 393.7 SG3 549.9

RRT -.7053 RRF -.7432 RTF .8931

SGB 1453.8 R23 .1245 R13 -.8988

SG1 1427.9 SG2 273.6 THA 168.34
                                                                                                                                    ST 361.5 SR 309.2 SS 429.4

CRT -.5607 CRS .9185 CST -.8376

LSA 599.3 MSA 226.0 SSA 19.8

EL1 422.2 EL2 219.3 ALF 142.81
    TOE .1385 TRA-1.0025 TC3 -.8131 BAU .3114
    ROE -.2817 RRA .1569 RC3 .1711 FAU .17251
    FOE 1.1685 FRA-2.4403 FC3-5.3286 BSP 3904
BDE .3139 BRA 1.0147 BC3 .8309 FSP -1762
```

ARRIVAL CATE MAR 29 1966

```
LAUNCH DATE DEC 17 1965
                                                                             DISTANCE 300.126
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 28.473 GAL -9.50 ATL 87.26 HCA 140.77 SMA 133.74 ECC .19258 INC 2.7449 V1 30.264 RP 108.26 LAP 1.74 LOP 225.65 VP 38.202 GAP 1.65 ATP 92.13 TAL 229.45 TAP 10.22 RCA 107.99 APO 159.50 V2 35.003
    RC 92.112 GL 14.89 GP 9.08 TAL 150.34 TAP 104.95 ETS 359.99 TAE 158.58 ETE 168.35 TAC 34.69 ETC 165.64 CLP-105.14
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 35 2069.07 -15.79 32.47 155.26 113.81 2 29 4 1469.1
    C3 27.387 VHL 5.233 DLA -7.10 RAL 290.22 RAD 6568.1 VEL 12:197 PTH 2.19 VHP 3.336 DPA -13.42 RAP 301.52 ECC 1.4507
                                                                                                    113.81 2 29 4

77.28 13 31 53

115.01 3 42 49

76.10 14 52 4

118.35 4 40 8

72.78 16 4 7
                                                                                                                                       4557.1
                                                                                                                                                       23.51
                                                                      230.26
                                                                                      159.20
                                     5157.06
                                                       25.51
                    12 5 56
        90.00
                   3 12 32 1817.63
13 30 40 4883.74
4 13 0 1628.28
14 46 41 4645.86
                                                                                                                                       1217.6
                                                                                                                                                       -13.42
                                                                                                                                                                        6.41
                                                                                      154.72
                                                      -16.93
                                                                       13.45
       100.00
                                                                                                                                                       24.55
                                                                                                                                                                       201.71
                                                                                                                                       4283.7
                                                      26.73
                                                                      209.83
                                                                                      158.88
       100.00
                                                                                                                                                    -16.01
                                                                                                                                                                       350.57
                                                                                  153.12
                                                                                                                                       1028.3
                                                      -19.96
                                                                      357.48
       110.00
                                                                                                                                                        27.34
                                                                                                                                       4045.9
                                                      29.99
                                                                      190.74
                                                                                      157.84
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 395.4 SR 297.1 SS 419.2
CRT -.5933 CRS .9231 CST -.8526
                                                                       SGT 1556.3 SGR 398.5 SG3 542.5
RRT -.7494 RRF -.7829 RTF .9050
SGB 1606.5 RZ3 .1289 RT3 -.9096
    TDE .1583 TRA-1.0699 TC3 -.9548 BAU .3568
    RDE -.2669 RRA .1609 RC3 .1955 FAU .16907
FDE 1.1148 FRA-2.3356 FC3-5.3445 BSP 4454
BOE .3103 BRA 1.0820 BC3 .9746 FSP -1747
                                                                                                                                  LSA 608.1 MSA 224.2 SSA 19.4
                                                                                                                                EL1 447.1 EL2 211.5 ALF 148.02
                                                                      SG1 1585.5 SG2 259.0 THA 168.84
                                                                                                                                              ARRIVAL CATE MAR 31 1966
                                                                               FLIGHT TIME 104.00
LAUNCH DATE DEC 17 1965
                                                                              DISTANCE 306.347
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 28.438 GAL -9.36 AZL 87.33 HCA 143.97 SHA 133.47 ECC .19172 INC 2.6699 VI 30.264 RP 108.31 LAP 1.57 LOP 228.85 VP 38.163 GAP 2.02 AZP 92.16 TAL 228.66 TAP 12.62 RCA 107.88 APO 159.06 V2 34.990 RC 94.449 GL 14.65 GP 9.62 TAL 149.95 ZAP 109.16 ETS .87 ZAE 155.57 ETE 168.15 ZAC 33.51 ETC 166.23 CLP-109.45
   PLANETOCENTRIC CONIC
    C3 26.722 VML 5.169 DLA -7.26 RAL 290.83 RAD 6568.1 VEL 12.170 PTH 2.18 VMP 3.384 DPA -13.07 RAP 300.33 ECC 1.4398
    C3 26.722 VHL 5.169 DLA -7.26 RAL 290.83 RAD 6568.1 VEL 12.170 PTH 2.18 VHP 3.384 DPA -13.07 RAP 300.33 ECC 1.4398 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 58 14 2057.86 -15.48 31.80 155.45 114.01 2 32 32 1457.9 -12.11 24.74 90.00 12 7 6 5156.07 25.50 230.19 159.42 77.25 13 33 2 4556.1 23.49 222.09 100.00 3 16 6 1806.68 -16.61 12.79 154.91 115.21 3 46 13 1206.7 -13.08 5.78 100.00 13 31 55 4882.48 26.71 209.75 159.10 76.05 14 53 18 4282.5 24.53 201.63 110.00 4 16 23 1617.91 -19.62 356.86 153.31 118.57 4 43 21 1017.9 -15.65 349.98 110.00 14 48 7 4644.02 29.96 190.6 158.07 72.71 16 5 31 4044.0 27.30 182.43
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 427.3 SR 283.8 55 405.8
CRT -.6160 CRS .9272 CST -.8615
                                                                           SCT 1713.3 SGR 404.5 SG3 531.2
RRT -.7886 RRF -.8198 RTF .9133
SCB 1760.4 R23 .1374 R13 -.9173
     TOE .1736 TRA-1.1335 TC3-1.1004 BAU .4010
     ROE -.2512 RRA .1642 RC3 .2216 FAU .16446
FOE 1.0480 FRA-2.2123 FC3-5.3281 BSP 5007
                                                                                                                                   LSA 615.1 MSA 221.6 55A 18.9
                                                                                                                                   EL1 471.2 EL2 202.7 ALF 152.16
                                                                           SGI 1743.3 SG2 244.5 THA 169.24
     BOE .3053 BRA 1.1453 BC3 1.1225 FSP -1721
                                                                                                                                              ARRIVAL DATE APR 2 1966
                                                                              FIRSHT TIME 106.00
LAUNCH DATE DEC 17 1965
                                                                              DISTANCE 312.541
    RL 147.21 LAL -.00 LOL 84.85 VL 28.400 GAL -9.21 A7L 87.42 HCA 147.17 SHA 133.18 ECC .19091 INC 2.5824 V1 30.264 RP 108.55 LAP 1.40 LOP 232.04 VP 38.123 GAP 2.38 A7P 92.17 TAL 227.79 TAP 14.95 RCA 107.76 APO 158.61 V2 34.977 RC 96.794 GL 14.33 GP 10.25 TAL 149.52 TAP 113.09 ETS 1.88 TAE 152.76 ETE 167.80 TAC 32.58 ETC 167.04 CLP-113.49
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                          2.18 VHP 3.445 OPA -12.58 RAP 299.39 ECC 1.4284
     C3 26.032 VHL 5.102 OLA -7.48 RAL 291.50 RAO 6568.1 VEL 12.141 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 2 36 2044.49 30 4643.28
                                                                                                                                                     -11.71
                                                                                                      114.24
                                                                                                                                   1444.5
                                                                                                                     2 36 40
                                                                                     155.68
                                                       -15.11
                                                                       30.99
         90.00
                                                                                                                                       4556.5
                                                                                                                                                        23.50
                                                                                                                                                                        222.12
                                                                                                         77.26
                                                                                                                   13 34 3
                                                                                      159.70
                                                        25.50
                                                                      230.21
         90.00
                                                                                                        115.45
                                                                                                                     3 50 15
                                                                                                                                       1193.7
                                                                                                                                                       -12.68
                                                                                                                                                                         5.02
                                                                                       155.14
                                                      -16.24
                                                                        12.01
        100.00
                                                                                                       76.06 14 54 25
118.83 4 47 9
                                                                                                                                                                        201.63
                                                                                                                                       4282.5
                                                                                                                                                        24.53
                                                                                       159.38
                                                      26.71
                                                                       209.75
        100.00
                                                                                                                                       1005.7
                                                   -19.22
29.94
                                                                                                                                                      -15.23
                                                                                                                                                                        349.29
                                                                       356.14
                                                                                       153.54
        110.00
                                                                                                         72.68 16 6 53
                                                                                                                                       4043.3
                                                                                                                                                       27.28
                                                                                                                                                                        182.38
                                                                                      158.36
                                                                    190.56
        110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 456.5 SR 270.0 SS 391.4
CRT -.6325 CRS .9330 CST -.8641
LSA 621.5 HSA 218.9 SSA 18.3
                                                                          SGT 1867.0 SGR 412.1 SG3 515.7
RRT -.8225 RRF -.8536 RTF ..9187
SGB 1912.0 R23 .1516 R13 -.9223
     TOE .1850 TRA-1.1909 TC3-1.2485 BAU .4431
     ROE - .2350 RRA .1661 RC3 .2494 FAU .15853
     FOE .9800 FRA-2.0651 FC3-5.2720 BSP 5529
BOE .2991 BRA 1.2025 BC3 1.2732 FSP -1667
                                                                                                                                   EL1 493.9 EL2 193.3 ALF 155.49
                                                                           SG1 1898.0 SG2 230.6 THA 169.55
                                                                                                                                               APRIVAL DATE APR 4 1966
                                                                               FLIGHT TIME 108.00
 LAUNCH DATE OFC 17 1965
                                                                               DISTANCE 318.709
    HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 28.359 GAL -9.06 A7L 87.52 MCA 150.36 SMA 132.87 ECC .19014 INC 2.4786 V1 30.264 RP 108.39 LAP 1.23 LOP 235.23 VP 38.081 GAP 2.73 A7P 92.15 TAL 226.86 TAP 17.22 RCA 107.61 APO 158.14 V2 34.964 RC 99.145 GL 13.93 GP 11.00 TAL 149.08 TAP 116.72 ETS 3.05 TAE 150.16 ETE 167.26 TAC 31.89 ETC 168.14 CLP-117.26
    PLANETOCENTRIC CONIC
     C3 25.314 VHL 5.031 DLA -7.78 RAL 292.25 RAD 6568.0 VEL 12.112 PTH 2.17 VMP 3.517 DPA -11.92 RAP 298.69 ECC 1.4166
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     1428.1
                     2 7 52 2028.14
12 8 47 5159.01
                                                                                                        114.50
                                                                                                                       2 41 40
                                                                         30.01
                                                                                      155.95
                                                       -14.65
          90.00
                                                                                                                                                                        222.29
                                                                                                                                                         23.55
                                                                                       160.06
                                                                                                          77.34
                                                                                                                    13 34 46
                                                                                                                                        4559.0
                                                                        230.39
                                                        25.54
          90.00
                                                                                                                                                                           4.11
                      3 25 28 1777.80
13 33 52 4884.58
                                                                                       155.41
                                                                                                        115.73
                                                                                                                     3 55 6
                                                                                                                                        1177.8
                                                                                                                                                         -12.18
                                                                         11.06
                                                       -15.77
         100.00
                                                                                                                                                                         201.77
                                                                                                                    14 55 17
                                                                                                                                        4284.6
                                                                                                                                                        24.57
                                                                                       159.74
                                                                                                          76.12
                                                       26.74
                                                                        209.89
         100.00
                                                                                                                                                                        348.46
                                                                                                                     4 51 41
                                                                                                                                          990.9
                                                                                                                                                         -14.71
                                                                                       153.80
                                                                                                        119.13
                                                       -18.73
                                                                        355.27
                     4 25 10 1590.88
14 50 40 4644.26
        110.00
                                                                                                          72.72 16 8 4
                                                                                                                                                       27.30
                                                                                                                                                                         182.44
                                                                                                                                        4044.3
                                                                                       158.72
                                                                        190.63
         110.00
                                                       29.96
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY

SGT 2019.8 SGR 422.6 SG3 499.0 ST 481.8 SR 254.8 55 5/2.2

RRT -.8528 RRF -.8846 RTF .9226 CRT -.6409 CRS .9368 CST -.8639

SGB 2063.6 R23 .1696 R13 -.9260 LSA 623.7 MSA 215.1 SSA 17.7

ELI 513.1 ELZ 183.6 ALF 158.37
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
      TDE .1895 TRA-1.2432 TC3-1.4024 BAU .4840
      ROE -.2178 RRA .1677 RC3 .2810 FAU .15229
FOE .8954 FRA-1.9159 FC3-5.2082 BSP 6067
      BOE .2887 BRA 1.2545 BC3 1.4303 FSP -1621
```

FLIGHT TIME 102.00

```
LAUNCH DATE DEC 17 1965
                                                                           FLIGHT TIME 110.00
                                                                                                                                       ARRIVAL DATE APR 6 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 324.852
     RL 147.21 LAL -.00 LOL 84.85 VL 28.316 GAL -8.90 AZL 87.65 HCA 153.55 SMA 132.55 ECC .18942 INC 2.3522 V1 30.264
RP 108.43 LAP 1.05 LOP 238.42 VP 38.037 GAP 3.06 AZP 92.11 TAL 225.87 TAP 19.42 RCA 107.44 APO 157.66 VZ 34.951
RC 101.502 GL 13.39 GP 11.93 ZAL 148.61 ZAP 120.05 ETS 4.43 ZAE 147.74 ETE 166.51 ZAC 31.43 ETC 169.60 CLP-120.79
   PLANETOCENTRIC CONIC
     C3 24,566 VHL 4.956 DLA -8.19 RAL 293.07 RAD 6568.0 VEL 12.081 PTH 2.16 VHP 3.599 DPA -11.05 RAP 298.22 ECC 1.4D43
    LNCH AZMTH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZMTH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                    2 14 22 2007.57
12 8 52 5164.80
                                                    -14.07
                                                                   28.78
                                                                                156.27
                                                                                                 114.83
                                                                                                              2 47 50
                                                                                                                              1407.6
                                                                                                                                              -10.60
        90.00
                                                                                                  77.53 13 34 56
                                                                   230.79
                                                                                  160.50
                                                                                                                                               23.65
         90.00
                                                    25.63
                                                                                                                                4564.8
                  3 31 45 1757.92
13 34 10 4889.67
                                                                     9.88
                                                                                  155.72
                                                                                                                4 1 3
                                                                                                                                1157.9
       100.00
                                                    -15.18
                                                                                                  116.06
                                                                                                                                                                2.97
                                                                                                                                               -11.55
                                                                                                  116.06 4 1 3
76.29 14 55 39
119.49 4 57 11
72.85 16 8 54
                                                                   210.25
       100.00
                                                                                  160.19
                                                                                                                                4289.7
                                                                                                                                               24.68
                                                                                                                                                               202.11
                                                    26.83
                                                                                154.11
                    4 30 58 1572.51
                                                                                                                                 972.5
                                                                                                                                                              347.44
       110.00
                                                    -18.12
                                                                   354.19
                                                                                                 119.49
                                                                                                                                              -14.06
                                                                                                                                                               182.68
                   14 51 26
                                                                                  159.19
                                                                                                                              4047.8
                                                                                                                                              27.39
       110.00
                                                     30.03
                                                                   190.88
                                   4647.85
                                                                    MID-COURSE EXECUTION ACCURACY

SGT 2167.3 SGR 436.4 SG3 479.4

RRT -.8778 RRF -.9122 RTF ..9247

SGB 2210.8 R23 ..1943 R13 -.9281
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
    TDE .1879 TRA-1.2870 TC3-1.5597 BAU .5227
RDE -.2002 RRA .1681 RC3 .3164 FAU .14519
FDE .8094 FRA-1.7513 FC3-5.1167 BSP 6565
                                                                                                                           ST 502.7 SR 239.0 SS 351.2
CRT -.6431 CRS .9416 CST -.8579
                                                                                                                         LSA 622.9 MSA 211.5 SSA 17.0
                                                                       SG1 2201.2 SG2 205.8 THA 169.89
    BOE .2745 BRA 1.2980 BC3 1.5915 FSP -1554
                                                                                                                           EL1 528.7 EL2 174.0 ALF 160.84
LAUNCH DATE DEC 17 1965
                                                                           FLIGHT TIME 112.00
                                                                                                                                       ARRIVAL DATE APR 8 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 330.971
    RL 147.21 LAL -.00 LOL 84.85 VL 28.271 GAL -8.73 AZL 87.81 MCA 156.74 SMA 132.21 ECC .18874 INC 2.1939 VI 30.264
RP 108.46 LAP .87 LOP 241.60 VP 37.992 GAP 3.38 AZP 92.02 TAL 224.82 TAP 21.56 RCA 107.26 APO 157.17 V2 34.939
RC 103.862 GL 12.67 GP 13.12 TAL 148.15 ZAP 123.08 ETS 6.13 ZAE 145.47 ETE 165.47 ZAC 31.19 ETC 171.52 CLP-124.08
   PLANETOCENTRIC CONIC
    C3 23.782 VHL 4.877 DLA -8.77 RAL 293.99 RAD 6568.0 VEL 12.048 PTH
                                                                                                     2.15 VHP 3.693 DPA
                                                                                                                                  -9.89 RAP 297.94 ECC 1.3914
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 22 37 1980.82
12 7 55 5175.65
3 39 41 1732.17
13 33 31 4899.53
4 38 12 1548.93
14 51 29 4655.53
                                                    -13.30
                                                                   27.20
                                                                                                115.23 2 55 37
                                                                                                                             1380.8
        90.00
                                                                                156.64
                                                                                                             13 34 10
        90.00
                                                     25.79
                                                                  231.55
                                                                                  161.06
                                                                                                   77.87
                                                                                                                                4575.6
                                                                                                                                                 23.86
                                                                                                  156.09
       100.00
                                                    -14.40
                                                                    8.36
                                                                                                  116.48
                                                                                                                                1132.2
                                                                                                                                               -10.73
                                                     26.98
                                                                   210.94
                                                                                 160.76
                                                                                                                                4299.5
       100.00
                                                                                                                                               24.87
                                                                                                                                                               202.77
                                                                                                                                              -13.21
                                                   -17.32
                                                                               154.46
                                                                                                                                 948.9
       110.00
                                                                   352.83
                                                                                                  119.94
       110.00
                                                    30.19
                                                                   191.43
                                                                                  159.78
                                                                                                                                4055.5
                                                                                                                                               27.58
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCUMENTS

ST 517,5 SR 221.4 SS 323.8

CRT -.6350 CRS ..9435 CST -.8489
    TOE .1756 TRA-1.3233 TC3-1.7257 BAU .5605

RDE -.1812 RRA .1682 RC3 .3592 FAU .13804

FDE .7056 FRA-1.5887 FC3-5.0251 BSP 7077

BDE .2523 BRA 1.3340 BC3 1.7627 FSP -1496
                                                                      SGT 2313.1 SGR 456.1 SG3 459.4

RRT -.8987 RRF -.9365 RTF ..9262

SGB 2357.7 R23 .2235 R13 -.9296
                                                                                                                           LSA 615.5 MSA 206.4 55A 16.3
                                                                      SG1 2349.4 SG2 196.9 THA 169.88
                                                                                                                         EL1 538.3 EL2 164.4 ALF 163.19
                                                                          FLIGHT TIME 114.00
                                                                                                                                      ARRIVAL DATE APR 10 1966
LAUNCH DATE DEC 17 1965
                                                                         015TANCE 337.067
    RL 147.21 LAL -.00 LOL 84.85 VL 28.224 GAL -8.56 AZL 88.01 MCA 159.93 SMA 131.86 ECC .18811 INC 1.9888 V1 30.264
RP 108.50 LAP .68 LOP 244.79 VP 37.946 GAP 3.68 AZP 91.87 TAL 223.72 TAP 23.65 RCA 107.06 APO 156.67 VZ 34.926
RC 106.225 GL 11.66 GP 14.68 ZAL 147.69 ZAP 125.75 ETS 8.26 ZAE 143.28 ETE 164.06 ZAC 31.17 ETC 174.08 CLP-127.16
   PLANETOCENTRIC CONTC
    C3 22.957 VML 4.791 OLA -9.62 RAL 295.01 RAD 6567.9 VEL 12.014 PTH 2.14 VMP 3.799 DPA -8.33 RAP 297.82 ECC 1.3778
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.74 3 5 53

78.49 13 31 48

117.00 4 18 22

77.22 14 53 15

120.50 5 12 51

73.68 16 8 8
                   2 33 28 1944.60
12 5 14 5194.63
3 50 5 1697.44
13 31 18 4917.02
                                                                              157.08
                                                                                                                           1344.6
                                                   -12.24
                                                                  25.06
        90.00
                                                    26.05
                                                                  232.88
                                                                                 161.80
                                                                                                                               4594.6
                                                                                                                                               24.20
                                                                                                                                                              224.69
                                                    -13.34
                                                                    6.33
                                                                                156.52
                                                                                                                             1097.4
                                                                                                                                                -9.61
                                                                                                                                                             359.52
       100.00
                                                    27.25
                                                                  212.17
                                                                                 161.51
                                                                                                                               4317.0
                                                                                                                                               25.22
                                                                                                                                                             203.96
                     4 47 34 1517.43
      110.00
                                                    -16.25
                                                                  351.02
                                                                                 154.87
                                                                                                                                917.4
                                                                                                                                               -12.08
       110.00
                   14 50 18
                                   4669.80
                                                   30.46
                                                                  192.45
                                                                                 160.56
                                                                                                                               4069.8
                                                                                                                                              27.93
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 525.6 SR 202.3 SS 291.1
CRT -.6137 CRS .9440 CST -.8327
LSA 601.3 MSA 200.3 SSA 15.6
    TOE .1510 TRA-1.3481 TC3-1.8996 BAU .5965
                                                                      SGT 2453.5 SGR 483.1 SG3 437.2
                                                                      RRT -.9140 RRF -.9567 RTF .9265
SGB 2500.6 R23 .2580 R13 -.9302
SGI 2493.2 SG2 192.9 THA 169.74
    RDE -.1610 RRA .1671 RC3 .4111 FAU .13026
    FOE .5922 FRA-1.4146 FC3-4.9120 BSP 7552
BOE .2207 BRA 1.3585 BC3 1.9436 FSP -1419
                                                                                                                           EL1 541.4 EL2 155.0 ALF 165.49
LAUNCH DATE DEC 17 1965
                                                                          FLIGHT TIME 116.00
                                                                                                                                       ARRIVAL DATE APR 12 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 343.141
    RL 147.21 LAL -.00 LOL
RP 108.54 LAP .50 LOP
RC 108.588 GL 10.20 GP
                            -.00 LOL 84.85 VL 28.176 GAL -8.37 AZL 88.29 MCA 163.11 SMA 131.51 ECC .18753 INC 1.7100 V1 30.264
-.50 LOP 247.97 VP 37.898 GAP 5.98 AZP 91.64 TAL 222.57 TAP 25.69 RCA 106.85 APO 156.17 VZ 34.914
1.20 GP 16.82 ZAL 147.27 ZAP 128.01 ETS 11.04 ZAE 141.08 ETE 162.10 ZAC 31.40 ETC 177.52 CLP-130.04
   PLANETOCENTRIC CONIC
    C3 22.085 VHL 4.699 DLA -10.91 RAL 296.18 RAD 6567.9 VEL 11.978 PTH 2.13 VMP 3.925 DPA -6.17 RAP 297.80 ECC 1.3635
    ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEZTH INJETHE PO CST TIM INJEET INJE LONG
                  2 48 35 1892.94
11 59 28 5227.48
4 4 28 1648.12
13 26 16 4947.53
5 0 20 1473.16
14 46 53 4695.25
                                                   -10.69
                                                                  22.06
                                                                                157.64
                                                                                                116.38
                                                                                                              3 20 7
                                                                                                                              1292.9
                                                                                                                                              -7.06
        90.00
                                                   26.48
                                                                  235.19
                                                                                 162.80
                                                                                                  79.57
                                                                                                            13 26 35
                                                                                                                               4627.5
                                                                                                                                                24.77
        90.00
                                                                                                                                                              226.93
                                                   -11.80
                                                                   3.48
                                                                                 157.07
                                                                                                 117.67
                                                                                                              4 31 56
                                                                                                                               1048.1
       100.00
                                                                                                                                                -8.00
                                                                                                                                                              356.75
                                                                                                                                              25.80
                                                                  214.33
                                                                                 162.53
                                                                                                  78.27
                                                                                                            14 48 44
                                                                                                                               4347.5
      100.00
                                                    27.69
                                                                                                                                                              206.04
                                                  -14.70
                                                                  348.52
                                                                                 155.38
                                                                                                 121.21
                                                                                                             5 24 53
                                                                                                                                873.2
      110.00
                                                                                                                                               -10.46
                                                                                                                                                              341.99
                                                                                                  121.21 5 24 55
74.67 16 5 8
                                                                                                                              4095.3
                                                                                                                                             28.52
      110.00
                                                   30.94
                                                                  194.28
                                                                                 161.64
                                                                                                                                                             185.91
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
SGT 2592.4 SGR 522.4 SG3 413.8
RRT -.9243 RRF -.9730 RTF ..9265
SGB 2644.5 R23 ..2926 R13 -.9307
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 526.0 SR 179.1 SS 247.3
CRT -.5676 CRS .9354 CST -.8133
    TOE .1049 TRA-1.3606 TC3-2.0877 BAU .6324
    ROE -.1375 RRA .1655 RC3 .4788 FAU .12219
    FOE .4498 FRA-1.2392 FC3-4.7900 BSP 8051
BOE .1730 BRA 1.3707 BC3 2.1419 FSP -1349
                                                                                                                         LSA 578.0 MSA 188.8 SSA 15.2
```

SG1 2637.3 SG2 196.0 THA 169.39

EL1 536.5 EL2 144.6 ALF 168.19

ARRIVAL DATE APR 14 1966

```
LAUNCH DATE DEC 17 1965
                                                                           DISTANCE 349.194
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 28.126 GAL -8.18 A7L 88.69 MCA 166.30 SMA 131.14 ECC .18700 INC 1.3067 VI 30.264 RP 108.58 LAP .31 LOP 251.15 VP 37.851 GAP 4.26 A7P 91.27 TAL 221.38 TAP 27.68 RCA 106.62 APO 155.67 V2 34.903 RC 110.951 GL 7.93 GP 19.91 TAL 146.89 ZAP 129.68 ETS 14.84 ZAE 138.68 ETE 159.34 ZAC 31.97 ETC 182.32 CLP-132.77
   PLANETOCENTRIC CONIC
                                                                                                       2.12 VMP 4.083 DPA -3.05 RAP 297.77 ECC 1.3483
    C3 21.163 VHL 4.600 DLA -12.95 RAL 297.58 RAD 6567.9 VEL 11.939 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 11 23 1813.64
11 47 48 5286.20
4 26 1 1572.86
13 15 52 5002.21
5 19 8 1406.48
14 39 13 4741.35
                                                                                                                                 1213.6
                                                                                 158.47
                                                                                                   117.18
                                                                                                                 3 41 37
                                                                                                                                                   -4.55
                                                                     17.50
                                                      -8.26
        90.00
                                                                                                                13 15 54
                                                                                                                                   4686.2
                                                                                                                                                    25.69
                                                                                                                                                                  230.99
                                                                                                     81.57
                                                      27.13
                                                                    239.36
                                                                                   164.30
        90.00
                                                                                                    118.51
                                                                                                                  4 52 14
                                                                                                                                    972.9
                                                                                                                                                    -5.50
                                                                                                                                                                  352.56
                                                                                   157.87
                                                      -9.38
                                                                    359.20
       100.00
                                                                                                    80.22 14 39 14
122.14 5 42 35
76.53 15 58 15
                                                                                                                                                                  209.83
                                                                                                                                   4402.2
                                                                                                                                                    26.75
                                                      28.39
                                                                    218.24
                                                                                   164.07
       100.00
                                                                                                                                   806.5
                                                                                                                                                   -7.98
                                                                                                                                                                  338.41
                                                   -12.31
                                                                    344.83
                                                                                   156.13
       110.00
                                                                                                                                  4141.4
                                                                                                                                                  29.54
                                                                                                                                                                  189.11
                                                    31.72
                                                                   197.64
                                                                                   163.28
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 2726.5 SGR 579.0 SG3 386.1

RRT -.9284 RRF -.9850 RTF .9258

SCB 2787.3 R23 .3238 R13 -.9308

SG1 2779.3 SG2 211.0 THA 168.78
                                                                                                                              ST 523.6 SR 149.D S5 19D.8
CRT -.4799 CRS .9012 CST -.8007
LSA 552.4 MSA 165.3 SSA 15.5
    TOE .0257 TRA-1.3530 TC3-2.2909 BAU .6679
    RDE -.1081 RRA .1615 RC3 .5694 FAU .11293
    FOE .2734 FRA-1.0448 FC3-4.6199 BSP 8529
BDE .1111 BRA 1.3626 BC3 2.3606 FSP -1257
                                                                                                                               EL1 528.7 EL2 129.5 ALF 171.72
                                                                                                                                           ARRIVAL DATE APR 16 1966
                                                                             FLIGHT TIME 120.00
LAUNCH DATE DEC 17 1965
                                                                             DISTANCE 355.227
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 28.075 GAL -7.98 AZL 89.33 HCA 169.48 SMA 130.77 ECC .18652 INC .6643 V1 30.264 RP 108.61 LAP .12 LOP 254.32 VP 37.802 GAP 4.54 AZP 90.65 TAL 220.14 TAP 29.62 RCA 106.38 APO 155.16 V2 34.892 RC 113.313 GL 4.12 GP 24.68 ZAL 146.48 ZAP 130.33 ETS 20.26 ZAE 135.63 ETE 155.33 ZAC 33.17 ETC 189.34 CLP-135.42
   PLANETOCENTRIC CONIC
                                                                                                                                       1.74 RAP 297.54 ECC 1.3329
                                                                                                        2.11 VHP 4.312 OPA
    C3 20.229 VHL 4.498 DLA -16.50 RAL 299.39 RAD 6567.8 VEL 11.900 PTH
     LNCH AZETH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZENTH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                    3 50 50 1676.81
11 22 47 5401.42
5 2 52 1444.36
12 53 26 5109.10
5 50 32 1295.04
14 22 16 4831.18
                                                                                                                                 1076.8
                                                                                                    118.07
                                                                                                                   4 18 47
                                                                                   160.06
                                                      -3.93
                                                                      9.78
         90.00
                                                                                                    85.64 12 52 49
119.49 5 26 57
84.21 14 18 35
123.30 6 12 7
80.32 15 42 47
                                                                                                                                    4801.4
                                                                                                                                                     27.11
                                                                                                                                                                   239.12
                                                                                    166.82
                                                       28.01
                                                                     247.67
         90.00
                                                                                                                                    844.4
                                                                                                                                                    -1.17
                                                                                                                                                                   345.48
                                                                                    159.40
                                                       -5.13
                                                                     352.02
       100.00
                                                                                                                                    4509.1
                                                                                                                                                    28.26
                                                                                                                                                                   217.41
                                                                     226.03
                                                                                   165.68
                                                       29.38
                                                                                                                                    695.0
                                                                                                                                                    -3.77
                                                                                                                                                                   332.53
                                                                                   157.51
                                                       -8.21
                                                                     338.81
       110.00
                                                                                                                                    4231.2
                                                                                                                                                    31.26
                                                                                                                                                                   195.54
                                                      32.95
                                                                     204.36
                                                                                    166.12
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 2857.6 SGR 665.6 SG3 351.2
RRT -.9271 RRF -.9930 RTF .9252
                                                                                                                               ST 549.1 SR 101.9 SS 130.9
CRT -.3822 CRS .6997 CST -.9091
     TOE -.1185 TRA-1.3138 TC3-2.5096 BAU .7045
     ROE -.0622 RRA .1536 RC3 .6987 FAU .10165
                                                                        SGB 2934.0 R23 .3440 R13 -.9316
SG1 2923.9 SG2 243.9 THA 167.73
                                                                                                                               LSA 563.5 MSA 105.6 SSA
                                                                                                                                                                       19.1
     FDE .0264 FRA -.8270 FC3-4.3501 BSP 9019
BDE .1338 BRA 1.3227 BC3 2.6050 FSP -1148
                                                                                                                              EL1 550.6 EL2 93.9 ALF 175.82
                                                                                                                                          ARRIVAL DATE APR 18 1966
                                                                             FLIGHT TIME 122.00
LAUNCH DATE DEC 17 1965
                                                                            DISTANCE 361.239
    RL 147.21 LAL -.00 LOL 84.85 VL 28.023 GAL -7.78 A7L 90.52 HCA 172.65 SMA 130.40 ECC .18610 INC .5254 V1 30.264 RP 108.64 LAP -.07 LOP 257.50 VP 37.754 GAP 4.80 A7P 89.48 TAL 218.87 TAP 31.51 RCA 106.13 APO 154.66 V2 34.881 RC 115.673 GL -3.27 GP 32.80 TAL 145.40 TAP 128.80 ETS 28.33 TAE 130.76 ETE 149.43 TAC 35.97 ETC 200.10 CLP-138.20
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 19.577 VHL 4.425 DLA -23.50 RAL 302.21 RAD 6567.8 VEL 11.873 PTH 2.11 VHP 4.736 DPA 9.82 RAP 296.62 ECC 1.3222 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
                                                                                                  117.73 5 46 26
96.27 11 47 23
119.62 6 45 51
94.40 13 21 55
124.18 7 15 13
89.84 15 1 54
                                                                                164.83
                    5 23 37 1369.13
10 12 30 5693.50
                                                                    352.57
                                                       5.96
         90.00
                                                                                                                                                     28.25
                                                                                    171.72
                                                                                                                                    5093.5
                                                                     268.97
                                                       27.67
                                                                                                                                                      8.17
                                                                                  163.90
                                                                                                                                     566.5
                      6 26 24
                                                                     336.75
                                     1166.46
                                                       4.26
        100.00
                                                                                                                                    4771.4
                                                                                                                                                    29.89
                    11 52 24 5371.41
6 57 24 1069.26
13 37 53 5041.37
                                                                                    171.92
                                                                     245.48
       100.00
                                                       29.60
                                                                                                                                                                   320.74
                                                                                                                                                      4.85
                                                                                                                                    469.3
                                                                                   161.47
       110.00
                                                        .36
                                                                     326.95
                                                                                                                                                     33.78
                                                                                                                                                                   211.39
                                                                                                                                    4441.4
                                                                                    172.12
                                                       34.18
                                                                     220.61
        110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               5T 749.9 SR 74.D 55 208.3
CRT -.9641 CR5 .9117 CST -.9597
LSA 779.5 MSA 56.8 55A 19.1
                                                                         SGT 2995.5 SGR 801.3 SG3 298.3
     TOE -.4188 TRA-1.2109 TC3-2.7110 BAU .7459
                                                                         RRT -.9193 RRF -.9973 RTF .9256
SGB 3100.8 R23 .3490 R13 -.9344
SGI 3085.6 SG2 306.1 THA 166.04
     ROE .0334 RRA .1306 RC3 .8799 FAU .08520
FDE -.3404 FRA -.5528 FC3-3.7679 BSP 9620
BOE .4201 BRA 1.2179 BC3 2.8502 FSP -980
                                                                                                                               EL1 753.3 EL2 19.5 ALF 174.56
                                                                                                                                           ARRIVAL DATE APR 20 1966
                                                                              FLIGHT TIME 124.00
 LAUNCH DATE DEC 17 1965
                                                                             DISTANCE 367.225
    RL 147.21 LAL -.00 LOL 84.85 VL 27.970 GAL -7.56 AZL 93.49 HCA 175.81 SMA 130.02 ECC .18572 INC 3.4891 VI 30.264
RP 108.68 LAP -.25 LOP 260.67 VP 37.705 GAP 5.05 AZP 86.52 TAL 217.54 TAP 33.36 RCA 105.87 APO 154.17 V2 34.870
RC 118.029 GL -21.09 GP 48.57 ZAL 138.80 ZAP 121.60 ETS 40.55 ZAE 120.40 ETE 141.71 ZAC 43.72 ETC 216.70 CLP-142.36
    PLANETOCENTRIC CONIC
                                                                                                         2.13 VHP 5.988 OPA 25.27 RAP 293.20 ECC 1.3622
     C3 22.009 VHL 4.691 DLA -40.39 RAL 309.25 RAD 6567.9 VEL 11.975 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    121.67 5 19 36
121.66 13 11 19
121.67 5 19 36
                                                                                                                                     946.3
                                                                                   183.35
                                                        26.50
                                                                      17.82
                     4 53 50 1546.28
11 38 27 5572.48
         59.91
                                                                                                                                     4972.5
                                                                                                                                                      30.49
                                                                                                                                                                    252.09
                                                                                    183.36
                                                        26.51
                                                                     259.58
        120.09
                                                                                                                                      946.3
                                                                                                                                                      30.48
                                                                                                                                                                     10.34
                                                                                     183.35
                                                                       17.82
                                                        26.50
         59.91
                       4 53 50 1546.28
                                                                                                    121.66 13 11 19
121.67 5 19 36
121.66 13 11 19
                                                                                                                                     4972.5
                                                                                                                                                      30.49
                                                                                                                                                                    252.09
                                                                     259.58
                                                                                   183.36
        120.09
                     11 38 27
                                    5572.48
                                                        26.51
                                                                                                                                    946.3
                                                                                                                                                      30.48
                                                                                                                                                                     10.34
                                                                                    183.35
                                                       26.50
                                                                       17.82
                       4 53 50 1546.28
         59.91
                                                                                                                                     4972.5
                                                                                                                                                      30.49
                                                                                                                                                                    252.09
                                                                                   183.36
                                                      26.51
                                                                     259.58
                     11 38 27
        120.09
                                     5572.48
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 3122.6 SGR 984.7 SG3 201.6

RRT -.9004 RRF -.9960 RTF ..9322

SGB 3274.2 R23 ..3258 R13 -.9447

SG1 3248.2 SG2 411.7 THA 163.88
                                                                                                                             ST 1587.0 SR 399.9 SS 555.4
CRT -.9724 CRS .9993 CST -.9806
      TDE-1.2504 TRA -.8865 TC3-2.4762 BAU .7812
      RDE .3264 RRA .0312 RC3 .9581 FAU .05573
                                                                                                                         LSA 1723.3 MSA 132.2 SSA 2.3
EL1 1634.1 EL2 90.6 ALF 166.19
     FDE -.8751 FRA -.1672 FC3-2.1921 BSP 10114
      BOE 1.2923 BRA .8871 BC3 2.6551 FSP -663
```

FLIGHT TIME 118.00

E

```
LAUNCH DATE DEC 17 1965
                                                                              FLIGHT TIME 126.00
                                                                                                                                            ARRIVAL DATE APR 22 1966
                                                                             DISTANCE 373.115
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.916 GAL -7.32 AZL 113.67 MCA 178.90 SMA 129.64 ECC .18522 INC23.6627 VI 30.264 RP 108.71 LAP -.44 LOP 263.84 VP 37.656 GAP 5.28 AZP 66.34 TAL 216.14 TAP 35.04 RCA 105.63 APO 153.65 V2 34.860 RC 120.382 GL -61.76 GP 78.08 ZAL 105.66 ZAP 100.88 ETS 97.71 ZAE 89.72 ETE 179.39 ZAC 65.09 ETC 280.68 CLP 156.09
    PLANETOCENTRIC CONIC
     C3 159.192 VHL 12.617 DLA -68.30 RAL 11.19 RAD 6570.7 VEL 16.749 PTH 2.90 VHP 17.416 DPA 55.36 RAP 265.25 ECC 3.6199
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  276.55
                    7 13 33 2244.70
17 32 54 5790.48
7 13 33 2244.70
                                                                                                   157.83 7 50 58
                                                                                                                                 1644.7
                                                                                                                                                    18.83
        24.84
                                                      11.45
                                                                      73.07
                                                                                                                                                                      70.31
                                                                                                     157.83 19 9 24
157.83 7 50 58
                                                                     263.02
                                                                                     276.58
                                                                                                                                     5190.5
                                                                                                                                                                    260.26
       155.16
                                                       11.45
                                                                                                                                                      18.84
                                                                                    276.55
        24.84
                                                       11.45
                                                                      73.07
                                                                                                                                    1544.7
                                                                                                                                                     18.83
                                                                                                                                                                      70.31
                                                                                                     157.83 19 9 24
157.83 7 50 58
157.83 19 9 24
                    17 32 54 5790.48
7 13 33 2244.70
17 32 54 5790.48
                                                                                                                                     5190.5
                                                                     263.02
                                                                                     276.58
       155.16
                                                       11.45
                                                                                                                                                     18.84
                                                                                                                                                                    260.26
        24.84
                                                       11.45
                                                                      73.07
                                                                                    276.55
                                                                                                                                    1644.7
                                                                                                                                                     18.83
                                                                                                                                                                      70.31
       155.16
                                                      11.45
                                                                     263.02
                                                                                    276.58
                                                                                                                                     5190.5
                                                                                                                                                     18.84
                                                                                                                                                                    260.26
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TOE-4.1792 TRA 1.9603 TC3 -.1157 BAU .2462

ROE-3.0066 RRA .7450 RC3 .0004 FAU .00579

FOE -.9628 FRA .4999 FC3 -.0315 BSP 7332

BDE 5.1484 BRA 2.0971 BC3 .1157 FSP -150
                                                                                                                               ST 2030.6 SR 1392.7 SS 713.9
CRT .9864 CRS -.9800 CST -.9994
LSA 2556.0 MSA 198.8 SSA .3
EL1 2455.0 EL2 189.5 ALF 34.31
                                                                         SGT 3079.4 SGR 1643.5 SG3 65.5
RRT .9471 RRF .9301 RTF .9988
SGB 3490.5 R23 -.1192 R13 .9929
                                                                         SG1 3458.8 SG2 469.5 THA 27.36
LAUNCH DATE DEC 17 1965
                                                                              FLIGHT TIME 128.00
                                                                                                                                            ARRIVAL DATE APR 24 1966
   HELIOCENTRIC CONTC
                                                                             DISTANCE 379.261
    RL 147.21 LAL -.00 LOL 84.85 VL 27.862 GAL -7.13 AZL 73.81 MCA 182.25 SMA 129.26 ECC .18544 INC16.1867 V1 30.264
RP 108.74 LAP -.63 LOP 267.01 VP 37.607 GAP 5.57 AZP 106.18 TAL 214.87 TAP 37.12 RCA 105.29 APO 153.23 V2 34.851
RC 122.731 GL 57.17 GP -65.15 ZAL 111.14 ZAP 112.34 ETS 290.42 ZAE 101.09 ETE 205.86 ZAC 81.93 ETC 109.23 CLP-154.74
   PLANETOCENTRIC CONIC
    C3 84.123 VHL 9.172 DLA 37.85 RAL 298.00 RAD 6569.6 VEL 14.334 PTH 2.61 VHP 9.166 DPA -83.76 RAP 11.19 ECC 2.3845 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 63.76 16 25 29 4467.05 -12.77 199.94 191.07 54.06 17 39 56 3867.1 -17.37 193.58 116.24 22 33 9 3310.81 -12.75 112.59 191.06 54.05 23 28 20 2710.8 -17.35 106.23
                    16 25 29 4467.05
22 33 9 3310.81
16 25 29 4467.05
22 33 9 3310.81
                                                     -12.77
                                                                                     191.07
                                                                                                       54.06 17 39 56
54.05 23 28 20
        63.76
                                                                     199.94
                                                                                                                                     3867.1
                                                                                                                                                     -17.37
                                                                                                                                                                     193.58
                                                     -12.75
       116.24
                                                                     112.59
                                                                                     191.06
                                                                                                                                     2710.8
                                                                                                                                                     -17.35
                                                                                                                                                                     106.23
                                                                                                       54.06 17 39 56
54.05 23 28 20
                                                     -12.77
        63.76
                                                                     199.94
                                                                                    191.07
                                                                                                                                     3867.1
                                                                                                                                                    -17.37
                                                                                                                                                                     193.58
       116.24
                                                      -12.75
                                                                     112.59
                                                                                     191.06
                                                                                                                                     2710.8
                                                                                                                                                    -17.35
                                                                                                                                                                     106.23
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SGT 3529.5 SGR 435.4 SG3 108.9

RRT -.4830 RRF -.2752 RTF .9747

SGB 3556.2 R23 -.2297 R13 -.9732
                                                                                                                                ST 2690.3 SR 133.4 SS 838.4 CRT .0524 CRS -.1430 CST -.9959
    TOE 4.1774 TRA-2.7525 TC3 -.5187 BAU .5857
    ROE .0626 RRA .5373 RC3 -.0466 FAU .02379
FOE 1.6745 FRA -.6851 FC3 -.2448 BSP 10910
                                                                                                                                LSA 2817.0 MSA 151.8 55A .0
                                                                                                                                EL1 2690.3 EL2 133.2 ALF
    BOE 4.1779 BRA 2.8044 BC3 .5208 FSP -369
                                                                         SG1 3535.8 SG2 380.6 THA 176.55
                                                                                                                                                                         . 15
LAUNCH DATE DEC 17 1965
                                                                             FLIGHT TIME 130.00
                                                                                                                                           ARRIVAL DATE APR 26 1966
                                                                             DISTANCE 385.178
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.808 GAL -6.88 AZL 81.34 HCA 185.39 SMA 128.88 ECC .18522 INC 8.6638 VI 30.264
RP 108.76 LAP -.81 LOP 270.17 VP 37.559 GAP 5.79 AZP 98.63 TAL 213.44 TAP 38.83 RCA 105.01 APO 152.75 V2 34.842
    RC 125.075 GL 43.69 GP -38.67 ZAL 121.91 ZAP 130.89 ETS 313.05 ZAE 120.32 ETE 209.43 ZAC 63.62 ETC 128.49 CLP-146.98
   PLANETOCENTRIC CONIC
    C3 36.253 VHL 6.021 DLA 23.99 RAL 299.07 RAD 6568.4 VEL 12.555 PTH 2.28 VHP 5.555 DPA -59.26 RAP 319.87 ECC 1.5966
    ENCH AZMTH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   77.68 22 44 17 61.74 18 25 41 79.09 24 19 57 60.11 19 23 57 82.43 2 5 36 56.11 19 51 37
                   21 50 29 3228.13
17 16 42 4138.93
        90.00
                                                     -25.70
                                                                    112.71
                                                                                   180.13
                                                                                                                                 2628.1
                                                                                                                                                 -27.14
                                                                                                                                                                   104.34
                                                                    168.57
                                                                                    171.17
                                                                                                                                    3538.9
                                                                                                                                                     -5.70
                                                                                                                                                                    161.92
        90.00
                                                       -1.93
                                  2902.17
3940.13
       100.00
                    23 31 35
                                                    -28.00
                                                                      89.26
                                                                                    180.66
                                                                                                                                   2302.2
                                                                                                                                                   -29.22
                                                                                                                                                                     80.67
       100.00
                    18 18 17
                                                        .13
                                                                     152.82
                                                                                    170.02
                                                                                                                                    3340.1
                                                                                                                                                     -3.85
                     1 22 49 2566.48
18 47 28 3848.59
                                                                                                                                                 -34.12
                                                      -33.43
                                                                      64.79
                                                                                    181.69
                                                                                                                                    1966.5
                                                                                                                                                                     55.61
       110.00
                                                                                                                                    3248.6
                   18 47 28
                                                      4.80
                                                                     142.98
                                                                                    167.11
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2111.0 SR 327.8 SS 841.3
CRT .9388 CRS -.9848 CST -.9844
                                                                         SGT 3559.9 SGR 436.9 SG3 224.5
    TOE 2.0994 TRA-2.1755 TC3-1.5641 BAU .7669
    ROE .3442 RRA .0248 RC3 -.2392 FAU .06003
FOE 1.8202 FRA -.8445 FC3-1.4335 BSP 11184
                                                                        RRT .7318 RRF .9174 RTF .9409
SGB 3586.6 R23 .3288 R13 .9434
SGI 3574.4 SGZ 296.6 THA 5.17
                                                                                                                              LSA 2289.5 MSA 172.8 SSA 1.3
EL1 2133.4 EL2 111.7 ALF 8.32
    BOE 2.1274 BRA 2.1756 BC3 1.5823 FSP -765
LAUNCH DATE DEC 17 1965
                                                                             FLIGHT TIME 132.00
                                                                                                                                            ARRIVAL DATE APR 28 1966
                                                                             DISTANCE 391.105
  HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.753 GAL -6.64 A7L 83.32 MCA 188.55 SMA 128.50 ECC .18514 INC 6.6836 V1 30.264 RP 108.79 LAP -.99 LOP 273.34 VP 37.511 GAP 6.02 A7P 96.61 TAL 211.99 TAP 40.54 RCA 104.71 APO 152.29 V2 34.834 RC 127.413 GL 37.36 GP -25.99 ZAL 125.33 ZAP 139.36 ETS 322.87 ZAE 126.88 ETE 202.77 ZAC 56.22 ETC 136.56 CLP-147.59
   PLANETOCENTRIC CONIC
    C3 27.958 VHL 5.288 OLA 17.94 RAL 301.09 RAD 6568.1 VEL 12.220 PTH 2.20 VMP 4.994 DPA -46.55 RAP 316.54 ECC 1.4601
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 13 16 2891.19 -28.31 88.49 175.25 89.47 24 1 27 2291.2 -28.09 79.83
        90.00
                    16 9 58
                                  4345.24
                                                       4.71
                                                                    180.10
                                                                                    166.83
                                                                                                       62.05
                                                                                                                 17 22 24
                                                                                                                                    3745.2
                                                                                                                                                       .93
                                                                                                                                                                    173.45
                                  2594.73
                                                                                                       90.77
                                                                                                                  1 32 22
                                                                                                                                    1994.7
                                                                                                                                                    -29.46
                     0 49 7
                                                     -29.88
                                                                      66.68
                                                                                    175.25
                                                                                                                                                                    57.90
       100.00
                                                                                                       60.68 18 29 20
                    17 20 43
                                  4116.93
                                                        6.09
                                                                     162.56
                                                                                    166.07
                                                                                                                                    3516.9
                                                                                                                                                      2.14
                                                                                                                                                                    156.00
       100.00
                                                                                                      94.24 2 59 1
57.03 19 12 3
                                                                                                                                    1708.7
                     2 20 33 2308.70
                                                     -33.95
                                                                                    175.04
                                                                                                                                                    -32.99
                                                                                                                                                                     35.64
                                    3975.73
                                                      9.57
                                                                     149.73
                                                                                    163.94
                                                                                                                                    3375.7
                                                                                                                                                     5.16
                                                                                                                                                                    143.41
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SCT 3641.8 SGR 308.6 SG3 270.8
RRT .6945 RRF .9002 RTF .9301
SCB 3654.8 R23 .3500 R13 .9314
                                                                                                                             ST 1874.3 SR 230.0 SS 795.2
CRT .9149 CRS -.9813 CST -.9754
    TOE 1.6126 TRA-1.9742 TC3-2.1465 BAU .8055
    RDE .2120 RRA .0318 RC3 -.1919 FAU .07294
FDE 1.6812 FRA -.7853 FC3-2.2585 BSP 11372
                                                                                                                              LSA 2040.8 MSA 182.8 SSA 2.7
```

SG1 3648.1 SG2 221.7 THA 3.38

BOE 1.6265 BRA 1.9745 BC3 2.1551 FSP -909

EL1 1886.1 EL2 92.3 ALF 6.42

ARRIVAL DATE APR 30 1966

LAUNCH DATE DEC 17 1965

DISTANCE 397.023 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 27.699 GAL -6.38 A7L 84.23 HCA 191.72 SHA 128.12 ECC .18515 INC 5.7684 VI 30.264
RP 108.81 LAP -1.17 LOP 276.51 VP 37.463 GAP 6.25 A7P 95.65 TAL 210.52 TAP 42.23 RCA 104.40 APO 151.84 V2 34.826
RC 129.747 GL 33.98 GP -19.16 7AL 126.28 7AP 143.96 ETS 329.20 7AE 129.36 ETE 197.70 7AC 53.35 ETC 142.07 CLP-148.87 PLANETOCENTRIC CONIC C3 24.508 VHL 4.951 DLA 14.92 RAL 302.94 RAD 6568.0 VEL 12.078 PTH 2.16 VHP 4.874 DPA -39.51 RAP 316.23 ECC 1.4033 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG OF APPITH LNCH TIME L-1 TIME
90.00 23 49 48 2746.58
90.00 15 48 16 4424.63
100.00 1 23 9 2458.21
100.00 17 1 32 4188.22
110.00 2 49 24 2188.31
110.00 17 51 46 4030.89 2146.6 173.25 94.75 24 35 35 62.55 17 2 0 -27.00 69.40 -27.95 77.93 177.89 184.58 166.20 3824.6 3.49 7.22 47.96 2 4 7 -29.33 56.58 173.10 96.06 1858.2 -28.18 100.00 3588.2 100.00 8.45 166.54 165.54 61.22 18 11 20 4.54 159.93 99.63 3 25 53 57.62 18 58 57 172.52 1588.3 3430.9 -31.28 26.57 -32.96 35.49 110.00 7.25 146.32 110.00 11.60 152.71 163.64 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1762.4 SR 178.9 SS 749.5 CRT .8889 CRS -.9751 CST -.9682 SGT 3744.3 SGR 218.9 SG3 284.7 TOE 1.4063 TRA-1.8692 TC3-2.5467 BAU .8353 RRT .5761 RRF .8094 RTF .9247 5GB 3750.7 R23 .3370 R13 .9252 ROE .1540 RRA .0419 RC3 -.1179 FAU .07612 FDE 1.5216 FRA -.6817 FC3-2.6890 BSP 11731 BDE 1.4147 BRA 1.8697 BC3 2.5494 FSP -953 LSA 1914.2 MSA 189.1 SSA 4.0 SG1 3746.4 SG2 178.8 THA 1.93 EL1 1769.6 EL2 81.6 ALF 5.17 FLIGHT TIME 136.00 ARRIVAL DATE MAY 2 1966 LAUNCH DATE DEC 17 1965 DISTANCE 402.929 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 27.644 GAL -6.12 AZL 84.76 HCA 194.88 SMA 127.75 ECC .18525 INC 5.2388 VI 30.264 RP 108.84 LAP -1.34 LOP 279.67 VP 37.416 GAP 6.47 AZP 95.06 TAL 209.02 TAP 43.90 RCA 104.08 APO 151.41 V2 34.819 RC 132.074 GL 31.95 GP -15.01 ZAL 126.15 ZAP 146.99 ETS 333.49 ZAE 130.36 ETE 194.16 ZAC 52.47 ETC 146.08 CLP-150.25 PLANETOCENTRIC CONIC C3 22.492 VHL 4.743 OLA 13.29 RAL 304.73 RAO 6567.9 VEL 11.995 PTH 2.14 VHP 4.877 DPA -35.04 RAP 316.88 ECC 1.3702 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 15 20 2668.59 -27.38 72.30 172.71 97.52 0 59 49 2068.6 -26.06 63.88 90.00 15 40 54 4460.68 8.35 186.63 166.55 62.84 16 55 14 3860.7 4.64 179.91 100.00 1 43 38 2383.88 -28.67 51.15 172.50 98.84 2 23 22 1783.9 -27.15 42.68 100.00 16 55 18 4220.62 9.50 168.36 165.93 61.53 18 5 39 3620.6 5.63 161.72 110.00 3 7 28 2121.52 -32.09 30.48 171.76 102.48 3 42 50 1521.5 -30.04 21.87 110.00 17 47 57 4055.74 12.50 154.07 164.15 57.92 18 55 32 3455.7 8.18 147.65 C3 22.492 VHL 4.743 OLA 13.29 RAL 304.73 RAD 6567.9 VEL 11.995 PTH 2.14 VHP 4.877 DPA -35.04 RAP 316.88 ECC 1.3702 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1712.0 SR 156.6 S5 716.3 CRT .8722 CRS -.9718 CST -.9625 SGT 3849.1 SGR 173.1 SG3 286.2 RRT .3827 RRF .6281 RTF .9209 TOE 1.3031 TRA-1.7930 TC3-2.8647 BAU .8615 RDE .1288 RRA .0457 RC3 -.0528 FAU .07566 SGB 3853.0 R23 .2978 R13 .9211 SGI 3849.7 SG2 159.9 THA .99 LSA 1852.3 MSA 193.4 SSA 5.4 EL1 1717.4 EL2 76.4 ALF 4.57 FDE 1.3942 FRA -.5740 FC3-2.9121 BSP 12082 BDE 1.3094 BRA 1.7936 BC3 2.8651 FSP -957 ARRIVAL DATE MAY 4 1966 FLIGHT TIME 138.00 LAUNCH DATE DEC 17 1965 DISTANCE 408.822 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 27.589 CAL -5.85 A7L 85.11 MCA 198.05 SMA 127.38 ECC .18545 INC 4.8916 V1 30.264 RP 108.86 LAP -1.51 LOP 282.83 VP 37.369 CAP 6.68 A7P 94.65 TAL 207.49 TAP 45.54 RCA 103.75 APO 151.00 V2 34.812 RC 134.395 GL 30.64 CP -12.25 TAL 125.44 ZAP 149.29 ETS 336.54 ZAE 130.74 ETE 191.64 ZAC 52.58 ETC 149.12 CLP-151.62 PLANETOCENTRIC CONIC C3 21.085 VHL 4.592 DLA 12.42 RAL 306.51 RAC 6567.9 VEL 11.936 PTH 2.12 VHP 4.927 DPA -31.92 RAP 318.00 ECC 1.3470 C3 21.085 VHL 4.592 DLA 12.42 RAL 306.51 RAD 6567.9 VEL 11.936 PTH 2.12 VHP 4.927 DPA -31.92 RAP 318.00 ECC 1.3470 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 D 29 56 2623.18 -26.93 69.05 172.93 99.09 1 13 39 2023.2 -25.40 60.72 90.00 15 40 29 4474.90 8.79 187.44 167.32 62.97 16 55 4 3874.9 5.10 180.71 100.00 1 57 39 2340.27 -28.18 48.00 172.69 100.42 2 36 39 1740.3 -26.45 39.63 100.00 16 55 27 4233.03 9.91 169.07 166.72 61.65 18 6 0 3633.0 6.04 162.41 110.00 3 20 17 2081.72 -31.46 27.55 171.87 104.11 3 54 58 1481.7 -29.20 19.07 110.00 17 49 18 4064.36 12.81 154.55 165.00 58.04 18 57 3 3464.4 8.50 148.11 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3953.0 SGR 158.7 SG3 282.8 RRT .1605 RRF .3881 RTF .9180 SGB 3956.2 R23 .2437 R13 .9181 SGI 3953.1 SG2 156.7 THA .37 ST 1696.0 SR 148.9 SS 693.5 CRT .8678 CRS -.9729 CST -.9583 TOE 1.2495 TRA-1.7269 TC3-3.1422 BAU .8858 ROE .1185 RRA .0450 RC3 .0011 FAU .07374 FDE 1.2959 FRA -.4722 FC3-3.0277 BSP 12424 LSA 1827.8 MSA 196.5 SSA EL1 1700.9 EL2 73.8 ALF 4.37 BOE 1.2551 BRA 1.7275 BC3 3.1422 FSP -944 ARRIVAL DATE MAY 6 1966 LAUNCH DATE DEC 17 1965 FLIGHT TIME 140.00 DISTANCE 414.702 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 27.534 GAL -5.57 AZL 85.35 MCA 201.21 SMA 127.01 ECC .18575 INC 4.6454 V1 30.264
RP 108.87 LAP -1.68 LOP 286.00 VP 37.323 GAP 6.90 AZP 94.33 TAL 205.95 TAP 47.16 RCA 103.42 APO 150.60 V2 34.806
RC 136.709 GL 29.75 GP -10.29 ZAL 124.36 ZAP 151.20 ETS 338.79 ZAE 130.86 ETE 189.79 ZAC 53.26 ETC 151.52 CLP-152.96 PLANETOCENTRIC CONIC C3 20.000 VHL 4.472 OLA 12.01 RAL 308.31 RAD 6567.8 VEL 11.890 PTH 2.11 VHP 4.998 DPA -29.54 RAP 319.38 ECC 1.3291 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 173.61 99.99 1996.6 1 23 53 -24.98 0 40 36 2596.62 15 44 11 4476.17 90.00 -26.64 67.16 16 58 47 3876.2 180.78 168.32 62.99 90.00 8.83 187.51 37.85 101.34 2 46 38 1714.5 -26.00 2 8 4 2314.54 16 59 24 4233.48 173.35 -27.84 46.16 100.00 61.66 18 9 58 3633.5 6.06 162.43 9.92 169.09 167.74 100.00 4 4 26 1457.7 -28.67 17.40 3 30 8 2057.73 17 53 49 4063.06 105.07 105.07 4 4 26 56.02 19 1 32 -31.05 25.80 172.49 110.00 3463.1 110.00 166.06 17 53 49 12.77 154.47 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4063.1 SGR 162.8 SG3 277.8 RRT -.0171 RRF .1718 RTF .9162 SGB 4066.4 R23 -.1875 R13 -.9162 ST 1696.3 SR 148.9 SS 675.0 TOE 1.2191 TRA-1.6677 TC3-3.4092 BAU .9116 ROE .1155 RRA .D414 RC3 .D455 FAU .D7156 FOE 1.2126 FRA -.3835 FC3-3.0975 BSP 12882 BDE 1.2246 BRA 1.6682 BC3 3.4095 FSP -939 CRT .8726 CRS -.9770 CST -.9553 LSA 1820.9 MSA 198.0 SSA 8.1 EL1 1701.2 EL2 72.5 ALF 4.39

FLIGHT TIME 134.00

5G1 4D63.1 SG2 162.8 THA 179.96

```
ARRIVAL DATE MAY $ 1966
                                                                          FLIGHT TIME 142.00
LAUNCH DATE DEC 17 1965
                                                                         01STANCE 420.565
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.479 GAL -5.29 AZL 85.54 HCA 204.38 SMA 126.64 ECC .18615 INC 4.4606 VI 30.264 RP 108.89 LAP -1.84 LOP 289.16 VP 37.278 GAP 7.11 AZP 94.06 TAL 204.39 TAP 48.76 RCA 103.07 APO 150.22 VZ 34.801 RC 139.015 GL 29.13 GP -8.85 ZAL 123.02 ZAP 152.87 ETS 340.51 ZAE 130.84 ETE 188.37 ZAC 54.30 ETC 153.48 CLP-154.25
   PLANETOCENTRIC CONIC
    C3 19.113 VML 4.372 DLA 11.90 RAL 310.15 RAD 6567.8 VEL 11.853 PTH 2.10 VMP 5.083 DPA -27.64 RAP 320.93 ECC 1.3145 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               174.60
                                                                                                100.47
                                                                                                             1 31 55
                                                                                                                             1982.2
                                                                                                                                             -24.75
                                                                                                                                                              57.90
        90.00
                                                                  66.15
                   0 48 53 2582.22
15 50 38 4469.06
                                                   -25.46
                                                                                                                               3869.1
                                                                                                                                                4.91
                                                                                                                                                             180.38
                                                                                 169.50
                                                                                                  62.92
        90.00
                                                    8.61
                                                                  187.11
                   2 16 16 2300.36
17 5 56 4226.16
                                                                                                                                              -25.74
                                                                                 174.34
                                                                                                101.84
                                                                                                              2 54 37
                                                                                                                               1700.4
                                                                                                                                                              36.87
                                                                   45.15
                                                  -27.65
       100.00
                                                                                                61.58 18 16 22
105.61 4 12 16
57.92 19 8 5
                                                                                                                            3626.2
                                                                                                                                                             162.03
                                                                                                                                               5.81
                                                                                168.93
       100.00
                                                     9.68
                                                                  168.68
                   3 38 12 2043.99
18 0 29 4055.29
      110.00
                                                                   24.80
                                                                               173.46
                                                                                                                              1444.0
                                                                                                                                              -28.36
                                                                                                                                                              16.46
                                                  -30.80
                                                                                                                            3455.3
                                                                                                                                                8.16
                                                                                                                                                             147.62
      110.00
                                                                 154.05
                                                                                 167.27
                                                   12.49
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4245.1 SGR 171.3 SG3 279.7
RRT -.1318 RRF -.0105 RTF .9231
SGB 4248.5 R23 -.1124 RI3 -.9231
                                                                                                                          ST 1662.7 SR 151.0 S5 626.1
CRT .8745 CRS -.9784 CST -.9536
    TOE 1.1606 TRA-1.6530 TC3-3.7594 BAU .9608
    ROE .1148 RRA .0336 RC3 .0782 FAU .07241
FOE 1.0799 FRA -.3723 FC3-3.2800 BSP 14428
                                                                                                                          LSA 1772.9 MSA 189.7 SSA 10.1
EL1 1667.9 EL2 73.0 ALF 4.55
    BOE 1.1663 BRA 1.6534 BC3 3.7603 FSP -1072
                                                                      SG1 4245.1 SG2 169.8 THA 179.69
                                                                                                                                      ARRIVAL DATE HAY 10 1966
                                                                          FLIGHT TIME 144.00
LAUNCH DATE DEC 17 1965
  HELIOCENTRIC CONIC
                                                                          DISTANCE 426.429
    RL 147.21 LAL -.00 LOL 84.85 VL 27.424 GAL -4.99 AZL 85.68 HCA 207.54 SMA 126.28 ECC .18664 INC 4.3160 V1 30.264 RP 108.90 LAP -1.99 LOP 292.32 VP 37.233 GAP 7.31 AZP 93.83 TAL 202.79 TAP 50.33 RCA 102.71 APO 149.85 V2 34.797
    RC 141.312 GL 28.68 GP -7.74 ZAL 121.46 ZAP 154.37 ETS 341.85 ZAE 130.77 ETE 187.28 ZAC 55.59 ETC 155.12 CLP-155.49
   PLANETOCENTRIC CONIC
    C3 18.351 VHL 4.284 CLA 12.03 RAL 312.08 RAD 6567.7 VEL 11.821 PTH 2.09 VHP 5.174 DPA -26.02 RAP 322.62 ECC 1.3020 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 55 31 2576.80 -26.39 65.76 175.86 100.65 1 38 28 1976.8 -24.66 57.53
                                                                                                            17 13 36
                   15 59 21 4455.38
2 23 U 2294.69
17 14 34 4212.72
                                                                                                                               3855.4
                                                                                                                                                4.47
                                                      8.19
                                                                  186.33
                                                                                 170.85
                                                                                                  62.80
        90.00
                                                                                                           3 1 14
18 24 46
                                                                                                 102.03
                                                                                                                               1594.7
                                                                                                                                              -25.63
                                                                                                                                                              36.48
                                                    -27.57
                                                                   44.75
                                                                                 175.60
       100.00
                                                                                                  61.45
                                                                                                                               3612.7
                                                                                                                                               5.36
                                                                                                                                                             161.28
       100.00
                                                      9.25
                                                                 167.92
                                                                                 170.28
                                                                                                 105.85 4 19 3
57.76 19 16 20
                                                                                                                               1437.8
                    3 45 5 2037.81
                                                                                                                                              -28.21
                                                                                                                                                              16.04
                                                   -30.69
                                                                   24.36
                                                                                 174.71
       110.00
                   18 8 57
                                                    12.02
                                                                 153.34
                                                                                 168.63
                                                                                                                               3442.4
                                                                                                                                                7.68
                                                                                                                                                             146.93
       110.00
                                   4042.36
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 4235.5 SGR 194.9 SG3 261.8
RRT -.1848 RRF -.0546 RTF .9086
    TOE 1.2347 TRA-1.5159 TC3-3.8561 BAU .9465
                                                                                                                          ST 1767.4 SR 162.0 55 674.0
CRT .9036 CRS -.9894 CST -.9526
    RDE .1207 RRA .0302 RC3 .1179 FAU .06479
                                                                                                                          LSA 1887.6 MSA 202.5 SSA 10.4
ELI 1773.5 EL2 69.2 ALF 4.74
    FDE 1.1243 FRA -.1862 FC3-3.0365 BSP 13133
BDE 1.2406 BRA 1.3162 BC3 3.8579 FSP -841
                                                                      SGB 4240.0 R23 -.1157 R13 -.9086
                                                                     SG1 4235.7 SG2 191.5 THA 179.51
                                                                                                                                     ARRIVAL DATE MAY 12 1966
                                                                          FLIGHT TIME 146.00
LAUNCH DATE DEC 17 1965
                                                                         DISTANCE 432.273
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.370 GAL -4.69 AZL 85.80 HCA 210.70 SMA 125.92 ECC .18726 INC 4.1992 V1 30.264 RP 108.92 LAP -2.14 LOP 295.48 VP 37.190 GAP 7.52 AZP 93.61 TAL 201.18 TAP 51.88 RCA 102.34 APO 149.50 VZ 34.793
                         28.35 CP -6.86 ZAL 119.73 ZAP 155.75 ETS 342.92 ZAE 130.66 ETE 186.40 ZAC 57.06 ETC 156.51 CLP-156.68
    RC 143.598 GL
   PLANETOCENTRIC CONIC
    C3 17.696 VHL 4.207 DLA 12.31 RAL 314.07 RAD 6567.7 VEL 11.793 PTH 2.09 VHP 5.270 DPA -24.61 RAP 324.39 ECC 1.2912
    ENCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1977.8
                                                                                                                                             -24.67
                                                                             177.34
                                                                                              100.61 1 44 3
                                                                                                                                                              57.60
                    1 1 6 2577.83
                                                   -26.41
                                                                  65.84
        90.00
                   16 9 41 4437.39
2 28 44 2295.16
                                                                  185.30
                                                                                172.34
                                                                                                  62.65
                                                                                                            17 23 38
                                                                                                                               3837.4
                                                                                                                                                3.90
                                                                                                                                                             178.60
                                                      7.62
        90.00
                                                                   44.78
                                                                               177.08
                                                                                                 102.02 3 7 0
                                                                                                                               1695.2
                                                                                                                                              -25.64
                                                                                                                                                              36.52
                                                   -27.58
       100.00
                                                                                                 61.28 18 34 38
105.88 4 25 10
57,56 19 25 50
                                                                                                                               3595.3
                                                                                                                                                4.78
                                                                                                                                                             160.32
                                                                 166.94
                                                                                171.77
                   17 24 43 4195.29
                                                      8.68
       100.00
                                                                                                                               1437.1
                                                                                                                                              -28.20
                                                                                                                                                              15.99
                   3 51 13 2037.10
18 18 44 4026.12
                                                   -30.68
                                                                   24.31
                                                                                176.19
       110.00
                                                                                                                               3426.1
                                                                                                                                              7.07
                                                                                                                                                             146.07
                                                                  152.45
                                                                                 170.12
                                                   11.43
       110.00
                                  4026.12
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1802.2 SR 170.8 SS 667.3
CRT .9189 CRS -.9934 CST -.9526
    TDE 1.2439 TRA-1.4479 TC3-4.1016 BAU .9710
                                                                      SGT 4341.9 SGR 212.2 SG3 255.8
    ROE .1252 RRA .0223 RC3 .1456 FAU .06243
FDE 1.0738 FRA -.1178 FC3-3.0542 BSP 13614
BDE 1.2302 BRA 1.4480 BC3 4.1042 FSP -838
                                                                      RRT -.2134 RRF -.1122 RTF .9082
                                                                                                                          LSA 1918.8 MSA 200.7 SSA 11.6
EL1 1809.0 EL2 67.1 ALF 4.98
                                                                      SGB 4347.1 R23 -.0839 R13 -.9081
                                                                      SG1 4342.2 SG2 207.3 THA 179.40
                                                                          FLIGHT TIME 148.00
                                                                                                                                      APPIVAL DATE MAY 14 1966
LAUNCH DATE DEC 17 1965
                                                                          DISTANCE 438.105
   HELIOCENTRIC CONIC
    RL 147.2; LAL -.00 LOL 84.85 VL 27.316 GAL -4.37 AZL 85.90 MCA 213.86 SMA 125.57 ECC .18800 INC 4.1023 V1 30.264
RP 108.93 LAP -2.28 LOP 298.64 VP 37.147 GAP 7.73 AZP 93.41 TAL 199.55 TAP 53.42 RCA 101.96 APO 149.18 V2 34.790
RC 145.874 GL 28.09 GP -6.16 ZAL 117.84 ZAP 157.04 ETS 343.77 ZAE 130.55 ETE 185.69 ZAC 58.67 ETC 157.72 CLP-157.83
   PLANETOCENTRIC CONIC
    C3 17.124 VHL 4.138 DLA 12.72 RAL 316.15 RAD 6567.7 VEL 11.769 PTH 2.08 VHP 5.371 DPA -23.32 RAP 326.24 ECC 1.2818 LNCH AZMTH LNCH TIME L-TTIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             1984.2
                   1 5 53 2584.24
16 21 30 4415.75
                                                                                179.02
                                                                                                100.40
                                                                                                             1 48 57
                                                                                                                                              -24.78
                                                    -26.49
                                                                   66.29
        90.00
                                                                                                                                                             177.39
                                                                                 173.99
                                                                                                  62.48
                                                                                                            17 35 5
                                                                                                                               3815.8
                                                                                                                                                3.21
                                                      6.95
                                                                  184.07
        90.00
                   2 33 47 2300.73
17 36 16 4174.49
3 56 49 2040.89
18 29 43 4007.09
                                                                                 178.76
                                                                                                 101.82
                                                                                                             3 12 8
                                                                                                                               1700.7
                                                                                                                                              -25.75
                                                                                                                                                              36.90
                                                   -27.66
                                                                   45.18
       100.00
                                                                                                  61.10 18 45 51
105.73 4 30 50
57.35 19 36 30
                                                                                                                                                             159.17
                                                                  165.77
                                                                                 173.42
                                                                                                                               3574.5
                                                                                                                                                4.08
                                                      8.00
       100.00
                                                                   24.58
                                                                                 177.89
                                                                                                 105.73
                                                                                                                               1440.9
                                                                                                                                              -28.28
                                                                                                                                                              16.25
                                                  -30.75
       110.00
                                                                                                                               3407.1
                                                                                                                                                6.35
                                                                                                                                                             145.06
                                                                                 171.77
                                                                  151.42
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                    SGT 4435.6 SGR 230.0 SG3 249.0 ST 1852.4 SR 180.9 S5 668.0 RRT -.2214 RRF -.1406 RTF .9067 CRT .9350 CRS -.9961 CST -.9534 SG8 4441.6 R23 -.0622 R13 -.9066 LSA 1967.4 MSA 198.9 SSA 12.8 SG1 4435.9 SG2 224.3 THA 179.34 ELI 1860.1 EL2 63.9 ALF 5.22
    TOE 1.2677 TRA-1.3672 TC3-4.3276 BAU .9915
    RDE .1305 RRA .0141 RC3 .1702 FAU .05969
FDE 1.0380 FRA -.0447 FC3-3.0177 BSP 13936
```

BOE 1.2744 BRA 1.3672 BC3 4.3309 FSP -816

ARRIVAL DATE MAY 16 1966

LAUNCH DATE DEC 17 1965

DISTANCE 443.925 HELIOCENTRIC CONIC PL 147.21 LAL -.00 LOL 84.85 VL 27.262 GAL -4.05 A7L 85.98 MCA 217.03 SMA 125.22 ECC .18886 INC 4.0201 V1 30.264 RP 108.93 LAP -2.42 LOP 301.80 VP 37.105 GAP 7.94 A7P 93.21 TAL 197.90 TAP 54.93 RCA 101.57 APO 148.87 V2 34.787 RC 148.138 GL 27.88 GP -5.58 TAL 115.81 TAP 158.25 ETS 344.47 TAE 130.45 ETE 185.11 TAC 60.38 ETC 158,78 CLP-158.94 PLANETOCENTRIC CONIC C3 16.624 VHL 4.077 OLA 13.24 RAL 318.33 RAD 6567.7 VEL 11.748 PTH 2.07 VHP 5.476 DPA -22.13 RAP 328.14 ECC 1.2736 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 100.03 1995.2 58.79 180.89 1 53 20 -24.96 1 10 5 2595.18 16 34 38 4391.19 67.06 90.00 -26.62 62.31 17 47 50 3791.2 2.42 90.00 6.17 182.69 175.79 37.58 3 16 50 1710.6 -25.93 2 38 19 2310.59 17 49 5 4151.01 180.64 101.48 100.00 -27.79 45.88 60.91 18 58 16 157.88 100.00 17 49 5 7.22 164.46 175.22 3551.0 3.29 105.43 4 36 14 57.13 19 48 14 179.79 16.77 110.00 4 2 5 2048.49 18 41 48 3985.88 -30.89 25.13 1448.5 -28.45 3385.9 5.55 143.95 110.00 9.95 150.27 173.56 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4526.9 SGR 247.2 SG3 242.3 RRT -.2176 RRF -.1535 RTF .9054 SGB 4533.7 R23 -.0452 R13 -.9053 ST 1910.4 SR 191.6 55 670.8 CRT .9499 CRS -.9971 CST -.9548 TOE 1.2986 TRA-1.2797 TC3-4.5473 BAU 1.0115 RDE .1363 RRA .0054 RC3 .1914 FAU .05701 FDE 1.0075 FRA .0245 FC3-2.9691 BSP 14249 LSA 2024.3 MSA 196.1 55A 13.9 SG1 4527.2 SG2 241.3 THA 179.32 EL1 1919.1 ELZ 59.6 ALF BOE 1.3057 BRA 1.2797 BC3 4.5513 FSP -795 5.45 LAUNCH DATE DEC 17 1965 FLIGHT TIME 152.00 ARRIVAL DATE MAY 18 1966 HELIOCENTRIC CONIC DISTANCE 449.734 RL 147.21 LAL -.00 LOL 84.85 VL 27.208 GAL -3.72 AZL 86.05 HCA 220.19 SNA 124.88 ECC .18986 INC 3.9491 V1 30.264 RP 108.94 LAP -2.55 LOP 304.97 VP 37.064 GAP 8.15 AZP 93.02 TAL 196.24 TAP 56.43 RCA 101.17 APO 148.59 V2 34.786 RC 150.390 GL 27.69 GP -5.09 ZAL 113.64 ZAP 159.40 ETS 345.03 ZAE 130.36 ETE 184.62 ZAC 62.18 ETC 159.72 CLP-160.01 PLANETOCENTRIC CONIC C3 16.192 VHL 4.024 DLA 13.84 RAL 320.60 RAD 6567.6 VEL 11.729 PTH 2.07 VMP 5.584 DPA -21.00 RAP 330.09 ECC 1.2665 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2010.1 1 13 51 2610.13 90.00 -26.79 68.12 182.96 99.53 1 57 21 -25.20 59.82 90.00 16 49 1 4364.20 5.31 181.16 177.76 62.15 18 1 45 3764.2 1.55 174.51 2 42 30 2324.23 18 3 3 4125.32 4 7 8 2059.40 3 21 14 1724.2 -26.17 38.52 100.00 -27.97 46.85 182.72 101.00 3525.3 163.03 177.18 60.73 19 11 48 105.00 4 41 27 56.91 20 0 57 2.42 156.46 100.00 6.37 -31.08 1459.4 -28.71 17.52 110.00 25.92 181.89 110.00 18 54 54 3962.92 9.10 149.04 175.51 3362.9 4.68 142.74 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4614.6 SGR 263.7 SG3 235.8 RRT -.2061 RRF -.1558 RTF .9044 ST 1976.2 SR 202.8 SS 675.4 CRT .9631 CRS -.9965 CST -.9567 TOF 1.3363 TRA-1.1846 TC3-4.7570 BAU 1.0308 ROE .1424 RRA -.0036 RC3 .2096 FAU .05439 FOE .9814 FRA .0899 FC3-2.9082 BSP 14553 BDE 1.3439 BRA 1.1846 BC3 4.7616 FSP -775 LSA 2089.3 MSA 192.4 SSA 14.9 EL1 1985.8 EL2 54.3 ALF 5.65 SGB 4622.2 R23 -.0318 R13 -.9044 SG1 4614.9 SG2 258.1 THA 179.32 ARRIVAL DATE MAY 20 1966 FLIGHT TIME 154.00 LAUNCH DATE DEC 17 1965 DISTANCE 455.530 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 27.155 GAL -3.37 AZL 86.11 MCA 223.35 SMA 124.54 ECC .19100 INC 3.8869 VI 30.264 RP 108.94 LAP -2.67 LOP 308.13 VP 37.024 GAP 8.36 AZP 92.83 TAL 194.56 TAP 57.91 RCA 100.75 APO 148.33 V2 34.785 RC 152.629 GL 27.51 GP -4.68 ZAL 111.33 ZAP 160.50 ETS 345.49 ZAE 130.28 ETE 184.21 ZAC 64.06 ETC 160.57 CLP-161.05 PLANETOCENTRIC CONTC C3 15.825 VHL 3.978 OLA 14.52 RAL 322.98 RAD 6567.6 VEL 11.714 PTH 2.06 VMP 5.696 DPA -19.91 RAP 332.08 ECC 1.2604 C3 15.825 VHL 3.978 DLA 14.52 RAL 322.98 RAD 6567.6 VEL 11.714 PTH 2.06 VMP 5.696 DPA -19.91 RAP 332.08 ECC 1.2604 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 17 17 2628.71 -26.99 69.45 185.22 98.90 2 1 6 2028.7 -25.49 61.10 90.00 17 4 33 4335.19 4.39 179.53 179.90 62.00 18 16 49 3735.2 .61 172.89 100.00 2 46 24 2341.29 -28.19 48.08 184.99 100.39 3 25 26 1741.5 -26.46 39.70 100.00 18 18 7 4097.84 5.45 161.50 179.32 60.56 19 26 25 3497.8 1.49 154.95 110.00 4 12 3 2073.30 -31.32 26.93 184.19 104.45 4 46 37 1473.3 -29.02 18.48 110.00 19 8 58 3938.59 8.19 147.74 177.64 56.70 20 14 36 3338.66 3.75 141.46 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4695.5 SGR 279.6 SG3 229.2 RRT -.1890 RRF -.1494 RTF .9032 SGB 4703.8 R23 -.0223 R13 -.9031 ST 2051.5 SR 214.2 SS 682.8 TOE 1.3821 TRA-1.0790 TC3-4.9497 BAU 1.0482 CRT .9745 CRS -.9944 CST -.9591 ROE .1486 RRA -.0127 RC3 .2248 FAU .05172 FOE .9609 FRA .1553 FC3-2.8294 8SP 14782 LSA 2164.5 MSA 188.3 SSA 15.9 EL1 2062.1 EL2 47.8 ALF 5.81 SG1 4695.8 SG2 274.5 THA 179.35 BOE 1.3901 BRA 1.0791 BC3 4.9548 FSP -749 ARRIVAL DATE MAY 22 1966 FLIGHT TIME 156.00 LAUNCH DATE DEC 17 1965 HELIOCENTRIC CONIC DISTANCE 461.314 RL 147.21 LAL -.00 LOL 84.85 VL 27.103 GAL -3.02 A7L 86.17 MCA 226.51 SMA 124.21 ECC .19230 INC 3.8316 V1 30.264
RP 108.94 LAP -2.78 LOP 311.29 VP 36.985 GAP 8.57 A7P 92.64 TAL 192.87 TAP 59.38 RCA 100.32 APO 148.09 V2 34.784
RC 154.855 GL 27.33 GP -4.34 7AL 108.91 7AP 161.56 ETS 345.85 7AE 130.21 ETE 183.87 7AC 65.99 ETC 161.32 CLP-162.06 PLANETOCENTRIC CONIC C3 15.322 VHL 3.940 DLA 15.26 RAL 325.47 RAD 6567.6 VEL 11.701 PTH 2.06 VHP 5.812 DPA -18.85 RAP 334.09 ECC 1.2555 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 98.14 2 4 39 61.87 18 32 57 187.68 2050.6 -25.81 1 20 29 2650.63 -27.21 71.01 90.00 3704.5 -.38 171.18 17 21 13 4304.53 177.82 182.23 90.00 3.41 3 29 30 1761.5 -26.80 41.10 49.53 99.66 100.00 2 50 9 2361.47 -28.43 187.46 60.41 19 42 3 3468.9 .51 100.00 18 34 14 4068.93 4.48 159.90 181.64 4 51 46 -31.60 186.70 103.78 1489.9 -29.38 19.64 110.00 4 16 56 2089.92 28.15 103.78 4 51 46 56.50 20 29 9 19 23 56 7.24 146.39 179.94 3313.2 2.79 140.14 3913.25 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2129.7 SR 225.7 SS 689.0 CRT .9833 CRS -.9909 CST -.9616 SGT 4777.9 SGR 294.5 SG3 223.0 RRT -.1695 RRF -.1405 RTF .9028 SGB 4787.0 R23 -.0133 R13 -.9028 TOE 1.4307 TRA -.9681 TC3-5.1347 BAU 1.0667 RDE .1550 RRA -.0218 RC3 .2369 FAU .04928 FDE .9401 FRA .2145 FC3-2.7483 BSP 15077 BDE 1.4391 BRA .9684 BC3 5.1402 FSP -731 CRT .9833 LNS -.9909 CO: LSA 2242.1 MSA 183.2 55A 16.9 EL1 2141.2 EL2 40.8 ALF 5.95

FLIGHT TIME 150.00

SG1 4778.2 SG2 290.2 THA 179.40

ARRIVAL DATE MAY 24 1966

```
LAUNCH DATE DEC 17 1965
                                                                                        DISTANCE 467.085
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 27.050 GAL -2.65 AZL 86.22 HCA 229.67 SMA 123.88 ECC .19375 INC 3.7817 V1 30.264 RP 108.94 LAP -2.88 LOP 314.45 VP 36.948 GAP 8.79 AZP 92.45 TAL 191.16 TAP 60.83 RCA 99.88 APO 147.88 V2 34.785 RC 157.067 GL 27.12 GP -4.04 ZAL 106.36 ZAP 162.57 ETS 346.13 ZAE 130.17 ETE 183.58 ZAC 67.98 ETC 162.01 CLP-163.03
   PLANETOCENTRIC CONIC
    C3 15.286 VHL 3.910 DLA 16.05 RAL 328.07 RAD 6567.6 VEL 11.691 PTH 2.06 VMP 5.931 DPA -17.81 RAP 336.14 ECC 1.2516 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 23 29 2675.71
17 38 56 4272.55
2 53 46 2384.58
18 51 21 4038.91
4 21 50 2109.04
19 39 46 3887.21
                                                                                                                     97.27
                                                                                                                                   2 8 5
                                                                                                                                                       2075.7
                                                                                                                                                                                              64.38
                                                                                                190.34
                                                              -27.44
                                                                                72.81
                                                                                                                                  18 50 9
                                                                                                                                                        3672.6
                                                                                                                                                                                             169.40
                                                                                                 184.75
                                                                2.38
                                                                                176.03
                                                                                                                      61.77
         90.00
                                                                                                                   98.81 3 33 31
60.29 19 58 39
102.99 4 56 59
56.33 20 44 33
                                                                                                                                                        1784.6
                                                                                                                                                                           -27.16
                                                                                                                                                                                              42.72
                                                              -28.68
                                                                                 51.20
                                                                                                 190.14
        100.00
                                                                                                                                                        3438.9
                                                                                                                                                                              -.51
                                                                                                                                                                                             151.72
                                                                3.47
                                                                               158.25
                                                                                                 184.15
        100.00
                                                                                                                                                                                              20.98
                                                                                                                                                        1509.0
                                                                                                                                                                           -29.78
                                                             -31.90
                                                                                29.56
                                                                                                 189.42
        110.00
                                                                                                                                                      3287.2
                                                                                                                                                                             1.79
                                                                               145.01
                                                                                                 182.42
        110.00
                                                               6.26
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2213.3 SR 237.3 SS 696.1
CRT .9899 CRS -.9862 CST -.9643
                                                                                   SCT 4857.2 SCR 308.6 SC3 217.1
RRT -.1478 RRF -.1276 RTF .9026
SCB 4867.0 R23 -.0064 R13 -.9026
     TOE 1.4844 TRA -.8484 TC3-5.3018 BAU 1.0846
     RDE .1616 RRA -. 0308 RC3 .2460 FAU .04690
                                                                                                                                                  LSA 2325.4 MSA 177.9 SSA 17.9
    FDE .9221 FRA .2717 FC3-2.6564 BSP 15361
BDE 1.4932 BRA .8490 BC3 5.3075 FSP -713
                                                                                    SG1 4857.5 SG2 305.2 THA 179.46
                                                                                                                                                    EL1 2225.7 EL2 33.4 ALF
                                                                                                                                                                 ARRIVAL DATE MAY 26 1966
                                                                                         FLIGHT TIME 160.00
LAUNCH DATE DEC 17 1965
                                                                                         DISTANCE 472.842
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 26.999 GAL -2.27 AZL 86.26 MCA 232.83 SMA 123.56 ECC .19537 INC 3.7363 V1 30.264 RP 108.94 LAP -2.98 LOP 317.62 VP 36.911 GAP 9.01 AZP 92.26 TAL 189.44 TAP 62.27 RCA 99.42 APO 147.70 V2 34.786 RC 159.265 GL 26.88 GP -3.78 ZAL 103.70 ZAP 163.55 ETS 346.33 ZAE 130.13 ETE 183.33 ZAC 70.02 ETC 162.63 CLP-163.98
   PLANETOCENTRIC CONIC
                                                                                                                        2.05 VHP 6.054 OPA -16.78 RAP 338.20 ECC 1.2488
    C3 15.118 VHL 3.888 DLA 16.87 RAL 330.78 RAD 6567.6 VEL 11.683 PTH 2.05 VHP 6.054 OPA -16.78 RAP 338.20 ECC 1.2488 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 26 22 2703.74 -27.67 74.83 193.20 96.28 2 11 26 2103.7 -26.51 66.36 90.00 17 57 41 4239.57 1.32 174.19 187.47 61.71 19 8 20 3639.6 -2.48 167.56 100.00 2 57 20 2410.41 -28.93 55.08 193.02 97.86 3 37 30 1810.4 -27.55 44.55 100.00 19 9 24 4008.13 2.43 156.55 186.85 60.20 20 16 12 3408.1 -1.55 150.03 110.00 4 26 48 2130.49 -32.22 31.15 192.35 102.10 5 2 18 1530.5 -30.21 22.51 110.00 19 56 26 3860.81 5.26 143.62 185.09 56.18 21 0 47 3260.8 7.8 137.40
    C3 15.118 VHL 3.888 DLA 16.87 RAL 330.78 RAD 6567.6 VEL 11.683 PTH
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2300.2 SR 249.0 SS 702.4
CRT .9943 CRS -.9805 CST -.9670
                                                                                    SGT 4933.8 SGR 322.0 SG3 211.3
RRT -.1247 RRF -.1128 RTF .9029
     TOE 1.5421 TRA -.7208 TC3-5.4476 BAU 1.1022
     ROE .1684 RRA -. 0395 RC3 .2518 FAU . 04463
FOE .9047 FRA .3256 FC3-2.5557 BSP 15657
BOE 1.5513 BRA .7219 BC3 5.4535 FSP -698
                                                                                    SGB 4944.3 R23 -. 0002 R13 -. 9029
                                                                                                                                                    LSA 2411.7 MSA 172.2 SSA 18.8
                                                                                   SG1 4933.9 SG2 319.4 THA 179.53
                                                                                                                                                 EL1 2313.4 EL2 26.4 ALF 6.14
                                                                                                                                                                 ARRIVAL DATE MAY 28 1966
                                                                                         FLIGHT TIME 162.00
LAUNCH DATE DEC 17 1965
                                                                                         DISTANCE 478.586
    HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 26.947 GAL -1.88 AZL 86.31 HCA 235.99 SHA 123.24 ECC .19717 INC 3.6946 VI 30.264 RP 108.93 LAP -3.06 LOP 320.78 VP 36.875 GAP 9.23 AZP 92.07 TAL 187.71 TAP 63.70 RCA 98.94 APO 147.54 V2 34.788 RC 161.449 GL 26.60 GP -3.55 ZAL 100.94 ZAP 164.50 ETS 346.46 ZAE 130.11 ETE 183.11 ZAC 72.10 ETC 163.19 CLP-164.90
    PLANETOCENTRIC CONIC
      C3 15.023 VHL 3.876 DLA 17.72 RAL 333.60 RAO 6567.6 VEL 11.679 PTH 2.05 VHP 6.182 OPA -15.75 RAP 340.28 ECC 1.2472
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A9C INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 10 2734.59 -27.88 77.06 196.26 95.18 2 14 45 2134.6 -26.87 68.54 90.00 18 17 24 4205.90 .23 172.31 190.40 61.68 19 27 30 3605.9 -3.56 165.68
                                                                                                                  95.18 2 14 45
61.68 19 27 30
96.79 3 41 33
60.14 20 34 39
101.10 5 7 48
56.05 21 17 46
                       3 0 54 2438.81
19 28 22 3976.91
4 31 54 2154.09
20 13 51 3834.39
                                                                                                                                                                           -27.93
                                                                                                                                                         1838.8
                                                                                55.15
                                                                                                 196.11
                                                               -29.18
         100.00
                                                                                                                                                         3376.9
                                                                                                                                                                             -2.61
                                                                                                                                                                                              148.32
                                                                1.37
                                                                            154.84
                                                                                                189.76
         100.00
                                                                                                                                                         1554.1
                                                                                                                                                                                               24.20
                                                               -32.54
                                                                                  32.91
                                                                                                 195.49
         110.00
                                                                                              187.96
                                                                                                                                                                               - .23
                                                                                                                                                         3234.4
                                                                                142.23
         110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5002.0 SGR 334.5 SG3 205.4

RRT -.0993 RRF -.0936 RTF .9028

SGB 5013.2 R23 .0036 R13 -.9028

SGI 5002.1 SG2 332.9 THA 179.62
                                                                                                                                                   ST 2395.2 SR 260.7 SS 710.7
CRT .9967 CRS -.9739 CST -.9697
      TOE 1.6076 TRA -.5802 TC3-5.5578 BAU 1.1174
     ROE .1757 RRA -.0479 RC3 .2546 FAU .04228
FOE .8913 FRA .3806 FC3-2.4363 BSP 15842
BOE 1.6172 BRA .5822 BC3 5.5636 FSP -675
                                                                                                                                                   LSA 2506.4 MSA 166.9 SSA 19.6
EL1 2409.3 EL2 21.1 ALF 6.19
                                                                                                                                                                  ARRIVAL DATE HAY 30 1966
                                                                                          FLIGHT TIME 164.00
 LAUNCH DATE DEC 17 1965
                                                                                         DISTANCE 484.315
    HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 26.897 GAL -1.48 AZL 86.34 HCA 239.15 SNA 122.93 ECC .19917 INC 3.6558 V1 30.264
RP 108.92 LAP -5.14 LOP 323.95 VP 36.840 GAP 9.47 AZP 91.88 TAL 185.97 TAP 65.12 RCA 98.44 APO 147.41 V2 34.791
RC 163.619 GL 26.27 GP -3.35 ZAL 98.08 ZAP 165.42 ETS 346.52 ZAE 130.11 ETE 182.93 ZAC 74.22 ETC 163.71 CLP-165.80
    PLANFTOCENTRIC CONIC
      C3 15.006 VHL 3.874 OLA 18.59 RAL 336.53 RAD 6567.6 VEL 11.679 PTH 2.05 VMP 6.315 DPA -14.73 RAP 342.38 ECC 1.2470
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   93.97 2 18 4
61.70 19 47 34
95.62 3 45 40
60.11 20 53 54
100.01 5 13 30
55.95 21 35 26
                                                                                                                                                       2168.1
                                                                                               199.52
                                                                                                                                                                          -27.21
                                                               -28.06
                         1 31 56 2768.06
                                                                                 79.50
          90.00
                                                                                                                                                          3571.9
                                                                                                                                                                              -4.65
                        18 38 2
                                           4171.90
                                                                 - .87
                                                                                170.41
                                                                                                  193.53
           90.00
                                                                                                                                                          1869.6
                                                                                                                                                                           -28.32
                                                                                                                                                                                                48.78
                         3 4 30 2469.56
                                                                                  57.41
                                                                                                  199.40
                                                               -29.41
         100.00
                                                                                                                                                                              -3.67
                                                                                153.12
                                                                                                  192.88
                                                                                                                                                          3345.6
                        19 48 9
                                           3945.63
                                                                   .31
         100.00
                                                                                                                                                                          -31.13
-1.22
                                                                                                                                                                                               26.04
                                                                                                                                                          1579.6
                          4 37 10 2179.63
                                                               -32.86
                                                                                  34.84
                                                                                                  198.84
         110.00
                                                                                                                                                         3208.3
                        20 31 58
                                           3808.33
                                                                3.27
                                                                                140.87
                                                                                                  191.03
         110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5069.8 SGR 346.3 SG3 199.8

RRT -.0740 RRF -.0742 RTF .9034

3GB 5081.6 R23 .0070 R13 -.9034

SGI 5069.9 SG2 345.4 THA 179.71
                                                                                                                                                    ST 2488.2 SR 272.6 SS 717.0
CRT .9971 CRS -.9668 CST -.9722
      TOE 1.6744 TRA -.4328 TC3-5.6430 BAU 1.1332
      ROE .1834 RRA -.0559 RC3 .2541 FAU .04007
FOE .8771 FRA .4317 FC3-2.3120 BSP 16091
BDE 1.6844 BRA .4364 BC3 5.6487 FSP -658
                                                                                                                                                   LSA 2598.7 MSA 161.7 SSA 20.3
EL1 2503.1 EL2 20.5 ALF 6.23
```

FLIGHT TIME 158.00

```
LAUNCH DATE DEC 17 1965
                                                                                                FLIGHT TIME 166.00
                                                                                                                                                                              ARRIVAL DATE JUN 1 1966
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 490.028
      RL 147.21 LAL -.00 LOL 84.85 VL 26.846 GAL -1.06 A7L 86.38 MCA 242.32 SMA 122.62 ECC .20137 INC 3.6195 V1 30.264 RP 108.91 LAP -3.20 LOP 327.12 VP 36.807 GAP 9.70 A7P 91.68 TAL 184.22 TAP 66.53 RCA 97.93 APO 147.31 V2 34.794 RC 165.775 GL 25.88 GP -3.17 ZAL 95.13 ZAP 166.31 ETS 346.50 ZAE 130.11 ETE 182.77 ZAC 76.37 ETC 164.18 CLP-166.68
    PLANETOCENTRIC CONIC
      C3 15.072 VHL 3.882 DLA 19.45 RAL 339.57 RAD 6567.6 VEL 11.681 PTM 2.05 VMP 6.453 DPA -13.71 RAP 344.49 ECC 1.2480 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            92.67
                                                                                                                                                                 2204.0
                                                                                                                                                                                     -27.53
                          1 34 42 2803.96
18 59 28 4137.97
           90.00
                                                                   -28.20
                                                                                       82.11
                                                                                                         202.98
                                                                                                                                              2 21 26
                                                                                                                                                                                                             73.51
           90.00
                                                                    -1.96
                                                                                      168.52
                                                                                                         196.87
                                                                                                                                61.75
                                                                                                                                            20 8 26
                                                                                                                                                                     3538.0
                                                                                                                                                                                          -5.73
                                                                                                                                                                                                            161.86
                          3 8 12 2502.46
20 8 40 3914.70
         100.00
                                                                  -29.60
                                                                                        59.84
                                                                                                          202.89
                                                                                                                                94.36
                                                                                                                                               3 49 54
                                                                                                                                                                     1902.5
                                                                                                                                                                                         -28.68
                                                                                                                                                                                                             51.15
         100.00
                                                                      -.74
                                                                                      151.43
                                                                                                         196.19
                                                                                                                                60.12 21 13 54
                                                                                                                                                                     3314.7
                                                                                                                                                                                          -4.71
                                                                                                                                                                                                           144.89
                          4 42 40 2206.90
20 50 41 3783.02
                                                                                                                                98.82 5 19 27
55.89 21 53 44
         110.00
                                                                 -33.16
                                                                                       36.91
                                                                                                         202.40
                                                                                                                                                                     1606.9
                                                                                                                                                                                         -31.59
                                                                                                                                                                                                             28.03
                                                                                                                                                                                        -2.19
         110.00
                                                                   2.30
                                                                                      139.55
                                                                                                         194.29
                                                                                                                                                                     3183.0
                                                                                                                                                                                                             133.34
    DIFFERENTIAL CORRECTIONS
                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           SGT 5135.6 SGR 357.3 SG3 194.3
RRT -.0483 RRF -.0541 RTF .9047
                                                                                                                                                               ST 2580.2 SR 284.6 SS 721.5
CRT .9960 CRS -.9594 CST -.9747
      TDE 1.7437 TRA -.2769 TC3-5.6966 BAU 1.1489
      RDE .1917 RRA -.0632 RC3 .2503 FAU .03800
     FOE .8628 FRA .4795 FC3-2.1830 BSP 16347
BDE 1.7543 BRA .2840 BC3 5.7021 FSP -643
                                                                                           SGB 5148.0 R23 .0102 R13 -.9047
                                                                                                                                                               LSA 2689.6 MSA 156.8 SSA 20.9
EL1 2595.7 EL2 25.4 ALF 6.27
                                                                                           SG1 5135.7 SG2 356.9 THA 179.81
LAUNCH DATE DEC 17 1965
                                                                                                 FLIGHT TIME 168.00
                                                                                                                                                                               ARRIVAL DATE JUN 3 1966
    HELIOCENTRIC CONIC
                                                                                                DISTANCE 495.723
    RL 147.21 LAL -.00 LOL 84.85 VL 26.796 GAL -.63 AZL 86.41 MCA 245.48 SMA 122.32 ECC .20380 INC 3.5853 V1 30.264
RP 108.90 LAP -3.26 LOP 330.28 VP 36.774 GAP 9.95 AZP 91.49 TAL 182.46 TAP 67.94 RCA 97.39 APO 147.25 V2 34.798
-RC 167.915 GL 25.43 GP -3.01 ZAL 92.12 ZAP 167.18 ETS 346.40 ZAE 130.13 ETE 182.64 ZAC 78.54 ETC 164.61 CLP-167.54
    PLANETOCENTRIC CONIC
     C3 15.228 VHL 3.902 DLA 20.31 RAL 342.70 RAD 6567.6 VEL 11.688 PTH 2.06 VHP 6.597 DPA -12.68 RAP 346.61 ECC 1.2506 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 31 2842.06 -28.29 84.90 206.63 91.27 2 24 53 2242.1 -27.81 76.26 90.00 19 21 38 4104.48 -3.04 166.65 200.42 61.83 20 30 3 3504.5 -6.78 159.97 100.00 3 12 2 2557.26 -29.75 62.41 206.57 93.01 3 54 19 1937.3 -29.02 53.68 100.00 20 29 48 3884.52 -1.76 149.77 199.71 60.15 21 34 32 3284.5 -5.72 143.22 110.00 4 48 26 2235.68 -33.44 39.11 206.17 97.54 5 25 42 1635.7 -32.04 30.16 110.00 21 9 53 3758.87 1.38 138.28 197.75 55.84 22 12 32 3158.9 -3.11 132.08
                                                                                                                                97.54 5 25 42
55.84 22 12 32
         110.00
                         21 9 53
                                             3758.87
                                                                  1.38
                                                                                    138.28
                                                                                                         197.75
                                                                                                                                                                    3158.9
                                                                                                                                                                                         -3.11
    DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                          SGT 5197.7 SGR 367.4 SG3 189.1

RRT -.0223 RRF -.0330 RTF .9059

SGB 5210.7 R23 .0127 R13 -.9059

SG1 5197.7 SG2 367.3 THA 179.91
      TOE 1.8158 TRA -.1102 TC3-5.7127 BAU 1.1640
                                                                                                                                                               ST 2670.0 SR 296.6 SS 725.1
CRT .9934 CRS -.9516 CST -.9768
      ROE .2008 RRA -.0699 RC3 .2435 FAU .03600
     FDE .8491 FRA .5275 FC3-2.0468 8SP 16588
BDE 1.8269 BRA .1305 BC3 5.7179 FSP -628
                                                                                                                                                           LSA 2778.2 MSA 153.0 SSA 21.3
EL1 2686.2 EL2 33.8 ALF 6.30
LAUNCH DATE DEC 17 1965
                                                                                                FLIGHT TIME 170.00
                                                                                                                                                                             ARRIVAL DATE JUN 5 1966
                                                                                              DISTANCE 501.401
   HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 26.747 GAL -.18 A7L 86.45 MCA 248.64 SMA 122.02 ECC .20646 INC 3.5528 V1 30.264 RP 108.89 LAP -3.31 LOP 333.45 VP 36.743 GAP 10.21 A7P 91.30 TAL 180.69 TAP 69.33 RCA 96.83 APO 147.21 V2 34.803 RC 170.040 GL 24.91 GP -2.87 TAL 89.04 TAP 168.04 ETS 346.22 TAE 130.16 ETE 182.52 TAC 80.74 ETC 165.00 CLP-168.38
   PLANETOCENTRIC CONIC
    C3 15.482 VHL 3.935 OLA 21.14 RAL 345.91 RAO 6567.6 VEL 11.699 PTH 2.06 VHP 6.748 OPA -11.65 RAP 348.74 ECC 1.2548
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 40 25 2882.11 -28.32 87.83 210.46 89.81 2 28 27 2282.1 -28.04 79.17
90.00 19 44 24 4071.89 -4.09 164.83 204.16 61.96 20 52 15 3471.9 -7.81 158.12
100.00 3 16 4 2573.67 -29.85 65.11 210.43 91.99 3 58 58 1973.7 -29.31 56.35
                                                                                                                               60.22 21 55 41
96.20 5 32 16
                                                                                                                                                                    3255.6
                                                                                                                                                                                         -6.68
                                                                                                                                                                                                           141.61
         100.00
                         20 51 25 3855.56
                                                                    -2.74
                                                                                     148.18
                                                                                                        203.42
                                           2265.69
3736.31
                                                                  -33.68
                                                                                                                                                                                        -32.46
                                                                                                                                                                                                             32.40
         110.00
                           4 54 31
                                                                                       41.42
                                                                                                        210.13
                                                                                                                               96.20
                                                                                                                                                                    1665.7
                                                                                                                               55.82 22 31 44
                                                                     .52
                                                                                                                                                                                          -3.97
        110.00
                         21 29 28
                                                                                     137.11
                                                                                                        201.38
                                                                                                                                                                    3136.3
                                                                                                                                                                                                            130.90
                                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                          SGT 5259.8 SGR 376.8 SG3 184.0
RRT .0044 RRF -.0103 RTF .9096
SGB 5273.3 R23 -.0144 R13 .9096
                                                                                                                                                              ST 2754.8 SR 308.9 SS 727.2
CRT .9899 CRS -.9446 CST -.9792
     TOE 1.8895 TRA .0616 TC3-5.6952 BAU 1.1798
     ROE .2107 RRA -.0760 RC3 .2336 FAU .03424
FOE .8364 FRA .5664 FC3-1.9146 B3P 16890
B0E 1.9012 BRA .0979 BC3 5.6999 FSP -619
                                                                                                                                                              LSA 2861.9 MSA 148.8 SSA 21.6
EL1 2771.7 EL2 43.6 ALF 6.33
                                                                                           SG1 5259.8 SG2 376.8 THA
                                                                                                                                           .02
                                                                                                FLIGHT TIME 172.00
                                                                                                                                                                              ARRIVAL DATE JUN 7 1966
LAUNCH DATE DEC 17 1965
   HELIOCENTRIC CONIC
                                                                                              DISTANCE 507.059
    RL 147.21 LAL -.00 LOL 84.85 VL 26.699 GAL .29 AZL 86.48 MCA 251.81 SMA 121.73 ECC .20939 INC 3.5216 V1 30.264
RP 108.87 LAP -3.35 LOP 336.62 VP 36.713 GAP 10.47 AZP 91.10 TAL 178.92 TAP 70.73 RCA 96.24 APO 147.22 V2 34.808
RC 172.148 GL 24.33 GP -2.75 ZAL 85.92 ZAP 168.87 ETS 345.94 ZAE 130.20 ETE 182.43 ZAC 82.97 ETC 165.36 CLP-169.21
   PLANETOCENTRIC CONIC
    C3 15.844 VHL 3.980 OLA 21.94 RAL 349.20 RAD 6567.6 VEL 11.714 PTH 2.06 VHP 6.907 OPA -10.61 RAP 350.87 ECC 1.2608 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 28 2923.79 -28.27 90.87 214.44 88.28 2 32 11 2323.8 -28.21 82.21 90.00 20 7 35 4040.67 -5.08 163.07 208.09 62.11 21 14 56 3440.7 -8.78 156.34 100.00 3 20 21 2611.39 -29.89 67.92 214.47 90.12 4 3 52 2011.4 -29.56 59.13
         100.00
                           3 20 21
                                            2611.39
                                                                  -29.89
                                                                                       67.92
                                                                                                        214.47
                                                                                                                                90.12
                                                                                                                                               4 3 52
                                                                                                                                                                     2011.4
                                                                                                                                                                                        -29.56
                                                                                                                                                                                                              59.13
                                                                    -3.66
                                                                                                                                60.31 22 17 11
                      21 13 23
                                          3828.31
                                                                                                        207.31
                                                                                                                                                                     3228.3
                                                                                                                                                                                          -7.59
                                                                                     146.68
                       5 0 57 2296.65
21 49 16 3715.81
                                                                                                                               94.79 5 39 13
55.82 22 51 12
        110.00
                                                                  -33.89
                                                                                       43.81
                                                                                                        214.27
                                                                                                                                                                     1696.7
                                                                                                                                                                                        -32.85
        110.00
                                                                                     136.04
                                                                                                        205.19
                                                                                                                                                                     3115.8
                                                                                                                                                                                        -4.75
   DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5303.6 SGR 385.4 SG3 178.4
RRT .0314 RRF .0158 RTF .9079
SGB 5517.6 R23 -.0128 R13 .9079
                                                                                                                                                          ST 2837.4 SR 321.1 SS 729.5
CRT .9853 CRS -.9359 CST -.9806
LSA 2943.3 MSA 148.6 SSA 21.7
     TOE 1.9672 TRA .2573 TC3-5.6106 BAU 1.1894
     ROE .2215 RRA -.0808 RC3 .2218 FAU .03189
FOE .8247 FRA .6215 FC3-1.7426 BSP 16995
BOE 1.9797 BRA .2697 BC3 5.6150 FSP -594
                                                                                           SG1 5303.6 SG2 385.3 THA
                                                                                                                                                              EL1 2854.9 EL2 54.6 ALF 6.36
                                                                                                                                            .13
```

27.5

```
THE RESERVE OF THE PARTY OF THE
```

```
ARRIVAL DATE JUN 9 1966
                                                                              FLIGHT TIME 174.00
LAUNCH DATE DEC 17 1965
                                                                             DISTANCE 512.695
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 26.650 GAL .77 AZL 86.51 HCA 254.98 SNA 121.44 ECC .21259 INC 3.4915 V1 30.264 RP 108.85 LAP -3.37 LOP 339.79 VP 36.683 GAP 10.75 AZP 90.91 TAL 177.14 TAP 72.12 RCA 95.63 APO 147.26 V2 34.814 RC 174.259 GL 23.68 GP -2.63 ZAL 82.78 ZAP 169.69 ETS 345.56 ZAE 130.24 ETE 182.34 ZAC 85.21 ETC 165.68 CLP-170.03
   PLANETOCENTRIC CONIC
    C3 16.326 VHL 4.040 DLA 22.70 RAL 352.55 RAD 6567.7 VEL 11.735 PTH 2.07 VHP 7.073 DPA -9.58 RAP 353.02 ECC 1.2687 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     2366.8
                                                                                                                                                                       85.35
                                                                                    218.57
                                                                                                        86.71
                                                                                                                    2 36 9
                                                                                                                                                      -28.30
                     1 46 42 2966.76
20 31 2 4011.31
3 24 56 2650.04
                                                       -28.14
                                                                      94.01
        90.00
                                                                                                        62.28 21 37 54
                                                                                                                                                       -9.68
                                                                                                                                                                       154.56
                                                                                                                                       3411.3
                                                       -6.02
                                                                      161.42
                                                                                      212.20
        90.00
                                                                                                        88.61
                                                                                                                     4 9 6
                                                                                                                                       2050.0
                                                                                                                                                       -29.74
                                                                                                                                                                        61.99
                                                       -29.86
                                                                       70.79
                                                                                      218.65
       100.00
                                                                                                        60.42 22 38 53
93.35 5 46 35
55.83 23 10 46
                                                                                                                                                        -8.41
                                                                                                                                    3203.3
                                                                                                                                                                       138.69
                     21 35 30
                                     3803.27
                                                        -4.50
                                                                      145.30
                                                                                      211.37
       100.00
                                                                                                                                      1728.3
                                                                                                                                                       -33.20
                                                                                                                                                                        37.13
                                                       -34.04
                                                                       46.27
                                                                                      218.57
                       5 7 47 2328.27
       110.00
                                                                                                                                    3097.8
                                                                                                                                                      -5.43
                                                                                                                                                                       128.88
                    22 9 8
                                                                      135.10
                                                                                     209.16
                                     3697.80
                                                         -.96
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          #ID-CQUINSE ERECUTION ACCURACY

SGT 5352.5 SGR 393.2 SG3 173.5

RRT .0589 RRF .0404 RTF .9101 CRT .9801 CR5 -9282 CST -9823

SGB 5366.9 R23 -.0136 R13 .9101 LSA 3015.9 MSA 147.8 SSA 21.6

SG1 5352.6 SG2 392.5 THA .25 EL1 2929.6 EL2 65.8 ALF 6.40
    TOE 2.0455 TRA .4585 TC3-5.4979 BAU 1.2008
    ROE .2334 RRA -.0848 RC3 .2072 FAU .03005
FOE .8121 FRA .6662 FC3-1.5936 BSP 17133
BOE 2.0588 BRA .4663 BC3 5.5018 FSP -577
                                                                          SG1 5352.6 SG2 392.5 THA .25
                                                                                                                                   EL1 2929.6 EL2 65.8 ALF 6.40
                                                                                                                                               ARRIVAL DATE JUN 11 1966
                                                                               FLIGHT TIME 176.00
LAUNCH DATE DEC 17 1965
                                                                               DISTANCE 518.306
    RL 147.21 LAL -.00 LOL 84.85 VL 26.603 GAL 1.27 A7L 86.54 MCA 258.14 SMA 121.16 ECC .21609 INC 3.4622 VI 30.264 RP 108.83 LAP -3.39 LOP 342.97 VP 36.655 GAP 11.05 A7P 90.71 TAL 175.37 TAP 73.51 RCA 94.98 APO 147.34 V2 34.821 RC 176.312 GL 22.97 GP -2.53 TAL 79.62 TAP 170.49 ETS 345.04 TAE 130.29 ETE 182.27 TAC 87.47 ETC 165.97 CLP-170.83
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.939 VHL 4.116 DLA 23.40 RAL 355.93 RAD 6567.7 VEL 11.761 PTH 2.08 VHP 7.249 DPA -8.53 RAP 355.16 ECC 1.2788 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 50 13 3010.60 20 54 32 3984.38 3 29 54 2689.21 21 57 33 3781.00 5 15 3 2360.23 22 28 53 3682.75
                                                                                                                                    2410.6
                                                                                                      85.12 2 40 24
                                                                                     222.83
                                                                       97.20
                                                       -27.93
         90.00
                                                                                                                   22 0 57
                                                                                                                                                                        153.10
                                                                                                                                        3384.4
                                                                                                                                                        -10.50
                                                                                      216.45
                                                                                                         62.46
                                                        -6.87
                                                                       159.90
         90.00
                                                                                                                    4 14 43
                                                                                                                                       2089.2
                                                                                                                                                       -29.85
                                                                                                                                                                         64.89
                                                                                                         87.08
                                                                        73.70
                                                                                      222.97
                                                       -29.76
        100.00
                                                                                                         60.53 23 0 34
                                                                                                                                                                        137.44
                                                                                                                                       3181.0
                                                                                                                                                        -9.14
                                                                       144.07
                                                                                      215.57
                                                        -5.25
        100.00
                                                                                                         91.87 5 54 23
55.85 23 30 16
                                                                                                                                                      -33.50
                                                                                                                                                                         39.57
                                                                                                                                       1760.2
                                                                                      223.02
                                                                                                         91.87
                                                                        48.75
                                                      -34.14
       110.00
                                                                                                                                                                        128.08
                                                                                      213.26
                                                                                                                                       3082.7
                                                                                                                                                        -6.00
                                                                       134.31
                                                       -1.53
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SGT 5397.6 SGR 400.1 SG3 168.6 ST 2971.1 SR 344.3 55 725.5

RRT .0858 RRF .0655 RTF .9121 CRT .9745 CRS -.9205 CST -.9838

SGB 5412.4 R23 -.0133 R13 .9121 LSA 3074.2 MSA 148.4 55A 21.3
     TOE 2.1208 TRA .6699 TC3-5.3488 BAU 1.2120
     RDE .2464 RRA -.0878 RC3 .1909 FAU .02825
                                                                           SCB 5412.4 R23 -.0133 R13 .9121
     FOE .7987 FRA .7105 FC3-1.4436 BSP 17326
                                                                                                                               ELI 2990.1 ELZ 77.0 ALF 6.47
                                                                           SG1 5397.7 SG2 398.6 THA
     BOE 2.1351 BRA .6756 BC3 5.3523 FSP -563
                                                                                                                                              ARRIVAL DATE JUN 13 1966
                                                                               FLIGHT TIME 178.00
LAUNCH DATE DEC 17 1965
                                                                               DISTANCE 523.891
     RL 147.21 LAL -.00 LOL 84.85 VL 26.556 GAL 1.80 A7L 86.57 MCA 261.31 SMA 120.89 ECC .21991 INC 3.4337 VI 30.264 RP 108.81 LAP -3.39 LOP 346.14 VP 36.628 GAP 11.35 A7P 90.52 TAL 173.59 TAP 74.90 RCA 94.30 APO 147.47 V2 34.828 RC 178.386 GL 22.20 GP -2.44 ZAL 76.48 ZAP 171.28 ETS 344.35 ZAE 130.35 ETE 182.22 ZAC 89.75 ETC 166.23 CLP-171.62
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 17.698 VHL 4.207 DLA 24.04 RAL 359.34 RAD 6567.7 VEL 11.793 PTH 2.09 VHP 7.434 DPA -7.49 RAP 357.31 ECC 1.2913
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     -28.24
                                                                                   227.18
                                                       -27.63
                                                                      100.40
                                     3054.83
         90.00
                       1 54 5
                                                                                                                                                                        151.72
                                                                                                                                                       -11.22
                     21 17 51
                                                                                      220.84
                                     3960.44
                                                        -7.62
                                                                      158.54
          90.00
                                                                                                                                                       -29.89
                                                                                                                                                                         67.81
                                                                                      227.40
                                                       -29.59
                                                                        76.60
                       3 35 19 2728.47
        100.00
                                                                                                                                                        -9.75
                                                                                                                                                                        136.37
                                                                                      219.90
                      22 19 19 3762.03
                                                        -5.88
                                                                      143.02
        100.00
                                                                                                                                                                        42.04
                                                                                                                                                      -33.75
                     5 22 48 2392.21
22 48 20 3671.06
                                                        -34.18
                                                                        51.26
                                                                                      227.59
        110.00
                                                                                                                                                                        127.47
                                                                                                                                                        -6.44
                                                                       133.70
                                                                                      217.48
                                                         -1.98
        110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 3024.3 SR 357.1 SS 722.2
CRT .9685 CRS -.9132 CST -.9851
                                                                           SGT 5436.4 SGR 406.2 SG3 163.9
RRT .1139 RRF .0929 RTF .9140
SGB 5451.6 RZ3 -.0118 R13 .9140
     TOE 2.1989 TRA .8963 TC3-5.1532 BAU 1.2200
ROE .2603 RRA -.0894 RC3 .1735 FAU .02639
FOE .7871 FRA .7554 FC3-1.2907 BSP 17422
                                                                                                                                  LSA 3126.1 MSA 150.0 55A 20.8
                                                                           SG1 5436.6 SG2 403.6 THA
                                                                                                                                   EL1 3044.0 EL2 88.3 ALF
                                                                                                                                                                            6.53
     BOE 2.2143 BRA .9008 BC3 5.1561 FSP
                                                           -546
                                                                                                                                               ARRIVAL DATE JUN 15 1966
                                                                                FLIGHT TIME 180.00
 LAUNCH DATE OFC 17 1965
     RL 147.21 LAL -.00 LOL 84.85 VL 26.509 GAL 2.35 AZL 86.59 HCA 264.48 SHA 120.62 ECC .22409 INC 3.4056 V1 30.264 RP 108.78 LAP -3.39 LOP 349.32 VP 36.602 GAP 11.68 AZP 90.33 TAL 171.81 TAP 76.29 RCA 93.59 APO 147.65 V2 34.836 RC 180.400 GL 21.38 GP -2.36 ZAL 73.36 ZAP 172.06 ETS 343.47 ZAE 130.41 ETE 182.17 ZAC 92.04 ETC 166.46 CLP-172.41
                                                                                DISTANCE 529.445
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 18.622 VHL 4.315 DLA 24.60 RAL 2.75 RAD 6567.8 VEL 11.832 PTH 2.10 VMP 7.630 DPA -6.44 RAP 359.47 ECC 1.3065
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 58 25 3098.93 -27.25 103.57 231.62 82.00 2 50 4 2498.9 -28.08 95.01
                                                                                                          62.82 22 46 23
                                                                                                                                        3340.1
                                                                                       225.33
                     21 40 43
                                      3940.12
                                                        -8.25
                                                                       157.38
          90.00
                                                                                                                                                        -29.86
                                                                                                                                                                          70.70
                                                                                                                      4 27 22
                                                                                                                                        2167.4
                                                                                                          84.07
                                                                         79.47
                                                                                       231.91
                        3 41 15 2767.37
                                                        -29.35
         100.00
                                                                                                          60.74 23 43 1
88.93 6 11 25
55.88 24 8 20
                                                                                                                                                                        135.51
                                                                                                                                                       -10.24
                                                                                                                                        3146.9
                                                        -6.39
                                                                       142.18
                                                                                       224.32
                      22 40 34
                                      3746.92
         100.00
                                                                                                                                                                         44.50
                                                                                                                                                       -33.94
                                                                                                                                        1623.9
                                                                                       232.26
                        5 31 1 2423.93
23 7 17 3663.12
                                                                         53.73
                                                        -34.17
         110.00
                                                                                                                                                                        127.05
                                                                                                                                                          -6.74
                                                                                                                                        3063.1
                                                                       133.29
                                                                                       221.78
                      23 7 17
                                                        -2.28
         110.00
                                                                                                                               ST 3058.4 SR 368.4 SS 714.8
CRT .9624 CRS -.9060 CST -.9863
LSA 3158.6 MSA 152 4 44
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                            SGT 5473.0 SGR 411.4 SG3 159.1
RRT .1409 RRF .1190 RTF .9166
      TOE 2.2710 TRA 1.1316 TC3-4.9338 BAU 1.2289
     ROE .2758 RRA -.0899 RC3 .1551 FAU .02471
FDE .7728 FRA .7976 FC3-1.1487 BSP 17590
BDE 2.2877 BRA 1.1351 BC3 4.9362 FSP -533
                                                                                                                                   LSA 3158.6 MSA 152.5 SSA 20.2
EL1 3078.9 EL2 99.4 ALF 6.62
                                                                          SCB 5488.5 R23 -.0110 R13 .9166
SG1 5473.4 SG2 407.3 THA .61
```

LAUNCH DATE DEC 17 1965 FLIGHT TIME 182.00 ARRIVAL DATE JUN 17 1966 HELIOCENTRIC CONIC DISTANCE 534.965 RL 147.21 LAL -.00 LOL 84.85 VL 26.463 GAL 2.92 ATL 86.62 HCA 267.65 SMA 120.35 ECC .22866 INC 3.3778 V1 30.264 RP 108.76 LAP -3.37 LOP \$52.49 VP 36.577 GAP 12.03 AZP 90.14 TAL 170.04 TAP 77.69 RCA 92.83 APO 147.87 V2 34.845 RC 182.414 GL 20.52 GP -2.28 ZAL 70.28 ZAP 172.82 ETS 342.33 ZAE 130.47 ETE 182.13 ZAC 94.33 ETC 166.66 CLP-173.19 PLANETOCENTRIC CONIC 6.14 RAD 6567.8 VEL 11.879 PTH 2.11 VHP 7.839 DPA -5.39 RAP C3 19.731 VHL 4.442 DLA 25.09 RAL 1.63 ECC 1.3247 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 3 18 3142.31 22 2 52 3924.05 3 47 48 2805.42 23 1 4 3736.17 90.00 236.12 2 55 40 2542.3 -26.80 106.67 80.51 -27.84 98.16 62.96 23 8 16 -8.75 90.00 156.46 229.90 3324.1 -12.31149.59 -29.05 4 34 33 2205.4 73.53 100.00 82.26 236.50 82.63 -29.77 60.81 24 3 20 87.49 6 20 41 55.89 24 26 34 100.00 -6.75 141.58 228.82 3136.2 -10.59134.90 5 39 46 2455.11 23 25 35 3659.25 110.00 -34.10 56.17 237.01 1855.1 -34.07 46.92 110.00 133.09 226.15 3059.2 -6.89 126.84 -2.43 DIFFFRENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5504.8 SGR 415.8 SG3 154.5 RRT .1680 RRF .1456 RTF .9192 SGB 5520.4 R23 -.0098 R13 .9192 SGI 5505.2 SG2 409.9 THA .73 TOE 2.3406 TRA 1.3801 TC3-4.6851 BAU 1.2364 ST 3078.7 SR 379.0 SS 706.1 CRT .9561 CRS -.8989 CST -.9873 RDE .2923 RRA -.0889 RC3 .1365 FAU .02307 FDE .7585 FRA .8403 FC3-1.0120 BSP 17748 BDE 2.3588 BRA 1.3829 BC3 4.6871 FSP -519 LSA 3177.4 MSA 156.1 SSA 19.5 .73 EL1 3100.0 EL2 110.3 ALF 6.72 LAUNCH DATE DEC 17 1965 FLIGHT TIME 184.00 ARRIVAL DATE JUN 19 1966 HELIOCENTRIC CONIC DISTANCE 540.446 RL 147.21 LAL -.00 LOL 84.85 VL 26.418 GAL 3.52 A7L 86.65 MCA 270.82 SMA 120.09 ECC .23366 INC 3.3501 V1 30.264
RP 108.73 LAP -3.35 LOP 355.67 VP 36.553 GAP .12.39 A7P 89.95 TAL 168.27 TAP 79.10 RCA 92.03 APO 148.15 V2 34.854
RC 184.407 GL 19.62 GP -2.21 ZAL 67.26 ZAP 173.58 ETS 340.84 ZAE 130.53 ETE 182.10 ZAC 96.64 ETC 166.83 CLP-173.97 PLANETOCENTRIC CONIC C3 21.048 VHL 4.588 0LA 25.51 RAL 9.49 RAD 6567.9 VEL 11.934 PTH 2.12 VHP 8.062 0PA -4.34 RAP 3.79 ECC 1.3464 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 8 53 3184.33 -26.30 109.64 240.67 79.10 3 1 57 2584.3 -27.54 101.19 23 29 14 90.00 22 24 1 3912.89 -9.09 155.83 234.51 63.07 3312.9 -12.64 148.94 3 55 0 2642.20 23 20 34 3730.26 5 49 0 2485.54 100.00 -28.70 84.94 241.14 81.26 4 42 23 2242.2 76.25 -29.61 24 22 45 100.00 -6.94 141.25 233.36 60.85 3130.3 -10.78 134.56 110.00 -33.99 86.09 6 30 26 -34.15 58.54 241.83 1885.5 49.30 24 44 4 110.00 23 43 4 3659.68 -2.41 230.56 55.89 3059.7 133.11 -6.87 126.86 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 3085.7 SR 388.7 SS 696.1 CRT .9495 CRS -.8919 CST -.9883 SGT 5532.4 SGR 419.3 SG3 150.0 RRT .1952 RRF .1726 RTF .9220 TOE 2.4077 TRA 1.6436 TC3-4.4127 BAU 1.2421 RDE .3099 RRA -.0864 RC3 .1182 FAU .02148 FDE .7441 FRA .8833 FC3 -.8835 BSP 17890 BDE 2.4275 BRA 1.6458 BC3 4.4143 FSP -506 SGB 5548.3 R23 -.0086 R13 .9220 LSA 3182.9 MSA 160.4 SSA 18.8 ELI 3107.7 EL2 121.0 ALF 6.83 SG1 5533.0 SG2 411.2 THA .85 FUIGHT TIME 186.00 ARRIVAL DATE JUN 21 1966 LAUNCH DATE DEC 17 1965 HELIOCENTRIC CONIC 01STANCE 545.884 RL 147.21 LAL -.00 LOL 84.85 VL 26.373 GAL 4.16 AZL 86.68 HCA 274.00 SMA 119.83 ECC .23911 INC 3.3223 VL 30.264
RP 108.70 LAP -3.31 LOP 358.85 VP 36.529 GAP 12.78 AZP 89.77 TAL 166.52 TAP 80.51 RCA 91.18 APO 148.49 VZ 34.863
RC 186.379 GL 18.70 GP -2.15 ZAL 64.31 ZAP 174.32 ETS 338.87 ZAE 130.60 ETE 182.07 ZAC 98.95 ETC 166.97 CLP-174.74 PLANETOCENTRIC CONIC C3 22.602 VHL 4.754 DLA 25.84 RAL 12.78 RAD 6567.9 VEL 11.999 PTH 2.14 VHP 8.300 DPA -3.29 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 15 18 3224.36 22 43 52 3907.28 4 2 57 2877.29 245.25 -25.75 112.45 77.80 3 9 2 2624.4 -27.18 104.07 90.00 155.50 239.14 63.12 23 48 59 3307.3 -12.80 90.00 -9.27 87.47 245.82 79.98 4 50 54 2277.3 -29.40 100.00 -28.31 23 38 53 3729.58 237.91 60.86 24 41 3 3129.6 -10.80 134.52 100.00 -6.96 141.21 6 40 39 5 58 43 2515.06 -33.83 60.83 246.68 84.75 1915.1 -34.18 110.00 0 3 32 133.37 234.98 55.88 1 4 37 3064.6 -6.69 110.00 -2.23 3664.57 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5555.3 SGR 422.0 SG3 145.7 RRT .2230 RRF .2009 RTF .9246 SGB 5571.3 R23 -.0066 R13 .9246 TOE 2.4748 TRA 1.9245 TC3-4.1170 BAU 1.2444 ST 3093.4 SR 397.4 SS 686.5 CRT .9428 CRS -.8850 CST -.9892 LSA 3179.5 MSA 165.3 SSA 18.0 EL1 3106.1 EL2 131.5 ALF 6.94 ROE .3286 RRA -.0822 RC3 .1006 FAU .01986 FOE .7314 FRA .9280 FC3 -.7607 BSP 17947 BDE 2.4965 BRA 1.9264 BC3 4.1182 FSP -490 SG1 5556.1 SG2 411.3 THA .98 FLIGHT TIME 188.00 ARRIVAL DATE JUN 23 1966 LAUNCH DATE DEC 17 1965 HELIOCENTRIC CONIC DISTANCE 551.270 RL 147.21 LAL -.00 LOL 84.85 VL 26.329 GAL 4.82 AZL 86.71 MCA 277.17 SMA 119.58 ECC .24509 INC 3.2943 V1 30.264
RP 108.67 LAP -3.27 LOP 2.03 VP 36.507 GAP 13.20 AZP 89.59 TAL 164.77 TAP 81.94 RCA 90.27 APO 148.89 V2 34.873
RC 188.330 GL 17.76 GP -2.09 ZAL 61.45 ZAP 175.05 ETS 336.21 ZAE 130.66 ETE 182.05 ZAC 101.26 ETC 167.08 CLP-175.52 PLANETOCENTRIC CONIC C3 24.425 VHL 4.942 DLA 26.09 RAL 16.00 RAD 6568.0 VEL 12.075 PTH 2.16 VHP 8.555 DPA C3 24.425 VML 4.942 DLA 26.D9 RAL 16.D0 RAD 6568.D VEL 12.D75 PTM 2.16 VMP 8.555 DPA -2.24 RAP 8.11 ECC 1.4020 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 25 28 3907.82 -9.25 155.54 243.76 63.12 24 7 16 3307.8 -12.79 148.64 100.00 4 11 40 2910.36 -27.90 89.84 250.51 78.80 5 0 11 2310.4 -29.16 81.27 100.00 23 55 50 3734.42 -6.80 141.48 242.44 60.82 24 58 4 3134.4 -10.64 134.80 110.00 6 8 54 2543.56 -33.63 63.03 251.55 83.46 6 51 18 1943.6 -34.17 53.83 110.00 0 19 1 3673.98 -1.87 133.86 239.39 55.86 1 20 15 3074.0 -6.33 127.62 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5573.8 SGR 423.8 SG3 141.4 RRT .2502 RRF .2284 RTF .9277 SGB 5589.9 R23 -.0051 R13 .9277 SGI 5574.8 SG2 410.2 THA 1.10 TOE 2.5355 TRA 2.2183 TC3-3.8159 BAU 1.2464 ST 3064.5 SR 404.7 S5 674.9 ROE .3482 RRA -.0765 RC3 .0839 FAU .01837 FDE .7174 FRA .9719 FC3 -.6511 BSP 18065 BDE 2.5593 BRA 2.2196 BC3 3.8169 FSP -478 CRT .9359 CRS -.8781 CST -.9900 CRT .9359 LRS -.010. LLS LSA 3159.3 MSA 170.5 SSA 17.3 EL1 3087.9 EL2 141.5 ALF 7.06

```
ARRIVAL DATE JUN 25 1966
                                                                                  FLIGHT TIME 190.00
LAUNCH DATE DEC 17 1965
                                                                                 DISTANCE 556.598
   HELIOCENTRIC CONIC
   RL 147.21 LAL -.00 LOL 84.85 VL 26.286 GAL 5.52 A7L 86.73 HCA 280.35 SHA 119.34 ECC .25163 INC 3.2659 VI 30.264 RP 108.63 LAP -3.21 LOP 5.22 VP 36.486 GAP 13.65 A7P 89.41 TAL 163.04 TAP 83.39 RCA 89.31 APO 149.36 V2 34.884 RC 190.259 GL 16.81 GP -2.04 ZAL 58.68 ZAP 175.77 ETS 332.53 ZAE 130.71 ETE 182.04 ZAC 103.58 ETC 167.16 CLP-176.29
   PLANETOCENTRIC CONIC
    C3 26.559 VHL 5.154 DLA 26.27 RAL 19.12 RAD 6568.1 VEL 12.163 PTH 2.18 VMP 8.829 DPA -1.20 RAP 10.28 ECC 1.4371 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                            -26.37
                                                                         117.39
                                                                                         254.46
                                                                                                            75.57
                                                                                                                         3 26 4
                                                                                                                                            2695.9
                                                         -24.63
         90.00
                      2 31 8 3295.91
23 18 36 3914.99
                                                                                                                                                                              149.06
                                                                                                             63.05
                                                                                                                         24 23 51
                                                                                                                                             3315.0
                                                                                                                                                             -12.58
                                                                         155.95
                                                                                         248.33
                                                        -9.03
         90.00
                                                                                                                                                                                83.52
                                                                          92.04
                                                                                         255.21
                                                                                                             77.72
                                                                                                                         5 10 11
                                                                                                                                            2341.2
                                                                                                                                                             -28.88
                      4 21 10 2941.19
0 15 11 3744.94
                                                        -27.47
       100.00
                                                                                                                        1 17 36
7 2 20
                                                                                                                                                             -10.31
                                                                                                                                                                              135.40
                                                                                                             60.75
                                                                                                                                             3144.9
                                                                         142.07
                                                                                         246.94
       100.00
                                                          -6.45
                                                                                                                                                                                55.97
                                                                                                                                            1971.0
                       6 19 29 2571.00
0 33 22 3687.89
                                                                                                             82.23
                                                                                                                                                             -34.11
                                                        -33.39
                                                                          65.14
                                                                                         256.42
       110.00
                                                                                         243.77
                                                                                                                                                               -5.81
                                                                                                                                                                              124.35
                                                                                                             55.84
                                                                                                                        1 34 50
                                                                                                                                            30A7.9
                                                                         134.58
                                                        -1.33
       110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 5587.8 SGR 424.6 SG3 137.3
RRT .2773 RRF .2559 RTF .9309
SGB 5603.9 R23 -.0037 R13 .9309
SGI 5589.0 SG2 407.9 THA 1.21
                                                                                                                                        ST 3034.5 SR 410.7 SS 663.1
CRT .9286 CRS -.8711 CST -.9908
     TOE 2.5931 TRA 2.5290 TC3-3.5089 BAU 1.2462
    ROE .3687 RRA -.0690 RC3 .0685 FAU .01693
FDE .7038 FRA 1.0168 FC3 -.5518 BSP 18174
BDE 2.6192 BRA 2.5299 BC3 3.5096 FSP -466
                                                                                                                                        LSA 3128.1 MSA 176.0 SSA 16.5
EL1 3058.4 EL2 151.2 ALF 7.18
                                                                                                                                                     ARRIVAL DATE JUN 27 1966
                                                                                  FLIGHT TIME 192.00
LAUNCH DATE DEC 17 1965
                                                                                  DISTANCE 561.858
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 25.243 GAL 6.26 AZL 86.76 MCA 283.53 SMA 119.10 ECC .25880 INC 3.2369 VI 30.264 RP 108.60 LAP -3.15 LOP 8.40 VP 36.466 GAP 14.14 AZP 89.24 TAL 161.33 TAP 84.86 RCA 88.27 APO 149.92 V2 34.895 RC 192.167 GL 15.86 GP -1.99 ZAL 56.01 ZAP 176.46 ETS 327.23 ZAE 130.76 ETE 182.02 ZAC 105.89 ETC 167.21 CLP-177.08
   PLANETOCENTRIC CONIC
    C3 29.051 VHL 5.390 DLA 26.38 RAL 22.14 RAD 6568.2 VEL 12.265 PTH 2.21 VHP 9.125 DPA -.16 RAP 12.44 ECC 1.4781
LNCH AZWITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZWITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           3 36 9
                                                                                        259.07
                                                                                                             74.65
                       2 40 42 3326.55
                                                        -24.09
                                                                        119.47
         90.00
                      25 33 7 3929.02
4 31 25 2969.67
0 29 2 3761.13
6 30 23 2597.39
0 46 33
                                                                                                                         24 38 36
                                                                                                                                              3329.0
                                                                                                                                                               -12.16
                                                                                          252.83
                                                                                                              62.92
                                                           -8.60
                                                                         156.75
         90.00
                      23 33 7
                                                                                                                         5 20 54
1 31 43
                                                                                                                                                                                 85.59
                                                                                                                                             2369.7
                                                                                                                                                              -28.60
                                                                                          259.91
                                                                                                             76.75
                                                         -27.04
                                                                           94.04
       100.00
                                                                                                                                                                -9.78
                                                                                                                                             3161.1
                                                                         142.97
                                                                                          251.38
                                                                                                             60.65
                                                           -5.91
       100.00
                                                                                                                         7 13 41
1 48 19
                                                                                                                                                              -34.01
                                                                                                                                             1997.4
                                                                                                                                                                                 58.02
                                                                           67.15
                                                                                          261.29
                                                                                                             81.07
                                                        -33.13
       110.00
                                                                                                                                             3106.2
                                                                                                                                                              -5.12
                                                            -.64
                                                                          135.54
                                                                                          248.11
                                                                                                             55.A2
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5597.7 SGR 424.6 SG3 133.3
RRT .3045 RRF .2836 RTF .9343
SGB 5613.8 R23 -.0025 R13 .9343
SGI 5599.2 SG2 404.3 THA 1.33
                                                                                                                                         ST 2995.4 SR 415.0 55 651.5
CRT .9212 CRS -.8641 CST -.9916
     TOE 2.6485 TRA 2.8582 TC3-3.2009 BAU 1.2434
     RDE .3899 RRA -.0596 RC3 .0547 FAU .01554
FDE .6909 FRA 1.0633 FC3 -.4630 BSP 18266
                                                                                                                                         LSA 3088.0 MSA 181.6 55A 15.8
EL1 3019.7 EL2 160.2 ALF 7.29
                                                                                                                                         EL1 3019.7 EL2 160.2 ALF
     BOE 2.6770 BRA 2.8588 BC3 3.2014 FSP -454
                                                                                                                                                    ARRIVAL DATE JUN 29 1966
                                                                                  FLIGHT TIME 194.00
LAUNCH DATE DEC 17 1965
                                                                                  DISTANCE 567.040
    RL 147.21 LAL -.00 LOL 84.85 VL 26.201 GAL 7.05 AZL 86.79 MCA 286.71 SMA 118.86 ECC .26668 INC 3.2071 V1 30.264
RP 108.57 LAP -3.07 LOP 11.59 VP 36.446 GAP 14.67 AZP 89.08 TAL 159.64 TAP 86.35 RCA 87.16 APO 150.56 V2 34.906
RC 194.034 GL 14.91 GP -1.95 ZAL 53.45 ZAP 177.11 ETS 319.25 ZAE 130.80 ETE 182.02 ZAC 108.20 ETC 167.22 CLP-177.86
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 31.959 VML 5.653 DLA 26.42 RAL 25.04 RAD 6568.3 VEL 12.383 PTH 2.24 VMP 9.446 DPA
                                                                                                                                                    .86 RAP 14.60 ECC 1.5260
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 25123 3353.56 -23.59 121.29 263.68 73.87 3 47 16 2753.6 -25.58 113.19 90.00 23 45 37 3949.89 -7.95 157.94 257.24 62.73 24 51 27 3349.9 -11.54 151.10 100.00 4 42 20 2995.86 -26.62 95.88 264.59 75.87 5 32 16 2395.9 -28.30 87.48
                                                                             5.88 264.59 75.87 5 32 16

4.17 255.74 60.52 1 44 20

9.08 266.12 79.96 7 25 17

6.71 252.38 55.82 2 0 41

MID-COURSE EXECUTION ACCURACY

SGT 5604.4 SGR 421 4 827
                                                                          144.17
                      0 41 17 3782.82
6 41 34 2622.80
0 58 33 3728.64
        100.00
                                                          -5.19
                                                                                                                                                                                60.00
                                                                                                                                                              -33.88
                                                                                                                                             2022.8
                                                                           69.08
        110.00
                                                         -32.85
                                                                                                                                                               -4.26
                                                                                                                                                                               130.50
                                                                                                                                             3128.6
                                                            .22
                                                                          136.71
                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2952.0 SR 417.8 SS 641.6
CRT .9134 CRS -.8573 CST -.9923
                                                                              SGT 5604.4 SGR 423.8 SG3 129.5
RRT .3322 RRF .3122 RTF .9377
SGB 5620.4 R23 -.0010 R13 .9377
     TOE 2.7051 TRA 3.2109 TC3-2.8916 BAU 1.2356
     ROE .4119 RRA -.0482 RC3 .0426 FAU .01411
FOE .6801 FRA 1.1127 FC3 -.3823 BSP 18266
BOE 2.7362 BRA 3.2113 BC3 2.8919 FSP -439
                                                                                                                                        LSA 3043.9 MSA 186.9 SSA
                                                                                                                                                                                15.1
                                                                                                                                         EL1 2976.7 EL2 168.6 ALF
                                                                              SG1 5606.2 SG2 399.6 THA 1.45
                                                                                                                                                     ARRIVAL DATE JUL 1 1966
                                                                                   FLIGHT TIME 196.00
 LAUNCH DATE DEC 17 1965
                                                                                   OISTANCE 572.128
     RL 147.21 LAL -.00 LOL 84.85 VL 26.159 GAL 7.89 AZL 86.82 HCA 289.90 SMA 118.63 ECC .27534 INC 3.1763 V1 30.264 RP 108.53 LAP -2.99 LOP 14.77 VP 36.428 GAP 15.24 AZP 88.92 TAL 157.98 TAP 87.88 RCA 85.97 APO 151.29 V2 34.918 RC 195.918 GL 13.97 GP -1.91 ZAL 51.00 ZAP 177.67 ETS 306.77 ZAE 130.82 ETE 182.01 ZAC 110.50 ETC 167.21 CLP-178.66
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                                  1.88 RAP 16.76 ECC 1.5816
     C3 35.352 VHL 5.946 DLA 26.39 RAL 27.82 RAD 6568.4 VEL 12.519 PTH 2.27 VHP 9.794 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           3 59 20
                                                                                                                                           2777.1
                                                                                           268.28
                                                                                                             73.21
                                       3377.07
                                                          -23.14
                                                                          122.87
                       3 3 3 3377.07
0 0 4 3977.27
          90.00
                                                                                                                            1 6 21
                                                                                                                                              3377.3
                                                                                                                                                               -10.72
                                                                                                                                                                                152.69
                                                                         159.49
                                                                                           261.54
                                                                                                              62.51
                                                          -7.09
          90.00
                                                                                                                            5 44 10
                                                                                                                                              2419.9
                                                                                                                                                               -28.00
                                                                                                                                                                                 89.20
                       4 53 50
0 51 57
                                                                            97.54
                                                                                           269.24
                                                                                                              75.08
                                                         -26.21
                                       3019.89
         100.00
                                                                                                                         1 55 27
7 37 2
                                                                                                                                              3209.7
                                                                                                                                                                -8.20
                                                                                                                                                                               139.05
                                                                          145.65
                                                                                           260.01
                                                                                                              60.39
                                                            -4.29
         100.00
                                        3809.69
                                                                                                                                              2047.3
                                                                                                                                                                                 61.89
                         6 52 55 2647.32
1 9 22 3755.02
                                                                            70.93
                                                                                           270.91
                                                                                                              78.90
                                                         -32.54
         110.00
                                                                                                                                              3155.0
                                                                                                                                                               -3.26
                                                                                                                                                                                131.88
                                                                                                                           2 11 57
                                                                          138.08
                                                                                           256.58
                                                                                                              55.84
                                                          1.23
                        1 9 22
         110.00
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                             SGT 5604.8 SGR 422.0 SG3 125.8

RRT .3592 RRF .3397 RTF .9414

SGB 5620.7 R23 -.0002 R13 .9414

SGI 5606.9 SG2 393.7 THA 1.56
                                                                                                                                        ST 2897.9 SR 418.7 SS 631.1
CRT .9054 CRS -.8502 CST -.9930
      TDE 2.7561 TRA 3.5808 TC3-2.5949 BAU 1.2265
      ROE .4344 RRA -.0348 RC3 .0321 FAU .01281
FOE .6688 FRA 1.1626 FC3 -.3136 BSP 18348
                                                                                                                                        LSA 2989.0 MSA 192.0 SSA 14.4
                                                                                                                                      EL1 2922.6 EL2 176.3 ALF 7.48
      BOE 2.7901 BRA 3.5809 BC3 2.5951 FSP -428
```

```
ARRIVAL DATE JUL 3 1966
LAUNCH DATE DEC 17 1965
                                                                                     FLIGHT TIME 198.00
                                                                                     DISTANCE 577.105
   HELIOCENTRIC CONIC
     RL 147.21 LAL -.00 LOL 84.85 VL 26.119 GAL 8.79 AZL 86.86 MCA 293.09 SMA 118.40 ECC .28489 INC 3.1442 V1 30.264
RP 108.49 LAP -2.89 LOP 17.96 VP 36.410 GAP 15.86 AZP 88.77 TAL 156.35 TAP 89.44 RCA 84.67 APO 152.14 V2 34.930
RC 197.761 GL 13.05 GP -1.87 ZAL 48.67 ZAP 178.06 ETS 287.55 ZAE 130.84 ETE 182.01 ZAC 112.79 ETC 167.15 CLP-179.47
    PLANETOCENTRIC CONIC
     C3 39.316 VHL 6.270 QLA 26.31 RAL 30.47 RAD 6568.5 VEL 12.676 PTH 2.30 VHP 10.174 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        3 15 31 3397.48
0 8 42 4010.57
          90.00
                                                           -22.73
                                                                           124.22
                                                                                           272.85
                                                                                                                72.65
                                                                                                                             4 12 9
                                                                                                                                                2797.5
                                                                                                                                                                   -24.89
                                                                                                                             1 15 33
                                                           -6.04
                                                                            161.38
                                                                                             265.73
                                                                                                                 62.28
                                                                                                                                                 3410.6
                                                                                                                                                                    -9.70
          90.00
                                                                                                                74.38 5 56 30
60.27 2 5 9
77.90 7 48 52
55.89 2 22 9
                        5 5 48 3041.99
1 1 7 3841.30
                                                                              99.07
                                                                                             273.85
                                                                                                                                                 2442.0
                                                                                                                                                                   -27.71
                                                                                                                                                                                      90.78
        100.00
                                                           -25.81
                                                                            147.40
                                                                                                                                                 3241.3
        100.00
                                                           -3.22
                                                                                             264.18
                        7 4 21 2671.05
1 19 4 3785.00
        110.00
                                                          -32.22
                                                                             72.70
                                                                                             275.65
                                                                                                                                              2071.0
3185.0
                                                                                                                                                 2071.0
                                                                                                                                                                  -33.55
                                                                                                                                                                                      63.72
                                                                                                                                                                 -2.11
                                                                                             260.70
        110.00
                                                           2.38
                                                                            139.65
                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SGT 5601.5 SGR 419.3 SG3 122.2
RRT .3864 RRF .3675 RTF .9453
SGB 5617.2 R23 .0005 R13 .9453
SGI 5603.9 SG2 386.6 THA 1.66
                                                                                                                                            ST 2840.3 SR 417.9 S5 622.0
CRT .8970 CRS -.8433 CST -.9937
     TOE 2.8077 TRA 3.9751 TC3-2.3078 BAU 1.2131
     ROE .4572 RRA -.0193 RC3 .0233 FAU .01153
FDE .6589 FRA 1.2155 FC3 -.2538 BSP 18403
                                                                                                                                          LSA 2930.9 MSA 196.6 SSA 13.7
                                                                                                                                            EL1 2865.0 EL2 183.1 ALF
     BOE 2.8447 BRA 3.9752 BC3 2.3079 FSP
                                                                -416
                                                                                     FLIGHT TIME 200.00
                                                                                                                                                          ARRIVAL DATE JUL 5 1966
LAUNCH DATE DEC 17 1965
                                                                                    DISTANCE 581.952
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 26.079 GAL 9.75 A7L 86.89 MCA 296.27 SMA 118.18 ECC .29543 INC 3.1105 V1 30.264 RP 108.45 LAP -2.79 LOP 21.15 VP 36.393 GAP 16.54 A7P 88.62 TAL 154.77 TAP 91.04 RCA 83.27 APO 153.10 V2 34.942 RC 199.580 GL 12.14 GP -1.83 ZAL 46.46 ZAP 178.14 ETS 262.57 ZAE 130.83 ETE 182.00 ZAC 115.06 ETC 167.07 CLP 179.70
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 43.957 VHL 6.630 DLA 26.18 RAL 32.98 RAD 6568.7 VEL 12.858 PTH 2.34 VHP 10.590 DPA 3.87 RAP 21.06 ECC 1.7234
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 28 36 3415.32 -22.37 125.40 277.38 72.17 4 25 31 2815.3 -24.60 117.44
90.00 0 15 39 4049.02 -4.82 163.54 269.80 62.06 1 23 8 3449.0 -8.52 156.82
100.00 5 18 3 3062.44 -25.43 100.47 278.41 73.73 6 9 6 2462.4 -27.42 92.23
100.00 1 8 53 3877.14 -2.01 149.37 268.25 60.17 2 13 30 3277.1 -5.97 142.81
110.00 7 15 47 2694.09 -31.87 74.41 280.33 76.94 8 0 41 2094.1 -33.34 651.49
110.00 1 27 39 3818.25 3.65 141.39 264.73 55.99 2 31 17 3218.3 -.84 135.18
                                                                              #ID-COURSE EXECUTION ACCURACY
                         1 27 39
                                                          3.65
                                                                                                                                                  3218.3
                                                                                                                                                                      -.84
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 5594.2 SGR 415.7 SG3 118.7
RRT .4135 RRF .3952 RTF .9493
SGB 5609.6 R23 .0010 R13 .9493
SG1 5596.8 SG2 378.4 THA 1.77
                                                                                                                                             ST 2779.3 SR 415.2 SS 614.4
CRT .8885 CRS -.8364 CST -.9944
     TOE 2.8592 TRA 4.3958 TC3-2.0337 BAU 1.1952
     ROE .4804 RRA -.0017 RC3 .0161 FAU .01027
FOE .6504 FRA 1.2715 FC3 -.2022 BSP 18442
BOE 2.8993 BRA 4.3958 BC3 2.0337 FSP -405
                                                                                                                                            LSA 2869.5 HSA 200.5 SSA 13.1
E11 2403.8 EL2 188.9 ALF 7.60
                                                                                                                                            EL1 2803.8 EL2 188.9 ALF
                                                                                                                                                         ARRIVAL DATE JUL 7 1966
                                                                                     FLIGHT TIME 202.00
LAUNCH DATE DEC 17 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 586.642
    RL 147.21 LAL -.00 LOL 84.85 VL 26.040 GAL 10.79 AZL 86.93 MCA 299.46 SMA 117.97 ECC .30711 INC 3.0748 VI 30.264
RP 108.41 LAP -2.68 LOP 24.35 VP 36.377 GAP 17.29 AZP 88.49 TAL 153.24 TAP 92.70 RCA 81.74 APO 154.20 VZ 34.955
RC 201.376 GL 11.26 GP -1.80 ZAL 44.38 ZAP 177.86 ETS 239.44 ZAE 130.80 ETE 182.00 ZAC 117.31 ETC 166.94 CLP 178.85
   PLANETOCENTRIC CONIC
     C3 49.406 VHL 7.029 DLA 25.99 RAL 35.35 RAD 6568.8 VEL 13.068 PTH 2.38 VHP 11.047 OPA
                                                                                                                                                     4.83 RAP 23.20 ECC 1.8131
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           71.75 4 39 13
61.88 1 29 18
73.15 6 21 51
60.11 2 20 37
76.03 8 12 25
56.14 2 39 25
                      3 42 2 3431.13
0 21 6 4091.81
5 30 29 3081.51
1 15 20 3916.67
7 27 8 2716.53
1 35 11 3854.41
                                                                                                                                                                               118.52
                                                          -22.03
                                                                                                                                            2831.1 -24.32
                                                                          126.44 281.86
         90.00
                                                                                                                                                                    -7.18
                                                                                                                                                                                    159.25
                                                                           165.94
                                                                                            273.74
                                                                                                                                                 3491.8
                                                            -3.45
         90.00
                                                          -25.06
                                                                           101.76
                                                                                        282.90
                                                                                                                                                2481.5
                                                                                                                                                                  -27.13
                                                                                                                                                                                    93.57
       100.00
                                                                                                                                                 3316.7
                                                                                                                                                                    -4.64
                                                                                                                                                                                    145.00
                                                                          151.54
                                                                                            272.20
                                                             -.67
       100.00
                                                                                                                                                                  -33,12
                                                                                                                                                                                     67.20
                                                          -31.52
                                                                             76.06
                                                                                          284.92
                                                                                                                                                 2116.5
       110.00
                                                                                                                                                 3254.4
                                                                                                                                                                                    137 07
                                                                           143.28
                                                                                            268.66
                                                          5.02
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ST 2720.0 SR 410.9 SS 609.4
CRT .8798 CRS -.8300 CST -.9951
                                                                                SGT 5585.2 SGR 411.4 SG3 115.4
     TOE 2.9164 TRA 4.8503 TC3-1.7704 BAU 1.1694
    ROE .5040 RRA .0185 RC3 .0105 FAU .00897
FDE .6447 FRA 1.3325 FC3 -.1572 BSP 18397
BDE 2.9596 BRA 4.8504 BC3 1.7704 FSP -392
                                                                               RRT .4410 RRF .4236 RTF .9534
SGB 5600.3 R23 .0015 R13 .9534
SGI 5588.1 SG2 369.1 THA 1.87
                                                                                                                                           LSA 2810.2 MSA 203.5 SSA 12.5
                                                                                                                                            EL1 2744.0 EL2 193.6 ALF 7.61
                                                                                                                                                          ARRIVAL DATE JUL 9 1966
                                                                                     FLIGHT TIME 204.00
LAUNCH DATE DEC 17 1965
                                                                                     DISTANCE 591.141
   HELIOCENTRIC CONIC
    RL 147.21 LAL -.00 LOL 84.85 VL 26.001 GAL 11.91 AZL 86.96 HCA 302.66 SMA 117.76 ECC .32008 INC 3.0368 V1 30.264 RP 108.37 LAP -2.56 LOP 27.54 VP 36.362 GAP 18.12 AZP 88.36 TAL 151.77 TAP 94.43 RCA 80.07 APO 155.46 V2 34.968 RC 203.147 GL 10.39 GP -1.77 ZAL 42.43 ZAP 177.30 ETS 223.28 ZAE 130.74 ETE 182.00 ZAC 119.54 ETC 166.78 CLP 177.97
   PLANETOCENTRIC CONIC
     C3 55.827 VHL 7.472 DLA 25.77 RAL 37.57 RAD 6569.0 VEL 13.311 PTH 2.43 VHP 11.552 DPA
                                                                                                                                                      5.78 RAP 25.32 ECC 1.9188
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       3 55 38 3445.38
0 25 14 4138.14
5 42 57 3099.42
1 20 36 3959.34
7 38 20 2738.40
1 41 42 3893.12
                                                                                                                                                                 -24.07
                                                          -21.73
                                                                                            286.26
                                                                                                                71.38
                                                                                                                             4 53 4
                                                                                                                                               2845.4
                                                                                                                                                                                    119.49
                                                                           127.37
                                                                                             277.56
                                                                                                                 61.75
                                                                                                                             1 34 12
                                                                                                                                                  3538.1
                                                                                                                                                                   -5.72
                                                                                                                                                                                     161.87
                                                            -1.96
                                                                           168.53
                                                                                                                 72.61 6 34 36
60.12 2 26 35
75.15 8 23 58
56.36 2 46 35
                                                          -24.70
                                                                            102.97
                                                                                             287.31
                                                                                                                                                  2499.4
                                                                                                                                                                   -26.85
                                                                                                                                                                                      94.83
       100.00
                                                                                             276.04
                                                                                                                                                  3359.3
                                                                                                                                                                   -3.20
                                                                                                                                                                                     147.35
                                                              .78
                                                                           153.88
                                                          -31.15
                                                                                             289.42
                                                                                                                                                 2138.4
                                                                                                                                                                  -32.87
                                                                                                                                                                                     68.86
                                                                             77.66
                                                                                             272.50
                                                                                                                                                 3293.1
                                                                                                                                                                    2.02
                                                                                                                                                                                    139.09
                                                                         145.33
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              SGT 5569.1 SGR 406.2 SG3 112.2

RRT .4679 RRF .4513 RTF .9576

SGB 5583.9 R23 .0015 R13 .9576

SGI 5572.3 SG2 358.7 THA 1.96
                                                                                                                                        ST 2656.0 SR 404.7 SS 505.3

CRT .8710 CRS -8835 CST -.9958

LSA 2746.3 MSA 205.6 SSA 11.9

EL1 2679.4 EL2 197.1 ALF 7.60
     TDE 2.9720 TRA 5.3325 TC3-1.5264 BAU 1.1392
     RDE .5276 RRA .0408 RC3 .0063 FAU .00774 FDE .6395 FRA 1.3967 FC5 -.1200 BSP 18438
     BOE 3.0185 BRA 5.3326 BC3 1.5264 FSP -382
```



2858.4

3587.3

2516.3

3404.6

2159.7

3334 .D

2.48 VHP 12.112 DPA

5 6 51

1 37 58

6 47 15 2 31 30 8 35 18 2 52 50

INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

71.05

61.69

72.11

60.19

74.31

56.66

ARRIVAL DATE JUL 11 1966

6.70 RAP 27.42 ECC 2.0438

120.37

164.63

149.84

141.22

96.01

70.47

-23.83

-4.15

-26.57

-1.67

-32.61

ORBIT DETERMINATION ACCURACY

LSA 2509.8 MSA 202.0 SSA 9.6 EL1 2433.4 EL2 197.4 ALF 7.26

3.58

LAUNCH DATE DEC 17 1965

HELIOCENTRIC CONIC

PLANETOCENTRIC CONIC

DIFFERENTIAL CORRECTIONS

90.00

90.00

100.00

100.00

110.00

110.00

LNCH AZHTH LNCH TIME L-I TIME

4 9 12 3458.45 0 28 11 4167.29

5 55 19 3116.34 1 24 45 4004.63

7 49 18 2759.72 1 47 16 3934.02

TOE 3.0328 TRA 5.8520 TC3-1.2982 BAU 1.1008

BOE 3.3262 BRA 7.6900 BC3 .7101 FSP --342

RRT .4948 RRF .4790 RTF .9619
SGB 5563.8 R23 .0014 R13 .9619
SGI 5552.9 SGZ 347.4 THA 2.05 ST 2592.8 SR 396.9 SS 603.6 CRT .8622 CRS -.8174 CST -.9964 ROE .5512 RRA .0657 RC3 .0034 FAU .00648 FDE .6366 FRA 1.4665 FC3 -.0885 BSP 18453 BDE 3.0825 BRA 5.8524 BC3 1.2982 FSP -372 LSA 2683.6 MSA 206.6 SSA 11.3 EL1 2615.4 EL2 199.3 ALF 7.56 ARRIVAL DATE JUL 13 1966 FLIGHT TIME 208.00 LAUNCH DATE DEC 17 1965 DISTANCE 599.391 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 25.928 GAL 14.46 AZL 87.05 HCA 309.05 SMA 117.37 ECC .35067 INC 2.9517 V1 30.264 RP 108.29 LAP -2.29 LOP 33.93 VP 36.335 GAP 20.06 AZP 88.14 TAL 149.06 TAP 98.11 RCA 76.21 APO 158.82 V2 34.994 RC 206.614 GL 8.74 GP -1.72 ZAL 38.92 ZAP 175.74 ETS 206.18 ZAE 130.50 ETE 181.99 ZAC 123.88 ETC 166.33 CLP 176.10 PLANETOCENTRIC CONIC C3 72.471 VHL 8.513 DLA 25.20 RAL 41.56 RAD 6569.4 VEL 13.922 PTH 2.54 VHP 12.736 DPA 7.60 RAP 29.49 ECC 2.1927
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 22 35 3470.56 -21.17 129.01 294.75 70.74 5 20 26 2870.6 -23.60 121.19 0 30 5 4238.63 6 7 29 3132.37 1 27 52 4052.05 7 59 58 2780.45 284.80 61.71 1 40 44 3638.6 -2.51 167.51 1.29 174.13 en inn 6 59 42 2 35 24 97.12 295.80 71.64 2532.4 -26.30 -24.01 105.18 100.00 152.44 283.34 60.34 3452.0 -.06 3.91 158.97 100.00 72.02 73.51 8 46 19 2180.4 -32.33 -30.37 80.69 298.05 110.00 MID-COURSE EXECUTION ACCURACY 5.20 9.61 149.78 3376.7 143.46 3976.74 110.00 1 51 53 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2531.1 SR 387.5 SS 604.6 CRT .8536 CRS -.8117 CST -.9970 SGT 5523.9 SGR 393.1 SG3 106.2 RRT .5216 RRF .5067 RTF .9661 SGB 5539.9 R23 .0010 R13 .9661 TOE 3.1006 TRA 6.4137 TC3-1.0861 BAU 1.0523 ROE .5749 RRA .0931 RC3 .0015 FAU .00518 FOE .6361 FRA 1.5429 FC3 -.0619 BSP 18448 BOE 3.1534 BRA 6.4144 BC3 1.0862 FSP -362 LSA 2622.8 MSA 206.4 SSA 10.8 EL1 2552.7 EL2 200.1 ALF 7.49 SG1 5529.7 SG2 335.1 THA 2.13 ARRIVAL DATE JUL 15 1966 FLIGHT TIME 210.00 LAUNCH DATE DEC 17 1965 DISTANCE 603.022 HELIOCENTRIC CONIC RL 147.21 LAL -.00 LOL 84.85 VL 25.893 GAL 15.92 AZL 87.10 MCA 312.25 SMA 117.18 ECC .36877 INC 2.9031 V1 30.264
RP 108.25 LAP -2.15 LOP 37.13 VP 36.323 GAP 21.21 AZP 88.05 TAL 147.86 TAP 100.11 RCA 73.97 APO 160.39 V2 35.007
RC 208.309 GL 7.94 GP -1.70 ZAL 37.38 ZAP 174.81 ETS 201.54 ZAE 130.31 ETE 181.99 ZAC 125.98 ETC 166.04 CLP 175.10 PLANETOCENTRIC CONIC C3 83.300 VHL 9.127 DLA 24.87 RAL 43.31 RAD 6569.6 VEL 14.306 PTH 2.60 VHP 13.436 DPA 8.46 RAP 31.53 ECC 2.3709 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2881.8 -23.39 121.94 5 33 42 5 42 32 7 11 49 70.46 129.74 298.81 -20.91 4 35 40 3481.82 90.00 170.46 177.09 288.21 61.83 3691.6 - .80 0 31 1 6 19 22 4291.60 2.99 7 11 49 2 36 22 98.17 299.85 71.21 2547.5 -26.03 106.18 3147.51 -23.68 100.00 1 30 0 4101.14 8 10 17 2800.47 1 55 34 4020.95 3501.1 1.60 155.14 286.80 60.58 161.68 5.56 73.51 8 56 58 2200.5 -32.04 302.14 72.75 82.12 -29.98 145.80 3 2 35 3420.9 6.A7 283.36 57.50 11.24 152.17 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2473.1 SR 376.8 \$5 609.0 SGT 5500.4 SGR 385.5 SG3 103.5 TOE 3.1805 TRA 7.0263 TC3 -.8888 BAU .9898 CRT .8456 CRS -.8070 CST -.9975 RRT .5487 RRF .5348 RTF .9703 SGB 5513.9 R23 .0006 R13 .9703 SGI 5504.4 SGZ 322.0 THA 2.21 ROE .5988 RRA .1234 RC3 .0008 FAU .00377 FOE .6593 FRA 1.6279 FC3 -.0392 BSP 18343 BOE 3.2364 BRA 7.0274 BC3 .8888 FSP -351 LSA 2566.5 MSA 204.8 SSA 10.2 EL1 2493.7 EL2 199.5 ALF 7.39 ARRIVAL DATE JUL 17 1966 FLIGHT TIME 212.00 LAUNCH DATE DEC 17 1965 DISTANCE 606.211 RL 147.21 LAL -.00 LOL 84.85 VL 25.860 GAL 17.54 AZL 87.15 MCA 315.45 SMA 117.00 ECC .38915 INC 2.8493 VI 30.264 RP 108.21 LAP -2.00 LOP 40.34 VP 36.312 GAP 22.51 AZP 87.97 TAL 146.79 TAP 102.24 RCA 71.47 APO 162.53 V2 35.020 RC 209.976 GL 7.17 GP -1.68 ZAL 35.99 ZAP 173.80 ETS 198.20 ZAE 130.06 ETE 181.98 ZAC 128.02 ETC 165.72 CLP 174.04 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 96.359 VHL 9.816 DLA 24.50 RAL 44.90 RAD 6569.9 VEL 14.755 PTH 2.67 VHP 14.225 DPA 9.28 RAP 33.53 ECC 2.5858 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2892.2 122.63 302.70 70.21 5 46 33 -23.19 -20.68 130.41 4 48 21 0 31 I 3492.18 90.00 173.48 3745.8 .95 62.05 1 43 26 4.73 180.13 291.47 4345.76 90.00 -25.77 99.14 70.81 7 23 33 2561.7 -23.37 107.12 303.72 100.00 6 30 52 3161.66 2 40 22 3.31 157.90 3551.5 290.10 60.92 7.24 164.48 72.04 9 7 11 72.04 9 7 11 286.72 58.06 3 6 7 MID-COURSE EXECUTION ACCURACY SGT 5468.2 SGR 376.4 100.00 1 31 11 4151.51 74.93 -31.75 83.47 2219.6 -29.58 2819.62 110.00 8 20 11 148.21 8.57 3466.3 12.89 154.65 1 58 21 4066.31 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2414.1 SR 364.6 SS 616.0 CRT .8379 CRS -.8025 CST -.9980 SGT 5468.2 SGR 376.9 SG3 100.8 RRT .5751 RRF .5622 RTF .9744 TOE 3.2674 TRA 7.6884 TC3 -.7101 BAU .9148 ROE .6224 RRA .1562 RC3 .0007 FAU .00230 FOE .6445 FRA 1.7208 FC3 -.0206 BSP 18338

FLIGHT TIME 206.00

DISTANCE 595.408

RL 147.21 LAL -.00 LOL 84.85 VL 25.964 GAL 13.13 AZL 87.00 HCA 305.85 SMA 117.56 ECC .33452 INC 2.9960 V1 30.264 RP 108.33 LAP -2.43 LOP 30.74 VP 36.348 GAP 19.04 AZP 88.24 TAL 150.37 TAP 96.22 RCA 78.23 APO 156.89 V2 34.981 RC 204.883 GL 9.55 GP -1.75 ZAL 40.61 ZAP 176.58 ETS 212.94 ZAE 130.64 ETE 182.00 ZAC 121.73 ETC 166.57 CLP 177.06

290.56

281.25

291.62

279.76

293.80

276.24

MID-COURSE EXECUTION ACCURACY

128.23

171.27

104.11

156.36

147.49

79.21

C3 63.427 VHL 7.964 DLA 25.50 RAL 39.64 RAD 6569.2 VEL 13.593 PTH

-21.44

-.37

2.31

8.02

-24.35

-30.76

SGB 5481.1 R23 .0000 R13 .9744 SG1 5472.5 SG2 308.1 THA 2.28

```
LAUNCH DATE DEC 17 1965
                                                                              FLIGHT TIME 214.00
                                                                                                                                            ARRIVAL CATE JUL 19 1966
    HELIOCENTRIC CONIC
                                                                             015TANCE 608.842
     RL 147.21 LAL -.00 LOL 84.85 VL 25.828 GAL 19.34 A7L 87.21 HCA 318.66 SMA 116.83 ECC .41218 INC 2.7890 V1 30.264
RP 108.17 LAP -1.84 LOP 43.54 VP 36.302 GAP 23.99 A7P 87.91 TAL 145.87 TAP 104.53 RCA 68.68 APO 164.99 V2 35.034
     RC 211.617 GL 6.43 GP -1.66 7AL 34.76 7AP 172.70 ETS 195.69 7AE 129.73 ETE 181.97 7AC 129.99 ETC 165.35 CLP 172.90
    PLANETOCENTRIC CONIC
     C3 112.234 VML 10.594 OLA 24.10 RAL 46.31 RAD 6570.1 VEL 15.283 PTH 2.74 VMP 15.119 OPA 10.07 RAP 35.47 ECC 2.8471
     C3 112.234 VML 10.394 DLA 24.10 RAL 46.31 RAD 6570.1 VEL 15.283 PTH 2.74 VMP 15.119 DPA 10.07 RAP 35.47 ECC 2.8471 LNCH AYMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 0 32 3501.50 -20.46 131.00 306.39 69.99 5 58 54 2901.5 -23.00 123.25 90.00 0 30 4 4400.71 6.47 183.22 294.56 62.37 1 43 25 3800.7 2.72 176.55 100.00 6 41 55 3174.65 -23.08 107.97 307.40 70.45 7 34 50 2574.6 -25.53 100.03 100.00 1 31 23 4202.80 8.92 167.36 293.24 61.35 2 41 26 3602.8 5.03 160.73 110.00 8 29 37 2837.69 -29.20 84.73 309.76 71.38 9 16 55 2237.7 -31.46 76.26 110.00 2 0 10 4112.52 14.53 157.22 289.94 58.72 3 8 42 3512.5 10.29 150.69
    DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SGT 5432.3 SGR 367.5 SG3 98.3
RRT .6012 RRF .5894 RTF .9783
SGB 5444.8 R23 -.0006 R13 .9783
     TDE 3.3695 TRA 8.4135 TC3 -.5470 BAU .8207
                                                                                                                                ST 2357.6 SR 351.2 SS 626.8 CRT .8309 CRS -.7990 CST -.9984
     RDE .6462 RRA .1919 RC3 .0013 FAU .00064
     FOE .6537 FRA 1.8250 FC3 -.0050 BSP 18304
                                                                                                                               LSA 2456.6 MSA 197.9 5SA 9.1
     BOE 3.4309 BRA 8.4157 BC3 .5470 FSP
                                                                         SG1 5436.8 SG2 293.4 THA 2.34
                                                          -333
                                                                                                                                EL1 2375.7 EL2 193.9 ALF 7.10
 LAUNCH DATE DEC 17 1965
                                                                             FLIGHT TIME 216.00
                                                                                                                                            ARRIVAL DATE JUL 21 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 610.761
     RL 147.21 LAL -.00 LOL 84.85 VL 25.798 GAL 21.36 A7L 87.28 HCA 321.87 SMA 116.67 ECC .43831 INC 2.7204 V1 30.264
RP 108.13 LAP -1.68 LOP 46.74 VP 36.294 GAP 25.68 AZP 87.86 TAL 145.15 TAP 107.02 RCA 65.53 APO 167.81 V2 35.047
RC 213.230 GL 5.70 GP -1.64 ZAL 33.70 ZAP 171.50 ETS 193.73 ZAE 129.31 ETE 181.95 ZAC 131.87 ETC 164.95 CLP 171.66
   PLANETOCENTRIC CONIC
     C3 131.705 VHL 11.476 DLA 23.66 RAL 47.53 RAD 6570.4 VEL 15.907 PTH
     C3 131.705 VHL 11.476 DLA 23.66 RAL 47.53 RAD 6570.4 VEL 15.907 PTH 2.81 VHP 16.140 DPA 10.80 RAP 37.33 ECC 3.1675 LNCM AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                    5 12 11 3509.53
0 28 9 4456.13
                                                      -20.27
                                                                    131.52
                                                                                    309.86
                                                                                                                 6 10 40
                                                                                                       69.80
                                                                                                                                  2909.5
                                                                                                                                                   -22.84
                                                                                                                                                                   123.79
         90.00
                                                        8.21
                                                                     186.37
                                                                                     297.46
                                                                                                                 1 42 26
7 45 34
                                                                                                       62.80
                                                                                                                                    3456.1
                                                                                                                                                      4.50
                                                                                                                                                                    179.65
                    6 52 27 3186.22
1 30 34 4254.70
8 38 31 2854.37
       100.00
                                                      -22.81
                                                                     108.73
                                                                                     310.85
                                                                                                       70.14
                                                                                                                                    2586.2
                                                                                                                                                    -25.31
                                                                                                                                                                    100.82
       100.00
                                                       10.60
                                                                     170.29
                                                                                    296.19
                                                                                                       61.89
                                                                                                                 2 41 29
9 26 6
                                                                                                                                    3654.7
                                                                                                                                                      6.76
                                                                                                                                                                    163.61
       110.00
                                                     -28.83
                                                                      85.89
                                                                                    313.22
                                                                                                       70.78
                                                                                                                                    2254.4
                                                                                                                                                    -31.17
                                                                                                                                                                     77.48
                                                                       MID-COURSE EXECUTION ACCURACY
       110.00
                      2 0 59
                                    4159.28
                                                      16.17
                                                                     159.85
                                                                                                                                    3559.3
                                                                                                                                                    12.00
                                                                                                                                                                   153.23
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                         RRT .6270 RRF .6163 RTF .9820
SGB 5404.1 R23 -.0013 R13 .9820
SGI 5397.0 SG2 278.2 THA 2.39
     TOE 3.4900 TRA 9.2100 TC3 -.3993 BAU .7030
                                                                                                                               ST 2303.2 SR 336.7 SS 641.8
CRT .8249 CRS -.7964 CST -.9987
    RDE .6701 RRA .2304 RC3 .0024 FAU-.00125
FDE .6672 FRA 1.9423 FC3 .0082 8SP 18255
BDE 3.5537 BRA 9.2129 BC3 .3993 FSP -325
                                                                                                                            LSA 2406.9 MSA 192.4 SSA 8.5
EL1 2320.0 EL2 188.9 ALF 6.92
LAUNCH DATE DEC 17 1965
                                                                             FLIGHT TIME 218.00
                                                                                                                                          ARRIVAL CATE JUL 23 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 611.761
    RL 147.21 LAL -.00 LOL 84.85 VL 25.771 GAL 23.65 AZL 87.36 HCA 325.08 SMA 116.53 ECC .46807 INC 2.6412 V1 30.264
RP 108.09 LAP -1.51 LOP 49.95 VP 36.287 GAP 27.62 AZP 87.83 TAL 144.67 TAP 109.74 RCA 61.98 APO 171.07 V2 35.060
RC 214.816 GL 5.00 GP -1.62 ZAL 32.84 ZAP 170.18 ETS 192.16 ZAE 128.77 ETE 181.94 ZAC 133.63 ETC 164.52 CLP 170.31
   PLANETOCENTRIC CONIC
    C3 155.822 VHL 12.483 DLA 23.19 RAL 48.54 RAD 6570.7 VEL 16.648 PTH 2.89 VHP 17.313 DPA 11.49 RAP 39.09 ECC 3.5644
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 23 12 3515.89
0 25 11 4511.76
7 2 25 3196.01
1 28 40 4306.88
                                                     -20.12
        90.00
                                                                   131.92 313.05
                                                                                                 69.65 6 21 48
                                                                                                                               2915.9 -22.71 124.21
        90.00
                                                       9.92
                                                                    189.56
                                                                                    300.14
                                                                                                      63.34
                                                                                                                 1 40 23
                                                                                                                                   3911.8
                                                                                                                                                      6.27
                                                                                                                                                                   182.78
                                                                               314.03
                                                                                                                7 55 41
       100.00
                                                     -22.58
                                                                    109.36
                                                                                                      69.88
                                                                                                                                   2596.0
                                                                                                                                                   -25.12
       100.00
                                                                                   298.92
                                                                                                      62.52
                                                      12.26
                                                                   173.28
                                                                                                                  2 40 27
                                                                                                                                   3706.9
                                                                                                                                                      8.48
                                                                                                                                                                  166.53
       110.00
                     8 46 50 2869.31
                                                                                                                  9 34 39
                                                    -28.49
                                                                      86.92
                                                                                 316.40
                                                                                                      70.26
                                                                                                                                2269.3
                                                                                                                                                   -30.91
       110.00
                      2 0 44
                                   4206.34
                                                                                                                  3 10 50
                                                      17.78
                                                                    162.55
                                                                                   295.81
                                                                                                      60.31
                                                                                                                                   3606.3
                                                                                                                                                   13.69
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5349.6 SGR 348.6 SG3 93.7
RRT .6524 RRF .6429 RTF .9854
SGB 5360.8 R23 -.0020 R13 .9854
    TOE 3.6376 TRAID.0915 TC3 -.2654 BAU .5530
                                                                                                                               ST 2252.4 SR 321.4 SS 662.5
    ROE .6945 RRA .2718 RC3 .0039 FAU-.00354
FOE .6869 FRA 2.0760 FC3 .0197 BSP 18101
BDE 3.7033 BRAID.0952 BC3 .2655 FSP -316
                                                                                                                             CRT .8203 CRS -.7952 CST -.9990
                                                                                                                              LSA 2362.4 MSA 185.5 SSA 8.0
                                                                                                                              EL1 2267.9 EL2 182.5 ALF 6.72
                                                                        SG1 5354.4 SG2 262.4 THA 2.43
LAUNCH DATE DEC 17 1965
                                                                             FLIGHT TIME 220.00
                                                                                                                                           ARRIVAL DATE JUL 25 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 611.566
   RL 147.21 LAL -.00 LOL 84.85 VL 25.746 GAL 26.26 A7L 87.45 MCA 328.29 SMA 116.40 ECC .50207 INC 2.5481 V1 30.264 RP 108.05 LAP -1.34 LOP 53.16 VP 36.282 GAP 29.88 A7P 87.83 TAL 144.48 TAP 112.76 RCA 57.96 APO 174.84 V2 35.073
    RC 216.375 GL
                           4.32 GP -1.60 7AL 32.21 7AP 168.71 ETS 190.86 7AE 128.09 ETE 181.91 7AC 135.26 ETC 164.08 CLP 168.82
  PLANETOCENTRIC CONIC
    C3 186.015 VHL 13.639 OLA 22.67 RAL 49.31 RAD 6571.0 VEL 17.531 PTH
                                                                                                       2.97 VHP 18.670 DPA 12.11 RAP 40.73 ECC 4.0613
   LNCH AZMTH LNCH TIME LI TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 8 LONG 90.00 5 33 32 3520.13 -20.02 132.19 315.93 69.55 6 32 12 2420.1 -20.63 124.10
                                                                                                                  6 32 12
                                                                                                                                                 -22.63
        90.00
                      0 21 1
                                   4567.42
                                                     11.61
                                                                    192.78
                                                                                   302.55
                                                                                                      63.99
                                                                                                                  1 37 9
                                                                                                                                    3967.4
                                                                                                                                                     8.02
                                                                                                                                                                   185.94
      100.00
                      7 11 42
                                  3203.57
                                                    -22.41
                                                                    109.86
                                                                                   316.88
                                                                                                      69.68
                                                                                                                  8 5 6
                                                                                                                                   2603.6
                                                                                                                                                   -24.97
                                                                                                                                                                   102.00
                    1 25 32 4359.21
8 54 28 2882.08
      100.00
                                                                                                                  2 38 11
                                                                                                                                                                   169.48
                                                    13.88
                                                                    176.32
                                                                                   301.39
                                                                                                      63.26
                                                                                                                                   3759.2
                                                                                                                                                   10.19
      110.00
                                                     -28.19
                                                                     87.80
                                                                                   319.24
                                                                                                      69.82
                                                                                                                  9 42 30
                                                                                                                                   2282.1
                                                                                                                                                  -30.68
                                                                                                                                                                   79.48
      110.00
                     1 59 16
                                   4253.51
                                                     19.34
                                                                    165.31
                                                                                  298.40
                                                                                                     61.25
                                                                                                                  3 10 9
                                                                                                                                   3653.5
                                                                                                                                                  15.36
                                                                                                                                                                  158.46
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                      SGT 5299.3 SGR 334.9 SG3 91.6

RRT .6767 RRF .6683 RTF .9884

SGB 5309.8 R23 -.0028 R13 .9884

SGI 5304.1 SG2 246.3 THA 2.45
                                                                                                                            ST 2201.0 SR 305.2 S5 688.3 CRT .8169 CRS -.1949 CST -.9992 LSA 2319.4 MSA 177.5 SSA 7.4 EL1 2215.2 EL2 174.9 ALF 6.50
    TOE 3.8101 TRA11.0608 TC3 -.1474 BAU .3667
   ROE .7192 RRA .3156 RC3 .0055 FAU-.00628
FOE .7122 FRA 2.2273 FC3 .0292 BSP 18036
BOE 3.8774 BRA11.0653 BC3 .1475 FSP -309
```

ARRIVAL DATE FEB 26 1966

```
LAUNCH DATE DEC 18 1965
                                                                               01STANCE 197.166
    RL 147.2D LAL -.OD LOL 85.86 VL 28.333 GAL -11.28 AZL 86.65 HCA 89.86 SMA 132.66 ECC .22324 INC 3.3492 V1 30.266 RP 107.69 LAP 3.35 LOP 175.73 VP 38.268 GAP -7.02 AZP 89.99 TAL 229.93 TAP 319.79 RCA 103.04 APO 162.27 V2 35.191 RC 58.184 GL 15.23 GP 3.79 ZAL 150.92 ZAP 30.15 ETS 352.25 ZAE 153.82 ETE 347.10 ZAC 60.38 ETC 164.59 CLP -29.93
   HELIOCENTRIC CONIC
    C3 38.208 VHL 6.181 DLA -6.75 RAL 290.32 RAD 6568.5 VEL 12.632 PTH 2.29 VHP 5.601 DPA -12.33 RAP 327.87 ECC 1.6288 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 20 2163.97 -18.31 38.30 160.90 111.99 2 24 24 1564.0 -15.17 31.04
   PLANETOCENTRIC CONIC
                                                                                                          79.64 13 32 16
                                                                                       165.36
                                                                       235.34
                                    5229.63
                                                       26.50
        90.00
                     12 5 6
3 6 28
                                                                                                                                                                           11.98
                                                                                                       113.07
                                                                                                                       3 38 20
                                                                                                                                         1312.0
                                                                                                                                                         -16.26
                                                                                       160.36
                                   1911.95
                                                       -19.55
                                                                        19.23
       100.00
                                                                                                        78.60 14 52 17
116.14 4 36 2
75.67 16 3 57
                                                                                                                                                                         206.68
                                                                                                                                        4356.9
                                                                                                                                                         25.97
                                                        27.82
                                                                       215.00
                                                                                       165.08
                    13 29 40
                                    4956.88
       100.00
                                                                                                                                                                          355.95
                                                                                                                                        1121.3
                                                                                                                                                         -19.16
                                                                         3.14
                                                                                      158.73
                                    1721.34
                                                       -22.86
                       4 7 20
       110.00
                                                                                                                                                                         187.64
                                                                                                                                       4120.3
                                                                                                                                                         29.08
                                                                       196.10
                                                                                       164.14
                                    4720.26
                                                        31.37
       110.00
                    14 45 16
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ST 176.7 SR 380.3 53 256.4
CRT .8124 CRS .8774 CST .4506
LSA 465.8 MSA 155.3 SSA 23.2
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 511.1 SGR 391.4 SG3 188.6
RRT .0534 RRF -.1274 RTF -.4534
    TDE -.1607 TRA -.3371 TC3 .3027 BAU .1569
    RDE -.4097 RRA .0740 RC3 -.0523 FAU .06906
                                                                           SGB 643.7 R23 -.0693 R13 -.4599
SG1 512.1 SG2 390.0 THA 5.59
    FDE .4866 FRA -.9709 FC3-1.5649 BSP 1136
BDE .4401 BRA .3451 BC3 .3072 FSP -517
                                                                                                                                     EL! 408.2 EL2 96.0 ALF 68.04
                                                                                                                                                 ARRIVAL DATE FEB 28 1966
                                                                                FLIGHT TIME 72.00
LAUNCH DATE DEC 18 1965
    RL 147.20 LAL -.00 LOL 85.86 VL 28.415 GAL -11.19 A7L 86.68 MCA 93.10 SMA 133.28 ECC .21947 INC 3.3176 V1 30.266
RP 107.72 LAP 3.31 LOP 178.96 VP 38.320 GAP -6.24 A7P 90.18 TAL 230.98 TAP 324.08 RCA 104.03 APO 162.53 V2 35.181
RC 60.133 GL 15.29 GP 4.07 ZAL 151.46 ZAP 34.06 ETS 352.72 ZAE 155.36 ETE 347.66 ZAC 59.66 ETC 164.66 CLP -33.84
                                                                                DISTANCE 203.916
   HELIOCENTRIC CONIC
    C3 37.424 VHL 6.118 DLA -6.78 RAL 289.66 RAD 6568.5 VEL 12.601 PTH 2.29 VHP 5.240 DPA -12.28 RAP 327.12 ECC 1.6159
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 45 55 2157.82 -18.15 37.92 159.89 112.11 2 21 53 1557.8 -14.99 30.67
90.00 12 2 14 5225.31 26.45 235.03 164.32 79.50 13 29 19 4625.3 24.73 226.79
   PLANETOCENTRIC CONIC
                                                                                                                     3 35 47
14 49 21
                                                                                                         113.21
                       3 4 1 1905.84
13 26 49 4952.52
                                                        -19.39
                                                                         18.85
        100.00
                                                                                                                                                                          206.38
                                                                                                                                                          25.89
                                                                                                                                          4352.5
                                                                        214.68
                                                                                        164.03
                                                                                                           78.45
                                                        27.76
                      13 26 49
        100.00
                                                                                                                                                                          355.60
                                                                                                           116.29 4 33 27
75.49 16 1 3
                                                                                                                                        1115.3
                                                                                                                                                         -18.96
                                                                          2.76
                                                                                        157.72
                                                                                                         116.29
                       4 4 52 1715.34
14 42 27 4715.79
                                                        -22.68
        110.00
                                                                                                                                                                           187.33
                                                                        195.77
                                                                                                                                          4115.8
                                                                                                                                                           28.99
                                                                                        163.09
                                                         31.30
                     14 42 27
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 172.8 SR 380.8 55 274.0
CRT .7931 CRS .8726 CST .4117
LSA 472.0 MSA 163.1 55A 23.3
                                                                            SGT 503.4 SGR 391.1 SG3 214.7
RRT .0549 RRF -.1518 RTF -.4152
     TOE -.1525 TRA -.3416 TC3 .2938 BAU .1488
     RDE -. 4060 RRA .0765 RC3 -. 0460 FAU .07736
                                                                            SGB 637.5 R23 -.0947 R13 -.4243
SG1 504.5 SG2 389.6 THA 6.07
     FDE .5459 FRA-1.1213 FC3-1.7895 BSP 1093
                                                                                                                                     EL1 406.4 EL2 98.6 ALF 68.91
     BOE .4337 BRA .3501 BC3 .2974 FSP
                                                                                                                                                ARRIVAL DATE MAR 2 1966
                                                                                 FLIGHT TIME 74.00
 LAUNCH DATE DEC 18 1965
                                                                                DISTANCE 210.632
     RL 147.20 LAL -.00 LOL 85.86 VL 28.484 GAL -11.11 A7L 86.71 MCA 96.33 SMA 133.81 ECC .21623 INC 3.2858 VI 30.266
RP 107.75 LAP 3.27 LOP 182.20 VP 38.361 GAP -5.50 A7P 90.36 TAL 231.87 TAP 328.20 RCA 104.87 APO 162.74 V2 35.171
RC 62.133 GL 15.33 GP 4.38 7AL 151.91 7AP 38.19 ETS 353.13 7AE 157.23 ETE 348.22 7AC 58.71 ETC 164.72 CLP -37.97
    HELIOCENTRIC CONIC
      C3 36.718 VHL 6.060 DLA -6.82 RAL 289.11 RAD 6568.4 VEL 12.573 PTH 2.28 VHP 4.911 DPA -12.27 RAP 326.15 ECC 1.6043 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     PLANETOCENTRIC CONIC
                                                                                                                                      1551.9
                                                                                                        112.23 2 19 51
79.38 13 26 48
113.34 3 33 44
                      1 43 59 2151.92
11 59 46 5221.59
3 2 4 1900.00
13 24 22 4948.74
                                                                         37.55
                                                                                      159.01
                                                         -18.00
          90.00
                                                                                                                                                                           226.53
                                                                                                                                          4621.6
                                                                                                                                                          24.67
                                                         26.40
                                                                        234.77
                                                                                        163.42
          90.00
                                                                                                                                         1300.0
                                                                                                                                                          -15.91
                                                                                                                                                                            11.27
                                                                                        158.47
                                                        -19.23
                                                                         18.48
                                                                                                           78.32 14 46 51
116.43 4 31 22
         100.00
                                                                                                                                          4348.7
                                                                                                                                                          25.82
                                                                                                                                                                           206.12
                                                         27.71
                                                                        214.41
                                                                                        163.13
         100.00
                                                                                                                                                          -18.77
                                                                                                                                                                           355.26
                                                                                                                                          1109.6
                       4 2 53 1709.62
14 40 3 4711.88
                                                         -22.51
                                                                           2.41
                                                                                         156.84
                                                                                                          116.43
                                                                                                                     15 58 35
                                                                                                                                                          28.90
                                                                                                                                                                           187.06
                                                                                                                                          4111.9
                                                                                        162.19
                                                                                                           75.33
                                                                         195.49
                                                         31.23
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 159.4 SR 380.7 SS 292.6
CRT .7633 CRS .8706 CST .3631
LSA 479.0 MSA 171.4 SSA 23.2
                                                                             SGT 493.1 SGR 390.4 SG5 243.1
RRT .0540 RRF -.1812 RTF -.3546
      TOE -.1435 TRA -.3534 TC3 .2756 BAU .1366
      ROE -.4019 RRA .0801 RC3 -.0383 FAU .08636
FOE .6132 FRA-1.2818 FC3-2.0363 BSP 988
BOE .4268 BRA .3624 BC3 .2782 FSP -693
                                                                             SGB 628.9 R23 -.1303 R13 -.3676
                                                                                                                                      EL1 403.7 EL2 103.2 ALF 69.87
                                                                             SG1 494.3 SG2 388.9 THA 6.45
                                                                                                                                                  ARRIVAL DATE MAR 4 1966
                                                                                  FLIGHT TIME 76.00
  LAUNCH DATE DEC 18 1965
      RL 147.2D LAL -.0D LOL 85.86 VL 28.540 GAL -11.02 AZL 86.75 HCA 99.56 SNA 134.24 ECC .21343 INC 3.2537 VI 30.266
RP 107.78 LAP 3.21 LOP 185.44 VP 38.393 GAP -4.79 AZP 90.54 TAL 232.61 TAP 332.17 RCA 105.59 APO 162.89 V2 35.160
RC 64.180 GL 15.35 GP 4.70 ZAL 152.27 ZAP 42.55 ETS 353.51 ZAE 159.44 ETE 348.82 ZAC 57.54 ETC 164.78 CLP -42.33
                                                                                 DISTANCE 217.313
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                              2.27 VHP 4.615 DPA -12.31 RAP 324.95 ECC 1.5936
      C3 36.070 VHL 6.006 DLA -6.85 RAL 288.67 RAD 6568.4 VEL 12.548 PTH
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00 1 42 31 2146.20
                                                                                                         112.35 2 18 17
79.27 13 24 41
3 32 9
                                                                                       158.26
                                                                                                                         2 18 17
                                                                                                                                          1546.2
                                                                                                                                                          -14.67
                                                         -17.85
                                                                          37.20
                                                                                                                                                                            226.31
                                                                                                                                           4618.3
                                                                                                                                                            24.61
                                                                                         162.66
                       11 57 42 5218.31
                                                           26.36
                                                                         234.54
           90.00
                                                                                                                                                                             10.93
                                                                                                                                           1294.3
                                                                                                                                                           -15.74
                                                                                         157.72
                                                                           18.13
                                                                                                            3 0 35 1894.34
                                                         -19.08
          100.00
                                                                                                                                                                            205.89
                                                                                                                                                           25.76
                                                                                                                                           4345.4
                                                                         214.18
                                                                                         162.37
                       13 22 19 4945.39
                                                           27.66
          100.00
                                                                                                                                           1104.1
                                                                                                                                                          -18.59
                                                                           2.07
                                                                                                           116.57
                                                                                          156.09
                          4 1 21 1704.10
                                                          -22.34
          110.00
                                                                                                                                                             28.82
                                                                                                                                          4108.4
                                                                         195.23
                                                                                          161.42
                                        4708.40
                                                           31.17
                       14 38 3
          110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 165.6 SR 380.0 SS 311.3

CRT .7173 CRS .8697 CST .2956

LSA 485.7 MSA 179.7 SSA 23.0

EL1 399.7 EL2 109.7 ALF 71.17
                                                                             SGT 482.0 SGR 389.4 SG3 274.0
RRT .0443 RRF -.2150 RTF -.2686
       TDE -.1320 TRA -.3716 TC3 .2484 BAU
                                                               .1206
       ROE -. 3975 RRA .0848 RC3 -. 0289 FAU .09611
                                                                             SCB 619.7 R23 -.1807 R13 -.2843
SG1 482.9 SG2 388.3 THA 5.81
       FOE .6851 FRA-1.4531 FC3-2.3068 BSP 856
BDE .4188 BRA .3811 BC3 .2501 FSP -792
```

FLIGHT TIME 70.00

```
LAUNCH DATE DEC 18 1965
                                                                                 FLIGHT TIME 78.00
                                                                                                                                                 ARRIVAL DATE MAR 6 1966
     MELIOCENTRIC CONIC
                                                                                 DISTANCE 223.957
      RL 147.20 LAL -.00 LOL 85.86 VL 28.584 GAL -10.94 AZL 86.78 HCA 102.79 SMA 134.58 ECC .21098 INC 3.2209 V1 30.266 RP 107.81 LAP 3.14 LOP 188.67 VP 38.416 GAP -4.12 AZP 90.71 TAL 233.19 TAP 335.97 RCA 106.19 APO 162.98 V2 35.149
      RC 66.268 GL 15.35 GP 5.05 ZAL 152.56 ZAP 47.13 ETS 353.88 ZAE 161.97 ETE 349.48 ZAC 56.14 ETC 164.83 CLP -46.93
     PLANETOCENTRIC CONTC
      C3 35.463 VML 5.955 OLA -6.90 RAL 288.33 RAD 6568.4 VEL 12.523 PTM 2.27 VMP 4.351 OPA -12.38 RAP 323.52 ECC 1.5836
      ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      112.46 2 17 9
79.17 13 22 57
113.58 3 31 0
78.09 14 43 2
116.71 4 28 33
75.07 15 54 52
                                                                                      157.63
                       1 41 28 2140.60
11 56 2 5215.33
          90.00
                                                         -17.71
                                                                          36.85
                                                                                                                                     1540.6
          90.00
                                                         26.32
                                                                        234.33
                                                                                        162.02
                                                                                                                                         4615.3
                                                                                                                                                          24.56
                     2 59 31 1888.81
13 2D 40 4942.35
4 0 14 1698.71
14 36 26 4705.21
         100.00
                                                         -18.93
                                                                          17.79
                                                                                        157.09
                                                                                                                                         1288.8
                                                                                                                                                       -15.58
         100.00
                                                         27.62
                                                                       213.96
                                                                                        161.73
                                                                                                                                         4342.4
                                                                                                                                                        25.70
                                                                                                                                                                         205.69
         110.00
                                                         -22.17
                                                                          1.74
                                                                                        155.46
                                                                                                                                     1098.7
4105.2
                                                                                                                                                                         354.63
         110.00
                                                                        195.00
                                                                                        160.77
                                                                                                                                                        28.75
                                                                                                                                                                         186.60
     DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
      TDE -.1170 TRA -.3960 TC3 .2126 BAU .1012
                                                                            SGT 473.3 SGR 388.2 SG3 307.2
RRT .0188 RRF -.2525 RTF -.1539
                                                                                                                                   ST 161.2 SR 378.5 SS 328.9
CRT .6468 CRS .8686 CST .1988
LSA 491.6 MSA 187.9 SSA 22.9
      ROE -.3925 RRA .0906 RC3 -.0178 FAU .10659
      FDE .7575 FRA-1.6341 FC3-2.6022 BSP 719
                                                                            SGB 612.2 R23 -.2436 R13 -.1634
      BDE .4095 BRA .4062 BC3 .2133 FSP
                                                                            SG1 473.5 SG2 388.0 THA 2.69
                                                                                                                                    EL1 394.1 EL2 118.1 ALF 73.03
 LAUNCH DATE DEC 18 1965
                                                                                 FLIGHT TIME 80.00
                                                                                                                                                 ARRIVAL DATE MAR 8 1966
    HELIOCENTRIC CONIC
                                                                                DISTANCE 230.565
     RL 147.20 LAL -.00 LOL 85.86 VL 28.618 GAL -10.86 AZL 86.81 MCA 106.01 SMA 134.84 ECC .20884 INC 3.1873 VI 30.266
RP 107.85 LAP 3.06 LOP 191.90 VP 38.431 GAP -3.48 AZP 90.88 TAL 233.61 TAP 339.63 RCA 106.68 APO 163.00 V2 35.138
RC 68.394 GL 15.34 GP 5.42 ZAL 152.77 ZAP 51.94 ETS 354.24 ZAE 164.81 ETE 350.27 ZAC 54.51 ETC 164.88 CLP -51.74
    RC 68.394 GL 10.34 UF
PLANETOCENTRIC CONIC

C3 34.882 VHL 5.906 DLA -6.94 RAL 288.08 RAD 6568.4 VEL 12.500 PTH 2.26 VHP 4.120 DPA -12.49 RAP 321.86 ECC 1.5741
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 14 40 51 235.04 -17.56 36.51 157.11 112.58 2 16 26 1535.0 -14.35 29.30
90.00 11 54 44 5212.54 26.29 234.13 161.49 79.08 13 21 36 4612.5 24.51 225.91
100.00 2 58 52 1883.33 -18.78 17.45 156.56 113.70 3 30 15 1283.3 -15.41 10.27
100.00 13 19 23 4939.49 27.58 213.76 161.19 77.99 14 41 43 4339.5 25.65 205.49
110.00 3 59 32 1693.39 -22.01 1.41 154.93 116.84 4 27 45 1093.4 -18.23 354.32
110.00 14 35 13 4702.19 31.06 194.78 160.23 74.95 15 53 35 4102.2 28.68 186.39
    PLANETOCENTRIC CONIC
    DIFFERENTIAL CORRECTIONS
      TOE -.1004 TRA -.4292 TC3 .1648 BAU .0769
                                                                           SGT 472.6 SGR 387.3 SG3 341.5
RRT -.0242 RRF -.2954 RTF -.0026
                                                                                                                                  ST 159.2 SR 376.5 SS 346.8

CRT .5502 CRS .8701 CST .0810

LSA 498.5 MSA 195.8 SSA 22.7
     ROE - .3870 RRA .0972 RC3 - .0050 FAU .11729
     FOE .8346 FRA-1.8138 FC3-2.9110 BSP 542
BOE .3998 BRA .4401 BC3 .1649 FSP -1017
                                                                           SGB 611.0 R23 .2954 R13 -.0119
                                                                           SG1 472.9 SG2 386.9 THA 176.56
                                                                                                                                  EL1 387.9 EL2 129.1 ALF 75.23
LAUNCH DATE DEC 18 1965
                                                                               FLIGHT TIME 82.00
                                                                                                                                               ARRIVAL DATE HAR 10 1966
                                                                               DISTANCE 237.135
    RL 147.20 LAL -.00 LOL 85.86 VL 28.642 GAL -10.78 AZL 86.85 HCA 109.24 SMA 135.03 ECC .20693 INC 3.1526 V1 30.266 RP 107.89 LAP 2.98 LOP 195.13 VP 38.438 GAP -2.87 AZP 91.04 TAL 233.89 TAP 343.13 RCA 107.09 APO 162.97 V2 35.126 RC 70.553 GL 15.32 GP 5.81 ZAL 152.92 ZAP 56.95 ETS 354.61 ZAE 167.94 ETE 351.33 ZAC 52.69 ETC 164.93 CLP -56.76
   PLANETOCENTRIC CONIC
    C3 34.317 VHL 5.858 DLA -6.98 RAL 287.93 RAD 6568.4 VEL 12.477 PTH 2.26 VHP 3.920 DPA -12.63 RAP 319.99 ECC 1.5648
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 40 36 2129.48
11 53 47 5209.85
         90.00
                                                                                   156.68 112.69 2 16 5
161.05 78.99 13 20 37
                                                      -17.42
                                                                       36.16
                                                                                                                                   1529.5
                                                                                                                                                    -14.19
                                                                                                                                                                        28.97
                                                       26.25
                                                                      233.94
                                                                                                                                       4609.9
                                                                                                                                                        24.47
                                                                                                                                                                        225.73
       100.00
                    2 58 36 1877.84
13 18 28 4936.73
                                                      -18.63
                                                                       17.12
                                                                                      156.13
                                                                                                       113.81
                                                                                                                   3 29 54
                                                                                                                                    1277.8
                                                                                                                                                      -15.25
                                                                                                                                                                         9.95
                                                      27.54
                                                                      213.56
                                                                                      160.75
                                                                                                       77.90 14 40 45
116.97 4 27 21
74.83 15 52 40
                                                                                                                                      4336.7
                                                                                                                                                       25.60
                                                                                                                                                                        205.30
       110.00
                      3 59 13 1688.06
14 34 21 4699.27
                                                     -21.85
                                                                        1.08
                                                                                      154.51
                                                                                                                                      1088.1
                                                                                                                                                      -1A 05
                                                                                                                                                                        354.01
       110.00
                    14 34 21
                                                       31.01
                                                                      194.57
                                                                                      159.79
                                                                                                                                                       28.62
                                                                                                                                       4099.3
                                                                                                                                                                       186.19
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE -. 0802 TRA -. 4692 TC3 .1070 BAU .0493
                                                                          SGT 485.4 SGR 386.6 SG3 376.6
RRT -.0912 RRF -.3415 RTF .1717
                                                                                                                                ST 159.4 SR 373.7 SS 362.5

CRT .4183 CRS .8709 CST -.0692

LSA 504.5 MSA 203.4 SSA 22.5

EL1 380.6 EL2 142.2 ALF 78.22
    ROE - .3808 RRA .1048 RC3 .0096 FAU .12821
    FOE .9059 FRA-1.9931 FC3-3.2344 BSP 439
                                                                          568 620.6 R23 .2982 R13 -.2182
    BOE .3891 BRA .4808 BC3 .1075 FSP -1141
                                                                           SG1 488.8 SG2 382.4 THA 169.17
LAUNCH DATE OFC 18 1965
                                                                              FLIGHT TIME 84.00
                                                                                                                                              ARRIVAL DATE MAR 12 1966
   HELIOCENTRIC CONIC
                                                                              DISTANCE 243.669
   RL 147.20 LAL -.00 LOL 85.86 VL 28.657 GAL -10.69 AZL 86.88 HCA 112.46 SMA 135.15 ECC .20522 INC 3.1166 V1 30.266 RP 107.92 LAP 2.88 LOP 198.35 VP 38.438 GAP -2.29 AZP 91.19 TAL 234.03 TAP 346.49 RCA 107.42 APO 162.88 V2 35.114 RC 72.741 GL 15.28 GP 6.20 ZAL 152.99 ZAP 62.13 ETS 355.00 ZAE 171.31 ETE 353.05 ZAC 50.69 ETC 164.98 CLP -61.95
  PLANETOCENTRIC CONIC
    C3 33.757 VML 5.810 OLA -7.03 RAL 287.87 RAD 6568.3 VEL 12.455 PTH 2.25 VMP 3.752 DPA -12.78 RAP 317.95 ECC 1.5556
   LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 40 43 2123.85 -17.27 35.82 156.34 112.80 2 16 6 1523.9 -14.03 28.64
                                                                                                    112.80
                                                                                                                     2 16 6
                                                                                                                                      1523.9
                                                                                                                                                      -14.03
                                                                                                                                                                        28.64
                    11 53 11 5207.19
2 58 41 1872.28
13 17 53 4933.99
        90.00
                                                       26.22
                                                                     233.76
                                                                                      160.70
                                                                                                       78.90 13 19 58
                                                                                                                                       4607.2
                                                                                                                                                       24.42
                                                                                                                                                                       225.55
      100.00
                                                      -18.47
                                                                       16.77
                                                                                     155.79
                                                                                                       113.93
                                                                                                                     3 29 54
                                                                                                                                       1272.3
                                                                                                                                                       -15.08
                                                                                                                                                                         9.62
      100.00
                                                       27.50
                                                                                                      77.80 14 40 7
117.10 4 27 18
74.72 15 52 5
                                                                     213.37
                                                                                     160.40
                                                                                                                                       4334.0
                                                                                                                                                       25.55
                                                                                                                                                                       205.11
                                  1682.67
4696.37
      110.00
                     3 59 15
                                                      -21.68
                                                                         .75
                                                                                    154.16
                                                                                                                                                      -17.87
                                                                                                                                                                       353.69
      110.00
                    14 33 49
                                                       30.96
                                                                     194.36
                                                                                     159.43
                                                                                                                                                     28.55
                                                                                                                                       4096.4
                                                                                                                                                                       185.99
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        SCT 519.7 SGR 386.6 SG3 410.4

RRT -.1750 RRF -.3915 RTF .3531

SGB 647.8 R23 .2627 R13 -.4097

SG1 528.8 SG2 374.1 THA 164.89
                                                                                                                           ST 164.9 SR 370.3 SS 377.5

CRT .2658 CRS .8742 CST -.2262

LSA 511.9 MSA 210.4 SSA 22.2

EL1 373.4 EL2 157.7 ALF 81.83
   TOE -.0586 TRA -.5181 TC3 .0365 BAU .0202
   ROE -.3739 RRA .1129 RC3 .0258 FAU .13855
FOE .9767 FRA-2.1552 FC3-3.5532 BSP 508
   BOE .3785 BRA .5302 BC3 .0447 FSP -1253
```

APRIVAL DATE MAR 14 1966

```
FLIGHT TIME 86.00
LAUNCH CATE DEC 18 1965
                                                                            DISTANCE 250.165
    RE 147.20 LAL -.00 LOL 85.86 VL 28.664 GAL -10.61 A7L 86.92 HCA 115.68 SHA 135.20 ECC .20366 INC 3.0789 V1 30.266 RP 107.96 LAP 2.77 LOP 201.58 VP 38.431 GAP -1.73 A7P 91.34 TAL 234.04 TAP 349.72 RCA 107.67 APO 162.74 V2 35.101 RC 74.954 GL 15.23 GP 6.61 7AL 153.01 7AP 67.43 ETS 355.43 ZAE 174.86 ETE 356.86 ZAC 48.56 ETC 165.03 CLP -67.28
  HELTOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                        2.25 VHP 3.614 CPA -12.94 RAP 315.77 ECC 1.5463
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 10 2118.08 -17.12 35.46 156.08 112.91 2 16 28 1518.1 -13.87 28.29
    C3 33.198 VML 5.762 DLA -7.08 RAL 287.89 RAD 6568.3 VEL 12.433 PTH
                  11 52 53 5204.53
2 59 8 1866.59
13 17 37 4931.25
                                                                                                     78.81 13 19 38
                                                                                   160.43
                                                                    233.57
                                                     26.18
                                                                                                                                                                    9.28
        90.00
                                                                                                    114.05 3 30 14
77.71 14 39 48
117.23 4 27 35
74.60 15 51 49
                                                                                                                                                   -14.91
                                                                                                                                    1266.6
                                                                                   155.53
                                                    -18.32
                                                                     15.42
       100.00
                                                                                160.13
                                                                                                                                    4331.2
                                                                                                                                                   25.49
                                                                                                                                                                   204.93
                                                      27.46
                                                                    213.17
                                                                                153.90
                                                                                                                                                  -17.69
                                                                                                                                                                   343.37
       100.00
                                                                                                                                   1077.2
                                                                                                    117.23
                     3 59 38 1677.15
                                                    -21.51
                                                                        .42
       110.00
                                                                                                                                    4093.5
                                                                                                                                                   28.48
                                                                                                                                                                   185.79
                                                                                    159.16
       110.00 14 33 36 4693.45
                                                      30.90
                                                                     194.15
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 175.7 SR 366.0 SS 389.2
CRT .0941 CRS .8765 CST -.3864
                                                                        SCT 577.8 SGR 387.2 SG3 442.6

RRI -.2688 RRF -.4430 RTF .5132

SGB 695.6 R23 .2194 R13 -.5617

SGI 593.1 SG2 363.3 THA 163.41
     TOE -.0341 TRA -.5734 TC3 -.0445 BAU .0276
    ROE -. 3662 RRA .1214 RC3 .0435 FAU .14831
                                                                                                                                LSA 518.5 MSA 216.7 55A 22.0
    FOE 1.0341 FRA-2.3020 FC3-3.8676 BSP 774
                                                                                                                                EL1 366.5 EL2 174.7 ALF 86.65
     BOE .3678 BRA .5861 BC3 .0622 FSP -1369
                                                                                                                                            ARRIVAL DATE MAR 16 1966
                                                                             FLIGHT TIME 88.00
LAUNCH DATE DEC 18 1965
    RL 147.20 LAL -.00 LOL 85.86 VL 28.663 GAL -10.51 A7L 86.96 MCA 118.90 SMA 135.20 ECC .20224 INC 3.0391 VI 30.266 RP 108.00 LAP 2.66 LOP 204.80 VP 38.420 GAP -1.21 A7P 91.47 TAL 233.93 TAP 352.83 RCA 107.86 APO 162.54 VZ 35.089 RC 77.191 GL 15.16 GP 7.02 ZAL 152.96 ZAP 72.81 ETS 355.90 ZAE 178.43 ETE 18.03 ZAC 46.36 ETC 165.09 CLP -72.67
                                                                             01STANCE 256.625
   HELIOCENTRIC CONIC
                           5.712 DLA -7.13 RAL 287.99 RAD 6568.3 VEL 12.410 PTH 2.24 VMP 3.505 OPA -13.08 RAP 313.52 ECC 1.5370
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 58 2112.10 -16.96 35.10 155.88 113.02 2 17 10 1512.1 -13.69 27.94
                                                                                     160.23
                                                                     233.38
                     11 52 53 5201.83
                                                      26.15
                                                                                                                                                                      8.94
                                                                                                                                                     -14.74
         90.00
                                                                                                                   3 30 55
                                                                                                                                     1260.7
                   2 59 54 1860.69
13 17 39 4928.47
4 0 21 1671.44
14 33 41 4690.48
                                                                                                     114.17
                                                                       16.06
                                                                                     155.34
                                                      -18.15
                                                                                                                                                                     204.74
        100.00
                                                                                                                                                     25.44
                                                                                                       77.61 14 39 47
                                                                                                                                     4328.5
                                                                                     159.93
                                                                     212.98
                                                       27.42
                                                                                                                                                                     353.04
        100.00
                                                                                                                                    1071.4
                                                                                                                                                    -17.49
                                                                                                     117.37
                                                                                                                    4 28 12
                                                                                     153.71
                                                      -21.33
                                                                         .07
                                                                                                       74.49 15 51 52
        110.00
                                                                                                                                    4090.5
                                                                                                                                                     28.41
                                                       30.85
                                                                     193.93
                                                                                     158.95
                                                                                                                                 ORBIT DETERMINATION ACCURACY
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ST 193.0 SR 361.0 SS 399.5
CRT -.0644 CRS .8809 CST -.5201
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 661.4 SGR 388.7 SG3 470.6
RRT - 3596 RRF - 4956 RTF .6393
SGB 767.1 R23 .1853 R13 - 6749
     TDE -.0087 TRA -.6356 TC3 -.1372 BAU .0657
                                                                                                                               LSA 526.7 MSA 222.0 SSA 21.8
EL1 361.3 EL2 192.4 ALF 92.76
     ROE - .3577 RRA .1299 RC3 .D624 FAU .15656
     FOE 1.0846 FRA-2.4156 FC3-4.1538 BSP 1155
BDE .3578 BRA .6488 BC3 .1507 FSP -1464
                                                                         SG1 681.7 SG2 351.9 THA 163.58
                                                                                                                                            ARRIVAL DATE MAR 18 1966
                                                                               FLIGHT TIME 90.00
 LAUNCH DATE DEC 18 1965
     RL 147.20 LAL -.00 LOL 85.86 VL 28.656 GAL -10.41 A7L 87.00 MCA 122.11 SMA 135.15 ECC .20092 INC 2.9967 VI 30.266 RP 108.04 LAP 2.54 LOP 208.01 VP 38.403 GAP -.70 A7P 91.59 TAL 233.70 TAP 355.81 RCA 107.99 APO 162.30 V2 35.076 RC 79.446 GL 15.09 GP 7.42 TAL 152.87 TAP 78.19 ETS 356.41 TAE 177.45 ETE 151.03 TAC 44.15 ETC 165.17 CLP -78.09
     HELIOCENTRIC CONIC
      C3 32.053 VHL 5.662 DLA -7.19 RAL 288.17 RAD 6568.3 VEL 12.387 PTH 2.24 VHP 3.424 DPA -13.20 RAP 311.24 ECC 1.5275
     PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  1505.8
                                                                                                    113.14
                     1 43 6 2105.82
11 53 9 5199.12
3 1 0 1854.51
13 17 56 4925.66
4 1 23 1665.46
14 34 3 4687.47
                                                                                  155.76
                                                                                                       113.14 2 18 12
78.64 13 19 48
                                                       -16.79
                                                                                                                                                                     225.00
          90.00
                                                                                                                                                      24.28
                                                                                      160.09
                                                                                                      78.50

114.29 3 31 50

77.52 14 40 2 4325.1

117.51 4 29 8 1065.5

74.37 15 52 10 4087.5

ORBIT CETE
215.5
                                                                      233.19
                                                        26.11
                                                                                                                                                                       8.57
          90.00
                                                                                                                                                      -14.55
                                                                                     155.21
                                                                        15.68
                                                       -17.98
                                                                                                                                                                     204.55
         100.00
                                                                                                                                                     25.39
                                                                                     159.79
                                                                       212.78
                                                       27.38
                                                                                                                                                                     352.70
         100.00
                                                                                                                                                     -17.29
                                                                       359.71
                                                                                     153.58
                                                       -21.14
                                                                                                                                                     28.34
         110.00
                                                                                                                                                                     185.38
                                                                                      158.81
                                                        30.79
                                                                      193.72
                                                                                                                                ORBIT DETERMINATION ACCURACY
         110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ST 215.9 SR 354.8 SS 405.7

CRT -.2031 CRS .8842 CST -.6293

LSA 534.2 MSA 226.4 SSA 21.5

EL1 358.9 EL2 208.9 ALF 100.72
     CIFFERENTIAL CORRECTIONS
                                                                          SGT 766.2 SGR 390.8 SG3 494.5
RRT -.4437 RRF -.5472 RTF .7301
SGB 860.1 R23 .1596 R13 -.7547
      TOE .0180 TRA -.7024 TC3 -.2391 BAU .1084 RCE -.3481 RRA .1384 RC3 .0824 FAU .16341 FOE 1.1146 FRA-2.5005 FC3-4.4135 BSP .1589 BDE .3485 BRA .7159 BC3 .2529 FSP -1554
                                                                           561 790.2 562 339.6 THA 164.27
                                                                                                                                              ARRIVAL DATE MAR 20 1966
                                                                                FLIGHT TIME 92.00
  LAUNCH DATE DEC 18 1965
      RL 147.20 LAL -.00 LOL 85.86 VL 28.643 GAL -10.31 A7L 87.05 HCA 125.33 SMA 135.04 ECC .19969 INC 2.9514 V1 30.266
RP 108.08 LAP 2.41 LOP 211.23 VP 38.381 GAP -.22 A7P 91.71 TAL 233.36 TAP 358.69 RCA 108.08 APO 162.01 V2 35.063
RC 81.719 GL 14.99 GP 7.83 7AL 152.71 7AP 83.51 ETS 356.98 7AE 173.72 ETE 161.75 7AC 41.97 ETC 165.28 CLP -83.45
                                                                               DISTANCE 269.439
      HELTOCENTRIC CONIC
       C3 31.461 VHL 5.609 DLA -7.25 RAL 288.41 RAD 6568.3 VEL 12.363 PTH 2.23 VHP 3.369 DPA -13.27 RAP 309.01 ECC 1.5178
      PLANETOCENTRIC CONIC
       LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      113.27
                                                                                     155.69
                                                                        34.30
                                                        -16.61
                        1 44 34 2099.15
                                                                                                     78.55 13 20 15
114.42 3 33 14
77.42 14 40 31
117.65 4 30 23
74.25 15 52 43
           90.00
                                                                                                                                                       24.23
                                                                                                                                       4596.4
                                                        26.07
                                                                       233.00
                                                                                       160.01
                       11 53 39
                                       5196.40
                                                                                                                                                                        8.19
            90.00
                                                                                                                                                      -14.35
                                                                                                                                       1247.9
                                                                                       155.14
                                                                         15.28
                                                         -17.79
                         3 2 26 1847.94
                                                                                                                                                                      204.35
                                                                                                                                                      25.33
          100.00
                                                                                                                                       4322.8
                                                                                       159.71
                                                        27.34
                                                                       212.58
                                      4922.84
                       13 18 28
                                                                                                                                                     -17.08
                                                                                                                                                                      352.33
          100.00
                                                                                                                                       1059.1
                                                                        359.32
                                                                                       153.51
                                                        -20.94
                       4 2 44 1659.12
14 34 39 4684.44
                                                                                                                                                       28.27
          110.00
                                                                                                                                       4084.4
                                                                    193.50
                                                                                       158.73
                                                        30.74
                                                                                                                                  ORBIT DETERMINATION ACCURACY
          110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                            ST 243.4 SR 347.5 S5 408.3

CRT -.3143 CRS .8873 CST -.7100

LSA 541.8 MSA 229.6 SSA 21.3

EL1 361.5 EL2 222.2 ALF 110.42
      DIFFERENTIAL CORRECTIONS ...
                                                                            SGT 888.8 SGR 393.5 SG3 512.8
RRT -.5183 RRF -.5971 RTF .7929
        TOE .0447 TRA -.7730 TC3 -.3501 BAU .1535
        ROE -.3373 RRA .1464 RC3 .1033 FAU .16839
FOE 1.1262 FRA-2.5487 FC3-4.6335 BSP 2068
                                                                          SGB 972.0 R23 .1418 R13 -.8099
5G1 915.4 5G2 326.7 THA 165.14
```

BOE .3402 BRA .7868 BC3 .3650 FSP -1630

```
LAUNCH DATE DEC 18 1965
                                                                                                     FLIGHT TIME 94.00
                                                                                                                                                                                     ARRIVAL DATE MAR 22 1966
     HELIOCENTRIC CONIC
                                                                                                     DISTANCE 275.795
       RL 147.20 LAL -.00 LOL 85.86 VL 28.625 GAL -10.20 AZL 87.10 MCA 128.54 SMA 134.90 ECC .19853 INC 2.9023 V1 30.266 RP 108.12 LAP 2.27 LOP 214.44 VP 38.355 GAP .24 AZP 91.81 TAL 232.92 TAP 1.46 RCA 108.12 APO 161.68 V2 35.050
       RC 84.008 GL 14.88 GP 8.24 7AL 152.51 7AP 88.72 ETS 357.59 7AE 169.99 ETE 164.50 7AC 39.91 ETC 165.43 CLP -88.71
     PLANETOCENTRIC CONIC
       C3 30.852 VHL 5.554 DLA -7.32 RAL 288.73 RAD 6568.2 VEL 12.338 PTH 2.22 VHP 3.338 DPA -13.29 RAP 306.89 ECC 1.5077
       LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 46 22 2091.98 -16.42 33.87 155.67 113.40 2 21 14 1492.0 -13.11 26.74
                                                                                                                             113.40 2 21 14

78.46 13 20 55

114.56 3 34 53

77.32 14 41 13

117.81 4 31 58

74.13 15 53 30
                                                                                                          155.67
                                                                                                                                                                        1492.0
                                                                                                                                                                                             -13.11
            90.00
                           11 54 22
                                               5193.74
                                                                       26.04
                                                                                          232.81
                                                                                                              159.99
                                                                                                                                                                            4593.7
                                                                                                                                                                                               24.19
                                                                                                                                                                                                                    224.63
                         3 4 12 1840.89
13 19 13 4920.07
4 4 25 1652.32
14 35 28 4681.40
           100.00
                                                                       -17.59
                                                                                            14.86
                                                                                                              155.12
                                                                                                                                                                           1240.9
                                                                                                                                                                                               -14.13
                                                                                                                                                                                                                       7.77
                                                                                                                                                                       4320.1 25.28
1052.3 -16.84
4081.4 28.20
                                                                                                          159.69
153.49
           100.00
                                                                       27.30
                                                                                          212.38
                                                                                                                                                                                                                    204.17
           110.00
                                                                       -20.73
                                                                                          358.91
                                                                                                                                                                                                                    351.94
           110.00
                                                                     30.68
                                                                                         193.28
                                                                                                              158.71
                                                                                                                                                                                                                    184.96
     DIFFERENTIAL CORRECTIONS
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                             SGT 1024.9 SGR 396.8 SG3 523.9

RRT -.5823 RRF -.6447 RTF ..8354

SGB 1099.1 R23 .1323 R13 -.8475

SGI 1053.3 SG2 313.9 THA 166.03
                                                                                                                                                                5T 274.2 SR 339.4 SS 409.5

CRT -.3987 CRS .8928 CST -.7631

LSA 551.3 MSA 231.7 SSA 20.9

EL1 370.6 EL2 230.3 ALF 120.84
       TDE .0704 TRA -.8459 TC3 -.4688 BAU .2001
       RDE -.3257 RRA .1535 RC3 .1245 FAU .17089
       FDE 1.1294 FRA-2.5495 FC3-4.7955 BSP 2580
       BOE .3332 BRA .8597 BC3 .4851 FSP -1667
 LAUNCH DATE DEC 18 1965
                                                                                                     FLIGHT TIME 96.00
                                                                                                                                                                                     ARRIVAL CATE MAR 24 1966
     HELIOCENTRIC CONIC
                                                                                                    DISTANCE 282.118
      RL 147.20 LAL -.00 LOL 85.86 VL 28.601 GAL -10.08 AZL 87.15 HCA 131.74 SMA 134.71 ECC .19744 INC 2.8486 VL 30.266 RP 108.16 LAP 2.13 LOP 217.64 VP 38.325 GAP .68 AZP 91.90 TAL 232.39 TAP 4.13 RCA 108.12 APO 161.31 VZ 35.036
             86.309 GL 14.75 GP 8.66 ZAL 152.27 ZAP 93.76 ETS 358.26 ZAE 166.37 ETE 165.74 ZAC 38.00 ETC 165.64 CLP -93.80
     PLANETOCENTRIC CONIC
      C3 30.223 VHL 5.498 DLA -7.40 RAL 289.11 RAD 6568.2 VEL 12.312 PTH 2.22 VHP 3.329 DPA -13.25 RAP 304.93 ECC 1.4974 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                113.54 2 23 16

78.38 13 21 45

114.71 3 36 53

77.23 14 42 5

117.98 4 33 52

74.02 15 54 28
                                                                                                                                                                        1484.1
           90.00
                             1 48 32 2084.14
                                                                      -16.20
                                                                                           33.39
                                                                                                           155.71
                                                                                                                                                                                              -12.88
                                                                                                                                                                                                                     26.29
            90.00
                          11 55 14 5191.25
                                                                       26.00
                                                                                         232.64
                                                                                                              160.03
                                                                                                                                                                            4591.2
                                                                                                                                                                                                 24.14
                                                                                                                                                                                                                     224.47
          100.00
                             3 6 19 1833.19
                                                                      -17.38
                                                                                           14.39
                                                                                                            155.16
                                                                                                                                                                            1233.2
                                                                                                                                                                                              -13.90
                                                                                                                                                                                                                      7.32
          100.00
                         13 20 8 4917.43
                                                                      27.26
                                                                                        212.20
                                                                                                         159.72
                                                                                                                                                                                              25.23
                                                                                                                                                                            4317.4
                                                                                                          153.53
                                                                                                                                                                                                                    203.99
          110.00 4 6 27 1644.92
110.00 14 36 29 4678.47
                                                                      -20.49
                                                                                         358.47
                                                                                                                                                                           1044.9 -16.59
                                                                                                                                                                                                                    351.52
                                                                     30.63
                                                                                        193.07
                                                                                                              158.74
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                                                                                                                    184.76
    DIFFERENTIAL CORRECTIONS
                                                                                               MID-COURSE EXECUTION ACCURACY
      TDE .0947 TRA -.9190 TC3 -.5933 BAU .2469
RDE -.3130 RRA .1596 RC3 .1461 FAU .17141
                                                                                            SGT 1169.7 SGR 400.4 SG3 528.9
RRT -.6384 RRF -.6893 RTF .8642
SGB 1236.3 R23 .1278 R13 -.8732
                                                                                              SGT 1169-7 SGR 400.4 SG3 528-9 ST 306.7 SR 330.1 SS 407.4

RRT -.6384 RRF -.6893 RTF .8642 CRT -.4650 CRS .8981 CST -.8001

SGB 1236.3 R23 .1278 R13 -.8732 LSA 560.8 HSA 232.6 SSA 20.6

SGI 1199.2 SGZ 300.6 THA 166.83 EL1 386.0 EL2 232.5 ALF 130.49
      FOE 1.1153 FRA-2.5139 FC3-4.9101 BSP 3105
BOE .3270 BRA .9328 BC3 .6110 FSP -1686
LAUNCH CATE OFC 18 1965
                                                                                                  FLIGHT TIME 98.00
                                                                                                                                                                                    ARRIVAL DATE MAR 26 1966
    HELIOCENTRIC CONIC
                                                                                                  DISTANCE 288,409
     RL 147.20 LAL -.00 LOL 85.86 VL 28.573 GAL -9.96 A7L 87.21 MCA 134.95 SMA 134.50 ECC .19640 INC 2.7894 VI 30.266 RP 108.20 LAP 1.97 LOP 220.85 VP 38.292 GAP 1.10 A7P 91.97 TAL 231.76 TAP 6.71 RCA 108.08 APO 160.91 V2 35.023
     RC 88.623 GL 14.59 GP 9.10 7AL 151.98 7AP 98.58 ETS 359.00 7AE 162.89 ETE 166.38 7AC 36.28 ETC 165.94 CLP -98.69
    PLANETOCENTRIC CONTC
      C3 29.575 VML 5.438 DLA -7.51 RAL 289.56 RAD 6568.2 VEL 12.286 PTH 2.21 VMP 3.339 DPA -13.13 RAP 303.17 ECC 1.4867
     LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 ENCH TIME L-1 TIME INJ LAT

1 51 6 2075.45 -15.97

11 56 13 5189.06 25.97

3 8 51 1824.67 -17.13

13 21 10 4915.08 27.22

4 8 51 1636.77 -20.23

14 37 39 4675.74 30.58
                                                                                                                                                                      1475.5
                                                                                                                                                                                           -12.63
           an . nn
                                                                                         32.86
                                                                                                          155.79
                                                                                                                               113.70
                                                                                                                                                    2 25 42
                                                                                                                                                                                                                    25.77
                                                                                                                                  78.31 13 22 42
114.88 3 39 15
                                                                                                                                                                         4589.1
                                                                                                                                                                                              24.10
           90.00
                                                                                         232.49
                                                                                                            160.11
                                                                                                                                                                                                                   224.32
         100.00
                                                                                          13.87
                                                                                                             155.24
                                                                                                                                                                         1224.7
                                                                                                                                                                                               -13.64
                                                                                                                                                                                                                     6.82
                                                                                                                                  77.15 14 43 5
118.16 4 36 8
73.91 15 55 35
                                                                                                                                                                      4315.1
                                                                                                                                                                                             25.18
                                                                                                                                                                                                                   203.83
         100.00
                                                                                        212.03
                                                                                                           159.81
                                                                                                                                                                       1036.8
        110.00
                                                                                         357.98
                                                                                                           153.61
                                                                                                                                                                                            -16.31
28.07
                                                                                                                                                                                                                   351.05
                                                                                        192.87
        110.00
                                                                                                           158.82
                                                                                                                                                                                                                   184.57
   DIFFERENTIAL CORRECTIONS
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     TDE .1166 TRA -.9910 TC3 -.7226 BAU .2934 RDE -.2990 RRA .1650 RC3 .1687 FAU .17033
                                                                                             SCT 1319.8 SCR 404.5 SC3 529.0

RRT - .6885 RRF - .7308 RTF .8842

SCB 1380.4 R23 .1266 R13 - .8911

SCI 1350.3 SC2 286.7 THA 167.51
                                                                                                                                                                   ST 339.8 SR 319.4 SS 400.9
CRT -.5108 CRS .9019 CST -.8269
     FDE 1.0796 FRA-2.4508 FC3-4.9862 BSP 3641
BDE .3209 BRA 1.0047 BC3 .7421 FSP -1697
                                                                                                                                                                   LSA 569.1 MSA 232.3 SSA 20.3
                                                                                                                                                                    EL1 405.7 EL2 230.0 ALF 138.46
LAUNCH DATE DEC 18 1965
                                                                                                   FLIGHT TIME 100.00
                                                                                                                                                                                    ARRIVAL DATE MAR 28 1966
   HELIOCENTRIC CONIC
                                                                                                  DISTANCE 294.669
     RL 147.20 LAL -.00 LOL 85.86 VL 28.542 GAL -9.83 A7L 87.28 HCA 138.15 SMA 134.25 ECC .19540 INC 2.7232 V1 30.266 RP 108.24 LAP 1.82 LOP 224.05 VP 38.257 GAP 1.50 A7P 92.03 TAL 231.06 TAP 9.21 RCA 108.02 APO 160.48 V2 35.010 RC 90.946 GL 14.39 GP 9.57 ZAL 151.65 ZAP 103.15 ETS 359.81 ZAE 159.61 ETE 166.69 ZAC 34.79 ETC 166.35 CLP-103.34
   PLANETOCENTRIC CONIC
     C3 28.904 VHL 5.376 DLA -7.63 RAL 290.07 RAD 6568.2 VEL 12.259 PTH 2.21 VHP 3.367 DPA -12.91 RAP 301.64 ECC 1.4757 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 LNCH TIME L-I TIME

1 54 8 2065.66

11 57 16 5187.37

3 11 48 1815.06

13 22 17 4913.18

4 11 40 1627.65

14 38 55 4673.38
           90.00
                                                                     -15.70
                                                                                          32.27
                                                                                                                               113.87
                                                                                                                                                   2 28 33
                                                                                                                                                                      1465.7
                                                                                                                                                                                             -12.34
                                                                                                           155.91
                                                                                                                                                                                                                    25.20
           90.00
                                                                                                                                  78.25 13 23 44
115.06 3 42 3
77.09 14 44 10
                                                                     25.95
                                                                                         232.37
                                                                                                            160.25
                                                                                                                                                                           4587.A
                                                                                                                                                                                               24.07
                                                                                                                                                                                                                    224.20
         100.00
                                                                     -16.86
                                                                                                           155.36
                                                                                         13.29
                                                                                                                                                                         1215.1
                                                                                                                                                                                              -13.34
                                                                                                                                                                                                                     6.27
         100.00
                                                                    27.20
                                                                                        211.90
                                                                                                            159.95
                                                                                                                                                                         4313.2
                                                                                                                                                                                              25.15
                                                                                                                                                                                                                   203.70
                                                                                                                                                                       1027.6
         110.00
                                                                                                                                 118.36 4 38 48
73.82 15 56 48
                                                                     -19.94
                                                                                         357.44
                                                                                                           153.73
                                                                                                                                                                                           -15.99
                                                                                                                                                                                                                   350.54
                                                                                         192.70
                                                                   30.53
                                                                                                            158.96
                                                                                                                                                                         4073.4
                                                                                                                                                                                               28.01
                                                                                                                                                                                                                   184.41
                                                                                             2.70 138.96 73.82 13.36 40 40.73 40 40.73 40 40.73 40 40.73 40.73 40 40.73 40 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 40.73 
   DIFFERENTIAL CORRECTIONS
                                                                                            SGT 1472.4 SGR 409.0 SG3 523.1 ST 372.4 SR 307.8 55 393.0 RRT -.7319 RRF -.7694 RTF .8978 CRT -.5461 CRS .9074 CST -.8426 SGB 1528.1 R23 .1305 R13 -.9034 LSA 577.9 MSA 231.3 SSA 19.9 SG1 1503.5 SG2 272.9 THA 168.11 EL1 427.8 EL2 224.4 ALF 144.66
     TOE .1356 TRA-1.0604 TC3 -.8559 BAU .3389
     ROE - .2842 RRA .1691 RC3 .1916 FAU .16731
     FOE 1.0377 FRA-2.3528 FC3-5.0113 8SP 4176
BDE .3149 BRA 1.0738 BC3 .8771 FSP -1678
```

ARRIVAL CATE MAR 30 1966

```
FLIGHT TIME 102.00
LAUNCH DATE DEC 18 1965
                                                                                      DISTANCE 300.901
    RL 147.20 LAL -.00 LOL 85.86 VL 28.506 GAL -9.69 AZL 87.35 HCA 141.35 SMA 133.98 ECC .19446 INC 2.6482 VI 30.266 RP 108.29 LAP 1.65 LOP 227.25 VP 38.218 GAP 1.89 AZP 92.07 TAL 230.28 TAP 11.64 RCA 107.92 APO 160.03 V2 34.996 RC 93.279 GL 14.15 GP 10.09 ZAL 151.29 ZAP 107.45 ETS .70 ZAE 156.52 ETE 166.77 ZAC 33.54 ETC 166.93 CLP-107.73
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 28.210 VHL 5.311 CLA -7.79 RAL 290.64 RAC 6568.1 VEL 12.230 PTH 2.20 VHP 3.409 CPA -12.59 RAP 300.36 ECC 1.4643
    C3 28.210 VHL 5.311 CLA -7.79 RAL 290.64 RAD 6568.1 VEL 12.230 PTH 2.20 VHP 3.409 CPA -12.59 RAP 300.36 ECC 1.4643

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 57 41 2054.41 -15.39 31.59 156.07 114.07 2 31.55 1454.4 -12.01 24.54

90.00 11 58 18 5186.48 25.94 232.31 160.44 78.22 13 24.45 4586.5 24.05 224.14

100.00 3 15 16 1804.11 -16.54 12.63 155.52 115.26 3 45.20 1204.1 -13.00 5.63

100.00 13 23 24 4912.02 27.18 211.82 160.14 77.05 14.45 16 4312.0 25.12 203.62

110.00 4 14 57 1617.26 -19.60 356.82 153.89 118.58 4.41 54 1017.3 -15.63 349.95

110.00 14 40 13 4671.63 30.50 192.58 159.15 73.75 15.58 5 4071.6 27.97 184.29
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 403.5 SR 294.9 55 381.3
CRT -.5716 CRS .9115 CST -.8536
                                                                                  SGT 1625.4 SGR 414.4 SG3 513.8
RRT -.7711 RRF -.8054 RTF .9074
    TOE .1508 TRA-1.1262 TC3 -.9926 BAU .3831
    ROE - 2683 RRA .1724 RC3 .2161 FAU .16323
FOE .9793 FRA-2.2382 FC3-5.0093 BSP 4710
BOE .3078 BRA 1.1393 BC3 1.0159 FSP -1656
                                                                                                                                               LSA 585.1 MSA 228.9 SSA 19.5
                                                                                  SGB 1677.4 R23 .1374 R13 -.9121
                                                                               5G1 1657.3 SG2 258.8 THA 168.60
                                                                                                                                               EL1 450.3 EL2 216.8 ALF 149.56
                                                                                                                                                             ARRIVAL DATE APR 1 1966
                                                                                       FLIGHT TIME 104.00
LAUNCH DATE DEC 18 1965
                                                                                       01STANCE 307.104
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 28.468 CAL -9.55 A7L 87.44 HCA 144.55 SMA 133.68 ECC .19356 INC 2.5620 V1 30.266 RP 108.33 LAP 1.49 LOP 230.44 VP 38.177 GAP 2.26 A7P 92.09 TAL 229.43 TAP 13.99 RCA 107.81 APO 159.55 V2 34.983
                          13.85 GP 10.68 ZAL 150.89 ZAP 111.46 ETS 1.71 ZAE 153.65 ETE 166.64 ZAC 32.53 ETC 167.71 CLP-111.86
    RC 95.621 GL
   PLANETOCENTRIC CONIC
    C3 27.491 VHL 5.243 OLA -8.00 RAL 291.28 RAD 6568.1 VEL 12.201 PTH 2.19 VHP 3.465 CPA -12.15 RAP 299.34 ECC 1.4524
    C3 27.491 VHL 5.243 DLA -8.00 RAL 291.28 RAD 6568.1 VEL 12.201 PTH 2.19 VHP 3.465 CPA -12.15 RAP 299.34 ECC 1.4524 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 1 53 2041.24 -15.02 30.80 156.28 114.29 2 35.54 1441.2 -11.62 23.77 90.00 11 59 13 5186.79 25.94 232.33 160.70 78.23 13.25 40 4586.8 24.06 224.16 100.00 3 19.22 1791.29 -16.17 11.87 155.73 115.49 3 49.13 1191.3 -12.60 4.89 100.00 13.24 25 4911.98 27.18 211.81 160.39 77.05 14.46.17 4312.0 25.12 203.62 110.00 4.18 47 1605.21 -19.21 356.11 154.09 118.84 4.45 32 1005.2 -15.21 349.27 110.00 14.41 29 4670.82 30.48 192.52 159.41 73.72 15.59 20 4070.8 27.95 184.24
                     3 19 22 1791.29
13 24 25 4911.98
4 18 47 1605.21
14 41 29 4670.82
        110.00
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 432.4 SR 281.2 SS 368.2
CRT -.5891 CRS .9168 CST -.8578
                                                                                  SGT 1776.8 SGR 420.9 SG3 500.4
RRT -.8053 RRF -.8387 RTF .9138
     TDE .1619 TRA-1.1869 TC3-1.1325 BAU .4256
     ROE -.2518 RRA .1745 RC3 .2419 FAU .15784
FOE .9171 FRA-2.1014 FC3-4.9706 BSP 5229
                                                                                                                                               LSA 591.7 MSA 226.2 55A 19.0
                                                                              SGB 1826.0 R23 .1494 R13 - .9180
                                                                                                                                              EL1 471.9 EL2 208.2 ALF 153.49
      BOE .2993 BRA 1.1997 BC3 1.1580 FSP -1611
                                                                                  SG1 1809.5 SG2 245.1 THA 169.00
                                                                                                                                                             ARRIVAL DATE APR 3 1966
                                                                                      FLIGHT TIME 106.00
LAUNCH DATE DEC 18 1965
                                                                                      DISTANCE 313.280
     RL 147.20 LAL -.00 LOL 85.86 VL 28.426 GAL -9.40 A7L 87.54 HCA 147.75 SMA 133.36 ECC .19270 INC 2.4613 VI 30.266 RP 108.37 LAP 1.31 LOP 233.64 VP 38.135 GAP 2.61 A7P 92.08 TAL 228.52 TAP 16.27 RCA 107.67 APO 159.06 V2 34.970 RC 97.969 GL 13.47 GP 11.38 7AL 150.47 7AP 115.19 ETS 2.86 7AE 150.99 ETE 166.32 7AC 31.77 ETC 168.73 CLP-115.73
    PLANETOCENTRIC CONIC
      C3 26.747 VHL 5.172 DLA -8.28 RAL 291.99 RAD 6568.1 VEL 12.171 PTH 2.18 VHP 3.532 DPA -11.56 RAP 298.57 ECC 1.4402
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              -11.14
                                                                                                                                                  1425.5
                                                                                            156.52
                                                                               29.85
                        2 6 53 2025.47
                                                            -14.58
                                                                                                                                                                        24.10
                                                                                                                                                                                         224.31
                       11 59 52 5188.92
3 24 13 1775.99
13 25 13 4913.63
4 23 19 1590.94
14 42 36 4671.45
                                                                                             161.02
                                                                                                                                                      4588.9
                                                                              232.48
           90.00
                                                             25.97
                                                                                                                                                                      -12.12
                                                                                                                                                                                           4.00
                                                                                                                                                      1176.0
                                                                                10.95
                                                                                                155.97
                                                                                                                                                     4313.6 com.
-14.71
         100.00
                                                            -15.72
                                                                                            160.72
                                                                                                                                                                                         203.73
                                                                              211.93
                                                            27.20
         100.00
                                                                                                                                                                                         348.47
                                                                              355.27
                                                                                               154.33
                                                          -18.73
         110.00
                                                                                             159.74
                                                                                                                                                                         27.97
                                                                                                                                                                                         184.28
                                                                                                                                                     4071.4
                                                                              192.56
                                                             30.49
         110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT CETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SGT 1927.2 SGR 429.6 SG3 485.5

RRT -.8360 RRF -.8696 RTF .9184

SGB 1974.5 R23 .1649 R13 -.9223

SGI 1960.9 SG2 231.7 THA 169.29
                                                                                                                                               ST 458.2 SR 266.1 SS 350.9
CRT -.5984 CRS .9201 CST -.8592
      TOE .1669 TRA-1.2425 TC3-1.2771 BAU .4668
      ROE -.2341 RRA .1761 RC3 .2708 FAU .15201
FOE .8401 FRA-1.9590 FC3-4.9203 BSP 5755
BOE .2875 BRA 1.2550 BC3 1.3055 FSP -1571
                                                                                                                                                LSA 595.1 MSA 222.4 SSA 18.5
                                                                                                                                                EL1 491.1 EL2 198.9 ALF 156.81
                                                                                                                                                              ARRIVAL DATE APR 5 1966
                                                                                        FLIGHT TIME 108.00
      RL 147.20 LAL -.00 LOL 85.86 VL 28.383 GAL -9.24 A7L 87.66 HCA 150.94 SMA 133.03 ECC .19188 INC 2.3410 VI 30.266 RP 108.41 LAP 1.14 LOP 236.82 VP 38.090 GAP 2.95 A7P 92.05 TAL 227.54 TAP 18.48 RCA 107.51 APO 158.56 V2 34.957 RC 100.323 GL 12.98 GP 12.23 7AL 150.02 7AP 118.62 ETS 4.19 7AE 148.51 ETE 165.78 7AC 31.24 ETC 170.07 CLP-119.35
                                                                                        DISTANCE 319.431
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 25.975 VHL 5.097 DLA -8.66 RAL 292.78 RAD 6568.1 VEL 12.139 PTH 2.18 VMP 3.610 DPA -10.78 RAP 298.03 ECC 1.4275
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 114.85
                                                                                                                                  2 46 24
                                                                                              156.81
                                                              -14.03
                                                                                28.70
                          2 12 58 2006.12
           90.00
         90.00 12 0 2 5193.75
100.00 3 30 6 1757.28
100.00 13 25 35 4917.82
110.00 4 28 45 1573.63
110.00 14 43 25 4674.24
                                                                                                                                 13 26 36
                                                                                                                                                       4593.8
                                                                                                                                                                         24.19
                                                                                                                                                                                          224.64
                                                                                                                     78.46
                                                                                                 161.42
                                                              26.04
                                                                               232.81
                                                                                                                                                      1157.3
                                                                                                                                                                        -11.53
                                                                                                                                                                                            2.93
                                                                                                                                   3 59 23
                                                                                                                   116.08
                                                                                                 156.26
                                                             -15.16
                                                                                 9.84
                                                                                                                                                                                          204.01
                                                                                                                     77.25 14 47 33
                                                                                                                                                      4317.8
                                                                                                                                                                        25.24
                                                                                212.23
                                                                                                161.12
                                                              27.27
                                                                                                                                                                       -14.10
                                                                                                                                                                                          347.50
                                                                                                                                   4 54 59
                                                                                                                                                        973.6
                                                                                                                   119.47
                                                             -18.16
                                                                                354.26
                                                                                                154.61
                                                                                                                     73.86 16 1 19
                                                                                                                                                                       28.03
                                                                                                                                                                                         184.47
                                                                                                                                                 4074.2
                                                           30.55
                                                                               192.76
                                                                                                160.16
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    MID-COURSE EXECUTION ACCURACY

SGT 2074.8 SGR 441.3 SG3 468.7

RRT -.8627 RRF -.8977 RTF .9214

SGB 2121.3 R23 .1855 R13 -.9251

SGB 2121.3 R23 .1855 R13 -.9251

SGI 2109.9 SG2 219.5 THA 169.49

EL1 507.2 EL2 189.2 ALF 159.71
       TOE .1654 TRA-1.2915 TC3-1.4262 BAU .5063
       ROE - .2155 RRA .1769 RC3 .3033 FAU .14561
       FOE .7554 FRA-1.8083 FC3-4.8532 BSP 6271
BDE .2717 BRA 1.3036 BC3 1.4581 FSP -1523
                                                                             SG1 2109.9 SG2 219.5 THA 169.49
```

ARRIVAL DATE APR 7 1966

LAUNCH DATE DEC 18 1965

```
HELIOCENTRIC CONIC
                                                                     DISTANCE 325.557
    RL 147.20 LAL -.00 LOL 85.86 VL 28.337 GAL -9.07 A7L 87.81 HCA 154.13 SMA 132.69 ECC .19111 INC 2.1940 VI 30.266 RP 108.44 LAP .96 LOP 240.01 VP 38.045 GAP 3.27 A7P 91.97 TAL 226.51 TAP 20.64 RCA 107.33 APO 158.04 VZ 34.945 RC 102.682 GL 12.33 GP 13.28 ZAL 149.57 ZAP 121.74 ETS 5.78 ZAE 146.18 ETE 164.98 ZAC 30.95 ETC 171.80 CLP-122.72
   PLANETOCENTRIC CONIC
     C3 25.172 VHL 5.017 OLA -9.17 RAL 293.64 RAD 6568.0 VEL 12.106 PTH
                                                                                              2.17 VHP 3.699 CPA -9.76 RAP 297.69 ECC 1.4143
     LNCH AZMTH LNCH TIME L-I TIME INU LAT INU LONG INU RT ASC INU AZMTH INU TIME PO CST TIM INU 2 LAT INU 2 LONG
                                                                                        115.22 2 53 32
78.75 13 26 7
116.46 4 6 16
77.52 14 47 20
119.88 5 1 16
74.09 16 1 42
                                                                                                                    1381.7
                                                                          157.15
                                                                                                                                   -9.82
        90.00
                    2 20 30
                                 1981.69
                                                -13.32
                                                               27.25
                                                                                                                                                    20.32
        90.00
                  11 59 24
                                 5202.67
                                                 26.16
                                                              233.44
                                                                            161.92
                                                                                                                        4602.7
                                                                                                                                       24.34
                                                                                                                                                    225.24
       100.00
                    3 37 22
                                 1733.74
                                                 -14.45
                                                                8.45
                                                                            156.59
                                                                                                                        1133.7
                                                                                                                                      -10.78
                                                                                                                                                     1.58
                  13 25 14 4925.85
4 35 24 1552.02
14 43 41 4680.33
       100.00
                                                27.38
                                                              212.79
                                                                                                                     4325.8
                                                                                                                                    25.39
                                                                                                                                                    204.56
                                                                          161.63
                                                                                                                                     -13.32
       110.00
                                                -17.43
                                                              353.01
                                                                           154.93
                                                                                                                        952.0
                                                                                                                                                    346.30
                                                                          160.69
                                                                                                                                    28.18
                                                                                                                     4080.3
      110.00
                                                              193.20
                                                30.66
                                                                                                                                                    184.89
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                  SGT 2217.5 SGR 456.6 SG3 449.3
RRT -.8844 RRF -.9227 RTF .9229
SGB 2264.0 R23 .2123 R13 -.9267
                                                                                                                   ST 497.9 SR 232.8 SS 308.1
CRT -.5948 CRS .9256 CST -.8486
    TOE .1568 TRA-1.3316 TC3-1.5797 BAU .5438
    RDE -.1965 RRA .1763 RC3 .3402 FAU .13848
                                                                                                                  LSA 592.9 MSA 212.6 SSA' 17.4
    FOE .6686 FRA-1.6446 FC3-4.7626 BSP 6752
    BOE .2513 BRA 1.3433 BC3 1.6159 FSP -1456
                                                                  SG1 2254.3 SG2 209.6 THA 169.59
                                                                                                                   EL1 519.5 EL2 179.3 ALF 162.28
LAUNCH DATE DEC 18 1965
                                                                      FLIGHT TIME 112,00
                                                                                                                              ARRIVAL DATE APR 9 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 331.66D
    RL 147.20 LAL -.00 LOL 85.86 VL 28.289 GAL -8.90 AZL 87.99 HCA 157.32 SMA 132.33 ECC .19039 INC 2.0090 V1 30.266 RP 108.48 LAP .77 LOP 243.20 VP 37.998 GAP 3.58 AZP 91.85 TAL 225.42 TAP 22.74 RCA 107.13 APO 157.52 V2 34.932 RC 105.043 GL 11.46 GP 14.64 ZAL 149.12 ZAP 124.54 ETS 7.73 ZAE 143.98 ETE 163.86 ZAC 30.88 ETC 174.04 CLP-125.87
   PLANETOCENTRIC CONIC
    C3 24.334 VHL 4.933 DLA -9.90 RAL 294.60 RAD 6568.0 VEL 12.071 PTH 2.16 VHP 3.800 DPA -8.41 RAP 297.53 ECC 1.4005 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 2 30 9 1949.74
11 57 26 5217.95
3 46 37 1703.08
13 23 40 4939.85
4 43 45 1524.14
14 43 1 4691.55
        90.00
                                                                          157.56
                                                                                                                     1349.7
                                                                                                                                                    18.49
                                                -12.39
                                                               25.37
                                                                                          115.67 3 2 39
                                                                                                                                    -8.83
                                                                                           79.26 13 24 24
116.92 4 15 0
78.01 14 46 0
120.38 5 9 9
74.53 16 1 12
                                                                                                                                       24.61
        90.00
                                                 26.36
                                                              234.51
                                                                            162.57
                                                                                                                        4618.0
                                                                                                                                                    226.28
                                                                           156.99
       100.00
                                                -13.51
                                                               6.66
                                                                                                                        1103.1
                                                                                                                                       -9.79
                                                                                                                                                    359.84
      100.00
                                                27.59
                                                              213.78
                                                                           162.29
                                                                                                                        4339.8
                                                                                                                                       25.66
                                                                                                                                                    205.52
                                                                                                                                   -12.32
      110.00
                                                -16.48
                                                              351.41
                                                                          155.31
                                                                                                                        924.1
                                                                                                                                                    344.77
                                                                  110.00
                                                30.87
                                                              194.01
                                                                            161.37
                                                                                                                       4091.5
                                                                                                                                     28.44
                                                                                                                                                    185.65
   DIFFERENTIAL CORRECTIONS
    TOE .1358 TRA-1.3637 TC3-1.7428 BAU .5807
                                                                                                                  ST 510.1 SR 213.4 SS 279.0
CRT -.5758 CRS .9235 CST -.8382
    ROE -.1755 RRA .1755 RC3 .3863 FAU .13133
FOE .5631 FRA-1.4833 FC3-4.6726 BSP 7249
BOE .2219 BRA 1.3750 BC3 1.7849 FSP -1398
                                                                  SGB 2407.4 R23 .2429 R13 -.9278
                                                                                                                   LSA 584.2 MSA 205.1 55A 16.9
                                                                 SG1 2398.8 SG2 202.9 THA 169.56
                                                                                                                  EL1 526.5 EL2 169.1 ALF 164.86
LAUNCH DATE DEC 18 1965
                                                                                                                             ARRIVAL DATE APR 11 1966
                                                                     FLIGHT TIME 114.00
   HELIOCENTRIC CONIC
                                                                     DISTANCE 337.740
    RL 147.20 LAL -.00 LOL 85.86 VL 28.240 GAL -8.71 A7L 88.23 MCA 160.50 SMA 131.96 ECC .18971 INC 1.7676 VI 30.266 RP 108.52 LAP .59 LOP 246.38 VP 37.950 GAP 3.88 A7P 91.67 TAL 224.29 TAP 24.79 RCA 106.93 APO 156.99 VZ 34.920
    RC 107.406 GL 10.24 GP 16.43 7AL 148.68 7AP 126.96 ETS 10.19 7AE 141.81 ETE 162.31 7AC 31.05 ETC 176.97 CLP-128.82
   PLANETOCENTRIC CONIC
    C3 23.456 VHL 4.843 DLA -10.95 RAL 295.69 RAD 6568.0 VEL 12.035 PTH 2.15 VHP 3.916 OPA -6.61 RAP 297.50 ECC 1.3860
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        116.22 3 14 48
80.11 13 20 37
                                                                                                                    1306.2
                 2 43 2 1906.18
11 53 13 5243.53
3 58 53 1661.44
13 20 3 4963.50
                                                                          158.06
                                                                                                                                                    16.01
       90.00
                                                -11.09
                                                              22.82
                                                                                                                                    -7.48
                                                                                                                                      25.03
       90.00
                                                                                                                       4643.5
                                                26.67
                                                             236.32
                                                                            163.43
                                                                                                                    1061.4
436*
                                                                                          117.50 4 26 35
78.84 14 42 47
5 19 29
                                                                                                                                                   357.50
                                                                           157.48
      100.00
                                               -12.22
                                                               4.25
                                                                                                                                       -8.44
                                                                                                                                     26.09
                                                                                                                                                   207.14
      100.00
                                               27.91
                                                              215.47
                                                                           163.17
                                                                                          78.00
121.00 5 15 _
30 15 59 15
                   4 54 42 1486.65
                                                                                                                                                   342.72
      110.00
                                            -15.17
31.21
                                                              349.28
                                                                                                                       886.6
                                                                                                                                    -10.95
                                                                           155.77
                  14 40 43
                                4711.06
                                                             195.43
                                                                            162.29
                                                                                                                       4111.1
                                                                                                                                      28.88
                                                                                                                                                   187.00
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                   ST 516.8 SR 191.7 SS 244.0
CRT -.5385 CRS .9160 CST -.8227
                                                                 SGT 2496.2 SGR 508.2 SG3 407.8
RRT -.9147 RRF -.9627 RTF ..9239
SGB 2547.4 R23 .2773 R13 -.9281
    TOE .0998 TRA-1.3833 TC3-1.9145 BAU .6160
   RDE -.1528 RRA .1732 RC3 .4405 FAU .12353
FOE .4455 FRA-1.3110 FC3-4.5592 BSP 7721
                                                                                                                  LSA 570.1 MSA 195.0 SSA 16.5
    BOE .1825 BRA 1.3941 BC3 1.9645 FSP -1325
                                                                  SG1 2539.4 SG2 201.9 THA 169.38
                                                                                                                   EL1 528.1 EL2 158.1 ALF 167.57
LAUNCH DATE DEC 18 1965
                                                                     FLIGHT TIME 116.00
                                                                                                                              ARRIVAL DATE APR 13 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 343.799
   RL 147.20 LAL -.00 LOL 85.86 VL 28.189 GAL -8.53 A7L 88.56 MCA 163.69 SMA 131.58 ECC .18908 INC 1.4357 V1 30.266 RP 108.56 LAP .40 LOP 249.56 VP 37.901 GAP 4.17 A7P 91.38 TAL 223.11 TAP 26.79 RCA 106.70 APO 156.46 V2 34.909 RC 109.770 GL 8.46 GP 18.90 ZAL 148.26 ZAP 128.91 ETS 13.40 ZAE 139.56 ETE 160.16 ZAC 31.50 ETC 180.88 CLP-131.60
  PLANETOCENTRIC CONIC
    C3 22.538 VHL 4.747 DLA -12.53 RAL 296.95 RAD 6567.9 VEL 11.997 PTH 2.14 VHP 4.056 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 1 19 1843.30
                                                                                                       3 32 2
                                                                                                                    1243.3
                                                 -9.17
                                                               19.20
                                                                          158.75
                                                                                          116.91
                                                                                                    13 13 6
                  11 44 59
       90.00
                                 5286.96
                                                 27.14
                                                              239.41
                                                                            164.63
                                                                                            81.59
                                                                                                                        4687.0
                                                                                                                                       25.70
                                                                                                     4 42 54
      100.00
                   4 16 12
                                 1601.65
                                                -10.31
                                                                 .83
                                                                            158.15
                                                                                           118.21
                                                                                                                       1001.6
                                                                                                                                       -6.46
                                                                                                                                                    354.16
                                                                                            80.28 14 36 10
      100.00
                  13 12 46
                                 5003.84
                                                28.41
                                                              218.36
                                                                            164.41
                                                                                                                       4403.8
                                                                                                                                      26.77
                                                                                                                                                    209.94
                 5 9 55 1433.44
14 35 33 4744.82
      110.00
                                                -13.29
                                                              346.31
                                                                            156.40
                                                                                           121.79
                                                                                            121.79 5 33 48
76.67 15 54 38
                                                                                                                        833.4
      110.00
                                                 31.77
                                                              197.90
                                                                            163.61
                                                                                                                       4144.8
                                                                                                                                       29.61
                                                                                                                                                    189.36
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                 SGT 2631.1 SGR 551.3 SG3 384.2
RRT -.9224 RRF -.9771 RTF .9237
                                                                                                                 ST 520.4 SR 164.5 SS 198.7
CRT -.4712 CRS .8852 CST -.8164
    TOE .0385 TRA-1.3882 TC3-2.0998 BAU .6513
   ROE -.1254 RRA .1699 RC3 .5127 FAU .11527
FOE .2970 FRA-1.1344 FC3-4.4279 BSP 8204
BOE .1312 BRA 1.3985 BC3 2.1615 FSP -1253
                                                                SGB 2688.2 R23 .3099 R13 -.9285 LSA 553.5 M5A 175.2 SSA 16.6 SG1 2680.1 SG2 209.1 THA 168.99 EL1 526.6 EL2 143.4 ALF 170.84
                                                                                                                  LSA 553.5 H5A 175.2 SSA 16.6
```

FLIGHT TIME 110.00

ARRIVAL DATE APR 15 1966

LAUNCH DATE DEC 18 1965

```
DISTANCE 349.837
  HELIOCENTRIC CONIC
   RL 147.20 LAL -.00 LOL 85.86 VL 28.137 GAL -8.33 AZL 89.05 HCA 166.87 SMA 131.20 ECC .18851 INC .9476 V1 30.266
RP 108.59 LAP .22 LOP 252.73 VP 37.852 GAP 4.45 AZP 90.92 TAL 221.88 TAP 28.75 RCA 106.47 APO 155.93 V2 34.897
                       5.70 GP 22.49 TAL 147.84 TAP 130.15 ETS 17.76 TAE 136.98 ETE 157.14 TAC 32.39 ETC 186.30 CLP-134.25
   RC 112.133 GL
  PLANETOCENTRIC CONIC
                                                                                                                       -.49 RAP 297.48 ECC 1.3554
   C3 21.594 VHL 4.647 DLA -15.06 RAL 298.48 RAD 6567.9 VEL 11.957 PTH
                                                                                           2.13 VHP 4.240 DPA
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    3 58 52
                                                                                                                  1144.8
                                                                        159.88
                                                                                       117.71
                   3 29 47
                               1744.77
                                               -6.09
                                                            13.60
       90.00
                                                                                          84.33 12 56 10
119.07 5 8 6
                                                                                                                    4764.8
                                                                                                                                   26.71
                                                                                                                                                236.51
                                                27.79
                                                            245.02
                                                                          166.49
                 11 28 45
                              5364.77
       90.00
                                                                                                                                   -3.35
                                                                                                                                               349.02
                                                                                                                    908.7
                                                                                         119.07
                  4 42 57
                               1508.69
                                               -7.28
                                                            355.60
                                                                          159.24
     100.00
                                                                                          82.96 14 22 52
122.77 5 55 30
79.21 15 44 51
                                                                                                                    4476.1
                                                                                                                                   27.84
                                                                                                                                                215.04
                12 58 16 5076.08
                                                            223.61
                                                                         166.32
                                               29.13
     100.00
                                                                                                                                                335.53
                                                                                                                                   -5.93
                                                                                        122.77
                                                                                                                    752.0
                 5 32 58 1352.04
14 24 45 4805.50
                                                            341.87
                                                                         157.39
                                               -10.32
     110.00
                                                                                                                    4205.5
                                                                                                                                    30.80
                                                                                                                                                193.68
                                                            202.42
                                                                         165.68
     110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 2758.4 SGR 612.5 SG3 355.1

RRT -.9240 RRF -.9875 RTF ..9227

SGB 2825.6 R23 ..3374 R13 -.9285

SG1 2816.3 SG2 229.3 THA 168.33
                                                                                                                ST 533.5 SR 127.7 SS 147.0
CRT -.3710 CRS .7700 CST -.8625
LSA 551.1 MSA 136.0 SSA 18.1
   TOE -. 0626 TRA-1.3680 TC3-2.2957 BAU .6856
   ROE - . 0893 RRA . 1629 RC3 . 6085 FAU . 10547
   FCE .1113 FRA -.9352 FC3-4.2284 BSP 8634
                                                                                                                EL1 535.7 EL2 118.1 ALF 174.67
   BOE .1091 BRA 1.3776 BC3 2.3749 FSP -1155
                                                                                                                           ARRIVAL DATE APR 17 1966
                                                                    F: 1CHT TIME 120.00
LAUNCH DATE DEC 18 1965
                                                                   DISTANCE 355.854
  HELIOCENTRIC CONIC
   RL 147.20 LAL -.00 LOL 85.86 VL 28.083 GAL -8.12 AZL 89.84 HCA 170.05 SMA 130.82 ECC .18798 INC .1455 V1 30.266 RP 108.63 LAP .03 LOP 255.91 VP 37.802 GAP 4.72 AZP 90.16 TAL 220.61 TAP 30.66 RCA 106.22 APO 155.41 V2 34.886
                          .97 GP 28.06 7AL 147.20 7AP 130.10 ETS 23.90 7AE 133.50 ETE 152.82 7AC 34.13 ETC 194.10 CLP-136.88
   RC 114.493 GL
  PLANETOCENTRIC CONIC
   C3 20.724 VHL 4.552 DLA -19.49 RAL 300.56 RAD 6567.8 VEL 11.921 PTH 2.12 VHP 4.523 DPA 5.10 RAP 297.13 ECC 1.3411 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        118.31
                                                                                                     4 48 23
                                                                                                                     966.5
                                                              3.61
                                                                         162.31
                   4 22 17
                              1566.49
                                                -.3A
                                                                                                                                                 247.92
                                                                                          90.09 12 24 53
                                                                                                                     4923.3
                                                                                                                                    28.03
                                                                          169.71
                               5523.28
                                                28.32
                                                            256.57
       90.00
                 10 52 50
                                                                                                                                                 339.94
                   5 31 26 1343.35
12 26 22 5221.66
                                                                          161.56
                                                                                         119.85
                                                                                                     5 53 49
                                                                                                                     743.3
                                                                                                                                    2.26
                                                            346.46
                                                -1.73
                                                                                         88.56 13 53 24
123.85 6 33 35
84.54 15 23 1
                                                                                                                                                 225.60
                                                                          169.68
                                                                                                                     4621.7
                                                                                                                                    29.34
                                                            234.36
                                               29.86
                 12 26 22
      100.00
                                                                                                                     611.9
                                                                                                                                     -.60
                                                                                                                                                 328.19
                 6 13 23 1211.90
14 0 55 4925.88
                                                                          159.48
                                                             334.41
                                                -5.08
                                                                          169.41
                                                                                                                     4325.9
                                                                                                                                   32.67
                                                                                                                                                202.56
                                                            211.62
                                               33.80
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 615.3 SR 72.9 SS 140.5
CRT -,4747 CRS .4634 CST -.9807
                                                                SGT 2887.8 SGR 705.8 SG3 317.5
    TOE -. 2494 TRA-1.3103 TC3-2.4999 BAU .7225
                                                                RRT -.9204 RRF -.9943 RTF .9224
568 2972.8 R23 .3526 R13 -.9298
    ROE -.0290 RRA .1492 RC3 .7426 FAU .09320
FOE -.1528 FRA -.7103 FC3-3.8936 BSP 9129
                                                                                                                 LSA 631.6 MSA 64.1 SSA 26.8
EL1 616.3 EL2 64.1 ALF 176.75
    BOE .2511 BRA 1.3187 BC3 2.6079 FSP -1037
                                                                SG1 2960.6 SG2 269.2 THA 167.21
                                                                                                                           ARRIVAL DATE APR 19 1966
                                                                   FLIGHT TIME 122.00
LAUNCH DATE DEC 18 1965
   RL 147.2D LAL -.OD LOL 85.86 VL 28.029 GAL -7.91 A7L 91.36 MCA 173.22 SMA 130.43 ECC .18751 INC 1.3591 VI 30.266
RP 108.66 LAP -.16 LOP 259.08 VP 37.752 GAP 4.97 A7P 88.65 TAL 219.30 TAP 32.52 RCA 105.97 APO 154.88 V2 34.875
RC 116.852 GL -8.36 GP 37.58 ZAL 145.06 ZAP 127.26 ETS 32.79 ZAE 127.62 ETE 146.75 ZAC 38.03 ETC 205.69 CLP-139.82
                                                                   CISTANCE 361.850
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 20.546 VHL 4.533 OLA -28.33 RAL 304.10 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 5.097 CPA 14.53 RAP 295.82 ECC 1.3381
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       110.99
                                                                                                     7 58 46
                                                                          173.08
                                               19.48
                                                            326.66
        89.02
                   7 43 20 925.76
                                                                                                    8 14 30
                                                                                                                      271.9
                                                                                                                                    22.17
                                                                                                                                                315.07
                                                19.49
                                                             322.72
                                                                          173.08
                                                                                         110.98
                   7 59 58
                                 871.85
        90.98
                                                                                                                                                314.58
                                                                                                     871
                                                                                                                      297.5
                                                                                                                                    16.56
                                               13.02
                                                             321.59
                                                                          170.08
                                                                                         117.15
      100.00
                   7 52 3
                                  897.50
                                                                                                                                    28.01
                                                                                                                                                258.12
                                                                                         104.90 12 8 20
                                                             266.46
                                                                           175.44
                                                26.22
                  10 33 56 5663.39
       100.00
                                                                                                                                    11.24
                                                                                                                                                311.61
                                                                                                     8 6 49
                                                                                                                      298.1
                                                                                         123.57 8 6 49
98.68 14 17 54
                                                             317.98
                                                                          166.42
                                                 6.87
                   7 51 51
                                 898.14
       110.00
                                                                                                                    4635.5
                                                                                                                                   34.04
                                                                                                                                                226.52
                                                             235.66
                                                                          177.12
                              5235.51
                                                33.19
      110.00
                 12 50 38
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                SGT 3016.4 SGR 842.5 SG3 258.1

RRT -.9095 RRF -.9972 RTF .9236

SGB 3131.9 R23 .3520 R13 -.9339

SGI 3113.5 SGZ 339.3 THA 165.57
                                                                                                                 ST 959.2 SR 140.3 SS 309.5
CRT -.9750 CRS .9949 CST -.9580
    TOE -.6447 TRA-1.1629 TC3-2.6210 BAU .7614
    ROE .1027 RRA .1099 RC3 .9016 FAU .07452
FOE -.5329 FRA -.4208 FC3-3.1400 BSP 9646
BOE .6528 BRA 1.1681 BC3 2.7718 FSP -845
                                                                                                                LSA 1013.7 MSA 88.7 SSA 8.8
EL1 968.9 EL2 30.9 ALF 171.87
                                                                                                                            ARRIVAL DATE APR 21 1966
                                                                     FLIGHT TIME 124.00
LAUNCH DATE DEC 18 1965
                                                                    DISTANCE 367.815
    RL 147.20 LAL -.00 LOL 85.86 VL 27.975 GAL -7.69 AZL 95.51 HCA 176.37 SMA 130.04 ECC .18708 INC 5.5122 VI 30.266 RP 108.69 LAP -.35 LOP 262.25 VP 37.702 GAP 5.22 AZP 84.50 TAL 217.95 TAP 34.32 RCA 105.71 APO 154.36 V2 34.865 RC 119.206 GL -30.72 GP 55.76 ZAL 133.66 ZAP 117.64 ETS 45.96 ZAE 114.88 ETE 140.46 ZAC 48.01 ETC 222.96 CLP-145.54
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 27.185 VHL 5.214 CLA -49.23 RAL 314.92 RAD 6568.1 VEL 12.189 PTH 2.19 VHP 7.009 CPA 32.20 RAP 290.76 ECC 1.4474
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1119.7
                                                                                                     4 54 52
                   4 26 12 1719.66
12 43 26 5502.79
                                                                          196.19
                                                                                         T31.62
                                                 29.12
                                                              35.A7
        47.89
                                                                                                                                                 248.61
                                                                                                    14 15 9
                                                                                                                      4902.8
                                                                                                                                     34.25
                                                                                          131.61
                                                                           196.20
                                                 29.14
                                                             255.42
       132.11
                                                                                                                                                  29.05
                                                                                          131.62
                                                                                                     4 54 52
                                                                                                                     1119.7
                                                                                                                                    34.24
                  4 26 12 1719.66
12 43 26 5502.79
                                                                           196.19
                                                 29.12
                                                              35.87
        47.89
                                                                                                    14 15 9
                                                                                                                     4902.8
                                                                                                                                    34.25
                                                                                                                                                 248.61
                                                                                          131.61
                                                                           196.20
                                                 29.14
                                                             255.42
       132.11
                                                                                                                                                  29.05
                                                                                                    4 54 52
                                                                                          131.62
                                                                                                                     1119.7
                                                                                                                                    34.24
                    4 26 12 1719.66
12 43 26 5502.79
                                                 29.12
                                                               35.87
                                                                           196.19
        47.89
                                                                                                    14 15 9
                                                                                          131.61
                                                                                                                     4902.8
                                                                                                                                    34.25
                                                                                                                                                 248.61
                                                             255.42
                                                                           196.20
                   12 43 26
                                                 29.14
       132.11
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                SCT 3171.9 SGR 982.1 SG3 157.5
RRT -.8812 RRF -.9898 RTF .9380
                                                                                                           ST 2100.4 SR 554.2 SS 691.8
CRT -.9775 CRS ..9980 CST -.9888
LSA 2275.2 MSA 144.6 SSA 1.4
     TOE-1.8839 TRA -.6914 TC3-2.0165 BAU .7850
     RDE .5034 RRA -.0497 RC3 .7740 FAU .04275
                                                                SCB 3320.5 R23 .3095 R13 -.9504
     FOE-1.0387 FRA -.0384 FC3-1.3613 BSP 10313
                                                                SG1 3290.2 SG2 447.6 THA 164.44 EL1 2169.4 EL2 113.3 ALF 165.50
```

FLIGHT TIME 118.00

BOE 1.9500 BRA .6932 BC3 2.1599 FSP -517

```
FLIGHT TIME 126.00
 LAUNCH DATE DEC 18 1965
                                                                                                                                          ARRIVAL DATE APR 23 1966
    HELIOCENTRIC CONIC
                                                                            DISTANCE 373.538
     RL 147.20 LAL -.00 LOL 85.86 VL 27.920 GAL -7.41 A7L 140.48 MCA 179.31 SMA 129.64 ECC .18616 INC50.4754 VI 30.266 RP 108.72 LAP -.53 LOP 265.42 VP 37.652 GAP 5.40 AZP 39.52 TAL 216.42 TAP 35.73 RCA 105.51 APO 153.78 VZ 34.856 RC 121.557 GL -58.46 GP 66.48 ZAL 97.93 ZAP 95.86 ETS 162.42 ZAE 71.41 ETE 241.24 ZAC 71.06 ETC 348.16 CLP 104.83
    PLANETOCENTRIC CONIC
     C3 628.071 VHL 25.061 OLA -58.34 RAL 19.99 RAD 6572.6 VEL 27.375 PTH 3.40 VHP 33.003 CPA 55.71 RAP 232.98 ECC11.3365
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
36.61 8 12 45 2359.39 1.15 69.48 289.26 148.33 8 52 4 1759.4 7.95 65.66
                                                                                                 148.33 8 52 4
                                                                                                 148.33 17 47 52
148.33 8 52 4
148.33 17 47 52
148.33 8 52 4
148.33 17 47 52
        143.39
                     17 36 2
                                      710.20
                                                        1.16
                                                                    295.18
                                                                                   289.28
                                                                                                                                   110.2
                                                                                                                                                    7.96
                                                                                                                                                                 291.37
                    8 12 45 2359.39
17 36 2 710.20
8 12 45 2359.39
17 36 2 710.20
         36.61
                                                                                                                                                                  65.66
                                                       1.15
                                                                     69.48
                                                                                   289.26
                                                                                                                                   1759.4
                                                                                                                                                     7.95
                                                                    295.18 289.28
29 18 289.26
        143.39
                                     710.20
                                                       1.16
                                                                                                                                   110.2
                                                                                                                                                    7.96
                                                                                                                                                                 291.37
                                                       1.15
                                                                                                                                  1759.4
                                                                                                                                                    7.95
                                                                                                                                                                  65.66
        143.39
                    17 36 2
                                     710.20
                                                                    295.18
                                                       1.16
                                                                                   289.28
                                                                                                                                   110.2
                                                                                                                                                   7.96
                                                                                                                                                                 291.37
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SCT 616.9 SCR 3221.6 SC3 51.9

RRT -.2230 RRF .9976 RTF -.1557

SCB 3280.1 R23 -.0766 R13 .9970

SCI 3224.6 SC2 600.8 THA 92.53

ELI 1793.8 EL2 300.6 ALF 105.20
     TOE 2.4009 TRA .4866 TC3 -.0370 BAU 1.5593
     ROE-6.7120 RRA 6.1576 RC3 .1820 FAU-.02245
FDE-1.1128 FRA 1.1988 FC3 .0309 BSP 3339
BDE 7.1285 BRA 6.1768 BC3 .1857 FSP -61
LAUNCH DATE DEC 18 1965
                                                                            FLIGHT TIME 128.00
                                                                                                                                          ARRIVAL CATE APR 25 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 379.839
    RL 147.20 LAL -.00 LOL 85.86 VL 27.864 GAL -7.24 AZL 75.22 HCA 182.82 SMA 129.25 ECC .18676 INC14.7798 V1 30.266 RP 108.75 LAP -.72 LOP 268.59 VP 37.602 GAP 5.73 AZP 104.76 TAL 215.23 TAP 38.05 RCA 105.11 APO 153.39 V2 34.846
     RC 123.903 GL 55.27 GP -61.50 ZAL 113.14 ZAP 115.18 ETS 294.10 ZAE 103.99 ETE 208.36 ZAC 79.40 ETC 113.76 CLP-153.08
   PLANETOCENTRIC CONIC
    C3 73.625 VHL 8.580 DLA 35.89 RAL 298.22 RAD 6569.4 VEL 13.963 PTH 2.55 VHP 8.448 DPA -80.97 RAP 349.91 ECC 2.2117
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    56.37 17 52 24
56.37 17 52 24
56.37 17 52 24
56.37 17 52 24
56.37 17 52 24
56.37 17 52 24
                    16 39 18
                                                    -13.35
                                                                                 189.09
                                                                                                                                                             187.28
        66.97
                                   4386.63
                                                                    193.85
                                                                                                                                  3786.6
                                                                                                                                                -17.68
                   22 13 10 3329.96
       113.03
                                                     -13.33
                                                                    114.56
                                                                                   189.08
                                                                                                                                   2730.0
                                                                                                                                                  -17.66
                                                                                                                                                                  107.99
                  16 39 18 4386.63
22 13 10 3329.96
        66.97
                                                    -13.35
                                                                    193.85
                                                                                   189.09
                                                                                                                                   3786.6
                                                                                                                                                 -17.68
                                                                                                                                                                 187.28
                                                                                189.08
       113.03
                                                     -13.33
                                                                    114.56
                                                                                                                                  2730.0
                                                                                                                                                 -17.66
                                                                                                                                                                 107.99
                                                                                 189.09
       66.97 16 39 18 4386.63
113.03 22 13 10 3329.96
                                                    -13.35
                                                                    193.85
                                                                                                                                  3786.6 -17.68
                                                                                                                                                                 187.28
                                                                    114.56
                                                                                   189.08
                                                                                                                                  2730.0
                                                                                                                                                                 107.99
                                                                                                                                                 -17.66
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                    SGT 3536.4 SGR 376.6 SG3 119.2

RRT -.1254 RRF .1280 RTF .9678

SGB 3556.4 R23 -.2528 R13 -.9674

SGI 3536.8 SG2 373.6 THA 179.23
     TOE 3.7441 TRA-2.7278 TC3 -.6386 BAU .6330
                                                                                                                           ST 2589.7 SR 185.5 SS 822.6

CRT .6979 CRS -.7702 CST -.9943

LSA 2719.1 MSA 155.8 SSA .4
    ROE .2390 RRA .3825 RC3 -.0759 FAU .02807
    FDE 1.6670 FRA -.7116 FC3 -.3301 BSP 10892
BDE 3.7517 BRA 2.7545 BC3 .6431 FSP -403
                                                                                                                           EL1 2593.0 EL2 132.7 ALF 2.87
LAUNCH DATE DEC 18 1965
                                                                           FLIGHT TIME 130.00
                                                                                                                                         ARRIVAL DATE APR 27 1966
   HELIOCENTRIC CONTC
                                                                           DISTANCE 385.748
    RL 147.20 LAL -.00 LOL 85.86 VL 27.808 GAL -7.00 A7L 81.29 HCA 185.96 SMA 128.86 ECC .18651 INC 8.7124 VI 30.266 RP 108.78 LAP -.90 LOP 271.76 VP 37.553 GAP 5.95 A7P 98.67 TAL 213.77 TAP 39.73 RCA 104.83 APO 152.90 V2 34.838
    RC 126.245 GL 43.48 GP -38.47 TAL 122.29 TAP 131.56 ETS 312.20 TAE 120.21 ETE 208.95 TAC 63.81 ETC 129.20 CLP-147.91
   PLANETOCENTRIC CONTC
    C3 36.914 VHL 6.076 OLA 23.91 RAL 299.58 RAO 6568.4 VEL 12.581 PTH 2.28 VHP 5.644 DPA -58.89 RAP 320.66 ECC 1.6075
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 21 49 50 3226.27 -25.70

90.00 17 13 31 4147.92 -1.64

100.00 23 30 44 2902.98 -27.99

100.00 18 15 18 3948.45 .41

110.00 1 21 39 2568.24 -33.42

110.00 18 44 48 3855.95 5.08
                                                                                                77.67 22 43 38 61.73 18 22 38 79.06 24 19 7 60.11 19 21 7 82.35 2 4 27 56.15 19 49 4
                                                                                                                                              -27.14
                                                                               180.96
171.89
                                                                                                                                                             104.35
                                                                   112.72
                                                                                                                                2628.3
                                                                    169.08
                                                                                                                                                   -5.41
                                                                                                                                  2303.0
       100.00
                                                                     89.32
                                                                                 181.49
                                                                                                                                                -29.22
                                                                                                                                                                  80.73
                                                                                                                                  2303.0
3348.4
                                                                               170.75
       100.00
                                                                    153.28
                                                                                                                                                 -3.57
                                                                                                                                                                146.75
                                                                                                                                               -34.11
       110.00
                                                                     64.93
                                                                                182.53
167.85
                                                                                                                                  1968.2
                                                                                                                                                                  55.75
      110.00
                                                                    143.37
                                                                                                                                  3255.9
                                                                                                                                                    .60
                                                                                                                                                                 137.15
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       SGT 3574.0 SGR 412.1 SG3 216.1
RRT .6963 RRF .8991 RTF .9381
SGB 3597.7 R23 .3363 R13 .9404
SG1 3585.6 SG2 294.8 THA 4.62
    TOE 2.0993 TRA-2.2307 TC3-1.5526 BAU .7739
                                                                                                                             ST 2037.4 SR 311.2 55 817.7
    RDE .3296 RRA .0398 RC3 -.2201 FAU .05858
                                                                                                                             CRT .9305 CRS -.9816 CST -.9833
    FOE 1.7567 FRA -.8239 FC3-1.3738 BSP 11180
BCE 2.1250 BRA 2.2310 BC3 1.5681 FSP -733
                                                                                                                            LSA 2265.8 MSA 174.7 SSA 1.5
                                                                                                                             EL1 2117.3 EL2 112.9 ALF 7.88
LAUNCH DATE DEC 18 1965
                                                                            FLIGHT TIME 132.00
                                                                                                                                         ARRIVAL DATE APR 29 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 391.663
   RL 147.20 LAL -.00 LOL 85.86 VL 27.752 GAL -6.74 AZL 83.17 HCA 189.12 SMA 128.47 ECC .18639 INC 6.8340 V1 30.266 RP 108.80 LAP -1.08 LOP 274.92 VP 37.504 GAP 6.18 AZP 96.75 TAL 212.30 TAP 41.42 RCA 104.53 APO 152.42 VZ 34.830 RC 128.581 GL 37.60 GP -26.69 ZAL 125.44 ZAP 139.63 ETS 321.26 ZAE 126.29 ETE 202.89 ZAC 57.13 ETC 136.79 CLP-148.50
  PLANETOCENTRIC CONIC
    C3 28.891 VHL 5.375 DLA 18.31 RAL 301.54 RAD 6568.2 VEL 12.258 PTH 2.21 VHP 5.112 DPA -47.04 RAP 317.68 ECC 1.4755
    ENCH AZMTH ENCH TIME L-I TIME
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIN INJ 2 LAT INJ 2 LONG
                 1 LNCH TIME L-I TIME
23 7 24 2913.58
16 11 37 4339.23
0 43 37 2615.98
17 22 1 4112.07
2 15 44 2327.76
18 6 23 3973.06
                                                                                                   88.65 23 55 57
62.02 17 23 57
89.94 1 27 13
60.65 18 30 33
        90.00
                                                                                176.50
                                                    -28.29
                                                                    90.13
                                                                                                                               2313.6
                                                                                                                                              -28.18
        90.00
                                                      4.52
                                                                   179.76
                                                                                  167.86
                                                                                                                                  3739.2
                                                                                                                                                    .74
                                                                                                                                                                173.12
      100.00
                                                                                                                                                 -29.58
                                                    -29.89
                                                                    68.26
                                                                                 176.52
                                                                                                                                  2016.0
                                                                                                                                                                  59.47
      100.00
                                                     5.93
                                                                   162.29
                                                                                 167.09
                                                                                                                                  3512.1
                                                                                                                                                   1.97
                                                                                                                                                                155.74
      110.00
                                                                               176.38
                                                    -34.04
                                                                                                    93.37 2 54 32
57.00 19 12 36
                                                                    46.23
                                                                                                                                  1727.8
                                                                                                                                                -33.20
                                                                                                                                                                37.09
      110.00
                                                     9.47
                                                                   149.58
                                                                                  164.92
                                                                                                                                 3373.1
                                                                                                                                                  5.06
                                                                                                                                                                 143.27
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                     SCT 3662.6 SGR 302.0 SG3 257.1 ST 1877.5 SR 228.8 SS 773.9 RRT .6606 RRF .8815 RTF .9275 CRT .9072 CRS -.9786 CST -.9743 SGB 3675.0 R23 .3550 R13 .9287 LSA 2035.3 MSA 184.6 SSA 2.8 SGI 3668.0 SG2 226.4 THA 3.13 ELI 1889.0 EL2 95.7 ALF 6.32
    TOE 1.6377 TRA-2.0419 TC3-2.1030 BAU .8152
   RDE .2142 RRA .0400 RC3 -.1790 FAU .07020
FDE 1.6248 FRA -.7657 FC3-2.1035 BSP 11503
    BOE 1.6516 BRA 2.0423 BC3 2.1106 FSP -865
```

ARRIVAL DATE MAY 1 1966

```
LAUNCH DATE DEC 18 1965
                                                                   DISTANCE 397.569
   RL 147.20 LAL -.00 LOL 85.86 VL 27.696 GAL -6.48 A7L 84.08 HCA 192.29 SMA 128.09 ECC .18638 INC 5.9172 V1 30.266 RP 108.82 LAP -1.26 LOP 278.09 VP 37.456 GAP 6.39 A7P 95.78 TAL 210.81 TAP 43.09 RCA 104.21 APO 151.96 V2 34.822 RC 130.911 GL 34.30 GP -20.04 ZAL 126.38 ZAP 144.22 ETS 327.34 ZAE 128.78 ETE 198.10 ZAC 54.43 ETC 142.12 CLP-149.71
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 25.340 VHL 5.034 CLA 15.38 RAL 303.39 RAC 6568.0 VEL 12.113 PTH 2.17 VHP 4.983 CPA -40.16 RAP 317.42 ECC 1.4170
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        93.86 24 29 39
                                                                         174.54
                 23 43 28 2771.12
15 50 19 4416.52
                                               -28.07
                                                             79.72
       90.00
                                                                                                  17 3 55
                                                                                                                                                177.43
                                                                                                                    3816.5
                                                                                                                                    3.23
                                                                                          62.49
                                                                          167.20
                                                6.97
                                                            184.12
       90.00
                                                                                                                                                49.65
                                                                                                    1 58 31
                                                                                                                    1881.7
                                                                                                                                  -28.46
                 1 17 9 2481.67
17 3 14 4181.20
2 44 7 2209.53
17 52 45 4026.11
                                                                                          95.16
                                               -29.48
                                                             58.30
                                                                          174.41
      100.00
                                                                                         61.16 18 12 56
98.70 3 20 57
57.56 18 59 51
                                                                                                                                                159.54
                                                                                                                    3581.2
                                                                                                                                   4.31
                                                                         166.53
                                                 8.22
                                                            166.14
      100.00
                                                                                                                                                 28.23
                                                                                                                    1609.5
                                                                                                                                 -31.63
                                               -33.19
                                                             37.11
                                                                          173.88
      110.00
                                                                                                                                                146.07
                                                                          154.60
                                                                                                                    3426.1
                                                                                                                                    7.07
                                                            152.45
      110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1774.0 SR 183.1 SS 732.9
CRT .8834 CRS -.9734 CST -.9671
                                                                SGT 3758.9 SGR 221.7 SG3 270.3
RRT .5452 RRF .7906 RTF .9217
SGB 3765.4 R23 .3422 R13 .9222
    TOE 1.4367 TRA-1.9305 TC3-2.4855 BAU .8429
   ROE .1602 RRA .0472 RG3 -.1124 FAU .07318
FDE 1.4797 FRA -.6634 FC3-2.5003 BSP 11754
                                                                                                                LSA 1918.7 MSA 190.4 SSA 4.2
                                                                                                                EL1 1781.4 EL2 85.5 ALF 5.22
                                                                SG1 3760.8 SG2 185.8 THA 1.85
                                                   -903
    BOE 1.4456 BRA 1.9311 BC3 2.4880 FSP
                                                                                                                           ARRIVAL DATE MAY 3 1966
                                                                    FLIGHT TIME 136.00
LAUNCH DATE DEC 18 1965
                                                                    DISTANCE 403.463
   RL 147.20 LAL -.00 LOL 85.86 VL 27.639 GAL -6.22 AZL 84.63 HCA 195.45 SMA 127.70 ECC .18645 INC 5.3720 V1 30.266 RP 108.85 LAP -1.43 LOP 281.25 VP 37.408 GAP 6.61 AZP 95.18 TAL 209.29 TAP 44.74 RCA 103.89 APO 151.51 V2 34.816
   HELIOCENTRIC CONIC
                      32.27 GP -15.88 ZAL 126.28 ZAP 147.30 ETS 331.59 ZAE 129.86 ETE 194.66 ZAC 53.58 ETC 146.07 CLP-151.03
    RC 133.236 GL
   PLANETOCENTRIC CONIC
    C3 23.215 VHL 4.818 DLA 13.75 RAL 305.18 RAD 6567.9 VEL 12.025 PTH 2.15 VHP 4.977 OPA -35.67 RAP 318.09 ECC 1.3821
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                 -26.36
                                                                                                                    2092.1
                                                                                          96.69
                                                                                                    0 54 6
                                                              73.99
                                                                         173.95
                               2692.D6
                                                -27.58
                    0 9 14
       90.00
                                                                                                                                     4.39
                                                                                                    16 56 58
                                                                                                                     3852.6
                                                                                           62.77
                                                                          167.51
                                                             186.17
                  15 42 45
                                4452.62
                                                 8.10
        90.00
                                                                                                                                                 44.26
                                                                                                                                   -27.49
                                                                                                                     1806.4
                                                                          173.76
                                                                                           98.01
                                                                                                     2 17 56
                                                              52.78
                   1 37 49 2406.36
                                                -28.90
       100.00
                                                                                                                                     5.39
                                                                                                                                                161.33
                                                                                                  18 7 5
3 38 1
                                                                                                                     3613.5
                                                             167.96
                                                                          166.88
                                                                                           61.46
                               4213.55
                                                 9.27
                  16 56 51
       100.00
                                                                                                                                   -30.44
                                                                                                                                                23.32
                                                                                                                    1542.0
                  3 2 19 2141.96
17 48 51 4050.72
                                                                                        101.62
                                                              32.00
                                                                          173.06
                                                -32.38
       110.00
                                                                                          57.86 18 56 21
                                                                                                                                     7.99
                                                                          165.06
                                                                                                                     3450.7
                                                             153.80
                  17 48 51
                                                12.32
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1723.6 5R 162.5 SS 701.6
CRT .8682 CR5 -.9709 CST -.9613
                                                                 SGT 3862.3 SGR 179.6 SG3 272.6

RRT .3649 RRF .6189 RTF .9177

SGB 3866.5 R23 .3044 R13 .9180
    TOE 1.3302 TRA-1.8510 TC3-2.8000 BAU .8692
    ROE .1358 RRA .0495 RC3 -.0519 FAU .07295
FOE 1.3596 FRA -.5601 FC3-2.7202 BSP 12098
BDE 1.3371 BRA 1.8517 BC3 2.8005 FSP -909
                                                                                                                LSA 1857.8 MSA 194.7 55A
                                                                                                                 EL1 1729.3 EL2 80.4 ALF
                                                                                                   .97
                                                                 SG1 3862.9 SG2 167.2 THA
                                                                                                                           ARRIVAL DATE MAY 5 1966
                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 18 1965
                                                                    DISTANCE 409.346
    RL 147.20 LAL -.00 LOL 85.86 VL 27.583 GAL -5.94 AZL 84.99 HCA 198.62 SMA 127.32 ECC .18662 INC 5.0089 V1 30.266 RP 108.87 LAP -1.60 LOP 284.41 VP 37.360 GAP 6.82 AZP 94.75 TAL 207.74 TAP 46.36 RCA 103.56 APO 151.08 V2 34.809
   HELIOCENTRIC CONIC
     RC 135.553 GL 30.93 GP -13.06 7AL 125.61 7AP 149.64 ETS 334.68 ZAE 130.34 ETE 192.16 ZAC 53.70 ETC 149.11 CLP-152.35.
    PLANETOCENTRIC CONIC
     C3 21.720 VHL 4.660 DLA 12.85 RAL 306.97 RAD 6567.9 VEL 11.962 PTH ,2.13 VHP 5.020 DPA -32.47 RAP 319.21 ECC 1.3575 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         174.12
                                                                                                      1 8 15
                   0 24 10 2644.95
15 42 4 4467.41
1 52 10 2361.17
                                                                                           98.34
                                                -27.16
                                                              70.61
        90.00
                                                                                                                                                180.29
                                                                                                                     3867.4
                                                                                                                                     4.85
                                                                                           62.90 16 56 31
                                                                          168.24
                                                  8.56
                                                              187.01
         90.00
                                                                                                                                                 41.08
                                                                                                      2 31 31
                                                                                                                     1761.2
                                                                                                                                   -26.79
                                                                                           99.67
                                                -28.42
                                                              49.51
                                                                           173.89
       100.00
                                                                                                                                                162.04
                                                                                           61.58 18 7 12
                                                                                                                     3626.4
                                                                                                                                     5.82
                                                              168.69
                                                                          167.54
                                                  9.69
                                 4226.42
                   16 56 46
       100.00
                                                                                                                                                 20.40
                                                                                         103.33 3 50 24
57.97 18 57 41
                                                                                                                     1500.8
                                                                                                                                   -29.61
                                                                           173.10
                    3 15 23 2100.76
                                                -31.77
                                                              28.94
       110.00
                                                                                                                                                147.85
                                                                                                                     3459.6
                                                                                                                                     8.32
                                                                           165.88
                                                              154.28
                                 4059.60
                                                12.64
       110.00
                   17 50 1
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1703.3 SR 155.4 SS 679.0
CRT .8642 CR5 -.9725 CST -.9567
                                                                 SGT 3968.5 SGR 165.7 SG3 270.3
     TOE 1.2702 TRA-1.7839 TC3-3.0817 BAU
                                                    .8946
                                                                 RRT .1622 RRF .3975 RTF .9148
SGB 3972.0 R23 .2523 R13 .9148
     ROE .1255 RRA .0480 RC3 -.0007 FAU .07137
FOE 1.2637 FRA -.4632 FC3-2.8447 BSP 12498
                                                                                                                 LSA 1829.5 MSA 198.1 SSA
                                                                                                                                                     6.9
                                                                                                                                                   4.52
                                                                                                                 EL1 1708.6 EL2 77.9 ALF
                                                                 SG1 3968.6 SG2 163.5 THA
                                                                                                   .39
     BDE 1.2764 BRA 1.7845 BC3 3.0817 FSP -904
                                                                                                                            ARRIVAL DATE MAY 7 1966
                                                                     FLIGHT TIME 140.00
 LAUNCH DATE DEC 18 1965
                                                                    DISTANCE 415.216
     RL 147.20 LAL -.00 LOL 85.86 VL 27.527 GAL -5.66 AZL 85.25 MCA 201.78 SHA 126.94 ECC .18689 INC 4.7481 V1 30.266
RP 108.88 LAP -1.76 LOP 287.58 VP 37.314 GAP 7.03 AZP 94.41 TAL 206.18 TAP 47.96 RCA 103.22 APO 150.67 V2 34.804
RC 137.863 GL 30.00 GP -11.04 7AL 124.56 ZAP 151.58 ETS 336.99 ZAE 130.52 ETE 190.29 ZAC 54.39 ETC 151.53 CLP-153.64
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 20.561 VHL 4.534 DLA 12.41 RAL 308.78 RAD 6567.8 VEL 11.914 PTH 2.12 VHP 5.087 DPA -30.01 RAP 320.60 ECC 1.3384
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 35 11 2616.72 -26.86 68.59 174.75 99.31 1 18 48 2016.7 -25.30 60.27
                                                                                                    17 0 1
                                                                            169.22
                                                                                            62.92
                                                              187.12
                   15 45 31 4469.29
                                                  8.62
         90.00
                                                                                                    2 41 48
18 10 57
                                                                                                                                                  39.18
                                                                                                                                   -26.34
                                                                                                                      1733.8
                   2 2 54 2333.84
17 0 30 4227.40
                                                                           174.50
                                                                                          100.65
                                                -28.10
                                                               47.54
        100.00
                                                                                                                                                 162.10
                                                                                                                      3627.4
                                                                                                                                     5.85
                                                              168.75
                                                                           168.63
                                                                                            61.59
                                                  9.72
        100.00
                                                                                                                                                  18.62
                                                                                                                                   -29.06
                                                                                          104.37
                                                                                                      4 0 6
                                                                                                                      1475.3
                                                                           173.67
                                 2075.34
                                                -31.36
                                                               27.08
                     3 25 31
        110.00
                                                                                                    19 2 I
                                                                                                                                     8.29
                                                                            166.92
                                                                                            57.96
                                                                                                                      3458.7
                                                              154.23
                                                12.61
                    17 54 22
        110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1703.1 SR 155.5 SS 662.0
CRT .8697 CRS -.9770 CST -.9536
                                                                  SGT 4074.3 SGR 169.0 SG3 266.0
RRT -.0009 RRF .1968 RTF .9127
      TOE 1.2380 TRA-1.7198 TC3-3.3449 BAU .9195
      RDE .1223 RRA .0438 RC3 .0423 FAU .06929
                                                                                                                  LSA 1822.9 MSA 199.8 SSA 8.2
                                                                 SGB 4077.8 R23 -.1977 R13 -.9127
      FOE 1.1848 FRA -. 3752 FC3-2.9173 BSP 12903
                                                                                                                 EL1 1708.5 EL2 76.5 ALF 4.55
                                                                SG1 4074.3 SG2 169.0 THA 180.00
      BOE 1.2440 BRA 1.7203 BC3 3.3452 FSP -895
```

FLIGHT TIME 134.00

ARRIVAL DATE MAY 9 1966

LAUNCH CATE DEC 18 1965

```
CISTANCE 421.067
   RL 147.20 LAL -.00 LOL 85.86 VL 27.471 GAL -5.37 A7L 85.45 HCA 204.94 SHA 126.57 ECC .18729 INC 4.5508 VI 30.266 RP 108.90 LAP -1.92 LOP 290.74 VP 37.268 GAP 7.24 A7P 94.13 TAL 204.59 TAP 49.54 RCA 102.87 APO 150.28 V2 34.799 RC 140.164 GL 29.34 GP -9.53 TAL 123.25 TAP 153.26 ETS 338.77 TAE 130.56 ETE 188.86 TAC 55.43 ETC 153.51 CLP-154.90
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 19.615 VHL 4.429 CLA 12.27 RAL 310.64 RAD 6567.8 VEL 11.874 PTH 2.11 VHP 5.167 CPA -28.02 RAP 322.16 ECC 1.3228
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
90.00 0 43 46 2600.80 -26.68 67.46 175.70 99.85 1 27 7 2000.8 -25.05 59.17
                                                                                        62.86 17 6 8
101.21 2 50 2
61.52 18 17 10
104.97 4 8 10
57.87 19 8 24
                                                                                                                      3862.8
               15 51 45 4462.76
                                                 8.41
                                                             186.75
                                                                          170.38
       90.00
                                                                                                                                                  38.10
               2 11 24 2318.20
17 6 49 4220.59
                                                                                                                     1718.2
                                                                                                                                   -26.06
                                                                          175.45
                                               -27.89
                                                              46.42
      100.00
                                                                                                                     3620.6
                                                                                                                                    5.63
                                                                                                                                                 161.72
                                                             168.36 169.80
25.98 174.59
                                                9.50
      100.00
                                                                                                                                  -28.73
                                                                                                                                                  17.58
                                                                                                                     1460.3
                3 33 49 2060.28
18 0 53 4051.27
                                               -31.10
                                                             25.98
      110.00
                                                                                                                      3451.3
                                                                                                                                    8.01
                                                                                                                                                 147.41
                                                             153.83
                                                                          168.11
      110.00
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
                                                            SGT 4272.9 SGR 174.8 SG3 270.1
RRT -.1078 RRF .0161 RTF .9217
SGB 4276.5 R23 -.1162 R13 -.9217
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1656.4 5R 156.6 5S 605.9
CRT .8692 CRS -.9774 CST -.9518
    TOE 1.1648 TRA-1.7136 TC3-3.7170 BAU .9749
    ROE .1206 RRA .0348 RC3 .0724 FAU .07101
                                                                                                                 LSA 1760.5 MSA 189.6 SSA 10.3
    FOE 1.0406 FRA -. 3805 FC3-3.1340 BSP 14725
                                                                                                                ELI 1662.0 EL2 77.2 ALF 4.71
                                                                5G1 4272.9 SG2 173.8 THA 179.75
    BOE 1.1710 BRA 1.7139 BC3 3.7177 FSP -1061
                                                                                                                            ARRIVAL DATE MAY 11 1966
                                                                    FLIGHT TIME 144.00
LAUNCH DATE DEC 18 1965
                                                                    DISTANCE 426.923
  HELIOCENTRIC CONIC
   RL 147.20 LAL -.00 LOL 85.86 VL 27.415 GAL -5.06 A7L 85.60 HCA 208.11 SHA 126.20 ECC .18775 INC 4.3954 V1 30.266 RP 108.91 LAP -2.07 LOP 293.90 VP 37.223 GAP 7.44 A7P 93.88 TAL 202.98 TAP 51.09 RCA 102.51 APO 149.90 V2 34.795
    RC 142.456 GL 28.86 GP -8.37 ZAL 121.70 ZAP 154.76 ETS 340.17 ZAE 130.54 ETE 187.73 ZAC 56.73 ETC 155.17 CLP-156.10
  PLANETOCENTRIC CONIC
                                                                                             2.10 VHP 5.255 0PA -26.34 RAP 323.85 ECC 1.3094
    C3 18.801 VHL 4.336 DLA 12.37 RAL 312.58 RAD 6567.8 VEL 11.840 PTH
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                         176.93
                                                                                                      1 33 55
                                                                                                                     1994.1
                                                                                                                                 -24.94
                                                                                                                                                  58.71
                                                                                         100.07
                   0 50 41 2594.10
                                               -26.61
                                                             66.99
                                                                                                                                     4.29
                                                                                                                                                  179.28
                                                                                           62.75 17 14 29
                                                                                                                      3849.4
                                                                           171.72
                                4449.45
                                                 8.00
                                                             185.99
       90.00
                  16 0 19
                   2 18 22 2311.30
17 15 19 4207.47
                                                                                          101.45 2 56 53
61.40 18 25 26
                                                                                                                      1711.3
                                                                                                                                    -25.94
                                                                                                                                                   37.62
                                                -27.80
                                                              45.93
                                                                           176.67
      100.00
                                                                                                                      3607.5
                                                                                                                                     5.19
                                                                                                                                                  160.49
                                                 9.08
                                                             167.62
                                                                          171.14
      100.00
                  17 15 19
                                                                         175.81
                                                                                                                                    -28.56
                                                                                                                                                   17.08
                                                                                         105.26 4 15 8
57.71 19 16 33
                                                                                                                     1453.0
                  3 40 55 2052.97
18 9 15 4038.57
                                                -30.97
                                                              25.45
      110.00
                                                                                                                                    7.53
                                                                                                                                                  146.73
                                                                                                                      3438.6
      110.00
                                               11.88
                                                             153.13
                                                                           169.46
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 4245.7 SGR 199.2 SG3 251.8
RRT -.1622 RRF -.0235 RTF .9050
SGB 4250.3 R23 -.1252 R13 -.9049
                                                                                                                 ST 1769.1 SR 168.5 55 660.7
CRT .9005 CRS -.9894 CST -.9506
    TOE 1.2476 TRA-1.5625 TC3-3.7966 BAU .9547
    RDE .1271 RRA .0318 RC3 .1131 FAU .06298
                                                                                                               LSA 1884.9 MSA 204.2 SSA 10.5
EL1 1775.6 EL2 73.0 ALF 4.91
    FOE 1.0983 FRA -.1834 FC3-2.9000 BSP 13165
BOE 1.2541 BRA 1.5628 BC3 3.7983 FSP -807
                                                                 SG1 4245.8 SG2 196.6 THA 179.56
                                                                                                                            ARRIVAL DATE MAY 13 1966
                                                                    FLIGHT TIME 146.00
LAUNCH DATE DEC 18 1965
                                                                    01STANCE 432.758
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 27.360 GAL -4.75 AZL 85.73 HCA 211.27 SMA 125.84 ECC .18836 INC 4.2692 V1 30.266
RP 108.92 LAP -2.21 LOP 297.06 VP 37.179 GAP 7.65 AZP 93.65 TAL 201.35 TAP 52.62 RCA 102.14 APO 149.54 V2 34.791
    RC 144.737 GL 28.49 GP -7.44 ZAL 119.99 TAP 156.13 ETS 341.29 ZAE 130.48 ETE 186.83 ZAC 58.20 ETC 156.58 CLP-157.26
   PLANETOCENTRIC CONIC
    C3 18.102 VML 4.255 OLA 12.63 RAL 314.59 RAD 6567.7 VEL 11.810 PTH 2.09 VMP 5.349 OPA -24.85 RAP 325.63 ECC 1.2979
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  -24.94
                                                                       178.38
173.20
                                                                                        100.07
                                                                                                      1 39 43
                                                                                                                     1994.0
                    0 56 28 2594.02
16 10 32 4431.75
                                               -26.60
                                                              66.98
                                                                                          62.60 17 24 24
101.47 3 2 50
                                                                                                                                                  178.29
                                                                                                                      3831.8
                                                             184.98
                   16 10 32
                                                7.45
                                                                                                                                                  37.58
                                                                                                                                    -25.93
                                                                                                                      1710.7
                   2 24 19 2310.70
17 25 22 4190.30
                                                                          178.12
                                                              45.89
                                               -27.79
                                                                       172.62
                                                                                           61.24 18 35 12
                                                                                                                                      4.61
                                                                                                                                                  160.04
                                                                                                                      3590.3
                  17 25 22
                                                 8.52
                                                             166.66
       100.00
                                                                         177.26
                                                                                         105.32 4 21 26
57.52 19 25 59
                                                                                                                                    -28.52
                                                                                                                                                   16.96
                                                                                                                      1451.3
                    3 47 14 2051.26
18 18 57 4022.51
                                                               25.33
                                               - 30 . 94
      110.00
                                                                                                                                      6.93
                                                                                                                      3422.5
                                               11.30
                                                             152.26
                                                                           170.95
                  18 18 57
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1801.6 SR 177.1 SS 654.0
CRT .9159 CRS -.9934 CST -.9505
                                                                 SGT 4350.8 SGR 215.8 SG3 246.4
RRT -.1910 RRF -.0825 RTF .9046
SGB 4356.1 R23 -.0924 R13 -.9045
    TDE 1.2544 TRA-1.4918 TC3-4.0433 BAU .9791
    RDE .1313 RRA .0237 RC3 .1403 FAU .06076
FDE 1.0487 FRA -.1167 FC3-2.9057 BSP 13640
                                                                                                                  LSA 1914.1 MSA 202.4 SSA 11.8
                                                                                                                  ELI 1808.9 ELZ 70.8 ALF 5.15
                                                                 SG1 4351.0 SG2 211.9 THA 179.46
    BDE 1.2613 BRA 1.4920 BC3 4.0457 FSP
                                                     -805
                                                                                                                             ARRIVAL DATE MAY 15 1966
                                                                     FLIGHT TIME 148.00
LAUNCH DATE DEC 18 1965
    RL 147.20 LAL -.00 LOL 85.86 VL 27.305 GAL -4.44 A7L 85.84 HCA 214.43 SMA 125.48 ECC .18908 INC 4.1640 VI 30.266 RP 108.93 LAP -2.35 LOP 300.22 VP 37.136 GAP 7.85 A7P 93.44 TAL 199.71 TAP 54.14 RCA 101.76 APO 149.21 V2 34.788 RC 147.008 GL 28.21 GP -6.69 7AL 118.11 7AP 157.42 ETS 342.19 7AE 130.41 ETE 186.09 7AC 59.82 ETC 157.81 CLP-158.38
                                                                     DISTANCE 438.581
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.491 VHL 4.182 DLA 13.02 RAL 316.68 RAD 6567.7 VEL 11.784 PTH 2.08 VHP 5.448 DPA -23.51 RAP 327.48 ECC 1.2879
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 1 27 2599.49 -26.67 67.37 180.03 99.89 1 44 46 1999.5 -25.03 59.08
                                                                                                                                       3.03
                                                                                                                       3810.3
                                                                                                     17 35 47
                                                                            174.83
                                                                                            62.44
                                                   6.77
                                                              183.77
                   16 22 17
                                4410.30
        90.00
                                                                                                       3 8 8
                                                                                                                       1715.4
                                                                                                                                     -26.01
                                                                                                                                                    37.90
                                                                                           101.31
                    2 29 33 2315.36
                                                                            179.78
                                                 -27.86
                                                               46.22
       100.00
                                                                                                     18 46 21
                                                                                                                                                   158.90
                                                                                                                       3569.7
                                                                                                                                      3.92
                                                                            174.26
                                                                                            61.06
                   17 36 52 4169.67
3 53 1 2054.20
                                                   7.84
                                                              165.50
       100.00
                                                                                                                                                    17.16
                                                                                                       4 27 15
                                                                                                                       1454.2
                                                                                                                                     -28.59
                                                                                           105.21
                                                -30.99
                                                               25.54
                                                                            178.94
                                                                                                    19 36 37
       110.00
                                                                                                                                    6.22
                                                                                                                                                  144.88
                                                                                                                       3403.6
                                 4003.59
                                                 10.60
                                                              151.23
                                                                            172.59
                                                                                            57.31
                   18 29 53
       110.00
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCUMALY
SGT 4443.3 SGR 233.1 SG3 240.2 ST 1849.7 SR 187.1 S5 554.5
RRT -.2000 RRF -.1130 RTF .9031 CRT .9322 CR5 -.9961 CST -.9513
SGB 4449.4 R23 -.0695 R13 -.9031 LSA 1960.7 MSA 200.4 SSA 12.9
EL1 1857.9 EL2 67.4 ALF 5.39
    DIFFERENTIAL CORRECTIONS
     TOE 1.2762 TRA-1.4083 TC3-4.2714 BAU .9995
     RDE .1364 RRA .0151 RC3 .1646 FAU .05815
    FOE 1.0135 FRA -.0454 FC3-2.8784 BSP 13963
BDE 1.2855 BRA 1.4084 BC3 4.2745 FSP -787
                                                                 SG1 4443.6 SG2 228.4 THA 179.40
```

FLIGHT TIME 142.00

ARRIVAL DATE MAY 25 1966

```
FLIGHT TIME 158.00
LAUNCH DATE DEC 18 1965
                                                                        DISTANCE 467.520
   RL 147.20 LAL -.00 LOL 85.86 VL 27.036 GAL -2.69 A7L 86.19 HCA 230.24 SMA 123.77 ECC .19481 INC 3.8134 V1 30.266 RP 108.94 LAP -2.93 LOP 316.04 VP 36.935 GAP 8.90 A7P 92.44 TAL 191.24 TAP 61.48 RCA 99.66 APO 147.88 V2 34.785
  HELIOCENTRIC CONIC
   RC 158.168 GL 27.13 GP -4.43 7AL 106.62 7AP 162.90 ETS 344.61 7AE 130.15 ETE 183.89 7AC 69.19 ETC 162.14 CLP-163.47
   PLANETOCENTRIC CONIC
    C3 15.516 VHL 3.939 DLA 16.30 RAL 328.69 RAD 6567.6 VEL 11.700 PTH 2.06 VHP 6.000 DPA -17.77 RAP 337.40 ECC 1.2553
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             191.32
                 1 19 36 2688.41
17 39 54 4266.57
2 50 5 2396.62
18 52 6 4033.59
4 18 34 2119.76
19 40 6 3883.22
                                                                                             96.82
                                                                 73.73
                                                  -27.55
        90.00
                                                                                                                                                          169.07
                                                                                                61.76 18 51 0
                                                                                                                            3666.6
                                                                                                                                            -1.61
                                                                               185.62
                                                   2.19
                                                                 175.69
        90.00
                                                                                                                                                          43.57
                                                                                                           3 30 2
                                                                                                                            1796.6
                                                                               191.13
                                                                                                98.37
                                                                  52.07
                                                                                              60.27 19 59 19
102.55 4 53 54
56.30 20 44 49
                                                 -28.80
       100.00
                                                                                                                                             -.69
                                                                                                                                                         151.43
                                                                             185.01
                                                                                                                            3433.6
                                                    3.29
                                                                 157.95
       100.00
                                                                           190.43
                                                                                                                                          -30.00
                                                                                                                                                           21.74
                                                                                                                            1519.8
                                                -32.06
                                                                 30.35
       110.00
                                                                                                                            3283.2
                                                                                                                                              1.64
                                                                                                                                                          138.57
                                                                               183.26
                                                                 144.80
                                                  6.11
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2202.1 SR 242.9 SS 682.3
CRT .9890 CRS -.9866 CST -.9627
                                                                   SGT 4860.1 SGR 310.8 SG3 210.6
RRT -.1304 RRF -.1080 RTF .8994
SGB 4870.0 R23 -.0098 R13 -.8994
    TDE 1.4864 TRA -.8769 TC3-5.2613 BAU 1.0925
    ROE .1667 RRA - .0305 RC3 .2397 FAU .04588
                                                                                                                       LSA 2311.2 MSA 178.7 SSA 18.0
    FOE .9001 FRA .2650 FC3-2.5598 BSP 15383
BOE 1.4958 BRA .8774 BC3 5.2668 FSP -692
                                                                                                                       EL1 2215.2 EL2 35.7 ALF 6.23
                                                                    SG1 4860.3 SG2 308.1 THA 179.52
                                                                                                                                    ARRIVAL DATE MAY 27 1966
                                                                         FI 16HT TIME 160.00
LAUNCH DATE DEC 18 1965
                                                                         DISTANCE 473.270
    RL 147.20 LAL -.00 LOL 85.86 VL 26.983 GAL -2.30 A7L 86.24 HCA 233.40 SMA 123.45 ECC .19643 INC 3.7634 VI 30.266
RP 108.94 LAP -3.02 LOP 319.20 VP 36.898 GAP 9.12 A7P 92.25 TAL 189.51 TAP 62.90 RCA 99.20 APO 147.69 V2 34.787
RC 160.359 GL 26.87 GP -4.15 ZAL 103.94 ZAP 163.87 ETS 344.80 ZAE 130.13 ETE 183.63 ZAC 71.24 ETC 162.77 CLP-164.40
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                           2 7 48
19 9 20
                   1 22 32 2716.30
17 58 47 4233.24
                                                   -27.76
        90.00
                                                                                                                                                           167.21
                                                                                                                             3633.2
                                                                                                 61.70
                                                                 173.83
                                                                                188.36
                                                     1.11
         90.00
                                                                                                 97.41 3 34 5
60.18 20 17 0
                                                                                                                                             -27.71
                                                                                                                                                            45.39
                  2 53 43 2422.27
19 10 17 4002.50
4 23 37 2140.96
19 56 52 3856.57
                                                                                                                             1822.3
                                                                               194.01
                                                                   53.94
                                                   -29.04
       100.00
                                                                                                                             3402.5
                                                                                                                                             -1.74
                                                                                                                                                           149.72
                                                     2.24
                                                                 156.25
                                                                                187.73
                                                                                                                                                            23.25
                                                                                                101.66 4 59 18
56.15 21 1 9
                                                                                                                             1541.0
                                                                                                                                           -30.42
                                                                   31.93
                                                                              193.36
                                                   -32.36
       110.00
                                                                                                                                                           137.18
                                                                                                                             3256.6
                                                   5.10
                                                                 143.40
                                                                                185.95
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2289.8 SR 254.5 55 689.6
                                                                     SCT 4934.7 SGR 324.0 SG3 205.1
RRT -.1075 RRF -.0935 RTF .8997
SGB 4945.3 R23 -.0036 R13 -.8997
     TDE 1.5447 TRA -.7454 TC3-5.4088 BAU 1.1096
                                                                                                                         CRT .9938 CRS -.9809 CST -.9656
     ROE .1734 RRA -.0393 RC3 .2455 FAU .04364
FOE .8843 FRA .3191 FC3-2.4645 BSP 15644
BOE 1.5544 BRA .7464 BC3 5.4144 FSP -675
                                                                                                                       LSA 2398.6 MSA 172.8 SSA 18.9
EL1 2303.7 EL2 28.1 ALF 6.30
                                                                     SG1 4934.8 SG2 322.1 THA 179.59
                                                                                                                                    ARRIVAL DATE MAY 29 1966
                                                                         FITCHT TIME 162.00
 LAUNCH DATE DEC 18 1965
                                                                        DISTANCE 479.006
     RE 147.20 LAL -.00 LOE 85.86 VE 26.931 GAE -1.91 AZE 86.28 HCA 236.56 SMA 123.12 ECC .19824 INC 3.7174 VI 30.266
RP 108.93 LAP -3.10 LOP 322.37 VP 36.863 GAP 9.34 AZP 92.05 TAE 187.76 TAP 64.32 RCA 98.72 APO 147.53 V2 34.789
RC 162.536 GE 26.57 GP -3.90 ZAE 101.17 ZAP 164.80 ETS 344.91 ZAE 130.13 ETE 183.41 ZAC 73.33 ETC 163.34 CLP-165.30
    HELIDCENTRIC CONIC
     C3 15.218 VHL 3.901 DLA 17.97 RAL 334.27 RAD 6567.6 VEL 11.688 PTH 2.06 VHP 6.250 DPA -15.65 RAP 341.55 ECC 1.2505
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             197.25
                                                                                              94.73
                                                                 77.97
                     1 25 22 2747.10
18 18 41 4199.16
2 57 20 2450.56
                                                   -27.95
                                                                                                                                              -3.77
                                                                                                                                                           165.30
                                                                                                                             3599.2
                                                                                                  61.68
                                                                                                           19 28 40
                                                                                191.30
                                                      .01
                                                                  171.93
          90.00
                                                                                                                                            -28.09
                                                                                                                                                            47.41
                                                                                                             3 38 10
                                                                                                                             1850.6
                                                                                                  96.35
                                                    -29.27
                                                                   56.01
                                                                                197.11
        100.00
                                                                                                                                             -2.81
                                                                                                                                                           147.99
                                                                                                                             3370.9
                                                                                                  60.13 20 35 35
        100.00 19 29 24 3970.93
110.00 4 28 48 2164.38
110.00 20 14 25 3829.88
                                                                  154.51
                                                                                190.66
                                                      1.17
                                                                                                                                            -30.86
                                                                                                                                                            24.94
                                                                                                100.66 5 4 52
56.03 21 18 15
                                                                                                                             1564.4
                                                                   33.69
                                                                                196.52
                                                   -32.67
                                                                                                                                               -.40
                                                                                                                                                            135.79
                                                                                                                             3229.9
                                                                 142.00
                                                                                188.84
                                                   4.09
                                                                                                                         ORBIT CETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ST 2383.6 SR 266.2 SS 697.9
CRT .9965 CRS -.9744 CST -.9684
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 5001.7 SGR 336.5 SG3 199.6
RRT -.0827 RRF -.0751 RTF .8996
SGB 5013.0 R23 .0004 R13 -.8996
SGI 5001.8 SG2 335.4 THA 179.68
     TOE 1.6093 TRA -.6021 TC3-5.5226 BAU 1.1247
     ROE .1806 RRA -.0476 RC3 .2482 FAU .04135
FOE .8713 FRA .3737 FC3-2.3522 BSP 15841
BDE 1.6194 BRA .6040 BC3 5.5282 FSP -655
                                                                                                                         LSA 2492.2 HSA 167.4 SSA 19.7
                                                                                                                         EL1 2398.3 EL2 22.1 ALF
                                                                                                                                     ARRIVAL DATE MAY 31 1966
                                                                          FLIGHT TIME 164.00
  LAUNCH DATE DEC 18 1965
     RL 147.2D LAL -.00 LOL 85.86 VL 26.880 GAL -1.50 A7L 86.33 MCA 239.72 SMA 122.81 ECC .20025 INC 3.6745 VI 30.266
RP 108.92 LAP -3.17 LOP 325.53 VP 36.828 GAP 9.57 A7P 91.85 TAL 186.01 TAP 65.73 RCA 98.22 APO 147.40 V2 34.792
RC 164.699 GL 26.23 GP -3.68 ZAL 98.29 ZAP 165.71 ETS 344.94 ZAE 130.14 ETE 183.22 ZAC 75.46 ETC 163.85 CLP-166.19
                                                                         DISTANCE 484.727
     HELIOCENTRIC CONIC
      C3 15.187 VHL 3.897 DLA 18.83 RAL 337.23 RAD 6567.6 VEL 11.686 PTH 2.06 VHP 6.382 DPA -14.59 RAP 343.65 ECC 1.2499
     PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 28 9 2780.63
18 39 31 4164.71
3 0 59 2481.30
19 49 22 3939.27
                                                                                                  93.52
                                                                                                             2 14 30
                                                                                 200.53
                                                     -28.12
                                                                   80.41
          90.00
                                                                                                                                                             163.37
                                                                                                                               3564.7
                                                                                                   61.70
                                                                                                           19 48 55
                                                                                  194.46
                                                                   170.01
                                                      -1.10
          90.00
                                                                                                                               1881.3
                                                                                                                                             -28.45
                                                                                                                                                             49.62
                                                                                                   95.17 3 42 20
60.11 20 55 2
                                                                                 200.41
                                                     -29.48
                                                                    58.27
         100.00
                                                                                                                                                             146.25
                                                                                                                               3339.3
                                                                                  193.79
                                                                  152.78
                                                       .10
         100.00
                                                                                                                                                             26.78
                                                                                                   99.56 5 10 39
55.94 21 36 5
                                                                                                                                             -31.30
                                                                                                                               1589.8
                                                                                 199.88
                                    2189.80
                                                    -32.98
                                                                    35.61
                       4 34 9
         110.00
                                                                                                                               3203.5
                                                                                                                                                            134.41
                                                                                  191.93
                                                    3.08
                                                                  140.62
                     20 32 41
         110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ST 2475.3 SR 278.0 SS 703.7

CRT .9972 CRS -.9674 CST -.9712

LSA 2583.2 MSA 161.8 SSA 20.5

EL1 2490.8 EL2 20.5 ALF 6.39
     DIFFERENTIAL CORRECTIONS
                                                                     SGT 5070.2 SGR 348.2 SG3 194.4

RRT - .0579 RRF - .0573 RTF .9006

SGB 5082.2 R23 .0049 R13 - .9006

SGI 5070.3 SG2 347.6 THA 179.77
       TOE 1.6751 TRA -.4528 TC3-5.6142 BAU 1.1410
      RDE .1882 RRA -.0555 RC3 .2476 FAU .03928
FDE .8568 FRA .4232 FC3-2.2390 BSP 16098
BDE 1.6857 BRA .4561 BC3 5.6196 FSP -640
```

```
LAUNCH DATE DEC 18 1965
                                                                         FLIGHT TIME 166.00
                                                                                                                                   ARRIVAL CATE JUN 2 1966
    MELIOCENTRIC CONIC
                                                                        CISTANCE 490.432
     RL 147.20 LAL -.00 LOL 85.86 VL 26.829 GAL -1.08 AZL 86.37 MCA 242.88 SMA 122.50 ECC .20247 INC 3.6344 V1 30.266
RP 108.91 LAP -3.23 LOP 328.70 VP 36.794 GAP 9.81 AZP 91.66 TAL 184.24 TAP 67.13 RCA 97.70 APO 147.50 V2 34.796
     RC 166.847 GL 25.82 GP -3.49 ZAL 95.32 ZAP 166.60 ETS 344.88 ZAE 130.16 ETE 183.05 ZAC 77.62 ETC 164.32 CLP-167.05
   PLANETOCENTRIC CONIC
     C3 15.241 VML 3.904 CLA 19.70 RAL 340.30 RAC 6567.6 VEL 11,689 PTH
                                                                                                  2.06 VMP 6.520 CPA -13.54 RAP 345.76 ECC 1.2508
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A5C INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 30 56 2816.68 -28.24 83.04 204.01 92.20 2 17 52 2216.7 -27.65 74.43
                                                                                            92.20
                                                                                                                                         -27.63
                  19 1 12 4130.27
3 4 43 2514.27
20 10 6 3907.91
4 39 43 2217.02
20 51 35 3777.93
        90.00
                                                   -2.21
                                                                 168.09
                                                                              197.83
                                                                                                61.76 20 10 2
                                                                                                                            3530.3
                                                                                                                                            -5.97
                                                                                                                                                         161.43
       100.00
                                                   -29.66
                                                                  60.71
                                                                               203.92
                                                                                                93.90
                                                                                                            3 46 37
                                                                                                                           1914.3
                                                                                                                                          -28.80
                                                                                                                                                          52.01
                                                                             197.14
                                                                                                60.12 21 15 14
98.37 5 16 40
55.87 21 54 33
       100.00
                                                                 151.06
                                                    -.97
                                                                                                                           3307.9
                                                                                                                                           -4.94
                                                                                                                                                         144.52
                                                                             203.47
195.22
       110.00
                                                  -33.26
                                                                  37.68
                                                                                                                           1617.0
                                                                                                                                         -31.75
                                                                                                                                                          28.78
                                                                                                                        3177.9
       110.00
                                                             139.28
                                                  2.11
                                                                                                                                           -2.38
                                                                                                                                                         133.08
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 5133.5 SGR 359.1 SG3 189.2

RRT - .0326 RRF - .0374 RTF .9016

SGB 5146.1 R23 .0079 R13 - .9016

SGI 5133.5 SG2 358.9 THA 179.87
     TOE 1.7445 TRA -.2929 TC3-5.6685 BAU 1.1561
                                                                                                                       ST 2567.3 SR 289.8 SS 708.8
CRT .9963 CRS -.9599 CST -.9737
     ROE .1964 RRA -.0628 RC3 .2439 FAU .03720
     FOE .8434 FRA .4718 FC3-2.1131 BSP 16338
                                                                                                                       LSA 2674.4 MSA 157.0 SSA 21.1
     BDE 1.7555 BRA .2996 BC3 5.6738 FSP -625
                                                                                                                        EL1 2583.5 EL2 24.8 ALF
                                                                                                                                                             6.42
LAUNCH DATE OFC 18 1965
                                                                         FLIGHT TIME 168.00
                                                                                                                                   ARRIVAL CATE JUN 4 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 496.120
    RL 147.20 LAL -.00 LOL 85.86 VL 26.779 GAL -.64 AZL 86.40 MCA 246.05 SMA 122.20 ECC .20491 INC 3.5964 V1 30.266
RP 108.89 LAP -3.29 LOP 331.87 VP 36.762 GAP 10.06 AZP 91.46 TAL 182.47 TAP 68.52 RCA 97.16 APO 147.24 VZ 34.800
RC 168.980 GL 25.35 GP -3.32 ZAL 92.28 ZAP 167.46 ETS 344.73 ZAE 130.19 ETE 182.91 ZAC 79.80 ETC 164.75 CLP-167.90
   PLANETOCENTRIC CONIC
    C3 15.389 VHL 3.923 OLA 20.56 RAL 343.46 RAD 6567.6 VEL 11.695 PTH 2.06 VHP 6.664 CPA -12.49 RAP 347.89 ECC 1.2533
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             90.80 2 21 19
61.86 20 31 54
92.55 3 51 4
60.17 21 36 6
97.09 5 23 0
55.63 22 13 32
        90.00
                   1 33 44 2855.04
19 23 38 4096.23
                                                                             207.67
                                                  -28.31
                                                                 85.85
                                                                                                                        2255.0
                                                                                                                                        -27.90
                                                                                                                                                          77.20
        90.00
                                                   -3.31
                                                                166.19
                                                                               201.41
                                                                                                                            3496.2
                                                                                                                                            -7.04
                                                                                                                                                         159.50
                 3 8 35 2549.20
20 31 29 3877.30
4 45 34 2245.78
21 10 59 3753.49
       100.00
                                                  -29.79
                                                                 63.30
                                                                           207.62
200.69
207.25
                                                                              207.62
                                                                                                                           1949.2
                                                                                                                                           -29.12
                                                                                                                                                          54.56
                                                  -2.00
                                                                149.38
                                                                                                                           3277.3
                                                                                                                                            -5.96
                                                                                                                                                         142.82
       110.00
                                                  -33.53
                                                                 39.88
                                                                                                                        1645.8
                                                                                                                                       -32.18
                                                                                                                                                         30.91
                                  3753.49
       110.00
                                                                138.00
                                                  1.17
                                                                              198.70
                                                                                                                           3153.5
                                                                                                                                          -3.32
                                                                                                                                                         131.80
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE 1.8170 TRA -.1236 TC3-5.6861 BAU 1.1708
                                                                  5CT 5194.4 SGR 369.2 SG3 184.2
RRT -.0066 RRF -.0161 RTF .9032
SGB 5207.5 R23 .0101 R13 -.9032
                                                                                                                       ST 2657.8 SR 301.8 SS 713.0
    ROE .2034 RRA .0694 RC3 .2371 FAU .03523
FOE .8309 FRA .5185 FC3-1.9818 BSP 16582
BOE 1.8286 BRA .1417 BC3 5.6911 FSP -612
                                                                   501 5194.4 502 369.2 THA 179.97
                                                                                                                       CRT .9939 CRS -.9522 CST -.9761
                                                                                                                    LSA 2764.0 MSA 152.9 SSA 21.5
EL1 2674.7 EL2 33.0 ALF 6.44
LAUNCH DATE DEC 18 1965
                                                                       FLIGHT TIME 170.00
                                                                                                                                  ARRIVAL DATE JUN 6 1966
   HELIOCENTRIC CONIC
                                                                      CISTANCE 501.790
    RL 147.20 LAL -.00 LOL 85.86 VL 26.729 GAL -.18 A7L 86.44 HCA 249.21 SMA 121.90 ECC .20760 INC 3.5603 VI 30.266 RP 108.88 LAP -3.33 LOP 335.04 VP 36.730 GAP 10.31 A7P 91.27 TAL 180.70 TAP 69.91 RCA 96.59 APO 147.20 V2 34.805 RC 171.096 GL 24.82 GP -3.17 TAL 89.18 TAP 168.30 ETS 344.48 TAE 130.23 ETE 182.79 TAC 82.01 ETC 165.15 CLP-168.73
   PLANETOCENTRIC CONIC
    C3 15.637 VHL 3.954 DLA 21.39 RAL 346.71 RAD 6567.6 VEL 11.706 PTH 2.06 VHP 6.815 CPA -11.44 RAP 350.01 ECC 1.2573
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 36 37 2895.42
19 46 42 4063.07
3 12 38 2585.81
20 53 22 3847.91
                                                                                           89.32 2 24 53
61.99 20 54 25
                                                                                                                     2295.4 -28.10 80.14
        90.00
                                                 -28.31
                                                               88.80
                                                                           211.52
                                                                                                           2 24 53
        90.00
                                                  -4.37
                                                               164.33
                                                                              205.19
                                                                                                                           3463.1
                                                                                                                                           -8.08
                                                                                                                                                        157.62
                                                                                               91.12 3 55 44
60.24 21 57 30
95.74 5 29 40
55.82 22 32 57
      100.00
                                                 -29.87
                                                                66.02
                                                                             211.51
                                                                                                                        1985.8
                                                                                                                                         -29.40
                                                                                                                                                         57.24
      100.00
                                                  -3.00
                                                               147.76
                                                                              204.44
                                                                                                                          3247.9
                                                                                                                                          -6.94
                                                                                                                                                        141.19
                  4 51 44 2275.81
21 30 46 3730.67
                                              -33.76
      110.00
                                                                 42.20
                                                                                                                         1675.8
                                                                              211.24
                                                                                                                                         -32.59
                                                                                                                                                         33.16
                                                  .30
      110.00
                                                               136.81
                                                                              202.38
                                                                                                                                        -4.19
                                                                                                                           3130.7
                                                                                                                                                        130.60
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
    TOE 1.8886 TRA .0566 TC3-5.6620 BAU 1.1846
                                                                   SGT 5248.6 SGR 378.5 SG3 178.8
RRT .0188 RRF .0038 RTF .9046
SGB 5262.2 R23 -.0133 R13 .9046
                                                                                                                      ST 2739.9 SR 313.8 SS 712.0
   RDE .2152 RRA -.0752 RC3 .2275 FAU .03326
FDE .814D FRA .5643 FC3-1.8417 BSP 16783
BDE 1.9008 BRA .0941 BC3 5.6666 FSP -596
                                                                                                                     CRT .9904 CRS -.9441 CST -.9780
                                                                                                                      LSA 2844.2 MSA 149.8 SSA 21.8
EL1 2757.5 EL2 43.1 ALF 6.47
                                                                   SG1 5248.6 SG2 378.4 THA .08
LAUNCH DATE DEC 18 1965
                                                                       FLIGHT TIME 172.00
                                                                                                                                 ARRIVAL DATE JUN 8 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 507.441
   RL 147.20 LAL -.00 LOL 85.86 VL 26.680 GAL .29 AZL 86.47 HCA 252.38 SMA 121.60 ECC .21055 INC 3.5256 V1 30.266 RP 108.86 LAP -3.36 LOP 338.21 VP 36.700 GAP 10.58 AZP 91.07 TAL 178.91 TAP 71.29 RCA 96.00 APO 147.21 V2 34.811
   RC 173.196 GL 24.22 GP -3.03 ZAL 86.04 ZAP 169.12 ETS 344.13 ZAE 130.28 ETE 182.68 ZAC 84.24 ETC 165.50 CLP-169.55
  PLANETOCENTRIC CONIC
   C3 15.996 VHL 3.999 DLA 22.19 RAL 350.04 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 6.973 DPA -10.38 RAP 352.15 ECC 1.2632
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  LNCH TIME L-I TIME
1 39 39 2937.52
20 10 13 4031.25
3 16 57 2623.77
21 15 36 3820.23
4 58 16 2306.83
21 50 47 3709.94
                                                                             215.53
                                                 -28.24
                                                                91.88
                                                                                             87.78
                                                                                                         2 28 36
                                                                                                                        2337.5
                                                                                                                                         -28.25
       90.00
                                                  -5.38
                                                               162.54
                                                                              209.17
                                                                                               62.16 21 17 24
                                                                                                                          3431.3
                                                                                                                                          -9.07
      100.00
                                                 -29.89
                                                                 68.84
                                                                              215.58
                                                                                               89.63
                                                                                                         4 0 41
                                                                                                                          2023.8
                                                                                                                                         -29.62
                                                                                                                                                         60.04
      100.00
                                                                                              60.34 22 19 16 3220.2
94.33 5 36 42 1706.8
55.82 22 52 37 3109.9
                                                 -3.93
                                                               146.24
                                                                              208.37
                                                                                                                                          -7.85
                                                                                                                                                        139.64
      110.00
                                                -33.94
                                                                 44.60
                                                                              215.41
                                                                                                                                        -32.97
                                                                                                                                                         35.50
      110.00
                  21 50 47
                                 3709.94
                                                  -.49
                                                               135.73
                                                                             206.23
                                                                                                                                        -4.97
                                                                 MID-COURSE EXECUTION ACCURACT
SGT 5296.Q SGR 387.3 SG3 174.3 ST 2830.6 SR 326.2 S5 121.6
RRT .0476 RRF .0345 RTF .9047 CRT .9860 CRS -.9365 CST -.9802
SGB 5310.1 R23 -.0089 R13 .9047 LSA 2935.5 MSA 148.6 SSA 21.9
ELI 2848.8 EL2 54.1 ALF 6.49
  DIFFERENTIAL CORRECTIONS
   TOE 1.9720 TRA .2534 TC3-5.5787 BAU 1.1939
   ROE .2262 RRA -.0798 RC3 .2156 FAU .03111
FOE .8115 FRA .6153 FC3-1.6837 BSP 16866
BDE 1.9849 BRA .2657 BC3 5.5829 FSP -572
```

ARRIVAL CATE JUN 10 1966

LAUNCH DATE DEC 18 1965

```
DISTANCE 513.068
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.631 GAL .78 A7L 86.51 HCA 255.54 SMA 121.32 ECC .21378 INC 3.4921 VI 30.266
RP 108.84 LAP -3.38 LOP 341.38 VP 36.671 GAP 10.86 A7P 90.87 TAL 177.13 TAP 72.67 RCA 95.38 APO 147.25 V2 34.817
RC 175.278 GL 23.55 GP -2.91 TAL 82.87 TAP 169.93 ETS 343.64 TAE 130.33 ETE 182.60 TAC 86.50 ETC 165.82 CLP-170.35
   PLANETOCENTRIC CONTC
    C3 16.476 VHL 4.059 DLA 22.94 RAL 353.43 RAD 6567.7 VEL 11.741 PTH 2.07 VHP 7.140 DPA -9.33 RAP 354.29 ECC 1.2712
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    86.19
                                                                                                                2 32 33
                                                                                                                                2380.9
                    1 42 52 2980.95
20 34 0 4001.33
                                                                    95.04
                                                                                  219.69
                                                     -28.08
        90.00
                                                                                                     62.34 21 40 42
                                                                                                                                  3401.3
        90.00
                                                     -6.33
                                                                    160.86
                                                                                   213.32
                                                                                                    88.11 4 5 7
60.46 22 41 14
92.88 5 44 11
55.83 23 12 23
                                                                                                                                  2062.7
                                                                                                                                                  -29.78
                                                                                                                                                                   62.93
                    3 21 35 2662.68
21 37 59 3794.83
                                                    -29.84
                                                                     71.73
                                                                                   219.79
       100.00
                                                                                                                                  3194.8
                                                                                                                                                   -8.69
       100.00
                                                     -4.79
                                                                   144.63
                                                                                   212.47
                                                 -34.08
                                                                                                                                                 -33.30
-5.66
                                                                                   219.75
                                                                                                                                  1738.5
                                                                                                                                                                   37.91
       110.00
                    5 5 12 2338.49
22 10 51 3691.78
                                                                     47.06
                                                                                                                                  3091.8
                                                                                   210.23
       110.00
                                                    -1.19
                                                                   134.79
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2895.7 SR 338.1 SS 716.5
CRT .9809 CRS -.9286 CST -.9817
                                                                       SGT 5347.1 SGR 394.8 SG3 169.5
RRT .0731 RRF .0547 RTF .9077
SGB 5361.7 R23 -.0120 R13 .9077
    TOE 2.0440 TRA .4542 TC3-5.4788 BAU 1.2076
    ROE .2380 RRA -.0837 RC3 .2009 FAU .02945
FDE .7941 FRA .6573 FC3-1.5475 BSP 17118
BDE 2.0578 BRA .4618 BC3 5.4825 FSP -564
                                                                                                                             LSA 2998.5 MSA 147.7 SSA 21.7
                                                                       SG1 5347.2 SG2 393.7 THA
                                                                                                                              EL1 2914.7 EL2 65.4 ALF
                                                                                                               . 31
                                                                                                                                          ARRIVAL CATE JUN 12 1966
LAUNCH DATE DEC 18 1965
                                                                            FLIGHT TIME 176.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 518.671
    RL 147.20 LAL -.00 LOL 85.86 VL 26.583 GAL 1.29 A7L 86.54 HCA 258.71 SMA 121.03 ECC .21732 INC 3.4596 V1 30.266
RP 108.82 LAP -3.39 LOP 344.55 VP 36.643 GAP 11.15 AZP 90.68 TAL 175.34 TAP 74.05 RCA 94.73 APO 147.34 V2 34.824
RC 177.341 GL 22.82 GP -2.80 TAL 79.69 ZAP 170.72 ETS 343.00 TAE 130.39 ETE 182.52 TAC 88.77 ETC 166.11 CLP-171.15
   PLANETOCENTRIC CONIC
                                                                                                                                      -8.27 RAP 356.44 ECC 1.2813
                                                                                                       2.08 VHP 7.315 DPA
    C3 17.092 VHL 4.134 OLA 23.64 RAL 356.85 RAD 6567.7 VEL 11.768 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 46 22 3025.29 -27.84 98.27 223.97 84.60 2 36 47 2425.3 -28.30 89.63
                                                                                                     62.54 22 4 5
86.58 4 11 38
60.58 23 3 11
91.40 5 52 6
55.86 23 32 4
                                                                                                                                   3373.8
                                                                                                                                                  -10.82
        90.00
                    20 57 51
                                    3973.84
                                                      -7.20
                                                                    159.30
                                                                                   217.63
                    3 26 35 2702.12
22 0 18 3772.24
5 12 36 2370.49
                                                                                                                                   2102.1
                                                                                                                                                  -29.87
                                                     -29.71
                                                                     74.66
                                                                                   224.14
       100.00
       100.00
                                                      -5.54
                                                                    143.58
                                                                                   216.73
                                                                                                                                   3172.2
                                                                                                                                                    -9.42
                                                                                                                                                                 136.94
                                                    -34.16
                                                                                  224.23
                                                                                                                                   1770.5
                                                                                                                                                 -33.59
                                                                     49.56
       110.00
                                                                                                                                   3076.6
                                                                                                                                                  -6.23
       110.00
                    22 30 48
                                   3676.65
                                                 -1.76
                                                                   134.00
                                                                                   214.38
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.1195 TRA .6684 TC3-5.3287 BAU 1.2184 ROE .2510 RRA -.0863 RC3 .1847 FAU .02768
                                                                        SGT 5391.1 SGR 401.7 SG3 164.8
RRT .1000 RRF .0799 RTF .9101
                                                                                                                             ST 2956.0 SR 350.0 SS 713.8
CRT .9753 CRS -.9210 CST -.9833
    FOE .7815 FRA .7005 FC3-1.4021 BSP 17290
BDE 2.1343 BRA .6740 BC3 5.3319 FSP -549
                                                                                                                             LSA 3057.4 MSA 148.0 SSA 21.4
EL1 2975.6 EL2 76.8 ALF 6.59
                                                                        SGB 5406.1 R23 -.0117 R13 .9101
                                                                        561 5391.3 562 399.7 THA
                                                                                                               .43
                                                                                                                                         ARRIVAL DATE JUN 14 1966
                                                                            FLIGHT TIME 178.00
LAUNCH DATE DEC 18 1965
                                                                           DISTANCE 524.247
   HELIOCENTRIC CONIC
   RL 147.20 LAL -.00 LOL 85.86 VL 26.536 GAL 1.82 A7L 86.57 MCA 261.88 SNA 120.76 ECC .22118 INC 3.4277 V1 30.266
RP 108.79 LAP -3.39 LOP 347.73 VP 36.615 GAP 11.46 A7P 90.48 TAL 173.55 TAP 75.43 RCA 94.05 APO 147.46 V2 34.832
RC 179.385 GL 22.04 GP -2.70 TAL 76.51 TAP 171.50 ETS 342.17 TAE 130.46 ETE 182.46 TAC 91.05 ETC 166.36 CLP-171.93
   PLANETOCENTRIC CONIC
                                                         .30 RAO 6567.7 VEL 11.800 PTH 2.09 VHP 7.501 DPA -7.20 RAP 358.60 ECC 1.2939
    C3 17.858 VHL 4.226 DLA 24.27 RAL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2470.1
                   1 50 12 3070.06
21 21 31 3949.40
3 32 4 2741.64
22 22 20 3753.05
5 20 28 2402.49
22 50 25 3664.97
                                                                                                 83.01 2 41 22
62.74 22 27 20
                                                                                                                                                                  92.90
                                                                                                                                                 -28.19
                                                    -27.51
                                                                   101.50 228.36
        90.00
                                                                                                                                                                 151.07
                                                      -7.96
                                                                   157.91
                                                                                   222.07
                                                                                                                                  3349.4
                                                                                                                                                  -11.56
        90.00
                                                                                                     85.05 4 17 46
60.70 23 24 53
                                                    -29.52
                                                                     77.58
                                                                                   228.60
                                                                                                     85.05
                                                                                                                                  2141.6
                                                                                                                                                  -29.89
                                                                                                                                                                   68.79
       100.00
                                                                                                                                  3153.0
                                                                                                                                                  -10.04
                                                                                                                                                                 135.86
                                                     -6.18
                                                                   142.52
                                                                                   221.11
       100.00
                                                                                                     89.92 6 0 31
55.88 23 51 30
                                                                                                                                  1802.5
                                                                                                                                                 -33.82
                                                                                                                                                                  42.83
                                                    -34.18
                                                                     52.06
                                                                                   228.84
       110.00
                                                                                                                                                                 127.14
                                                                                                                                  3065.0
                                                                                                                                                  -6.67
                                                     -2.21
                                                                   133.39
                                                                                   218.64
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5428.7 SGR 407.7 SG3 160.2
RRT .1273 RRF .1060 RTF .9121
SGB 5444.0 R23 -.0108 R13 .9121
                                                                                                                             ST 3005.7 SR 361.6 SS 709.4
CRT .9693 CRS -.9134 CST -.9846
    TOE 2.1950 TRA .8976 TC3-5.1346 BAU 1.2265
    ROE .2651 RRA -.0877 RC3 .1674 FAU .02588
FOE .7688 FRA .7453 FC3-1.2546 BSP 17401
BOE 2.2109 BRA .9018 BC3 5.1373 FSP -533
                                                                                                                             LSA 3105.7 MSA 149.9 SSA 20.9
EL1 3026.0 EL2 88.3 ALF 6.66
                                                                        SG1 5429.0 SG2 404.4 THA .55
                                                                                                                                          ARRIVAL DATE JUN 16 1966
                                                                            FLIGHT TIME 180.00
LAUNCH DATE DEC 18 1965
                                                                            DISTANCE 529.792
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.489 GAL 2.38 A7L 86.60 MCA 265.05 SMA 120.48 ECC .22541 INC 3.3963 VI 30.266
RP 108.77 LAP -3.38 LOP 350.90 VP 36.589 GAP 11.79 A7P 90.29 TAL 171.77 TAP 76.82 RCA 93.32 APO 147.64 V2 34.840
RC 181.409 GL 21.20 GP -2.61 TAL 73.37 ZAP 172.26 ETS 341.10 ZAE 130.52 ETE 182.41 ZAC 93.34 ETC 166.59 CLP-172.71
   PLANETOCENTRIC CONIC
    C3 18.793 VHL 4.335 OLA 24.83 RAL 3.75 RAD 6567.8 VEL 11.840 PTH 2.10 VHP 7.699 DPA -6.14 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 -28.00
                                                                                                                                                                   96.15
                    1 54 31 3114.68
21 44 43 3928.65
                                                     -27.10
                                                                    104.70
                                                                                  232.82
                                                                                                    81.45
                                                                                                                 2 46 26
                                                                                                                                2514.7
                                                                                                     62.92 22 50 11
                                                                                                                                                                  149.86
                                                                                                                                   3328.7
                                                                                                                                                  -12.17
                                                     -8.61
                                                                    156.73
                                                                                   226.62
                   3 38 6 2780.74
22 43 49 3737.82
5 28 52 2434.19
23 9 33 3657.14
                                                                                                                                   2180.7
                                                                                                                                                 -29.84
                                                                                                                                                                   71.70
                                                     -29.25
                                                                     80.45
                                                                                   233.15
                                                                                                     83.56
                                                                                                                4 24 26
       100.00
                                                                                                     60.80 23 46 7
                                                                                                                                                 -10.53
                                                                                                                                                                  134.99
                                                                                                                                   3137.8
                                                                   141.67
                                                                                   225.58
       100.00
                                                      -6.69
                                                                                                                                  3137.8
1834.2 -33.99
-6.97
                                                                                                                6 9 26
                                                                                                                                                                  45.29
                                                 -34.15
-2.51
                                                                     54.53
                                                                                   233.55
                                                                                                     88.46 6 9 26
55.90 24 10 30
       110.00
                                                                                                                                                    -6.97
                                                                                                                                                                  126.73
                                                                                                                                  3057.1
                                                                   132.98
                                                                                   223.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5465.0 SGR 412.9 SG3 155.7 ST 3037.9 SR 372.7 S5 702.1 RRT .1559 RRF .1314 RTF .9150 CRT .9631 CR5 -.9061 CST -.9858 SGB 5480.5 R23 -.0103 R13 .9150 L5A 3136.3 MSA 152.5 SSA 20.3 SGI 5465.3 SG2 407.9 THA .67 ELI 3059.0 EL2 99.6 ALF 6.75
     TOE 2.2655 TRA 1.1360 TC3-4.9155 BAU 1.2355
    ROE .2805 RRA -.0877 RC3 .1492 FAU .02426
FOE .7546 FRA .7875 FC3-1.1175 BSP 17574
```

FLIGHT TIME 174.00

BOE 2.2828 BRA 1.1394 BC3 4.9178 FSP -521

ARRIVAL CATE JUN 18 1956

LAUNCH CATE DEC 18 1965

```
DISTANCE 535.302
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.443 GAL 2.96 A7L 86.63 MCA 268.22 SMA 120.22 ECC .23004 INC 3.3653 VI 30.266
RP 108.74 LAP -3.36 LOP 354.08 VP 36.564 GAP 12.14 AZP 90.10 TAL 169.99 TAP 78.21 RCA 92.56 APO 147.87 VZ 34.849
RC 183.413 GL 20.33 GP -2.53 ZAL 70.26 ZAP 173.01 ETS 339.72 ZAE 130.59 ETE 182.36 ZAC 95.65 ETC 166.78 CLP-173.48
   PLANETOCENTRIC CONIC
    C3 19.916 VHL 4.463 CLA 25.31 RAL 7.18 RAD 6567.8 VEL 11.887 PTH 2.11 VHP 7.909 CPA -5.08 RAP
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       79.96 2 52 4
63.07 23 12 22
82.12 4 31 44
60.88 24 6 38
87.02 6 18 52
55.91 24 28 52
                                                                                  237.35
                                                                                                                                     2558.5
                                                                                                                                                    -27.73
                                                                                                                                                                       99.33
                                                                     107.82
                    1 59 25 3158.52
22 7 10 3912.29
        90.00
                                                     -26.62
                                                                                                                                      3312.3
                                                                                                                                                      -12.65
                                                                                     231.24
        90.00
                                                      -9.11
                                                                     155.79
                                                                                     237.77
                                                                                                                                      2218.9
                                                                                                                                                      -29.72
                                                                                                                                                                       74.53
                                                                      83.25
                                                     -28.93
       100.00
                      3 44 45 2818.93
                                                                                237.77
230.13
                                                                                                                                      3127.1
                                                                                                                                                      -10.88
       100.00
                   23 4 31
                                    3727.10
                                                      -7.05
                                                                     141.08
                                                   -34.07
                                                                                                                                                      -34.11
                                                                                                                                      1865.3
                                                                                                                                                                       47.72
       110.00
                     5 37 47 2465.30
                                                                      56.96 238.34
                                                                                                                                      3053.5
                                                                                                                                                      -7.11
                                                     -2.65
                                                                                    227.41
                    23 27 59
                                    3653.49
                                                                     132.79
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5495.7 SGR 417.2 SG3 151.3

RRT .1806 RRF .1578 RTF .9177

SGB 5511.5 R23 -.0090 R13 .9177

SGI 5496.2 SG2 410.3 THA .79
                                                                                                                                 ST 3056.8 SR 383.0 SS 693.5
CRT .9567 CRS -.8988 CST -.9869
    TOE 2.3339 TRA 1.3887 TC3-4.6647 BAU 1.2425
    ROE .2970 RRA -.0864 RC3 .1309 FAU .02263
FDE .7406 FRA .8306 FC3 -.9839 BSP 17726
BDE 2.3527 BRA 1.3913 BC3 4.6665 FSP -509
                                                                                                                                 LSA 3153.9 MSA 156.2 SSA 19.6
                                                                                                                                 EL1 3078.7 EL2 110.7 ALF
                                                                                                                                             ARRIVAL CATE JUN 20 1966
                                                                              FLIGHT TIME 184.00
LAUNCH DATE DEC 18 1965
                                                                             DISTANCE 540.773
  HELIOCENTRIC CONIC
   RL 147.20 LAL -.00 LOL 85.86 VL 26.397 GAL 3.57 AZL 86.67 HCA 271.39 SMA 119.95 ECC .23509 INC 3.3342 VI 30.266
RP 108.71 LAP -3.33 LOP 357.26 VP 36.540 GAP 12.51 AZP 89.92 TAL 168.21 TAP 79.61 RCA 91.75 APO 148.15 VZ 34.858
RC 185.395 GL 19.41 GP -2.45 ZAL 67.22 ZAP 173.75 ETS 337.94 ZAE 130.66 ETE 182.33 ZAC 97.96 ETC 166.95 CLP-174.25
  PLANETOCENTRIC CONIC
                                                                                                          2.13 VHP 8.133 CPA -4.02 RAP
    C3 21.253 VHL 4.610 DLA 25.72 RAL 10.56 RAD 6567.9 VEL 11.943 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 5 3 3200.89 -26.08 110.81 241.93 78.56 2 58 24 2600.9 -27.40 102.39
                  22 28 33 3901.00
3 52 7 2855.73
23 24 10 3721.40
5 47 13 2495.62
23 45 34 3654.27
                                                                                                        63.19 23 33 34
                                                       -9.46
                                                                      155.14
                                                                                     235.90
                                                                                                                                      3301.0
                                                                                                                                                      -12.98
                                                                                                                                                                      148.24
        90.00
                                                                                                        80.77 4 39 43
60.92 24 26 11
                                                                                                                                      2255.7
                                                                                                                                                                       77.25
                                                     -28.56
                                                                       85.92
                                                                                     242.44
                                                                                                                                                      -29.54
       100.00
                                                                                                                                                                      134.06
                                                                                                                                      3121.4
                                                                                                                                                      -11.06
                                                     -7.24
                                                                      140.76
                                                                                     234.71
       100.00
                                                                                   234.71
243.19
                                                                                                        85.63 6 28 48
55.91 24 46 28
                                                                                                                                                     -34.17
                                                                                                                                                                       50.08
                                                     -33.94
                                                                       59.32
                                                                                                                                     1895.6
       110.00
                                                      -2.62
                                                                      132.83
                                                                                     231.86
                                                                                                                                      3054.3
                                                                                                                                                      -7.08
                                                                                                                                                                      126.58
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 3061.6 SR 392.5 55 683.8
CRT .9500 CRS -.8916 CST -.9879
                                                                     SGT 5521.9 SGR 420.6 SG3 147.0
RRT .2074 RRF .1845 RTF .9205
    TOE 2.3990 TRA 1.6552 TC3-4.3906 BAU 1.2479
    ROE .3146 RRA -.0835 RC3 .1128 FAU .02106
    FOE .7266 FRA .8737 FC3 -.8579 BSP 17868
BOE 2.4195 BRA 1.6573 BC3 4.3920 FSP -497
                                                                        SGB 5537.9 R23 -.0076 R13 .9205
                                                                                                                                 LSA 3157.4 MSA 160.6 55A 18.8
                                                                     $G1 5522.6 SG2 411.4 THA .91
                                                                                                                              EL1 3084.3 EL2 121.6 ALF 6.95
                                                                                                                                            ARRIVAL DATE JUN 22 1966
                                                                              FLIGHT TIME 186.00
LAUNCH DATE DEC 18 1965
                                                                             DISTANCE 546.199
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.352 GAL 4.21 AZL 86.70 MCA 274.57 SMA 119.70 ECC .24062 INC 3.3031 V1 30.266
RP 108.68 LAP -3.29 LOP .44 VP 36.517 GAP 12.90 AZP 89.74 TAL 166.45 TAP 81.02 RCA 90.89 APO 148.50 V2 34.868
RC 187.357 GL 18.48 GP -2.38 ZAL 64.25 ZAP 174.48 ETS 335.58 ZAE 130.73 ETE 182.30 ZAC L00.27 ETC 167.08 CLP-175.02
   PLANETOCENTRIC CONTC
    C3 22.833 VHL 4.778 DLA 26.04 RAL 13.89 RAD 6567.9 VEL 12.009 PTH 2.14 VHP 8.373 DPA -2.96 RAP 7.24 ECC 1.3758
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  77.26 3 5 36
63.24 23 53 29
79.50 4 48 26
60.92 24 44 35
84.30 6 39 14
                                                                                                                                  2641.1 -27.01 105.26
                                                     -25.51
                                                                    113.61 246.54
       90.00
                     2 11 35 3241.08
       90.00 22 48 34 3899.51

100.00 4 0 15 2890.71

100.00 23 42 34 3721.11

110.00 5 57 9 2524.96

110.00 0 6 5 3659.63
                                                                                    240.58
                                                                                                                                      3295.5
                                                                                                                                                     -13.14
                                                                                                                                                                      147.91
                                                                      154.83
                                                      -9.63
                                                                                 247.15
                                                                                                                                      2290.7
                                                                                                                                                    -29.31
                                                                                                                                                                       79.83
                                                     -28.15
                                                                      88.44
                                                                                                                                                     -11.07
                                                                                                                                                                      134.04
                                                                                     239.31
                                                                                                                                      3121.1
                                                                      140.74
                                                      -7.25
                                                                                                                                                    -34.18
                                                                                                                                                                       52.37
                                                                       61.59
                                                                                     248.08
                                                                                                                                      1925.0
                                                     -33.76
                                                                                                                                      3059.6
                                                                                                                                                      -6.87
                                                                                                                                                                      126 86
                                                                                     236.33
                                                                                                        55.89
                                                                                                                    1 7 5
                                                     -2.41
                                                                      133.11
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5544.2 SGR 423.2 SG3 142.9

RRT .2348 RRF .2124 RTF .9233

SGB 556D.3 R23 -.0058 R13 .9233

SGI 5545.1 SG2 411.3 THA 1.03
                                                                                                                              ST 3057.3 SR 400.9 SS 674.3
CRT .9431 CRS -.8844 CST -.9889
    TOE 2.4641 TRA 1.9404 TC3-4.0933 BAU 1.2499
    ROE .3333 RRA -.0789 RC3 .0956 FAU .01948
FOE .7141 FRA .9189 FC3 -.7385 BSP 17910
BOE 2.4866 BRA 1.9420 BC3 4.0944 FSP -480
                                                                                                                                 LSA 3151.9 MSA 165.7 SSA 18.1
                                                                                                                                 EL1 3080.6 EL2 132.3 ALF
                                                                                                                                                                       7.06
                                                                                                                                             ARRIVAL DATE JUN 24 1966
                                                                              FLIGHT TIME 188.00
LAUNCH DATE DEC 18 1965
                                                                             DISTANCE 551.573
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.308 GAL 4.88 AZL 86.73 HCA 277.75 SMA 119.45 ECC .24668 INC 3.2718 VI 30.266 RP 108.65 LAP -3.24 LOP 3.62 VP 36.495 GAP 13.32 AZP 89.56 TAL 164.69 TAP 82.44 RCA 89.98 APO 148.91 V2 34.878 RC 189.297 GL 17.52 GP 2.32 ZAL 61.36 ZAP 175.20 ETS 332.41 ZAE 130.79 ETE 182.28 ZAC 102.59 ETC 167.18 CLP-175.79
   PLANETOCENTRIC CONIC
    C3 24.690 VML 4.969 DLA 26.28 RAL 17.14 RAD 6568.D VEL 12.086 PTH 2.16 VMP 8.630 DPA -1.91 RAP 9.41 ECC 1.4063 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 19 8 3278.38
23 6 54 3896.47
                                                                                                       76.10
                                                                                                                    3 13 47
                                                                                                                                     2678.4
                                                                                                                                                    -26.59
                                                      -24.92
                                                                      116.18
                                                                                    251.16
        90.00
                                                                                                                                                     -13.12
                                                                                                        63.23
                                                                                                                   24 11 51
                                                                                                                                      3296.5
                                                                                                                                                                      147.97
                                                      -9.60
                                                                      154.88
                                                                                     245.24
        90.00
                                                                                                        78.34
                                                                                                                    4 57 56
                                                                                                                                      2323.5
                                                                                                                                                      -29.05
                                                                                                                                                                       82.23
                      4 9 13 2923.53
0 3 27 3726.55
                                                     -27.72
                                                                       90.78
                                                                                     251.87
       100.00
                                                                                                                   1 5 34
6 50 7
                                                                                                                                      3126.6
                                                                                     243.88
                                                                                                        60.88
                                                                                                                                                     -10.49
                                                                                                                                                                      134.35
                                                      -7.06
                                                                      141.05
       100.00
                      0 3 27
6 7 34
                                   2553.22
3669.63
                                                     -33.55
                                                                                     252.98
                                                                                                        83.03
                                                                                                                                      1953.2
                                                                                                                                                     -34.15
                                                                                                                                                                       54.58
                                                                       63.77
       110.00
                                                                                                                                                      -6.50
                                                                                                                   1 22 45
                                                                                                                                                                      127.39
                                                                                     240.78
                                                                                                       55.87
                                                                                                                                      3069.6
                      0 21 35
                                                      -2.03
                                                                     133.63
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5561.8 SGR 424.8 SG3 138.8 ST 3035.4 SR 407.9 S5 662.6

RRT .2613 RRF .2392 RTF .9266 CRT .9359 CRS -.8772 CST -.9897

SGB 5578.0 R23 -.0044 R13 .9266 LSA 3128.8 MSA 171.2 SSA 17.3

SGI 5562.9 SG2 410.0 THA 1.15 EL1 3059.3 EL2 142.5 ALF 7.18
    TOE 2.5218 TRA 2.2377 TC3-3.7915 BAU 1.2518
    RDE .3529 RRA -.0727 RC3 .0793 FAU .01802
FDE .6999 FRA .9629 FC3 -.6320 BSP 18039
     BOE 2.5464 BRA 2.2389 BC3 3.7923 FSP -469
```

FLIGHT TIME 182.00

ARRIVAL CATE JUN 26 1966

```
LAUNCH DATE DEC 18 1965
                                                                            DISTANCE 556.887
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.264 GAL 5.60 AZL 86.76 MCA 280.93 SMA 119.20 ECC .25331 INC 3.2399 VI 30.266 RP 108.62 LAP -3.18 LOP 6.81 VP 36.474 GAP 13.78 AZP 89.39 TAL 162.96 TAP 83.88 RCA 89.00 APO 149.39 V2 34.889 RC 191.216 GL 16.56 GP -2.26 TAL 58.58 ZAP 175.89 ETS 328.04 ZAE 130.85 ETE 182.26 TAC 104.91 ETC 167.26 CLP-176.56
   PLANETOCENTRIC CONIC
    C3 26.866 VHL 5.183 DLA 26.44 RAL 20.29 RAD 6568.1 VEL 12.175 PTH 2.19 VHP 8.907 CPA -.86 RAP 11.57 ECC 1.4421
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 27 51 3312.20 -24.35 118.50 255.80 75.08 3 23 4 2712.2 -26.16 110.30
                                                                                                                24 28 25
                    23 23 20 3904.39
4 18 59 2953.95
                                                                                                      63.15
                                                      -9.36
                                                                    155.34
                                                                                    249.85
         90.00
                                                                                                                5 8 13
1 21 7
7 1 23
1 37 19
                                                                                                                                                    -28.76
                                                                                                                                    2353.9
                                                                                                                                                                    84.45
                                                                                                      77.28
                                                     -27.28
                                                                     92.94
                                                                                    256.60
       100.00
                                                                                                                                                                   135.00
                                                                                                                                                   -10.53
                                                                                                                                    3137.9
                                                                                                      60.80
                      0 18 50 3737.87
                                                      -6.69
                                                                     141.68
                                                                                    248.41
       100.00
                                                                                                                                                   -34.08
                                                                                                                                                                    56.70
                                                                                                      81.82
                                                                                                                                    1980.4
                                                    -33.31
                                                                     65.85
                                                                                    257.89
                      6 18 23 2580.37
       110.00
                                                                                                                                  3084.2
                                                                                                                                                   -5.95
                                                                                                                                                                   128.16
                                                                                                       55.84
                                                      -1.48
                                                                    134.39
                                                                                    245.19
       110.00
                      0 35 55
                                    3684.22
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        RRI .2880 RRI .2663 RIF .9299
SGB 5591.3 R23 -.0031 R13 .9299
SG1 5576.4 SG2 407.5 THA 1.27
                                                                                                                               ST 3003.5 SR 413.4 S5 651.0
CRT .9285 CRS -.8698 CST -.9905
    TOE 2.5771 TRA 2.5529 TC3-3.4825 BAU 1.2510
    RDE .3733 RRA -.0646 RC3 .0643 FAU .01660
FDE .6864 FRA 1.0086 FC3 -.5349 BSP 18136
                                                                                                                               LSA 3095.8 MSA 176.9 SSA 16.5
EL1 3028.0 EL2 152.3 ALF 7.30
    BDE 2.6040 BRA 2.5537 BC3 3.4831 FSP -457
                                                                                                                                            ARRIVAL DATE JUN 28 1966
                                                                             FLIGHT TIME 192.00
LAUNCH DATE DEC 18 1965
                                                                             DISTANCE 562.131
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 26.221 GAL 6.35 AZL 86.79 HCA 284.11 SMA 118.96 ECC .26059 INC 3.2073 V1 30.266 RP 108.58 LAP -3.11 LOP 9.99 VP 36.453 GAP 14.27 AZP 89.22 TAL 161.24 TAP 85.35 RCA 87.96 APO 149.96 V2 34.900 RC 193.113 GL 15.60 GP -2.21 TAL 55.89 ZAP 176.54 ETS 321.79 ZAE 130.90 ETE 182.24 ZAC 107.23 ETC 167.29 CLP-177.34
   PLANETOCENTRIC CONIC
                                                                                                         2.21 VHP 9.206 0PA
                                                                                                                                           .18 RAP 13.74 ECC 1.4840
     C3 29.409 VHL 5.423 DLA 26.53 RAL 23.33 RAD 6568.2 VEL 12.279 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC. INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 37 47 3342.17
23 37 42 3919.52
4 29 33 2981.89
0 32 33 3755.04
6 29 32 2606.43
0 49 3 3703.27
                                                                                                                                                                  112.39
                                                                                                                                 2742.2
                                                                                                                                                   -25.75
                                                                                                     74.20 3 33 29
                                                                                   260.45
                                                      -23.81
                                                                     120.53
         90.00
                                                                                                                24 43 1
                                                                                                                                                                    149.33
                                                                                                       63.00
                                                                                                                                     3319.5
                                                                                                                                                    -12.44
                                                      -8.89
                                                                     156.21
                                                                                     254.38
         90.00
                                                                                                                 5 19 15
                                                                                                                                                    -28.46
                                                                                                                                                                      86.47
                                                                                                                                    2381.9
                                                                                                       76.34
                                                      -26.85
                                                                       94.90
                                                                                     261.33
        100.00
                                                                                                                 1 35 8
7 12 59
1 50 46
                                                                                                                                    3155.0
                                                                                                                                                     -9.98
                                                                                                                                                                    135.97
                                                                                     252.88
                                                                                                       60.68
                                                      -6.12
                                                                     142.63
                                                                                                                                    2006.4
                                                                                                                                                    -33.97
                                                                                                                                                                     58.73
                                                                                                       80.67
                                                                                    262.78
                                                     -33.04
                                                                       67.84
        110.00
                                                                                                       55.82
                                                                                                                                     3103.3
                                                                                                                                                    -5.23
                                                                                                                                                                    129.16
                                                       -.75
                                                                     135.38
                                                                                    249.56
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 5584.1 SGR 425.4 SG3 130.9

RRT .3147 RRF .2934 RTF .9335

SGB 5600.3 R23 -.0019 R13 .9335

SG1 5585.7 SG2 403.7 THA 1.38
                                                                                                                               ST 2961.9 SR 417.3 SS 639.5
CRT .9207 CRS -.8624 CST -.9913
     TOE 2.6292 TRA 2.8864 TC3-3.1736 BAU 1.2479
     ROE .3945 RRA -.0548 RC3 .0509 FAU .01524
FDE .6735 FRA 1.0554 FC3 -.4485 BSP 18229
BDE 2.6586 BRA 2.8869 BC3 3.1740 FSP -445
                                                                                                                               LSA 3053.2 HSA 182.6 SSA 15.7
                                                                                                                               EL1 2986.8 EL2 161.5 ALF 7.41
                                                                                                                                           ARRIVAL DATE JUN 30 1966
                                                                             FLIGHT TIME 194.00
LAUNCH DATE DEC 18 1965
                                                                             DISTANCE 567.294
    RL 147.20 LAL -.00 LOL 85.86 VL 26.179 GAL 7.15 A7L 86.83 HCA 287.29 SMA 118.72 ECC .26859 INC 3.1737 V1 30.266 RP 108.55 LAP -3.03 LOP 13.18 VP 36.434 GAP 14.80 A7P 89.06 TAL 159.55 TAP 86.84 RCA 86.83 APO 150.61 V2 34.912 RC 194.989 GL 14.64 GP -2.16 TAL 53.32 ZAP 177.14 ETS 312.56 ZAE 130.95 ETE 182.23 ZAC 109.54 ETC 167.30 CLP-178.12
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                        1.21 RAP 15.90 ECC 1.5329
     C3 32.380 VHL 5.690 DLA 26.56 RAL 26.26 RAD 6568.3 VEL 12.400 PTH 2.24 VHP 9.530 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 2768.2
                                                                                                       73.46 3 45 2
62.80 24 55 38
                                                                                                                                                    -25.36
                                                                                                   73.46
                     2 48 53 3368.24
23 49 56 3941.80
4 40 49 3007.42
                                                                     122.28
                                                                                  265.09
                                                      -23.31
         90.00
                                                                                                                                                    -11.78
                                                                                                                                                                    150.63
                                                                                                                                    3341.8
                                                                     157.48
                                                                                     258.81
         90.00
                                                       -8.20
                                                                                                                                    2407.4
                                                                                                                                                    -28.16
                                                                                                                                                                     88.31
                                                                                                                 5 30 56
1 47 35
                                                                       96.68
                                                                                    266.04
                                                                                                       75.49
                                                      -26.42
        100.00
                                                                                                                                                                    137.26
                                                                                                                                    3177.8
                                                                                                                                                    -9.24
                                                                                                       60.55
                                                                     143.89
                                                                                     257.27
                                                       -5.36
                                                                                                                                                   -33.83
        100.00
                       0 44 38 3777.84
                                                                                                                  7 24 49
2 3 5
                                                                                                                                                                    60.67
                                                                                                                                    2031.5
                      6 40 58 2631.48
1 0 58 3726.55
                                                                                                       79.58
                                                                       69.74
                                                                                    267.65
                                                      -32.74
        110.00
                                                                                                                                    3126.5
                                                                                                                                                      -4.34
                                                                                                                                                                    130.39
                                                                                                       55.82
                                                        .14
                                                                     136.60
                                                                                     253.85
        110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2916.0 SR 419.6 SS 629.6

CRT .9126 CRS -.8552 CST -.9921

LSA 3006.6 MSA 188.2 SSA 15.0

EL1 2941.1 EL2 170.1 ALF 7.51
                                                                         SCT 5589.5 SCR 424.4 SC3 127.3
RRT .3418 RRF .3214 RTF .9371
SCB 5605.6 R23 -.0006 R13 .9371
     TOE 2.6821 TRA 3.2434 TC3-2.8633 BAU 1.2396
     RDE .4164 RRA -.0428 RC3 .0392 FAU .01384
FDE .6626 FRA 1.1053 FC3 -.3700 BSP 18227
BDE 2.7143 BRA 3.2437 BC3 2.8636 FSP -431
                                                                         5G1 5591.4 SG2 398.7 THA 1.49
                                                                                                                                            ARRIVAL DATE JUL 2 1966
                                                                              FLIGHT TIME 196.00
 LAUNCH DATE DEC 18 1965
                                                                              DISTANCE 572.361
     RL 147.20 LAL -.00 LOL 85.86 VL 26.137 GAL 8.00 A7L 86.86 MCA 290.48 SMA 118.49 ECC .27739 INC 3.1390 VI 30.266 RP 108.51 LAP -2.94 LOP 16.37 VP 36.415 GAP 15.38 A7P 88.90 TAL 157.88 TAP 88.36 RCA 85.62 APO 151.36 V2 34.924 RC 196.842 GL 13.69 GP -2.12 ZAL 50.86 ZAP 177.62 ETS 298.75 ZAE 130.98 ETE 182.22 ZAC 111.84 ETC 167.27 CLP-178.92
    PLANETOCENTRIC CONIC
     C3 35.850 VHL 5.988 DLA 26.52 RAL 29.05 RAD 6568.4 VEL 12.539 PTH 2.27 VHP 9.883 DPA 2.23 RAP 18.07 ECC 1.5900 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   -25.01
                                                                                                                                     2790.6
                                                                                                       72.83 3 57 33
                                                                      123.77
                                                                                    269.72
                                     3390.61
                                                       -22.87
                     3 1 2
         90.00
                                                                                                                                                     -10.91
                                                                                                                                                                     152.32
                                                                                                                    1 10 12
                                                                                                                                      3370.8
                                                                                                        62.56
                                                                      159.13
                                                                                     263.13
                                                       -7.29
                                     3970.80
         90.00
                                                                                                                                                     -27.86
                                                                                                                                                                      89.97
                                                                                                        74.74
                                                                                                                    5 43 11
                                                                                                                                      2430.7
                                                                       98.29
                                                                                     270.72
                                     3030.72
                                                       -26.02
                       4 52 40
        100.00
                                                                                                                  1 58 31
7 36 49
                                                                                                                                                      -8.32
                                                                                                                                                                     138.84
                                                                                                                                      3205.9
                                                                                     261.56
                                                                                                        60.41
                                     3805.92
                                                        -4.41
                                                                      145.45
        100.00
                      0 55 5
                       6 52 33
                                                                                                                                     2055.6
                                                                                                                                                    -33.67
                                                                                                                                                                      62.53
                                                                       71.55
                                                                                     272.47
                                                                                                        78.55
                                     2655.62
                                                       -32.43
        110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                      3153.8
                                                                                                                                                     -3.31
                                                                                                                                                                     131.81
                                                                     138.02
                       1 11 41
                                     3753.79
                                                       1.18
                                                                                                                           ORBIT DETERMINATION ACCURACY
        110.00
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5589.8 SGR 422.5 SG3 123.7
RRT .3684 RRF .3485 RTF .9409
                                                                                                                                 ST 2860.6 SR 420.0 SS 619.4
CRT .9041 CRS -.8477 CST -.9928
      TOE 2.7303 TRA 3.6188 TC3-2.5661 BAU 1.2300
     ROE .4388 RRA -.0290 RC3 .0292 FAU .01255
FOE .6514 FRA 1.1561 FC3 -.3031 BSP 18294
                                                                        SGB 5605.7 R23 .0002 R13 .9409
SG1 5592.0 SGZ 392.6 THA 1.60
                                                                                                                                LSA 2950.5 MSA 193.4 SSA 14.3
                                                                                                                               EL1 2885.7 EL2 177.9 ALF 7.59
      BOE 2.7654 BRA 3.6189 BC3 2.5662 FSP -420
```

FLIGHT TIME 190.00

Ē

```
LAUNCH DATE DEC 18 1965
                                                                                        FLIGHT TIME 198.00
                                                                                                                                                                ARRIVAL DATE JUL 4 1966
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 577.315
      RL 147.20 LAL -.00 LOL 85.86 VL 26.096 GAL 8.91 AZL 86.90 HCA 293.66 SMA 118.26 ECC .28710 INC 3.1027 V1 30.266 RP 108.47 LAP -2.84 LOP 19.56 VP 36.398 GAP 16.01 AZP 88.75 TAL 156.26 TAP 89.92 RCA 84.31 APO 152.22 V2 34.936
      RC 198.673 GL 12.76 GP -2.08 7AL 48.52 7AP 177.90 ETS 279.27 7AE 130.99 ETE 182.22 7AC 114.13 ETC 167.21 CLP-179.73
    PLANETOCENTRIC CONIC
      C3 39.910 VHL 6.317 DLA 26.42 RAL 31.72 RAD 6568.5 VEL 12.699 PTH 2.31 VHP 10.268 DPA
                                                                                                                                                            3.23 RAP 20.22 ECC 1.6568
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                     2809.8
                        3 14 1 3409.80
0 12 17 4005.82
          90.00
                                                              -22.48
                                                                               125.04
                                                                                                274.32
                                                                                                                     72.31
                                                                                                                                  4 10 50
                                                                                                                                                                                          117.06
                                                                                                                                                                         -24.69
                                                                                                                                 1 19 2
                                                                                  1 19 2

47.26 265.74 60.27 2 7 59

73.29 277.23 77.57 7 48 52

39.63 262.21 55.89 2 24 19

MIO-COURSE EXECUTION ACCURACY

SGT 5586.5 SGR 419.6 SG3 100

RRT .3948 Per
                                                                                                 267.33
                                                              -6.19
                                                                               161.11
                                                                                                                     62.31
                                                                                                                                                        3405.8
                                                                                                                                                                           -9.85
                                                                                                                                                                                            154.34
                        5 4 59 3052.06
1 4 0 3838.79
7 4 13 2678.97
1 21 15 3784.65
         100.00
                                                             -25.63
                                                                                 99.76
                                                                                                                                                       2452.1
                                                                                                                                                                                             91.49
                                                                                                                                                                          -27.56
                                                                               147.26
                                                                                                                                                                           -7.24
         100.00
                                                                -3.31
                                                                                                                                                       3238.8
                                                                                                                                                                                            140.68
        110.00
                                                            -32.10
                                                                                 73.29
                                                                                                                                                       2079.0
                                                                                                                                                                          -33.48
                                                                                                                                                                                            64.33
        110.00
                                                              2.36
                                                                              139.63
                                                                                                                                                       3184.7
                                                                                                                                                                                            133.43
                                                                                                                                                                           -2.13
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                   SCT 5586.5 SCR 419.6 SC3 120.2
RRT .3948 RRF .3757 RTF .9449
SCB 5602.3 R23 .0009 R13 .9449
SCI 5589.0 SC2 385.3 THA 1.71
     TOE 2.7777 TRA 4.0188 TC3-2.2801 BAU 1.2166
                                                                                                                                                  ST 2800.8 SR 418.6 55 610.5
CRT .8953 CRS -.8402 CST -.9936
     RDE .4615 RRA -.0130 RC3 .0200 FAU .01129
FDE .6414 FRA 1.2097 FC3 -.2450 BSP 18807
                                                                                                                                                 LSA 2890.2 MSA 198.2 SSA 13.7
                                                                                                                                                  EL1 2825.9 ELZ 184.8 ALF 7.65
     BOE 2.8158 BRA 4.0188 BC3 2.2802 FSP -410
LAUNCH DATE DEC 18 1965
                                                                                        FLIGHT TIME 200.00
                                                                                                                                                                ARRIVAL DATE JUL 6 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 582.134
     RL 147.20 LAL -.00 LOL 85.86 VL 26.056 GAL 9.89 AZL 86.94 HCA 296.85 SMA 118.04 ECC .29783 INC 3.0646 VI 30.266 RP 108.43 LAP -2.73 LOP 22.75 VP 36.381 GAP 16.70 AZP 88.61 TAL 154.67 TAP 91.53 RCA 82.89 APO 153.20 VZ 34.948 RC 200.481 GL 11.85 GP -2.04 ZAL 46.31 ZAP 177.88 ETS 256.70 ZAE 130.98 ETE 182.21 ZAC 116.41 ETC 167.11 CLP 179.44
   PLANETOCENTRIC CONIC
     C3 44.667 VHL 6.683 DLA 26.27 RAL 34.23 RAD 6568.7 VEL 12.885 PTH
                                                                                                                       2.35 VHP 10.690 DPA
                                                                                                                                                            4.22 RAP 22.37 ECC 1.7351
     C3 44.667 VML 6.683 OLA 26.27 RAL 34.23 RAO 6568.7 VEL 12.885 PTH 2.35 VMP 10.690 DPA 4.22 RAP 22.37 ECC 1.7351 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 27 34 3426.41 -22.13 126.13 278.88 71.87 4 24 40 2826.4 -24.41 118.20 90.00 0 18 49 4046.00 -4.91 163.37 271.40 62.08 1 26 15 3446.0 -8.61 156.65 100.00 5 17 35 3071.75 -25.25 101.10 279.95 73.45 6 8 46 2471.7 -27.28 92.88 100.00 1 11 29 3875.89 -2.05 149.30 269.82 60.17 2 16 5 3275.9 -6.01 142.74 110.00 7 15 52 2701.63 -31.76 74.97 281.92 76.63 8 0 54 2101.6 -33.27 66.07 110.00 1 29 41 3818.78 3.67 141.42 266.26 55.99 2 33 20 3218.8 -.82 135.21
                                                                                101.10 279.95 73.45 6 8 46
149.30 269.82 60.17 2 16 5
74.97 281.92 76.63 8 0 54
141.42 266.26 55.99 2 33 20
MIO-COURSE EXECUTION ACCURACY
SGT 5577.6 SGR ALK 4 507
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   SCT 5577.6 SGR 415.8 SG3 116.8

RRT .4215 RRF .4D29 RTF .9491

SGB 5593.1 R23 .0012 R13 .9491

SGI 5580.4 SG2 376.9 THA 1.81
     TOE 2.8262 TRA 4.4456 TC3-2.0041 BAU 1.1968
                                                                                                                                                  ST 2739.1 SR 415.4 SS 603.2
CRT: .8862 CRS -.8329 CST -.9943
     ROE .4845 RRA .0052 RC3 .0140 FAU .01005
FOE .6330 FRA 1.2668 FC3 -.1947 BSP 18407
                                                                                                                                            LSA 2828.0 MSA 202.1 SSA 13.0
EL1 2763.8 EL2 190.7 ALF 7.69
     BDE 2.8675 BRA 4.4456 BC3 2.0042 FSP -399
LAUNCH DATE DEC 18 1965
                                                                                        FLIGHT TIME 202.00
                                                                                                                                                              ARRIVAL DATE JUL 8 1966
                                                                                    DISTANCE 586.790
   HELIOCENTRIC CONIC
     RL 147.20 LAL -.00 LOL 85.86 VL 26.017 GAL 10.94 AZL 86.98 HCA 300.04 5MA 117.83 ECC .30971 INC 3.0243 VI 30.266 RP 108.39 LAP -2.62 LOP 25.94 VP 36.365 GAP 17.47 AZP 88.48 TAL 153.14 TAP 93.19 RCA 81.34 APO 154.32 V2 34.961 RC 202.264 GL 10.96 GP -2.01 ZAL 44.23 ZAP 177.55 ETS 237.04 ZAE 130.95 ETE 182.21 ZAC 118.66 ETC 166.97 CLP 178.59
    PLANETOCENTRIC CONIC
     C3 50.260 VHL 7.089 DLA 26.07 RAL 36.61 RAD 6568.8 VEL 13.100 PTH 2.39 VHP 11.154 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      3 41 27 3441.05
0 23 52 4090.44
5 30 19 3090.08
1 17 41 3916.64
7 27 25 2723.69
                                                                                           283.39 71.49 4 38 48
275.34 61.88 1 32 2
                                                                                                                                                 2841.0 -24.15 119.19
3490.4 -7.23 159.17
                                                            -21.82
                                                                             127.09
                                                              -3.49
                                                                              165.86
                                                                                                                                                     2490.1 -27.00
        100.00
                                                            -24.89
                                                                              102.34
                                                                                             284.46
                                                                                                                     72.89 6 21 49
                                                                                                                                                                                            94.17
                                                                                                                                2 22 58
8 12 49
        100.00
                                                                -.67
                                                                             151.53
                                                                                                273.77
                                                                                                                     60.11
                                                                                                                                                      3316.6
                                                                                                                                                                         -4.64
                                                                                                                                                                                          145.00
                                                                                                                                                      2123.7
                                                            -31.40
                                                                                76.59
                                                                                                286.53
                                                                                                                     75.74
                                                                                                                                                                        -33.04
                                                                                                                                                                                            67.75
                                         3855.79
                                                            5.07
                                                                              143.36
                                                                                                270.20
                                                                                                                     56.15
                                                                                                                                  2 41 20
                                                                                                                                                      3255.8
                                                                                                                                                                           .59
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCOUNTS

ST 2677.9 SR 410.5 SS 598.4
                                                                                 SCT 5366.8 SCR 411.3 SC3 113.7
RRT .4483 RRF .4307 RTF .9533
SC8 5582.0 R23 .0016 R13 .9533
SC1 5569.9 SC2 367.4 THA 1.91
     TOE 2.8787 TRA 4.9050 TC3-1.7419 BAU 1.1704
    ROE .5078 RRA .0258 RC3 .0089 FAU .00877
FOE .6271 FRA 1.3288 FC3 -.1511 BSP 18355
BOE 2.9232 BRA 4.9051 BC3 1.7419 FSP -386
                                                                                                                                             CRT .8770 CRS -.8259 CST -.9950
                                                                                                                                              LSA 2766.8 MSA 205.2 SSA 12.4
EL1 2702.1 EL2 195.4 ALF 7.70
LAUNCH DATE DEC 18 1965
                                                                                       FLIGHT TIME 204.00
                                                                                                                                                               ARRIVAL DATE JUL 10 1966
                                                                                       DISTANCE 591.249
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 25.978 GAL 12.08 AZL 87.02 MCA 303.24 SMA 117.62 ECC .32292 INC 2.9812 V1 30.266 RP 108.35 LAP -2.49 LOP 29.14 VP 36.350 GAP 18.31 AZP 88.36 TAL 151.68 TAP 94.91 RCA 79.64 APO 155.61 V2 34.974 RC 204.023 GL 10.09 GP -1.98 ZAL 42.28 ZAP 176.98 ETS 223.01 ZAE 130.89 ETE 182.20 ZAC 120.88 ETC 166.79 CLP 177.71
    C3 56.859 VHL 7.540 DLA 25.83 RAL 38.83 RAD 6569.0 VEL 13.350 PTH
                                                                                                                      2.44 VHP 11.668 DPA
                                                                                                                                                          6.12 RAP 26.64 ECC 1.9357
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A5C INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 55 27 3454.23 -21.53 127.95 287.81 71.15 4 53 1 2854.2 -23.91 120.09 90.00 0 27 36 4138.30 -1.95 168.54 279.15 61.74 1 36 35 3538.3 -5.72 161.88
                                                                                                                   72.37 6 34 51
60.12 2 28 41
74.88 8 24 33
56.38 2 40
                       5 43 4 3107.30
1 22 41 3960.47
7 38 47 2745.21
1 43 26 3895.32
        100.00
                                                            -24.54
                                                                              103.50
                                                                                               288.89
                                                                                                                                                      2507.3
                                                                                                                                                                         -26.72
                                                                                                                                                                                            95.38
                                                                .82
                                                                              153.94
                                                                                               277.61
                                                                                                                                                      3360.5
                                                                                                                                                                          -3.17
                                                                                                                                                                                          147.41
                                                            -31.03
                                                                                                                                                                       -32.79
2.10
        110.00
                                                                                78.16
                                                                                               291.04
                                                                                                                                                                                            69.38
                                                                                             274.05
                                                                              145.44
                                                                                                                                   2 48 22
                                                                                                                                                      3295.3
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                SGT 5550.2 SGR 405.7 SG3 110.6 ST 2613.6 SR 403.7 SS 594.7

RRT .4746 RRF .4578 RTF .9577 CRT .8677 CRS -.8189 CST -.9957

SGB 5565.0 R23 .0015 R13 .9577 LSA 2702.7 MSA 207.4 SSA 11.8

SG1 5553.6 SG2 356.9 THA 2.00 EL1 2637.1 EL2 198.9 ALF 7.68
    TOE 2.9309 TRA 5.3945 TC3-1.4984 BAU 1.1390
    RDE .5311 RRA .0487 RC3 .0050 FAU .00755
FDE .6219 FRA 1.3943 FC3 -.1149 BSP 18384
```

BDE 2.9786 BRA 5.3948 BC3 1.4984 FSP -376

ARRIVAL DATE JUL 12 1966

LAUNCH DATE DEC 18 1965

DISTANCE 595.468 HELIOCENTRIC CONIC RL 147.20 LAL -.00 LOL 85.86 VL 25.941 GAL 13.32 A7L 87.07 MCA 306.44 SMA 117.42 ECC .33765 INC 2.9349 VI 30.266
RP 108.31 LAP -2.36 LOP 32.34 VP 36.336 GAP 19.25 A7P 88.26 TAL 150.29 TAP 96.72 RCA 77.77 APO 157.07 V2 34.987
RC 205.757 GL 9.25 GP -1.95 TAL 40.46 ZAP 176.25 ETS 213.59 ZAE 130.79 ETE 182.19 ZAC 123.07 ETC 166.57 CLP 176.80 PLANETOCENTRIC CONIC C3 64.680 VHL 8.042 CLA 25.55 RAL 40.90 RAC 6569.2 VEL 13.639 PTH 2.49 VMP 12.238 CPA 7.04 RAP 28.74 ECC 2.0645 C3 64.680 VHL 8.042 CLA 25.55 RAL 40.90 RAO 6569.2 VEL 13.639 PTH 2.49 VHP 12.238 CPA 7.04 RAP 28.74 ECC 2.0645 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 9 21 3466.34 -21.26 128.74 292.13 70.85 5 7 8 2866.3 -23.68 120.90 90.00 0 30 12 4188.81 -.32 171.36 282.83 61.68 1 40 1 3588.8 -4.11 164.72 100.00 5 55 41 3123.57 -24.20 104.59 293.21 71.90 6 47 44 2523.6 -26.45 96.51 100.00 1 26 34 4006.82 2.39 156.48 281.33 60.19 2 33 21 3406.8 -1.60 149.96 110.00 7 49 54 2766.18 -30.64 79.67 295.43 74.06 8 36 1 2166.2 -32.52 70.96 110.00 1 48 50 3936.97 8.13 147.65 277.79 56.68 2 54 27 3337.0 3.69 141.38 21FFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5529.9 SGR 399.3 SG3 107.7 RRT .5009 RRF .4850 RTF .9620 SGB 5544.3 R23 .0013 R13 .9620 SGI 5533.5 SG2 345.4 THA 2.08 ST 2550.3 SR 395.4 S5 593.5 CRT .8583 CRS -.8123 CST -.9963 TOE 2.9881 TRA 5.9222 TC3-1.2709 BAU 1.0990 ROE .5545 RRA .0740 RC3 .0024 FAU .00630 FOE .6190 FRA 1.4657 FC3 -.0843 BSP 18391 BOE 3.0391 BRA 5.9226 BC3 1.2709 FSP -366 LAUNCH DATE DEC 18 1965 FLIGHT TIME 208.00 ARRIVAL CATE JUL 14 1966 HELIOCENTRIC CONIC DISTANCE 599.391 RL 147.20 LAL -.00 LOL 85.86 VL 25.905 GAL 14.68 AZL 87.12 HCA 309.63 SMA 117.23 ECC .35411 INC 2.8845 V1 30.266
RP 108.27 LAP -2.22 LOP 35.53 VP 36.323 GAP 20.29 AZP 88.16 TAL 148.99 TAP 98.62 RCA 75.72 APO 158.74 V2 35.000
RC 207.465 GL 8.43 GP -1.92 ZAL 38.78 ZAP 175.42 ETS 207.16 ZAE 130.65 ETE 182.19 ZAC 125.22 ETC 166.31 CLP 175.84 PLANETOCENTRIC CONIC PLANETOCENTRIC CONIC
C3 74.000 VHL 8.602 DLA 25.24 RAL 42.81 RAD 6569.4 VEL 13.977 PTH 2.55 VHP 12.874 CPA 7.93 RAP 30.81 ECC 2.2179
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 23 2 3477.61 -21.01 129.47 296.33 70.57 5 20 59 2877.6 -23.47 121.66
90.00 0 31 47 4241.35 1.37 174.29 286.38 61.71 1 42 28 3641.3 -2.42 167.66
100.00 6 8 3 3139.00 -23.87 105.62 297.40 71.45 7 0 22 2539.0 -26.18 97.58
100.00 1 29 26 4055.19 4.02 159.14 284.91 60.35 2 37 2 3455.2 .04 152.61
110.00 8 0 42 2786.56 -30.25 81.13 299.68 73.27 8 47 9 2186.6 -32.24 72.48
110.00 1 53 17 3980.39 9.75 149.98 281.41 57.07 2 59 37 3380.4 5.34 143.66 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5505.5 SGR 392.1 SG3 104.8 RRT .5271 RRF .5121 RTF .9664 SGB 5519.4 R23 .0010 R13 .9664 SGI 5509.4 SG2 332.9 THA 2.16 ST 2488.2 SR 385.5 SS 594.8 CRT .8491 CRS -.8062 CST -.9969 TOE 3.0517 TRA 6.4922 TC3-1.0601 BAU 1.0488 ROE .5778 RRA .1018 RC3 .0009 FAU .00501 FOE .6185 FRA 1.5437 FC3 -.0586 BSP 18387 CRT .8491 CR2 ... LSA 2578.8 MSA 208.1 SSA ELI 2509.8 EL2 201.9 ALF LSA 2578.8 MSA 208.1 SSA 10.7 BDE 3.1059 BRA 6.4930 BC3 1.0601 FSP -357 7.54 ARRIVAL DATE JUL 16 1966 FLIGHT TIME 210.00 LAUNCH DATE DEC 18 1965 DISTANCE 602.948 HELIOCENTRIC CONIC RL 147.20 LAL -.00 LOL 85.86 VL 25.870 GAL 16.17 AZL 87.17 HCA 312.84 SMA 117.04 ECC .37259 INC 2.8291 V1 30.266 RP 108.23 LAP -2.07 LOP 38.73 VP 36.311 GAP 21.47 AZP 88.08 TAL 147.80 TAP 100.63 RCA 73.43 APO 160.65 V2 35.014 RC 209.146 GL 7.64 GP -1.90 TAL 37.25 TAP 174.49 ETS 202.59 TAE 130.45 ETE 182.18 TAC 127.31 ETC 166.00 CLP 174.83 PLANETOCENTRIC CONIC 8.78 RAP 32.85 ECC 2.4018 C3 85.178 VHL 9.229 OLA 24.89 RAL 44.56 RAO 6569.7 VEL 14.371 PTH 2.61 VHP 13.588 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH TIME L-1 TIME INJ LAT
4 36 20 3488.12 -20.77
0 32 25 4295.36 3.11
6 20 6 3153.58 -23.55
1 31 20 4105.13 5.70
8 11 7 2806.25 -29.86
1 56 49 4025.23 11.40 5 34 28 1 44 D -23.27 300.39 70.31 2888.1 122.36 130.14 90.00 61.84 177.30 289.78 3695.4 -.68 170.67 90.00 2553.6 3505.1 301.44 71.04 7 12 39 -25.92 98.59 106.58 100.00 1.74 155.35 100.00 161.90 288.35 2206.2 -31.96 73.94 82.53 303.77 110.00 3425.2 284.90 152.40 7.03 146.02 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5479.2 SGR 384.1 SG3 102.2 RRT .5535 RRF .5396 RTF .9707 SGB 5492.7 R23 .0005 R13 .9707 SGI 5483.4 SG2 319.6 THA 2.23 ST 2430.2 SR 374.2 SS 599.8 CRT .8405 CRS -.8010 CST -.9975 TOE 3.1275 TRA 7.1146 TC3 -.8643 BAU .9842 CRT .8405 CRS -.8010 CS -..... LSA 2522.5 MSA 206.4 SSA 10.1 EL1 2450.6 EL2 201.1 ALF 7.43 ROE .6012 RRA .1324 RC3 .0003 FAU .00359 FOE .6216 FRA 1.6306 FC3 -.0365 BSP 18289 BOE 3.1848 BRA 7.1158 BC3 .8643 FSP -346 ARRIVAL DATE JUL 18 1966 LAUNCH DATE DEC 18 1965 FLIGHT TIME 212.00 HELIOCENTRIC CONIC DISTANCE 606.045 RL 147.20 LAL -.00 LOL 85.86 VL 25.837 GAL 17.82 AZL 87.23 MCA 316.04 SMA 116.86 ECC .39341 INC 2.7677 V1 30.266
RP 108:19 LAP -1.92 LOP 41.94 VP 36.300 GAP 22.79 AZP 88.01 TAL 146.74 TAP 102.78 RCA 70.89 APO 162.84 V2 35.027
RC 210.800 GL 6.87 GP -1.87 ZAL 35.87 ZAP 173.48 ETS 199.22 ZAE 130.19 ETE 182.16 ZAC 129.35 ETC 165.65 CLP 173.76 PLANETOCENTRIC CONIC C3 98.680 VHL 9.934 DLA 24.51 RAL 46.13 RAD 6569.9 VEL 14.833 PTH 2.68 VHP 14.394 DPA 9.59 RAP 34.85 ECC 2.6240 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 49 11 3497.81 0 32 8 4350.38 5 47 29 2897.8 -23.08 90.00 -20.55 130.77 304.28 70.08 123.01 173.74 4.87 180.39 293.02 62.07 1 44 38 3750.4 1.10 90.00 6 31 43 3167.21 1 32 17 4156.22 8 21 5 2825.06 1 59 24 4071.14 7 24 30 2 41 33 2567.2 3556.2 99.52 100.00 -23.25 107.48 305.31 70.66 -25.67 100.00 7.39 164.75 291.65 60.95 3.46 158.16 110.00 -29.47 83.85 307.67 71.84 9 8 10 2225.1 -31.66 75.33 3 7 15 110.00 13.06 154.92 288.26 58.13 3471.1 8.75 148.47 MID-COURSE EXECUTION ACCURACY MID-COURSE EXECUTION ACCURACY
SGT 5446.3 SGR 375.2 SG3 99.6
SRT .5792 RRF .5663 RTF .9748
SGB 5459.2 R23 -.0001 R13 .9748
SGI 5450.7 SG2 305.6 THA 2.29
SGB 5459.2 R23 -.0001 R13 .9748
SGI 5450.7 SG2 305.6 THA 2.29
SGI 5450.7 SG2 305.6 THA 2.29 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE 3.2106 TRA 7.7880 TC3 -.6870 BAU .9063 ROE .6245 RRA .1655 RC3 .0005 FAU .00210 FOE .6268 FRA 1.7260 FC3 -.0185 BSP 18280 BOE 3.2708 BRA 7.7897 BC3 .6870 FSP -338

FLIGHT TIME 206.00

```
ARRIVAL DATE JUL 20 1966
                                                                           FLIGHT TIME 214.00
                                                                          DISTANCE 608.559
   HELIOCENTRIC CONIC
    RL 147.20 LAL -.DD LOL 85.86 VL 25.805 CAL 19.67 AZL 87.30 HCA 319.25 SMA 116.69 ECC .41697 INC 2.6987 V1 30.266 RP 108.15 LAP -1.76 LOP 45.14 VP 36.290 CAP 24.30 AZP 87.96 TAL 145.85 TAP 105.10 RCA 68.04 APO 165.35 V2 35.040 RC 212.427 GL 6.12 GP -1.85 7AL 34.66 ZAP 172.38 ETS 196.63 ZAE 129.05 ETE 182.15 ZAC 131.30 ETC 165.26 CLP 172.61
   PLANETOCENTRIC CONIC
                                                                                                      2.75 VHP 15.309 OPA 10.37 RAP 36.78 ECC 2.8946
    C3 115.123 VHL 10.730 DLA 24.09 RAL 47.53 RAD 6570.2 VEL 15.377 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              5 59 56
                                                                                                                                2906.5
                    5 1 30 3506.52
0 30 56 4406.05
                                                    -20.34
                                                                   131.33
                                                                                 307.96
                                                                                                   69.87
        90.00
                                                                                                                                  3806.1
                                                                                                                                                                176.85
                                                                                                                1 44 22
                                                                   183.52
                                                                                  296.09
                                                                                                    62.41
                                                       6.64
        90.00
                                                                                                               7 35 51
                                                                                                                                  2579.7
                    6 42 52 3179.69
1 32 15 4208.11
                                                    -22.96
                                                                   108.30
                                                                                   308.98
                                                                                                    70.32
       100.00
                                                                     67.66 294.77 61.40 2 42 23
85.09 311.36 71.20 9 17 56
57.51 291.46 58.80 3 9 40
MID-COURSE EXECUTION ACCURACY
                                                                                                                                  3608.1
                                                                                                                                                   5.21
                                                                                                                                                                161.03
                                                                  167.66
                                                       9.10
       100.00
                                                                                                                                 2242.8
                                                                    85.09
                     8 30 33 2842.76
                                                   -29.09
       110.00
                                                                                                                                  3517.8
                                                                                                                                                 10.48
                     2 1 3
                                                                   157.51
                                   4117.80
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5409.7 SGR 365.4 SG3 97.2
RRT .6047 RRF .5929 RTF .9787
SGB 5422.0 R23 -.0007 R13 .9787
SGI 5414.2 SG2 290.8 THA 2.35
                                                                                                                             ST 2315.5 SR 347.7 SS 618.7
CRT .8248 CRS -.7922 CST -.9984
    TOE 3.3089 TRA 8.5256 TC3 -.5255 BAU .8087
    ROE .6478 RRA .2012 RC3 .0013 FAU .00043
FOE .6360 FRA 1.8328 FC3 -.0032 BSP 18239
                                                                                                                             LSA 2413.6 MSA 199.0 55A 9.0
                                                                                                                             EL1 2333.3 EL2 195.1 ALF 7.11
    BOE 3.3717 BRA 8.5280 BC3 .5255 FSP
                                                       -329
                                                                                                                                         ARRIVAL DATE JUL 22 1966
                                                                            FLIGHT TIME 216.00
LAUNCH DATE DEC 18 1965
                                                                           DISTANCE 610.328
  HELIOCENTRIC CONIC
    RL 147.20 LAL -.00 LOL 85.86 VL 25.775 GAL 21.74 AZL 87.38 HCA 322.45 SHA 116.54 ECC .44371 INC 2.6200 VI 30.266 RP 108.11 LAP -1.60 LOP 48.35 VP 36.282 GAP 26.04 AZP 87.92 TAL 145.16 TAP 107.61 RCA 64.83 APO 168.25 V2 35.053 RC 214.027 GL 5.40 GP -1.83 ZAL 33.62 ZAP 171.17 ETS 194.59 ZAE 129.41 ETE 182.13 ZAC 133.16 ETC 164.84 CLP 171.36
   PLANETOCENTRIC CONIC
    C3 135.330 VHL 11.633 OLA 23.65 RAL 48.72 RAD 6570.5 VEL 16.021 PTH 2.82 VHP 16.355 DPA 11.09 RAP 38.63 ECC 3.2272
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 13 12 3513.96

0 28 46 4462.04

6 53 27 3190.76

1 31 12 4260.48
                                                                                  311.40
                                                                                                   69.69
                                                                                                                6 11 46
                                                                                                                                 2914.0
                                                    -20.17
                                                                   131.80
                                                                                                                                                                 179.98
                                                                                                     62.86
                                                                                                                 1 43 8
                                                                                                                                  3862.0
                                                                                   298.96
                                                      8.39
                                                                    186.71
                                                                                                              7 46 37
2 42 13
                                                                                                                                  2590.8
                                                                                                                                                                 101.13
                                                                                   312.40
                                                                                                     70.02
                                                    -22.71
                                                                    109.02
                                                                                                                                3660.5
                                                                                                                                                   6.95
                                                                                                                                                                 163.93
                                                                                                    61.95
                                                                                   297.69
                                                    10.79
                                                                   170.62
                                                                                                              9 27 7
       100.00
                                                                                                                                                -31.09
12.20
                                                                                                                                                                  77.82
                    8 39 28 2859.07
2 1 40 4164.93
                                                                                                     70.62
                                                                                                                                  2259.1
                                                                                   314.79
                                                   -28.72
                                                                     86.22
                                                                                                                 3 11 5
                                                                                                                                3564.9
                                                                                                     59.56
                                                                                   294.48
       110.00
                                                    16.37
                                                                    160.17
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SCT 5368.9 SCR 354.9 SC3 94.9
RRT .6297 RRF .6191 RTF .9824
SCB 5380.6 R23 -.0014 R13 .9824
SCI 5373.5 SC2 275.4 THA 2.39
                                                                                                                             ST 2261.9 SR 332.8 SS 634.5
CRT .8183 CR5 -.7893 CST -.9987
    TOE 3.4263 TRA 9.3363 TC3 -.3794 BAU .6864
    ROE .6712 RRA .2397 RC3 .0025 FAU-.00151
FOE .6497 FRA 1.9532 FC3 .0097 BSP 18184
                                                                                                                             LSA 2364.8 MSA 193.3 SSA
                                                                                                                                                                     8.4
                                                                                                                              EL1 2278.4 EL2 189.9 ALF
    BOE 3.4915 BRA 9.3393 BC3 .3794 FSP -322
                                                                                                                                         ARRIVAL DATE JUL 24 1966
                                                                            FLIGHT TIME 218.00
LAUNCH DATE DEC 18 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 611.135
    RL 147.20 LAL -.00 LOL 85.86 VL 25.748 GAL 24.08 AZL 87.47 HCA 325.66 SMA 116.39 ECC .47418 INC 2.5288 VI 30.266 RP 108.07 LAP -1.43 LOP 51.55 VP 36.275 GAP 28.03 AZP 87.91 TAL 144.72 TAP 110.38 RCA 61.20 APO 171.59 V2 35.067 RC 215.599 GL 4.70 GP -1.81 ZAL 32.80 ZAP 169.83 ETS 192.93 ZAE 128.85 ETE 182.10 ZAC 134.91 ETC 164.39 CLP 169.99
   PLANETOCENTRIC CONIC
    C3 160.412 VHL 12.665 DLA 23.16 RAL 49.70 RAD 6570.7 VEL 16.785 PTH 2.90 VHP 17.558 DPA 11.76 RAP 40.58 ECC 3.6400 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              6 22 54
1 40 50
7 56 44
2 40 57
                    5 24 15 3519.76
0 25 32 4518.10
7 3 24 3200.04
1 29 4 4313.05
8 47 45 2873.60
2 1 13 4212.25
                                                                                314.56
                                                                  132.17
                                                                                                                                2919.8
                                                                                                                                                 -22.64
                                                                                                    69.56
                                                     -20.03
                                                                                                                                                   6.47
                                                                                                                                                                 183.14
                                                                                   301.60
                                                                                                    63.41
                                                     10.12
                                                                    189.92
         90.00
                                                                                                                                                                 101.76
                                                                                                    69.77
                                                                                                                                  2600.0
                                                                                                                                                 -25.04
                                                     -22.49
                                                                   109.63
                                                                                   315.54
       100.00
                                                                                                                                  3713.1
                                                                                                                                                    8.69
                                                                                                                                                                 166.88
                                                      12.45
                                                                   173.64
                                                                                   300.39
                                                                                                    62.60
                                                                                                              9 35 38
       100.00
                                                                                                                                  2273.6
                                                                                                                                                 -30.83
                                                                                                                                                                 78.87
                                                     -28.39
                                                                     87.22
                                                                                  317.92
                                                                                                     70.11
       110.00
                                                                                                                                  3612.3
                                                                                                    60.42
                                                                                                                 3 11 25
                                                                                                                                                13.90
                                                                   162.90
                                                                                  297.28
                                                     17.98
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2211.7 SR 317.1 SS 655.9
CRT .8134 CRS -.7878 CST -.9990
                                                                       SGT 5325.1 SGR 343.6 SG3 92.8
RRT .6543 RRF .6450 RTF .9858
SGB 5336.2 R23 -.0022 R13 .9858
     TOE 3.5706 TRA10.2337 TC3 -.2474 BAU .5306
    RDE .6950 RRA .2808 RC3 .0040 FAU-.00386
FDE .6695 FRA 2.0904 FC3 .0208 BSP 18027
                                                                                                                             LSA 2321.1 MSA 186.2 SSA
                                                                        5G1 5329.9 SG2 259.6 THA 2.42
                                                                                                                              EL1 2226.8 EL2 183.3 ALF
     BOE 3.6377 BRAID.2375 BC3 .2474 FSP -313
                                                                                                                                         ARRIVAL DATE JUL 26 1966
                                                                            FLIGHT TIME 220,00
LAUNCH DATE DEC 18 1965
   HELIOCENTRIC CONIC
                                                                            DISTANCE 610.687
    RL 147.20 LAL -.00 LOL 85.86 VL 25.724 GAL 26.76 AZL 87.58 HCA 328.88 SMA 116.27 ECC .50902 INC 2.4211 VI 30.266
RP 108.03 LAP -1.25 LOP 54.76 VP 36.271 GAP 30.35 AZP 87.93 TAL 144.58 TAP 113.45 RCA 57.08 APO 175.45 V2 35.080
RC 217.144 GL 4.02 CP -1.70 ZAL 32.20 ZAL 164.34 ZAL 574 104.54 ZAL 574 102 14 ETE 102.07 ZAC 134 KL ETC 163.00 CL 164.17
                            4.02 GP -1.79 TAL 32.20 TAP 168.34 ETS 191.54 TAE 128.15 ETE 182.07 TAC 136.51 ETC 163.92 CLP 168.47
     RC 217.144 GL
   PLANETOCENTRIC CONIC
                                                                                                       2.98 VHP 18.951 DPA 12.37 RAP 42.00 ECC 4.1579
     C3 191.882 VHL 13.852 OLA 22.64 RAL 50.44 RAD 6571.0 VEL 17.698 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                6 33 16
                                                                                                                               2923.4
                                                                                                                                                -22.56
                                                                                  317.39
                                                                                                     69.47
                      5 34 33 3523.42
                                                     -19.94
                                                                   132.40
                     0 21 6 4574.06
7 12 40 3207.07
1 25 41 4365.64
8 55 19 2885.91
                                                                                                                                  3974.1
                                                                                                                                                   8.22
                                                                                                                                                                 186.32
                                                                                                     64.07
                                                                                                                 1 37 20
                                                                    193.17
                                                                                   303.97
                                                     11.80
                                                                                                               8 6 7
2 38 26
9 43 25
3 10 30
                                                                                                                                  2607.1
                                                                                                                                                  -24.90
                                                                                                                                                                 102.23
                                                                                   318.35
                                                                                                     69.59
                                                     -22.32
                                                                    110.08
        100.00
                                                                                                                                  3765.6
                                                                                                                                                  10.39
                                                                                                                                                                 169.85
                                                                                   302.82
                                                                                                     63.36
                                                                    176.70
                                                     14.08
                                                                                   320.72
                                                                                                     69.69
                                                                                                                                  2285.9
                                                                                                                                                 - 30 . 60
                                                                                                                                                                  79.76
                                                    -28.10
                                                                     88.06
                                                                                                     61.38
                                                                                                                                  3659.6
                                                                                                                                                 15.57
                                                                                                                                                                 158.80
                                                                    165.67
                                                                                   299.83
                      1 59 31 4259.56
                                                   19.54
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SG1 5273.9 SGR 331.4 SG3 90.7 ST 2161.1 SR 300.6 SS 682.7 RRT .6778 RRF .6695 RTF .9888 CRT .8096 CRS -.7872 CST -.9992 SGB 5284.3 R23 -.0029 R13 .9888 LSA 2279.2 MSA 177.9 SSA 7.3 SG1 5278.7 SG2 243.4 THA 2.44 EL1 2174.8 EL2 175.4 ALF 6.47
     TOE 3.7408 TRAIL.2210 TC3 -.1310 BAU .3365
     ROE .7191 RRA .3240 RC3 .0057 FAU-.00669
FDE .6951 FRA 2.2459 FC3 .0302 BSP 17953
BDE 3.8093 BRA11.2257 BC3 .1312 FSP -306
```

```
ARRIVAL DATE FEB 27 1966
                                                                           FLIGHT TIME 75.00
LAUNCH DATE DEC 19 1965
                                                                           GISTANCE 198.216
   HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.456 GAL -11.59 A7L 86.67 HCA 90.46 SMA 133.57 ECC .22431 INC 3.3324 V1 30.269 RP 107.70 LAP 3.33 LOP 177.35 VP 38.355 GAP -6.62 A7P 90.03 TAL 231.97 TAP 322.44 RCA 103.61 APO 163.53 V2 35.186 RC 59.152 GL 14.89 GP 4.32 ZAL 152.32 ZAP 32.59 ETS 351.97 ZAE 155.10 ETE 348.01 ZAC 59.48 ETC 164.79 CLP -32.34
   PLANETOCENTRIC CONIC
    C3 39.740 VHL 6.304 CLA -7.14 RAL 289.93 RAC 6568.5 VEL 12.693 PTH 2.31 VHP 5.454 CPA -12.08 RAP 326.93 ECC 1.6540 LNCH AYNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              1561.5
                   1 45 51 2161.52
11 56 35 5251.96
3 3 46 1910.13
13 21 21 4978.57
4 4 12 1720.92
14 37 25 4740.55
                                                                                                 112.04
                                                                                                                2 21 52
                                                    -18.25
                                                                   30.15
                                                                                161.10
                                                                                                    112.04 2 21 52
80.40 13 24 7
        90.00
                                                                                                                                  4652.0
                                                                                                                                                 25.17
                                                                   236.92
                                                                                   165.89
                                                     26.77
        90.00
                                                                                                   113.11 3 35 36
79.37 14 44 20
116.15 4 32 53
76.49 15 56 25
                                                                                                                                                                  11.87
                                                                                                                               1310.1
4378.6
                                                                                                                                                 -16.21
                                                    -19,50
                                                                    19.11
                                                                                  160.55
       100.00
                                                    28.10
                                                                   216.55
                                                                                   165.62
                                                                                                                                                 26.35
       100.00
                                                                                                                                                                 355.93
                                                                                                                               1120.9
4140.€
                                                                                   158.90
                                                                                                                                                 -19.15
                                                    -22.85
                                                                      3.11
       110.00
                                                                                                                                                29.52
                                                                                                                                                                 189.06
                                                                                   164.73
                                                     31.70
                                                                   197.59
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   EIFFFRENTIAL CORRECTIONS
                                                                                                                            ST 168.9 SR 381.6 SS 250.9
CRT .7868 CRS .8613 CST .3818
LSA 459.6 MSA 159.3 SSA 22.9
                                                                        SGT 494.3 SGR 391.6 SG3 195.4
RRT .0556 RRF -.1502 RTF -.4061
    TOE -.1526 TRA -.3488 TC3 .2783 BAU .1495
    RCE - .4192 RRA .0800 RC3 - .0422 FAU .07273
    FCE .4874 FRA-1.0531 FC3-1.5843 BSP 1044
BCE .4461 BRA .3578 BC3 .2815 FSP -540
                                                                        568 630.6 R23 -.0902 R13 -.4161
                                                                                                                            EL1 405.6 EL2 98.1 ALF 69.55
                                                                        SG1 495.6 SG2 390.0 THA 6.65
                                                                                                                                         ARRIVAL DATE MAR 1 1966
                                                                            FLIGHT TIME 72.00
LAUNCH GATE DEC 19 1965
                                                                            CISTANCE 204.955
   HELTOCENTRIC CONTC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.530 GAL -11.49 AZL 86.70 HCA 93.70 SMA 134.14 ECC .22082 INC 3.2974 VI 30.269
RP 107.73 LAP 3.29 LOP 180.58 VP 38.398 GAP -5.85 AZP 90.21 TAL 232.94 TAP 326.63 RCA 104.52 APO 163.76 V2 35.176
RC 61.127 GL 14.93 GP 4.64 ZAL 152.80 ZAP 36.65 ETS 352.46 ZAE 156.84 ETE 348.68 ZAC 58.61 ETC 164.87 CLP -36.39
   PLANETOCENTRIC CONIC
    C3 38.942 VHL 6.240 DLA -7.18 RAL 289.35 RAD 6568.5 VEL 12.661 PTH 2.30 VHP 5.107 DPA -12.03 RAP 326.03 ECC 1.6409 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 43 50 2155.07

11 53 56 5248.15

3 1 44 1903.75

13 18 43 4974.70

4 2 7 1714.69

14 34 50 4736.53
                                                                                                                               1555.1
                                                                                                                                                -14.92
                                                                    37.75
                                                                                  160.17
                                                                                                   112.17 2 19 45
        90.00
                                                     -18.08
                                                                                                   80.27 13 21 25
113.26 3 33 28
79.23 14 41 38
116.31 4 30 42
76.33 15 53 46
                                                                                                                                                  25.11
                                                                                                                                                                  228.36
                                                                                   164.94
                                                                                                                                  4648.2
                                                     26.72
                                                                    236.65
        90.00
                                                                                                                                  1303.8
                                                                                                                                                 -16.02
                                                                                                                                                                   11.49
                                                     -19.33
                                                                     18.72
                                                                                   159.62
       100.00
                                                                                                                                 4374.7
                                                                                                                                              26.28
-18.94
                                                                                                                                                                  207.91
                                                                   216.27
                                                                                 164.67
                                                     28.06
       100.00
                                                                                                                                1114.7
                                                                                                                                                                  355.56
                                               -22.66
31.64
                                                                                   157.97
                                                                      2.72
       110.00
                                                                                                                                                   29.44
                                                                                                                                                                  188.77
                                                                    197.29
                                                                                  163.77
                                                                                                                                  4136.5
       110.00
                                                                                                                            ORBIT CETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 166.2 SR 382.2 55 268.2
CRT .7605 CRS .8585 CST .3368
                                                                        SGT 486.3 SGR 391.7 SG3 221.7
RRT .0555 RRF -.1789 RTF -.3521
     TOE -.1446 TRA -.3587 TC3 .2642 BAU .1387
     ROE - .4156 RRA .0836 RC3 - .0350 FAU .08126
                                                                                                                             LSA 465.9 MSA 167.7 SSA
                                                                        5GB 624.5 R23 -.1236 R13 -.3663
                                                                                                                                                                     22.9
    FOE .5475 FRA-1.2067 FC3-1.8064 BSP 958
BOE .4400 BRA .3683 BC3 .2665 FSP -623
                                                                                                                             EL1 404.1 EL2 102.1 ALF 70.40
                                                                        SG1 487.7 SG2 390.0 THA 7.15
                                                                                                                                         ARRIVAL DATE HAR 3 1966
                                                                            FLIGHT TIME 74.00
LAUNCH DATE DEC 19 1965
                                                                            01STANCE 211.657
    RL 147.79 LAL -.00 LOL 86.88 VL 28.591 GAL -11.40 AZL 86.74 MCA 96.93 SMA 134.61 ECC .21781 INC 3.2622 V1 30.269 RP 107.76 LAP 3.24 LOP 183.82 VP 38.434 GAP -5.12 AZP 90.39 TAL 233.74 TAP 330.66 RCA 105.29 APO 163.93 V2 35.166 RC 63.151 GL 14.95 GP 4.98 ZAL 153.19 ZAP 40.93 ETS 352.89 ZAE 158.91 ETE 349.40 ZAC 57.51 ETC 164.95 CLP -40.68
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 38.215 VHL 6.182 DLA -7.23 RAL 288.87 RAD 6568.5 VEL 12.633 PTH 2.29 VMP 4.794 DPA -12.03 RAP 324.91 ECC 1.6289
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 112.30 2 18 7 1548.8

80.16 13 19 6 4644.9

113.39 3 31 48 1297.6

79.11 14 39 21 4371.3

116.46 4 28 59 1108.7

76.18 15 51 32 4133.0
                                                                                                                                              -14.74
                   1 42 18 2148.83
11 51 41 5244.87
3 0 11 1897.59
13 16 30 4971.34
4 0 31 1708.69
14 32 39 4733.00
                                                                                 159.37
                                                                    37.36
                                                     -17.92
                                                                                                                                                                 228.13
                                                                                                                                                  25.05
                                                                                   164.13
                                                                   236.42
                                                      26.68
                                                                                                                                                 -15.84
                                                                                                                                                                  11.12
                                                                     18.33
                                                                                   158.82
                                                     -19.16
                                                                                                                                                  26.22
                                                                                                                                                                  207.68
                                                                 216.03
                                                                                   163.85
                                                     28.01
                                                                                                                                              -18.74
29.36
                                                                                                                                                                  355.21
                                                                                   157.17
       110.00
                                                     -22.48
                                                                      2.35
                                                                                                                                                                  188.53
                                                                    197.03
                                                                                   162.95
                                                     31.58
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 152.2 SR 382.2 SS 284.9
CRT .7179 CRS .8554 CST .2700
LSA 471.2 MSA 176.2 SSA 22.8
                                                                        SGT 477.0 SGR 391.5 SG3 250.6
     TOE -.1333 TRA -.3738 TC3 .2431 BAU .1249
                                                                        RRT .0460 RRF -.2109 RTF -.2782
     RDE -.4115 RRA .0884 RC3 -.0261 FAU .09067
     FOE .6094 FRA-1.3740 FC3-2.0540 BSP 867
BDE .4325 BRA .3841 BC3 .2445 FSP -720
                                                                        SG8 617.2 R23 -.1716 R13 -.2954
                                                                                                                             EL1 401.0 EL2 107.6 ALF 71.69
                                                                        SG1 478.1 SG2 390.3 THA 6.52
                                                                                                                                          ARRIVAL DATE HAR 5 1966
                                                                            FLIGHT TIME 76.00
 LAUNCH DATE DEC 19 1965
                                                                            DISTANCE 218.323
    RL 147.19 LAL -.00 LOL 86.88 VL 28.639 GAL -11.31 A7L 86.77 HCA 100.16 SMA 134.99 ECC .21519 INC 3.2266 VI 30.269 RP 107.80 LAP 3.18 LOP 187.05 VP 38.460 GAP -4.43 A7P 90.57 TAL 234.38 TAP 334.53 RCA 105.94 APO 164.04 V2 35.155 RC 65.219 GL 14.95 GP 5.34 ZAL 153.50 ZAP 45.44 ETS 353.30 ZAE 161.31 ETE 350.23 ZAC 56.19 ETC 165.03 CLP -45.19
   PLANETOCENTRIC CONIC
     C3 37.538 VHL 6.127 DLA -7.28 RAL 288.50 RAD 6568.5 VEL 12.606 PTH 2.29 VHP 4.514 DPA -12.07 RAP 323.55 ECC 1.6178
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   112.42 2 16 55
80.06 13 17 11
113.52 3 30 35
                                                                                  158.69
                                                                                                                  2 16 55
                                                                                                                                  1542.7
                                                                                                                                                 -14.57
                                                      -17.76
                                                                      36.98
         90.00
                      1 41 12 2142.73
                                                                                                                                                  25.01
                                                                                                                                                                  227.93
                                                                                                                                   4641.9
                                                                    236.21
                                                                                    163.44
                                    5241.94
                                                      26.65
         90.00
                    11 49 49
                                                                                                                                                   -15.66
                                                                                                                                                                   10.76
                                                                                                                                   1291.6
                                                      -19.00
                                                                      17.96
                                                                                    158.14
                      2 59 4
        100.00
                                    1891.57
                                                                                                   79.01 14 37 28
116.60 4 27 43
76.06 15 49 42
                                                                                                                                                  26.17
                                                                                                                                                                  207.47
                    13 14 39
                                                                                    163.17
                                                                                                                                   4368.3
                                                     27.97
                                                                    215.81
        100.00
                                   4968.33
                                                                                                                                                -18.55
                    3 59 20 1702.85
14 30 52 4729.81
                                                                                                                                  1102.9
                                                     -22.30
                                                                       1.99
                                                                                    156.49
        110.00
                                                                                                                                                                  188.31
                                                                                  162.26
                                                                                                                                  4129.8
                                                                                                                                                    29.29
                                                                    196.80
                                                     31.53
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 469.3 SGR 391.3 SG3 281.4 ST 159.5 SR 381.5 S5 302.3 RRT .0264 RRF -.2484 RTF -.1726 CRT .6578 CRS .8553 CST .1878 SGB 611.0 R23 -.2332 R13 -.1869 LSA 477.2 MSA .184.8 SSA .22.7 SG1 469.7 SG2 390.8 THA 4.11 ELI 397.1 EL2 115.4 ALF 73.16
     TOE -.1209 TRA -.3970 TC3 .2118 BAU .1066
     RDE - .4070 RRA .0942 RC3 - .0156 FAU .10059
     FDE .6780 FRA-1.5468 FC3-2.3198 BSP 725
     BDE .4246 BRA .4080 BC3 .2124 FSP -819
```

```
FLIGHT TIME 78.00
                                                                                                                                                       ARRIVAL DATE HAR 7 1966
LAUNCH DATE DEC 19 1965
                                                                                   DISTANCE 224.952
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.676 GAL -11.22 A7L 86.81 HCA 103.38 SMA 135.28 ECC .21289 INC 3.1902 V1 30.269
RP 107.83 LAP 3.10 LOP 190.29 VP 38.477 GAP -3.77 A7P 90.74 TAL 234.86 TAP 338.24 RCA 106.48 APO 164.09 V2 35.143
RC 67.327 GL 14.93 GP 5.73 7AL 153.75 ZAP 50.16 ETS 353.71 ZAE 164.03 ETE 351.25 ZAC 54.64 ETC 165.11 CLP -49.92
   PLANETOCENTRIC CONIC
    C3 36.898 VHL 6.074 DLA -7.33 RAL 288.23 RAD 6568.4 VEL 12.580 PTH 2.28 VHP 4.267 DPA -12.14 RAP 321.97 ECC 1.6072 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          112.54
                                                                                                                                            1536.7
                                                                                                                                                              -14.40
                      1 40 32 2136.70
11 48 20 5239.27
                                                                                                                           2 16 8
         90.00
                                                                                          158.13
                                                                                                                                                                                  29.40
                                                         -17.61
                                                                           36.61
                                                                                                              79.97
                                                                                                                          13 15 39
                                                          26.62
                                                                          236.02
                                                                                           162.87
                                                                                                                                               4639.3
                                                                                                                                                                 24.96
                                                                                                                                                                                 227.74
         90.00
                     2 58 21 1885.63
13 13 11 4965.58
3 58 34 1697.10
14 29 28 4726.87
                                                                                                             113.65 3 29 47
78.91 14 35 57
                                                                                           157.57
                                                                                                                                                                                  10.41
       100.00
                                                        -18.84
                                                                           17.60
                                                                                                                                              1285.6
                                                                                                                                                               -15.4A
       100.00
                                                          27.94
                                                                          215.62
                                                                                           162.59
                                                                                                                                               4365.6
                                                                                                                                                                26.12
                                                                                                                                                                                 207.28
                                                                                                                                             1097.1
                                                        -22.13
                                                                            1.64
                                                                                           155.92
                                                                                                             116.75 4 26 51
75.94 15 48 15
                                                                                                                                                               -18.36
                                                                                                                                                                                 354.53
       110.00
                                                         31.48
                                                                          196.58
                                                                                           161.68
                                                                                                                                               4126.9
                                                                                                                                                                29.23
                                                                                                                                                                                 188.10
       110.00
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 466.9 SGR 391.1 SG3 314.1
RRT -.0126 RRF -.2894 RTF -.0380
SGB 609.1 R23 .2909 R13 .0294
                                                                                                                                          ST 157.0 SR 380.1 SS 318.2
CRT .5697 CRS .8546 CST .0749
LSA 482.2 MSA 193.4 SSA 22.6
    TOE -.1049 TRA -.4267 TC3 .1719 BAU .0848
    RDE -.4019 RRA .1011 RC3 -.0033 FAU .11111
    FDE .7447 FRA-1.7266 FC3-2.6069 BSP 588
BDE .4153 BRA .4385 BC3 .1719 FSP -933
                                                                                                                                          EL1 391.8 EL2 125.2 ALF 75.21
                                                                               5G1 467.0 SG2 391.0 THA 177.97
                                                                                   FLIGHT TIME 80.00
                                                                                                                                                       ARRIVAL DATE MAR 9 1966
LAUNCH DATE DEC 19 1965
                                                                                   DISTANCE 231.543
  HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.703 GAL -11.13 AZL 86.85 MCA 106.61 SMA 135.50 ECC .21085 INC 3.1528 VI 30.269
RP 107.87 LAP 3.02 LOP 193.52 VP 38.487 GAP -3.14 AZP 90.90 TAL 235.19 TAP 341.80 RCA 106.93 APO 164.07 V2 35.132
RC 69.470 GL 14.90 GP 6.13 ZAL 153.92 ZAP 55.10 ETS 354.12 ZAE 167.03 ETE 352.64 ZAC 52.88 ETC 165.20 CLP -54.87
  PLANETOCENTRIC CONIC
    C3 36.279 VHL 6.023 DLA -7.39 RAL 288.05 RAD 6568.4 VEL 12.556 PTH
                                                                                                                 2.28 VHP 4.053 CPA -12.24 RAP 320.18 ECC 1.5971
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            1530.7
                                                                                                           112.66
        90.00
                       1 40 13 2130.68
                                                         -17.45
                                                                           36.24
                                                                                          157.66
                                                                                                                           2 15 45
                                                                                                                                                               -14.23
                                                                                                                                                                                   29.04
                    11 47 12 5236.75
2 58 2 1879.70
13 12 5 4962.96
3 58 11 1691.37
14 28 25 4724.05
        an nn
                                                          26.59
                                                                          235.84
                                                                                           162.39
                                                                                                              79.88
                                                                                                                           13 14 28
                                                                                                                                               4636.7
                                                                                                                                                                 24.92
                                                                                                                                                                                  227.57
                                                                                                             113.77
                                                                                                                            3 29 22
                                                                                                                                               1279.7
                                                                                                                                                                                   10.06
       100.00
                                                         -18.68
                                                                           17.23
                                                                                           157.10
                                                                                                                                                                 -15.31
                                                          27.90
                                                                                                              78.82 14 34 48
                                                                                                                                               4363.D
                                                                                                                                                                 26.08
                                                                                                                                                                                  207.10
       100.00
                                                                          215.43
                                                                                           162.11
                                                                                                             116.89
                                                                                                                          4 26 23
                                                                                                                                             1091.4
                                                                                                                                                                -18.17
                                                                                                                                                                                  354.20
                                                         -21.95
                                                                            1.29
       110.00
                                                                                           155.45
                                                                                                               75.82 15 47 9
                                                                                                                                               4124.1
       110.00
                                                          31.43
                                                                          196.37
                                                                                           161.20
                                                                                                                                                                  29.17
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE - .0876 TRA - .4652 TC3 .1203 BAU .0586

ROE - .3962 RRA .1087 RC3 .0106 FAU .12162

FOE .8144 FRA-1.9008 FC3-2.9023 BSP 459

BOE .4057 BRA .4777 BC3 .1208 FSP -1041
                                                                              SGT 476.5 SGR 391.2 SG3 347.2
RRT -.0713 RRF -.3351 RTF .1266
                                                                                                                                          ST 157.7 SR 378.2 SS 334.1
CRT .4562 CRS .8567 CST -.0546
                                                                              SGB 616.5 R23 .3060 R13 -.1710
SG1 478.9 SG2 388.3 THA 170.12
                                                                                                                                          LSA 488.2 MSA 201.7 SSA
                                                                                                                                                                                     22.4
                                                                                                                                          EL1 386.0 EL2 137.5 ALF 77.63
                                                                                                                                                      ARRIVAL DATE MAR 11 1966
                                                                                   FLIGHT TIME 82.00
LAUNCH DATE DEC 19 1965
                                                                                  DISTANCE 238.095
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.721 GAL -11.04 AZL 86.89 HCA 109.83 SMA 135.64 ECC .20901 INC 3.1142 V1 30.269
RP 107.90 LAP 2.93 LOP 196.74 VP 38.489 GAP -2.54 AZP 91.06 TAL 235.38 TAP 345.21 RCA 107.29 APO 163.99 V2 35.120
RC 71.643 GL 14.86 GP 6.55 ZAL 154.02 ZAP 60.21 ETS 354.55 ZAE 170.29 ETE 354.82 ZAC 50.95 ETC 165.29 CLP -60.00
    C3 35.673 VHL 5.973 DLA -7.44 RAL 287.96 RAD 6568.4 VEL 12.532 PTH 2.27 VHP 3.870 DPA -12.36 RAP 318.20 ECC 1.5871
    C3 35.673 VML 5.973 DLA -7.44 RAL 287.96 RAD 6568.4 VEL 12.352 PM 2.27 VMP 5.870 DPA -72.36 RAP 318.20 ECC 1.5871 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 11 40 20 2124.61 -17.29 35.86 157.28 112.78 2 15 44 1524.6 -14.05 28.68 90.00 11 46 24 5234.30 26.56 235.67 162.01 79.80 13 13 38 4634.3 24.88 227.40 100.00 2 58 6 1873.72 -18.51 16.86 156.72 113.90 3 29 19 1273.7 -15.13 9.71 100.00 13 11 19 4960.42 27.87 215.25 161.73 78.73 14 33 59 4360.4 26.03 206.93 110.00 3 58 11 1685.60 -21.77 .93 155.07 117.05 4 26 16 1085.6 -17.97 353.86 110.00 14 27 43 4721.31 31.39 196.17 160.81 75.71 15 46 24 4121.3 29.11 187.71
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 161.5 SR 375.3 SS 347.5

CRT .3132 CRS .8578 CST -.2070

LSA 493.3 MSA 209.5 SSA 22.2

EL1 379.4 EL2 151.8 ALF 80.84
    TOE -.0670 TRA -.5105 TC3 .0589 BAU .0307
ROE -.3896 RRA .1172 RC3 .0263 FAU .13214
FOE .8760 FRA-2.0701 FC3-3.2069 BSP 479
                                                                               SGT 503.0 SGR 391.8 SG3 380.5
                                                                              RRT -.1510 RRF -.3833 RTF .3005
SGB 637.6 R23 .2741 R13 -.3634
SGI 511.1 SG2 381.2 THA 164.55
    BOE .3954 BRA .5238 BC3 .0645 FSP -1159
LAUNCH DATE DEC 19 1965
                                                                                   FLIGHT TIME 84.00
                                                                                                                                                       ARRIVAL CATE HAR 13 1966
                                                                                   DISTANCE 244.611
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.730 GAL -10.95 AZL 86.93 MCA 113.05 SMA 135.71 ECC .20735 INC 3.0741 V1 30.269 RP 107.94 LAP 2.83 LOP 199.97 VP 38.485 GAP -1.97 AZP 91.20 TAL 235.43 TAP 348.49 RCA 107.57 APO 163.85 V2 35.108 RC 73.845 GL 14.80 GP 6.97 ZAL 154.06 ZAP 65.46 ETS 355.01 ZAE 173.74 ETE 359.25 ZAC 48.87 ETC 165.39 CLP -65.27
   PLANETOCENTRIC CONIC
    C3 35.069 VHL 5.922 DLA -7.50 RAL 287.95 RAD 6568.4 VEL 12.508 PTH 2.26 VMP 3.718 DPA -12.49 RAP 316.07 ECC 1.5772
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            1518.4
                                                                                                                                                              -13.88
                      1 40 46 2118.42
11 45 55 5231.87
                                                                                        156.98
                                                                                                          112.90
79.72
                                                                                                                          2 16 4
13 13 7
                                                         -17.12
                                                                           35.48
                                                                                                                                                                                  28.31
                                                          26.53
                                                                          235.50
                                                                                           161.71
                                                                                                                                               4631.9
                                                                                                                                                                 24.84
                                                                                                                                                                                 227.24
                      2 58 30 1867.63
13 10 52 4957.89
                                                        -18.34
                                                                           16.49
                                                                                           156.43
                                                                                                             114.02
                                                                                                                           3 29 38
                                                                                                                                               1257.6
                                                                                                                                                               -14.94
                                                                                                                                                                                   9.35
                     13 10 52
                                                         27.84
                                                                          215.07
                                                                                           161.43
                                                                                                              78.64 14 33 29
                                                                                                                                               4357.9
                                                                                                                                                                 25.99
                                                                                                                                                                                 206.75
       100.00
                       3 58 31 1679.72
14 27 20 4718.57
                                                                                                             117.17 4 26 31
75.60 15 45 59
                                                        -21.59
                                                                              .57
                                                                                           154.77
                                                                                                                                              1079.7
                                                                                                                                                               -17.77
                                                                                                                                                                                 353.52
                      14 27 20
                                                          31.34
                                                                         195.97
                                                                                           160.50
                                                                                                                                               4118.6
                                                                                                                                                                29.05
                                                                                                                                                                                 187.52
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 552.6 SGR 393.2 SG3 411.6
RRT - 2411 RRF - .4342 RTF .4646
SGB 678.2 R23 .2317 R13 - .5219
                                                                                                                                      ST 170.9 SR 371.8 SS 360.1
CRT .1588 CRS .8615 CST -.3536
LSA 499.6 MSA 216.7 SSA 22.0
    TDE -.0452 TRA -.5642 TC3 -.0145 BAU .0214
    RDE - .3824 RRA .1260 RC3 .0432 FAU .14180
    FDE .9355 FRA-2.2176 FC3-3.5004 BSP 690
BDE .3851 BRA .5781 BC3 .0456 FSP -1263
```

SG1 567.3 SG2 371.8 THA 162.60

EL1 373.1 EL2 168.2 ALF 84.76

```
ARRIVAL DATE MAR 15 1966
LAUNCH DATE DEC 19 1965
                                                                        FLIGHT TIME 86.00
                                                                        DISTANCE 251.088
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.731 CAL -10.86 A7L 86.97 MCA 116.27 SMA 135.72 ECC .20582 INC 3.0320 VI 30.269
RP 107.98 LAP 2.72 LOP 203.19 VP 38.474 CAP -1.43 A7P 91.34 TAL 235.36 TAP 351.63 RCA 107.79 APO 163.65 V2 35.095
RC 76.070 GL 14.73 GP 7.40 ZAL 154.05 ZAP 70.80 ETS 355.51 ZAE 177.22 ETE 14.79 ZAC 46.70 ETC 165.50 CLP -70.63
   PLANETOCENTRIC CONIC
    C3 34.463 VHL 5.870 DLA -7.57 RAL 288.03 RAC 6568.4 VEL 12.483 PTH
                                                                                                  2.26 VMP 3.597 CPA -12.61 RAP 313.85 ECC 1.5672
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  LNCH 11ME L-1 71ME
1 41 32 2112.03
11 45 43 5229.45
2 59 15 1861.34
13 10 42 4955.37
3 59 11 1673.66
14 27 15 4715.82
                                                                                                                         1512.0
        90.00
                                                  -16.96
                                                                 35.09
                                                                              156.76
                                                                                            113.02
                                                                                                           2 16 44
                                                                                                                                        -13.69
                                                                                                                                                          27.93
                                                                                               79.64 13 12 53
                                                                                                                                          24.80
        90.00
                                                  26.50
                                                                 235.33
                                                                               161.48
                                                                                                                            4629.4
                                                                                                                                                         227.07
       100.00
                                                  -18.17
                                                                  16.10
                                                                               156.20
                                                                                               114.15
                                                                                                           3 30 16
                                                                                                                            1261.3
                                                                                                                                          -14.75
                                                                                                                                                           8.97
                                                                                              78.55 14 33 18
117.31 4 27 5
75.49 15 45 51
                                                                                                                         4355.4
       100.00
                                                  27.80
                                                                214.89
                                                                              161.19
                                                                                                                                          25.94
                                                -21.40
31.30
       110.00
                                                                                                                                                         353.17
                                                                    .21
                                                                               154.55
                                                                                                                           1073.7
                                                                                                                                          -17.57
                                                                195.77 160.27
                                                                                                                          4115.8
                                                                                                                                         28.99
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 625.2 SGR 395.2 SG3 440.4
RRT -.3335 RRF -.4853 RTF .5985
SGB 739.7 R23 .1943 R13 -.6421
                                                                                                                       ST 185.5 SR 367.3 SS 369.3
CRT .0027 CRS .8639 CST -.4917
    TOE -.0212 TRA -.6239 TC3 -.0975 BAU .0532
    RDE -.3741 RRA .1350 RC3 .0617 FAU .15060
    FDE .9797 FRA-2.3454 FC3-3.7833 BSP 1020
                                                                                                                       LSA 505.4 MSA 223.2 SSA 21.8
    BOE .3747 BRA .6384 BC3 .1154 FSP -1369
                                                                    5G1 645.7 SG2 360.8 THA 162.46
                                                                                                                        EL1 367.3 EL2 185.5 ALF 89.89
LAUNCH DATE DEC 19 1965
                                                                        FLIGHT TIME 88.00
                                                                                                                                   ARRIVAL DATE MAR 17 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 257.530
    RL 147.19 LAL -.00 LOL 86.88 VL 28.725 GAL -10.76 A7L 87.01 MCA 119.49 SMA 135.67 ECC .20441 INC 2.9875 V1 30.269 RP 108.02 LAP 2.60 LOP 206.40 VP 38.458 GAP -.91 A7P 91.47 TAL 235.17 TAP 354.66 RCA 107.94 APO 163.41 V2 35.082 RC 78.316 GL 14.64 GP 7.82 7AL 153.98 7AP 76.17 ETS 356.06 7AE 178.21 ETE 123.76 7AC 44.49 ETC 165.63 CLP -76.03
   PLANETOCENTRIC CONIC
    C3 33.847 VHL 5.818 OLA -7.63 RAL 288.18 RAD 6568.3 VEL 12.459 PTH
                                                                                                  2.25 VHP 3.504 DPA -12.71 RAP 311.59 ECC 1.5570
    ENCH AZMTH. ENCH TIME. E-I TIME. INJ. EAT. INJ. EONG. INJ. AZMTH. INJ. TIME. PO. CST. TIM. INJ. 2 EAT. INJ. 2 EONG
                   1 42 39 2105.37
11 45 48 5227.01
3 0 19 1854.79
13 10 49 4952.82
4 0 11 1667.35
14 27 26 4713.03
                                                                                             113.15 2 17 44
                                                                                                                         1505.4
                                                  -16.78
                                                                 34.68
                                                                             156.60
                                                                                                                                                          27.54
        90.00
                                                                                                                                         -13.50
                                                                                              79.56 13 12 55
114.29 3 31 14
78.46 14 33 22
117.46 4 27 58
75.38 15 45 59
                                                   26.47
                                                                                                                            4627.0
        90.00
                                                                 235.15
                                                                               161.31
                                                                                                                                            24.76
                                                  -17.99
                                                                  15.70
       100.00
                                                                               156.04
                                                                                                                            1254.8
       100.00
                                                   27.77
                                                                 214.71
                                                                               161.03
                                                                                                                            4352.8
                                                                                                                                           25.89
                                                                                                                                                          206.41
                                                  -21.20
                                                                                                                         1067.3
       110.00
                                                                 359.82
                                                                              154.39
       110.00
                                                  31.25
                                                                195.57
                                                                               160.10
                                                                                                                           4113.0
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 720.6 SGR 398.0 SG3 464.4
RRT -.4183 RRF -.5364 RTF .6987
                                                                                                                       ST 205.8 SR 361.9 SS 377.0
CRT -.1338 CRS .8687 CST -.5988
    TOE .0032 TRA -.6898 TC3 -.1912 BAU .0939
    RDE -.3649 RRA .1438 RC3 .0809 FAU .15768
                                                                    SGB 823.3 R23 .1681 R13 -.7295
SG1 745.4 SG2 349.5 THA 163.19
    FOE 1.0170 FRA-2.4360 FC3-4.0332 BSP 1430
BDE .3649 BRA .7047 BC3 .2076 FSP -1450
                                                                                                                       LSA 512.6 MSA 228.6 SSA 21.6
                                                                                                                       EL1 363.5 EL2 203.1 ALF 96.34
                                                                                                                                 ARRIVAL DATE HAR 19 1966
LAUNCH DATE DEC 19 1965
                                                                        FLIGHT TIME 90.00
   HELIOCENTRIC CONIC
                                                                       DISTANCE 263.935
    RL 147.19 LAL -.00 LOL 86.88 VL 28.713 GAL -10.65 AZL 87.06 MCA 122.70 SMA 135.58 ECC .20308 INC 2.9401 VI 30.269
RP 108.06 LAP 2.47 LOP 209.62 VP 38.437 GAP -.41 AZP 91.59 TAL 234.86 TAP 357.57 RCA 108.04 APO 163.11 V2 35.069
RC 80.581 GL 14.54 GP 8.24 ZAL 153.85 ZAP 81.50 ETS 356.65 ZAE 174.79 ETE 154.56 ZAC 42.31 ETC 165.79 CLP -81.41
   PLANETOCENTRIC CONIC
    C3 33.219 VHL 5.764 DLA -7.70 RAL 288.40 RAD 6568.3 VEL 12.433 PTH 2.25 VHP 3.438 DPA -12.78 RAP 309.35 ECC 1.5467
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 1 44 5 2098.34

90.00 11 46 7 5224.59

100.00 3 1 43 1847.88

100.00 13 11 10 4950.28

110.00 4 1 30 1660.70

110.00 14 27 53 4710.23
                                                                                                                       1498.3
                                                                           156.50 113.28 2 19 3
161.21 79.48 13 13 12
                                                                34.25
                                                                                                                                       -13.30
                                                                                                                                                          27.12
                                                 -16.59
                                                   26.44
                                                                234.98
                                                                                                                           4624.6
                                                                                                                                          24.72
                                                                                                                                                         226.74
                                                                                                         3 32 31
14 33 41
                                                 -17.79
                                                                 15.28
                                                                               155.94
                                                                                              114.42
                                                                                                                           1247.9
                                                                                                                                         -14.35
                                                                                                                                                           8.18
                                                   27.73
                                                                               160.93
                                                                                               78.37
                                                                                                                           4350.3
                                                                                                                                          25.85
                                                                                                                                                         206.23
       100.00
                                                                214.52
                                                                                              117.62 4 29 11
75.27 15 46 23
                                                                                                                           1060.7
                                                                                                                                         -17.13
                                                                                                                                                         352.42
                                                -20.99
                                                                359.42
                                                                               154.29
                                                                195.37
                                                                               160.00
                                                                                                                           4110.2
                                                                                                                                         28 86
                                                                                                                                                         185.94
       110.00
                                                  31.20
                                                                                                                      ORBIT CETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 230.5 SR 355.3 SS 380.5

CRT -.2492 CR5 .8717 CST -.6845

L5A 519.1 MSA 232.9 SSA 21.4

EL1 362.7 EL2 218.7 ALF 104.59
    TDE .0283 TRA -.7594 TC3 -.2930 BAU .1377
                                                                    5GT 833.8 SGR 401.3 SG3 484.0
                                                                    RRT -.4949 RRF -.5854 RTF .7693
5GB 925.4 R23 .1488 R13 -.7907
    ROE -.3544 RRA .1522 RC3 .1011 FAU .16324
    FOE 1.0329 FRA-2.4964 FC3-4.2543 BSP 1879
    BOE .3555 BRA .7746 BC3 .3099 FSP -1528
                                                                    SG1 861.6 SG2 337.4 THA 164.10
                                                                        FLIGHT TIME 92.00
                                                                                                                                  ARRIVAL DATE MAR 21 1966
LAUNCH DATE DEC 19 1965
                                                                       DISTANCE 270.305
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.695 GAL -10.54 AZL 87.11 MCA 125.91 SMA 135.44 ECC .20183 INC 2.8892 VI 30.269
RP 108.10 LAP 2.34 LOP 212.83 VP 38.412 GAP .06 AZP 91.70 TAL 234.45 TAP .37 RCA 108.10 APC 162.77 V2 35.056
RC 82.862 GL 14.43 GP 8.67 ZAL 153.68 ZAP 86.73 ETS 357.30 ZAE 171.10 ETE 160.53 ZAC 40.21 ETC 165.98 CLP -86.70
  PLANETOCENTRIC CONIC
    C3 32.575 VHL 5.707 DLA -7.78 RAL 288.69 RAD 6568.3 VEL 12.408 PTH 2.24 VHP 3.398 DPA -12.80 RAP 307.20 ECC 1.5361
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         1490.8
                                                                                                                                         -13.08
       90.00
                    1 45 52 2090.84
                                                  -16.39
                                                                 33.60
                                                                              156.46
                                                                                              113.42
                                                                                                          2 20 42
                                                                                                                                                          26.68
                   11 46 39 5222.23
3 3 27 1840.51
                                                                                               79.40 13 13 41
114.57 3 34 8
                                                                                                                            4622.2
                                                                                                                                          24.68
                                                                                                                                                         226.58
        90.00
                                                  26.41
                                                                234.82
                                                                               161.17
      100.00
                                                 -17.58
                                                                 14.83
                                                                               155.90
                                                                                               114.57
                                                                                                                           1240.5
                                                                                                                                          -14.12
                                                                                                                                                           7.75
                                                                                                                                       25.80
-16.89
                                                                                                        14 34 12
4 30 42
15 47 0
                                                                                                                                                         206.06
                  13 11 44
                                                                                                                           4347.8
      100.00
                                  4947.79
                                                  27.70
                                                                214.35
                                                                               160.88
                                                                                               78.28
                                                                                                                                                         352.02
      110.00
                  4 3 9 1653.63
14 28 32 4707.44
                                                 -20.77
                                                                358.99
                                                                              154.24
                                                                                              117.78
                                                                                                                           1053.6
                                                                                                                           4107.4
                                                                                                                                           28.80
                                                                                                                                                         186.75
                                                                                               75.16
      110.00
                                                 31.15
                                                                195.16
                                                                              159.95
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 961.6 SGR 405.0 SG3 497.7 ST 258.7 SR 347.6 55 381.3 RRT -.5615 RRF -.6320 RTF .8180 CRT -.3393 CRS .8753 CST -.7453 SGB 1043.4 R23 .1366 R13 -.8330 LSA 526.3 MSA 236.1 SSA 21.2 SG1 991.5 SG2 325.0 THA 165.05 EL1 366.8 EL2 230.6 ALF 114.28
    TOE .0526 TRA -.8320 TC3 -.4027 BAU .1832
    ROE -.3428 RRA .1599 RC3 .1219 FAU .16676
   FOE 1.0344 FRA-2.5180 FC3-4.4320 BSP 2365
BDE .3468 BRA .8472 BC3 .4207 FSP -1582
```

ARRIVAL DATE MAR 23 1966

LAUNCH DATE DEC 19 1965

```
DISTANCE 276.641
   RL 147.19 LAL -.00 LOL 86.88 VL 28.672 GAL -10.42 A7L 87.17 HCA 129.12 SMA 135.25 ECC .20065 INC 2.8341 V1 30.269 RP 108.14 LAP 2.20 LOP 216.04 VP 38.383 GAP .51 A7P 91.79 TAL 233.95 TAP 3.07 RCA 108.12 APO 162.39 VZ 35.043 RC 85.157 GL 14.29 GP 9.09 7AL 153.46 7AP 91.82 ETS 358.00 7AE 167.47 ETE 162.99 7AC 38.25 ETC 166.23 CLP -91.84
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                                          2.23 VHP 3.380 DPA -12.76 RAP 305.20 ECC 1.5252
    C3 31.913 VHL 5.649 DLA -7.88 RAL 289.04 RAD 6568.3 VEL 12.381 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    -12.84
                                                                                                   113.57
                                                                                                                                   1482.7
                    1 48 0 2082.72
11 47 21 5220.01
                                                      -16.17
                                                                       33.30
                                                                                    156.46
                                                                                                                   2 22 42
        90.00
                                                                                                      79.32 13 14 21
114.72 3 36 5
                                                                                                                                                                      226.42
                                                                                                                                                      24.64
                                                                                     161.18
                                                                                                                                      4620.0
                                                      26.38
                                                                      234.66
        90.00
                                                                                                                                                      -13.86
                  3 5 33 1832.55
13 12 29 4945.41
                                                     -17.36
                                                                       14.35
                                                                                     155.91
                                                                                                                                      1232.5
                                                                                                                                     4345.4 27...
-16.63
       100.00
                                                                                                     78.20 14 34 55
117.95 4 32 33
75.05 15 47 48
                                                                                                                                                                      205.90
                                                                                    160.89
                                                                      214.18
                                                     27.66
       100.00
                                                                                                                                                                      351.58
                    4 5 7 1646.00
14 29 24 4704.73
                                                                                    154.25
                                                     -20.53
                                                                      358.53
       110.00
                                                                                                                                                       28.74
                                                                                                                                                                      186.56
                                                                                                                                     4104.7
                                                                     194.97
                                                                                     159.95
                                                     31.10
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 289.1 SR 338.8 SS 379.7

CRT - 4083 CRS .8800 CST - .7870

LSA 534.2 MSA 237.9 SSA 20.9

EL1 376.9 EL2 237.2 ALF 124.34
                                                                          SCT 1099.5 SCR 409.0 SC3 505.1
RRT -.6190 RRF -.6758 RTF .8512
SCB 1173.1 R23 .1304 R13 -.8622
    TDE .0756 TRA -.9056 TC3 -.5186 BAU .2295
    RDE -.3301 RRA .1665 RC3 .1429 FAU .16812
FDE 1.0235 FRA-2.4990 FC3-4.5607 BSP 2871
    BDE .3387 BRA .9208 BC3 .5379 FSP -1612
                                                                          SG1 1130.8 SG2 312.3 THA 165.94
                                                                                                                                              ARRIVAL DATE MAR 25 1966
                                                                              FLIGHT TIME 96.00
LAUNCH DATE DEC 19 1965
                                                                              DISTANCE 282.945
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.645 GAL -10.30 A7L 87.23 MCA 132.33 SMA 135.04 ECC .19951 INC 2.7737 V1 30.269
RP 108.18 LAP 2.05 LOP 219.25 VP 38.350 GAP .94 A7P 91.87 TAL 233.35 TAP 5.68 RCA 108.09 APO 161.98 V2 35.030
RC 87.465 GL 14.13 GP 9.53 7AL 153.20 ZAP 96.70 ETS 358.76 ZAE 163.96 ETE 164.29 ZAC 36.48 ETC 166.55 CLP -96.79
  PLANETOCENTRIC CONIC
    C3 31.231 VHL 5.588 DLA -7.98 RAL 289.46 RAD 6568.2 VEL 12.353 PTH 2.23 VHP 3.382 DPA -12.65 RAP 303.38 ECC 1.5140 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   2 25 5
13 15 9
                                                                                    156.52
                                                                                                     113.73
                                                                                                                                      1473.8
                      1 50 31 2073.81
                                                                      32.76
                                                      -15.92
        90.00
                                                                                                                                                        24.61
                                                                                                                                       4618.1
                                                                      234.52
                                                                                      161.24
                                                                                                        79.26
                    11 48 10
                                     5218.05
                                                       26.36
        90.00
                   3 8 0 1823.82
13 13 22 4943.27
4 7 28 1637.67
                                                                                                                                                                          6.78
                                                                                                                   3 38 24
                                                                                                                                      1223.8
                                                                                                                                                       -13.61
                                                                                      155.96
                                                                                                       114.89
                                                      -17.11
                                                                       13.82
       100.00
                                                                                                                                                       25.72
                                                                                                        78.13 14 35 45
                                                                                                                                       4343.3
                                                                      214.03
                                                                                      160.95
       100.00
                                                       27.63
                                                                                                                                                      -16.34
                                                                                                                                      1037.7
                                                                                                                                                                       351.11
                                                                      358.04
                                                                                      154.30
                                                                                                      118.14
                                                                                                                    4 34 45
                                                      -20.26
       110.00
                                                                                                        74.95 15 48 47
                                                                                                                                       4102.2
                                                                                                                                                        28.68
                    14 30 24
                                     4702.19
                                                       31.06
                                                                      194.78
                                                                                      160.01
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 320.4 SR 328.8 S5 375.7
CRT -,4602 CRS .8853 CST -.8147
                                                                          SGT 1243.9 SGR 413.1 SG3 506.6
RRT -.6689 RRF -.7166 RTF .8739
SGB 1310.7 R23 .1290 R13 -.8824
    TOE .0966 TRA -.9786 TC3 -.6395 BAU .2757
ROE -.3164 RRA .1720 RC3 .1642 FAU .16747
                                                                                                                                  LSA 542.7 MSA 238.6 SSA 20.6
    FOE 1.0008 FRA-2.4432 FC3-4.6424 BSP 3386
                                                                          SG1 1276.0 SG2 299.3 THA 166.73
                                                                                                                                  EL1 392.4 EL2 238.4 ALF 133.38
    BOE .3309 BRA .9936 BC3 .6603 FSP -1616
                                                                                                                                              ARRIVAL DATE MAR 27 1966
                                                                              FLIGHT TIME 98.00
LAUNCH DATE DEC 19 1965
                                                                              DISTANCE 289.217
    RL 147.19 LAL -.00 LOL 86.88 VL 28.613 GAL -10.17 AZL 87.29 MCA 135.53 SMA 134.79 ECC .19843 INC 2.7069 VI 30.269 RP 108.22 LAP 1.90 LOP 222.45 VP 38.314 GAP 1.36 AZP 91.93 TAL 232.67 TAP 8.21 RCA 108.04 APO 161.53 VZ 35.016 RC 89.783 GL 13.93 GP 9.99 TAL 152.90 ZAP 101.34 ETS 359.58 ZAE 160.63 ETE 165.02 ZAC 34.92 ETC 166.98 CLP-101.52
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    23 30.328 VML 3.325 DLA -8.12 RAL 289.94 RAD 6568.2 VEL 12.325 PTH 2.22 VMP 3.402 DPA -12.46 RAP 301.78 ECC 1.5024
ENCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 53 28 2063.89 -15.65 32.16 156.62 113.90 2 27 52 1463.9 -12.29 25.10
100.00 1 49 4 5216.54 26.34 234.42 161.35 79.21 13 16 1 4616.5 24.58 226.19
100.00 3 10 53 1814.12 -16.83 13.24 156.06 115.07 3 41 7 1214.1 -13.31 6.21
                                                                                                                  14 36 42
                    13 14 20 4941.54
4 10 11 1628.46
14 31 32 4699.97
                                                                                      161.07
                                                                      213.90
                                                       27.61
       100.00
                                                                                                                                                                      350.58
                                                                                                      118.34 4 37 20
74.86 15 49 52
                                                                                                                                      1028.5
                                                                                                                                                      -16.02
                                                                                      154.39
                                                      -19.96
                                                                      357.49
       110.00
                                                                                                                                                      28.63
                                                                                                                                      4100.0
                                                                      194.62
                                                                                      160.12
                                                      31.02
       110.00
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 351.6 SR 317.4 SS 367.7
CRT -.4984 CRS .8886 CST -.8352
LSA 550.0 MSA 238.0 SSA 20.3
                                                                          SGT 1392.0 SGR 417.5 SG3 503.9
RRT -.7137 RRF -.7545 RTF .8899
SG6 1453.3 R23 .1305 R13 -.8967
     TDE .1146 TRA-1.0499 TC3 -.7648 BAU .3213
    RDE -.3013 RRA .1767 RC3 .1864 FAU .16548
FDE .9584 FRA-2.3651 FC3-4.6927 BSP 3913
BDE .3224 BRA 1.0646 BC3 .7872 FSP -1619
                                                                                                                                  EL1 411.0 EL2 235.4 ALF 140.81
                                                                          SG1 1424.9 SG2 285.7 THA 167.40
                                                                                                                                              ARRIVAL DATE MAR 29 1966
                                                                               FLIGHT TIME 100.00
LAUNCH DATE DEC 19 1965
                                                                               DISTANCE 295.459
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.577 GAL -10.03 AZL 87.37 HCA 138.74 SMA 134.51 ECC .19739 INC 2.6321 VI 30.269
RP 108.26 LAP 1.74 LOP 225.65 VP 38.275 GAP 1.75 AZP 91.98 TAL 231.91 TAP 10.65 RCA 107.96 APO 161.06 V2 35.003
RC 92.112 GL 13.69 GP 10.49 ZAL 152.57 ZAP 105.73 ETS .49 ZAE 157.49 ETE 165.40 ZAC 33.59 ETC 167.55 CLP-106.00
   PLANETOCENTRIC CONIC
     C3 29.803 VML 5.459 DLA -8.28 RAL 290.49 RAD 6568.2 VEL 12.295 PTH 2.21 VHP 3.439 DPA -12.17 RAP 300.43 ECC 1.4905
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    1452.7
                     1 56 55 2052.66
11 49 59 5215.71
                                                                                     156.75
                                                                                                      114.10
                                                                                                                     2 31 7
                                                                                                                                                      -11.96
                                                       -15.34
                                                                        31.48
         90.00
                                                                                                                                                                       226.13
                                                                                                                   13 16 55
                                                                                                                                       4615.7
                                                                                                                                                       24.57
                                                                                      161.52
                                                                                                        79.18
                                                       26.33
                                                                      234.36
         90.00
                                                                                                                                       1203.2
                                                                                                                                                       -12.97
                                                                                      156.19
                                                                                                        115.28
                                                                                                                    3 44 18
                                                       -16.51
                                                                        12.58
                      3 14 15 1803.17
13 15 20 4940.43
       100.00
                                                                                                        78.03 14 37 40
                                                                                                                                       4340.4
                                                                                                                                                       25.67
                                                                                                                                                                       205.55
                                                                                      161.23
                                                       27.60
                                                                       213.82
       100.00
                     13 15 20
                                                                                                                                                                       349.99
                                                                                                                   4 40 19
                                                                                      154.53
                                                                                                       118.57
                                                                                                                                       1018.1
                                                                                                                                                       -15.66
                                     1618.10
                                                      -19.63
                                                                      356.87
        110.00
                      4 13 21
                                                                                                        74.79 15 51 1
                                                                                                                                                        28.59
                                                                      194.50
                                                                                                                                       4098.3
                                                                                     160.29
                                                       30.99
                                     4698.27
       110.00
                     14 32 43
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 1540.9 SGR 422.3 SG3 496.0
RRT -.7525 RRF -.7898 RTF .9008
SGB 1597.8 R23 .1367 R13 -.9065
SG1 1574.4 SG2 272.2 THA 167.98
                                                                                                                                 ST 381.9 SR 305.1 S5 358.4
CRT -.5263 CRS .8937 CST -.8466
     TOE .1296 TRA-1.1177 TC3 -.8931 BAU .3655
     RDE -. 2855 RRA . 1800 RC3 . 2091 FAU . 16172
                                                                                                                                LSA 557.7 MSA 236.4 SSA 19.9
EL1 431.5 EL2 229.6 ALF 146.63
     FDE .9119 FRA-2.2561 FC3-4.6978 BSP 4429
```

FLIGHT TIME 94.00

BDE .3135 BRA 1.1321 BC3 .9173 FSP -1592

THE STATE OF THE S

```
FLIGHT TIME 102.00
                                                                                                                                   ARRIVAL CATE MAR 31 1966
LAUNCH DATE OFC 19 1965
                                                                        DISTANCE 301.672
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.538 CAL -9.89 A7L 87.45 MCA 141.94 SMA 134.21 ECC .19640 INC 2.5472 VI 30.269
RP 108.31 LAP 1.57 LOP 228.85 VP 38.234 CAP 2.13 A7P 92.01 TAL 231.08 TAP 13.02 RCA 107.85 APO 160.56 V2 34.990
RC 94.449 CL 13.40 CP 11.06 7AL 152.20 7AP 109.83 ETS 1.50 7AE 154.55 ETE 165.52 7AC 32.51 ETC 168.29 CLP-110.22
   PLANETOCENTRIC CONIC
    C3 29.055 VHL 5.390 CLA -8.48 RAL 291.10 RAC 6568.2 VEL 12.265 PTH 2.21 VHP 3.489 CPA -11.77 RAP 299.32 ECC 1.4782
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 0 57 2039.72
11 50 48 5215.91
                                                                  30.70
                                                                              156.93
                                                                                              114.31
                                                                                                           2 34 57
                                                                                                                          1439.7
                                                                                                                                          -11.57
                                                                                                                                                           23.68
                                                   -14.98
        90.00
                                                                                                          13 17 44
                                                                               161.74
                                                                                                79.19
                                                                                                                             4615.9
                                                                                                                                            24.57
                                                                                                                                                          226.14
                                                                 234.37
        90.00
                                                  26.33
                   3 18 11 1790.57
13 16 16 4940.29
                                                                               156.37
                                                                                               115.50
                                                                                                            3 48 1
                                                                                                                            1190.6
                                                                                                                                            -12.58
                                                                  11.82
       100.00
                                                  -16.15
                                                                                                78.02 14 38 36
                                                                                                                                                          205.55
                                                                                                                            4340.3
                                                                                                                                            25.66
                                                                               161.45
       100.00
                                                  27.59
                                                                 213.61
                                                                                                           4 43 49
                                                                                                                            1006.2
                                                                                                                                                          349.33
                   4 17 3 1606.25
14 33 53 4697.37
                                                                               154.70
                                                                                               118.81
       110.00
                                                 -19.24
                                                                 356.17
                                                                                                118.81 4 43 49
74.76 15 52 11
                                                                                                                            4097.4
                                                                               160.52
       110.00
                                                  30.97
                                                                 194.43
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SCT 1690.2 SCR 428.1 SC3 485.5
RRT -.7877 RRF -.8228 RTF .9086
SCB 1743.6 R23 .1459 R13 -.9135
                                                                                                                        ST 410.4 SR 291.4 55 345.5
CRT -.5449 CRS .8969 CST -.8543
    TOE .1401 TRA-1.1816 TC3-1.0254 BAU .4085
    ROE -.2684 RRA .1826 RC3 .2336 FAU .15718
FOE .8505 FRA-2.1349 FC3-4.6834 BSP 4950
                                                                                                                        LSA 563.8 MSA 233.5 SSA 19.6
                                                                                                                        EL1 451.7 EL2 222.0 ALF 151.32
    BOE .3028 BRA 1.1957 BC3 1.0516 FSP -1566
                                                                     SG1 1724.3 SG2 258.5 THA 168.45
                                                                                                                                    ARRIVAL CATE APR 2 1966
LAUNCH DATE DEC 19 1965
                                                                        FLIGHT TIME 104.00
   HELIOCENTRIC CONIC
                                                                        DISTANCE 307.858
    RL 147.19 LAL -.00 LOL 86.88 VL 28.497 GAL -9.74 A7L 87.55 MCA 145.13 SMA 133.88 ECC .19545 INC 2.4492 V1 30.269 RP 108.35 LAP 1.40 LOP 232.04 VP 38.191 GAP 2.49 A7P 92.01 TAL 230.19 TAP 15.32 RCA 107.72 APO 160.05 V2 34.977 RC 96.794 GL 13.04 GP 11.71 7AL 151.80 ZAP 113.64 ETS 2.63 ZAE 151.82 ETE 165.40 ZAC 31.67 ETC 169.25 CLP-114.18
   PLANETOCENTRIC CONIC
                                                                                                   2.20 VHP 3.551 CPA -11.24 RAP 298.47 ECC 1.4654
    C3 28.281 VHL 5.318 OLA -8.74 RAL 291.77 RAD 6568.1 VEL 12.233 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1424.5
                                                                              157.15
                                                                                              114.56
                                                                                                            2 39 27
                                                                                                                                          -11.11
                    2 5 43 2024.50
                                                  -14.55
                                                                 29.79
        90.00
                  11 51 26 5217.65
3 22 48 1775.81
13 17 2 4941.58
4 21 21 1592.47
14 34 58 4697.68
                                                                                                         13 18 23
3 52 24
                                                   26.35
                                                                 234.49
                                                                               162.02
                                                                                                79.25
                                                                                                                             4617.6
                                                                                                                                             24.60
        90.00
                                                                                                                             1175.8
                                                                                                                                            -12.12
       100.00
                                                   -15.71
                                                                  10.94
                                                                               156.59
                                                                                                115.76
                                                                                                         14 39 23
4 47 54
       100.00
                                                  27.61
                                                                 213.91
                                                                               161.74
                                                                                                78.07
                                                                                                                             4341.6
                                                                                                                                            25.69
                                                  -18.79
                                                                                                119.10
                                                                                                                             992.5
                                                                                                                                           -14.76
                                                                                                                                                           348.55
                                                                 355.36
                                                                               154.92
       110.00
                                                                                                        15 53 16
                                                                                                                             4097.7
                                                                                                                                             28.58
                                                                                                74,77
       110.00
                                                   30.98
                                                                 194.45
                                                                               160.81
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1462 TRA-1.2399 TC3-1.1603 BAU .4495
                                                                     SGT 1837.0 SGR 435.1 SG3 471.4
RRT -.8183 RRF -.8534 RTF .9137
                                                                                                                        ST 436.6 SR 276.9 SS 331.3
CRT -.5563 CRS .9D13 CST -.8559
    ROE -.2507 RRA .1839 RC3 .2595 FAU .15149
FOE .7868 FRA-1.9942 FC3-4.6374 BSP 5449
BDE .2902 BRA 1.2535 BC3 1.1890 FSP -1519
                                                                     SGB 1887.8 R23 .1602 R13 -.9182
SG1 1871.8 SG2 245.4 THA 168.84
                                                                                                                        LSA 569.0 MSA 230.0 SSA 19.2
                                                                                                                        EL1 470.9 EL2 213.3 ALF 155.14
                                                                                                                                   ARRIVAL DATE APR 4 1966
                                                                        FLIGHT TIME 106.00
LAUNCH DATE DEC 19 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 314.016
   RL 147.19 LAL -.00 LOL 86.88 VL 28.452 GAL -9.58 A7L 87.67 MCA 148.33 SMA 133.54 ECC .19453 INC 2.3344 V1 30.269 RP 108.39 LAP 1.23 LOP 235.23 VP 38.146 GAP 2.83 A7P 91.99 TAL 229.23 TAP 17.55 RCA 107.56 APO 159.52 V2 34.964 RC 99.145 GL 12.59 GP 12.48 7AL 151.38 7AP 117.17 ETS 3.92 7AE 149.28 ETE 165.06 7AC 31.08 ETC 170.49 CLP-117.88
   PLANETOCENTRIC CONIC
    C3 27.482 VHL 5.242 OLA -9.09 RAL 292.52 RAO 6568.1 VEL 12.201 PTH 2.19 VHP 3.625 OPA -10.54 RAP 297.86 ECC 1.4523
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         1406.2
                                                                                                                                        -10.56
                                                                            157.42
                                                                                            114.85 2 44 51
79.38 13 18 42
                  2 11 25 2006.22
11 51 40 5221.64
3 28 19 1758.12
                                                                                                                                                           21.74
                                                 -14.03
                                                                 28.70
        90.00
                                                   26.40
                                                                234.78
                                                                               162.38
                                                                                                                            4621.6
                                                                                                                                            24.67
                                                                                                                                                          226.54
        90.00
                                                                                                          3 57 37
14 39 52
                                                 -15.18
                                                                  9.89
                                                                               156.85
                                                                                               116.06
                                                                                                                            1158.1
                                                                                                                                           -11.56
                                                                                                                                                            2.98
      100.00
                                                                               162.10
                                                                                                78.19
                                                                                                                            4345.0
                                                                                                                                            25.75
                                                                                                                                                          205.87
                   13 17 27
                                                   27.66
                                                                 214.15
       100.00
                                  4944.98
                                                                                                         4 52 43
15 54 8
                                                                                                                                                          347.64
                                                                                                                             976.1
                                                                                                                                           -14.18
                    4 26 27 1576.08
                                                 -18.24
                                                                 354.40
                                                                               155.17
                                                                                               119.42
      110.00
                                                                                                                                                          186.22
                                                                               161.18
                                                                                                74.85
                                                                                                                            4099.8
                                                                                                                                           28.63
                                                  31.02
                                                                194.61
      110.00
                   14 35 48
                                  4699.78
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 459.7 SR 260.8 SS 313.3

CRT -.5591 CRS .9030 CST -.8552

LSA 571.3 MSA 225.2 SSA 18.8

EL1 487.6 EL2 203.8 ALF 158.45
                                                                     SGT 1982.7 SGR 444.5 SG3 456.2
    TOE .1457 TRA-1.2927 TC3-1.3002 BAU .4894
                                                                    RRT -.8458 RRF -.8818 RTF .9173
SGB 2031.9 R23 .1782 R13 -.9215
    ROE -.2318 RRA .1846 RC3 .2888 FAU .14546
    FDE .7102 FRA-1.8501 FC3-4.5823 BSP 5957
BDE .2738 BRA 1.3058 BC3 1.3319 FSP -1476
                                                                     SG1 2018.5 SG2 232.9 THA 169.12
                                                                                                                                   ARRIVAL DATE APR 6 1966
                                                                         FLIGHT TIME 108.00
LAUNCH DATE DEC 19 1965
                                                                        DISTANCE 320.150
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.406 GAL -9.41 AZL 87.80 MCA 151.52 SMA 133.19 ECC .19367 INC 2.1967 VI 30.269 RP 108.43 LAP 1.05 LOP 238.42 VP 38.100 GAP 3.16 AZP 91.93 TAL 228.21 TAP 19.73 RCA 107.39 APO 158.98 V2 34.951 RC 101.502 GL 12.01 GP 13.43 ZAL 150.94 ZAP 120.39 ETS 5.43 ZAE 146.91 ETE 164.48 ZAC 30.73 ETC 172.05 CLP-121.34
   PLANETOCENTRIC CONIC
    C3 26.655 VHL 5.163 DLA -9.55 RAL 293.34 RAD 6568.1 VEL 12.167 PTH 2.18 VHP 3.709 DPA -9.64 RAP 297.46 ECC 1.4387
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 18 22 1983.69
11 51 17 5228.99
                                                                                                                                                            20.44
                                                   -13.38
                                                                 27.37
                                                                              157.73
                                                                                              115.19
                                                                                                           2 51 25
                                                                                                                          1383.7
                                                                                                                                           -9.88
                                                                                                                                            24.79
                                                                                                                             4629.D
                                                                                                                                                           227.04
                                                                 235.29
                                                                               162.84
                                                                                                79.62
                                                                                                         13 18 26
                                                   26.49
                  3 35 1 1736.40
13 17 19 4951.51
4 32 35 1556.11
14 36 14 4704.57
                                                                                                                                                             1.74
                                                  -14.53
                                                                  8.61
                                                                               157.15
                                                                                               116.41
                                                                                                           4 3 57
                                                                                                                             1136.4
                                                                                                                                            -10.87
       100.00
                                                                                                78.41 14 39 50
119.81 4 58 31
75.04 15 54 38
                                                                                                                                                           206.32
                                                                 214.61
                                                                                                                                            25.87
                                                   27.75
                                                                               162.56
                                                                                                                             4351.5
                                                  -17.57
                                                                 353.24
                                                                               155.46
                                                                                               119.81
                                                                                                                             956.1
                                                                                                                                           -13.47
                                                                                                                                                           346.53
       110.00
                                                                                                                            4104.6
                                                                                                                                             28.74
                                                                                                                                                           186.55
                                                 31.10
                                                                 194.95
                                                                               161.65
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .1379 TRA-1.3385 TC3-1.4455 BAU .5278 SGT 2126.0 SGR 457.2 SG3 439.5 RDE -.2118 RRA .1845 RC3 .3222 FAU .13902 RRT -.8695 RRF -.9078 RTF .9197 FDE .6253 FRA-1.7001 FC3-4.5154 BSP 6461 SGB 2174.6 R23 .2009 R13 -.9238 BDE .2528 BRA 1.3511 BC3 1.4810 FSP -1429 SG1 2163.3 SG2 221.9 THA 169.30
                                                                                                                       ST 479.2 SR 243.4 55 292.1
CRT -.5536 CRS .9029 CST -.8514
                                                                                                                       L5A 570.8 MSA 219.0 SSA 18.4
EL1 501.3 EL2 193.8 ALF 161.42
```

```
ARRIVAL DATE APR 8 1966
LAUNCH DATE DEC 19 1965
                                                                                             FLIGHT TIME 110.00
                                                                                             DISTANCE 326.259
   HELIOCENTRIC CONIC
     RL 147.19 LAL -.00 LOL 86.88 VL 28.357 GAL -9.24 AZL 87.97 HCA 154.71 SMA 132.82 ECC .19284 INC 2.0277 V1 30.269
RP 108.46 LAP .87 LOP 241.60 VP 38.052 GAP 3.48 AZP 91.83 TAL 227.13 TAP 21.84 RCA 107.21 APO 158.43 V2 34.939
     RC 103.862 GL 11.24 GP 14.62 7AL 150.50 7AP 123.30 ETS 7.23 7AE 144.68 ETE 163.61 7AC 30.60 ETC 174.04 CLP-124.56
    PLANETOCENTRIC CONIC
     C3 25.797 VHL 5.079 DLA -10.17 RAL 294.25 RAD 6568.0 VEL 12.132 PTH 2.17 VHP 3.805 DPA -8.48 RAP 297.26 ECC 1.4246
    C3 25.797 VHL 5.079 DLA -10.17 RAL 294.25 RAO 6568.0 VEL 12.132 PTH 2.17 VHP 3.805 DPA -8.48 RAP 297.26 ECC 1.4246 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 227 2 1955.10 -12.55 25.68 158.10 115.60 2 59 37 1355.1 -9.00 18.80 100.00 11 49 52 5241.38 26.64 236.17 163.41 80.04 13 17 13 4641.4 25.00 227.89 100.00 3 43 20 1708.93 -13.69 7.00 157.52 116.83 4 11 49 1108.9 -9.98 18 100.00 13 16 15 4962.78 27.90 215.42 163.14 78.81 14 38 57 4362.8 26.07 207.09 110.00 4 40 8 1531.07 -16.71 351.80 155.81 120.26 5 5 59 931.1 -12.57 345.15 110.00 14 35 56 4713.40 31.25 195.60 162.26 75.39 15 54 29 4113.4 28.93 187.16
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                       SGT 2264.4 SGR 473.8 SG3 420.6
RRT -.8885 RRF -.9307 RTF .9207
SGB 2313.4 R23 .2295 R13 -.9248
                                                                                                                                                          ST 494.6 SR 224.9 SS 268.2
CRT -.5386 CRS .9020 CST -.8423
     TOE .1219 TRA-1.3747 TC3-1.5954 BAU .5641
    ROE -.1911 RRA .1829 RC3 .3604 FAU .13191
FDE .5376 FRA-1.5385 FC3-4.4268 BSP 6924
                                                                                                                                                          LSA 567.4 MSA 211.9 SSA 17.9
                                                                                        SG1 2303.5 SG2 213.7 THA 169.38
                                                                                                                                                          EL1 511.5 EL2 183.2 ALF 164.16
     BOE .2267 BRA 1.3868 BC3 1.6356 FSP -1364
                                                                                                                                                                         ARRIVAL DATE APR 10 1966
                                                                                             FLIGHT TIME 112.00
LAUNCH DATE DEC 19 1965
                                                                                             DISTANCE 332.345
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 28.306 GAL -9.06 A7L 88.19 MCA 157.89 SMA 132.44 ECC .19206 INC 1.8135 V1 30.269
RP 108.50 LAP .68 LOP 244.79 VP 38.003 GAP 3.79 A7P 91.68 TAL 226.01 TAP 23.90 RCA 107.00 APO 157.88 V2 34.926
RC 106.225 GL 10.21 GP 16.15 7AL 150.05 7AP 125.86 ETS 9.44 7AE 142.52 ETE 162.39 7AC 30.71 ETC 176.58 CLP-127.58
   PLANETOCENTRIC CONIC
                                                                                                                              2.16 VHP 3.913 CPA -6.94 RAP 297.20 ECC 1.4099
     C3 24.907 VHL 4.991 DLA -11.05 RAL 295.26 RAD 6568.0 VEL 12.095 PTH
    C3 24.907 VHL 4.991 DLA -11.05 RAL 295.26 RAD 6568.0 VEL 12.095 PTH 2.16 VHP 3.913 DPA -6.94 RAP 297.20 ECC 1.4099 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 38 15 1917.49 -11.43 23.48 158.55 116.08 3 10 12 1317.5 -7.83 156.55 90.00 11 46 45 5261.65 26.87 237.61 164.15 80.72 13 14 26 4661.7 25.32 229.29 100.00 3 54 2 1672.95 -12.58 4.91 157.96 117.34 4 21 55 1072.9 -8.81 358.14 100.00 13 13 38 4981.43 28.14 216.75 163.90 79.47 14 36 39 4381.4 26.40 208.38 110.00 4 49 43 1498.57 -15.59 349.95 156.23 120.81 5 14 42 898.6 -11.39 343.37 110.00 14 34 26 4728.57 31.51 196.71 163.06 76.00 15 53 15 4128.6 29.27 188.22 DISSERBILLA CORRECTIONS
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 505.9 SR 203.6 SS 238.1

CRT -.5075 CRS .8917 CST -.8341

LSA 559.8 MSA 201.0 SSA 17.6
                                                                                        SGT 2401.8 SGR 497.5 SG3 401.4
RRT -.9038 RRF -.9508 RTF ..9213
     TDE .0920 TRA-1.4019 TC3-1.7550 BAU .5999
     RDE -.1682 RRA .1810 RC3 .4074 FAU .12475
     FOE .4310 FRA-1.3787 FC3-4.3362 BSP 7408
BOE .1917 BRA 1.4135 BC3 1.8017 FSP -1307
                                                                                        SGB 2452.8 R23 .2611 R13 -.9256
                                                                                        SG1 2443.9 SG2 209.2 THA 169.32
                                                                                                                                                        ELI 517.7 ELZ 171.4 ALF 167.01
                                                                                                                                                                        ARRIVAL DATE APR 12 1966
                                                                                             FLIGHT TIME 114.00
LAUNCH DATE DEC 19 1965
                                                                                            DISTANCE 338.409
    HELIOCENTRIC CONIC
     RL 147.19 LAL -.00 LOL 86.88 VL 28.254 GAL -8.87 AZL 88.47 MCA 161.08 SMA 132.05 ECC .19134 INC 1.5317 V1 30.269
RP 108.54 LAP .50 LOP 247.97 VP 37.953 GAP 4.08 AZP 91.45 TAL 224.84 TAP 25.92 RCA 106.79 APO 157.32 V2 34.914
RC 108.588 GL 8.77 GP 18.18 ZAL 149.61 ZAP 128.02 ETS 12.23 ZAE 140.36 ETE 160.70 ZAC 31.07 ETC 179.86 CLP-130.42
    PLANETOCENTRIC CONIC
     C3 23.982 VHL 4.897 DLA -12.32 RAL 296.42 RAD 6568.0 VEL 12.057 PTH 2.16 VHP 4.040 DPA -4.87 RAP 297.24 ECC 1.3947
     C3 23.982 VHL 4.897 DLA -12.32 RAL 296.42 RAO 6568.0 VEL 12.057 PTH 2.16 VHP 4.040 DPA -4.67 RAP 297.24 ECC 1.3947 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 53 26 1865.73 -9.86 20.49 159.15 116.68 3 24 32 1265.7 -6.20 13.72 90.00 11 40 46 5294.82 27.22 239.98 165.16 81.86 13 9 1 4694.8 25.81 231.59 100.00 4 8 28 1623.65 -11.02 2.08 158.54 117.96 4 35 32 1023.7 -7.19 355.38 100.00 13 8 25 5012.13 28.50 218.96 164.93 80.58 14 31 57 4412.1 26.91 210.52 110.00 5 2 28 1454.52 -14.04 347.48 156.77 121.49 5 26 43 854.5 -9.77 340.98 110.00 14 30 54 4754.03 31.91 198.58 164.15 77.05 15 50 8 4154.0 29.80 190.01
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                       ST 514.2 SR 179.0 SS 202.2
CRT -.4539 CR5 .8666 CST -.8276
LSA 550.3 M5A 184.9 55A 17.5
                                                                                        SCT 2534.6 SGR 529.7 SG3 379.6
RRT -.9139 RRF -.9673 RTF .9210
SGB 2589.4 R23 .2949 R13 -.9257
      TDE .0443 TRA-1.4153 TC3-1.9234 BAU .6345
     ROE -.1425 RRA .1772 RC3 .4653 FAU .11690
FDE .3102 FRA-1.2080 FC3-4.2199 BSP 7860
BDE .1492 BRA 1.4264 BC3 1.9789 FSP -1234
                                                                                                                                                         ELI 521.3 EL2 157.4 ALF 170.11
                                                                                        SG1 2580.7 SG2 211.2 THA 169.11
                                                                                                                                                                         ARRIVAL DATE APR 14 1966
                                                                                              FLIGHT TIME 116.00
LAUNCH DATE DEC 19 1965
                                                                                             DISTANCE 344.452
    HELIOCENTRIC CONIC
     RL 147.19 LAL -.00 LOL 86.88 VL 28.201 GAL -8.68 AZL 88.86 MCA 164.26 SMA 131.66 ECC .19066 INC 1.1406 V1 30.269
RP 108.58 LAP .31 LOP 251.15 VP 37.903 GAP 4.36 AZP 91.10 TAL 223.62 TAP 27.88 RCA 106.56 APO 156.76 V2 34.903
                                6.64 GP 21.00 7AL 149.18 7AP 129.64 ETS 15.87 7AE 138.03 ETE 158.37 7AC 31.77 ETC 184.21 CLP-133.10
     RC 110.951 GL
    PLANE TOCENTRIC CONIC
     C3 23.029 VHL 4.799 DLA -14.23 RAL 297.77 RAD 6567.9 VEL 12.017 PTH 2.14 VHP 4.198 DPA -2.01 RAP 297.30 ECC 1.3790
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                              1189.9
                                                                                                                       117.38
                        3 15 29 1789.94
11 29 33 5350.81
                                                                  -7.52
                                                                                                     160.02
                                                                                                                                          3 45 19
                                                                                                                                                                                 -3,79
                                                                                     16.15
          90.00
                                                                                                                                                                 4750.8
                                                                                                                                                                                     26.55
                                                                                                                                                                                                      235.53
                                                                                                       166.61
                                                                                                                           83.83
                                                                                                                                         12 58 43
                                                                 27.69
                                                                                   244.01
                        4 29 15 1551.92
12 58 28 5064.06
                                                                                                                                           4 55 7
                                                                                                                                                                 951.9
                                                                                                                                                                                      -4.80
                                                                                                                                                                                                      351.40
                                                                                                      159.39
                                                                                                                           118.71
                                                                   -8.70
                                                                                    358.02
         100.00
                                                                                                                                                                                   27.68
                                                                                                                           82.50 14 22 52
122.33 5 43 43
78.87 15 43 37
                                                                                                                                                                                                      214.19
                                                                                                                                                                4464.1
                                                                                                     166.43
                                                                 29.02
                                                                                   222.73
         100.00
                                                                                                                                                                                    -7.41
                                                                                                                                                                                                      337.61
                          5 20 32 1391.29
14 23 40 4797.46
                                                           -11.76 344.00
32.53 201.82
                                                                                                     157.55
                                                                                                                                                                791.3
         110.00
                                                                                                                                                               4197.5
                                                                                                                                                                                     30.65
                                                                                                                                                                                                      193.10
                                                                                                    165.76
                         14 23 40
         110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGT 2666.D SGR 576.1 SG3 355.7 ST 526.8 SR 147.2 S5 159.6
RRT - .9192 RRF - .9802 RTF .9205 CRT - .3705 CRS .7808 CST - .8558
SGB 2727.5 R23 .3253 R13 - .9260 LSA 548.0 MSA 154.7 SSA 18.4
SG1 2718.5 SG2 222.5 THA 168.69 EL1 529.8 EL2 135.9 ALF 173.67
      TOE -.0338 TRA-1.4118 TC3-2.1050 BAU .6692
      ROE -.1105 RRA .1717 RC3 .5412 FAU .10843
      FDE .1560 FRA-1.0308 FC3-4.0761 85P 8332
      BOE .1155 BRA 1.4222 BC3 2.1735 FSP -1160
                                                                                        SG1 2718.5 SG2 222.5 THA 168.69
```

ARRIVAL CATE APR 16 1966

JPL TM 33-99

LAUNCH DATE DEC 19 1965

```
DISTANCE 350.475
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.147 GAL -8.47 AZL 89.44 MCA 167.44 SMA 131.26 ECC .19003 INC .5569 V1 30.269 RP 108.61 LAP .12 LOP 254.32 VP 37.852 GAP 4.63 AZP 90.55 TAL 222.36 TAP 29.80 RCA 106.32 APO 156.20 V2 34.892 RC 113.313 GL 3.31 GP 25.12 ZAL 148.65 ZAP 130.39 ETS 20.78 ZAE 135.23 ETE 155.11 ZAC 33.02 ETC 190.18 CLP-135.70
  PLANETOCENTRIC CONIC
    C3 22.091 VHL 4.700 DLA -17.30 RAL 299.48 RAD 6567.9 VEL 11.978 PTH 2.13 VHP 4.414 DPA
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 51 10 1667.88
11 7 25 5452.67
5 2 31 1437.66
12 38 45 5158.12
                                                                                            118.10
                                                                                                         4 18 58
                                                                                                                       1067.9
                                                                             161.58
        90.00
                                                                9.28
                                                  -3.64
                                                                                                       12 38 17
                                                                                                                          4852.7
                                                  28.22
                                                               251.41
                                                                             168.89
                                                                                              87.50
        90.00
                                                                                            119.52 5 26 29
86.09 14 4 43
123.32 6 10 19
82.28 15 30 15
                                                                                                                           837.7
                                                                                                                                                       345.11
                                                                             160.88
       100.00
                                                  -4.91
                                                               351.65
                                                                                                                          4558.1
                                                                                                                                          28.80
       100.00
                                                  29.66
                                                               229.65
                                                                             168.80
                  5 48 46 1292.75
14 8 59 4875.80
                                                                                                                          692.7
                                                                                                                                          -3.68
                                                                                                                                                       332.41
                                                  -8.12
                                                               338.69
                                                                             158.91
      110.00
                                                                                                                      4275.8
                                                  33.40
                                                               207.76
                                                                             168.35
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 2792.4 SGR 641.9 SG3 325.7
RRT -.9187 RRF -.9894 RTF ..9197
SGB 2865.2 R23 .3488 R13 -.9263
SGI 2854.4 SG2 248.0 THA 167.98
                                                                                                                     ST 568.4 SR 103.0 SS 129.6
CRT -.3050 CRS .5032 CST -.9583
    TOE -.1628 TRA-1.3801 TC3-2.2947 BAU .7036
    ROE -. 0660 RRA .1613 RC3 .6411 FAU .09818
                                                                                                                     LSA 582.8 MSA 101.7 SSA 22.0
   FOE -.0408 FRA -.8306 FC3-3.8477 BSP 8774
BOE .1757 BRA 1.3895 BC3 2.3825 FSP -1060
                                                                                                                      EL1 569.3 EL2 98.0 ALF 176.74
                                                                                                                                 ARRIVAL DATE APR 18 1966
LAUNCH DATE DEC 19 1965
                                                                       FLIGHT TIME 120.00
                                                                      DISTANCE 356.476
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.092 GAL -8.26 AZL 90.41 MCA 170.61 SMA 130.86 ECC .18946 INC .4079 V1 30.269 RP 108.64 LAP -.07 LOP 257.50 VP 37.801 GAP 4.90 AZP 89.60 TAL 221.06 TAP 31.67 RCA 106.07 APO 155.65 V2 34.881 RC 115.673 GL -2.46 GP 31.54 ZAL 147.60 ZAP 129.55 ETS 27.60 ZAE 131.23 ETE 150.56 ZAC 35.38 ETC 198.64 CLP-138.34
  PLANETOCENTRIC CONIC
                                                                                                                              8.56 RAP 296.70 ECC 1.3517
                                                                                                2.13 VHP 4.767 DPA
    C3 21.371 VHL 4.623 OLA -22.73 RAL 301.89 RAD 6567.9 VEL 11.948 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  5 3 26 1429.26
10 14 27 5675.29
6 7 50 1221.38
11 52 44 5358.40
6 41 24 1116.16
13 35 40 5036.39
                                                                                            118.05
                                                                                                          5 27 15
                                                                                                                          829.3
       90.00
                                                   4.04
                                                               355.95
                                                                            165.37
                                                                                              95.62 11 49 2
                                                                                                                           5075.3
                                                                                                                                          28.29
                                                                                                                                                        259.02
        90.00
                                                  27.80
                                                               267.65
                                                                              172.79
                                                                                                          6 28 12
                                                                                                                           621.4
                                                                                                                                           6.36
                                                                                             119.80
       100.00
                                                   2.41
                                                                339.77
                                                                              164.47
                                                                                              93.90 13 22 2
124.16 7 0 0
                                                  29.66
                                                                             172.96
                                                                                                                          4758.4
                                                                                                                                          29.89
                                                                                                                                                       235.72
      100.00
                                                               244.52
                                                                                                                          516.2
                                                                                                                                           3.06
                                                                             162.07
                                                                                             124.16
      110.00
                                                  -1.43
                                                               329.40
                                                                                                       14 59 36
                                                                                                                          4436.4
                                                                                                                                          33.75
                                                                                              89.61
      110.00
                                                  34.18
                                                               220.22
                                                                              173.12
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 2924.1 SGR 740.1 SG3 285.5
RRT -.9130 RRF -.9950 RTF .9200
                                                                                                                      ST 727.4 SR 62.4 SS 195.2
CRT -.8553 CRS .7381 CST -.9609
    TDE -.4026 TRA-1.3016 TC3-2.4764 BAU .7413
    RDE .0124 RRA .1404 RC3 .7739 FAU .08489
                                                                   SGB 3016.3 R23 .3590 R13 -.9284
SG1 3002.0 SG2 294.2 THA 166.86
    FOE -.3196 FRA -.6003 FC3-3.4391 BSP 9311
BDE .4028 BRA 1.3092 BC3 2.5945 FSP -936
                                                                                                                     LSA 753.1 MSA
                                                                                                                                            56.9 55A 24.1
                                                                                                                     EL1 729.3 EL2 32.3 ALF 175.79
                                                                                                                                ARRIVAL DATE APR 20 1966
                                                                       FLIGHT TIME 122.00
LAUNCH CATE DEC 19 1965
                                                                      DISTANCE 362.455
  HELTOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 28.036 GAL -8.04 A7L 92.35 MCA 173.78 SMA 130.46 ECC .18894 INC 2.3507 V1 30.269
RP 108.68 LAP -.25 LOP 260.67 VP 37.750 GAP 5.15 A7P 87.66 TAL 219.72 TAP 33.50 RCA 105.81 APO 155.10 V2 34.870
RC 118.029 GL -14.03 GP 42.51 7AL 143.77 7AP 125.28 ET5 37.17 7AE 124.20 ETE 144.56 7AC 40.48 ETC 210.82 CLP-141.59
  PLANETOCENTRIC CONIC
    C3 22.059 VHL 4.697 DLA =33.68 RAL 306.44 RAD 6567.9 VEL 11.977 PTH 2.13 VHP 5.547 DPA 19.37 RAP 294.85 ECC 1.3630
    ENCH AZHTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          115.80 5 56 11
115.79 11 56 39
115.80 5 56 11
115.79 11 56 39
119.32 11 19 50
119.34 12 44 27
                                                                                                                      774.2
                                                                                                                                      25.71
                  5 33 17 1374.24
10 20 53 5745.61
5 33 17 1374.24
10 20 53 5745.61
9 42 5 5864.30
11 11 15 5591.59
                                                                                                          5 56 11
                                                                                                                                                       353.89
                                                                           178.15
                                                 22.43
                                                                 1.47
       70.96
                                                                                                                                                       263.54
                                                                             178.15
                                                                                                                          5145.6
                                                                                                                                          25.72
                                                               271.11
                                                  22.44
       109.04
                                                                             178.15
                                                                                                                          774.2
                                                                                                                                         25.71
                                                                                                                                                       353.89
                                                  22.43
                                                                 1.47
       70.96
                                                                                                                          5145.6
                                                                                                                                         25.72
                                                                                                                                                       263.54
                                                                             178.15
                                                  22.44
                                                               271.11
      109.04
                                                                                                                         5264.3
                                                                                                                                          22.18
                                                                                                                                                       210.99
                                                                             175.91
                                                  18.41
                                                               278.10
       110.00
                                                                                                                         4991.6
                                                                                                                                         29.36
                                                                                                                                                       253.08
                                              26.58
                                                                              180.18
      110.00
                                                               261.16
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1235.6 SR 235.7 SS 418.9
CRT -.9671 CRS .9997 CST -.9688
                                                                   SGT 3059.3 SGR 873.0 SG3 221.3
    TOE -.9298 TRA-1.1029 TC3-2.4873 BAU .7788
                                                                   RRT -.8986 RRF -.9963 RTF .9235
SGB 3181.4 R23 .3509 R13 -.9347
    ROE .1899 RRA .0802 RC3 .8873 FAU .06431
FOE -.7057 FRA -.3043 FC3-2.5240 BSP 9882
BOE .9490 BRA 1.1058 BC3 2.6408 FSP -730
                                                                                                                     LSA 1321.0 MSA 112.0 SSA 5.0
                                                                                                                      EL1 1256.5 EL2 58.9 ALF 169.52
                                                                   SG1 3159.8 SG2 370.8 THA 165.41
                                                                                                                                 APRIVAL DATE APR 22 1966
                                                                       FLIGHT TIME 124.00
LAUNCH DATE DEC 19 1965
                                                                       DISTANCE 368.395
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 27.979 GAL -7.81 AZL 98.26 HCA 176.92 SMA 130.05 ECC .18843 INC 8.2570 V1 30.269
RP 108.71 LAP -.44 LOP 263.84 VP 37.699 GAP 5.39 AZP 81.75 TAL 218.33 TAP 35.26 RCA 105.55 APO 154.56 V2 34.860
    RC 120.382 GL -40.65 GP 62.90 TAL 126.89 TAP 113.35 ETS 51.99 TAE 108.93 ETE 141.16 TAC 52.50 ETC 229.48 CLP-150.48
   PLANETOCENTRIC CONIC
                                                                                                 2.29 VHP 8.486 DPA 38.99 RAP 287.33 ECC 1.6147
    C3 37.352 VHL 6.112 OLA -57.80 RAL 323.92 RAD 6568.5 VEL 12.598 PTH
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            1268.3
                                                                             213.75
                                                                                                                                          34.91
                                                                                                                                                         46.16
                   4 26 51
13 46 44
                                                   28.68
                                                                51.66
                                  1868.33
       37.25
                                                                                                                                                        250.59
                                                                                                                                           34.92
                                                                              213.76
                                                                                                                           4913.8
                                                   28.70
                                                                256.09
                                  5513.82
       142.75
                                                                                                                                          34.91
                                                                                                                                                         46.16
                                                                              213.75
                                                                                                                          1268.3
                                                   28.68
                                                                 51.66
                    4 26 51
                                  1868.33
        37.25
                                                                                                                                                        250.59
                                                                                                                                          34.92
                   13 46 44
                                                                              213.76
                                                                                                                          4913.8
                                                   28.7Q
                                                                256.09
       142.75
                                  5513.82
                                                                                                                                                         46.16
                                                                              213.75
                                                                                                                          1268.3
                                                                                                                                          34.91
                    4 26 51
                                  1868.33
                                                  28.68
                                                                 51.66
        37.25
                                5513.82
                                                                                                                                          34.92
                                                                                                                          4913.8
                                                                256.09
                                                                              213.76
       142.75
                   13 46 44
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3209.3 SGR 906.9 SG3 120.7
RRT -.8452 RRF -.9699 RTF ..9493
SGB 3335.0 R23 .2802 R13 -.9597
                                                                                                                    ST 2610.9 SR 605.1 SS 787.5
CRT -.9765 CRS .9947 CST -.9935
    TDE-2.7765 TRA -.3740 TC3-1.4385 BAU .7615
    ROE .6387 RRA -.1615 RC3 .5065 FAU .03119
FOE-1.1445 FRA .0785 FC3 -.7228 BSP 10234
BDE 2.8490 BRA .4074 BC3 1.5250 FSP -388
                                                                                                                    LSA 2789.4 MSA 149.3 SSA .8
EL1 2677.1 EL2 127.2 ALF 167.22
                                                                    SG1 3301.5 SG2 471.1 THA 166.28
```

FLIGHT TIME 118.00

```
ARRIVAL DATE APR 24 1966
                                                                           FLIGHT TIME 126.00
LAUNCH DATE DEC 19 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 374.903
    RL 147.19 LAL -.00 LOL 86.88 VL 27.922 GAL -7.69 A7L 11.27 MCA 180.64 SMA 129.65 ECC .18945 INCT8.7286 VL 30.269 RP 108.74 LAP -.63 LOP 267.01 VP 37.648 GAP 5.78 A7P 168.73 TAL 217.25 TAP 37.89 RCA 105.08 APO 154.21 V2 34.851 RC 122.731 GL 47.21 GP -54.70 ZAL 95.59 ZAP 94.68 ETS 184.89 ZAE 53.74 ETE 109.85 ZAC 96.07 ETC 14.36 CLP 98.12
   PLANETOCENTRIC CONIC
    C31367.471 VHL 36.979 DLA 38.32 RAL 328.08 RAD 6573.1 VEL 38.584 PTH 3.55 VHP 44.411 DPA -47.22 RAP 156.22 ECC23.5051
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 63.03 18 13 58 4806.04 .78 217.37 239.08 51.69 19 34 4 4206.0 -4.18 211.50
        63.03 18 13 58 4806.04
116.97 0 32 52 3628.63
63.03 18 13 58 4806.04
                                                                                                                                                  -4.17
                                                        .79
                                                                   128.28
                                                                                  239.07
                                                                                                     51.69
                                                                                                               1 33 20
                                                                                                                                  3028.6
                                                                                                                                                                122.41
       116.97
                                                                                                                                  4206.0
                                                        .78
                                                                   217.37
                                                                                  239.08
                                                                                                     51.69 19 34 4
                                                                                                                                                  -4.18
                                                                                                                                                                211.50
        116.97
                                                        .79
                                                                   128.28
                                                                                  239.07
                                                                                                     51.69
                                                                                                               1 33 20
                                                                                                                                3028.6
                                                                                                                                                  -4.17
                                                                                                                                                                122.41
                                                        .78
                                                                   217.37
                                                                       239.07 51.69 1 33 20
MID-COURSE EXECUTION ACCURACY 650 975.3 SGR 2788 4 777
                                                                                  239.08
                                                                                                     51.69 19 34 4
                                                                                                                                 4206.0
                                                                                                                                                  -4.18
                                                                                                                                                                211.50
                                                                   128.28
                                                                                                                                 3028.6
                                                                                                                                                  -4.17
       116.97
                                                        .79
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 561.3 SR 2377.2 SS 1863.8

CRT .9612 CRS .9999 CST .9581

LSA 3068.5 MSA 155.5 SSA .4

EL1 2437.9 EL2 151.0 ALF 77.16
                                                                       SCT 975.3 SCR 2755.8 SC3 48.2
RRT .8170 RRF -.9994 RTF -.7964
SCB 2923.3 R23 -.0912 R13 -.9958
    TOE-3.4580 TRA 2.8059 TC3 -.0808 BAU 3.7286
                                                                       SG1 2873.1 SG2 539.5 THA 73.27
                                                                            FLIGHT TIME 128.00
                                                                                                                                         ARRIVAL CATE APR 26 1966
LAUNCH DATE DEC 19 1965
                                                                           DISTANCE 380.415
  HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 27.865 GAL -7.36 AZL 76.16 MCA 183.39 SMA 129.24 ECC .18809 INC13.8406 V1 30.269 RP 108.76 LAP -.81 LOP 270.17 VP 37.597 GAP 5.89 AZP 103.82 TAL 215.57 TAP 38.96 RCA 104.93 APO 153.55 V2 34.842 RC 125.075 GL 53.68 GP -58.56 ZAL 114.77 ZAP 117.56 ETS 296.19 ZAE 106.19 ETE 209.41 ZAC 77.43 ETC 116.85 CLP-152.49
   PLANETOCENTRIC CONIC
    C3 67.320 VHL 8.205 DLA 34.32 RAL 298.59 RAD 6569.3 VEL 13.736 PTH 2.51 VHP 8.004 DPA -78.24 RAP 341.18 ECC 2.1079
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
69.75 16 52 50 4317.40 -13.59 188.54 187.87 58.18 18 4 47 3717.4 -17.70 181.83
                                                                                                    58.18 22 50 44
58.18 18 4 47
58.18 22 50 44
58.18 18 4 47
58.18 22 50 44
                    21 54 47 3356.92
16 52 50 4317.40
                                                                                                                                  2756.9
                                                                                                                                                 -17.68
                                                                                                                                                                 110.13
       110.25
                                                    -13.57
                                                                   116.85
                                                                                   187.86
                                                                                                                                  3717.4
                                                                                                                                                 -17.70
                                                                                                                                                                 181.83
        69.75
                                                    -13.59
                                                                   188.54
                                                                                   187.87
                   21 54 47 3356.92
16 52 50 4317.40
                                                                   116.85
                                                                                  187.86
                                                                                                                                  2756.9
                                                                                                                                                 -17.68
                                                                                                                                                                 110.13
       110.25
                                                   -13.57
                                                                                                                                  3717.4
                                                                                                                                                 -17.70
                                                                                                                                                                 181.83
                                                                                  187.87
        69.75
                                                   -13.59
                                                                   188.54
                                                                                                                                  2756.9
                                                                                                                                                 -17.68
       110.25
                   21 54 47
                                  3356.92
                                                   -13.57
                                                                   116.85
                                                                                  187.86
                                                                                                                                                                 110.13
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2498.9 SR 225.5 SS 805.7
CRT .8057 CR5 -.8711 CST -.9928
    TOE 3.4382 TRA-2.7269 TC3 -.7379 BAU .6694
RDE .3029 RRA .3077 RC3 -.0938 FAU .03147
FDE 1.6467 FRA -.7318 FC3 -.4047 BSP 11105
BDE 3.4516 BRA 2.7442 BC3 .7438 FSP -433
                                                                       SGT 3542.1 SGR 368.9 SG3 126.6
RRT .0723 RRF .3414 RTF .9619
                                                                       SGB 3561.2 R23 .2718 R13 .9621
SG1 3542.2 SG2 368.0 THA .44
                                                                                                                             LSA 2630.3 MSA 160.3 SSA
                                                                                                                             EL1 2505.5 EL2 133.2 ALF 4.17
                                                                                                                                        ARRIVAL DATE APR 28 1966
                                                                           FLIGHT TIME 130.00
LAUNCH DATE DEC 19 1965
   HELIOCENTRIC CONIC
                                                                           DISTANCE 386.313
    RL 147.19 LAL -.00 LOL 86.88 VL 27.808 GAL -7.11 AZL 81.25 HCA 186.53 SHA 128.84 ECC .18781 INC 8.7482 V1 30.269 RP 108.79 LAP -.99 LOP 273.34 VP 37.547 GAP 6.11 AZP 98.69 TAL 214.09 TAP 40.63 RCA 104.64 APO 153.04 V2 34.834 RC 127.413 GL 43.25 GP -38.20 TAL 122.68 ZAP 132.24 ETS 311.41 ZAE 120.14 ETE 208.48 ZAC 63.99 ETC 129.96 CLP-148.80
   PLANETOCENTRIC CONIC
    C3 37.524 VHL 6.126 DLA 23.80 RAL 300.10 RAD 6568.5 VEL 12.605 PTH 2.29 VHP 5.729 DPA -58.45 RAP 321.45 ECC 1.6175
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 49 44 3226.34 -25.72 112.58 181.78 77.73 22 43 30 2626.3 -27.16 104.21
                   21 49 44 3226.34
17 9 56 4158.14
                                                                                                              18 19 14
                                                                                                                                                  -5.08
                                                                                                                                                                163.00
                                                                                                    61.71 18 19 14
79.10 24 18 42
                                                                                                                                 3558.1
                                                     -1.31
                                                                   169.65
                                                                                  172.59
                                                                                                                                 2301.9
                                                                                                                                                                 80.65
                                                                                                                                                 -29.22
                    23 30 20 2901.95
                                                    -28.01
                                                                    89.24
                                                                                  182.30
                                                                                                    60.12 19 17 58
82.34 2 3 39
                   18 12 0 3957.76
1 20 51 2568.52
18 41 55 3863.95
                                                                                                                                                                147.27
                                                                                                                                  3357.8
                                                                                                                                                 -3.26
                                                        .72
                                                                   153.79
                                                                                  171.46
                                                                                                                                                                  55.77
                                                                                                                                  1968.5
                                                    -33.42
                                                                     64.95
                                                                                  183.33
                                                                                                                                 3263.9
                                                                                                                                                 -34.11
                                                                                                    56,19 19 46 19
                                                                                                                                                                137.56
                                                      5.38
                                                                   143.79
                                                                                  168.57
                                                                                                                                                    .90
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SCT 3591.0 SCR 389.4 SC3 208.5
RRT .6565 RRF .8774 RTF .9353
SCB 3612.0 R23 .3436 R13 .9373
SCI 3600.1 SC2 293.0 THA 4.10
                                                                                                                             ST 2077.5 SR 295.5 SS 793.9
    TOE 2.0896 TRA-2.2889 TC3-1.5488 BAU .7836
                                                                                                                            CRT .9207 CRS -.9178 CST -.9820
    RDE .3154 RRA .0541 RC3 -.2026 FAU .05741 FDE 1.6934 FRA -.8064 FC3-1.3245 BSP 11292
                                                                                                                            LSA 2236.5 MSA 177.0 SSA 1.7
EL1 2095.3 EL2 114.3 ALF 7.48
    BOE 2.1132 BRA 2.2895 BC3 1.5620 FSP
                                                       -709
                                                                                                                                         ARRIVAL DATE APR 30 1966
                                                                            FLIGHT TIME 132.00
                                                                           OISTANCE 392.216
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 27.750 GAL -6.85 AZL 83.04 MCA 189.69 SMA 128.44 ECC .18766 INC 6.9623 V1 30.269
RP 108.81 LAP -1.17 LOP 276.51 VP 37.497 GAP 6.33 AZP 96.86 TAL 212.60 TAP 42.29 RCA 104.34 APO 152.55 VZ 34.826
RC 129.747 GL 37.75 GP -27.22 ZAL 125.60 ZAP 139.93 ETS 319.83 ZAE 125.80 ETE 202.91 ZAC 57.96 ETC 137.14 CLP-149.38
   PLANETOCENTRIC CONIC
    87.97 23 51 19
62.00 17 24 50
                                                                                                                               2332.1
                                                                                 177.68
        90.00 23 2 27 2932.12
90.00 16 12 34 4335.60
                                                                                                                                                                  82.82
                                                                                                                                                 -28.23
                                                    -28.25
                                                                    91.48
                                                                   179.56
                                                                                                                                  3735.6
                                                                                                                                                                 172.92
                                                      4.40
                                                                                  168.87
                                                                                                                                                    .62
                                                                                                                                  2033.6
                                                                                                                                                 -29.67
                     0 38 57 2633.61
                                                   -29.88
                                                                    69.57
                                                                                   177.73
                                                                                                     89.25
                                                                                                                1 22 51
                                                                                                                                                                  60.77
                   17 22 41
                                    4109.35
                                                      5.84
                                                                   162.14
                                                                                   168.08
                                                                                                     60.63
                                                                                                              18 31 11
                                                                                                                                  3509.3
                                                                                                                                                   1.88
                                                                                                                                                                 155.59
                                                                                                                2 50 42
                   2 11 38
18 6 30
                                                   -34.09
                                                                                  177.64
                                                                                                     92.64
                                                                                                                                  1743.6
                                                                                                                                                 -33.35
                                                                                                                                                                  38.30
                                   2343.65
                                                                    47.47
       110.00
                                                                                                             19 12 42
                                                                   149.53
                                                                                                                                 3372.1
                                                                                  165.88
                                                                                                     56.99
                                                                                                                                                   5.03
                                                                                                                                                                 143.22
       110.00
                                   3972.07
                                                     9.44
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 3676.0 SGR 294.0 SG3 244.4

RRT .6219 RRF .8594 RTF .9245

SGB 3687.8 R23 .3604 R13 .9256

SGI 3680.6 SG2 229.9 THA 2.86
                                                                                                                            ST 1880.3 SR 226.2 SS 754.0
CRT .8990 CR5 -.9757 CST -.9731
     TOE 1.6610 TRA-2.1016 TC3-2.0591 BAU .8220
    RDE .2148 RRA .0492 RC3 -.1654 FAU .06760
FDE 1.5719 FRA -.7421 FC3-1.9661 BSP 11498
BDE 1.6748 BRA 2.1022 BC3 2.0657 FSP -819
                                                                                                                            LSA 2029.9 MSA 186.1 SSA 3.0
```

EL1 1891.3 ELZ 98.5 ALF 6.19

ARRIVAL DATE MAY 2 1966

```
LAUNCH DATE DEC 19 1965
                                                                            DISTANCE 398.111
  HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 27.692 GAL -6.58 AZL 83.95 HCA 192.86 SMA 128.05 ECC .18762 INC 5.0497 V1 30.269
RP 108.84 LAP -1.34 LOP 279.67 VP 37.448 GAP 6.54 AZP 95.90 TAL 211.08 TAP 43.94 RCA 104.02 APO 152.07 V2 34.819
                         34.55 GP -20.77 TAL 126.51 TAP 144.49 ETS 325.65 TAE 128.27 ETE 198.40 TAC 55.45 ETC 142.29 CLP-150.53
    RC 132.074 GL
   PLANETOCENTRIC CONIC
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 37 53 2792.55 -28.16 81.28 175.78 93.08 24 24 25 2192.5 -27.44 72.69 90.00 15 51 50 4410.41 6.78 183.77 168.19 62.44 17 5 20 3810.4 3.03 177.09 100.00 1 11 52 2502.15 -29.60 59.81 175.67 94.37 1 53 34 1902.2 -28.68 51.13
                                                                                                       94.37 1 53 34
61.11 18 14 4
                    17 4 28 4176.04
2 39 27 2228.10
17 53 22 4022.85
                                                        8.05
                                                                                                       97.88 3 16 35
57.52 19 0 25
                                                                                                                                                                      29.60
                                                                                                                                      1628.1
                                                                                                                                                      -31.92
                                                  -33.37
                                                                                     175.20
                                                                       38.53
       110.00
                                                                                                                                      3422.9
                                                                                                                                                       6.94
                                                                                                                                                                     145.90
                                                                     152.27
                                                                                     165.54
                                                    11.31
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RRT .5083 RRF .7668 RTF .9186
SGB 3783.7 R23 .3468 R13 .9191
SGI 3778.8 SGZ 191.9 THA 1.72
                                                                                                                                 ST 1777.5 SR 185.9 55 715.0
CRT .8761 CRS -.9712 CST -.9656
    TOE 1.4578 TRA-1.9934 TC3-2.4370 BAU .8524
    RDE .1651 RRA .0530 RC3 -.1056 FAU .07063
FDE 1.4351 FRA -.6471 FC3-2.3394 BSP 11862
BDE 1.4671 BRA 1.9941 BC3 2.4393 FSP -862
                                                                                                                                 LSA 1915.3 MSA 192.2 SSA 4.3
                                                                                                                                 EL1 1785.0 EL2 89.3 ALF
                                                                                                                                             ARRIVAL DATE MAY 4 1966
                                                                              FLIGHT TIME 136.00
LAUNCH DATE DEC 19 1965
                                                                              DISTANCE 403.994
    RL 147.19 LAL -.00 LOL 86.88 VL 27.635 GAL -6.31 A7L 84.51 MCA 196.02 SMA 127.65 ECC .18766 INC 5.4930 V1 30.269 RP 108.86 LAP -1.51 LOP 282.83 VP 37.399 GAP 6.75 AZP 95.28 TAL 209.54 TAP 45.56 RCA 103.70 APO 151.61 V2 34.812 RC 134.395 GL 32.52 GP -16.63 ZAL 126.44 ZAP 147.60 ETS 329.84 ZAE 129.42 ETE 195.07 ZAC 54.66 ETC 146.17 CLP-151.79
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                         2.15 VHP 5.076 DPA -36.17 RAP 319.29 ECC 1.3936
    C3 23.918 VML 4.891 DLA 14.14 RAL 305.66 RAD 6568.0 VEL 12.D54 PTH 2.15 VMP 5.076 DPA -36.17 RAP 319.29 ECC 1.3936 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 3 44 2713.D8 -27.74 75.51 175.16 95.95 0 48 57 2113.1 -26.62 67.02 90.00 15 44 13 4446.17 7.90 185.80 168.47 62.72 16 58 20 3846.2 4.18 179.09
    C3 23.918 VHL 4.891 DLA 14.14 RAL 305.66 RAD 6568.0 VEL 12.054 PTH
                                                                                                                                                                       45.69
                    1 32 35 2426.52
16 58 3 4207.96
2 57 40 2160.30
17 49 28 4046.94
                                                                                                                                      1826.5
                                                                                                                                                       -27.77
                                                                                                                    2 13 2
                                                      -29.08
                                                                       54.25
                                                                                      174.99
                                                                                                        97.25
       100.00
                                                                                                       61.40 18 8 11
100.84 3 33 40
                                                                                                                                                                       161.02
                                                                                                                                      3608.0
                                                                                                                                                        5.20
                                                         9.09
                                                                      167.65
                                                                                      167.83
       100.00
                                                                                                                                      1560.3
                                                                                                                                                       -30.78
                                                                                                                                                                       24.54
                                                    -32.62
                                                                       33.38
                                                                                     174.33
       110.00
                                                                                                        57.81 18 56 55
                                                                                                                                      3446.9
                                                                                                                                                        7.85
                                                                                                                                                                       147.18
                                                   12.19
                                                                     153.59
                                                                                      165.98
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1727.6 SR 167.3 S5 685.5
CRT .8625 CRS -.9696 CST -.9596
                                                                          SGT 3879.1 SGR 184.7 SG3 260.2
RRT .3386 RRF .6019 RTF .9145
     TOE 1.3492 TRA-1.9107 TC3-2.7470 BAU .8785
     ROE .1418 RRA .0537 RC3 -.0494 FAU .07053
                                                                          SGB 3883.4 R23 .3099 R13 .9148
5G1 3879.6 SG2 173.8 THA .93
                                                                                                                                  LSA 1855.8 MSA 196.5 SSA 5.7
     FOE 1.3217 FRA -.5476 FC3-2.5530 BSP 12197
                                                                                                                 .93
                                                                                                                                  EL1 1733.7 EL2 84.3 ALF 4.78
     BOE 1.3567 BRA 1.9114 BC3.2.7475 FSP -870
                                                                                                                                             ARRIVAL DATE MAY 6 1966
                                                                              FLIGHT TIME 138.00
LAUNCH DATE DEC 19 1965
                                                                              DISTANCE 409.866
    RL 147.19 LAL -.00 LOL 86.88 VL 27.577 GAL -6.03 A7L 84.88 MCA 199.18 SMA 127.27 ECC .18781 INC 5.1162 VI 30.269 RP 108.87 LAP -1.68 LOP 286.00 VP 37.351 GAP 6.96 A7P 94.83 TAL 207.98 TAP 47.16 RCA 103.36 APO 151.17 V2 34.806 RC 136.709 GL 31.16 CP -13.78 ZAL 125.79 ZAP 149.98 ETS 332.93 ZAE 129.97 ETE 192.60 ZAC 54.80 ETC 149.19 CLP-153.06
    PLANETOCENTRIC CONIC
     C3 22.340 VHL 4.726 OLA 13.23 RAL 307.46 RAC 6567.9 VEL 11.988 PTH 2.14 VHP 5.113 CPA -32.92 RAP 320.42 ECC 1.3677
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  2064.8
                                                                                                    97.65 1 3 19
62.85 16 57 43
                    0 18 54 2664.79
15 43 22 4461.19
1 47 8 2380.21
16 57 48 4221.00
3 10 54 2118.13
17 50 32 4055.84
                                                                                  175.29
                                                    -27.35
                                                                      72.03
         90.00
                                                                                                                                      3861.2
                                                                                                                                                        4.66
                                                                                      169.17
                                                                      186.66
                                                        8.37
         90.00
                                                                                                                  2 26 49
18 8 9
                                                                                                                                                                        42.42
                                                                                                                                                       -27.10
                                                                                      175.07
                                                                                                        98.97
                                                                                                                                      1780.2
                                                     -28.63
                                                                       50.88
        100.00
                                                                                                                                                                      161.74
                                                                                                                                      3621.0
                                                                                                                                                         5.64
                                                                                      168.56
                                                                                                        61.53
                                                                      168.38
        100.00
                                                        9.52
                                                                                                        102.62 3 46 12
57.93 18 58 8
                                                                                                                                                                       21.63
                                                                                                                                                      -29.97
                                                                                                                                      1518.1
                                                                                     174.32
                                                                                                       102.62
                                                    -32.04
                                                                        30.23
        110.00
                                                                                                                                                        8.18
                                                                                      166.78
                                                                                                                                      3455.A
                                                     12.51
                                                                      154.08
        110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1708.6 SR 160.9 SS 664.8
CRT .8600 CRS -.9720 CST -.9550
                                                                          SGT 3980.1 SGR 172.1 SGS 258.4

RRT .1558 RRF .3972 RTF .9112

SGB 3983.9 R23 .2599 R13 .9113

SGI 3980.2 SG2 170.0 THA .38
     TOE 1.2888 TRA-1.8376 TC3-3.0227 BAU .9028
     RDE .1318 RRA .0513 RC3 -.0007 FAU .06905
FDE 1.2320 FRA -.4513 FC3-2.6758 BSP 12525
BDE 1.2955 BRA 1.8383 BC3 3.0227 FSP -862
                                                                                                                                 LSA 1829.6 MSA 199.9 SSA 7.0
                                                                                                                                  EL1 1714.2 EL2 81.8 ALF
                                                                                                                                               ARRIVAL DATE MAY $ 1966
                                                                               FLIGHT TIME 140.00
 LAUNCH DATE DEC 19 1965
                                                                               DISTANCE 415.726
     RL 147.19 LAL -.00 LOL 86.88 VL 27.520 GAL -5.74 A7L 85.16 HCA 202.35 SHA 126.88 ECC .18806 INC 4.8429 V1 30.269 RP 108.89 LAP -1.84 LOP 289.16 VP 37.304 GAP 7.17 A7P 94.48 TAL 206.39 TAP 48.74 RCA 103.02 APC 150.74 V2 34.801 RC 139.015 GL 30.21 GP -11.72 TAL 124.76 ZAP 151.93 ETS 335.28 ZAE 130.21 ETE 190.74 ZAC 55.49 ETC 151.61 CLP-154.31
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 21.112 VHL 4.595 OLA 12.77 RAL 309.28 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 5.175 OPA -30.40 RAP 321.82 ECC 1.3475
     LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       2035.2
                     0 30 11 2635.25
15 46 38 4463.44
1 58 7 2351.64
17 1 23 4222.28
                                                                                     175.88
                                                                                                       98.67
                                                                                                                     1 14 6
                                                        -27.06
                                                                        69.91
          90.00
                                                                                                        62.87 17 1 2
100.01 2 37 19
                                                                                                                                       3863.4
                                                                                                                                                                        180.06
                                                                                      170.13
                                                         8.44
                                                                       186.79
          90.00
                                                                                                                                                                         40.42
                                                                                                                                       1751.6
                                                                                       175.64
                                                                                                        100.01
                                                        -28.31
                                                                        48.82
                                                                                                        61.54 18 11 45
103.71 3 56 5
        100.00
                                                                                                                                       3622.3
                                                                                                                                                          5.68
                                                                                                                                                                        161.81
                                                                                       169.53
                                                         9.56
                                                                       168.46
        100.00
                                                                                                                                                                        19.76
                                                                                                                                       1491.6
                                                                                      174.84
                                                                                                       103.71
                                                      -31.62
                                                                        28.27
        110.00
                     3 21 14
17 54 46
                                      2091.59
                                                    12.48
                                                                                                        57.92 19 2 21
                                                                                                                                                          8.15
                                                                                                                                                                       147.61
                                                                                                                                       3455.1
                                                                                      167.79
                                                                       154.04
        110.00
                                     4055.09
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 4085.5 SGR 175.0 SG3 254.9 ST 1706.5 SR 161.3 SS 648.5 SGB 4089.3 R23 .2065 R13 .9091 LSA 1821.5 MSA 201.7 SSA 8.4 SG1 4085.5 SG2 175.0 THA .01 EL1 1712.2 EL2 80.4 ALF 4.69
      TOE 1.2533 TRA-1.7710 TC3-3.2866 BAU .9277
     ROE .1286 RRA .0464 RC3 .0406 FAU .06717
FOE 1.1560 FRA -.3661 FC3-2.7542 BSP 12938
      BOE 1.2599 BRA 1.7716 BC3 3.2868 FSP -857
```

FLIGHT TIME 134.00

```
LAUNCH DATE DEC 19 1965
                                                                            FLIGHT TIME 142.00
                                                                                                                                         ARRIVAL CATE MAY 10 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 421.557
    RL 147.19 LAL -.00 LOL 86.88 VL 27.463 GAL -5.45 A7L 85.37 HCA 205.51 SMA 126.50 ECC .18845 INC 4.6543 V1 30.269 RP 108.90 LAP -1.99 LOP 292.32 VP 37.258 GAP 7.38 A7P 94.18 TAL 204.80 TAP 50.31 RCA 102.66 APO 150.34 V2 34.797 RC 141.312 GL 29.51 GP -10.15 7AL 123.49 7AP 153.63 ETS 337.10 7AE 130.30 ETE 189.28 7AC 56.53 ETC 153.59 CLP-155.53
   PLANETOCENTRIC CONIC
    C3 20.115 VHL 4.485 OLA 12.60 RAL 311.14 RAC 6567.8 VEL 11.895 PTH 2.11 VHP 5.253 DPA -28.35 RAP 323.38 ECC 1.3310
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00 039 3 2617.86
90.00 15 52 36 4457.66
100.00 2 6 53 2334.61
100.00 17 7 27 4216.15
                                                                               176.79
                                                    -26.88
                                                                                                                              2017.9
                                                                    68.67
                                                                                                99.27 1 22 41
                                                                                                                                              -25.32
                                                                                                                                                                 60.35
                                                                                                   62.82 17 6 54
100.63 2 45 48
61.48 18 17 43
104.37 4 4 21
57.83 19 8 33
                                                                                   171.27
                                                                                                                                  3857.7
                                                      8.26
                                                                   186.46
                                                                                                                                                                179.74
                                                   -28.10
                                                                    47.60
                                                                                   176.55
                                                                                                                                1734.6
       100.00
                                                       9.36
                                                                   168.11
                                                                                   170.68
                                                                                                                                  3616.1
                   3 29 46 2075.29
18 1 4 4048.23
                                                   -31.36
                                                                    27.08
                                                                                175.72
                                                                                                                               1475.3
       110.00
                                                                                                                                                  -29.06
                                                                                                                                                                 18.62
                                                                                                                                  3448.2
       110.00
                                                     12.23
                                                                   153.66
                                                                                  168.97
                                                                                                                                                  7.90
                                                                                                                                                                 147.25
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                           ST 1560.7 SR 156.1 SS 522.7 CRT .8412 CRS -.9642 CST -.9519 LSA 1644.3 MSA 171.9 SSA 12.2 ELI 1566.3 ELZ 84.1 ALF 4.82
                                                                       SCT 4447.1 SGR 168.8 SG3 276.5
RRT -.0832 RRF -.0029 RTF .9329
    TOE 1:0762 TRA-1.8622 TC3-3.8530 BAU 1.0362
    ROE .1218 RRA .0308 RC3 .0574 FAU .07557
FOE .8847 FRA -.5142 FC3-3.2525 BSP 17159
           .8847 FRA -.5142 FC3-3.2525 BSP 17159
                                                                        SGB 4450.3 R23 -.0751 R13 -.9329
                                                                        SG1 4447.2 SG2 168.2 THA 179.82
    BOE 1.0831 BRA 1.8625 BC3 3.8534 FSP -1306
                                                                            FLIGHT TIME 144.00
LAUNCH DATE DEC 19 1965
                                                                                                                                         ARRIVAL DATE MAY 12 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 427.414
   RL 147.19 LAL -.00 LOL 86.88 VL 27.406 GAL -5.14 A7L 85.53 MCA 208.67 SMA 126.13 ECC .18888 INC 4.4691 V1 30.269
RP 108.92 LAP -2.14 LOP 295.48 VP 37.213 GAP 7.57 A2P 93.92 TAL 203.16 TAP 51.83 RCA 102.31 APO 149.95 V2 34.793
RC 143.598 GL 29.00 GP -8.95 ZAL 121.94 ZAP 155.12 ETS 338.55 ZAE 130.33 ETE 188.15 ZAC 57.85 ETC 155.27 CLP-156.69
  PLANETOCENTRIC CONIC
    C3 19.244 VHL 4.387 DLA 12.68 RAL 313.10 RAD 6567.8 VEL 11.859 PTH 2.10 VHP 5.337 DPA -26.59 RAP 325.09 ECC 1.3167 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 46 8 2610.30

16 1 9 4444.23

2 14 2 2326.86

17 15 57 4202.90

3 37 1 2067.18

18 9 27 4035.34
       90.00
                                                    -26.79
                                                                   68.13
                                                                                177.99
                                                                                                   99.52
                                                                                                                1 29 39
                                                                                                                               2010.3
                                                                                                                                                -25.20
                                                                                                                                                                  59.83
       90.00
                                                      7.84
                                                                   185.69
                                                                                  172.59
                                                                                                    62.70
                                                                                                              17 15 13
                                                                                                                                  3844.2
                                                                                                                                                   4.12
                                                                                                                                                                 178.99
      100.00
                                                   -28.01
                                                                    47.04
                                                                                  177.75
                                                                                                   100.90
                                                                                                               2 52 48
                                                                                                                                  1726.9
                                                                                                                                                                  38.70
                                                                                                                                                  -26.22
                                                                                                  61.35 18 26 0
104.69 4 11 28
57.67 19 16 43
                                                                   167.36 172.01
      100.00
                                                      8.93
                                                                                                                                  3602.9
                                                                                                                                                   5.03
                                                                                                                                                                160 74
      110.00
                                                   -31.22
                                                                   26.48
                                                                                 176.91
                                                                                                                                  1467.2
                                                                                                                                                 -28.88
                                                                                                                                                                  18.06
      110.00
                                                 11.76
                                                                  152.95
                                                                                  170.31
                                                                                                                                 3435.3
                                                                                                                                                   7.41
                                                                                                                                                                146.56
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       SGT 4255.7 SGR 203.6 SG3 242.3
RRT -.1459 RRF .0001 RTF .9013
SGB 4260.5 R23 -.1333 R13 -.9013
    TOE 1.2573 TRA-1.6086 TC3-3.7416 BAU .9630
                                                                                                                            ST 1767.4 SR 174.4 SS 646.7
CRT .8971 CRS -.9894 CST -.9484
   RDE .1331 RRA .0333 RC3 .1095 FAU .06127
FDE 1.0710 FRA -.1805 FC3-2.7564 BSP 13206
                                                                                                                          LSA 1878.7 MSA 205.9 SSA 10.6
ELI 1774.3 EL2 76.8 ALF 5.07
    BOE 1,2643 BRA 1,6089 BC3 3,7432 FSP -776
                                                                       5G1 4255.8 5G2 2D1.4 THA 179.60
                                                                                                                                        ARRIVAL DATE MAY 14 1966
                                                                           FILIGHT TIME 146.00
LAUNCH DATE DEC 19 1965
  HELIOCENTRIC CONIC
                                                                          DISTANCE 433.239
   RL 147.19 LAL -.00 LOL 86.88 VL 27.350 GAL -4.82 AZL 85.67 MCA 211.83 SMA 125.76 ECC .18946 INC 4.3342 VI 30.269 RP 108.93 LAP -2.28 LOP 298.64 VP 37.168 GAP 7.78 AZP 93.68 TAL 201.52 TAP 53.35 RCA 101.93 APO 149.59 VZ 34.790 RC 145.874 GL 28.61 GP -7.98 ZAL 120.24 ZAP 156.50 ETS 339.70 ZAE 130.31 ETE 187.22 ZAC 59.34 ETC 156.70 CLP-157.82
   PLANETOCENTRIC CONIC
    C3 18.502 VHL 4.301 DCA 12.93 RAL 315.12 RAD 6567.7 VEL 11.827 PTH 2.09 VMP 5.428 DPA -25.05 RAP 326.87 ECC 1.3045
    ENCH AZHTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 52 8 2609.27
16 11 17 4426.72
2 20 10 2325.34
                                                                               179.42
                                                                                               99.56 1 35 37
62.56 17 25 4
100.96 2 58 55
                                                                                                                             2009.3 -25.19
3826.7 3.56
                                                   -26.78
                                                                   68.06
                                                                                                                                                                59.76
        90.00
        90.00
                                                     7.29
                                                                  184.70
                                                                                 174.06
                                                                                                                                                               178.00
                                                                                179.17
                                                   -27.99
                                                                   46.93
                                                                                                                                1725.3
                                                                                                                                               -26.19
                                                                                                                                                                38.59
       100.00
                                                                                                  61.20 18 35 42
104.80 4 17 54
57.49 19 26 5
                 17 25 56 4185.89
3 43 30 2064.61
18 19 6 4019.38
      100.00
                                                     8.37 166.41
                                                                                 173.48
                                                                                                                                3585.9
                                                                                                                                                  4.46
                                                                                                                                                               159.80
                                                                              178.5.
171.79
                                                                                                                                 1464.6 -28.83
3419.4 6.81
      110.00
                                                   -31.17
                                                                    26.30
                                                                                                                                1464.6
                                                                                                                                                                17.88
                                                                  152.09
                                                                                                                                                               145.71
      110.00
                                                  11.18
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 4360.0 SGR 219.6 SG3 237.5
RRT -.1737 RRF -.D589 RTF .9010
SGB 4365.6 R23 -.D995 R13 -.9010
SGI 4360.2 SG2 216.3 THA 179.50
                                                                                                                           ST 1737.7 SR 183.0 55 640.0
CRT .9126 CR5 -.9933 CST -.9483
    TOE 1:2618 TRA-1.5352 TC3-3.9902 BAU .9875
   ROE .1371 RRA .0249 RC3 .1361 FAU .05919
FOE 1.0224 FRA -.1155 FC3-2.7698 BSP 13688
BDE 1.2692 BRA 1.5354 BC3 3.9925 FSP -777
                                                                                                                           LSA 1906.0 MSA 204.0 SSA 11.9
EL1 1805.4 EL2 74.5 ALF 5.32
LAUNCH DATE DEC 19 1965
                                                                           FLIGHT TIME 148.00
                                                                                                                                        ARRIVAL DATE MAY 16 1966
                                                                          01STANCE 439.054
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 27.294 GAL -4.50 AZL 85.78 HCA 215.00 SMA 125.40 ECC .19018 INC 4.2214 V1 30.269 RP 108.93 LAP -2.42 LOP 301.80 VP 37.125 GAP 7.98 AZP 93.46 TAL 199.85 TAP 54.85 RCA 101.55 APO 149.24 VZ 34.787 RC 148.138 GL 28.30 GP -7.19 ZAL 118.37 ZAP 157.78 ETS 340.63 ZAE 130.27 ETE 186.47 ZAC 60.96 ETC 157.93 CLP-158.92
  PLANETOCENTRIC CONIC
    C3 17.852 VHL 4.225 OLA 13.30 RAL 317.23 RAO 6567.7 VEL 11.800 PTH 2.09 VHP 5.525 DPA -23.65 RAP 328.73 ECC 1.2938
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               181.06
                                                                                                99.40
                                                                                                                              2013.9
                                                                                                                                              -25.26
       90.00
                                                   -26.83
                                                                                                               1 40 49
                   0 57 15 2613.94
16 22 58 4405.36
                                                                    68.39
                                                                                                                                                                60.08
                                                                                                    62.40 17 36 24
       90.00
                                                     6.62
                                                                   183.49
                                                                                 175.70
                                                                                                                                 3805.4
                                                                                                                                                  2.87
                                                                                                                                                                176.81
                   2 25 33 2329.21
17 37 22 4165.32
      100.00
                                                   -28.04
                                                                    47.21
                                                                                 180.81
                                                                                                  100.82
                                                                                                               3 4 22
                                                                                                                                 1729.2
                                                                                                                                                 -26.26
                                                                                                                                                                 38.86
                                                                                                  61.03 18 46 48
104.71 4 23 51
57.28 19 36 41
      100.00
                                                      7.69
                                                                   165.26
                                                                                  175.11
                                                                                                                                 3565.3
                                                                                                                                                   3.77
                                                                                                                                                                158.66
      110.00
                    3 49 24 2066.81
18 30 0 4000.49
                                                                                                                                 1466.8
                                                                                                                                                -28.88
                                                   -31.21
                                                                    26.46 179.99
                                                                                                                                                                 18.03
                                                                  151.06
                                                                                                                                                                144.72
                                                                                  173.42
                                                                                                                                 3400.5
                                                                                                                                                  6.10
      110.00
                   18 30 0
                                                   10.49
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
ST 1844.7 SR 192.9 SS 641.2
CRT .9293 CRS -.9961 CST -.9490
LSA 1952.0 MSA 202.1 SSA 13.0
                                                                      SGT 4451.1 SGR 236.5 SG3 231.8
RRT -.1823 RRF -.0895 RTF .8995
SGB 4457.4 R23 -.0762 R13 -.8994
    TOE 1.2825 TRA-1.4489 TC3-4.2192 BAU 1.0077
```

SG1 4451.4 SG2 232.5 THA 179.44

EL1 1853.4 EL2 70.9 ALF 5.56

RDE .1422 RRA .0161 RC3 .1599 FAU .05669 FDE .9891 FRA -.0452 FC3-2.7490 BSP 13997 BDE 1.2904 BRA 1.4490 BC3 4.2222 FSP -759

```
LAUNCH DATE DEC 19 1965
                                                                              FLIGHT TIME 150.00
                                                                                                                                             ARRIVAL DATE MAY 18 1966
    HELIOCENTRIC CONIC
                                                                              DISTANCE 444.857
     RL 147.19 LAL -.00 LOL 86.88 VL 27.238 GAL -4.16 AZL 85.87 MCA 218.16 SMA 125.04 ECC .19102 INC 4.1251 VI 30.269 RP 108.94 LAP -2.55 LOP 304.97 VP 37.082 GAP 8.18 AZP 93.25 TAL 198.18 TAP 56.33 RCA 101.15 APO 148.92 V2 34.786 RC 150.390 GL 28.04 GP -6.54 ZAL 116.34 ZAP 158.98 ETS 341.38 ZAE 130.23 ETE 185.85 ZAC 62.70 ETC 159.02 CLP-159.98
    PLANETOCENTRIC CONIC
     C3 17.285 VHL 4.157 OLA 13.80 RAL 319.43 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 5.626 DPA -22.35 RAP 330.64 ECC 1.2845
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 1 45 2623.44
16 36 4 4380.87
2 30 22 2537.65
17 50 8 4141.89
3 54 56 2073.04
18 42 3 3979.27
                                                                                    182.90
                                                                                                    99.08 1 45 28
                                                                                                                                  2023.4
         90.00
                                                       -26.94
                                                                      69.07
                                                                                                                                                    -25.41
                                                                                                                                                                      60.74
         90.00
                                                        5.84
                                                                      182.10
                                                                                     177.49
                                                                                                        62.24 17 49 5
                                                                                                                                      3780.9
                                                                                                                                                       2.08
                                                                                                                                                                      175.44
                                                                                                     100.52 3 9 20
60.85 18 59 10
104.46 4 29 29
57.06 19 48 23
        100.00
                                                       -28.14
                                                                      47.81
                                                                                     182.66
                                                                                                                                      1737.7
                                                                                                                                                      -26.40
                                                                                                                                                                       39.44
                                                                                   176.91
        100.00
                                                                     163.95
                                                                                                                                      3541.9
                                                        6.92
                                                                                                                                                       2.98
                                                                                                                                                                      157.37
        110.00
                                                       -31.32
                                                                       26.91
                                                                                    181.85
                                                                                                                                      1473.0
                                                                                                                                                                       18.46
                                                                                                                                                     -29.01
                                                                                                                                   3379.3
                                                                                    175.21
       110.00
                                                                     149.92
                                                      9.70
                                                                                                                                                       5.30
                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACT

SGT 4539.2 SGR 253.1 SG3 226.1 ST 1899.7 SR 203.5 SS 644.4

RRT -.1796 RRF -.1049 RTF .8982 CRT .9449 CRS -.9973 CST -.9506

SGB 4546.2 R23 -.0578 R13 -.8981 LSA 2006.4 MSA 199.2 SSA 14.1

ELI 1909.5 EL2 66.3 ALF 5.79
     TOE 1.3109 TRA-1.3554 TC3-4.4418 BAU 1.0273
     ROE .1476 RRA .0070 RC3 .1806 FAU .05421
     FDE .9607 FRA .0217 FC3-2.7152 BSP 14288
     BDE 1.3192 BRA 1.3554 BC3 4.4455 FSP -740
 LAUNCH DATE DEC 19 1965
                                                                              FLIGHT TIME 152.00
                                                                                                                                              ARRIVAL DATE MAY 20 1966
   HELIOCENTRIC CONIC
                                                                              DISTANCE 450.649
    RL 147.19 LAL -.00 LOL 86.88 VL 27.183 GAL -3.82 ATL 85.96 MCA 221.32 SMA 124.69 ECC .19201 INC 4.0414 V1 30.269 RP 108.94 LAP -2.67 LOP 308.13 VP 37.041 GAP 8.38 AZP 93.04 TAL 196.48 TAP 57.80 RCA 100.75 APO 148.63 V2 34.785 RC 152.629 GL 27.81 GP -6.00 ZAL 114.17 ZAP 160.11 ETS 341.98 ZAE 130.19 ETE 185.33 ZAC 64.52 ETC 159.98 CLP-161.00
   PLANETOCENTRIC CONIC
    C3 16.792 VHL 4.098 DLA 14.38 RAL 321.74 RAD 6567.7 VEL 11.755 PTH 2.07 VHP 5.731 DPA -21.13 RAP 332.60 ECC 1.2764 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 5 45 2637.20
16 50 27 4353.77
2 34 47 2350.11
18 4 7 4116.10
4 0 13 2082.80
18 55 11 3956.18
         90.00
                                                                                   184.94
                                                      -27.08
                                                                      70.05
                                                                                                     98.61 1 49 43 2037.2
                                                                                                                                                                       61.69
                                                                                                     62.09 18 3 1
100.07 3 13 57
60.67 19 12 43
104.07 4 34 55
56.85 20 1 7
                                                                                     179.46
         90.00
                                                        4.98
                                                                      180.58
                                                                                                                                      3753.8
                                                                                                                                                         1.21
                                                                                                                                                                      173.93
       100 00
                                                       -28.29
                                                                                     184.72
                                                                      48.71
                                                                                                                                      1750.1
                                                                                                                                                      -26.61
                                                                                                                                                                       40.31
       100.00
                                                        6.06
                                                                     162.51
                                                                                    178.87
                                                                                                                                      3516.1
                                                                                                                                                         2.11
                                                                                                                                                                      155.96
                                                                                  183.93
       110.00
                                                      -31.48
                                                                       27.62
                                                                                                                                                      -29.23
                                                                                                                                                                       19.14
       110.00
                                                       8.85
                                                                      148.68
                                                                                     177.17
                                                                                                                                      3356.2
                                                                                                                                                         4.42
                                                                                                                                                                      142.38
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                          SGT 4625.2 SGR 269.1 SG3 220.6
RRT -.1694 RRF -.1103 RTF .8973
     TOE 1.3458 TRA-1.2551 TC3-4.6574 BAU 1.0465
                                                                                                                               ST 1962.0 SR 214.4 S5 648.9
CRT .9589 CRS -.9968 CST -.9527
    ROE .1533 RRA -.0024 RC3 .1983 FAU .05181
FOE .9358 FRA .0848 FC3-2.6712 BSP 14587
                                                                          SGB 4633.1 R23 -.0428 R13 -.8973 LSA 2068.4 MSA 195.3 SSA 15.2 SG1 4625.5 SG2 265.2 THA 179.43 EL1 1972.8 EL2 60.6 ALF 5.99
     BDE 1.3545 BRA 1.2551 BC3 4.6617 FSP -723
                                                                             FLIGHT TIME 154.00
                                                                                                                                            ARRIVAL DATE MAY 22 1966
LAUNCH DATE DEC 19 1965
                                                                            DISTANCE 456.429
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.DO LOL 86.88 VL 27.129 GAL -3.47 AZL 86.03 MCA 224.48 SMA 124.34 ECC .19314 INC 3.9676 V1 30.269
RP 108.94 LAP -2.78 LOP 311.29 VP 37.001 GAP 8.59 AZP 92.83 TAL 194.77 TAP 59.25 RCA 100.32 APO 148.35 V2 34.784
RC 154.855 GL 27.59 GP -5.54 ZAL 111.87 ZAP 161.19 ETS 342.46 ZAE 130.16 ETE 184.89 ZAC 68.42 ETC 160.83 CLP-161.99
   PLANFTOCENTRIC CONIC
    C3 16.371 VHL 4.046 DLA 15.04 RAL 324.15 RAD 6567.7 VEL 11.737 PTH 2.07 VHP 5.840 DPA -19.95 RAP 334.60 ECC 1.2694
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 98.00 1 53 38
                                                                                                                                 2054.8
                                                                                                                                                 -25.87
        90.00
                    1 9 24 2654.85
17 6 5 4324.49
                                                                     71.31
                                                                                 187.19
                                                     -27.25
                                                                                                                                                                      62.92
                                                                                                                 18 18 10
        90.00
                                                       4.04
                                                                    178.93
                                                                                    181.61
                                                                                                       61.95
                                                                                                                                    3724.5
                                                                                                                                                       . 26
                                                                                                                                                                    172.30
       100.00
                    2 38 54 2366.21
18 19 16 4088.36
                                                    -28.48
                                                                      49.87
                                                                                    186.98
                                                                                                       99.49
                                                                                                                  3 18 20
                                                                                                                                  1766.2
3488.4
                                                                                                                                                     -25.88
                                                                                                                                                                      41.44
                                                                                    181.01 60.51 19 27 25
186.22 103.54 4 40 16
179.30 56.64 20 14 50
       100.00
                                                       5.13
                                                                    160.98
                                                                                                                                                      1.17
                                                                                                                                                                    154.43
                    4 5 20
19 9 19
                                                                                                                                                    -29.50
       110.00
                                    2095.74
                                                    -31.69
                                                                      28.57
                                                                                                                                    1495.7
                                                                                                                                                                      20.05
       110.00
                                    3931.60
                                                      7.93
                                                                    147.37
                                                                                                                                    3331.6
                                                                                                                                                      3.49
                                                                                                                                                                    141.10
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 4704.8 SGR 284.5 SG3 215.0
RRT -.1535 RRF -.1067 RTF .8962
SGB 4713.4 R23 -.0317 R13 -.8962
                                                                                                                               ST 2034.2 SR 225.7 SS 656.2
CRT .9710 CRS -.9948 CST -.9553
    TOE 1.3893 TRA-1.1444 TC3-4.8571 BAU 1.0641
    ROE .1593 RRA -.0118 RC3 .2132 FAU .04936
FDE .9162 FRA .11476 FC3-2.6102 BSP .14820
BDE 1.3984 BRA 1.1445 BC3 4.8618 FSP -701
                                                                                                                               LSA 2140.8 MSA 190.8 SSA 16.2
                                                                                                                                EL1 2046.0 EL2 53.6 ALF 6.15
                                                                         SG1 4705.0 SG2 281.1 THA 179.47
LAUNCH DATE DEC 19 1965
                                                                             FLIGHT TIME 156.00
                                                                                                                                            ARRIVAL DATE MAY 24 1966
  HELIOCENTRIC CONIC
                                                                            DISTANCE 462.197
    RL 147.19 LAL -.00 LOL 86.88 VL 27.075 GAL -3.10 AZL 86.10 MCA 227.64 SMA 124.00 ECC .19442 INC 3.9017 V1 30.269 RP 108.94 LAP -2.88 LOP 314.46 VP 36.961 GAP 8.80 AZP 92.63 TAL 193.05 TAP 60.69 RCA 99.89 APO 148.11 V2 34.785 RC 157.067 GL 27.36 GP -5.14 ZAL 109.43 ZAP 162.22 ETS 342.83 ZAE 130.14 ETE 184.52 ZAC 68.38 ETC 161.60 CLP-162.96
  PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 1 2 45 2676.07 -27.45 72.84 189.64 97.25 1 57 21 2076.1 -26.16 64.41 90.00 17 22 53 4293.41 3.05 177.19 183.96 61.83 18 34 27 3693.4 - 24 170.65
    C3 16.021 VHL 4.003 DLA 15.77 RAL 326.68 RAD 6567.6 VEL 11.722 PTH 2.07 VMP 5.953 DPA -18.82 RAP 336.62 ECC 1.2637
                                                                                                                 18 34 27
3 22 34
                   2 42 48 2385.66
18 35 31 4059.06
4 10 24 2111.57
       100.00
                                                      -28.69
                                                                      51.28
                                                                                    189.44
                                                                                                       98.77
                                                                                                                                     1785.7
                                                                                                                                                     -27.18
                                                                                                                                                                      42.80
                                                                                                     60.37 19 43 10
102.89 4 45 35
56.45 20 29 31
       100.00
                                                       4.15
                                                                                    183.35
                                                                     159.36
                                                                                                                                     3459.1
                                                                                                                                                                    152.83
                                                                                                                                                        . 17
       110.00
                                                                                    188.72
                                                     -31.94
                                                                      29.74
                                                                                                                                     1511.6
                                                                                                                                                    -29.83
                                                                                                                                                                      21.16
       110.00
                    19 24 25
                                                       6.97
                                                                     146.00
                                    3905.91
                                                                                    181.61
                                                                                                                                     3305.9
                                                                                                                                                       2.51
                                                                                                                                                                    139.75
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                        SGT 4784.6 SGR 299.1 SG3 209.6 ST 2110.0 SR 237.0 SS 662.8 RRT -.1350 RRF -.0998 RTF .8958 CRT .9807 CRS -.9914 CST -.9581 SGB 4793.9 R23 -.0218 R13 -.8958 LSA 2216.5 MSA 185.5 SSA 17.2 SG1 4784.7 SG2 296.4 THA 179.51 EL1 2122.8 EL2 46.0 ALF 6.29
    TOE 1.4363 TRA-1.0278 TC3-5.0477 BAU 1.0822
    ROE .1654 RRA -.0211 RC3 .2250 FAU .04707
FOE .8970 FRA .2054 FC3-2.5435 BSP 15103
                                                        -685
    BOE 1.4458 BRA 1.0280 BC3 5.0527 FSP
```

JPL TM 33-99

```
ARRIVAL CATE MAY 26 1966
                                                                                        FLIGHT TIME 158.00
LAUNCH DATE DEC 19 1965
                                                                                        DISTANCE 467.952
    RL 147.19 LAL -.00 LOL 86.88 VL 27.021 GAL -2.72 A7L 86.16 MCA 230.80 SMA 123.66 ECC .19588 INC 3.8421 VI 30.269 RP 108.94 LAP -2.98 LOP 317.62 VP 36.923 GAP 9.01 A7P 92.43 TAL 191.31 TAP 62.11 RCA 99.44 APO 147.89 V2 34.786 RC 159.265 GL 27.12 GP -4.80 7AL 106.86 7AP 163.21 ETS 343.10 7AE 130.13 ETE 184.20 7AC 70.40 ETC 162.29 CLP-163.89
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.742 VML 3.968 DLA 16.54 RAL 329.32 RAD 6567.6 VEL 11.710 PTH 2.06 VMP 6.070 CPA -17.70 RAP 338.67 ECC 1.2591
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  96.39 2 0 53
61.75 18 51 51
97.94 3 26 42
60.26 19 59 59
102.12 4 50 58
56.28 20 45 5
                                                                                                                                                     2100.7
                                                                                               192.30
                         1 15 53 2700.66
                                                             -27.65
                                                                               74.61
         90.00
                                                                                                                                                                                             168.75
                                                                                                                                                        3660.9
                                                                                                                                                                            -1.79
                                                                                                 186.50
                       17 40 50 4260.86
                                                               2.00
                                                                               175.38
         90.00
                                                                                                                                                                                              44.39
                                                                                                                                                        1808.2
                                                                                                                                                                          -27.51
                    2 46 34 2408.22
18 52 50 4028.53
4 15 28 2130.08
19 40 26 3879.44
                                                                                                 192.12
                                                             -28.91
                                                                                52.92
        100.00
                                                                                                                                                                                            151.15
                                                                                                                                                        3428.5
                                                                                                                                                                             - .86
                                                                               157.68
                                                                                                 185.88
                                                               3.12
        100.00
                                                                                                                                                                         -30.21
                                                                                                                                                                                              22.48
                                                                                                                                                        1530.1
                                                                                                 191.44
                                                                                31.12
                                                             -32.21
        110.00
                                                                                                                                                                                             138.37
                                                                                                                                                        3279.4
                                                                                                                                                                            1.50
                                                                              144.60
                                                                                                 184.11
                                                               5.97
        110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ST 2190.9 SR 248.4 $5 669.3
CRT .9881 CRS -.9868 CST -.9611
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 4862.3 SGR 313.0 SG3 204.5
RRT -.1143 RRF -.0896 RTF .8961
    TOE 1.4880 TRA -.9035 TC3-5.2222 BAU 1.1001
    ROE .1717 RRA -.0303 RC3 .2338 FAU .04487
FOE .8791 FRA .2597 FC3-2.4678 BSP 15390
                                                                                                                                                  LSA 2297.2 MSA 179.5 SSA 18.2
                                                                                   SGB 4872.4 R23 -.0133 R13 -.8961
                                                                                    SG1 4862.5 SG2 311.0 THA 179.58
                                                                                                                                                EL1 2204.6 EL2 38.0 ALF 6.39
     BOE 1.4979 BRA .9040 BC3 5.2274 FSP -671
                                                                                                                                                                 ARRIVAL CATE MAY 28 1966
                                                                                         FLIGHT TIME 160.00
LAUNCH DATE DEC 19 1965
                                                                                        DISTANCE 473.694
    RL 147.19 LAL -.00 LOL 86.88 VL 26.968 GAL -2.33 AZL 86.21 MCA 233.96 SMA 123.33 ECC .19751 INC 3.7877 VI 30.269 RP 108.93 LAP -3.06 LOP 320.78 VP 36.886 GAP _9.23 AZP 92.23 TAL 189.57 TAP 63.53 RCA 98.97 APO 147.69 V2 34.788 RC 161.449 GL 26.85 GP -4.50 ZAL 104.18 ZAP 164.17 ETS 343.27 ZAE 130.14 ETE 183.93 ZAC 72.46 ETC 162.92 CLP-164.81
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.537 VML 3.942 DLA 17.36 RAL 332.08 RAD 6567.6 VEL 11.701 PTH 2.06 VMP 6.191 DPA -16.60 RAP 340.74 ECC 1.2557
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 18 51 2728.44 -27.84 76.62 195.17 95.40 2 4 20 2128.4 -26.80 68.11
                                                                                                                                                         3627.2
                                                                                                                       61.70 19 10 19
                                                                                                  189.25
                                                                                173.49
                       17 59 52
                                        4227.16
                                                                  .92
          90.00
                                                                                                                                                                                               46.21
                                                                                                                                                                            -27.87
                       2 50 15 2433.72
19 11 10 3997.11
4 20 35 2151.06
19 57 19 3852.54
                                                                                                  195.01
                                                                                                                       96.98
                                                                                                                                     3 30 48
                                                                                                                                                         1833.7
                                                             -29.14
                                                                                 54.78
                                                                                                                       60.17 20 17 47
                                                                                                                                                                             -1.93
                                                                                                                                                                                             149.43
                                                                                                  188.62
                                                                                                                                                         3397.1
                                                                              155.95
                                                              2.06
                                                                                                                    101.23 4 56 26
56.13 21 1 31
                                                                                                                                                                                               23.98
                                                                                                                                                        1551.1
                                                                                                                                                                           -30.61
                                                                                 32.69
                                                                                                  194.39
                                                              -32.50
                                                                                                                                                         3252.5
                                                                                                                                                                                .47
                                                                                                                                                                                              136.97
                                                                                                  186.82
                                                                                143.19
                                                                4.95
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ST 2277.5 SR 259.9 S5 676.7
CRT .9933 CRS -.9812 CST -.9641
                                                                                    SGT 4935.3 SGR 326.2 SG3 199.3
RRT -.0917 RRF -.0757 RTF .8963
SGB 4946.1 R23 -.0069 R13 -.8963
      TOE 1.5456 TRA -.7691 TC3-5.3724 BAU 1.1171
     ROE .1783 RRA -.0391 RC3 .2395 FAU .04268
FOE .8639 FRA .3135 FC3-2.3784 BSP 15649
                                                                                                                                                 LSA 2383.7 MSA 173.5 SSA 19.1
EL1 2292.1 EL2 29.9 ALF 6.47
                                                                                    SG1 4935.4 SG2 324.8 THA 179.65
      BOE 1.5558 BRA .7701 BC3 5.3778 FSP -655
                                                                                                                                                                 ARRIVAL DATE MAY 30 1966
                                                                                         FLIGHT TIME 162.00
LAUNCH DATE DEC 19 1965
                                                                                         DISTANCE 479.423
     RL 147.19 LAL -.00 LOL 86.88 VL 26.915 GAL -1.93 A7L 86.26 MCA 237.12 SMA 123.01 ECC .19933 INC 3.7374 V1 30.269 RP 108.92 LAP -3.14 LOP 323.95 VP 36.850 GAP 9.45 A7P 92.03 TAL 187.81 TAP 64.93 RCA 98.49 APO 147.53 V2 34.791 RC 163.619 GL 26.53 GP -4.24 7AL 101.39 7AP 165.09 ETS 343.35 7AE 130.15 ETE 183.70 7AC 74.56 ETC 163.49 CLP-165.70
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 15.410 VHL 3.926 DLA 18.21 RAL 334.96 RAD 6567.6 VEL 11.696 PTH 2.06 VHP 6.318 DPA -15.52 RAP 342.82 ECC 1.2536
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 21 43 2759.24 -28.02 78.85 198.25 94.29 2 7 42 2159.2 -27.13 70.30 90.00 18 19 57 4192.65 -.20 171.57 192.22 61.68 19 29 50 3592.7 -3.98 164.93 100.00 2 53 54 2461.95 -29.35 56.85 198.12 95.91 3 34 56 1862.0 -28.23 48.23
                                                                                                                       60.12 20 36 32
                       19 30 27 3965.17
4 25 50 2174.33
20 15 0 3825.56
                                                                               154.20
                                                                                                  191.56
                                                                  .98
         100.00
                                                                                                                                                                          -31.04
                                                                                                                                                                                              25.56
                                                                                                                                     5 2 4
                                                                                                                                                        1574.3
                                                                                                                    100.23 5 2 4
56.02 21 18 46
                                                              -32.79
                                                                                 34.44
                                                                                                  197.55
         110.00
                                                                                                                                                       3225.6
                                                                                                                                                                              -.56
                                                                                                                                                                                             135.56
                                                                                141.77
                                                                                                 189.72
                                                              3.92
         110.00
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    RRT - .0670 RRF - .0578 RTF .8963
SGB 5013.0 R23 -.0025 R13 -.8963
SGI 5001.6 SGZ 337.9 THA 179.74
                                                                                                                                                   ST 2371.7 SR 271.5 SS 685.7
CRT .9963 CRS -.9748 CST -.9672
      TOE 1.6106 TRA -.6229 TC3-5.4894 BAU 1.1320
      RDE .1854 RRA -. 0474 RC3 .2421 FAU .04047
                                                                                                                                                   LSA 2478.0 MSA 167.9 SSA 19.9
EL1 2387.1 EL2 23.1 ALF 6.51
      FOE .8320 FRA .3673 FC3-2.2734 BSP 15831
BDE 1.6212 BRA .6247 BC3 5.4947 FSP -635
                                                                                                                                                                  ARRIVAL DATE JUN 1 1966
                                                                                          FLIGHT TIME 164.00
 LAUNCH DATE DEC 19 1965
                                                                                         DISTANCE 485.136
      RL 147.19 LAL -.00 LOL 86.88 VL 26.863 GAL -1.52 A7L 86.31 HCA 240.29 SMA 122.69 ECC .20134 INC 3.6906 VI 30.269 RP 108.91 LAP -3.20 LOP 327.12 VP 36.816 GAP 9.68 A7P 91.83 TAL 186.04 TAP 66.33 RCA 97.99 APO 147.40 V2 34.794 RC 165.773 GL 26.17 GP -4.01 TAL 98.49 ZAP 165.99 ETS 343.34 ZAE 130.17 ETE 183.49 ZAC 76.70 ETC 164.01 CLP-166.57
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 15.365 VHL 3.920 DLA 19.07 RAL 337.95 RAD 6567.6 VEL 11.694 PTH 2.06 VMP 6.449 DPA -14.44 RAP 344.92 ECC 1.2529
      C3 15.365 VHL 3.920 DLA 19.D7 RAL 337.95 RAD 6567.6 VEL 11.694 PTH 2.06 VHP 6.449 DPA -14.44 RAP 344.92 ECC 1.2529
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 24 31 2792.85 -28.16 81.30 201.54 93.07 2 11 3 2192.9 -27.44 72.71
90.00 18 41 0 4157.73 -1.33 169.62 195.40 61.71 19 50 18 3557.7 -5.10 162.97
100.00 2 57 35 2492.70 -29.55 59.12 201.44 94.74 3 39 8 1892.7 -28.58 50.45
100.00 19 50 36 3933.11 -.11 152.44 194.72 60.11 20 56 9 3333.1 -4.09 145.91
110.00 4 31 15 2199.66 -33.08 36.36 200.93 99.13 5 7 55 1599.7 -31.47 27.50
110.00 20 33 26 3798.91 2.91 140.38 192.84 55.93 21 36 45 3198.9 -1.58 134.17
                                                                                   MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5069.0 SGR 350.2 SG3 189.3 ST 2462.1 SR 283.2 SS 691.0 RRT -.0427 RRF -.0410 RTF .8975 CRT .9973 CRS -.9678 CST -.9700 SGB 3081.1 R23 .0024 R13 -.8975 LSA 2567.7 MSA 162.1 SSA 20.6 SG1 5069.0 SG2 349.9 THA 179.83 EL1 2478.2 EL2 20.6 ALF 6.54
       TOE 1.6753 TRA -.4708 TC3-5.5846 BAU 1.1482
       ROE .1929 RRA -.0553 RC3 .2414 FAU .03845
FDE .8374 FRA .4162 FC3-2.1667 BSP 16095
BDE 1.6864 BRA .4740 BC3 5.5898 FSP -622
```

```
ARRIVAL DATE JUN 3 1966
                                                                        FLIGHT TIME 166.00
LAUNCH CATE OFC 19 1965
                                                                        DISTANCE 490.834
  HELIOCENTRIC CONIC
   RL 147.19 LAL -.00 LOL 86.88 VL 26.812 GAL -1.09 A7L 86.35 MCA 243.45 SMA 122.38 ECC .20358 INC 3.6467 V1 30.269 RP 108.90 LAP -3.26 LOP 330.28 VP 36.782 GAP 9.92 A7P 91.63 TAL 184.27 TAP 67.72 RCA 97.47 APO 147.29 V2 34.798 RC 167.915 GL 25.74 GP -3.80 TAL 95.51 ZAP 166.86 ETS 343.24 ZAE 130.21 ETE 183.32 ZAC 78.87 ETC 164.48 CLP-167.42
   PLANE TOCENTRIC CONIC
    C3 15.408 VHL 3.925 CLA 19.94 RAL 341.04 RAC 6567.6 VEL 11.696 PTH 2.06 VHP 6.587 CPA -13.36 RAP 347.04 ECC 1.2536
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 27 17 2829.09 -28.27 83.95 205.04 91.75 2 14 26 2229.1 -27.73 75.32 90.00 19 2 56 4122.76 -2.45 167.67 198.80 61.78 20 11 39 3522.8 -6.21 161.00 100.00 3 1 21 2525.76 -29.71 61.56 204.96 93.46 3 43 27 1925.8 -28.91 52.85
                  20 11 33 3901.33
4 36 54 2226.84
20 52 30 3773.01
                                                                                                60.13 21 16 34
97.93 5 14 1
55.86 21 55 23
                                                                                                                           3301.3
                                                                                                                                           -5.16
                                                                               198.10
                                                  -1.19
                                                                150.69
      100.00
                                                                                                                                          -31.90
                                                                                                                                                          29.50
                                                                                                                          1626.8
                                                                               204.54
                                                 -33.36
                                                                 38.43
      110.00
                                                  1.92
                                                                               196.16
                                                                                                                            3173.0
                                                                                                                                           -2.57
                                                                                                                                                         132.82
                                                               139.02
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2552.7 SR 295.0 SS 695.8
CRT .9966 CRS -.9603 CST -.9727
                                                                    SGT 5133.0 SGR 361.0 SG3 184.4
RRT -.0178 RRF -.0224 RTF .8989
    TOE 1.7437 TRA -.3088 TC3-5.6450 BAU 1.1639
    RDE .2011 RRA -. 0625 RC3 .2376 FAU .03650
                                                                    5GB 5145.7 R23 .0063 R13 -.8989
                                                                                                                        LSA 2657.5 MSA 157.0 SSA 21.3
    FDE .8238 FRA .4640 FC3-2.0507 85P 16352
                                                                                                                       ELI 2569.6 EL2 24.2 ALF 6.57
                                                                    SG1 5133.0 SG2 361.0 THA 179.93
    BOE 1.7553 BRA .3151 BC3 5.6500 FSP
                                                     -610
                                                                                                                                   ARRIVAL CATE JUN 5 1966
                                                                        FLIGHT TIME 168.00
LAUNCH DATE DEC 19 1965
                                                                       DISTANCE 496.515
  HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.761 GAL -.64 AZL 86.39 HCA 246.61 SMA 122.07 ECC .20604 INC 3.6051 VI 30.269 RP 108.89 LAP -3.31 LOP 333.45 VP 36.749 GAP 10.16 AZP 91.43 TAL 182.48 TAP 69.10 RCA 96.92 APO 147.23 V2 34.803
    RC 170.040 GL 25.26 GP -3.62 TAL 92.44 TAP 167.72 ETS 343.03 TAE 130.25 ETE 183.18 TAC 81.06 ETC 164.91 CLP-168.25
   PLANETOCENTRIC CONIC
    C3 15.547 VHL 3.943 DLA 20.80 RAL 344.24 RAD 6567.6 VEL 11.702 PTH 2.06 VHP 6.730 DPA -12.29 RAP 349.16 ECC 1.2559 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           2 17 53
                                                                                                                          2267.7
                                                                                                                                         -27.97
                                                                                                                                                           78.12
                   1 30 5 2867.71
19 25 39 4088.18
                                                                 86.77
                                                                               208.72
                                                                                                90.33
        90.00
                                                 -28.32
                                                                                                         20 33 47
                                                                                                                                            -7.30
                                                                                                                                                          159.05
                                                                                                61.89
                                                                                                                            3488.2
                                                                 165.74
                                                                               202.42
                                                   -3.56
        90.00
                  3 5 15 2560.85
20 33 10 3870.27
4 42 49 2255.60
21 12 6 3748.28
                                                                                                92.09
                                                                                                            3 47 56
                                                                                                                             1960.8
                                                                                                                                           -29.22
                                                                                                                                                           55.41
                                                                               208.69
                                                 -29.83
                                                                 64.16
                                                                                                92.09 3 47 56
60.18 21 37 40
       100.00
                                                                                                                            3270.3
                                                                                                                                            -6.19
                                                                                                                                                          142.43
                                                                               201.68
       100.00
                                                  -2.24
                                                                 148.99
                                                                                                                            1655.6
                                                                                                                                           -32.32
                                                                                                                                                           31.64
                                                                                                96.65
                                                                                                             5 20 25
                                                                               208.35
       110.00
                                                 -33.61
                                                                  40.64
                                                                                                96.65 5 20 25
55.83 22 14 34
                                                                                                                          3148.3
                                                                                                                                          -3.52
                                                                                                                                                          131.53
                                                                               199.67
                                                                 137.73
       110.00
                                                     .97
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2641.1 SR 306.9 SS 699.4
CRT .9944 CRS -.9527 CST -.9752
                                                                    SGT 5193.7 SGR 371.0 SG3 179.7
    TOE 1.8147 TRA -.1373 TC3-5.6675 BAU 1.1790
                                                                    RRT .0075 RRF -.0024 RTF .9010
SGB 5206.9 R23 -.0092 R13 .9010
    ROE .2100 RRA -.0690 RC3 .2306 FAU .03461
                                                                                                                        LSA 2745.0 MSA 152.5 SSA 21.7
EL1 2658.7 EL2 32.2 ALF 6.59
           .8108 FRA .5091 FC3-1.9273 BSP 16596
                                                                    5G1 5193.7 SG2 371.0 THA .03
    BOE 1.8268 BRA .1537 BC3 5.6722 FSP -598
                                                                                                                                  ARRIVAL DATE JUN 7 1966
                                                                        FLIGHT TIME 170.00
LAUNCH DATE DEC 19 1965
                                                                       DISTANCE 502.177
    RL 147.19 LAL -.00 LOL 86.88 VL 26.711 GAL -.18 A7L 86.43 HCA 249.78 SMA 121.77 ECC .20875 INC 3.5654 V1 30.269 RP 108.87 LAP -3.35 LOP 336.62 VP 36.718 GAP 10.42 A7P 91.23 TAL 180.70 TAP 70.47 RCA 96.35 APO 147.19 V2 34.808 RC 172.148 GL 24.71 GP -3.46 7AL 89.32 ZAP 168.55 ETS 342.72 ZAE 130.30 ETE 183.05 ZAC 83.28 ETC 165.30 CLP-169.07
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 15.789 VHL 3.974 OLA 21.63 RAL 347.53 RAD 6567.6 VEL 11.712 PTH 2.06 VMP 6.881 DPA -11.21 RAP 351.29 ECC 1.2599 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2308.5
                                                                                                                                           -28.16
                   1 32 57 2908.46
19 49 1 4054.42
3 9 20 2597.68
20 55 19 3840.43
                                                                               212.60
                                                                                               88.84
                                                                                                          2 21 26
                                                                 89.75
                                                   -28.30
        90.00
                                                                                                                                             -8.35
                                                                                                                                                          157.13
                                                                                                         20 56 35
3 52 38
                                                                                                                            3454.4
                                                    -4.64
                                                                 163.85
                                                                               206.24
                                                                                                62.04
        90.00
                                                                                                                                           -29.48
                                                                                                                                                           58.12
                                                                                                                            1997.7
                                                                               212.60
                                                                                                90.65
                                                 -29.89
                                                                  66.90
       100.00
                                                                                               60.27 21 59 20
95.29 5 27 10
55.82 22 34 10
                                                                                                                            3240.4
                                                                                                                                            -7.19
                                                                                                                                                          140.77
                                                                               205.47
                                                    -3.25
                                                                 147.35
       100.00
                                                                                                                            1685.7
                                                                                                                                           -32.72
                                                                                                                                                           33.90
                   4 49 4 2285.68 -33.82
21 32 5 3725.20 .09
                                                                               212.36
                                                                  42.96
       110.00
                                                                                                                                            -4.39
                                                                                                                                                          130.32
                                                                                                                            3125.2
                                                                               203.39
                                                                 136.53
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2723.0 SR 318.7 SS 698.8
CRT .9910 CRS -.9443 CST -.9771
                                                                     SGT 5246.9 SGR 380.1 SG3 174.8
RRT .0328 RRF .0166 RTF .9023
SGB 5260.7 R23 -.0131 R13 .9023
     TOE 1.8861 TRA .0459 TC3-5.6454 BAU 1.1926
    ROE .2197 RRA -.0745 RC3 .2209 FAU .03273
FOE .7947 FRA .5563 FC3-1.7947 BSP 16813
                                                                                                                         LSA 2825.2 MSA 149.8 SSA 22.0
                                                                                                                         EL1 2741.3 ELZ 42.3 ALF 6.62
     BOE 1.8988 BRA .0875 BC3 5.6498 FSP -587
                                                                     SG1 5246.9 SG2 379.9 THA
                                                                                                          .14
                                                                         FLIGHT TIME 172.00
                                                                                                                                    ARRIVAL DATE JUN 9 1966
LAUNCH DATE DEC 19 1965
                                                                        DISTANCE 507.819
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.661 GAL .29 A7L 86.47 HCA 252.94 SMA 121.48 ECC .21172 INC 3.5273 V1 30.269 RP 108.85 LAP -3.37 LOP 339.79 VP 36.687 GAP 10.69 A7P 91.04 TAL 178.90 TAP 71.85 RCA 95.76 APO 147.20 V2 34.814 RC 174.239 GL 24.09 GP -3.31 TAL 86.15 ZAP 169.36 ETS 342.27 ZAE 130.36 ETE 182.94 ZAC 85.52 ETC 165.65 CLP-169.88
   PLANETOCENTRIC CONIC
     C3 16.145 VHL 4.018 DLA 22.43 RAL 350.89 RAD 6567.6 VEL 11.727 PTH 2.07 VHP 7.039 DPA -10.14 RAP 353.43 ECC 1.2657
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2351.0
                   1 35 57 2950.98
20 12 52 4022.02
                                                                              216.63
                                                                                               87.28
                                                                                                             2 25 8
                                                   -28.20
                                                                  92.86
        90.00
                                                                                                                                                           155.27
                                                                                                 62.21 21 19 54
                                                                                                                             3422.0
                                                                                                                                             -9.35
                                                                  162.02
                                                                                210.26
                                   4022.02
                                                    -5.68
        90.00
                                                                                                             3 57 37
                                                                                                                             2035.9
                                                                                                                                            -29.68
                                                                                                                                                           60.94
                                                                   69.74
                                                                                216.69
                                                                                                 89.16
       100.00
                     3 13 41
                                   2635.88
                                                   -29.88
                                                                                                 60.38 22 21 22
                                                                                                                                                           139.20
                                                                                                                             3212.3
                                                                                                                                             -8.11
                                                    -4.20
                                                                 145.80
                                                                                209.45
       100.00
                   21 17 49
                                   3612.35
                                                                                                                                           -33.08
-5.19
                                                                                                                                                           36.25
                                                                                                                             1716.7
                                                                                                             5 34 18
                                                                                                 93.87
                     4 55 41
                                 2316.73
                                                   -33.99
                                                                   45.37
                                                                                216.56
       110.00
                                                                                                          22 54 2
                                                                                                                             3104.3
                                                                                                 55.82
                   21 52 18
                                   3704.26
                                                                  135.44
                                                                                207.27
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACT

SGT 5296.4 SGR 388.9 SG3 170.5

RRT .0608 RRF .0449 RTF .9035

SGB 5310.7 R23 -.0103 R13 .9035

SGB 5310.7 R23 -.0103 R13 .9035

EL1 2830.7 EL2 53.6 ALF 6.63
    DIFFERENTIAL CORRECTIONS
     TOE 1.9680 TRA .2459 TC3-5.5696 BAU 1.2030
     ROE .2306 RRA -.0790 RC3 .2089 FAU .03072
     FDE .7900 FRA .6050 FC3-1.6474 BSP 16896
     BOE 1.9815 BRA .2583 BC3 5.5735 FSP -563
```

```
ARRIVAL DATE JUN 11 1966
                                                                         FLIGHT TIME 174.00
LAUNCH DATE DEC 19 1965
                                                                        DISTANCE 513.439
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.612 GAL .79 A7L 86.51 MCA 256.11 SMA 121.19 ECC .21499 INC 3.4905 VI 30.269
RP 108.83 LAP -3.39 LOP 342.97 VP 36.658 GAP 10.97 A7P 90.84 TAL 177.11 TAP 73.22 RCA 95.13 APO 147.24 VZ 34.821
RC 176.312 GL 23.41 GP -3.18 ZAL 82.95 ZAP 170.15 ETS 341.68 ZAE 130.42 ETE 182.85 ZAC 87.78 ETC 165.97 CLP-170.68
   PLANETOCENTRIC CONIC
    C3 16.626 VHL 4.077 DLA 23.18 RAL 354.32 RAD 6567.7 VEL 11.748 PTM 2.07 VMP 7.206 DPA -9.06 RAP 355.57 ECC 1.2736
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 39 9 2994.91
20 37 0 3991.50
3 18 20 2675.08
21 40 29 3786.56
5 2 44 2348.46
                                                                              220.82
                                                                                               85.69
                                                                                                            2 29 4
                                                                                                                            2394.9
                                                                  96.06
                                                                                                                                           -28.32
        90.00
                                                  -28.01
                                                                                                           21 43 31
                                                                                                                              3391.5
                                                                                                                                                            153.52
                                                                 160.30
                                                                                214.46
                                                                                                 62.41
                                                                                                                                             -10.29
        90.00
                                                   -6.64
                                                  -29.81
                                                                   72.65
                                                                                220.93
                                                                                                 87.63
                                                                                                             4 2 55
                                                                                                                             2075.1
                                                                                                                                             -29.82
                                                                                                                                                             63.85
      100.00
                                                                 144.38
                                                                                213.60
                                                                                                 60.50 22 43 36
                                                                                                                             3186.6
                                                                                                                                              -8.96
                                                                                                                                                            137.75
      100.00
                                                   -5.06
                                                                                                             5 41 53
                                                                                                                             1748.5
                                                                                                                                             -33.40
                                                                                                                                                             38.67
                                                  -34.11
                                                                   47.84
                                                                                220.93
                                                                                                 92.42
      110.00
                                                                                                 55.84 23 14 1
                                                                 134.48
                                                                                                                             3065.9
                                                                                                                                              -5.88
                                                                                                                                                            128.25
                   22 12 35
                                                                                211.33
      110.00
                                  3685.95
                                                   -1.41
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.0408 TRA .4496 TC3-5.4613 BAU 1.2147 ROE .2425 RRA -.0826 RC3 .1946 FAU .02890
                                                                     SGT 5341.5 SGR 396.5 SG3 165.6
RRT .0866 RRF .0680 RTF .9057
SGB 5356.2 R23 -.0109 R13 .9057
                                                                                                                         ST 2878.2 SR 342.8 SS 703.7
CRT .9816 CRS -.9289 CST -.9812
    FOE .7756 FRA .6473 FC3-1.5048 BSP 17120
BOE 2.0552 BRA .4571 BC3 5.4648 FSP -552
                                                                                                                         LSA 2979.1 MSA 147.2 SSA 21.9
EL1 2897.9 EL2 65.0 ALF 6.67
                                                                     SG1 5341.6 SG2 395.0 THA .37
LAUNCH DATE DEC 19 1965
                                                                         FLIGHT TIME 176.00
                                                                                                                                     ARRIVAL DATE JUN 13 1966
                                                                         DISTANCE 519.034
  HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.564 GAL 1.31 A7L 86.55 MCA 259.28 SMA 120.90 ECC .21856 INC 3.4546 VL 30.269 RP 108.81 LAP -3.39 LOP 346.14 VP 36.630 GAP 11.26 A7P 90.64 TAL 175.31 TAP 74.59 RCA 94.48 APO 147.33 VZ 34.828 RC 178.366 GL 22.67 GP -3.06 ZAL 79.74 ZAP 170.93 ETS 340.91 ZAE 130.49 ETE 182.77 ZAC 90.06 ETC 166.25 CLP-171.46
   PLANETOCENTRIC CONIC
    C3 17.245 VHL 4.153 DLA 23.87 RAL 357.79 RAD 6567.7 VEL 11.774 PTH 2.08 VHP 7.383 DPA -7.99 RAP 357.72 ECC 1.2838 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 42 36 3039.81
21 1 12 3963.43
3 23 24 2714.81
22 3 6 3763.66
        90.00
                                                  -27.74
                                                                  99.32
                                                                               225.13
                                                                                                84.08
                                                                                                             2 33 16
                                                                                                                            2439.8
                                                                                                                                            -28.27
                                                                                                                                                             90.69
                                                    -7.52
                   21 1 12
                                                                  158.71
                                                                                218.82
                                                                                                 62.62
                                                                                                           22 7 16
                                                                                                                              3363.4
                                                                                                                                                            151.89
        90.00
                                                                                                                                             -11.13
                                                  -29.66
                                                                  75.59
                                                                                225.31
                                                                                                 86.09
                                                                                                             4 8 39
                                                                                                                             2114.8
      100.00
                                                                                                                                             -29.89
                                                                                                                                                             66.80
                   22 3 6
                                                  -5.83
                                                                 143.11
                                                                                217.90
                                                                                                 60.63 23 5 49
                                                                                                                             3163.7
                                                                                                                                             -9.70
                                                                                                                                                            136.46
      100.00
                    5 10 15 2380.51
22 32 44 3670.73
                                                  -34.17
                                                                   50.34
                                                                                                 90.94
                                                                                                             5 49 56
                                                                                                                             1780.5
                                                                                                                                           -33.66
                                                                                                                                                             41.14
      110.00
                                                                                225.45
                                                                                                 55.87 23 33 54
                   22 32 44
                                                                                                                             3070.7
      110.00
                                                                 133.69
                                                                                215.52
                                                   -1.99
                                                                                                                                              -6.46
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SCT 5382.9 SGR 403.4 SG3 161.2
RRT .1139 RRF .0938 RTF .9077
SCB 5397.9 R23 -.0102 R13 .9077
                                                                                                                         ST 2941.9 SR 354.7 SS 702.6
CRT .9760 CRS -.9211 CST -.9828
    TOE 2.1187 TRA .6709 TC3-5.3040 BAU 1.2235
    ROE .2555 RRA -.0848 RC3 .1187 FAU .02708
FOE .7649 FRA .6932 FC3-1.3596 89P 17212
BOE 2.1340 BRA .6762 BC3 5.3070 FSP -534
                                                                                                                         LSA 3041.7 MSA 148.0 SSA 21.5
                                                                     SG1 5383.0 SG2 400.7 THA .49
                                                                                                                         ELI 2962.2 ELZ 76.7 ALF 6.72
                                                                         FLIGHT TIME 178.00
                                                                                                                                   ARRIVAL DATE JUN 15 1966
LAUNCH DATE DEC 19 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 524.601
    RL 147.19 LAL -.00 LOL 86.88 VL 26.516 GAL 1.85 AZL 86.58 HCA 262.45 SMA 120.62 ECC .22247 INC 3.4195 V1 30.269
RP 108.78 LAP -3.39 LOP 349.32 VP 36.603 GAP 11.57 AZP 90.45 TAL 173.51 TAP 75.96 RCA 93.79 APO 147.46 V2 34.836
RC 180.400 GL 21.86 GP -2.95 TAL 76.54 TAP 171.70 ETS 339.92 TAE 130.56 ETE 182.70 TAC 92.35 ETC 166.50 CLP-172.24
   PLANETOCENTRIC CONIC
    C3 18.018 VHL 4.245 OLA 24.50 RAL 1.28 RAD 6567.7 VEL 11.807 PTH 2.09 VHP 7.569 OPA -6.91 RAP 359.88 ECC 1.2965
    ENCH AZMTH LINCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 46 25 3085.13
21 25 13 3938.48
3 28 56 2754.59
22 25 23 3744.25
5 18 16 2412.53
22 52 32 3659.08
                                                                                             82.48 2 37 50
62.83 22 30 51
                                                                                                                                         -28.14
                                                                                                                                                       94.00
                                                                            229.54
                                                                                                                          2485.1
       90.00
                                                  -27.38
                                                                 102.58
        90.00
                                                   -8.30
                                                                 157.29
                                                                                223.31
                                                                                                                             3338.5
                                                                                                                                            -11.88
                                                                                                                                                           150.44
                                                                                                 100.00
                                                  -29.44
                                                                  78.53
                                                                                229.81
                                                                                                                             2154.6
                                                                                                                                           -29.88
                                                                                                                                                            69.75
                                                   -6.48
                                                                 142.03
                                                                                222.33
                                                                                                                             3144.3
                                                                                                                                           -10.33
                                                                                                                                                           135.36
       100.00
                                                                                                                                           -33.88
                                                  -34.18
                                                                  52.84
                                                                                230.10
                                                                                                                             1812.5
                                                                                                                                                            43.61
       110.00
                                                                133.08
                                                   -2.44
                                                                                219.83
                                                                                                           23 53 31
                                                                                                                             3059.1
                                                                                                                                            -6.90
                                                                                                                                                           126.83
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5421.9 SGR 409.3 SG3 156.8
RRT .1400 RRF .1186 RTF .9103
SGB 5437.3 R23 -.0097 R13 .9103
                                                                                                                         ST 2986.2 SR 366.1 S5 697.2
CRT .9700 CRS -.9135 CST -.9842
    TOE 2.1902 TRA .9000 TC3-5.1175 BAU 1.2333
    RDE .2697 RRA -.0859 RC3 .1614 FAU .02540
FDE .7512 FRA .7358 FC3-1.2206 8SP 17396
BDE 2.2068 BRA .9041 BC3 5.1200 FSP -522
                                                                                                                        LSA 3084.6 MSA 149.7 SSA 21.0
                                                                     SG1 5422.2 SG2 405.2 THA
                                                                                                          .61
                                                                                                                         EL1 3007.3 EL2 88.3 ALF 6.79
LAUNCH DATE DEC 19 1965
                                                                         FLIGHT TIME 180.00
                                                                                                                                    ARRIVAL DATE JUN 17 1966
                                                                        DISTANCE 530.136
   MELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.469 GAL 2.41 AZL 86.62 MCA 265.62 SMA 120.35 ECC .22675 INC 3.3848 V1 30.269 RP 108.76 LAP -3.37 LOP 352.49 VP 36.577 GAP 11.90 AZP 90.26 TAL 171.72 TAP 77.34 RCA 93.06 APO 147.64 V2 34.845 RC 182.414 GL 21.01 GP -2.86 ZAL 73.37 ZAP 172.45 ETS 338.65 ZAE 130.64 ETE 182.65 ZAC 94.65 ETC 166.72 CLP-173.01
   PLANETOCENTRIC CONIC
    C3 18.963 VHL 4.355 DLA 25.05 RAL 4.76 RAD 6567.8 VEL 11.847 PTH 2.10 VHP 7.768 DPA -5.84 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           2530.3
       90.00
                    1 50 43 3130.28
                                                  -26.94
                                                                105.61
                                                                              234.04
                                                                                                80.92
                                                                                                            2 42 53
                                                                                                                                           -27.92
                                                                                                                                                            97.29
                                                                                                           22 54 2
       90.00
                    21 48 45 3917.31
                                                   -8.96
                                                                 156.08
                                                                                227.92
                                                                                                 63.03
                                                                                                                             3317.3
                                                                                                                                            -12.51
                                                                                                                                                           149.20
                   3 35 3 2793.89
22 47 6 3728.93
5 26 50 2444.20
      100.00
                                                  -29.15
                                                                  81.42
                                                                                234.39
                                                                                                 83.06
                                                                                                            4 21 37
                                                                                                                             2193.9
                                                                                                                                            -29.80
                                                                                                                                                            72.67
                                                                                                 60.86 23 49 15
       100.00
                                                   -6.99
                                                                 141.18
                                                                                226.85
                                                                                                                             3128.9
                                                                                                                                            -10.82
                                                                                                                                                           134.49
       110.00
                                                  -34.13
                                                                  55.32
                                                                                234.65
                                                                                                 87.99
                                                                                                            6 7 34
                                                                                                                             1844.2
                                                                                                                                           -34.03
                                                                                                                                                            46.07
                                                                                                 55.91 24 12 40
      110.00
                   23 11 49
                                  3651.39
                                               -2.73
                                                                 132.68
                                                                               224.23
                                                                                                                             3051.4
                                                                                                                                            -7.18
                                                                                                                                                           126.42
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5456.5 SGR 414.4 SG3 152.5

RRT .1663 RRF .1457 RTF .9131

SGB 5472.2 R23 -.0092 R13 .9131

SGI 5456.9 SG2 408.6 THA .73
    TDE 2.2597 TRA 1.1427 TC3-4.8955 BAU 1.2417
                                                                                                                     ST 3017.3 SR 376.9 SS 690.0

CRT .9637 CRS -.9039 CST -.9854

LSA 3114.2 MSA 152.6 SSA 20.4

EL1 3039.1 EL2 99.8 ALF 6.87
    RDE .2850 RRA -.0856 RC3 .1434 FAU .02378
```

FOE .7373 FRA .7789 FC3-1.0856 BSP 17548 BOE 2.2776 BRA 1.1459 BC3 4.8976 FSP -510

```
FLIGHT TIME 182.00
                                                                                                                                 ARRIVAL DATE JUN 19 1966
LAUNCH DATE DEC 19 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 535.636
    RL 147.19 LAL -.00 LOL 86.88 VL 26.422 GAL 3.00 A7L 86.65 MCA 268.79 SMA 120.08 ECC .23143 INC 3.3505 V1 30.269 RP 108.73 LAP -3.35 LOP 355.67 VP 36.552 GAP 12.25 A7P 90.07 TAL 169.93 TAP 78.72 RCA 92.29 APO 147.87 V2 34.854 RC 184.407 GL 20.12 GP -2.77 TAL 70.24 ZAP 173.19 ETS 337.03 ZAE 130.71 ETE 182.60 ZAC 96.96 ETC 166.91 CLP-173.78
   PLANETOCENTRIC CONIC
    C3 20.103 VHL 4.484 OLA 25.52 RAL 8.23 RAO 6567.8 VEL 11.895 PTH 2.11 VHP 7.979 OPA -4.76 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 55 38 3174.59
22 11 30 3900.64
                                                                                                                        2574.6
        90.00
                                                  -26.42
                                                                108.96
                                                                             238.59
                                                                                              79.42
                                                                                                         2 48 32
                                                                                                                                        -27.61
                                                                                                                                                      100.49
        90.00
                                                   -9.47
                                                                155.12
                                                                              232.59
                                                                                               63.19 23 16 30
                                                                                                                          3300.6
                                                                                                                                         -13.00
                                                                                                                                                        148.22
                  3 41 50 2832.20
23 7 58 3718.27
       100.00
                                                  -28.80
                                                                 84.21
                                                                              239.04
                                                                                               81.63
                                                                                                       4 29 2
                                                                                                                          2232.2
                                                                                                                                         -29.66
                                                                                                                                                         75.51
                                                                                              60.94 24 9 57
86.57 6 17 11
55.92 24 31 10
                                                   -7.34
                                                                140.58
                                                                              231.45
                                                                                                                          3118.3
                                                                                                                                         -11.16
                                                                                                                                                        133.88
       100.00
                  5 35 55 2475.24
23 30 22 3647.99
                                                 -34.03
                                                                 57,74
                                                                              239.67
                                                                                                                          1875.2
                                                                                                                                         -34.13
                                                                                                                                                         48.49
       110.00
                                                                                                                                        -7.31
                                                                132.50
                                                                              228.69
                                                                                                                         3048.0
                                                                                                                                                        126.24
       110.00
                                             -2.86
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 5486.5 SGR 418.6 SG3 148.2
RRT .1925 RRF .1693 RTF .9161
                                                                                                                      ST 3033.4 SR 387.0 SS 681.2
CRT .9572 CRS -.8984 CST -.9865
    TOE 2.3257 TRA 1.3982 TC3-4.6449 BAU 1.2488
    ROE .3015 RRA -.0838 RC3 .1253 FAU .02221
                                                                    SGB 5502.4 R23 -.0082 R13 .9161
                                                                                                                     LSA 3128.9 MSA 156.4 SSA 19.7
EL1 3055.9 EL2 111.2 ALF 6.97
    FOE .7231 FRA .8215 FC3 -.9564 BSP 17708
    BOE 2.3452 BRA 1.4007 BC3 4.6465 FSP -498
                                                                   SG1 5487.1 SG2 410.7 THA .85
LAUNCH DATE DEC 19 1965
                                                                        FLIGHT TIME 184.00
                                                                                                                                  ARRIVAL DATE JUN 21 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 541.096
    RL 147.19 LAL -.00 LOL 86.88 VL 26.376 GAL 3.62 AZL 86.68 MCA 271.97 SMA 119.82 ECC .23655 INC 3.3162 V1 30.269 RP 108.70 LAP -3.31 LOP 358.85 VP 36.528 GAP 12.62 AZP 89.89 TAL 168.15 TAP 80.11 RCA 91.48 APO 148.16 V2 34.863
    RC 186.379 GL 19.19 GP -2.69 TAL 67.17 TAP 173.91 ETS 334.92 TAE 130.79 ETE 182.56 TAC 99.28 ETC 167.07 CLP-174.54
   PLANETOCENTRIC CONIC
    C3 21.461 VHL 4.633 DLA 25.92 RAL 11.65 RAD 6567.9 VEL 11.952 PTH 2.13 VHP 8.204 DPA -3.69 RAP 6.36 ECC 1.3532
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 1 19 3217.32
22 33 7 3889.25
3 49 21 2869.00
23 27 46 3712.80
5 45 34 2505.42
23 48 3 3649.15
                                                                                                                       2617.3
                                                                                             78.02 2 54 56
63.31 23 37 56
                                                                                                                                                      103.56
        nn. ne
                                                  -25.85
                                                                111.96
                                                                            243.20
                                                                                                                                        -27.24
        90.00
                                                   -9.82
                                                                154.47
                                                                              237.31
                                                                                                                           3289.3
                                                                                                                                         -13.33
                                                                                                                                                        147.55
                                                                                               80.28 4 37 10
60.98 24 29 39
85.19 6 27 19
55.92 24 48 52
       100.00
                                                  -28.41
                                                                 86.88
                                                                              243.75
                                                                                                                           2269.0
                                                                                                                                         -29.46
                                                                                                                                                         78 23
       100.00
                                                  -7.52
                                                                140.28
                                                                              236.08
                                                                                                                           3112.8
                                                                                                                                        -11.33
                                                                                                                                                        133.57
       110.00
                                                -33.88
                                                                 60.08
                                                                              244.56
                                                                                                                           1905.4
                                                                                                                                        -34.18
                                                                                                                                                         50.85
       110.00
                                                 -2.81
                                                                132.56
                                                                              233.18
                                                                                                                           3049.1
                                                                                                                                          -7.27
                                                                                                                                                        126.30
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    TOE 2.3890 TRA 1.6685 TC3-4.3688 BAU 1.2538
                                                                   SGT 5511.7 SGR 421.9 SG3 144.1
RRT .2189 RRF .1957 RTF .9190
                                                                                                                      ST 3036.3 SR 396.1 SS 671.4
CRT .9504 CRS -.8910 CST -.9875
    RDE .3192 RRA -.0805 RC3 .1075 FAU .02066
FDE .7092 FRA .8649 FC3 -.8333 BSP 17837
                                                                    SG8 5527.8 R23 -.0068 R13 .9190
                                                                                                                       LSA 3130.5 MSA 161.0 SSA 18.9
                                                                    SG1 5512.5 SG2 411.6 THA .97
    BDE 2.4102 BRA 1.6705 BC3 4.3701 FSP -486
                                                                                                                       EL1 3059.6 EL2 122.3 ALF 7.08
                                                                                                                                 ARRIVAL DATE JUN 23 1966
LAUNCH DATE DEC 19 1965
                                                                       FLIGHT TIME 186.00
                                                                      DISTANCE 546.511
   HELIOCENTRIC CONIC
   RL 147.19 LAL -.DD LOL 86.88 VL 26.331 GAL 4.27 AZL 86.72 HCA 275.14 SMA 119.56 ECC .24216 INC 3.2817 V1 30.269 RP 108.67 LAP -3.27 LOP 2.03 VP 36.505 GAP 13.02 AZP 89.71 TAL 166.37 TAP 81.52 RCA 90.61 APO 148.51 V2 34.873 RC 188.330 GL 18.24 GP -2.61 ZAL 64.18 ZAP 174.62 ETS 332.16 ZAE 130.86 ETE 182.53 ZAC 101.60 ETC 167.19 CLP-175.30
   PLANETOCENTRIC CONIC
    C3 23.068 VHL 4.803 DLA 26.22 RAL 15.01 RAD 6567.9 VEL 12.019 PTH 2.15 VHP 8.446 DPA
                                                                                                                             -2.63 RAP
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 7 57 3257.66
22 53 18 3883.91
3 57 42 2903.85
23 46 14 3712.96
                                                                                                                        2657.7
                                                                             247.83
                                                                                              76.74
                                                                                                          3 2 15
                                                                                                                                         -26.83
        90.00
                                                 -25.25
                                                               114.76
                                                                                               63.36 23 58 1
                                                                                                                          3283.9
                                                                                                                                         -13.48
                                                                              242.04
        90.00
                                                 -9.98
                                                               154.16
                                                                                                          4 46 6
                                                                                                                          2303.8
                                                                                                                                         -29.21
                                                                              248.49
                                                                                               79.03
      100.00
                                                -27.98
                                                                 89.38
                                                                                                        24 48 7
                                                                              240.72
                                                                                               60.98
                                                                                                                          3113.0
                                                                                                                                         -11.33
                                                                                                                                                       133.57
      100.00
                                                  -7.51
                                                                140.29
                                                                   12.33 249.49 83.86 6 37 58
12.87 237.69 55.90 1 9 32
MID-COURSE EXECUTION ACCURACY
                                                -33.69
                                                                                                                          1934.6
                                                                                                                                        -34.18
                                                                                                                                                        53.12
      110.00
                   5 55 43 2534.56
                                                                 62.33
                    0 8 37
                                                                132.87
                                                                                                                          3055.0
                                                                                                                                        -7.05
      110.00
                                 3655.01
                                                 -2.59
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 5533.2 SGR 424.4 SG3 140.1
RRT .2458 RRF .2229 RTF .9221
SGB 5549.4 R23 -.0051 R13 .9221
                                                                                                                      ST 3029.2 SR 404.2 SS 661.8
CRT .9433 CRS -.8836 CST -.9885
    TOE 2.4515 TRA 1.9571 TC3-4.0707 BAU 1.2557
   RDE .3379 RRA -.0755 RC3 .0906 FAU .01912
FDE .6964 FRA .9100 FC3 -.7174 BSP 17896
                                                                                                                      LSA 3122.4 MSA 166.3 SSA 18.1
                                                                                                                      EL1 3053.1 EL2 133.1 ALF 7.19
    BOE 2.4747 BRA 1.9585 BC3 4.0717 FSP -472
                                                                   SG1 5534.2 SG2 411.3 THA 1.09
                                                                       FLIGHT TIME 188.00
                                                                                                                                 ARRIVAL DATE JUN 25 1966
LAUNCH DATE OFC 19 1965
  HELIOCENTRIC CONIC
                                                                       DISTANCE 551.872
   RL 147.19 LAL -.00 LOL 86.88 VL 26.286 GAL 4.95 A7L 86.75 MCA 278.32 SMA 119.31 ECC .24830 INC 3.2469 VI 30.269 RP 108.63 LAP -3.21 LOP 5.22 VP 36.482 GAP 13.45 A7P 89.53 TAL 164.61 TAP 82.93 RCA 89.68 APO 148.93 VZ 34.884 RC 190.259 GL 17.27 GP -2.55 TAL 61.27 TAP 175.31 ETS 328.46 TAE 130.93 ETE 182.50 TAC 103.92 ETC 167.29 CLP-176.06
   PLANETOCENTRIC CONIC
    C3 24.960 VHL 4.996 DLA 26.45 RAL 18.29 RAD 6568.0 VEL 12.097 PTH 2.17 VHP 8.706 DPA -1.57 RAP 10.70 ECC 1.4108
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           3 10 37
                                                                                                                          2694.8
                                                                                                                                         -26.39
                                                                                                                                                        109.08
                    2 15 42 3294.85
                                                  -24.65
                                                               117.31
                                                                                              75.60
                                                                                                                           3285.3
                                                                                                                                                        147.31
        90.00
                   23 11 41
                                  3885.34
                                                   -9.94
                                                                154.24
                                                                              246.74
                                                                                               63.35
                                                                                                        24 16 27
                                                                                                                                         -13.44
                   4 6 54
                                                                                                                           2336.4
                                                                                                                                                         83.17
       100.00
                                  2936.37
                                                  -27.54
                                                                 91.69
                                                                              253.24
                                                                                               77.89
                                                                                                                                         -28.93
                                                                                                          1 9 6
                    0 7 6
                                                                                                                          3119.1
                                                                                                                                         -11.13
                                                                                                                                                        133.92
                                  3719.05
                                                   -7.31
                                                                140.63
                                                                              245.34
                                                                                               60.94
                                                                                                        6 49 5
1 25 14
                    6 6 22 2562.57
                                                 -33.47
                                                                 64.49
                                                                              254.43
                                                                                               82.61
                                                                                                                          1962.6
                                                                                                                                         -34.13
                                                                                                                                                        55.31
      110.00
                     0 24 8
                                 3665.62
                                                  -2.19
                                                                133.42
                                                                              242.17
                                                                                               55.88
                                                                                                                          3065.6
                                                                                                                                         -6.65
                                                                                                                                                        127.18
                                                                  MID-COURSE EXECUTION ACCURACY
SGT 5549.7 SGR 425.9 SG3 136.2
RRT .2719 RRF .2494 RTF .9255
SGB 5566.0 R23 -.0038 R13 .9255
SGI 5550.9 SG2 409.8 THA 1.20
CRBIT DETERMINATION ACCURACY
ORBIT DETERMINATION ACCURACY
ORBIT DETERMINATION ACCURACY
CRB 1 DETERMINATION ACCURACY
ST 3005.3 SR 410.8 SS 650.3
CRT .9359 CRS -.8759 CST -.9894
LSA 3097.3 MSA 172.0 SSA 17.3
SGI 5550.9 SG2 409.8 THA 1.20
EL1 3029.8 EL2 143.6 ALF 7.31
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
    TOE 2.5069 TRA 2.2588 TC3-3.7663 BAU 1.2570
    ROE .3575 RRA -.0688 RC3 .0747 FAU .01767
          .6824 FRA .9547 FC3 -.6131 BSP 18005
```

BOE 2.5322 BRA 2.2598 BC3 3.7670 FSP -460

```
ARRIVAL DATE JUN 27 1966
                                                                                       FLIGHT TIME 190.00
LAUNCH DATE DEC 19 1965
                                                                                      DISTANCE 557.171
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.242 GAL 5.67 AZL 86.79 MCA 281.50 SMA 119.06 ECC .25503 INC 3.2115 V1 30.269 RP 108.60 LAP -3.15 LOP 8.40 VP 36.461 GAP 13.91 AZP 89.36 TAL 162.87 TAP 84.37 RCA 88.70 APO 149.42 V2 34.895 RC 192.167 GL 16.30 GP -2.48 ZAL 58.47 ZAP 175.97 ETS 323.37 ZAE 130.99 ETE 182.48 ZAC 106.25 ETC 167.35 CLP-176.83
   PLANETOCENTRIC CONIC
     C3 27.178 VML 5.213 DLA 26.60 RAL 21.47 RAD 6568.1 VEL 12.188 PTH 2.19 VHP 8.985 DPA.
                                                                                                                                                        -.51 RAP 12.87 ECC 1.4473
    C3 27.178 VHL 5.213 DLA 26.60 RAL 21.47 RAD 6568.1 VEL 12.188 PTH 2.19 VHP 8.985 OPA. -.51 RAP 12.87 ECC 1.4473 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 28 3 3894.10 -9.67 154.75 251.38 63.26 24 32 57 3294.1 -13.19 147.83 100.00 4 16.58 2966.33 -27.09 93.81 258.01 76.86 5 6 25 2366.3 -28.63 85.34 100.00 0 22 25 3731.23 -6.91 141.31 249.90 60.85 1 24 36 3131.2 -10.75 134.62 110.00 6 17 26 2589.41 -33.22 66.54 259.37 81.42 7 0 35 1989.4 -34.04 57.40 110.00 0 38 26 3680.92 -1.60 134.22 246.62 55.85 1 39 47 3080.9 -6.07 127.99
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5562.1 SGR 426.5 SG3 132.3
RRT .2981 RRF .2760 RTF .9290
SGB 5578.5 R23 -.0026 R13 .9290
SGI 5563.6 SG2 407.0 THA 1.32
                                                                                                                                                ST 2970.9 SR 415.9 S5 638.7
CRT .9281 CRS -.8683 CST -.9902
     TDE 2.5592 TRA 2.5777 TC3-3.4564 BAU 1.2561
    RDE .3779 RRA -.0603 RC3 .0602 FAU .01629
FDE .6690 FRA 1.0005 FC3 -.5188 BSP 18107
                                                                                                                                                LSA 3061.9 MSA 177.9 55A 16.5
                                                                                                                                               EL1 2995.9 EL2 153.6 ALF 7.42
     BDE 2.5869 BRA 2.5784 BC3 3.4570 FSP -448
                                                                                                                                                              ARRIVAL DATE JUN 29 1966
                                                                                       FLIGHT TIME 192.00
LAUNCH DATE DEC 19 1965
                                                                                      DISTANCE 562.400
   HELIOCENTRIC CONIC
    RL 147.19 LAL -.00 LOL 86.88 VL 26.199 GAL 6.44 AZL 86.82 HCA 284.68 SHA 118.82 ECC .26241 INC 3.1753 V1 30.269 RP 108.57 LAP -3.07 LOP 11.59 VP 36.441 GAP 14.40 AZP 89.19 TAL 161.15 TAP 85.83 RCA 87.64 APO 150.00 V2 34.906 RC 194.054 GL 15.32 GP -2.43 ZAL 55.77 ZAP 176.59 ETS 316.20 ZAE 131.05 ETE 182.46 ZAC 108.57 ETC 167.38 CLP-177.60
   PLANETOCENTRIC CONIC
    C3 29.775 VHL 5.457 DLA 26.68 RAL 24.54 RAD 6568.2 VEL 12.294 PTH 2.21 VHP 9.288 DPA .53 RAP 15.04 ECC 1.4900 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 35 2 3357.45
23 42 13 3910.44
4 27 52 2993.69
0 36 0 3749.43
6 28 51 2615.14
0 51 30 3700.75
                                                                                                                   73.76
                                                                                                                                                                                       113.46
                                                                                                                                  3 30 59
                                                                                                                                                  2757.4
                                                                                                                                                                      -25.52
                                                           -23.52
                                                                             121.55
                                                                                              261.83
         90.00
                                                                                                                                                                                         148.79
                                                                                                                               24 47 24
                                                                                                                                                     3310.4
                                                                                                                                                                       -12.71
                                                                                               255.94
                                                                                                                    63.09
                                                                             155.69
                                                             -9.17
         90.00
                                                                                                                               5 17 45
1 38 29
7 12 26
1 53 11
                                                                                               262.77
                                                                                                                    75.94
                                                                                                                                                     2393.7
                                                                                                                                                                       -28.32
                                                                                                                                                                                          87.32
                                                                               95.72
                                                           -26.65
        100.00
                                                                             142.32
                                                                                               254.40
                                                                                                                    60.72
                                                                                                                                                     3149.4
                                                                                                                                                                       -10.16
                                                                                                                                                                                         135.65
        100.00
                                                             -6.30
                                                                                                                                                     2015.1
                                                                                                                                                                       -33.93
                                                                                                                                                                                          59.40
                                                                                               264.29
                                                                                                                    80.29
        110.00
                                                                               68.50
                                                            -32.94
                                                                                                                                                     3100.8
                                                                                                                                                                       -5.32
                                                                                                                                                                                         129.03
                                                                              135.25
                                                                                               251.02
                                                                                                                    55.83
        110.00
                                                               -.84
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5571.2 SGR 426.3 SG3 128.7

RRT .3250 RRF .3036 RTF .9326

SCB 5587.5 R23 -.0011 R13 .9326

SG1 5572.9 SG2 403.0 THA 1.43
                                                                                                                                                ST 2931.4 SR 419.5 S5 628.7 CRT .9200 CRS -.8607 CST -.9910
     TDE 2.6122 TRA 2.9197 TC3-3.1401 BAU 1.2501
     RDE .3991 RRA -.0498 RC3 .0473 FAU .01486
FDE .6575 FRA 1.0494 FC3 -.4321 BSP 18095
BDE 2.6425 BRA 2.9201 BC3 3.1405 FSP -434
                                                                                                                                                LSA 3021.7 MSA 183.8 SSA 15.7
EL1 2956.8 EL2 163.0 ALF 7.52
                                                                                                                                                            ARRIVAL DATE JUL 1 1966
                                                                                      FLIGHT TIME 194.00
LAUNCH DATE DEC 19 1965
                                                                                      DISTANCE 567.544
     RL 147.19 LAL -.00 LOL 86.88 VL 26.156 GAL 7.25 AZL 86.86 MCA 287.87 SMA 118.58 ECC .27053 INC 3.1379 V1 30.269 RP 108.53 LAP -2.99 LOP 14.77 VP 36.422 GAP 14.94 AZP 89.04 TAL 159.45 TAP 87.32 RCA 86.50 APO 150.66 V2 34.918 RC 195.918 GL 14.36 GP -2.38 ZAL 53.18 ZAP 177.13 ETS 305.89 ZAE 131.10 ETE 182.45 ZAC 110.88 ETC 167.38 CLP-178.39
    PLANETOCENTRIC CONIC
     C3 32.811 VHL 5.728 DLA 26.69 RAL 27.48 RAD 6568.3 VEL 12.417 PTH
                                                                                                                     2.24 VHP 9.616 OPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 46 36 3382.45
23 54 9 3934.25
4 39 29 3018.52
0 47 52 3773.41
                                                                                                                                                   2782.5
                                                                                                                                                                     -25.14
                                                                                                                   73.06
                                                                                                                                 3 42 58
                                                                             123.23
                                                                                              266.51
                                                            -23.03
                                                                                                                    62.87
                                                                                                                               24 59 43
                                                                                                                                                     3334.2
                                                                                                                                                                       -12.01
                                                                                                                                                                                        150.19
                                                                                               260.39
                                                             -8.43
                                                                             157.05
                                                                                                                   75.13 5 29 48
60.57 1 50 46
79.23 7 24 31
55.82 2 5 25
                                                                                                                                                    2418.5
                                                                                                                                                                       -28.02
                                                                                                                                                                                          89.10
                                                                                               267.51
                                                           -26.23
                                                                               97.45
                                                                                                                                                     3173.4
                                                                                                                                                                       -9.38
                                                                                                                                                                                        137.01
                                                                                               258.80
                                                             -5.50
                                                                             143.65
         100.00
                                                                                                                                                    2039.8
                                                                                                                                                                       -33.78
                                                                                                                                                                                         61.31
                                                                                               269.18
                        6 40 31 2639.81
                                                           -32.64
                                                                               70.36
        110.00
                                                                                                                                                                      -4.41
                                                                                                                                                                                        130.30
                                                              .08
                                                                                               255.34
                                                                                                                                                   3124.9
                                                                             136.51
                                         3724.89
         110.00
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 RET 5574.7 SGR 425.0 SG3 125.1

RRT .3509 RRF .3301 RTF .9365

SGB 5590.8 R23 -.0003 R13 .9365

SG1 5576.7 SG2 397.9 THA 1.54
                                                                                                                                                ST 2879.2 SR 421.1 SS 617.6
CRT .9115 CRS -.8528 CST -.9918
      TOE 2.6581 TRA 3.2772 TC3-2.8349 BAU 1.2436
     ROE .4208 RRA -.0375 RC3 .0360 FAU .01357
FOE .6451 FRA 1.0984 FC3 -.3581 BSP 18191
BOE 2.6912 BRA 3.2774 BC3 2.8351 FSP -424
                                                                                                                                                LSA 2968.6 MSA 189.6 SSA 15.0
EL1 2904.8 EL2 171.7 ALF 7.62
                                                                                                                                                              ARRIVAL DATE JUL 3 1966
                                                                                       FLIGHT TIME 196.00
                                                                                       DISTANCE 572.590
     RL 147.19 LAL -.00 LOL 86.88 VL 26.114 GAL 8.11 A7L 86.90 MCA 291.05 SMA 118.35 ECC .27948 INC 3.0992 V1 30.269 RP 108.49 LAP -2.89 LOP 17.96 VP 36.403 GAP 15.53 A7P 88.89 TAL 157.79 TAP 88.84 RCA 85.27 APO 151.43 V2 34.930 RC 197.761 GL 13.40 GP -2.33 TAL 50.72 ZAP 177.53 ETS 291.25 ZAE 131.13 ETE 182.44 ZAC 113.19 ETC 167.34 CLP-179.18
    PLANETOCENTRIC CONIC
                                                                                                                                                         2.58 RAP 19.37 ECC 1.5984
     CS 36.362 VHL 6.030 DLA 26.63 RAL 30.30 RAD 6568.4 VEL 12.559 PTH
                                                                                                                       2.28 VHP 9.973 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                3 55 58
                                                                                                                                                  2803.6
                                                                                                                                                                       -24.79
                                                                                                                                                                                        116.64
                                                                              124.63
                                                                                              271.17
                                                                                                                    72.48
                          2 59 15
                                         3403.60
                                                             -22.61
                                                                                                                                  1 13 56
                                                                                                                                                      3365.0
                                                                                                                                                                        -11.09
                                                                                                                                                                                         151.98
                                                                              158.80
                                                                                                264.72
                                                                                                                    62.61
                                                              -7.48
                          0 7 51 3964.98
                                                                                                                              1 13 56
5 42 23
2 1 28
7 36 44
2 16 29
          90.00
                                                                                                                                                     2441.1
                                                                                                                                                                       -27.72
                                                                                                                                                                                           90.71
                                                             -25.83
                                                                                99.00
                                                                                                272.22
                         4 51 42
                                         3041.06
         100.00
                                                                                                                                                     3202.8
                                                                                                                                                                        -8.43
                                                                                                                                                                                         138.66
                        0 58 5 3802.75
6 52 21 2663.57
1 13 56 3753.01
                                                                              145.27
                                                                                                263.11
                                                                                                                    60.42
                                                             -4.52
         100.00
                                                                                72.14
                                                                                                274.03
                                                                                                                    78.22
                                                                                                                                                     2063.6
                                                                                                                                                                       -33.61
                                                                                                                                                                                           63.15
                                                            -32.32
         110.00
                                                                              137.98
                                                                                                259.58
                                                                                                                    55.83
                                                                                                                                                     3153.0
                                                                                                                                                                        -3.34
                                                                                                                                                                                         131.77
                                                             1.16
         110.00
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SCI 5573.7 SGR 422.9 SG3 121.6 ST 2821.5 SR 421.0 SS 607.6
RRT .3769 RRF .3567 RTF .9405 CRI .9025 CRS -.8448 CST -.9926
SGB 5589.7 R23 .0005 R13 .9405 LSA 2910.2 MSA 195.0 SSA 14.3
SGI 5576.0 SG2 391.5 THA 1.65 ELI 2847.1 EL2 179.7 ALF 7.70
      TOE 2.7022 TRA 3.6578 TC3-2.5366 BAU 1.2332
      ROE .4430 RRA -.0231 RC3 .0263 FAU .01230
FOE .6338 FRA 1.1499 FC3 -.2929 BSP 18258
BOE 2.7383 BRA 3.6579 BC3 2.5367 FSP -413
```

ARRIVAL CATE JUL 5 1966

```
FLIGHT TIME 198.00
LAUNCH DATE DEC 19 1965
   RL 147.19 LAL -.00 LOL 86.88 VL 26.073 GAL 9.04 A7L 86.94 MCA 294.24 SMA 118.12 ECC .28935 INC 3.0588 V1 30.269
RP 108.45 LAP -2.79 LOP 21.15 VP 36.385 GAP 16.17 A7P 88.74 TAL 156.16 TAP 90.40 RCA 83.95 APO 152.30 V2 34.942
RC 199.580 GL 12.47 GP -2.29 ZAL 48.37 ZAP 177.71 ETS 272.27 ZAE 131.14 ETE 182.43 ZAC 115.48 ETC 167.26 CLP-179.99
                                                                                DISTANCE 577.519
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 40.520 VHL 6.366 DLA 26.52 RAL 32.97 RAD 6568.6 VEL 12.723 PTH 2.31 VHP 10.363 DPA 3.58 RAP 21.53 ECC 1.6669 ENCH AZMITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       72.00
                                                                                    275.81
                                                                                                                      4 9 46
                      3 12 44 3421.48
0 15 41 4001.82
5 4 22 3061.61
                                                                       125.81
                                                        -22.24
         90.00
                                                                                                                                                                            154,11
                                                                                                                                                             -9.97
                                                                                                                                           3401.8
                                                                                                            62.34
                                                                        160.88
                                                                                        268.92
                                                        -6.32
                                                                            0.41 276.89 73.76 5 55 24
7.16 267.30 60.28 2 10 41
3.85 278.82 77.26 7 49 1
9.64 263.73 55.89 2 26 26
MID-COURSE EXECUTION ACCURACY
SGT 5571.4 8.69 410.0000
         90.00
                                                                                                                                                            -27.43
                                                                                                                                                                             92.17
                                                                                                                                           2461.6
                                                                        100.41
                                                        -25.45
       100.00
                                                                                                                                           3236.9
                                                                                                                                                            -7.30
                                                                                                                                                                            140.57
                                                                        147.16
                                                        -3.37
                      1 6 45
                                      3836.92
                                                                                                                                           2086.5
                                                                                                                                                                              64.91
                                                                          73.85
                      7 4 15 2686.52
1 23 21 3784.76
                                                        -31.99
       110.00
                                                                                                                                                            -2.12
                                                                                                                                                                            133.43
                                                                                                                                          3184.8
                                                                        139.64
                                                          2.37
       110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2767.1 SR 419.2 SS 599.0
CRT .8938 CRS -.8368 CST -.9932
                                                                            SGT 5571.4 5GR 419.9 SG3 118.3
RRT .4040 RRF .3834 RTF .9446
SGB 5587.2 R23 -.0001 R13 .9446
SGI 5574.0 SG2 384.0 THA 1.75
    TOE 2.7545 TRA 4.0620 TC3-2.2492 BAU 1.2185
    ROE .4658 RRA -.0066 RC3 .0184 FAU .01106
FDE .6239 FRA 1.2045 FC3 -.2363 BSP 18323
BOE 2.7936 BRA 4.0620 BC3 2.2493 FSP -403
                                                                                                                                     LSA 2855.0 M5A 199.7 SSA 13.6
F11 2792.4 ELZ 186.3 ALF 7.75
                                                                                                                                       EL1 2792.4 ELZ 186.3 ALF
                                                                                                                                                   ARRIVAL DATE JUL 7 1966
                                                                                  FLIGHT TIME 200.00
                                                                                 DISTANCE 582.309
    RL 147.19 LAL -.00 LOL 86.88 VL 26.033 GAL 10.03 A7L 86.98 MCA 297.43 SMA 117.90 ECC .30026 INC 3.0162 VI 30.269 RP 108.41 LAP -2.68 LOP 24.35 VP 36.369 GAP 16.87 A7P 88.61 TAL 154.57 TAP 92.01 RCA 82.50 APO 153.31 V2 34.955 RC 201.376 GL 11.55 GP -2.25 TAL 46.16 TAP 177.61 ETS 252.15 TAE 131.14 ETE 182.42 TAC 117.75 ETC 167.15 CLP 179.19
   PLANETOCENTRIC CONIC
    C3 45.399 VHL 6.738 DLA 26.35 RAL 35.50 RAD 6568.7 VEL 12.914 PTH 2.35 VHP 10.791 DPA 4.56 RAP 23.69 ECC 1.7472 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        4 24 4
                                                                                                                                         2836.8
                     3 26 47 3436.81
0 21 48 4043.77
                                                                                         280.40
                                                                                                           71.60
                                                         -21.91
                                                                         126.81
         90.00
                                                                                                            62.09 1 29 12
73.18 6 8 39
60.17 2 18 33
76.34 8 1 15
                                                                                                                                            3443.8
                                                                                                                                                               -8.68
                                                                                                                                                                              156.52
                                                                                         272.99
                                                                         163.25
                                                        -4.98
         90.00
                                                                                                                                            2480.5
                                                                                                                                                             -27.14
                                                                                                                                                                               93.50
                                                                                         281.50
                                                        -25.08
                                                                         101.69
                     5 17 18 3080.52
1 13 58 3875.30
        100.00
                                                                                                                                            3275.3
                                                                                                                                                              -6.03
                                                                                                                                                                             142.71
                                                                                         271.39
                                                         -2.07
                                                                         149.27
        100.00
                                                                                                                                            2108.8
                                                                                                                                                                               66.61
                      7 16 6 2708.81
1 31 39 3819.77
                                                                                         283.53
                                                       -31.64
                                                                          75.50
        110.00
                                                                                                                                                               -.79
                                                                                                                                                                              135.26
                                                                                                                        2 35 19
                                                                                                                                            3219.8
                                                                                         267.79
                                                                                                             55.99
                                                                         141.47
        110.00
                                                         3.70
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5562.5 SGR 415.9 SG3 115.1
RRT .4294 RRF .4108 RTF .9489
SGB 5578.0 R23 .0016 R13 .9489
SGI 5565.3 SG2 375.4 THA 1.85
                                                                                                                                       ST 2701.1 SR 415.4 SS 593.0
CRT .8838 CRS -.8293 CST -.9941
     TDE 2.7949 TRA 4.4997 TC3-1.9717 BAU 1.1967
     ROE .4885 RRA .0123 RC3 .0122 FAU .00978
FOE .6167 FRA 1.2637 FC3 -.1865 BSP 18256
                                                                                                                                      LSA 2788.9 MSA 203.9 SSA 13.0
ELI 2726.0 ELZ 192.6 ALF 7.78
     BOE 2.8373 BRA 4.4998 BC3 1.9717 FSP -390
                                                                                                                                                   ARRIVAL DATE JUL 9 1966
                                                                                 FLIGHT TIME 202.00
LAUNCH DATE DEC 19 1965
                                                                                 DISTANCE 586.930
     RL 147.19 LAL -.00 LOL 86.88 VL 25.994 GAL 11.10 A7L 87.03 HCA 300.62 SMA 117.69 ECC .31236 INC 2.9711 V1 30.269 RP 108.37 LAP -2.56 LOP 27.54 VP 36.353 GAP 17.64 A7P 88.49 TAL 153.05 TAP 93.67 RCA 80.93 APO 154.45 V2 34.968 RC 203.147 GL 10.65 GP -2.21 TAL 44.07 TAP 177.23 ETS 235.17 TAE 131.10 ETE 182.41 TAC 120.00 ETC 166.99 CLP 178.34
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 51.141 VHL 7.151 DLA 26.14 RAL 37.87 RAD 6568.9 VEL 13.134 PTH 2.40 VHP 11.263 OPA
                                                                                                                                               5.53 RAP 25.83 ECC 1.8417
     ENCH AZMTH LNCH TIME LTI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        71.25 4 38 38 2850.3
61.88 1 34 36 3489.9
72.65 6 22 0 2498.1
60.11 2 25 10 3317.3
75.46 8 13 21 2130.5
66.16 2 43 11 3257.6
                                                                                                                                                         -23.98
                                                                                                                                                                          119.82
                     3 41 8 3450.26
0 26 26 4089.89
                                                                                      284.93
                                                         -21.62
                                                                        127.69
         90.00
                                                                                                                                                                             159.14
                                                                                                                                                             -7.24
                                                                                         276.93
                                                          -3.51
                                                                         165.83
          90.00
                                                                                                                                                                               94.74
                                                                                                                                                            -26.87
                       5 30 22
                                                                         102.88
                                                                                         286.03
                                       3098.10
                                                          -24.73
        100.00
                                                                                                                                                                             145.03
                                                                                                                                                             -4.62
                                       3917.27
                                                            -.65
                                                                       151.57
                                                                                         275.35
        100.00
                                                                                                                                                                              68.26
                                                                                                                                                            -32.96
                       7 27 51 2730.50
1 38 53 3857.64
                                                          -31.28
                                                                          77.09
                                                                                         288.15
        110.00
                                                                                                                                                                             137.23
                                                                                                                                                              . 5 6
                                                                         143.45
                                                                                         271.75
        110.00
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2635.6 SR 409.9 S5 587.5
CRT .8739 CRS -.8214 CST -.9949
                                                                            SGT 5548.9 SGR 411.0 SG3 112.0
RRT .4552 RRF .4373 RTF .9533
SGB 5564.1 R23 .0017 R13 .9533
SG1 5552.1 SG2 365.7 THA 1.94
     TDE 2.8396 TRA 4.9621 TC3-1.7131 BAU 1.1713
     ROE .5114 RRA .0332 RC3 .0073 FAU .00858
FOE .6095 FRA 1.3255 FC3 -.1452 BSP 18301
                                                                                                                                       LSA 2723.3 MSA 207.1 SSA 12.4
                                                                                                                                       ELI 2660.0 ELZ 197.4 ALF 7.78
      BOE 2.8853 BRA 4.9622 BC3 1.7132 FSP -380
                                                                                                                                                     APPIVAL DATE JUL 11 1966
                                                                                   FLIGHT TIME 204.00
 LAUNCH DATE DEC 19 1965
     TELIOCENIMIC CONIC

RL 147.19 LAL -.00 LOL 86.88 VL 25.955 GAL 12.26 A7L 87.08 HCA 303.82 SMA 117.48 ECC .32582 INC 2.9228 V1 30.269

RP 108.33 LAP -2.43 LOP 30.74 VP 36.338 GAP 18.50 A7P 88.37 TAL 151.58 TAP 95.40 RCA 79.20 APO 155.76 V2 34.981

RC 204.893 GL 9.78 GP -2.18 TAL 42.12 TAP 176.65 ETS 222.78 TAE 131.04 ETE 182.40 TAC 122.23 ETC 166.80 CLP 177.45
                                                                                  DISTANCE 591.348
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                                  6.46 RAP 27.96 ECC 1.9533
     C3 57.925 VHL 7.611 DLA 25.88 RAL 40.10 RAD 6569.1 VEL 13.390 PTH
                                                                                                               2.45 VHP 11.785 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                            -23.76
                                                                                                                                          2862.4
                                                                                                             70.95 4 53 13
61.74 1 38 46
                                                                                                                          4 53 13
                                                                                         289.37
          90.00 3 55 31 3462.38
                                                                          128.48
                                                          -21.35
                                                                                                                                                               -5.68
                                                                                                                                             3539.3
                                                                                          280.74
                                                                          168.59
                        0 29 47
                                        4139.26
                                                          -1.92
          90.00
                                                                                                             72.16 6 35 17
60.12 2 30 39
74.62 8 25 15
56.40 2 50 3
                                                                                                                                                              -26.60
                                                                                                                                             2514.5
                                                                                           290.47
                                                          -24.39
                                                                          103.99
                       5 43 23 3114.63
         100.00
                                                                                                                                                                               147.51
                                                                                                                                                               -3.11
                                                                                                                                             3362.2
                                                             .88
                                                                          154.04
                                                                                          279.19
                        1 24 36
                                       3962.24
         100.00
                                                                                                                                                            -32.71
                                                                                                                                            2151.7
                                                         -30.91
                                                                            78.62
                                                                                          292.57
                                                                                                                                         3298.0
                        7 39 23 2751.66
         110.00
                                                                                                                                                                2.20
                                                                          145.58
                                                                                          275.60
                                        3897.98
                                                           6.67
         110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2570.6 SR 402.6 SS 584.2

CRT .8639 CRS -.8139 CST -.9956

LSA 2658.4 MSA 209.2 SSA 11.8

EL1 2594.1 EL2 200.9 ALF 7.75
                                                                            SGT 5531.4 SGR 405.1 SG3 109.0
RRT .4809 RRF .4639 RTF .9578
SGB 5546.2 R23 .0016 R13 .9578
SGI 5534.8 SG2 355.0 THA 2.03
      TOE 2.8877 TRA 5.4585 TC3-1.4704 BAU 1.1387
      RDE .5344 RRA .0565 RC3 .0038 FAU .00736
FDE .6043 FRA 1.3924 FC3 -.1101 BSP 18336
BDE 2.9367 BRA 5.4588 BC3 1.4704 FSP -371
```

```
FLIGHT TIME 206.00
 LAUNCH DATE DEC 19 1965
                                                                                                                                         ARRIVAL DATE JUL 13 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 595.516
     RL 147.19 LAL -.00 LOL 86.88 VL 25.918 GAL 13.52 AZL 87.13 HCA 307.02 SMA 117.28 ECC .34083 INC 2.8708 V1 30.269
RP 108.29 LAP -2.29 LOP 33.93 VP 36.324 GAP 19.46 AZP 88.27 TAL 150.20 TAP 97.22 RCA 77.31 APO 157.25 V2 34.994
RC 206.614 GL 8.94 GP -2.15 ZAL 40.31 ZAP 175.93 ETS 214.12 ZAE 130.94 ETE 182.39 ZAC 124.41 EYC 166.56 CLP 176.54
    PLANETOCENTRIC CONTC
                                                                                                                                      7.37 RAP 30.06 ECC 2.0858
     C3 65.976 VHL 8.123 DLA 25.59 RAL 42.16 RAD 6569.3 VEL 13.687 PTH 2.50 VHP 12.366 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                293.71
                                                                                                                                               -23.55
                      4 9 45 3473.56
0 32 2 4191.11
                                                                   129.21
                                                                                                               5 7 38
1 41 53
                                                                                                                               2873.6
         90.00
                                                    -21.10
                                                                                                     70.67
         90.00
                                                      - .25
                                                                    171.49
                                                                                   284.41
                                                                                                     61.68
                                                                                                                                  3591.1
                                                                                                                                                  -4.03
                                                                                                                                                                 164.85
                                                                                                              6 48 24
2 35 4
8 36 51
                     5 56 14 3130.28
1 28 15 4009.63
                                                                                                                                                  -26.33
       100.00
                                                    -24.06
                                                                    105.04
                                                                                   294.80
                                                                                                     71.70
                                                                                                                                  2530.3
                                                                                                                                                                  96.98
       100.00
                                                       2.48
                                                                    156.64
                                                                                   282.90
                                                                                                     60.20
                                                                                                                                  3409.6
                                                                                                                                                   -1.50
                                                                                                                                                                 150.12
                     7 50 39 2772.29
1 50 19 3940.39
       110.00
                                                    -30.53
                                                                     80.11
                                                                                297.06
                                                                                                     73.82
                                                                                                                                  2172.3
                                                                                                                                                  -32.44
                                                                                                                                                                  71.41
                                                                       MID-COURSE EXECUTION ACCURACY
SGT 551D.0 SGP 300
       110.00
                                                     8.26
                                                                    147.83
                                                                                                                                  3340.4
                                                                                                                                                 3.82
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 5510.0 SGR 398.5 SG3 1D6.2
RRT .5066 RRF .4905 RTF .9622
SGB 5524.3 R23 .0013 R13 .9622
                                                                                                                              ST 2506.8 SR 393.7 SS 583.3
CRT .8540 CRS -.8068 CST -.9962
    TOE 2.9407 TRA 5.9936 TC3-1.2439 BAU 1.0971
    ROE .5575 RRA .0822 RC3 .0015 FAU .00612
FOE .6013 FRA 1.4652 FC3 -.0804 BSP 18343
BOE 2.9931 BRA 5.9942 BC3 1.2439 FSP -361
                                                                                                                            LSA 2595.2 MSA 210.1 55A 11.2
EL1 2529.4 EL2 203.0 ALF 7.69
                                                                        SG1 5513.7 SG2 343.3 THA 2.11
LAUNCH DATE DEC 19 1965
                                                                            FLIGHT TIME 208.00
                                                                                                                                          ARRIVAL DATE JUL 15 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 599.378
    RL 147.19 LAL -.00 LOL 86.88 VL 25.882 GAL 14.91 AZL 87.19 MCA 310.22 SMA 117.09 ECC .35763 INC 2.8141 VI 30.269 RP 108.25 LAP -2.15 LOP 37.13 VP 36.311 GAP 20.52 AZP 88.18 TAL 148.91 TAP 99.13 RCA 75.21 APO 158.96 VZ 35.007 RC 208.309 GL 8.12 GP -2.12 ZAL 38.64 ZAP 175.10 ETS 207.98 ZAE 130.79 ETE 182.38 ZAC 126.56 ETC 166.28 CLP 175.58
   PLANETOCENTRIC CONTC
    C3 75.584 VHL 8.694 OLA 25.26 RAL 44.07 RAD 6569.5 VEL 14.033 PTH 2.56 VHP 13.014 DPA 8.25 RAP 32.14 ECC 2.2439
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 23 41 3484.02 -20.86 129.88 297.92 70.41 5 21 45 2884.0 -23.35 122.09
                      0 33 18
        90.00
                                   4244.81
                                                       1.49
                                                                    174.48
                                                                                   287.95
                                                                                                     61.72
                                                                                                                1 44 3
                                                                                                                                  3644.8
                                                                                                                                                  -2.31
                                                                                                                                                                  167.85
                      6 8 48
       100.00
                                  3145.12
                                                     -23.74
                                                                    106.02
                                                                                   299.00
                                                                                                                 7 1 13
                                                                                                     71.28
                                                                                                                                  2545.1
                                                                                                                                                  -26.07
                                                                                                                                                                   98.00
                     1 30 52 4058.94
8 1 33 2792.33
       100.00
                                                      4.15
                                                                   159.35
                                                                                   286.48
                                                                                                     60.37
                                                                                                               2 38 31
8 48 6
                                                                                                                                  3458.9
2192.3
                                                                                                                                                     . 17
                                                                                                                                                                 152.82
       110.00
                                                     -30.14
                                                                                   301.31
                                                                                                     73.05
                                                                                                                 8 48 6
                                                                     81.54
                                                                                                                                                - 32 . 16
                                                                                                                                                                  72.91
       110.00
                      1 54 36
                                    3984.49
                                                      9.90
                                                                   150.20
                                                                                   282.96
                                                                                                     57.11
                                                                                                                 3 1 0
                                                                                                                                  3384.5
                                                                                                                                                    5.50
                                                                                                                                                                 143.67
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 5484.9 SGR 390.9 SG3 103.5
RRT .5321 RRF .5171 RTF .9667
SGB 5498.8 R23 .0009 R13 .9667
SGI 5488.9 SG2 330.7 THA 2.18
                                                                                                                              ST 2444.9 SR 383.3 SS 585.2
CRT .8442 CRS -.8001 CST -.9968
    TOE 3.0004 TRA 6.5729 TC3-1.0341 BAU 1.0450
    ROE .5804 RRA .1104 RC3 .0003 FAU .00483
FOE .6008 FRA 1.5451 FC3 -.0553 BSP 18334
BOE 3.0561 BRA 6.5738 BC3 1.0341 FSP -352
                                                                                                                            LSA 2534.4 MSA 209.8 55A 10.6
EL1 2466.4 EL2 203.7 ALF 7.59
LAUNCH DATE DEC 19 1965
                                                                           FLIGHT TIME 210.00
                                                                                                                                        ARRIVAL DATE JUL 17 1966
   HELTOCENTRIC CONTC
                                                                          DISTANCE 602.858
    RL 147.19 LAL -.00 LOL 86.88 VL 25.847 GAL 16.43 AZL 87.25 MCA 313.42 SMA 116.90 ECC .37650 INC 2.7518 V1 30.269 RP 108.21 LAP -2.00 LOP 40.34 VP 36.299 GAP 21.72 AZP 88.11 TAL 147.73 TAP 101.15 RCA 72.89 APO 160.91 V2 35.020 RC 209.976 GL 7.33 GP -2.09 ZAL 37.12 ZAP 174.17 ETS 203.50 ZAE 130.59 ETE 182.36 ZAC 128.64 EYC 165.95 CLP 174.56
   PLANETOCENTRIC CONIC
    C3 87.126 VHL 9.334 OLA 24.90 RAL 45.80 RAO 6569.7 VEL 14.439 PTH 2.62 VHP 13.743 OPA 9.10 RAP 34.18 ECC 2.4339
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                70.17 5 35 25
61.86 1 45 18
70.88 7 13 39
60.63 2 41 1
72.33 8 58 55
57.61 3 5 7
                     4 37 11 3493.82
0 33 38 4299.80
                                                                              301.98
        90.00
                                                    -20.64
                                                                   130.51
                                                                                                                                2893.8
                                                                                                                                                              122.74
        90.00
                                                      3.26
                                                                   177.55
                                                                                  291.34
                                                                                                                                 3699.8
                                                                                                                                                   -.53
       100.00
                     6 20 59 3159.16
                                                                                  303.05
                                                    -23.43
                                                                   106.95
                                                                                                                                 2559.2
                                                                                                                                                 -25.82
                                                                                                                                                                 98.97
                    1 32 32 4109.68
       100.00
                                                      5.85
                                                                   162.16
                                                                                  289.91
                                                                                                                                 3509.7
                                                                                                                                                  1.89
                                                                                                                                                                155.60
       110.00
                   8 12 3 2811.68
1 57 57 4029.93
                                                    -29.75
                                                                     82.91
                                                                                  305.40
                                                                                                                                 2211.7
                                                                                                                                                -31.87
                                                                                                                                                                 74.35
                                                                   152.66
       110.00
                                                    11.57
                                                                                  286.45
                                                                                                                                 3429.9
                                                                                                                                                   7.21
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       RRT .5579 RRF .5439 RTF .9710
SGB 5471.2 R23 .0004 R13 .9710
SGI 5462.0 SGZ 317.3 THA 2.25
    TOE 3.0723 TRA 7.2051 TC3 -.8397 BAU .9781
                                                                                                                            57 2387.1 SR 371.5 SS 590.7
    ROE .6035 RRA .1413 RC3 -.0000 FAU .00341
                                                                                                                            CRT .8350 CRS -.7944 CST -.9974
                                                                                                                            LSA 2478.3 MSA 208.0 SSA 10.0
EL1 2407.3 EL2 202.7 ALF 7.46
    FOE .6039 FRA 1.6340 FC3 -.0339 BSP 18230
    BOE 3.1310 BRA 7.2065 BC3 .8397 FSP
                                                        -342
LAUNCH DATE DEC 19 1965
                                                                           FLIGHT TIME 212.00
                                                                                                                                        ARRIVAL DATE JUL 19 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 605.859
   RL 147.19 LAL -.00 LOL 86.88 VL 25.813 GAL 18.12 ATL 87.32 MCA 316.62 SMA 116.72 ECC .39777 INC 2.6825 V1 30.269 RP 108.17 LAP -1.84 LOP 43.54 VP 36.288 GAP 23.08 ATP 88.05 TAL 146.70 TAP 103.32 RCA 70.29 APO 163.15 V2 35.034 RC 211.617 GL 6.56 GP -2.06 ZAL 35.75 ZAP 173.16 ETS 200.12 ZAE 130.32 ETE 182.35 ZAC 130.67 ETC 165.58 CLP 173.48
  PLANETOCENTRIC CONIC
   C3 101.091 VHL 10.054 DLA 24.50 RAL 47.36 RAO 6570.0 VEL 14.914 PTH 2.69 VHP 14.567 DPA 9.90 RAP 36.17 ECC 2.6637
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                                                             5 48 34
                                                                               305.86
                    4 50 12 3502.87
0 33 5 4355.65
       90.00
                                                    -20.43
                                                                   131.09
                                                                                                69.95
                                                                                                                                 2902.9
                                                                                                                                             -22.98 123.35
       90.00
                                                     5.04
                                                                   180.68
                                                                                  294.56
                                                                                                    62.10
                                                                                                                1 45 41
                                                                                                                                 3755.6
                                                                                                                                                  1.27
                                                                                                                                                                174.03
      100.00
                    6 32 44 3172.28
1 33 14 4161.47
                                                    -23.13
                                                                   107.81
                                                                                  306.91
                                                                                                    70.52
                                                                                                                7 25 36
                                                                                                                                 2572.3
                                                                                                                                                 -25.58
                                                                                                                                                                  99.87
                                                                                                               7 25 36
2 42 36
      100.00
                                                      7.57
                                                                   165.04
                                                                                  293.19
                                                                                                    61.00
                                                                                                                                 3561.5
                                                                                                                                                   3.64
                                                                                                                                                                158.45
                    8 22 5 2830.16
2 0 22 4076.36
                                                   -29.36
      110.00
                                                                    84.21
                                                                                  309.29
                                                                                                    71.65
                                                                                                                9 9 15
                                                                                                                                 2230.2
                                                                                                                                                -31.58
                                                                                                                                                                 75.71
                                                                                                                3 8 19
      110.00
                                                    13.25
                                                                   155.21
                                                                                  289.80
                                                                                                    58.20
                                                                                                                                 3476.4
                                                                                                                                                  8.95
                                                                                                                                                                148.75
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5424.2 SGR 3T3.2 SG3 98.4

RRT .5829 RRF .5701 RTF .9752

SGB 5437.0 R23 -.0002 R13 .9752

SGI 5428.6 SG2 303.0 THA 2.30
                                                                                                                           5T 2328.9 SR 358.4 SS 598.7
CRT .8261 CRS -.7891 CST -.9979
LSA 2422.6 MSA 204.8 SSA 9.5
    TOE 3.1514 TRA 7.8898 TC3 -.6640 BAU .8974
   ROE .6263 RRA .1745 RC3 .0003 FAU .00191
FOE .6091 FRA 1.7316 FC3 -.0164 BSP 18219
BOE 3.2130 BRA 7.8917 BC3 .6640 FSP -334
```

EL1 2347.8 EL2 200.3 ALF 7.30

ARRIVAL DATE JUL 21 1966

```
LAUNCH DATE DEC 19 1965
                                                                                           DISTANCE 608.251
    RE 147.19 EAL -.00 EOL 86.88 VE 25.782 GAE 20.00 A7E 87.40 MCA 319.83 SHA 116.56 ECC .42186 INC 2.6043 VI 30.269
RP 108.13 EAP -1.68 EOP 46.74 VP 36.278 GAP 24.63 A7P 88.01 TAL 145.83 TAP 105.66 RCA 67.39 APO 165.73 V2 35.047
RC 213.230 GE 5.81 GP -2.04 7AL 34.56 7AP 172.05 ETS 197.48 ZAE 129.96 ETE 182.33 ZAC 132.61 ETC 165.17 CLP 172.31
   HELIOCENTRIC CONIC
     C3 118.129 VHL 10.869 DLA 24.08 RAL 48.74 RAD 6570.2 VEL 15.475 PTH 2.76 VHP 15.503 DPA 10.66 RAP 38.09 ECC 2.9441
    PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        1 32 59 4213.92

8 31 35 2847.52

2 1 50 4123.45
                                                                                                    309.53
                                                                -20.24
                                                                                 131.61
          90.00
                                                                                                                                     1 45 10
7 37 1
2 43 13
9 19 2
3 10 33
                                                                                                                                                                                   3.08
                                                                                                                                                                                                    177.18
                                                                                                                                                              3812.0
                                                                                                                          62.45
                                                                                  183.86
                                                                                                    297.61
                                                                  6.83
           90.00
                                                                                                                                                                                                    100.69
                                                                                                                                                                                 -25.35
                                                                                                                           70.19
                                                                                                                                                              2584.3
                                                                                                     310.55
                                                                -22.86
                                                                                   108.60
         100.00
                                                                                                                                                                                                   161.35
                                                                                                                                                                                   5.40
                                                                                                                                                              3613.9
                                                                                                                          61.46
                                                                   9.29
                                                                                  167.98
                                                                                                     296.29
         100.00
                                                                                                                                                                                 -31.29
                                                                                                                                                             2247.5
                                                                                                                           71.03
                                                                                    85.42
                                                                                                     312.95
                                                                -28.98
         110.00
                                                                                                                                                                                  10.69
                                                                                                                                                             3523.5
                                                                                                                           58.88
                                                                                                    292.99
                                                                                  157.83
                                                                14.92
         110.00
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2273.6 SR 344.1 S5 610.8
CRT .8181 CR5 -.7848 CST -.9983
                                                                                       SGT 5386.8 SGR 363.1 SG3 96.1
RRT .6077 RRF .5960 RTF .9792
      TOE 3.2459 TRA 8.6402 TC3 -.5041 BAU .7960
      RDE .6491 RRA .2104 RC3 .0012 FAU .00021
                                                                                                                                                         LSA 2370.7 MSA 200.2 SSA
                                                                                       SGB 5399.0 R23 -.0009 R13 .9792
     FOE .6183 FRA 1.8412 FC3 -.0015 BSP 18178
BDE 3.3102 BRA 8.6427 BC3 .5041 FSP -326
                                                                                                                                                         EL1 2291.1 EL2 196.4 ALF 7.11
                                                                                        5G1 5391.3 SG2 288.1 THA 2.35
                                                                                                                                                                       ARRIVAL DATE JUL 23 1966
                                                                                             FLIGHT TIME 216.00
 LAUNCH DATE DEC 19 1965
     RE 147.19 LAL -.00 LOL 86.88 VL 25.752 GAL 22.12 A7L 87.49 MCA 323.04 SMA 116.40 ECC .44923 INC 2.5149 VI 30.269
RP 108.09 LAP -1.51 LOP 49.95 VP 36.270 GAP 26.40 A7P 87.99 TAL 145.17 TAP 108.21 RCA 64.11 APO 168.69 V2 35.060
RC 214.816 GL 5.09 GP -2.02 TAL 33.55 TAP 170.83 ETS 195.37 TAE 129.51 ETE 182.30 TAC 134.45 ETC 164.72 CLP 171.05
                                                                                             DISTANCE 609.863
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 139.110 VHL 11.794 DLA 23.62 RAL 49.91 RAD 6570.5 VEL 16.138 PTH 2.84 VHP 16.574 DPA 11.38 RAP 39.94 ECC 3.2894
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ LONG INJ RT ASC INJ AZMTH INJ LONG INJ RT ASC INJ AZMTH INJ LONG INJ RT ASC INJ R
                                                                                                                              2.84 VHP 16.574 DPA 11.38 RAP 39.94 ECC 3.2894
                                                                                                                           69.60 6 13 0
                                                                                                    312.94
                                                                 -20.08
                                                                                   132.05
           90.00
                            5 14 22
                                           3517.89
                                                                                                                                                                                                     180.35
                                                                                                                                                                                     4.89
                                                                                                                                           1 43 41
                                                                                                                                                               3868.5
                                                                                                      300.45
                                                                                                                            62.91
                                                                   8.59
                                                                                   187.07
                            0 29 13
                                            4468.47
                                                                                                                           69.91 7 47 48
62.03 2 42 49
70.46 9 28 13
59.67 3 11 47
           90.00
                                                                                                                                                                                                     101.41
                                                                                                                                                                                   -25.14
                                                                                                                                                               2594.9
                                                                                                      313.95
                                                                 -22.61
                                                                                   109.29
                                           3194.87
                          6 54 33
          100.00
                                                                                                                                                                                     7.16
                                                                                                                                                               3666.7
                                                                                                     299.19
                                                                  10.99
                                                                                   170.98
                                           4266.73
                           1 31 43
          100.00
                                                                                                                                                                                                       78.14
                                                                                                                                                                                 -31.01
                                                                                                                                                               2263.4
                            8 40 29 2863.45
2 2 16 4170.91
                                                                                                     316.35
                                                                 -28.62
                                                                                     86.52
          110.00
                                                                                                                                                                                   12.42
                                                                                                                                                               3570.9
                                                                                   160.52
                                                                                                     295.98
                                                                  16.57
          110.00
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 2220.7 SR 328.8 SS 621.4
                                                                                        SGT 5345.3 SGR 352.1 SG3 93.9
RRT .6320 RRF .6215 RTF .9828
       TOE 3.3599 TRA 9.4656 TC3 -.3596 BAU .6688
                                                                                                                                                          CRT .8112 CRS -.7815 CST -.9987
       RDE .6720 RRA .2487 RC3 .0026 FAU-.00178
FDE .6320 FRA 1.9648 FC3 .0111 BSP 18115
                                                                                                                                                          LSA 2322.8 MSA 194.2 SSA 8.4
                                                                                        SGB 5356.8 R23 -.0016 R13 .9828
                                                                                                                                                          EL1 2236.8 EL2 190.9 ALF
                                                                                                                                                                                                         6.90
                                                                                        SG1 5349.9 SG2 272.7 THA 2.39
       BDE 3.4264 BRA 9.4689 BC3 .3596 FSP -318
                                                                                                                                                                       ARRIVAL DATE JUL 25 1966
                                                                                             FLIGHT TIME 218.00
 LAUNCH DATE DEC 19 1965
      RL 147.19 LAL -.00 LOL 86.88 VL 25.726 GAL 24.52 AZL 87.59 HCA 326.25 SMA 116.26 ECC .48045 INC 2.4111 VI 30.269
RP 108.05 LAP -1.34 LOP 53.16 VP 36.264 GAP 28.45 AZP 87.99 TAL 144.77 TAP 111.02 RCA 60.40 APO 172.12 VZ 35.073
RC 216.375 GL 4.39 GP -1.99 ZAL 32.75 ZAP 169.47 ETS 193.63 ZAE 128.93 ETE 182.27 ZAC 136.18 ETC 164.24 CLP 169.66
                                                                                             DISTANCE 610.467
     HELIOCENTRIC CONIC
       C3 165.207 VHL 12.853 DLA 23.13 RAL 50.86 RAO 6570.8 VEL 16.927 PTH 2.92 VHP 17.809 DPA 12.03 RAP 41.67 ECC 3.7189
      PLANETOCENTRIC CONIC
       ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 25 25 3523.15 -19.95 132.39 316.07 69.48 6 24 8 2923.2 -22.57 124.69
                                                                                                                      69.48 6 24 B
63.49 1 41 9
                                                                                                      303.06
                                                                                   190.31
                                            4524.90
                                                                  10.32
                             0 25 44
                                                                                                                                      7 57 54
2 41 20
            90.00
                                                                                                                                                                                                     102.00
                                                                                                                                                               2603.7
                                                                                                                                                                                   -24.97
                                                                                                      317.05
                                                                                                                            69.68
                          7 4 30 3203.66
1 29 20 4319.63
                                                                  -22.40
                                                                                  109.86
           100.00
                                                                                                                                                                                                     167.25
                                                                                                                                                               3719.6
                                                                                                                                                                                    8.90
                                                                                                                            62.69
                                                                                                      301.85
                                                                                  174.02
                                                                  12.66
                                                                                                                                       9 36 41
           100.00
                                                                                                                                                                                                      79.16
                                                                                                                                                               2277.6
                                                                                                                                                                                  -30.76
                                                                                                                            69.97
                                                                                                      319.44
                           8 48 44 2877.57
2 1 36 4218.48
                                                                  -28.30
                                                                                      87.49
           110.00
                                                                                                                                                               3618.5
                                                                                                                                                                                                     156.50
                                                                                                                                                                                   14.13
                                                                                                                            60.54
                                                                                                                                           3 11 54
                                                                                                      298.75
                                                                                    163.26
                                                                  18.19
           110.00
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 2171.2 SR 312.8 SS 649.5
CRT .8058 CRS -.7797 CST -.9990
                                                                                         SGT 5300.5 SGR 340.4 SG3 91.8
RRT .6558 RRF .6466 RTF .9862
SGB 5311.4 R23 -.0023 R13 .9862
       TOE 3.5011 TRAID.3792 TC3 -.2295 BAU .5070
       RDE .6953 RRA .2895 RC3 .0042 FAU-.00419
FDE .6519 FRA 2.1057 FC3 .0220 BSP 17959
BOE 3.5694 BRA10.3832 BC3 .2295 FSP -309
                                                                                                                                                          LSA 2280.1 MSA 186.9 SSA
                                                                                                                                                                                                            7.8
                                                                                                                                                           EL1 2185.9 EL2 184.0 ALF
                                                                                                                                                                                                           6.67
                                                                                         SG1 5305.2 SG2 256.7 THA 2.42
                                                                                                                                                                         ARRIVAL DATE JUL 27 1966
                                                                                               FLIGHT TIME 220.00
  LAUNCH DATE DEC 19 1965
                                                                                               DISTANCE 609.753
       RE 147.19 LAL -.00 LOL 86.88 VL 25.702 GAL 27.27 AZL 87.71 MCA 329.47 SMA 116.14 ECC .51615 INC 2.2882 VI 30.269
RP 108.01 LAP -1.16 LOP 56.37 VP 36.259 GAP 30.84 AZP 88.03 TAL 144.69 TAP 114.15 RCA 56.19 APO 176.08 V2 35.086
RC 217.906 GL 3.72 GP -1.97 ZAL 32.19 ZAP 167.96 ETS 192.17 ZAE 128.20 ETE 182.23 ZAC 137.75 ETC 163.75 CLP 168.12
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 198.025 VHL 14.072 OLA 22.60 RAL 51.56 RAD 6571.1 VEL 17.870 PTH 3.00 VHP 19.241 OPA 12.62 RAP 43.27 ECC 4.2590
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       318.85
                                                                                     132.59
                      5 35 40 3526.27
0 21 3 4581.10
                                                                   -19.88
                                                                                                                                                                                                      186.72
                                                                                                                                                                                      8.44
                                                                                                                                                                 3981.1
                                                                                                                                            1 37 24
                                                                                                       305.38
                                                                                                                              64.16
                                                                                     193.58
                                                                   12.01
                                                                                                                                                                                                       102.44
                                                                                                                                                                                    -24.84
                                                                                                                                            8 7 12
                                                                                                                                                                 2610.2
                                                                                                        319.81
                                                                                                                              69.51
                                                                                     110.28
                           7 13 42 3210.18
                                                                   -22.25
                                                                                                                                                                                                      170.23
                                                                                                                                                                                    10.61
                                                                                                                                            2 38 34
                                                                                                                                                                 3772.4
                                                                                                                              63.46
                                                                                     177.09
                                                                                                        304.23
                             1 25 42
                                             4372.42
                                                                  14.29
           100.00
                                                                                                                                                                                                        80.01
                                                                                                                                            9 44 23
                                                                                                                                                                 2289.4
                                                                                                                                                                                   -30.54
                                                                                                        322.18
                                                                                                                              69.57
                                                                                       88.30
                                                                 -28.02
                            8 56 13 2889.43
           110.00
                                                                                                                                                                 3665.9
                                                                                                                                                                                    15.79
                                                                                                                                                                                                       159.16
                                                                                                                                            3 10 46
                                                                                                                             61.52
                                                                                     166.05
                                                                                                     301.26
           110.00
                             1 59 40
                                             4265.93
                                                                  19.75
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 2121.2 SR 295.9 SS 677.2
CRT .8017 CRS -.7789 CST -.9992
                                                                                          SGT 5248.1 SGR 327.6 SG3 89.9
RRT .6784 RRF .6703 RTF .9892
         TOE 3.6681 TRAIL.3845 TC3 -.1151 BAU .3050
        ROE .7188 RRA .3319 RC3 .0059 FAU-.00712
FOE .6776 FRA 2.2654 FC3 .0311 8SP 17887
BOE 3.7379 BRA11.3893 BC3 .1152 FSP -303
                                                                                         568 5258.3 R23 -.0030 R13 .9892
SG1 5252.8 SG2 240.5 THA 2.43
                                                                                                                                                           LSA 2239.1 MSA 178.3 SSA 7.2
                                                                                                                                                        EL1 2134.5 EL2 175.8 ALF 6.43
```

FLIGHT TIME 214.00

Ē

```
LAUNCH DATE DEC 20 1965
                                                                        FLIGHT TIME 70.00
                                                                                                                                  ARRIVAL DATE FEB 28 1966
    HELIOCENTRIC CONIC
                                                                        DISTANCE 199.275
     RL 147.18 LAL .00 LOL 87.90 VL 28.578 GAL -11.89 AZL 86.69 MCA 91.06 SMA 134.50 ECC .22573 INC 3.3133 VI 30.271
RP 107.72 LAP 3.31 LOP 178.97 VP 38.437 GAP -6.23 AZP 90.06 TAL 233.99 TAP 325.05 RCA 104.14 APO 164.86 V2 35.181
RC 60.133 GL 14.56 GP 4.88 ZAL 153.66 ZAP 35.16 ETS 351.76 ZAE 156.51 ETE 349.04 ZAC 58.48 ETC 165.00 CLP -34.86
    PLANETOCENTRIC CONIC
     C3 41.358 VML 6.431 OLA -7.53 RAL 289.61 RAD 6568.6 VEL 12.756 PTH 2.32 VMP 5.315 DPA -11.83 RAP 325.88 ECC 1.6806
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 43 37 2159.24
11 48 22 5274.38
3 1 21 1908.50
13 13 20 5000.36
4 1 20 1720.69
14 29 50 4760.93
         90.00
                                                  -18.19
                                                                 38.01
                                                                              161.38
                                                                                            112.08
                                                                                                          2 19 37
                                                                                                                          1559.2
                                                                                                                                        -15.03
                                                                                                                                                         30.75
         90.00
                                                   27.01
                                                                238.52
                                                                               166.50
                                                                                               81.16
                                                                                                         13 16 16
                                                                                                                           4674.4
                                                                                                                                          25.51
                                                                                                                                                        230.17
       100.00
                                                  -19.46
                                                                 19.01
                                                                               160.82
                                                                                              113.15
                                                                                                           3 33 9
                                                                                                                           1308.5
                                                                                                                                         -15.16
                                                                                                                                                         11.77
       100.00
                                                  28.37
                                                                218.11
                                                                               166.25
                                                                                               80.16 14 36 40
                                                                                                                           4400.4
                                                                                                                                         26.72
                                                                                                                                                        209.70
                                                                                              116.15 4 30 1
77.33 15 49 11
       110.00
                                                  -22.84
                                                                               159.16
                                                                                                                           1120.7
                                                                                                                                         -19.14
                                                                                                                                                        355.91
       110.00
                                                   32.02
                                                                199.09
                                                                              165.41
                                                                                                                           4160.9
                                                                                                                                          29.94
                                                                                                                                                        190.49
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    SGT 478.7 SGR 392.1 SG3 202.1
RRT .0541 RRF -.1743 RTF -.3498
     TOE -.1443 TRA -.3639 TC3 .2528 BAU .1409
                                                                                                                      ST 162.0 SR 382.8 SS 245.1
CRT .7548 CRS .8442 CST .3033
LSA 453.4 MSA 163.5 SSA 22.6
     ROE -.4288 RRA .0869 RC3 -.0321 FAU .07650
     FDE .4859 FRA-1.1354 FC3-1.6014 BSP 950
                                                                    SGB 618.8 R23 -.1173 R13 -.3644
     BDE .4525 BRA .3741 BC3 .2548 FSP
                                                                    SG1 480.1 SG2 390.4 THA 7.53
                                                      -564
                                                                                                                       EL1 403.2 EL2 100.9 ALF 71.05
LAUNCH DATE DEC 20 1965
                                                                        FLIGHT TIME 72.00
                                                                                                                                  ARRIVAL DATE MAR 2 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 206.000
    RL 147.18 LAL .00 LOL 87.90 VL 28.644 GAL -11.79 AZL 86.72 HCA 94.29 SHA 135.01 ECC .22249 INC 3.2750 V1 30.271
RP 107.75 LAP 3.27 LOP 182.20 VP 38.477 GAP -5.47 AZP 90.25 TAL 234.85 TAP 329.15 RCA 104.97 APO 165.05 V2 35.171
RC 62.133 GL 14.57 GP 5.23 ZAL 154.08 ZAP 39.36 ETS 352.26 ZAE 158.45 ETE 349.87 ZAC 57.45 ETC 165.10 CLP -39.07
   PLANETOCENTRIC CONIC
    C3 40.338 VHL 6.367 DLA -7.58 RAL 289.10 RAD 6568.6 VEL 12.724 PTH
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
                                                                                                 2.31 VHP 4.985 DPA -11.80 RAP 324.83 ECC 1.6672
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     1 42 1 2152.49
                                                  -18.01
                                                                37.59
                                                                             160.53
                                                                                            112.22
                                                                                                           2 17 53
                                                                                                                         1552.5
                                                                                                                                        -14.84
                                                                                                                                                         30.35
        90.00
                    11 45 56
                                 5271.02
                                                  26.98
                                                                238.28
                                                                              165.64
                                                                                               81.04
                                                                                                         13 13 47
                                                                                                                           4671.0
                                                                                                                                          25.46
                                                                                                                                                        229.94
                 2 59 43 1901.83
13 10 55 4996.91
                                                 -19.28
                                                                                            113.30 3 31 25
80.03 14 34 12
116.32 4 28 12
77.18 15 46 46
       100.00
                                                                 18.60
                                                                              159.97
                                                                                                                           1301.8
                                                                                                                                         -15.96
                                                                                                                                                         11.38
       100.00
                                                 28.33
                                                                217.86
                                                                              165.38
                                                                                                                           4396.9
                                                                                                                                          26.66
                                                                                                                                                       209,46
                 3 59 38 1714.21
14 27 29 4757.30
       110.00
                                                 -22.65
                                                                 2.69
                                                                              158.30
                                                                                                                                         -18.93
                                                                                                                                                        355.53
       110.00
                                                  31.96
                                                                198.82
                                                                              164.54
                                                                                                                          4157.3
                                                                                                                                          29.87
                                                                                                                                                        190.24
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
    TOE -.1353 TRA -.3782 TC3 .2349 BAU .1279
                                                                                                                      ST 159.7 SR 383.5 SS 261.4
CRT .7186 CRS .8421 CST .2470
                                                                   SGT 471.3 SGR 392.8 SG3 228.6
RRT .0484 RRF -.2063 RTF -.2811
    ROE - .4253 RRA .0916 RC3 - .0239 FAU .08532
    FOE .5440 FRA-1.2932 FC3-1.8222 BSP 849
BDE .4463 BRA .3891 BC3 .2361 FSP -648
                                                                   5GB 613.5 R23 -.1618 R13 -.3001
                                                                                                                      LSA 459.1 MSA 172.3 SSA
                                                                                                                                                           22.5
                                                                                                                      EL1 401.7 EL2 106.1 ALF 72.05
                                                                   5G1 472.6 5G2 391.3 THA 7.39
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 74.00
                                                                                                                                ARRIVAL DATE HAR 4 1966
   HELIOCENTRIC CONTC
                                                                       DISTANCE 212.688
    RL 147.18 LAL .00 LOL 87.90 VL 28.696 GAL -11.69 AZL 86.76 MCA 97.53 SMA 135.43 ECC .21968 INC 3.2363 V1 30.271
RP 107.78 LAP 3.21 LOP 185.44 VP 38.506 GAP -4.75 AZP 90.42 TAL 235.56 TAP 333.08 RCA 105.68 APO 165.18 V2 35.160
RC 64.180 GL 14.57 GP 5.60 ZAL 154.42 ZAP 43.79 ETS 352.72 ZAE 160.72 ETE 350.82 ZAC 56.20 ETC 165.21 CLP -43.50
   PLANETOCENTRIC CONIC
    C3 39.783 VML 6.307 DLA -7.64 RAL 288,70 RAD 6568.5 VEL 12.694 PTH 2.31 VHP 4.688 DPA -11.80 RAP 323.55 ECC 1.6547
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          112.36 2 16 37
.80.94 13 11 41
                  1 40 51 2145.90
11 43 53 5268.11
2 58 32 1895.34
13 6 54 4993.90
                                                                          159.80
       90.00
                                                 -17.84
                                                                37.18
                                                                                                         2 16 37
                                                                                                                        1545.9
                                                                                                                                     -14.66
                                                                                                                                                       29.95
        90.00
                                                  26.94
                                                               238.07
                                                                             164.90
                                                                                                                         4668.1
                                                                                                                                        25.42
                                                                                                                                                      229.73
      100.00
                                                -19.10
                                                                18.20
                                                                          159.24
                                                                                            113.44 3 30 7
                                                                                                                         1295.3
                                                                                                                                       -15.77
                                                                                                                                                       10.99
      100.00
                                                  28.29
                                                               217.65
                                                                             164.65
                                                                                              79.92 14 32 8
                                                                                                                         4393.9
                                                                                                                                        26.61
                                                                                                                                                      209.25
                  3 58 23 1707.93
14 25 32 4754.08
      110.00
                                                 -22.46
                                                                 2.31
                                                                             157.57
                                                                                                         4 26 51
                                                                                             116.48
                                                                                                                         1107.9
                                                                                                                                       -18.72
                                                                                                                                                      345.17
      110.00
                                                                                              77.05 15 44 46
                                                  31.91
                                                               198.58
                                                                             163.60
                                                                                                                         4154.1
                                                                                                                                        29.80
                                                                                                                                                      190.01
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                    ST 156.6 SR 383.5 SS 276.9
CRT .6628 CRS .8394 CST .1657
LSA 463.6 MSA 181.2 SSA 22.5
EL1 398.6 EL2 112.8 ALF 73.49
    TDE -.1230 TRA -.3981 TC3 .2099 BAU .1119
                                                                  SGT 464.5 SGR 393.2 SG3 257.7
RRT .0301 RRF -.2416 RTF -.1894
    RDE -.4211 RRA .0975 RC3 -.0139 FAU .09496
   FDE .6024 FRA-1.4630 FC3-2.0665 BSP
                                                      748
                                                                   SGB 608.6 R23 -.2211 R13 -.2066
    BOE .4387 BRA .4098 BC3 .2104 FSP
                                                                   SG1 465.0 SG2 392.6 THA 5.10
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 76.00
                                                                                                                                ARRIVAL DATE MAR 6 1966
  HELIOCENTRIC CONTC
                                                                       DISTANCE 219.338
   RL 147.18 LAL .00 LOL 87.90 VL 28.737 GAL -11.59 A7L 86.80 MCA 100.75 SMA 135.75 ECC .21721 INC 3.1972 V1 30.271
RP 107.81 LAP 3.14 LOP 188.67 VP 38.527 GAP -4.07 A7P 90.60 TAL 236.10 TAP 336.85 RCA 106.27 APO 165.24 V2 35.149
RC 66.268 GL 14.55 GP 6.00 ZAL 154.68 ZAP 48.43 ETS 353.17 ZAE 163.31 ETE 352.00 ZAC 54.73 ETC 165.32 CLP -48.15
  PLANETOCENTRIC CONIC
   C3 39.073 VHL 6.251 DLA -7.70 RAL 288.40 RAD 6568.5 VEL 12.667 PTH
                                                                                                2.30 VHP 4.425 OPA -11.83 RAP 322.04 ECC 1.6430
   CS 39.073 VML 6.251 OLA -7.70

LNCH AZMTH LNCH TIME L-I TIME

90.00 1 40 8 2139.42

90.00 11 42 12 5265.50

100.00 2 57 46 1888.96

100.00 13 7 15 4991.19

110.00 3 57 33 1701.77
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                 -17.68
                                                                36.78
                                                                            159.19
                                                                                                                                       -14.48
                                                                                           112.49
                                                                                                         2 15 47
                                                                                                                        1539.4
                                                                                                                                                       29.56
                                                                                              80.86 13 9 58
                                                 26.92
                                                               237.88
                                                                            154.29
                                                                                                                         4665.5
                                                                                                                                       25.38
                                                                                                                                                      229.55
                                                 -18.93
                                                                17.80
                                                                             158.63
                                                                                            113.58
                                                                                                         3 29 15
                                                                                                                         1289.0
                                                                                                                                       -15.58
                                                                                                                                                       10.61
                                                 28.26
                                                               217.45
                                                                                              79.82 14 30 27
                                                                            164.03
                                                                                                                         4391.2
                                                                                                                                       26.56
                                                                                                                                                      209.06
                                                                                            116.63 4 25 55
76.93 15 43 9
                                                -22.27
                                                                 1.93
                                                                             156.96
                                                                                                                         1101.8
                                                                                                                                       -18.51
                                                                                                                                                      354.80
      110.00
                  14 23 58
                                4751.14
                                                               198.37
                                                                            163.17
                                                  31.87
                                                                                                                         4151.1
                                                                                                                                         29.74
                                                                                                                                                      189.80
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                 SGT 461.9 SGR 393.8 SG3 288.0

RRT -.0018 RRF -.2821 RTF -.0649

SGB 607.0 R23 .2826 R13 .0636

SG1 461.9 SG2 393.8 THA 179.68
   TOE -.1097 TRA -.4264 TC3 .1747 BAU .0913
                                                                                                                    ST 155.4 SR 382.9 SS 292.7
CRT .5876 CRS .8399 CST .D697
LSA 468.8 M5A 190.2 SSA 22.4
   ROE -.4165 RRA .1044 RC3 -.0024 FAU .10495
   FDE .6660 FRA-1.6350 FC3-2.3255 BSP 603
   BOE .4307 BRA .4390 BC3 .1747 FSP
                                                     -845
```

ELI 394.8 ELZ 122.0 ALF 75.13

```
ARRIVAL DATE MAR 8 1966
                                                                       FLIGHT TIME 78.00
LAUNCH DATE DEC 20 1965
   RL 147.18 LAL .00 LOE 87.90 VL 28.767 GAL -11.50 A7L 86.84 MCA 103.98 SMA 135.99 ECC .21502 INC 3.1571 V1 30.271 RP 107.85 LAP 3.06 LOP 191.90 VP 38.539 GAP -3.42 A7P 90.76 TAL 236.48 TAP 340.46 RCA 106.75 APO 165.23 V2 35.138 RC 68.394 GL 14.51 GP 6.42 TAL 154.88 ZAP 53.29 ETS 353.62 ZAE 166.19 ETE 353.59 ZAC 53.05 ETC 165.43 CLP -53.02
                                                                       DISTANCE 225.950
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 38.393 VHL 6.196 DLA -7.76 RAL 288.19 RAD 6568.5 VEL 12.640 PTH 2.29 VHP 4.195 DPA -11.90 RAP 320.32 ECC 1.6319
    LNCH AZMTH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZMTH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                                                                                             112.62 2 15 20
                   1 39 48 2132.97
11 40 54 5263.08
                                                  -17.51
                                                                 36.38
                                                                              158.68
       90.00
                                                                                                                                                        229.39
                                                                                                                           4663.1
                                                                                                                                           25.34
                                                                                                         13 8 37
                                                                               163.78
                                                                                               80.77
                                                                237.71
                                                  26.89
        90.00
                                                                                                                                                         10.23
                                                                                                           3 28 46
                                                                                                                           1282.6
                                                                                                                                          -15.39
                                                                 17.41
                                                                               158.12
                                                                                              113.71
                   2 57 24 1882.61
13 5 58 4988.67
                                                  -18.76
       100.00
                                                                                              79.73 14 29 7
116.78 4 25 22
76.81 15 41 53
                                                                                                                           4388.7
                                                                                                                                           26.52
                                                                                                                                                         208.88
                                                                217.27
                                                                              163.52
                                                  28.23
      100.00
                                                                                                                                                        354.45
                                                                                                                           1095.7
                                                                                                                                          -18.31
                                                                              156.45
                   3 57 6 1695.65
14 22 45 4748.39
                                                 -22.08
                                                                  1.55
                                                                                                                           4148.4
                                                                                                                                          29.69
                                                                                                                                                         189.61
                                                                198.16
                                                                              162.65
                                                  31.83
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 156.0 SR 381.6 SS 307.8
CRT .4871 CRS .8416 CST -.0477
                                                                    SGT 468.6 SGR 394.7 SG3 319.4
RRT -.D538 RRF -.3266 RTF .0869
    TOE -.0940 TRA -.4623 TC3 .1299 BAU .0669
    RDE -.4113 RRA .1122 RC3 .0108 FAU .11520
                                                                    SCB 612.7 R23 .3088 R13 -.1269
SC1 470.2 SC2 392.7 THA 171.34
                                                                                                                       LSA 473.9 MSA 199.0 55A 22.3
    FOE .7303 FRA-1.8071 FC3-2.5977 BSP 477
BOE .4219 BRA .4757 BC3 .1304 FSP -947
                                                                                                                       EL1 390.1 EL2 133.2 ALF 77.22
                                                                                                                                   ARRIVAL DATE MAR 10 1966
                                                                        FLIGHT TIME 80.00
LAUNCH DATE DEC 20 1965
                                                                        DISTANCE 232.523
   RL 147.18 LAL .00 LOL 87.90 VL 28.787 GAL -11.40 A7L 86.88 HCA 107.20 SHA 136.15 ECC .21306 INC 3.1160 V1 30.271 RP 107.89 LAP 2.98 LOP 195.13 VP 38.543 GAP -2.80 A7P 90.92 TAL 236.72 TAP 343.93 RCA 107.15 APO 165.16 V2 35.126 RC 70.553 GL 14.46 GP 6.85 7AL 155.01 7AP 58.33 ETS 354.09 ZAE 169.33 ETE 356.03 ZAC 51.17 ETC 165.56 CLP -58.08
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 37.732 VHL 6.143 DLA -7.83 RAL 288.07 RAD 6568.5 VEL 12.614 PTH 2.29 VHP 3.997 DPA -11.99 RAP 318.41 ECC 1.6210 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                  -17.34
                                                                                              112.74
                                                                                                           2 15 17
                                                                             158.26
                    1 39 50 2126.48
                                                                 35.98
                                                                                                112.74 2 15 17
80.70 13 7 36
        90.00
                                                                                                                                                          229.23
                                                                                                                            4660.8
                                                                                                                                            25.30
                                                                               163.36
                                                   26.86
                                                                237.55
        90.00
                   11 39 55
2 57 24
                                  5260.79
                                                                                              113.85 3 28 41
79.65 14 28 8
116.93 4 25 12
76.71 15 40 59
                                                                                                            3 28 41
                                                                                                                            1276.2
                                                                                                                                           -15.20
                                                                                                                                                           9.85
                                                                               157.70
                                                   -18.58
                                                                  17.02
                                  1876.24
       100.00
                                                                                                                            4386.3
                                                                                                                                          26.48
                                                                                                                                                          20A . 72
                  13 5 2 4986.27
3 57 2 1689.51
                                                                               163.10
                                                   28.20
                                                                217.10
       100.00
                                                                                                                                          -18.10
                                                                                                                                                          354.09
                                                                                                                           1089.5
                                                                               156.03
                                                   -21.89
                                                                   1.17
       110.00
                                                                                                                            4145.8
                                                                                                                                           29.63
                                                                                                                                                         189.42
                                                   31.79
                                                                 197.97
                                                                               162.23
       110.00
                   14 21 53
                                  4745.75
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 159.0 SR 379.4 55 320.8
CRT .3588 CRS .8422 CST -.1882
                                                                     SGT 489.6 SGR 395.9 SG3 351.3
RRT -.1272 RRF -.3735 RTF .2530
SGB 629.7 R23 .2835 R13 -.3194
    TOE -.0752 TRA -.5051 TC3 .0758 BAU .0404
ROE -.4051 RRA .1208 RC3 .0257 FAU .12557
                                                                                                                       LSA 478.1 MSA 207.7 SSA 22.1
    FOE .7878 FRA-1.9766 FC3-2.8810 BSP
                                                        464
                                                                                                                       EL1 384.4 EL2 146.5 ALF 79.98
                                                                     SG1 496.5 SG2 387.3 THA 164.64
     BOE .4121 BRA .5193 BC3 .0801 FSP -1060
                                                                                                                                  ARRIVAL DATE MAR 12 1966
                                                                        FLIGHT TIME 82.00
LAUNCH DATE DEC 20 1965
                                                                       DISTANCE 239.058
    RE 147.18 LAL .00 LOL 87.90 VL 28.799 GAL -11.31 A7L 86.93 MCA 110.43 SHA 136.24 ECC .21128 INC 3.0734 VI 30.271
RP 107.92 LAP 2.88 LOP 198.35 VP 38.540 GAP -2.21 A7P 91.07 TAL 236.82 TAP 347.25 RCA 107.46 APO 165.03 V2 35.114
RC 72.741 GL 14.40 GP 7.29 ZAL 155.08 ZAP 63.53 ETS 354.58 ZAE 172.67 ETE .58 ZAC 49.15 ETC 165.70 CLP -63.30
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 37.079 VHL 6.089 DLA -7.90 RAL 288.04 RAD 6568.4 VEL 12.588 PTH 2.28 VMP 3.832 DPA -12.09 RAP 316.34 ECC 1.6102
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             157.93
                                                                                                           2 15 34
                   1 40 14 2119.90
11 39 15 5258.55
2 57 46 1869.76
                                                                                              112.87
                                                   -17.16
                                                                 35.57
                                                                                                112.87 2 15 34
80.62 13 6 54
        90.00
                                                                                                                                                         229.07
                                                                                                                            4658.6
                                                                                                                                           25.27
                                                                               163.02
                                                    26.84
                                                                 237.39
        90.00
                                                                                                                                           -15.01
                                                                                                          3 28 56
                                                                                                                            1269.8
                                                                                               113.98
                                                                                              113.98 3 28 56
79.56 14 27 28
117.08 4 25 23
76.60 15 40 23
                                                   -18.40
                                                                  16.62
                                                                               157.37
       100.00
                                                                                                                                           26.44
                                                                                                                            4383.9
                   13 4 24
                                                   28.17
                                                                 216.93
                                                                               162.76
                                  4983.92
       100.00
                                                                                                                                          -17.89
                                                                                                                            1083.3
                                                                               155.69
                                                   -21.70
                                                                    .79
                     3 57 19 1683.29
       110.00
                                                                                                                                            29.58
                                                                                                                            4143.2
                                                                               161.89
                                                   31.74
                                                                 197.78
                                  4743.16
       110.00
                   14 21 20
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 166.9 SR 376.6 SS 333.0
CRT .2167 CRS .8455 CST -.3265
                                                                    SGT 531.2 SGR 397.9 SG3 381.6
RRT -.2132 RRF -.4231 RTF .4166
SGB 663.7 R23 .2418 R13 -.4818
SG1 544.8 SG2 379.0 THA 161.98
     TDE -.0552 TRA -.5563 TC3 .0105 BAU .0214
     ROE - .3983 RRA .1299 RC3 .0420 FAU .13528
                                                                                                                        LSA 483.2 MSA 215.8 SSA 22.0
EL1 378.7 EL2 162.0 ALF 83.28
     FOE .8441 FRA-2.1277 FC3-3.1584 BSP 622
     BOE .4021 BRA .5713 BC3 .0433 FSP -1161
                                                                                                                                   ARRIVAL DATE MAR 14 1966
                                                                         FLIGHT TIME 84.00
 LAUNCH DATE DEC 20 1965
                                                                         DISTANCE 245.554
    RL 147.18 LAL .00 LOL 87.90 VL 28.802 GAL -11.21 A7L 86.97 HCA 113.65 SHA 136.27 ECC .20964 INC 3.0291 VI 30.271 RP 107.96 LAP 2.77 LOP 201.58 VP 38.531 GAP -1.65 A7P 91.22 TAL 236.79 TAP 350.44 RCA 107.70 APO 164.84 V2 35.101 RC 74.994 GL 14.32 GP 7.73 7AL 155.09 ZAP 68.83 ETS 355.11 ZAE 176.07 ETE 13.03 ZAC 47.01 ETC 165.85 CLP -68.62
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 36.428 VHL 6.036 DLA -7.97 RAL 288.09 RAD 6568.4 VEL 12.562 PTH 2.28 VHP 3.697 DPA -12.19 RAP 314.16 ECC 1.5995
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1513.1
                                                                                                             2 16 12
                                                                              157.67
                                                                                              113.00
                                                                  35.16
                      1 40 59 2113.14
                                                   -16.98
         90.00
                                                                                                                                             25.23
                                                                                                                                                          228.92
                                                                                                                             4656.3
                                                                                                80.54
                                                                                                           13 6 30
                                                                                162.77
                                                    26.82
                                                                 237.23
                    11 38 53 5256.35
         90.00
                                                                                                114.12 3 29 32
79.48 14 27 6
                                                                                                                                           -14.81
                                                                                                                                                           9.08
                                                                                                                             1263.1
                    2 58 29 1863.13
13 4 4 4981.59
3 57 57 1676.91
14 21 6 4740.57
                                                                   16.21
                                                                               157.11
                                                   -18.22
        100.00
                                                                                                                                                          208.39
                                                                                                                             4381.6
                                                                               162.50
                                                                 216.76
        100.00
                                                   28.14
                                                                                                117.24 4 25 54
76.49 15 40 6
                                                                                                                                                           353.36
                                                                                                                                           -17.68
                                                                                                                             1076.9
                                                                               155.43
                                                   -21.50
                                                                     .40
        110.00
                                                                                                                                                          189.06
                                                                                                                                            29.52
                                                                                                                             4140.6
                                                                 197.59
                                                                                161.63
                                                  31.70
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 179.3 SR 372.7 SS 342.2
CRT .0677 CRS .8474 CST -.4621
                                                                     SGT 594.3 SGR 400.4 SG3 410.3

RRT -.3048 RRF -.4732 RTF .5564

SGB 716.6 R23 .2031 R13 -.6082
     TOE -.0330 TRA -.6138 TC3 -.0642 BAU .0427
                                                                                                                   CRT .0677 LRS .003.2
LSA 487.7 MSA 223.2 SSA 21.8
EL1 373.0 EL2 178.7 ALF 87.58
     ROE -.3903 RRA .1393 RC3 .0597 FAU .14431
     FDE .8872 FRA-2.2623 FC3-3.4297 BSP 911
                                                                     SG1 614.3 SG2 368.9 THA 161.52
```

BOE .3917 BRA .6294 BC3 .0876 FSP -1266

```
LAUNCH DATE DEC 20 1965
                                                                        FLIGHT TIME 86.00
                                                                                                                                  ARRIVAL DATE MAR 16 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 252.012
    RL 147.18 LAL .00 LOL 87.90 VL 28.797 GAL -11.11 A7L 87.02 MCA 116.86 SMA 136.23 ECC .20812 INC 2.9825 V1 30.271
RP 108.00 LAP 2.66 LOP 204.80 VP 38.516 GAP -1.12 A7P 91.35 TAL 236.64 TAP 353.50 RCA 107.88 APO 164.59 VZ 35.089
RC 77.191 GL 14.23 GP 8.17 ZAL 155.05 ZAP 74.17 ETS 355.68 ZAE 178.30 ETE 83.04 ZAC 44.82 ETC 166.03 CLP -74.00
   PLANETOCENTRIC CONIC
     C3 35.770 VML 5.981 OLA -8.04 RAL 288.21 RAD 6568.4 VEL 12.536 PTH 2.27 VMP 3.592 DPA -12.27 RAP 311.92 ECC 1.5887
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     1 42 3 2106.13
                                                                                            113.14
                                                  -16.80
                                                                 34.73
                                                                              157.49
                                                                                                          2 17 9
                                                                                                                         1506.1
                                                                                                                                         -13.52
                                                                                                                                                          27.58
                  11 38 48 5254.14
2 59 31 1856.25
13 4 1 4979.26
3 58 54 1670.31
14 21 8 4737.97
        90.00
                                                   26.79
                                                                 237.08
                                                                               162.58
                                                                                               80.47
                                                                                                         13 6 22
                                                                                                                            4654.1
                                                                                                                                          25.20
       100.00
                                                  -18.03
                                                                 15.79
                                                                               156.92
                                                                                               114.26
                                                                                                          3 30 27
                                                                                                                            1256.2
                                                                                                                                           -14.60
       100.00
                                                  28.11
                                                                216.59
                                                                               162.31
                                                                                               79.40 14 27 0
                                                                                                                           4379.3
                                                                                                                                          26.36
                                                                                              117.39 4 26 44
76.39 15 40 6
       110.00
                                                 -21.29
                                                                   .00
                                                                               155.24
                                                                                                                           1070.3
                                                                                                                                         -17.46
                                                                                                                                                         352.98
                                                31.66
                                                                                                                          4138.0
                                                                                                                                        29.47
       110.00
                                                                197.40
                                                                               161.44
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 679.8 SGR 403.7 SG3 434.8

RRT -.3908 RRF -.5233 RTF .6649

SGB 790.6 R23 .1752 R13 -.7024

SG1 704.7 SG2 358.4 THA 162.18
                                                                                                                       ST 197.1 SR 368.0 SS 350.0 CRT -.0674 CRS .8519 CST -.5710
    TOE -.0103 TRA -.6779 TC3 -.1491 BAU .0805
    ROE - .3815 RRA .1484 RC3 .0782 FAU .15180
                                                                                                                   CRT -.0674 CRS .8519 C51 -...
LSA 493.5 MSA 229.8 SSA 21.6
    FOE .9245 FRA-2.3630 FC3-3.6741 BSP 1285
BDE .3817 BRA .6940 BC3 .1684 FSP -1349
                                                                                                                       EL1 368.4 EL2 196.5 ALF 92.89
LAUNCH DATE DEC 20 1965
                                                                        FLIGHT TIME 88.00
                                                                                                                                   ARRIVAL DATE MAR 18 1966
   HELIOCENTRIC CONTC
                                                                        DISTANCE 258.434
    RL 147.18 LAL .00 LOL 87.90 VL 28.786 GAL -11.00 A7L 87.07 MCA 120.08 SMA 136.15 ECC .20670 INC 2.9332 V1 30.271
RP 108.04 LAP 2.54 LOP 208.01 VP 38.496 GAP -.61 A7P 91.47 TAL 236.37 TAP 356.45 RCA 108.00 APO 164.29 V2 35.076
RC 79.446 GL 14.13 GP 8.61 ZAL 154.95 ZAP 79.50 ETS 356.30 ZAE 175.74 ETE 144.72 ZAC 42.64 ETC 166.23 CLP -79.38
   PLANETOCENTRIC CONIC
    C3 35.102 VHL 5.925 OLA -8.12 RAL 288.41 RAD 6568.4 VEL 12.509 PTH 2.26 VHP 3.515 OPA -12.33 RAP 309.69 ECC 1.5777
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
               TH LNCH TIME L-1 TIME
1 43 28 2098.79
11 38 56 5251.97
3 0 53 1849.04
13 4 13 4976.95
4 0 10 1663.40
14 21 25 4735.36
       90.00
                                                                             157.36
                                                                                            113.27
                                                  -16.60
                                                                 34.28
                                                                                                                         1498.8
                                                                                                                                        -13.31
                                                                                                          2 18 27
                                                                                                                                                         27.15
        90.00
                                                  26.77
                                                                                                         13 6 28
                                                                236.92
                                                                                               80.40
                                                                               162.45
                                                                                                                            4652.0
                                                                                                                                           25.17
                                                                                                                                                         228.62
      100.00
                                                 -17.82
                                                                                              114.40 3 31 42
79.31 14 27 10
                                                                 15.35
                                                                              156.79
                                                                                                                           1249.0
                                                                                                                                          -14.38
                                                                                                                                                          8.25
      100.00
                                                 28.08
                                                                216.43
                                                                              162.19
                                                                                                                           4377.0
                                                                                                                                           26.32
                                                                                                                                                         208.07
                                                                           155.11
                                                                                            117.56 4 27 54
76.28 15 40 20
                                                                                                                         1063.4
      110.00
                                                  -21.08
                                                                359.58
                                                                                                                                         -17.22
                                                                                                                                                         352.58
                                                 31.62
                                                                               161.30
                                                                197.20
                                                                                                                                                         188.69
                                                                                                                           4135.4
                                                                                                                                           29.41
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 783.6 SGR 407.4 SG3 455.5
RRT -.4693 RRF -.5715 RTF .7435
SGB 883.2 R23 .1543 R13 -.7697
    TOE .0132 TRA -.7463 TC3 -.2423 BAU .1226
                                                                                                                      ST 219.3 SR 362.1 SS 354.2
CRT -.1852 CRS .8545 CST -.6608
LSA 498.8 MSA 235.4 SSA 21.4
    RDE -.3713 RRA .1573 RC3 .0977 FAU .15791
FDE .9432 FRA-2.4361 FC3-3.8945 BSP 1704
    BDE .3716 BRA .7627 BC3 .2612 FSP -1428
                                                                    SG1 812.1 SG2 347.1 THA 163.11
                                                                                                                    EL1 365.5 EL2 213.4 ALF 99.75
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 90.00
                                                                                                                                  ARRIVAL DATE MAR 20 1966
  HELIOCENTRIC CONIC
                                                                       DISTANCE 264.819
    RL 147.18 LAL .00 LOL 87.90 VL 28.769 GAL -10.89 AZL 87.12 HCA 123.29 SMA 136.01 ECC .20535 INC 2.8807 V1 30.271
RP 108.08 LAP 2.41 LOP 211.23 VP 38.472 GAP -.12 AZP 91.58 TAL 235.99 TAP 359.28 RCA 108.08 APO 163.94 V2 35.063
RC 81.719 GL 14.01 GP 9.04 ZAL 154.81 ZAP 84.76 ETS 356.97 ZAE 172.16 ETE 155.87 ZAC 40.52 ETC 166.46 CLP -84.69
   PLANETOCENTRIC CONIC
    C3 34.420 VHL 5.867 DLA -8.21 RAL 288.67 RAD 6568.4 VEL 12.482 PTH 2.26 VHP 3.464 DPA -12.35 RAP 307.52 ECC 1.5665
    LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          113.42 2 20 3

80.32 13 6 48

114.55 3 33 16

79.23 14 27 32

117.72 4 29 22

76.18 15 40 48
                                                                          157.29
                  1 45 12 2091.00
11 39 18 5249.85
       90.00
                                                 -16.39
                                                                33.81
                                                                                                                       1491.0 -13.08 26.69
       90.00
                                                  26.74
                                                               236.77
                                                                             162.38
                                                                                                                           4649.9
                                                                                                                                          25.13
                                                                                                                                                        228.47
      100.00
                   3 2 35 1841.40
                                                -17.61
                                                                14.89
                                                                           156.72
                                                                                                                           1241.4
                                                                                                                                      -14.15
      100.00
                  13 4 37
                                4974.69
                                                                                                                                                        207.91
                                                  28.05
                                                                216.27
                                                                             162.12
                                                                                                                           4374.7
                                                                                                                                          26.28
      110.00
                                                                           155.04
                    4 1 46 1656.09
                                                 -20.85
                                                               359.14
                                                                                                                           1056.1
                                                                                                                                          -16.97
                                                                                                                                                        352.16
      110.00
                  14 21 55
                                4732.77
                                                  31.58
                                                               197.01
                                                                              161.23
                                                                                                                           4132.8
                                                                                                                                          29.36
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 245.1 SR 354.9 SS 355.5
CRT -.2803 CRS .8572 CST -.7275
LSA 504.5 MSA 239.7 SSA 21.3
    TDE .0363 TRA -.8181 TC3 -.3432 BAU .1670
                                                                    SGT 902.8 SGR 411.5 SG3 471.0
    ROE -.3599 RRA .1654 RC3 .1178 FAU .16217
                                                                   RRT -.5381 RRF -.6174 RTF .7985
SGB 992.2 R23 .1404 R13 -.8170
   FDE .9467 FRA-2.4725 FC3-4.0790 BSP 2162
BDE .3617 BRA .8347 BC3 .3629 FSP -1491
                                                                    SG1 933.8 SG2 335.3 THA 164.12
                                                                                                                     EL1 366.1 EL2 228.1 ALF 108.25
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 92.00
                                                                                                                                  ARRIVAL DATE HAR 22 1966
  HELTOCENTRIC CONTC.
                                                                      DISTANCE 271.170
   RL 147.18 LAL .00 LOL 87.90 VL 28.747 GAL -10.77 AZL 87.18 MCA 126.50 SMA 135.83 ECC .20407 INC 2.8242 V1 30.271
RP 108.12 LAP 2.27 LOP 214.44 VP 38.443 GAP .34 AZP 91.68 TAL 235.51 TAP 2.01 RCA 108.11 APO 163.55 V2 35.050
RC 84.008 GL 13.86 GP 9.48 ZAL 154.62 ZAP 89.88 ETS 357.70 ZAE 168.54 ETE 159.99 ZAC 38.52 ETC 166.74 CLP -89.88
  PLANETOCENTRIC CONIC
   C3 33.722 VHL 5.807 DLA -8.31 RAL 289.00 RAD 6568.3 VEL 12.454 PTH
                                                                                                2.25 VHP 3.436 DPA -12.32 RAP 305.47 ECC 1.5550
                                                                                          INJ Acm...
113.57 2 22 .
80.26 13 7 18
14 71 3 35 10
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    1 47 18 2082.65
                                                 -16.16
                                                                33.30
                                                                           157.27
                                                                                                          2 22 1
                                                                                                                          1482.7
                                                                                                                                        -12.84
       90.00
                 11 39 51 5247.85
3 4 37 1833.22
                                                 26.72
                                                               236.63
                                                                             162.37
                                                                                                                           4647.9
                                                                                                                                         25.10
      100.00
                                                 -17.38
                                                                14.39
                                                                              156.70
                                                                                                                           1233.2
                                                                                                                                         -13.90
                                                                                            79.16 14 28 5
117.90 4 31 9
76.07 15 41 28
                 13 5 13 4972.52
4 3 41 1648.27
14 22 38 4730.24
                                                                          162.10
      100.00
                                                 24.03
                                                               215.11
                                                                                                                           4372.5
                                                                                                                                         26.24
      110.00
                                                -20.60
                                                               358.67
                                                                             155.02
                                                                                                                          1048.3
                                                                                                                                        -16.70
                                                                                                                                                        351.71
      110.00
                                                                                                                         4130.2
                                                                                                                                        29.30
                                              31.54
                                                               196.83
                                                                             161.21
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                SGT 1033.6 SGR 415.7 SG3 480.1

RRT -.5969 RRF -.6606 RTF .8364

SGB 1114.0 R23 .1332 R13 -.8499

SGI 1066.1 SG2 323.3 THA 165.10
                                                                                                                    ST 273.3 SR 346.7 SS 355.1

CRT -.3533 CRS .8621 CST -.7723

LSA 511.5 MSA 242.7 SSA 21.0

EL1 371.4 EL2 238.7 ALF 117.89
   TOE .0581 TRA -.8919 TC3 -.4508 BAU .2125
   RDE -.3475 RRA .1724 RC3 .1379 FAU .16419
   FDE .9422 FRA-2.4668 FC3-4.2152 BSP 2647
BDE .3523 BRA .9084 BC3 .4715 FSP -1523
```

ARRIVAL DATE MAR 24 1966

LAUNCH DATE DEC 20 1965 DISTANCE 277.487 RL 147.18 LAL .00 LOL 87.90 VL 28.719 GAL -10.64 AZL 87.24 HCA 129.71 SMA 135.61 ECC .20284 INC 2.7629 V1 30.271 RP 108.16 LAP 2.13 LOP 217.64 VP 38.410 GAP .78 AZP 91.77 TAL 234.94 TAP 4.65 RCA 108.10 APO 163.12 V2 35.036 HELIOCENTRIC CONIC RC 86.309 GL 13.70 GP 9.91 ZAL 154.38 ZAP 94.82 ETS 358.48 ZAE 165.02 ETE 162.09 ZAC 36.69 ETC 167.09 CLP -94.89 PLANETOCENTRIC CONIC 2.25 VHP 3.430 DPA -12.22 RAP 303.60 ECC 1.5432 C3 33.004 VHL 5.745 DLA -8.42 RAL 289.39 RAD 6568.3 VEL 12.425 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -12.57 113.73 2 24 19 -15.92 32.75 157.30 1 49 46 2073.58 11 40 31 5246.08 90.00 25.07 228.21 13 7 57 4646.1 162.40 80.20 236.50 26.70 90.00 6.A1 3 37 26 1224.3 -13.63 13.85 156.73 114.88 -17.12 100.00 3 7 1 1824.33 79.09 14 28 47 118.09 4 33 17 75.98 15 42 18 4370.6 26.21 207.63 215.97 162.14 100.00 13 5 57 4970.56 28.00 1039.8 351.23 -16.41 4 5 57 1639.81 14 23 30 4727.85 155.04 -20.33 358.16 4127.9 29.25 188.17 196.65 161.25 31.50 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1171.9 SGR 419.9 SG3 483.8 RRT -.6479 RRF -.7008 RTF .8625 SGB 1244.8 R23 .1305 R13 -.8727 SG1 1205.4 SG2 310.9 THA 165.98 ST 302.9 SR 337.3 SS 351.8 CRT -.4090 CRS .8669 CST -.8036 TOE .0781 TRA -.9656 TC3 -.5637 BAU .2583 RDE -.3338 RRA .1783 RC3 .1584 FAU .16432 FDE .9238 FRA-2.4258 FC3-4.3103 BSP 3145 LSA 518.8 MSA 244.4 55A 20.8 EL1 382.1 EL2 244.0 ALF 127.61 BDE .3429 BRA .9820 BC3 .5855 FSP -1537 ARRIVAL DATE MAR 26 1966 FLIGHT TIME 96.00 LAUNCH DATE DEC 20 1965 DISTANCE 283.771 RL 147.18 LAL .00 LOL 87.90 VL 28.688 GAL -10.51 A7L 87.30 HCA 132.92 SMA 135.36 ECC .20166 INC 2.6956 VI 30.271 RP 108.20 LAP 1.97 LOP 220.85 VP 38.374 GAP 1.21 A7P 91.84 TAL 234.28 TAP 7.20 RCA 108.06 APO 162.65 V2 35.023 RC 88.623 GL 13.50 GP 10.37 ZAL 154.11 ZAP 99.53 ETS 359.33 ZAE 161.64 ETE 163.31 ZAC 35.07 ETC 167.53 CLP -99.69 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 32.267 VHL 5.680 DLA -8.56 RAL 289.85 RAD 6568.3 VEL 12.395 PTH 2.24 VHP 3.443 DPA -12.05 RAP 301.94 ECC 1.5310 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.91 2 27 2 157.37 -15.64 32.14 1 52 38 2063.57 90.00 25.05 228.12 13 8 42 4644.7 162.49 80.15 26.58 236.41 90.00 11 41 17 5244.70 115.07 3 40 4 79.03 14 29 36 1214.6 -13.33 5.24 3 9 49 1814.56 13 6 47 4968.94 4 8 36 1630.53 156.80 13.26 -16.84 100.00 4368.9 26.18 207.52 162.22 27.98 215.86 100.00 118.30 4 35 46 75.89 15 43 16 -16.09 350.70 1030.5 155.11 -20.03 357.61 110.00 29.20 188.02 4125.7 31.46 196.50 161.33 110.00 14 24 30 4725.74 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1314.7 SGR 424.2 SG3 483.2 RRT -.6934 RRF -.7382 RTF .8809 SGB 1381.5 R23 .1308 R13 -.8889 SG1 1349.0 SG2 297.9 THA 166.73 ST 332.8 SR 326.5 SS 345.2 CRT -.4508 CRS .8698 CST -.8269 TDE .0956 TRA-1.0381 TC3 -.6806 BAU .3036 ROE -.3188 RRA .1833 RC3 .1795 FAU .16297 LSA 525.6 MSA 244.6 SSA 20.5 FOE .8882 FRA-2.3603 FC3-4.3727 BSP 3651 BOE .3328 BRA 1.0542 BC3 .7039 FSP -1545 EL1 397.1 EL2 244.2 ALF 136.22 ARRIVAL DATE MAR 28 1966 FLIGHT TIME 98.00 LAUNCH DATE DEC 20 1965 DISTANCE 290.024 RL 147.18 LAL .00 LOL 87.90 VL 28.652 GAL -10.38 A7L 87.38 HCA 136.12 SHA 135.07 ECC .20053 INC 2.6209 VI 30.271
RP 108.24 LAP 1.82 LOP 224.05 VP 38.336 GAP 1.61 A7P 91.89 TAL 233.55 TAP 9.67 RCA 107.99 APO 162.16 V2 35.010
RC 90.946 GL 13.27 GP 10.85 ZAL 153.80 ZAP 104.00 ETS .25 ZAE 158.45 ETE 164.03 ZAC 33.67 ETC 168.09 CLP-104.26 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 31.508 VHL 5.613 DLA -8.72 RAL 290.37 RAD 6568.3 VEL 12.364 PTH 2.23 VHP 3.473 DPA -11.79 RAP 300.51 ECC 1.5185 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.10 2 30 11 80.12 13 9 29 115.27 3 43 8 78.99 14 30 28 118.52 4 38 39 75.82 15 44 18 157.49 1452.4 1 55 58 2052.39 11 42 5 5243.90 3 13 4 1803.65 13 7 40 4967.87 -15.33 31.47 90.00 228.06 4643.9 162.63 236.35 26.67 90.00 -12.99 5.60 1203.7 156.91 -16.53 12.61 100.00 207.44 4367.9 162.36 27.97 215.78 100.00 350.12 1020.2 4 11 39 1620.23 14 25 34 4724.07 155.22 357.00 -19.70 110.00 29.17 187.90 4124.1 161.47 31.43 196.38 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 362.1 SR 314.3 SS 336.0 CRT -.4804 CRS .8723 CST -.8423 SGT 1460.2 SGR 428.7 SG3 478.3 RRT -.7335 RRF -.7731 RTF .8938 SGB 1521.8 R23 .1347 R13 -.9004 TOE .1097 TRA-1.1082 TC3 -.8016 BAU .3482 ROE - .3026 RRA .1872 RC3 .2013 FAU .16019 LSA 532.1 MSA 243.5 SSA 20.3 EL1 414.7 EL2 240.7 ALF 143.24 FOE .8414 FRA-2.2693 FC3-4.4014 BSP 4166 BOE .3218 BRA 1.1239 BC3 .8265 FSP -1538 SG1 1495.0 SG2 284.6 THA 167.38 ARRIVAL DATE MAR 30 1966 FLIGHT TIME 100.00 LAUNCH DATE DEC 20 1965 RL 147.18 LAL .00 LOL 87.90 VL 28.612 GAL -10.23 A7L 87.46 MCA 139.32 SMA 134.77 ECC .19944 INC 2.5372 V1 30.271
RP 108.29 LAP 1.65 LOP 227.25 VP 38.294 GAP 2.00 A7P 91.92 TAL 232.74 TAP 12.05 RCA 107.89 APO 161.64 V2 34.996
RC 93.279 GL 13.00 GP 11.39 7AL 153.46 7AP 108.18 ETS 1.25 7AE 155.46 ETE 164.40 7AC 32.52 ETC 168.81 CLP-108.56 **DISTANCE 296.247** HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 30.726 VML 5.543 DLA -8.92 RAL 290.95 RAD 6568.2 VEL 12.333 PTH 2.22 VMP 3.517 DPA -11.43 RAP 299.33 ECC 1.5057 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 157.64 114.32 30.70 1 59 51 2039.68 -14.9A 90.00 25.04 80.13 13 10 14 4644.0 228.07 162.83 236.35 26.67 11 42 50 5243.98 90.00 1191.3 -12.60 4.89 115.49 3 46 42 78.98 14 31 19 3 46 42 157.07 1791.29 11.86 3 16 51 -16.17 100.00 207.42 4367.6 26.16 162.56 13 8 31 4967.61 4 15 11 1608.56 14 26 40 4723.07 215.76 27.96 -15.0 29.15 349.46 118.77 4 42 0 75.78 15 45 23 1008.6 356.31 155.37 -19.32 187.83 4123.1 196.30 161.67 31.42 ST 390.3 SR 301.3 SS 325.7 CRT -.5014 CR5 .8767 CST -.8502 LSA 539.0 MSA 241.3 SSA 20.0 EL1 433.6 Ft 2 234 5 ... MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1605.5 SGR 433.6 SG3 469.0 RRT -.7684 RRF -.8057 RTF .9026 SGB 1663.0 R23 .1432 R13 -.9082 SG1 1640.7 SG2 271.5 THA 167.94 TOE .1205 TRA-1.1743 TC3 -.9254 BAU .3911 FDE -.2856 RRA .1896 RC3 .2237 FAU .15591 FDE .7922 FRA-2.1526 FC3-4.3930 BSP 4665 BDE .3100 BRA 1.1895 BC3 .9520 FSP -1506 EL1 433.6 EL2 234.6 ALF 148.79

FLIGHT TIME 94.00

```
LAUNCH DATE DEC 20 1965
                                                                              FEIGHT TIME 102.00
                                                                                                                                           ARRIVAL DATE APR 1 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 302.441
                          .00 LOL 87.90 VL 28.570 GAL -10.08 A7L 87.56 MCA 142.52 SHA 134.44 ECC .19839 INC 2.4418 VI 30.271 1.49 LOP 230.44 VP 38.250 GAP 2.37 A7P 91.94 TAL 231.86 TAP 14.37 RCA 107.76 APO 161.11 VZ 34.983 12.66 GP 12.00 TAL 153.08 TAP 112.09 ETS 2.36 TAE 152.67 ETE 164.50 TAC 31.61 ETC 169.71 CLP-112.61
     RL 147.18 LAL
RP 108.33 LAP
     RC 95.621 GL
    PLANETOCENTRIC CONIC
     C3 29.921 VHL 5.470 DLA -9.16 RAL 291.59 RAD 6568.2 VEL 12.300 PTH
                                                                                                        2.22 VMP 3.575 DPA -10.96 RAP 298.40 ECC 1.4924
     LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
         90.00
                      2 4 23 2024.98
                                                     -14.56
                                                                     29.82
                                                                                   157.84
                                                                                                  114.56
                                                                                                                   2 38 8
                                                                                                                                   1425.0
                   11 43 25 5245.37
3 21 15 1777.02
13 9 15 4968.57
4 19 17 1595.26
14 27 42 4723.08
         90.00
                                                      26.69
                                                                     236.45
                                                                                     163.08
                                                                                                     80.17 13 10 51
                                                                                                                                    4645.4
                                                                                                                                                    25.06
       100.00
                                                     -15.75
                                                                      11.01
                                                                                     157.26
                                                                                                     115.74
                                                                                                                   3 50 52
                                                                                                                                    1177.0
                                                                                                                                                    -12.15
                                                                                                                                                                      4.06
                                                                                                    79.02 14 32 3
119.04 4 45 53
75.78 15 46 25
       100.00
                                                     27.98
                                                                     215.83
                                                                                     162.81
                                                                                                                                   4368.6
                                                                                                                                                    26.18
                                                                                                                                                                    207.49
       110.00
                                                     -18.88
                                                                     355.52
                                                                                    155.56
                                                                                                                                     995.3
                                                                                                                                                   -14.86
                                                                                                                                                                   348.71
       110.00
                                                    31.42
                                                                     196.30
                                                                                   161.93
                                                                                                                                4123.1
                                                                                                                                                   29.15
                                                                                                                                                                   187.84
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SGT 1730.6 SGR 439.6 SG3 457.6

RRT -.8002 RRF -.8363 RTF .9089

SGB 1804.9 R23 .1547 R13 -.9139

SGI 1786.4 SG2 258.3 THA 168.39
     TOE .1263 TRA-1.2361 TC3-1.0530 BAU .4327
                                                                                                                                ST 416.5 SR 286.7 SS 312.0
CRT -.5131 CRS .8784 CST -.8592
    ROE -.2674 RRA .1913 RC3 .2480 FAU .19099
FOE .7294 FRA-2.0267 FC3-4.3687 BSP 5171
BOE .2957 BRA 1.2508 BC3 1.0818 FSP -1477
                                                                                                                               LSA 544.2 MSA 237.7 55A 19.7
                                                                                                                                EL1 451.9 EL2 226.8 ALF 153.34
LAUNCH DATE DEC 20 1965
                                                                             FLIGHT TIME 104.00
                                                                                                                                           ARRIVAL DATE APR 3 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 308.608
    RL 147.18 LAL .00 LOL 87.90 VL 28.525 GAL -9.92 A7L 87.67 MCA 145.71 SMA 134.09 ECC .19738 INC 2.3316 V1 30.271 RP 108.37 LAP 1.31 LOP 233.64 VP 38.205 GAP 2.72 A7P 91.93 TAL 230.91 TAP 16.62 RCA 107.62 APO 160.95 V2 34.970 RC 97.989 GL 12.24 GP 12.71 ZAL 152.68 ZAP 115.70 ETS 3.62 ZAE 150.07 ETE 164.36 ZAC 30.95 ETC 170.85 CLP-116.39
   PLANETOCENTRIC CONIC
    C3 29.092 VML 5.394 DLA -9.48 RAL 292.30 RAD 6568.2 VEL 12.266 PTH 2.21 VMP 3.644 DPA -10.34 RAP 297.72 ECC 1.4788 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 29.092 VHL 5.394 DLA -9.48 RAL 292.30 RAD 6568.2 VEL 12.266 PTH
        90.00
                      2 9 45 2007.63
                                                     -14.07
                                                                     24.79
                                                                                  158.07
                                                                                                  114.83
                                                                                                                                 1407.6
                                                                                                                  2 43 13
                                                                                                                                                  -10.61
                    11 43 43 5248.64
         90.00
                                                      26.73
                                                                     236.69
                                                                                    163.40
                                                                                                      80.28 13 11 12
                                                                                                                                    4648.6
                                                                                                                                                     25.11
                 3 26 26 1760.23
13 9 43 4971.28
4 24 6 1579.68
14 28 33 4724.59
                                                                                                    116.03 3 55 46
79.11 14 32 35
119.35 4 50 25
75.84 15 47 18
       100.00
                                                    -15.25
                                                                     10.02
                                                                                   157.49
                                                                                                                                    1160.2
                                                                                                                                                   -11.62
       100.00
                                                                     216.02
                                                     28.01
                                                                                                                                                                   207.68
                                                                                   163.14
                                                                                                                                    4371.3
                                                                                                                                                     26.22
                                                                                  155.79
       110.00
                                                    -18.36
                                                                     354.61
                                                                                                                                    979.7
                                                                                                                                                   -14.31
                                                                                                                                                                   347.84
       110.00
                                                     31.44
                                                                     196.41
                                                                                    162.26
                                                                                                                                   4124.6
                                                                                                                                                   29.18
                                                                                                                                                                    187.94
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 1893.1 SGR 446.8 SG3 443.2

RRT -.8278 RRF -.8648 RTF ..9129

SGB 1945.1 R23 .1712 R13 -.9176

SGI 1929.5 SG2 245.9 THA 168.76
    TOE .1273 TRA-1.2918 TC3-1.1835 BAU .4725
                                                                                                                             5T 440.4 SR 271.3 S5 297.0
CRT -.5180 CRS .8813 CST -.8546
LSA 548.6 MSA 233.2 SSA 19.3
    ROE --2485 RRA .1917 RC3 .2740 FAU .14511
FDE .6655 FRA-1.8844 FC3-4.3182 BSP 5656
    BOE .2792 BRA 1.3059 BC3 1.2148 FSP -1428
                                                                                                                             EL1 469.1 EL2 217.8 ALF 957.10
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 106.00
                                                                                                                                          ARRIVAL DATE APR 5 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 314.749
    RL 147.18 LAL .00 LOL 87.90 VL 28.477 GAL -9.76 AZL 87.80 HCA 148.91 SMA 133.72 ECC .19641 INC 2.2018 VI 30.271 RP 108.41 LAP 1.14 LOP 236.82 VP 38.158 GAP 3.06 AZP 91.89 TAL 229.91 TAP 18.81 RCA 107.46 APO 159.98 V2 34.957 RC 100.323 GL 11.71 GP 13.56 ZAL 152.26 ZAP 119.02 ETS 5.06 ZAE 147.66 ETE 163.98 ZAC 30.53 ETC 172.28 CLP-119.93
   PLANETOCENTRIC CONIC
    C3 28.237 VHL 5.314 DLA -9.89 RAL 293.08 RAD 6568.1 VEL 12.232 PTH 2.20 VHP 3.723 DPA -9.54 RAP 297.26 ECC 1.4647
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               90.00 2 16 11 1986.70
90.00 11 43 31 5254.68
100.00 3 32 38 1740.03
100.00 13 9 45 4976.58
110.00 4 29 47
                                                                                158.36
                                                                                                                 2 49 18 1386.7 -9.97
                                                     -13.47
                                                                     27.54
                                                                                                                                                                   20.61
                                                                                                                                                    25.21
                                                     26.80
                                                                    237.11
                                                                                  163.80
                                                                                                                                   4654.7
                                                                                                                                                                  228.81
                                                    -14.64
                                                                      8.82
                                                                                 157.77
163.55
                                                                                                                                   1140.0
                                                                                                                                                  -10.98
                                                                                                                                                                    1.94
                                                     28.08
                                                                    216.40
                                                                                                                                   4376.6
                                                                                                                                                   26.32
                                                                                                                                                                  208.04
                                                  -17.74
                                                                                 156.06
                   4 29 47 1561.08
14 29 5 4728.29
                                                                                                                                    961.1
                                                                    353.53
                                                                                                                                                  -13.65
                                                                                                                                                                 346.80
       110.00
                                                     31.50
                                                                    196.69
                                                                                   162.68
                                                                                                                                   4128.3
                                                                                                                                                 29.26
                                                                                                                                                                   188.20
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 2034.7 SGR 456.9 SG3 428.2

RRT -.8528 RRF -.8914 RTF .9158

SGB 2085.4 R23 .1912 R13 -.9202

SG1 2072.1 SG2 234.3 THA 169.02
    TOE .1210 TRA-1.3417 TC3-1.3195 BAU .5111
                                                                                                                             ST 461.4 SR 254.2 SS 278.2

CRT -.5136 CRS .8798 CST -.8531

LSA 550,5 MSA 227.0 SSA 19.0
    ROE -.2282 RRA .1916 RC3 .3037 FAU .13904
FOE .5884 FRA-1.7416 FC3-4.2630 BSP 6152
BOE .2583 BRA 1.3553 BC3 1.3540 FSP -1387
                                                                                                                               EL1 484.0 EL2 207.9 ALF 160.45
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 108.00
                                                                                                                                          ARRIVAL DATE APR 7 1966
  HELIOCENTRIC CONIC
                                                                            DISTANCE 320.865
                         .00 LOL 87.90 VL 28.428 GAL -9.59 A7L 87.95 MCA 152.10 SMA 133.34 ECC .19549 INC 2.0456 V1 30.271 .96 LOP 240.01 VP 38.109 GAP 3.38 A7P 91.81 TAL 228.84 TAP 20.94 RCA 107.27 APO 159.41 VZ 34.945 11.03 GP 14.61 ZAL 151.83 ZAP 122.03 ETS 6.74 ZAE 145.39 ETE 163.34 ZAC 30.34 ETC 174.06 CLP-123.24
   RL 147.18 LAL
        108.44 LAP
    RC 102.682 GL
  PLANETOCENTRIC CONIC
    C3 27.355 VHL 5.230 OLA -10.44 RAL 293.94 RAD 6568.1 VEL 12.196 PTH 2.19 VHP 3.813 OPA -8.52 RAP 297.00 ECC 1.4502
   LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 24 3 1960.79 -12.71 26.02 158.69 115.52 2 56 44 1360.8 -9.17 19.12
                                                                                                                                                -9.17
                  2 24

11 42 31 5264.77

3 40 12 1715.12

13 9 3 4965.68

4 36 40 1538.31

20 5 4735.25
                                                                                                    80.83 13 10 16
116.74 4 8 48
        90.00
                                                     26.91
                                                                    237.83
                                                                                   164.31
                                                                                                                                   4664.8
                                                                                                                                                   25.37
                                                                                                                                                                  229.50
      100.00
                                                    -13.88
                                                                      7.36
                                                                                  158.10
                                                                                                                                   1115.1
                                                                                                                                                  -10.18
                                                                                                                                                                      .53
                                                                                                     79.63 14 32 9
      100.00
                                                                    217.06
                                                                                164.06
                                                    28.19
                                                                                                                                                                  208.68
                                                                                                                                   4385.7
                                                                                                                                                  26.47
      110.00
                                                    -16.96
                                                                    352.22
                                                                                  156.37
                                                                                                    120.13 5 2 18
76.28 15 48 0
                                                                                                                                    938.3
                                                                                                                                                  -12.83
                                                                                                                                                                  345.54
      110.00
                                                                    197.20
                                                     31.62
                                                                                   163.22
                                                                                                                                  4135.2
                                                                                                                                                  29.41
                                                                                                                                                                 188.69
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   TOE .1079 TRA-1.3829 TC3-1.4592 BAU .5477
RDE -2073 RRA .1900 RC3 .3371 FAU .13230
FDE .5101 FRA-1.5869 FC3-4.1871 B9P 6609
BDE .2337 BRA 1.3959 BC3 1.4976 FSP -1328
                                                                      SGT 2171.8 SGR 469.8 SG3 410.9
RRT -.8734 RRF -.9154 RTF .9172
                                                                                                                             ST 479.2 SR 236.0 S5 257.5
CRT -.5010 CRS .8780 CST -.8469
                                                                       SGB 2222.1 R23 .2169 R13 -.9216
SG1 2210.7 SG2 224.8 THA 169.19
                                                                                                                             LSA 550.5 MSA 219.6 SSA 18.7
                                                                                                                             EL1 496.5 EL2 197.2 ALF 163.46
```

```
ARRIVAL DATE APR 9 1966
                                                                       FLIGHT TIME 110.00
LAUNCH DATE DEC 20 1965
                                                                      DISTANCE 326.957
  HELIOCENTRIC CONIC
   RL 147.18 LAL .00 LOL 87.90 VL 28.376 GAL -9.41 AZL 88.15 HCA 155.28 SHA 132.95 ECC .19461 INC 1.8529 V1 30.271 RP 108.48 LAP .77 LOP 243.20 VP 38.059 GAP 3.69 AZP 91.68 TAL 227.73 TAP 23.02 RCA 107.08 APO 158.82 VZ 34.932 RC 105.043 GL 10.14 GP 15.93 TAL 151.38 ZAP 124.73 ETS 8.75 ZAE 143.23 ETE 162.39 ZAC 30.38 ETC 176.29 CLP-126.33
   PLANETOCENTRIC CONIC
                                                                                                2.18 VHP 3.916 OPA -7.20 RAP 296.90 ECC 1.4352
    C3 26.445 VHL 5.142 OLA -11.19 RAL 294.89 RAD 6568.1 VEL 12.158 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.96 3 6 6
                                                                                                                         1327.7
                                                                                                                                                        17.23
                   2 33 58 1927.72
11 40 12 5281.03
                                                                            159.10
       90.00
                                                 -11.73
                                                                24.08
                                                                                                        13 8 13
                                                                                                                          4681.0
                                                                                                                                                       230.63
                                                 27.08
                                                               238.99
                                                                              164.96
                                                                                               81.39
        90.00
                                                                                                                          1083.4
                                                                                                                                           -9.16
                                                                                             117.20
                                                                                                        4 17 45
       100.00
                    3 49 41
                                  1683.44
                                                 -12.90
                                                                 5.52
                                                                              158.51
                                                                                             80.16 14 30 31
120.63 5 10 21
76.76 15 47 17
                                                                                                                          4400.5
                                                                                                                                         26.72
                                                                                                                                                       209.71
                  13 7 10 5000.55
                                                 28.37
                                                                218.12
                                                                              164.72
       100.00
                  4 45 12 1509.62
14 28 9 4747.13
                                                                                                                          909.6
                                                                                                                                         -11.79
                                                                                                                                                       343.97
                                                 -15.97
                                                                350.58
                                                                              156.75
      110.00
                                                                                                                          4147.1
                                                                                                                                          29.66
                                                                                                                                                        189.52
                                                31.81
                                                                198.07
                                                                              163.91
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 2308.5 SGR 488.1 SG3 393.4
RRT -.8907 RRF -.9371 RTF .9181
                                                                                                                      ST 493.8 SR 215.5 SS 231.8
CRT -.4742 CRS .8665 CST -.8420
    TOE .0829 TRA-1.4163 TC3-1.6074 BAU .5837
    ROE -.1843 RRA .1879 RC3 .3773 FAU .12553
                                                                   SGB 2359.5 R23 .2462 R13 -.9226
SG1 2349.4 SG2 218.0 THA 169.24
                                                                                                                      LSA 547.8 MSA 208.9 SSA 18.4
    FOE .4158 FRA-1.4343 FC3-4.1095 BSP 7092
BOE .2021 BRA 1.4287 BC3 1.6510 FSP -1277
                                                                                                                      EL1 506.0 EL2 185.1 ALF 166.47
                                                                                                                                 ARRIVAL DATE APR 11 1966
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 112.00
                                                                       DISTANCE 333.027
  HELIOCENTRIC CONIC
   RL 147.18 LAL .00 LOL 87.90 VL 28.323 GAL -9.22 A7L 88.39 MCA 158.47 SMA 132.55 ECC .19377 INC 1.6072 V1 30.271
RP 108.52 LAP .59 LOP 246.38 VP 38.009 GAP 3.99 A7P 91.50 TAL 226.57 TAP 25.04 RCA 106.87 APO 158.23 V2 34.920
RC 107.406 GL 8.93 GP 17.64 7AL 150.94 7AP 127.06 ETS 11.23 7AE 141.11 ETE 161.06 7AC 30.67 ETC 179.10 CLP-129.23
   PLANETOCENTRIC CONIC
                                                                                                 2.17 VHP 4.033 DPA -5.46 RAP 296.94 ECC 1.4197
    C3 25.505 VHL 5.050 OLA -12.23 RAL 295.97 RAD 6568.0 VEL 12.119 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 46 56 1863.90
11 35 47 5306.94
                                                 -10.42
                                                                21.53
                                                                             159.63
                                                                                             116.48
                                                                                                           3 18 20
                                                                                                                         1283.9
        90.00
                                                                                               82.29
                                                                                                        13 4 14
                                                                                                                           4706.9
                                                                                                                                           25.98
                                                                                                                                                        232.44
        90.00
                                                  27.33
                                                                240.85
                                                                              165.81
                  4 2 2 1641.64
13 3 25 5024.43
4 56 9 1472.13
14 25 45 4766.71
                                                                                                          4 29 23
                                                                                                                           1041.6
                                                                                                                                           -7.79
                                                                                                                                                        356.39
                                                                                              117.75
      100.00
                                                  -11.59
                                                                 3.11
                                                                              159.01
                                                                                                       14 27 7
                                                                                                                          4424.4
                                                                                                                                         27.10
                                                                                               61.03
                                                                219.85
      100.00
                                                 28.64
                                                                              165.60
                                                                                                           5 20 41
                                                                                                                                        -10.42
                                                                                                       5 20
15 45 11
                                                                                                                           872.1
                                                                348.47
                                                                                             121.23
      110.00
                                                  -14.66
                                                                              157.23
                                                                                                                           4166.7
                                                                                                                                           30.06
                                                                                               77.57
      110.00
                                                 32.10
                                                                199.52
                                                                              164.84
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 2442.3 SGR 513.5 SG3 374.6
RRT -.9038 RRF -.9557 RTF .9184
SGB 2495.7 R23 .2783 R13 -.9231
SG1 2486.4 SG2 215.8 TMA 169.16
                                                                                                                       ST 506.2 SR 192.0 SS 201.5
CRT -.4299 CRS .8393 CST -.8416
    TOE .0433 TRA-1.4385 TC3-1.7638 BAU .6187
    RDE -.1590 RRA .1847 RC3 .4260 FAU .11838
FDE .3079 FRA-1.2769 FC3-4.0184 BSP 7564
BDE .1648 BRA 1.4503 BC3 1.8145 FSP -1220
                                                                                                                       LSA 544.1 MSA 193.3 55A
                                                                                                                      EL1 513.7 EL2 170.8 ALF 169.58
                                                                                                                                ARRIVAL DATE APR 13 1966
LAUNCH DATE DEC 20 1965
                                                                       FLIGHT TIME 114.00
                                                                      DISTANCE 339.075
   HELIOCENTRIC CONIC
                          .00 LOL 87.90 VL 28.269 GAL -9.03 A7L 88.72 HCA 161.65 SMA 132.14 ECC .19299 INC 1.2812 VI 30.271 .40 LOP 249.56 VP 37.957 GAP 4.28 AZP 91.22 TAL 225.36 TAP 27.01 RCA 106.64 APO 157.65 V2 34.909
    RL 147.18 LAL
    RP 108.56 LAP
                        7.24 GP 19.94 TAL 150.49 TAP 128.94 ETS 14.37 TAE 138.93 ETE 159.23 TAC 31.24 ETC 182.71 CLP-131.96
    RC 109.770 GL
   PLANETOCENTRIC CONIC
    C3 24.538 VML 4.954 DLA -13.73 RAL 297.19 RAD 5568.0 VEL 12.080 PTM 2.16 VMP 4.172 DPA -3.13 RAP 297.04 ECC 1.4038
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 4 48 1822.93
11 27 44 5348.89
                                                                                            117.10
                                                                                                         3 35 11
                                                                                                                        1222.9
                                                                                                                                         -4.84
                                                                                                                                                        11.31
                                                                18.03
                                                                              160.35
                                                  -8.54
       90.00
                                                                                               83.76
                                                                                                        12 56 53
                                                                                                                                          26.52
                                                                                                                                                       235.39
                                                  27.68
                                                                243.87
                                                                              166.99
                                                                                                                          4748.9
        90.00
                                                                                                                                                       353.17
                   4 18 55 1583.80
12 56 18 5063.24
                                                                                             118.40
                                                                                                         4 45 19
                                                                                                                           983.8
                                                                                                                                          -5.87
                                                   -9.74
                                                                359.82
                                                                              159.71
      100.00
                                                                                                                                                       214.13
                                                                                               82.47 14 20 41
                                                                                                                          4463.2
                                                                                                                                          27.67
                                                  29.01
                                                                222.67
                                                                              166.81
      100.00
                                                                                              121.96 5 34 37
78.93 15 40 45
                                                                                                                                                       339.18
                                                                                             121.96
                                                                                                                          820.9
                                                                                                                                         -8.52
                                                                345.62
                                                                              157.88
                                 1420.87
                                                -12.83
      110.00
                    5 10 56
                                                                                                                                                        193.21
                                                                                                                          4198.9
                                                                                                                                          30.68
                   14 20 46
                                                  32.55
                                                                201.93
                                                                              166.13
      110.00
                                 4798.94
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 519.8 SR 164.2 SS 167.3
CRT -.3619 CRS .7756 CST -.8564
LSA 544.0 MSA 169.8 SSA 18.8
EL1 523.5 EL2 152.0 ALF 172.88
                                                                   SGT 2571.4 SGR 547.8 SG3 353.0
RRT -.9117 RRF -.9709 RTF .9178
SGB 2629.1 R23 .3113 R13 -.9230
SG1 2619.8 SG2 221.0 THA 168.93
    TOE -.0171 TRA-1.4452 TC3-1.9286 BAU .6525
   ROE -.1301 RRA .1791 RC3 .4861 FAU .11045
FDE .1845 FRA-1.1073 FC3-3.8969 BSP 8001
BDE .1312 BRA 1.4563 BC3 1.9889 FSP -1147
                                                                                                                                 ARRIVAL DATE APR 15 1966
                                                                        FLIGHT TIME 116.00
LAUNCH DATE DEC 20 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 345.102
                          .00 LOL 87.90 VL 28.213 GAL -8.83 AZL 89.18 HCA 164.83 SMA 131.73 ECC .19226 INC .8240 VI 30.271 .22 LOP 252.73 VP 37.905 GAP 4.55 AZP 90.80 TAL 224.11 TAP 28.94 RCA 106.41 APO 157.06 V2 34.897 4.74 GP 23.13 ZAL 150.00 ZAP 130.19 ETS 18.44 ZAE 136.49 ETE 156.71 ZAC 32.21 ETC 187.47 CLP-134.56
    RL 147.18 LAL
    RP 108.59 LAP
    RC 112.133 GL
   PLANETOCENTRIC CONIC
    C3 23.567 VHL 4.855 DLA -16.00 RAL 298.66 RAD 6568.0 VEL 12.039 PTH 2.15 VHP 4.350 DPA
                                                                                                                                .10 RAP 297.11 ECC 1.3879
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 31 24 1732.02 -5.69 12.88 161.48 117.79 4 0 16 1132.0 -1.93 6.22
                                                                                                                                           27.29
                                                                                                        12 43 11
                                                                                                                           4820.0
                                                   28.10
                                                                249.03
                                                                               168.72
                                                                                               86.32
        90.00
                   11 12 51
                                 5419.99
                                                                                                       5 8 49
14 8 35
                                                                                                                                           -2.99
                                                                                                                                                        348.44
                                                                                                                            898.3
                     4 43 51 1498.27
                                                   -6.93
                                                                355.02
                                                                              160.80
                                                                                              119.15
                                                                                                                           4529.0
                                                                                                                                          28.49
                                                                                                                                                        218.84
                     12 43 6 5128.98
5 32 21 1346.34
14 11 5 4853.67
                   12 45 6
                                                   29.50
                                                                227.50
                                                                              168.60
                                                                                               84.97
       100.00
                                                                                              122.83 5 5 7 15 31 59
                                                                                                                                           -5.72
                                                                                                                                                        335.23
                                                                                                                            746.3
                                                  -10.11
                                                                341.56
                                                                              158.87
                                                                                                                           4253.7
                                                                                                                                           31.63
       110.00
                   14 11 5
                                                 33.19
                                                                206.07
                                                                              168.08
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 548.4 SR 127.2 SS 135.7
CRT -.2801 CRS .5775 CST -.9291
                                                                    SGT 2701.0 SGR 597.4 SG3 328.9
RRT -.9150 RRF -.9827 RTF .9174
SGB 2766.2 R23 .3390 R13 -.9234
    TOE -.1145 TRA-1.4332 TC3-2.1058 BAU .6869
    RDE -.0926 RRA .1712 RC3 .5648 FAU 10179
FDE .0240 FRA -.9315 FC3-3.7394 BSP 8475
BDE .1472 BRA 1.4434 BC3 2.1803 FSP -1074
                                                                                                                      LSA 564.1 MSA 129.0 SSA 20.7
```

5G1 2756.1 SG2 236.1 THA 168.47

EL1 549.6 EL2 121.8 ALF 176.09

```
FLIGHT TIME 118.00
                                                                                                                                   ARRIVAL DATE APR 17 1966
LAUNCH DATE DEC 20 1965
                                                                         DISTANCE 351.108
   HELIOCENTRIC CONIC
                           .00 LOL 87.90 VL 28.157 GAL -8.62 ATL 89.87 HCA 168.01 5MA 131.32 ECC .19158 INC .1356 V1 30.271 .03 LOP 255.91 VP 37.853 GAP 4.82 ATP 90.13 TAL 222.82 TAP 30.83 RCA 106.16 APO 156.47 V2 34.886 .77 GP 27.80 ZAL 149.28 ZAP 130.40 ETS 23.89 ZAE 133.41 ETE 153.24 ZAC 33.85 ETC 193.92 CLP-137.12
    RL 147.18 LAL
    RP 108.63 LAP
    RC 114.493 GL
   PLANETOCENTRIC CONIC
    C3 22.674 VHL 4.762 DLA -19.68 RAL 300.56 RAD 6567.9 VEL 12.002 PTH 2.14 VHP 4.606 DPA
                                                                                                                                 4.81 RAP 296.97 ECC 1.3732
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 16 38 1579.99
10 42 46 5553.19
5 25 33 1357.58
12 16 32 5250.83
6 7 4 1227.49
13 51 31 4953.69
                                                                                                                              980.0
                                                                              163.68
                                                                                              118.31
                                                                                                            4 42 58
                                                                                                                                              2.98
        90.00
                                                    - .81
                                                                   4.37
                                                                                                          12 15 20
                                                                                                                                                           250.10
                                                                                                                             4953.2
        90.00
                                                    28.29
                                                                 258.76
                                                                                171.47
                                                                                                 91.19
                                                                                                                                             28.16
                                                                                                          5 48 11
       100.00
                                                                                               119.82
                                                                                                                              757.6
                                                                                                                                              1.77
                                                                                                                                                           340.72
                                                    -2.21
                                                                 347.24
                                                                                162.90
                                                                                                89.70 13 44 3
123.77 6 27 32
                                                                                171.48
                                                                                                                             4650.8
                                                                                                                                            29.53
                                                                                                                                                           227.74
       100.00
                                                    29.89
                                                                 236.53
                                                                                                                                                           329.00
                                                                               160.75
                                                                                               123.77
                                                                                                            6 27 32
                                                                                                                              627.5
       110.00
                                                    -5.67
                                                                 335.23
                                                                                                                                             -1.19
                                                                                                 85.80 15 14 5
                                                                                                                             4353.7
                                                                                                                                             33.00
                                                                                                                                                           204.67
                                                                               171.29
       110.00
                                                    33.96
                                                                 213.78
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 2827.8 SCR 666.9 SC3 297.8
RRT -.9125 RRF -.9908 RF ..9168
SCB 2905.4 R23 ..3587 R13 -.9241
SCI 2893.1 SC2 266.6 THA 167.75
                                                                                                                        ST 630.7 SR 77.8 SS 147.0

CRT - 3663 CRS ,3008 CST - 9803

LSA 647.6 MSA 73.0 SSA 26.5

EL1 631.4 EL2 72.3 ALF 177.38
    TOE -.2760 TRA-1.3882 TC3-2.2859 BAU .7218
    ROE -.0380 RRA .1564 RC3 .6664 FAU .09107
    FDE -.1824 FRA -.7301 FC3-3.4771 BSP 8941
BDE .2786 BRA 1.3969 BC3 2.3811 FSP -973
                                                                         FLIGHT TIME 120.00
                                                                                                                                    ARRIVAL CATE APR 19 1966
LAUNCH DATE DEC 20 1965
                                                                        DISTANCE 357.094
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 28.100 GAL -8.40 AZL 91.05 HCA 171.18 SMA 130.90 ECC .19096 INC 1.0449 V1 30.271
RP 108.66 LAP -.16 LOP 259.08 VP 37.801 GAP 5.07 AZP 88.96 TAL 221.49 TAP 32.67 RCA 105.90 APO 155.90 VZ 34.875
RC 116.852 GL -6.19 GP 35.12 ZAL 147.57 ZAP 128.68 ETS 31.31 ZAE 128.82 ETE 148.53 ZAC 36.90 ETC 202.92 CLP-139.82
   PLANETOCENTRIC CONIC
    C3 22.229 VHL 4.715 DLA -26.24 RAL 303.42 RAD 6567.9 VEL 11.984 PTH 2.14 VHP 5.051 DPA 12.10 RAP 296.22 ECC 1.3658 ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   6 6 5 1229.74
9 16 8 605.78
                                                    10.29
                                                                 344.62
                                                                               169.91
                                                                                               116.53
                                                                                                            6 26 35
                                                                                                                              629.7
                                                                                                                                           13.Z7
                                                                                                                                                           337.67
                                                                  305.26
                                                                                175.58
                                                                                                103.01
                                                                                                             9 26 14
                                                                                                                                5.8
                                                                                                                                             26.91
        90.00
                                                    25.37
                  6 58 56 1059.08
11 5 58 5539.72
7 17 18 1001.41
                                                                                168.60
                                                                                                             7 16 35
                                                                                                                               459.1
                                                                                                                                             11.64
                                                                                                                                                           324.06
                                                     7.84
                                                                 330.78
                                                                                                118.94
       100.00
                                                    28.09
                                                                 257.75
                                                                                176.22
                                                                                                100.68
                                                                                                          12 38 18
                                                                                                                             4939.7
       100.00
                                                                 323.41
                                                                                165.60
                                                                                               124.07
                                                                                                             7 34 D
                                                                                                                              401.4
                                                                                                                                                           317.15
                                                     2.96
       110.00
                                                                                                 95.75 14 30 15
                                                                                177.17
                   13 4 5
                                                    33.75
                                                                 230.64
       110.00
                                  5170.15
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2947.8 SGR 764.8 SG3 254.1
RRT -.9038 RRF -.9953 RTF ..9174
SGB 3045.4 R23 .3651 R13 -.9268
                                                                                                                        ST 871.9 SR 92.3 SS 264.5
CRT -.9857 CRS .9616 CST -.9536
    TOE -.5735 TRA-1.2780 TC3-2.4197 BAU .7562
    ROE .0608 RRA .1247 RC3 .7871 FAU .07647
FDE -.4659 FRA -.4910 FC3-2.9784 BSP 9364
BDE .5767 BRA 1.2840 BC3 2.5445 FSP -832
                                                                                                                         LSA 912.5 MSA 76.6 55A 14.0
                                                                     SG1 3028.7 SG2 318.6 THA 166.65
                                                                                                                         EL1 876.6 EL2
                                                                                                                                               15.5 ALF 174.04
                                                                         FLIGHT TIME 122.00
                                                                                                                                   ARRIVAL DATE APR 21 1966
LAUNCH DATE DEC 20 1965
                                                                        DISTANCE 363.054
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 28.042 GAL -8.17 ATL 93.53 HCA 174.34 SMA 130.48 ECC .19038 INC 3.5323 V1 30.271
RP 108.69 LAP -.35 LOP 262.25 VP 37.748 GAP 5.32 ATP 86.48 TAL 220.12 TAP 34.46 RCA 105.64 APO 155.32 V2 34.865
RC 119.206 GL -20.25 GP 47.55 TAL 141.38 TAP 122.90 ETS 41.45 TAE 120.52 ETE 142.92 TAC 43.25 ETC 215.53 CLP-143.59
   PLANETOCENTRIC CONIC
    C3 24.420 VHL 4.942 DLA -39.48 RAL 309.44 RAD 6568.0 VEL 12.075 PTH
                                                                                                  2.16 VHP
                                                                                                                6.114 OPA 24.30 RAP 293.64 ECC 1.4019
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 48 59 1554.19
11 21 14 5615.25
                                                                                                                                            29.05
                                                                                                                                                           10.13
                                                                  17.51
                                                                              184.82
                                                                                              121.56
                                                                                                            5 14 53
                                                                                                                              954.2
       61.25
                                                    25.07
                                                                                                          12 54 50
                                                                               184.83
                                                                                               121.55
                                                                                                                             5015.3
                                                                                                                                             29.06
                                                                                                                                                          254.84
                                                                 262.22
                                                    25.08
       118.74
                                                                                                                                             29.05
                                                                                                                                                           10.13
                                                                  17.51
                                                                               184.82
                                                                                               121.56
                                                                                                                              954.2
                                                    25.07
        61.25
                    4 48 59 1554.19
                                                                                               121.55 12 54 50
                                                                 262.22
                                                                               184.83
                                                                                                                             5015.3
                                                                                                                                             29.06
                                                                                                                                                          254.84
       118.75
                   11 21 14
                                   5615.25
                                                    25.08
                                                                                               121.56 5 14 53
121.55 12 54 50
                                                                                                                              954.2
                                                                                                                                            29.05
                                                                                                                                                           10.13
                                                    25.07
                                                                  17.51
                                                                              184.82
        61.25
                    4 48 59 1554.19
                                                  25.08
                                                                 262.22
                                                                               184.83
                                                                                                                             5015.3
       118.75
                   11 21 14
                                  5615.25
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1544.4 SR 336.9 SS 519.3
CRT -.9684 CRS .9991 CST -.9780
LSA 1658.9 MSA 127.7 SSA 3.2
                                                                     SCT 3075.6 SCR 880.5 SC3 186.1
RRT -.8833 RRF -.9930 RTF ..9240
SC6 3199.2 R25 .3488 R13 -.9358
    TOE-1.2722 TRA-1.0045 TC3-2.2640 BAU .7863
    RDE .2895 RRA .0351 RC3 .8219 FAU .05416
FDE -.8432 FRA -.1908 FC3-1.9200 BSP 9838
                                                                     SG1 3174.1 SG2 399.9 THA 165.57
                                                                                                                         EL1 1578.6 EL2
                                                                                                                                              82.2 ALF 168.04
    BDE 1.3048 BRA 1.0051 BC3 2.4086 FSP
                                                        -609
                                                                         FLIGHT TIME 124.00
                                                                                                                                    ARRIVAL DATE APR 23 1966
LAUNCH DATE DEC 2D 1965
                                                                         DISTANCE 368.961
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 27.983 GAL -7.93 AZL 102.18 HCA 177.47 SMA 130.06 ECC .18978 INC12.1770 V1 30.271
RP 108.72 LAP -.53 LOP 265.42 VP 37.696 GAP 5.55 AZP 77.83 TAL 218.70 TAP 36.16 RCA 105.38 APO 154.75 V2 34.856
RC 121.557 GL -50.01 GP 69.73 ZAL 119.31 ZAP 108.94 ETS 60.44 ZAE 102.48 ETE 145.47 ZAC 56.97 ETC 238.24 CLP-159.53
   PLANETOCENTRIC CONIC
    C3 58.241 VHL 7.632 DLA -64.63 RAL 338.36 RAD 6569.1 VEL 13.401 PTH 2.45 VHP 10.701 DPA 45.41 RAP 282.23 ECC 1.9585
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1415.1
                                                                                                                                           31.21
                                                                               236.03
                                                                                                             5 34 3
                                                                                                                                                           59.95
                     5 0 28
                                  2015.06
                                                    24.22
                                                                  63.92
                                                                                              151.98
        29.12
                                                                                                          16 33 38
                                                                                                                             4989.2
                                                                                                                                             31.22
                                                                                                                                                           254.62
                                                                 258.59
                                                                                236.05
                   15 0 29
                                   5589.24
                                                    24.23
       150.88
                                                                                                           5 34 3
                                                                                                                             1415.1
                                                                                                                                                           59.95
                     5 0 28
                                   2015.06
                                                    24.22
                                                                   63.92
                                                                                236.03
                                                                                                151.98
                                                                                                                                             31.21
        29.12
                                                                                                          16 33 38
                                                                                                                             4989.2
                                                                                                                                             31.22
                                                                                                                                                          254.52
                   15 0 29
                                   5589.24
                                                    24.23
                                                                 258.59
                                                                                236.05
                                                                                               151.98
       150.88
                                                                                                          5 34 3
16 33 38
                                                                                                                                           31.21
                                                                                                                                                           59.95
                                   2015.06
                                                    24.22
                                                                   63.92
                                                                                236.03
                                                                                                151.98
                                                                                                                             1415.1
                     5 0 28
        29.12
                                                    24.23
                                                                 258.59
                                                                                236.05
                                                                                                151.98
                                                                                                                             4989.2
                                                                                                                                             31.22
                                                                                                                                                           254.62
                   15 0 29
                                   5589.24
       150.88
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 3280.0 SGR 682.6 SG3 92.4

RRT - 7261 RRF - .8749 RTF .9681
    TOE-3.9869 TRA .1467 TC3 -.8623 BAU .6949
RDE .4640 RRA -.2685 RC3 .2300 FAU .02147
                                                                                                                        ST 2994.5 SR 376.0 SS 830.2

CRT -.9361 CRS .9629 CST -.9963

LSA 3126.7 MSA 146.5 SSA .6
    FOE-1.1883 FRA .1907 FC3 -.3192 BSP 10131
BOE 4.0139 BRA .3059 BC3 .8925 FSP -290
                                                                     SGB 3350.2 R23 .2292 R13 -.9732
                                                                SGT 3318.0 SG2 463.9 THA 171.23
                                                                                                                      EL1 3015.2 EL2 131.3 ALF 173.28
```

```
ARRIVAL DATE APR 25 1966
                                                                                               FLIGHT TIME 126.00
LAUNCH DATE DEC 20 1965
                                                                                               DISTANCE 375.269
     RL 147.18 LAL .00 LOL 87.90 VL 27.925 GAL -7.77 A7L 43.83 HCA 181.00 SMA 129.65 ECC .19030 INC46.1674 V1 30.271 RP 108.75 LAP -.72 LOP 268.59 VP 37.644 GAP 5.88 A7P 136.17 TAL 217.48 TAP 38.47 RCA 104.98 APO 154.32 V2 34.846 RC 123.903 GL 59.64 GP -72.02 7AL 99.08 ZAP 97.94 ETS 199.43 ZAE 72.88 ETE 122.17 ZAC 94.88 ETC 26.39 CLP 116.58
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                 3.36 VHP 26.773 OPA -64.84 RAP 141.69 ECC 9.8070
     C3 535.136 VHL 23.133 CLA 46.21 RAL 313.25 RAD 6572.4 VEL 25.621 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 51.82 16 23 25 4885.67 -1.56 226.45 221.76 43.81 17 44 51 4285.7 -7.32 221.29 128.18 0 17 10 3448.70 -1.55 114.66 221.75 43.81 1 14 39 2848.7 -7.30 109.51
                                                                                                                                                                     4285.7
                                                                                                                                            17 44 51
                                                                                                         221.76
                                                                                                                               43.81
                         16 23 25
                                            4885.67
                                                                    -1.56
                                                                                     226.45
          51.82
                         0 17 10 3448.70
16 23 25 4885.67
0 17 10 3448.70
                                                                                                                                              1 14 39
                                                                                                                                                                    2848.7
                                                                                                                                                                                         -7.30
                                                                                                                                                                                                           109.51
                                                                                                        221.75
                                                                                                                              43.81 1 14 39
43.81 17 44 51
                                                                                                                              43.81
                                                                    -1.55
                                                                                     114.66
         128.18
                                                                                                                                                                    4285.7
                                                                                                                                                                                         -7.32
                                                                                                                                                                                                           221.29
                                                                                                        221.76
                                                                    -1.56
                                                                                     226.45
          51.82
                                                                                                                              43.81
                                                                                                                                              1 14 39
                                                                                                                                                                    2848.7
                                                                                                                                                                                         -7.30
                                                                                                                                                                                                           109.51
                                                                                                        221.75
                                                                                     114.66
         128.18
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 397.2 SR 2969.9 SS 1305.2
CRT -.8746 CRS .9995 CST -.8889
LSA 3262.5 MSA 193.2 SSA .5
                                                                                          SGT 627.8 SGR 3291.4 SG3 52.0
RRT -.1782 RRF -.9956 RTF .2694
     TOE 1.4901 TRA 1.3663 TC3 -.0296 BAU 1.1883
     RD-11.8930 RRA 3.5170 RC3 -.1634 FAU-.01572
                                                                                          SGB 3350.7 R23 -. 0870 R13 -. 9962
     FOE 2.2674 FRA -.5103 FC3 .0254 BSP 6959
BDE11.9860 BRA 3.7731 BC3 .1661 FSP -120
                                                                                                                                                               EL1 2990.2 EL2 191.3 ALF 96.70
                                                                                          SG1 3293.4 SG2 617.3 THA 92.02
     BOE11.9860 BRA 3.7731 BC3 .1661 FSP
                                                                                                                                                                              ARRIVAL DATE APR 27 1966
                                                                                                FLIGHT TIME 128.00
LAUNCH DATE DEC 20 1965
                                                                                               015TANCE 380.987
   HELIOCENTRIC CONIC
     RL 147.18 LAL .00 LOL 87.90 VL 27.866 GAL -7.48 AZL 76.83 HCA 183.96 SMA 129.23 ECC .18944 INC13.1655 VI 30.271 RP 108.78 LAP -.90 LOP 271.76 VP 37.592 GAP 6.05 AZP 103.14 TAL 215.90 TAP 39.86 RCA 104.75 APO 153.71 VZ 34.838
                                52.33 GP -56.10 TAL 116.13 TAP 119.62 ETS 297.47 TAE 107.91 ETE 209.80 TAC 75.86 ETC 119.24 CLP-152.40
     RC 126.245 GL
     RC 126.249 UL 32.35 UL 33.35 UL 32.35 UL 33.35 U
    PLANETOCENTRIC CONIC
         72.26 17 6 10 4254.94

107.74 21 37 16 3389.08

72.26 17 6 10 4254.94

107.74 21 37 16 3389.08

110.00 22 58 37 3139.10

110.00 20 44 0 3552.92
                                                                                                                                59.64 18 17 5
59.63 22 33 45
62.42 23 50 56
56.36 21 43 13
                                                                  -13.65
                                                                                      183.73
                                                                                                                                                                    2789.1
                                                                                                                                                                                        -17.57
                                                                                                                                                                                                             112.56
                                                                                                         187.12
                                                                  -13.64
                                                                                      119.38
                                                                                                                                                                    2539.1
                                                                                                                                                                                        -24.57
                                                                                                                                                                                                              96.95
                                                                  -21.05
                                                                                      104.33
                                                                                                         191.41
         110.00
                                                                                                                                                                                       -10.85
                                                                                                                                                                                                            121.15
                                                                                                                                                                     2952.9
                                                                   -6.47
                                                                                      127.50
                                                                                                         182.57
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 3546.3 SGR 367.2 SG3 131.6
RRT .1613 RRF .4404 RTF .9567
SGB 3565.3 R23 .2883 R13 .9572
                                                                                                                                                                ST 2424.4 SR 242.6 SS 788.7
CRT .8337 CRS -.8994 CST -.9912
      TOE 3.2183 TRA-2.7325 TC3 -.8152 BAU .6944
      RDE .3225 RRA .2691 RC3 -.1040 FAU .03401
      FDE 1.6200 FRA -.7420 FC3 -.4659 BSP 11166
BDE 3.2344 BRA 2.7457 BC3 .8218 FSP -451
                                                                                                                                                                LSA 2555.7 MSA 164.3 SSA
                                                                                                                                                                EL1 2432.9 EL2 133.5 ALF 4.78
                                                                                           5G1 3546.8 SG2 362.3 THA
                                                                                                                                            .97
                                                                                                                                                                             ARRIVAL DATE APR 29 1966
                                                                                                FLIGHT TIME 130.00
LAUNCH DATE DEC 20 1965
                                                                                                DISTANCE 386.875
     RL 147.18 LAL .00 LOL 87.90 VL 27.807 GAL -7.22 AZL 81.23 HCA 187.10 SHA 128.82 ECC .18913 INC 8.7731 V1 30.271 RP 108.80 LAP -1.08 LOP 274.92 VP 37.541 GAP 6.27 AZP 98.71 TAL 214.40 TAP 41.51 RCA 104.46 APO 153.18 V2 34.830
      RC 128.581 GL 42.98 GP -37.90 ZAL 123.08 ZAP 132.92 ETS 310.69 ZAE 120.12 ETE 208.02 ZAC 64.16 ETC 130.77 CLP-149.66
    PLANETOCENTRIC CONIC
                                                                                                                                   2.29 VMP 5.811 OPA -57.95 RAP 322.26 ECC 1.6269
      C3 38.093 VHL 6.172 DLA 23.66 RAL 300.64 RAD 6568.5 VEL 12.628 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               77.84 22 43 44
61.70 18 15 35
79.18 24 18 37
60.12 19 14 38
                                                                                                                                                                 2622.9
           90.00 21 50 1 3222.93
90.00 17 6 6 4169.15
100.00 23 30 18 2899.59
100.00 18 8 30 3967.72
                                                                                                                                                                                       -27.19
                                                                                      112.35
                                                                                                        182.59
                                                                    -25.77
                                                                                                                                                                                                            163.62
                                                                                                                                                                     3569.1
                                                                                                                                                                                          -4.73
                                                                                                         173.28
                                                                     -.96
                                                                                      170.26
                                                                                                                                                                                                              80.48
                                                                                                                                                                                        -29.24
                                                                                                                                                                     2299.6
                                                                                                         183.10
                                                                   -28.04
                                                                                        89.07
          100.00
                                                                                                                                                                                                            147.81
                                                                                                                                                                                         -2.92
                                                                                                                                                                     3367.7
                                                                      1.06
                                                                                      154.34
                                                                                                         172.16
          100.00
                                                                                                                                                                                                              55.71
                                                                                                                                              2 3 6
                                                                                                                                                                     1967.7
                                                                                                                                                                                        -34.12
                                                                                                                                82.38
                                                                                                         184.12
                                                                                                                                82.38 2 3 6
56.24 19 43 27
                            1 20 19
                                              2567.71
                                                                   -33.42
                                                                                        64.88
          110.00
                                                                                                                                                                                                             138.00
                                                                                                                                                                     3272.4
                                                                                                                                                                                            1.23
                                                                     5.70
                                                                                                          169.28
                                                                                      144.23
                          18 38 55
                                              3872.37
          110.00
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ST 2059.5 SR 281.1 SS 771.7
CRT .9102 CRS -.9736 CST -.9807
                                                                                            SGT 3602.7 SGR 368.8 SG3 201.2
      TOE 2.0809 TRA-2.3405 TC3-1.5414 BAU .7907
                                                                                           RRT .6121 RRF .8521 RTF .9322
SGB 3621.6 R23 .3512 R13 .9340
SG1 3609.8 SG2 291.0 THA 3.61
      ROE .3019 RRA .0685 RC3 -.1859 FAU .05622
FOE 1.6349 FRA -.7859 FC3-1.2776 BSP 11286
BOE 2.1027 BRA 2.3415 BC3 1.5526 FSP -682
                                                                                                                                                                LSA 2210.0 MSA 179.0 SSA 1.9
EL1 2075.4 EL2 115.5 ALF 7.10
                                                                                                                                                                               ARRIVAL DATE MAY 1 1966
                                                                                                 FLIGHT TIME 132.00
 LAUNCH DATE DEC 20 1965
                                                                                                 DISTANCE 392.767
    HELIOCENTRIC CONIC
      RL 147.18 LAL .00 LOL 87.90 VL 27.748 GAL -6.95 A7L 82.93 HCA 190.26 SHA 128.41 ECC .18895 INC 7.0726 V1 30.271 RP 108.82 LAP -1.26 LOP 278.09 VP 37.491 GAP 6.48 A7P 96.96 TAL 212.89 TAP 43.15 RCA 104.15 APO 152.67 V2 34.822 RC 130.911 GL 37.82 GP -27.63 7AL 125.79 7AP 140.26 ETS 318.53 7AE 125.39 ETE 202.87 7AC 58.72 ETC 137.58 CLP-150.22
     PLANETOCENTRIC CONIC
       C3 30.586 VHL 5.530 DLA 18.80 RAL 302.54 RAD 6568.2 VEL 12.327 PTH 2.22 VHP 5.333 DPA -47.55 RAP 319.91 ECC 1.5034
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             87.41 23 47 25
61.99 17 25 11
88.68 1 19 9
60.62 18 31 19
92.03 2 47 24
57.00 19 12 26
                                                                                                                                                                     2347.5
                                                                                                                                                                                          -28.27
                                                                                                        178.81
                                                                                        92.60
                         22 58 17
                                              2947.48
                                                                     -28.21
            90.00
                                                                                                                                                                                                              172.82
                                                                                                                                                                      3733.9
                                                                                                                                                                                              .57
                                                                                                           169.85
                                                                       4.35
                                                                                       179.46
                         16 12 57
                                              4333.89
            90.00
                                                                                                                                                                                          -29.73
                                                                                                                                                                                                                61.86
                                                                                                                                                                      2048.3
                                                                     -29.87
                                                                                         70.66
                                                                                                         178.87
                            0 35 1
                                              2648.26
           100.00
                                                                                                                                                                                             1.85
                                                                                                                                                                                                             155.53
                                                                                                        169.05
178.84
                                                                                                                                                                      3508.4
                          17 22 51 4108.35
2 8 7 2356.94
                                                                       5.80
                                                                                       162.08
           100.00
                                                                                                                                                                                          -33.47
                                                                                                                                                                                                               39.32
                                                                                                                                                                      1756.9
                                                                                         48.50
                                                                     -34.13
           110.00
                                                                                                                                                                                             5.04
                                                                      9.45
                                                                                       149.55
                                                                                                           166.82
                                                                                                                                                                      3372.4
                          18 6 13 3972.43
          110.00
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                         HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                 ST 1876.4 SR 222.8 SS 733.6
CRT .8895 CRS -.9722 CST -.9716
                                                                                          SGT 3691.1 SGR 285.7 SG3 233.2

RRT .5784 RRF .8334 RTF .9214

SGB 3702.2 R23 .3657 R13 .9224

SGI 3694.8 SG2 232.8 THA 2.57
       TOE 1.6753 TRA-2.1618 TC3-2.0245 BAU .8302
       ROE .2142 RRA .0586 RC3 -.1520 FAU .06535
FDE 1.5185 FRA -.7207 FC3-1.8497 BSP 11557
                                                                                                                                                                 LSA 2018.2 MSA 188.0 SSA 3.2
EL1 1886.8 EL2 101.2 ALF 6.05
       BOE 1.6890 BRA 2.1626 BC3 2.0302 FSP -781
```

```
ARRIVAL DATE MAY 3 1966
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 134.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 398.649
    RL 147.18 LAL .00 LOL 87.90 VL 27.689 GAL -6.68 AZL 83.83 HCA 193.43 SHA 128.01 ECC .18887 INC 6.1670 V1 30.271
RP 108.85 LAP -1.43 LOP 281.25 VP 37.441 GAP 6.69 AZP 96.00 TAL 211.35 TAP 44.77 RCA 103.83 APO 152.18 VZ 34.816
    RC 133.236 GL 34.72 GP -21.39 TAL 126.67 TAP 144.77 ETS 324.11 TAE 127.83 ETE 198.61 TAC 56.41 ETC 142.56 CLP-151.31
   PLANETOCENTRIC CONIC
    C3 26.902 VHL 5.187 DLA 16.08 RAL 304.37 RAD 6568.1 VEL 12.177 PTH 2.19 VHP 5.195 DPA -41.03 RAP 319.77 ECC 1.4427
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 23 32 57 2811.29 -28.22 82.65 176.97 92.40 24 19 48 2211.3 -27.59 74.04 90.00 15 52 54 4405.96 6.64 183.52 169.18 62.41 17 6 19 3806.0 2.89 176.84 100.00 1 7 11 2520.09 -29.69 61.14 176.88 93.68 1 49 11 1920.1 -28.86 52.43 100.00 17 5 17 4172.40 7.93 165.65 168.48 61.08 18 14 49 3572.4 4.01 159.05 110.00 2 35 18 2244.40 -33.52 39.78 176.46 97.15 3 12 42 1644.4 -32.16 30.81 11.00 17 53 39 4020.85 11.24 152.16 166.49 57.50 19 0 40 3420.9 6.87 145.79
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 3788.4 SGR 222.9 SG3 245.3
RRT .4671 RRF .7395 RTF .9152
SGB 3795.0 R23 .3515 R13 .9157
SGI 3789.8 SG2 197.0 THA 1.58
                                                                                                                               ST 1780.8 SR 187.6 55 697.9
CRT .8686 CRS -.9688 CST -.9641
    TOE 1.4780 TRA-2.0499 TC3-2.3873 BAU .8593
    RDE .1688 RRA .0593 RC3 -.0976 FAU .06814
    FDE 1.3925 FRA -.6272 FC3-2.1929 BSP 11854
                                                                                                                              LSA 1912.0 MSA 193.7 SSA
                                                                                                                                                                      4.5
    BDE 1.4876 BRA 2.0508 BC3 2.3892 FSP -818
                                                                                                                              EL1 1788.2 EL2 92.6 ALF
                                                                                                                                                                       5.24
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 136.00
                                                                                                                                           ARRIVAL DATE MAY 5 1966
  HELIOCENTRIC CONIC
                                                                            DISTANCE 404.522
   RL 147.18 LAL .00 LOL 87.90 VL 27.630 GAL -6.40 A7L 84.40 MCA 196.59 SMA 127.60 ECC .18888 INC 5.6024 V1 30.271 RP 108.87 LAP -1.60 LOP 284.41 VP 37.391 GAP 6.90 A7P 95.37 TAL 209.79 TAP 46.38 RCA 103.50 APO 151.71 VZ 34.809
                         32.71 GP -17.29 ZAL 126.60 ZAP 147.90 ETS 328.21 ZAE 129.02 ETE 195.40 ZAC 55.69 ETC 146.35 CLP-152.53
   RC 135.553 GL
  PLANETOCENTRIC CONIC
   C3 24.399 VHL 4.960 DLA 14.48 RAL 306.17 RAD 6568.0 VEL 12.082 PTH 2.16 VHP 5.175 DPA -36.57 RAP 320.49 ECC 1.4048 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  23 54 49 2731.95
15 45 21 4441.08
1 27 51 2444.62
16 58 56 4203.65
2 53 27 2176.81
17 49 50 4044.22
       90.00
                                                   -27.86
                                                                     76.87
                                                                                  176.35
                                                                                                     95.27 24 40 21
                                                                                                                                 2132.0
                                                                                                                                                  -26.84
                                                                                                                                                                   68.36
                                                                                                                16 59 22
        90.00
                                                       7.74
                                                                    185.51
                                                                                    169.42
                                                                                                      62.68
                                                                                                                                   3841.1
                                                                                                                                                     4.02
                                                                                                                                                                   178.81
                                                                                                               2 8 36
18 9 0
                                                                                                     96.57
                                                                                                                                   1844.6
      100.00
                                                    -29.23
                                                                     55.58
                                                                                   176.19
                                                                                                                                                   -28.01
                                                                                                                                                                   46.99
                                                                                                                                   3603.6
                                                      8.95
                                                                    167.41
                                                                                   168.77
      100.00
                                                                                                      61.36
                                                                                                                                                     5.06
                                                                                                                                                                  160.78
                                                                                                   100.13 3 29 43
57.78 18 57 15
                                                     -32.82
                                                                      34.62
      110.00
                                                                                   175.57
                                                                                                                                   1576.8
                                                                                                                                                  -31.08
                                                                                                                                                                    25.84
       110.00
                                                     12.09
                                                                    153.44
                                                                                   166.90
                                                                                                                                   3444.2
                                                                                                                                                     7.75
                                                                                                                                                                  147.03
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 3892.7 SGR 188.9 SG3 248.6
RRT .3067 RRF .5799 RTF .9111
SGB 3897.3 R23 .3151 R13 .9113
                                                                                                                               ST 1729.4 SR 171.1 55 669.6
CRT .8561 CRS -.9682 CST -.9578
    TOE 1.3655 TRA-1.9672 TC3-2.6967 BAU .8870
   ROE .1470 RRA .0582 RC3 -.0455 FAU .06824
FOE 1.2843 FRA -.5330 FC3-2.4015 BSP 12250
                                                                                                                               LSA 1851.8 MSA 198.4 55A 5.9
    BOE 1.3734 BRA 1.9680 BC3 2.6971 FSP -831
                                                                        SG1 3893.1 SG2 179.8 THA
                                                                                                                              EL1 1735.6 EL2 88.1 ALF 4.85
                                                                                                                .85
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 138.00
                                                                                                                                          ARRIVAL DATE MAY 7 1966
                                                                            DISTANCE 410.383
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 27.571 GAL -6.12 AZL 84.79 HCA 199.75 SMA 127.21 ECC .18900 INC 5.2144 VI 30.271
RP 108.88 LAP -1.76 LOP 287.58 VP 37.343 GAP 7.10 AZP 94.91 TAL 208.20 TAP 47.96 RCA 103.17 APO 151.25 VZ 34.804
RC 137.863 GL 31.34 GP -14.43 ZAL 125.98 ZAP 150.30 ETS 331.29 ZAE 129.63 ETE 192.98 ZAC 55.86 ETC 149.34 CLP-153.75
   PLANETOCENTRIC CONIC
    C3 22.345 VHL 4.790 OLA 13.57 RAL 307.97 RAD 6567.9 VEL 12.013 PTH 2.14 VHP 5.206 OPA -33.28 RAP 321.63 ECC 1.3776 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 14 5 2682.88
15 44 24 4456.09
1 42 32 2397.59
16 58 37 4216.62
3 6 47 2134.01
17 50 52 4052.96
                                                                                                                                  2082.9
                                                                                                     97.02
                                                                                                                                               -26.25
                                                                                                                 0 58 48
        90.00
                                                    -27.50
                                                                    73.33
                                                                                   176.44
                                                                                                                                                                  64.89
                                                                                                     62.80 16 58 40
                                                                                   170.10
                                                                   186.37
                                                                                                                                   3856.1
                                                                                                                                                    4.50
        90.00
                                                      8.21
                                                                                                                                                                  179.65
                                                                                   176.24
                                                                                                                 2 22 30
                                                                                                                                   1797.6
      100.00
                                                   -28.81
                                                                     52.14
                                                                                                     98.33
                                                                                                                                                  -27.36
                                                                                                                                                                   43.64
                                                                                                     61.49 18 8 54
      100.00
                                                      9.37
                                                                    168.14
                                                                                   169.48
                                                                                                                                   3616.6
                                                                                                                                                    5.49
                                                                                                                                                                 161.50
                                                                                                   101.95 3 42 21
57.89 18 58 25
                                                   -32.27
                                                                                   175.52
                                                                                                                                   1534.0
      110.00
                                                                     31.41
                                                                                                                                                 -30.28
                                                                                                                                                                   22.76
                                                                                   167.68
                                                                                                                                   3453.0
       110.00
                                                     12.40
                                                                   153.92
                                                                                                                                                    A.07
                                                                                                                                                                  147.50
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 3993.3 SGR 177.7 SG3 247.4
RRT .1382 RRF .3893 RTF .9077
SGB 3997.2 R23 .2662 R13 .9078
                                                                                                                              ST 1709.4 SR 165.7 S5 649.9 CRT .8548 CRS -.9712 CST -.9529
    TOE 1.3025 TRA-1.8916 TC3-2.9710 BAU .9114
   ROE .1375 RRA .0547 RC3 .0005 FAU .06693 FOE 1.1987 FRA -.4403 FC3-2.5254 BSP 12582
                                                                                                                            CRT .8548 CR5 -.5112 CC
LSA 1825.1 MSA 201.7 SSA 7.2
    BOE 1.3097 BRA 1.8924 BC3 2.9710 FSP -825
                                                                        SG1 3993.3 SG2 176.0 THA
                                                                                                               .35
                                                                                                                              FL1 1715.3 FL2 85.7 ALF
                                                                                                                                                                     4.75
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 140.00
                                                                                                                                          ARRIVAL DATE MAY 9 1966
                                                                            DISTANCE 416.233
  HELTOCENTRIC CONIC
   RL 147.18 LAL .00 LOL 87.90 VL 27.513 GAL -5.82 AZL 85.07 MCA 202.91 SMA 126.82 ECC .18923 INC 4.9300 V1 30.271
RP 108.90 LAP -1.92 LOP 290.74 VP 37.295 GAP 7.30 AZP 94.54 TAL 206.60 TAP 49.52 RCA 102.82 APO 150.81 V2 34.799
RC 140.164 GL 30.36 GP -12.33 7AL 124.97 ZAP 152.27 ETS 333.65 ZAE 129.93 ETE 191.13 ZAC 56.58 ETC 151.75 CLP-154.96
  PLANETOCENTRIC CONIC
                                                                                                       2.13 VHP 5.264 OPA -30.71 RAP 323.04 ECC 1.3563
   C3 21.653 VHL 4.653 DLA 13.09 RAL 309.80 RAD 6567.9 VEL 11.960 PTH
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     0 25 33 2652.35
                                                                    71.13
                                                                                  177.00
                                                                                                     98.08
                                                                                                                 1 9 46
                                                                                                                                   2052.3
       90.00
                                                    -27.23
                                                                                                                                                  -25.83
                                                                                                                                                                   62.75
                                                                                                               17 1 52
                   15 47 33 4458.51
       90.00
                                                      8.28
                                                                    186.50
                                                                                   171.04
                                                                                                     62.83
                                                                                                                                   3858.5
                                                                                                                                                    4.57
                                                                                                                                                                  179.79
                     1 53 42 2368.07
                                                    -28.50
                                                                     50.00
                                                                                   176.77
                                                                                                     99.42
                                                                                                                 2 33 10
                                                                                                                                   1768.1
                                                                                                                                                                   41.57
      100.00
                                                                                                                                                   -26.91
                   17 2 5 4218.02
3 17 15 2106.62
                                                      9.42
                                                                    168.22
                                                                                   170.43
                                                                                                     61.50
                                                                                                               18 12 23
                                                                                                                                   3618.0
      100.00
                                                                                                                                                    5.54
                                                                                                                                                                 161.58
                                                    -31.86
                                                                                 176.00
                                                                                                    103.09
                                                                                                                 3 52 22
                                                                     29.38
                                                                                                                                   1506.6
                                                                                                                                                  -29.73
      110.00
                                                                                                                                                                  20.81
                                                                   153.88
                                                                                                     57.88 19 2 34
                   17 55 1
                                   4052.24
                                                     12.38
                                                                                   168.67
                                                                                                                                   3452.2
                                                                                                                                                     8.05
      110.00
                                                                                                                                                                  147.46
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SCT 4097.2 SCR 180.5 SC3 244.6

RRT .0042 RRF .2173 RTF .9056

SCB 4101.2 R23 .2135 R13 .9056

SCI 4097.2 SC2 180.5 THA .01
                                                                                                                        ST 1706.0 SR 166.5 SS 634.1

CRT .8615 CRS -.9764 CST -.9494

LSA 1816.2 MSA 203.4 SSA 8.5

EL1 1712.0 EL2 84.2 ALF 4.82
    TOE 1.2647 TRA-1.8219 TC3-3.2339 BAU .9362
```

RDE .1344 RRA .0490 RC3 .0399 FAU .06523 FOE 1.1253 FRA -.3579 FC3-2.6081 BSP 12988 BDE 1.2718 BRA 1.8225 BC3 3.2342 FSP -823

ARRIVAL DATE MAY 11 1966

LAUNCH DATE DEC 20 1965

DISTANCE 422.119 RL 147.18 LAL .00 LOL 87.90 VL 27.455 GAL -5.51 AZL 85.29 MCA 206.08 SNA 126.43 ECC .18946 INC 4.7114 VI 30.271 RP 108.91 LAP -2.07 LOP 293.90 VP 37.248 GAP 7.50 AZP 94.23 TAL 204.94 TAP 51.01 RCA 102.48 APO 150.39 V2 34.795 RC 142.456 GL 29.67 GP -10.74 ZAL 123.64 ZAP 153.93 ETS 335.52 ZAE 130.10 ETE 189.70 ZAC 57.68 ETC 153.75 CLP-156.10 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 20.557 VHL 4.534 DLA 12.96 RAL 311.73 RAO 6567.8 VEL 11.914 PTH 2.12 VHP 5.332 DPA -28.60 RAP 324.66 ECC 1.3383 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 69.92 177.92 98.67 1 18 19 0 34 23 2635.29 15 54 5 4450.62 -27.06 90.00 179.34 3850.6 4.32 17 8 16 172.20 62.76 186.05 8.04 90.00 40.39 2 41 38 1751.3 2 2 27 2351.30 17 8 42 4209.85 48.79 177.69 100.03 -28.31 61.42 18 18 52 103.76 4 0 40 57.77 19 9 13 3609.9 5.27 161.12 167.76 171.60 9.15 1490.4 19.68 28.18 176.89 3 25 49 2090.43 -31.61 3443.5 7.72 146.99 169.86 153.40 18 1 50 4043.48 12.06 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3648.6 SGR 243.0 SG3 214.4 RRT -.0083 RRF .4546 RTF .7700 SGB 3656.7 R23 -.4611 R13 -.7700 ST 2178.3 SR 198.5 55 931.7 CRT .9306 CRS -.9965 CST -.9562 TOE 1.6736 TRA-1.3269 TC3-2.6739 BAU .7357 ROE .1557 RRA .0671 RC3 .1245 FAU .03638 FDE 1.5974 FRA .2991 FC3-1.5322 BSP 3290 ROF 1.6809 RRA 1.3286 BC3 2.6768 FSP 345 LSA 2363.2 MSA 260.2 SSA 6.5 EL1 2186.1 EL2 72.4 ALF 4.85 561 3648.6 562 242.9 THA 179.97 BOE 1.6809 BRA 1.3286 BC3 2.6768 FSP ARRIVAL DATE MAY 13 1966 FLIGHT TIME 144.00 LAUNCH DATE DEC 20 1965 DISTANCE 427.901 RL 147.18 LAL .00 LOL 87.90 VL 27.397 GAL -5.21 A7L 85.46 MCA 209.24 SMA 126.05 ECC .19001 INC 4.5372 V1 30.271 RP 108.92 LAP -2.21 LOP 297.06 VP 37.202 GAP 7.70 A7P 93.96 TAL 203.33 TAP 52.57 RCA 102.10 APO 150.00 V2 34.791 RC 144.737 GL 29.11 GP -9.48 TAL 122.18 ZAP 155.47 ETS 336.98 ZAE 130.14 ETE 188.52 ZAC 58.97 ETC 155.41 CLP-157.27 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 19.681 VHL 4.436 DLA 12.97 RAL 313.64 RAD 6567.8 VEL 11.877 PTH 2.11 VHP 5.418 DPA -26.80 RAP 326.32 ECC 1.3239
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 41 53 2695 47 -28 65 50 21 0 41 53 2625.47 16 1 52 4439.67 2 9 58 2341.44 17 16 29 4198.94 3 33 21 2080.50 18 9 35 4032.64 -26.96 69.21 90.00 178.73 3839.7 3.97 62.67 17 15 52 7.70 185.43 173.48 90.00 100.38 2 48 59 61.32 18 26 28 1741.4 -26.47 39.71 48.09 178.82 -28.19 100.00 3598.9 4.90 160.52 172.89 8.80 167.14 100.00 104.16 4 8 2 57.64 19 16 47 1480.5 -29.18 18.98 -31.44 27.46 178.01 110.00 7.31 3432.6 11.67 152.81 171.17 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1758.5 SR 179.7 S5 629.5 CRT .8926 CRS -.9891 CST -.9459 SGT 4272.0 SGR 207.7 SG3 233.9 RRT -.1353 RRF .0147 RTF .8986 SGB 4277.1 R23 -.1378 R13 -.8985 TDE 1.2600 TRA-1.6580 TC3-3.6994 BAU .9737 ROE .1387 RRA .0350 RC3 .1063 FAU .05992 LSA 1864.9 MSA 207.0 SSA 10.8 EL1 1765.8 EL2 80.7 ALF 5.22 FOE 1.0381 FRA -.1826 FC3-2.6360 BSP 13357 BOE 1.2676 BRA 1.6584 BC3 3.7009 FSP -759 SG1 4272.1 SG2 205.8 THA 179.62 ARRIVAL DATE MAY 15 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 20 1965 DISTANCE 433.718 RL 147.18 LAL .00 LOL 87.90 VL 27.340 GAL -4.89 AZL 85.61 MCA 212.40 SMA 125.68 ECC .19058 INC 4.3943 V1 30.271 RP 108.93 LAP -2.35 LOP 300.22 VP 37.158 GAP 7.90 AZP 93.71 TAL 201.67 TAP 54.07 RCA 101.73 APO 149.63 V2 34.788 HELIOCENTRIC CONIC RC 147.008 GL 28.70 GP -8.48 ZAL 120.49 ZAP 156.85 ETS 338.16 ZAE 130.16 ETE 187.59 ZAC 60.47 ETC 156.85 CLP-158.38 PLANETOCENTRIC CONIC C3 18.895 VHL 4.347 DLA 13.20 RAL 315.68 RAD 6567.8 VEL 11.844 PTH 2.10 VHP 5.508 DPA -25.20 RAP 328.12 ECC 1.3110 LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 99.07 1 31 45 62.53 17 25 39 2023.7 180.46 0 48 2 2623.66 16 11 57 4422.24 2 16 15 2339.15 69.09 -26.94 90.00 177.75 3.41 3822.2 7.15 184.44 174.94 100.46 2 55 4 61.16 18 36 7 90.00 39.55 1739.1 -26.43 -28.16 47.92 180.22 100.00 159.58 4.33 3582.0 17 26 25 4181.98 3 39 58 2077.21 166.19 174.35 8.24 100.00 104.29 4 14 35 57.45 19 26 8 18.75 1477.2 -29.11 27.22 179.41 -31.39 110.00 145.57 3416.7 6.71 172.64 151.94 11.08 110.00 4016.68 18 19 11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1793.1 SR 188.5 SS 626.7 CRT .9094 CRS -.9933 CST -.9459 SGT 4367.1 SGR 223.6 SG3 229.0 RRT -.1599 RRF -.0388 RTF .8972 SGB 4372.8 R23 -.1064 R13 -.8971 TOE 1.2883 TRA-1.5767 TC3-3.9379 BAU .9953 RDE .1428 RRA .0262 RC3 .1327 FAU .05765 FDE .9972 FRA -.1126 FC3-2.6414 BSP 13701 LSA 1897.6 MSA 205.8 SSA 12.0 EL1 1801.3 EL2 78.0 ALF 5.47 SG1 4367.3 SG2 220.7 THA 179.53 BDE 1.2763 BRA 1.5769 BC3 3.9401 FSP -747 ARRIVAL DATE MAY 17 1966 FITCHT TIME 148.00 LAUNCH DATE DEC 20 1965 DISTANCE 439.524 RL 147.18 LAL .00 LOL 87.90 VL 27.283 GAL -4.56 A7L 85.73 MCA 215.56 SMA 125.31 ECC .19128 INC 4.2743 V1 30.271 RP 108.94 LAP -2.48 LOP 303.39 VP 37.114 GAP 8.10 A7P 93.48 TAL 199.99 TAP 55.55 RCA 101.34 APO 149.28 V2 34.786 RC 149.266 GL 28.36 GP -7.66 7AL 118.62 7AP 158.12 ETS 339.11 ZAE 130.15 ETE 186.82 7AC 62.11 ETC 158.09 CLP-159.44 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 18.209 VHL 4.267 DLA 13.57 RAL 317.80 RAD 6567.7 VEL 11.815 PTH 2.09 VHP 5.602 DPA -23.76 RAP 329.98 ECC 1.2997 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 37 5 98.93 182.08 2627.63 -26.98 69.37 0 53 18 90.00 62.37 17 36 57 100.35 3 0 48 60.99 18 47 11 2.73 3800.9 176.57 183.23 16 23 36 4400.89 6.48 90.00 -26.48 39.77 1742.3 2 21 45 2342.34 17 37 50 4161.42 3 46 0 2078.76 18 30 5 3997.76 181.85 -28.20 48.15 100.00 3.64 158.45 3561.4 175.98 165.04 7.57 100.00 104.23 4 20 38 57.25 19 36 42 18.86 1478.8 181.04 -31.41 27.33 110.00 3397.8 174.27 150.91 10.39 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1838.8 SR 198.5 SS 628.2 SGT 4456.7 SGR 240.0 SG3 223.8 RRT -.1676 RRF -.0690 RTF .8956 TOE 1.2878 TRA-1.4872 TC3-4.1678 BAU 1.0153 ROE .1417 RRA .0171 RC3 .1560 FAU .05525 FOE .9653 FRA -.0434 FC3-2.6267 BSP 14006 BOE 1.2963 BRA 1.4873 BC3 4.1708 FSP -730

FLIGHT TIME 142.00

```
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 150.00
                                                                                                                                        ARRIVAL DATE MAY 19 1966
    HELIOCENTRIC CONIC
                                                                           DISTANCE 445.319
     RL 147.18 LAL .00 LOL 87.90 VL 27.226 GAL -4.22 ATL 85.83 MCA 218.72 SMA 124.95 ECC .19211 INC 4.1716 V1 30.271
RP 108.94 LAP -2.61 LOP 306.55 VP 37.071 GAP 8.30 ATP 93.26 TAL 198.30 TAP 57.02 RCA 100.94 APO 148.95 VZ 34.785
     RC 151.511 GL 28.08 GP -6.99 ZAL 116.60 ZAP 159.31 ETS 339.87 ZAE 130.14 ETE 186.19 ZAC 63.86 ETC 159.18 CLP-160.48
    PLANETOCENTRIC CONTC
     C3 17.608 VHL 4.196 DLA 14.05 RAL 320.02 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 5.701 DPA -22.41 RAP 331.90 ECC 1.2898
     LNCH APMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                      0 57 54 - 2636.55
                                                     -27.07
                                                                     70.00
                                                                                  183.91
                                                                                                    98.63
                                                                                                                1 41 51
                                                                                                                                2036.5
                                                                                                                                                 -25.60
                                                                                                                                                                61.65
                    16 36 42 4376.35
2 26 42 2350.20
17 50 35 4137.93
3 51 38 2084.43
18 42 8 3976.46
                                                       5.70
                                                                    181.85
                                                                                   178.36
                                                                                                    62.22
                                                                                                                                 3776.3
                                                                                                               17 49 38
                                                                                                                                                   1.94
                                                                                                                                                                175.19
        100.00
                                                     -28.30
                                                                     48.72
                                                                                                                3 5 52
                                                                                   183.68
                                                                                                   100.07
                                                                                                                                 1750.2
                                                                                                                                                 -26.61
                                                                                                                                                                 40.32
                                                                                                   60.82 18 59 33
104.00 4 26 22
57.03 19 48 25
                                                      6.79
                                                                    163.73
                                                                                  177.77
                                                                                                                                 3537.9
                                                                                                                                                  2.85
                                                                                                                                                                157.16
                                                                                  182.89
        110.00
                                                     -31.51
                                                                     27.74
                                                                                                                                 1484.4
                                                                                                                                                 -29.26
                                                                                                                                                                 19.26
                                                                   149.77
                                                      9.60
                                                                                  176.06
                                                                                                                                 3376.5
                                                                                                                                                   5.19
                                                                                                                                                                143.45
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 4545.1 SGR 256.2 SG3 218.7

RRT -.1647 RRF -.0854 RTF .8944

SGB 4552.3 R23 -.0633 R13 -.8944
    TOE 1.3142 TRA-1.3919 TC3-4.3942 BAU 1.0352
                                                                                                                             ST 1891.4 SR 209.0 SS 631.1
CRT .9423 CRS -.9973 CST -.9482
    ROE .1530 RRA .0077 RC3 .1763 FAU .05291
FOE .9371 FRA .0214 FC3-2.6014 BSP 14313
                                                                                                                            CRT .9423 CRS -.9973 C3. ....
LSA 1994.7 MSA 200.8 SSA 14.2
50.6 ALF 5.95
     BOE 1.3230 BRA 1.3919 BC3 4.3977 FSP
                                                                        SG1 4545.3 SG2 252.7 THA 179.47
LAUNCH DATE DEC 20 1965
                                                                            FLIGHT TIME 152.00
                                                                                                                                        ARRIVAL DATE MAY 21 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 451.102
    RL 147.18 LAL .00 LOL 87.90 VL 27.170 GAL -3.87 A7L 85.92 MCA 221.88 SMA 124.59 ECC .19309 INC 4.0820 VI 30.271
RP 108.94 LAP -2.72 LOP 309.71 VP 37.029 GAP 8.50 AZP 93.04 TAL 196.59 TAP 58.47 RCA 100.53 APO 148.65 V2 34.784
RC 153.743 GL 27.83 GP -6.42 ZAL 114.43 ZAP 160.43 ETS 340.49 ZAE 130.13 ETE 185.65 ZAC 65.70 EYC 160.14 CLP-161.48
   PLANETOCENTRIC CONIC
    C3 17.086 VHL 4.133 DLA 14.62 RAL 322.34 RAD 6567.7 VEL 11.767 PTH
                                                                                                      2.08 VMP 5.805 DPA -21.15 RAP 333.86 ECC 1.2812
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     1 2 0 2649.84
                                                    -27.21
                                                                   70.95
                                                                                 185.94
                                                                                                 98.17
                                                                                                                1 46 10
                                                                                                                                2049.8
                                                                                                                                               -25.80
                                                                                                                                                                 62.57
        90.00
                    16 51 7
                                 4349.12
                                                      4.83
                                                                   180.32
                                                                                  180.33
                                                                                                    62.06
                                                                                                              18 3 36
                                                                                                                                 3749.1
                                                                                                                                                   1.06
                                                                                                                                                                173.67
                   2 31 12 2362.18
18 4 36 4112.01
3 57 0 2093.71
18 55 17 3953.24
       100.00
                                                     -28.43
                                                                    49.58
                                                                                  185.73
                                                                                                                3 10 34
                                                                                                    99.63
                                                                                                                                 1762.2
                                                                                                                                                 -26.81
                                                                                                                                                                 41.15
       100.00
                                                       5.92
                                                                   162.29
                                                                                  179.73
                                                                                                    60.65
                                                                                                              19 13 8
                                                                                                                                 3512.0
1493.7
                                                                                                                                                   1.97
                                                                                                                                                                155.73
       110.00
                                                    -31.66
                                                                                  184.96
                                                                                                   103.62
                                                                                                               4-31 54
                                                                                                                                                 -29.46
                                                                                                                                                                 19.91
                                                                                                    56.82 20 1 11
       110.00
                                                      8.74
                                                                   148.52
                                                                                  178.01
                                                                                                                                 3353.2
                                                                                                                                                   4.31
                                                                                                                                                                142.23
   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 4629.5 SGR 272.0 SG3 213.5
RRT -.1543 RRF -.0912 RTF .8935
                                                                                                                            5T 1952.6 SR 219.9 55 635.9
CRT .9567 CRS -.9969 CST -.9505
    TDE 1.3483 TRA-1.2885 TC3-4.6113 BAU 1.0542
    RDE .1586 RRA -.0019 RC3 .1937 FAU .05059
FDE .9133 FRA .0836 FC3-2.5633 BSP 14603
BDE 1.3576 BRA 1.2885 BC3 4.6154 FSP -699
                                                                                                                         L5A 2055.8 M5A 196.8 55A 15.3
EL1 1963.9 EL2 63.6 ALF 6.16
                                                                       SGB 4637.5 R23 -.0478 R13 -.8935
                                                                       5G1 4629.7 SG2 268.7 THA 179.48
LAUNCH DATE DEC 20 1965
                                                                           FLIGHT TIME 154.00
                                                                                                                                       ARRIVAL DATE MAY 23 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 456.874
    RL 147.18 LAL .00 LOL 87.90 VL 27.115 GAL -3.51 A7L 86.00 MCA 225.04 8MA 124.24 ECC .19422 INC 4.0029 VI 30.271 RP 108.94 LAP -2.83 LOP 312.87 VP 36.989 GAP 8.71 A7P 92.83 TAL 194.87 TAP 59.91 RCA 100.11 APO 148.37 V2 34.784 RC 155.962 GL 27.59 GP -5.93 7AL 112.12 7AP 161.50 ETS 340.96 7AE 130.12 ETE 185.20 7AC 67.61 ETC 161.00 CLP-162.45
   PLANETOCENTRIC CONIC
    C3 16.638 VHL 4.079 DLA 15.28 RAL 324.77 RAD 6567.7 YEL 11.748 PTH 2.07 VHP 5.912 DPA -19.93 RAP 335.86 ECC 1.2738
    LNCM AZMIM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 5 43 2667.11 -27.37 72.19 188.18 97.57 1 50 10 2067.1 -26.04 63.78 90.00 17 6 48 4319.64 3.89 178.66 182.49 61.93 18 18 48 3719.6 .11 172.03
                                                                                               97.57 1 50 10
61.93 18 18 48
99.06 3 15 2
60.49 19 27 52
103.11 4 37 19
56.62 20 14 57
       100.00
                    2 35 24 2377.90
                                                    -28.61
                                                                    50.71
                                                                                 187.98
                                                                                                                                1777.9
                                                                                                                                                -27.06
                                                                                                                                                                42.25
       100.00
                   18 19 48
                                  4084.08
                                                      4.99
                                                                  160.74
                                                                                 181.88
                                                                                                                                3484.1
                                                                                                                                                 1.02
                                                                                                                                                              154.20
       110.00
                     4 2 13 2106.25
                                                    -31.86
                                                                   29.35
                                                                                 187.24
                                                                                                                                1506.2
                                                                                                                                                -29.72
                                                                                                                                                                20.79
                    19 9 29
       110.00
                                   3928.50
                                                     7.81
                                                                   147.20
                                                                                 180.14
                                                                                                                                3328.5
                                                                                                                                                 3.37
                                                                                                                                                              140.93
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 4707.9 SGR 287.2 SG3 208.3
RRT -.1384 RRF -.0881 RTF .8925
SGB 4716.6 R23 -.0362 R13 -.8925
    TOE 1.3911 TRA-1.1754 TC3-4.8130 BAU 1.0716
                                                                                                                          ST 2023.7 SR 231.1 S5 643.4
CRT .9693 CRS -.9949 CST -.9532
    ROE .1644 RRA -.0115 RC3 .2083 FAU .04821
    FOE .8945 FRA .1450 FC3-2.5087 BSP 14832
BOE 1.4007 BRA 1.1754 BC3 4.8175 FSP -679
                                                                                                                           L5A 2127.4 M5A 192.2 S5A 16.3
EL1 2036.1 EL2 56.5 ALF 6.32
                                                                       SG1 4708.0 SG2 284.5 THA 179.51
                                                                           FLIGHT TIME 156.00
LAUNCH DATE DEC 20 1965
                                                                                                                                       ARRIVAL DATE MAY 25 1966
  HELIOCENTRIC CONIC
                                                                          DISTANCE 462.634
   RL 147.18 LAL .00 LOL 87.90 VL 27.060 GAL -3.14 AZL 86.07 MCA 228.20 SMA 123.89 ECC .19550 INC 3.9320 V1 30.271
RP 108.94 LAP -2.93 LOP 316.04 VP 36.950 GAP 8.91 AZP 92.62 TAL 193.13 TAP 61.33 RCA 99.67 APO 148.11 V2 34.785
RC 158.168 GL 27.35 GP -5.51 ZAL 109.68 ZAP 162.53 ETS 341.33 ZAE 130.12 ETE 184.82 ZAC 69.58 ETC 161.77 CLP-163.39
  PLANETOCENTRIC CONIC
    C3 16.264 VHL 4.033 DLA 16.00 RAL 327.31 RAD 6567.7 VEL 11.732 PTH
                                                                                                     2.07 VHP 6.024 OPA -18.76 RAP 337.88 ECC 1.2677
   C3 16.264 VHL 4.033 DLA 16.00 RAL 327.31 RAD 6567.7 VEL 11.732 PTM 2.01 VHF 0.024 DFA -10.10 RAF 00.100 LEC 1.20.7 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 9 8 2688.06 -27.55 73.70 190.63 96.83 1 53 56 2088.1 -26.31 65.25 90.00 17 23 42 4288.29 2.89 176.91 184.84 61.82 18 35 10 3688.3 -.90 170.28
      100.00
                    2 39 22 2397.05
                                                   -28.81
                                                                    52.10
                                                                                 190.44
                                                                                                   98.35
                                                                                                               3 19 19
                                                                                                                                1797.0
                                                                                                                                               -27.35
                                                                                                                                                                43.60
                                                                                                  60.35 19 43 43
102.47 4 42 43
56.43 20 29 41
                                                                  159.11 184.22
      100.00
                 18 36 9 4054.53
                                                                                                                                3454.5
                                                     4.00
                                                                                                                                                   .02
                                                                                                                                                              152.58
      110.00
                     4 7 21 2121.76
                                                   -32.09
                                                                   30.50
                                                                                189.74
                                                                                                 102.47
                                                                                                                                1521.8
                                                                                                                                               -30.04
                                                                                                                                                                21.88
      110.00
                  19 24 39
                                                                                182.46
                                  3902.59
                                                                  145.83
                                                                                                                                3302.6
                                                                                                                                                 2.38
                                                                                                                                                              139.58
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                    SGT 4787.3 SGR 301.7 SG3 203.3

RRT -.1202 RRF -.0823 RTF .8923

SGB 4796.8 R23 -.0256 R13 -.8923
    TOE 1.4368 TRA-1.0564 TC3-5.0076 BAU 1.0899
                                                                                                                          ST 2097.8 SR 242.3 SS 649.7
CRT .9794 CRS -.9915 CST -.9562
    ROE .1704 RRA -.0209 RC3 .2198 FAU .04602
    FOE .8754 FRA .2016 FC3-2.4496 BSP 15117
                                                                                                                          LSA 2201.5 MSA 186.5 SSA 17.3
```

SG1 4787.4 SG2 299.5 THA 179.56

EL1 2111.2 ELZ 48.7 ALF 6.46

BDE 1.4469 BRA 1.0566 BC3 5.0124 FSP -664

ARRIVAL CATE MAY 27 1966

```
LAUNCH DATE DEC 20 1965
                                                                            DISTANCE 468.381
    HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 12 19 2712.48 -27.73 75.46 193.30 95.97 1 57 31 2112.5 -26.62 66.97
                                                                                                        2.06 VHP 6.139 CPA -17.61 RAP 339.93 ECC 1.2627
                    17 41 46 4255.41
2 43 11 2419.41
                                                                    175.07
                                                       1.83
        90.00
                                                                                                      97.52 3 23 31
60.24 20 0 38
                                                                                                                                                                     45.19
                                                                                                                                    1819.4
                                                                                                                                                    -27.67
                                                                                    193.12
                                                     -29.02
                                                                      53.73
       100.00
                                                                                                                                                                   150.89
                                                                                                                                    3423.7
                                                                                                                                                    -1.03
                   18 53 34 4023.71
4 12 29 2140.01
19 40 46 3875.87
                                                        2.96
                                                                     157.41
                                                                                    186.76
       100.00
                                                                                                    101.70 4 48 9
56.26 20 45 21
                                                                                                                                                                    23.19
                                                                                                                                    1540.0
                                                                                                                                                   -30.40
                                                                      31.86
                                                                                    192.47
                                                    -32.35
       110.00
                                                                                                                                                                    138.18
                                                                                                                                  3275.9
                                                                                                                                                    1.36
                                                                    144,41
                                                                                    184.98
                                                      5.83
      110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2178.2 SR 253.7 S5 656.7
CRT .9872 CRS -.9870 CST -.9594
                                                                        SGT 4864.2 SGR 315.4 SG3 198.5
RRT -.0995 RRF -.0724 RTF .8926
SGB 4874.4 R23 -.0169 R13 -.8926
     TOE 1.4883 TRA -.9291 TC3-5.1852 BAU 1.1078
     ROE .1766 RRA - .0302 RC3 .2284 FAU .04389
                                                                                                                             LSA 2282.0 MSA 180.4 SSA 18.3
EL1 2192.6 EL2 40.2 ALF 6.56
    FOE .8587 FRA .2554 FC3-2.3802 BSP 15399
BOE 1.4987 BRA .9296 BC3 5.1902 FSP -651
                                                                         5G1 4864.3 SG2 313.9 THA 179.63
                                                                                                                                            ARRIVAL DATE MAY 29 1966
                                                                              FLIGHT TIME 160.00
LAUNCH DATE DEC 20 1965
                                                                             DISTANCE 474.116
    RL 147.18 LAL .00 LOL 87.90 VL 26.952 GAL -2.36 A7L 86.19 MCA 234.53 SMA 123.22 ECC .19859 INC 3.8091 V1 30.271 RP 108.93 LAP -3.10 LOP 322.37 VP 36.874 GAP 9.34 A7P 92.21 TAL 189.62 TAP 64.15 RCA 98.75 APO 147.69 V2 34.789 RC 162.536 GL 26.80 GP -4.84 ZAL 104.41 ZAP 164.46 ETS 341.73 ZAE 130.15 ETE 184.21 ZAC 73.68 ETC 163.09 CLP-165.21
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                         2.06 VHP 6.260 OPA -16.48 RAP 342.01 ECC 1.2591
     C3 15.741 VHL 3.968 OLA 17.59 RAL 332.76 RAD 6567.6 VEL 11.710 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  2140.2
                                                                                                       94.98 2 0 59
                     1 15 19 2740.19
18 0 57 4221.32
                                                                                    196.17
                                                      -27.91
                                                                      77.47
         90.00
                                                                                                                                                                     166.54
                                                                                                                                     3621.3
                                                                                                                                                      -3.06
                                                                                                       61.69
                                                                                                                 19 11 19
                                                        .73
                                                                      173.17
                                                                                     190.15
         90.00
                                                                                                                                                                      47.00
                                                                                                                 3 27 40
                                                                                                                                     1844.8
                                                                                                                                                     -28.01
                    2 46 55 2444.79
19 12 2 3991.95
4 17 41 2160.81
19 57 46 3848.69
                                                                                                       96.56
                                                      -29.23
                                                                      55.59
                                                                                     196.02
        100.00
                                                                                                       60.16 20 18 34
100.82 4 53 42
56.12 21 1 54
                                                                                                                                                                     149.14
                                                                                                                                     3392.0
                                                                                                                                                     -2.10
                                                                                     189.52
                                                        1.88
                                                                      155.67
        100.00
                                                                                                                                     1560.8
                                                                                                                                                                     24.68
                                                                                                                                                     -30.79
                                                                                                      100.82
                                                                                     195.42
                                                    -32.63
                                                                       33.42
        110.00
                                                                                                                                                                     136.77
                                                                                                       56.12
                                                                                                                                     3248.7
                                                                                                                                                        . 32
                                                                                     187.70
                                                       4.80
                                                                     142.98
        110.00
                                                                                                                                 ORBIT CETERMINATION ACCURACY
                                                                        MIC-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2263.4 SR 265.1 SS 663.7
CRT .9927 CRS -.9815 CST -.9626
                                                                         SGT 4937.1 9GR 328.4 SG3 193.7
RRT -.0772 RRF -.0597 RTF .8931
     TOE 1.5448 TRA -.7928 TC3-5.3401 BAU 1.1249
     RDE .1831 RRA - .0390 RC3 .2338 FAU .04180
                                                                                                                                 LSA 2367.0 MSA 174.1 SSA 19.3
     FOE .8433 FRA .3075 FC3-2.2991 BSP 15672
BDE 1.5556 BRA .7938 BC3 5.3452 FSP -637
                                                                         5GB 4948.0 R23 -.0096 R13 -.8931
                                                                                                                              EL1 2278.6 EL2 31.8 ALF 6.63
                                                                         SG1 4937.2 SG2 327.4 THA 179.70
                                                                                                                                            ARRIVAL DATE MAY 31 1966
                                                                              FLIGHT TIME 162.00
 LAUNCH DATE DEC 20 1965
                                                                             DISTANCE 479.837
     RL 147.18 LAL .00 LOL 87.90 VL 26.899 GAL -1.96 A7L 86.25 MCA 237.69 SMA 122.89 ECC .20042 INC 3.7547 VI 30.271 RP 108.92 LAP -3.17 LOP 325.53 VP 36.838 GAP 9.56 A7P 92.01 TAL 187.85 TAP 65.54 RCA 98.26 APO 147.52 V2 34.792 RC 164.699 GL 26.47 GP -4.56 TAL 101.60 TAP 165.37 ETS 341.78 TAE 130.18 ETE 183.97 TAC 75.79 ETC 163.66 CLP-166.09
    HELIOCENTRIC CONIC
    PLAMETOCENTRIC CONIC
     C3 15.598 VML 3.949 DLA 18.44 RAL 335.66 RAD 6567.6 VEL 11.704 PTH 2.06 VMP 6.386 DPA -15.37 RAP 344.09 ECC 1.2567
     C3 15.598 VHL 3.949 DLA 18.44 RAL 335.66 RAD 6567.6 VEL 11.704 PTH 2.06 VHP 6.386 DPA -15.37 RAP 344.09 ECC 1.2567

LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 18 12 2771.01 -28.07 79.71 199.26 93.86 2 4 23 2171.0 -27.24 71.14
90.00 18 21 13 4186.37 -.40 171.22 193.14 61.69 19 31 0 3586.4 -4.18 164.58
100.00 2 50 37 2472.99 -29.43 57.66 199.14 95.49 3 31 50 1873.0 -28.36 49.02
100.00 19 31 29 3599.62 .79 153.89 192.48 60.12 20 37 29 3359.6 -3.19 147.37
110.00 4 23 0 2183.96 -32.91 35.17 198.59 99.82 4 59 24 1584.0 -31.20 26.36
110.00 20 15 36 3821.42 3.77 141.55 190.62 56.00 21 19 17 3221.4 -.72 135.35
                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2357.2 SR 276.7 S5 672.8
CRT .9961 CRS -.9750 CST -.9659
                                                                          SGT 5001.8 SGR 340.8 SG3 188.9
RRT -.0527 RRF -.0422 RTF .8932
SGB 5013.4 R23 -.0051 R13 -.8932
      TDE 1.6096 TRA -.6433 TC3-5.4595 BAU 1.1396
     ROE .1901 RRA -.0474 RC3 .2363 FAU .D3963
FOE .8320 FRA .3609 FC3-2.1995 BSP 15837
BOE 1.6208 BRA .6451 BC3 5.4646 FSP -617
                                                                                                                                LSA 2461.1 MSA 168.2 SSA 20.1
                                                                                                                                EL1 2373.3 EL2 24.3 ALF
                                                                                                                                                                         6.67
                                                                          SG1 5001.8 SG2 340.3 THA 179.79
                                                                                                                                             ARRIVAL DATE JUN 2 1966
                                                                               FLIGHT TIME 164.00
 LAUNCH DATE DEC 20 1965
                                                                              DISTANCE 485.543
     RL 147.18 LAL .00 LOL 87.90 VL 26.846 GAL -1.54 A7L 86.30 HCA 240.85 SMA 122.57 ECC .20245 INC 3.7040 V1 30.271 RP 108.91 LAP -3.23 LOP 328.70 VP 36.803 GAP 9.79 A7P 91.81 TAL 186.07 TAP 66.92 RCA 97.76 APO 147.39 V2 34.796 RC 166.847 GL 26.09 GP -4.32 ZAL 98.68 ZAP 166.26 ETS 341.73 ZAE 130.21 ETE 183.77 ZAC 77.94 ETC 164.17 CLP-166.94
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                          2.06 VHP 6.517 DPA -14.26 RAP 346.20 ECC 1.2558
      C3 15.540 VHL 3.942 DLA 19.30 RAL 338.68 RAD 6567.6 VEL 11.701 PTH
      ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIH INJ 2 LAT INJ 2 LONG
                                                                                                                                                    -27.54
                                                                                                                     2 7 45
                                                                                      202.57
                                                                                                     92.64
                                                        -28.20
                                                                        82.17
          90.00
                        1 21 0 2804.74
                                                                                                        61.72 19 51 41
94.31 3 36 4
                                                                                                                                                       -5.31
                                                                                                                                                                      162.59
                                                                                                                                       3551.0
                                                                                      196.35
                                                                       169.25
                      18 42 30 4150.95
                                                        -1.54
          90.00
                                                                                                                                                      -28.70
                                                                                                                                                                       51.25
                                                                                                                                      1903.8
                                                                                      202.47
                                                        -29.61
                                                                        59.93
                       2 54 20 2503.78
         100.00
                                                                                                        60.11 20 57 18
98.71 5 5 18
55.91 21 37 26
                                                                                                                                                       -4.29
                                                                                                                                                                      145.58
                                                                                                                                       3327.1
                                                                      152.11
                                                                                      195.67
                      19 51 51
                                      3927.14
                                                          -.31
         100.00
                                                                                                                                      1609.2
                                                                                                                                                    -31.63
                                                                                                                                                                       28.21
                      4 28 29 2209.23
20 34 11 3794.46
                                                                                     201.99
                                                       -33.19
                                                                        37.09
                                                                          ORBIT DETERMINATION ACCURACY

ST 2447.7 SR 288.3 SS 678.8

SGB 5080.5 R23 -.0001 R13 -.8944

SGI 5068.2 SG2 352.2 THA 179.89

SGI 5068.2 SG2 352.2 THA 179.89
         110.00
                                                        2.74
                                                                      140.14
         110.00
                                                                         HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                         SGT 5068.2 SGR 352.3 SG3 184.3
RRT - .0285 RRF - .0255 RTF .8944
SGB 5080.5 R23 - .0001 R13 - .8944
       TDE 1.6745 TRA -.4881 TC3-5.5575 BAU 1.1557
      ROE .1975 RRA -.0552 RC3 .2355 FAU .03766
FOE .8185 FRA .4097 FC3-2.0981 BSP 16102
       BOE 1.6861 BRA .4912 BC3 5.5625 FSP -606
```

FI 16HT TIME 158.00

LAUNCH DATE DEC 20 1965

ARRIVAL CATE JUN 4 1966

```
HELIOCENTRIC CONIC
                                                                            DISTANCE 491.233
    RL 147.18 LAL .00 LOL 87.90 VL 26.794 GAL -1.10 A7L 86.34 MCA 244.01 SMA 122.26 ECC .20470 INC 3.6564 VI 30.271
RP 108.89 LAP -3.29 LOP 331.87 VP 36.769 GAP 10.03 A7P 91.60 TAL 184.28 TAP 68.30 RCA 97.23 APO 147.28 V2 34.800
RC 168.980 GL 25.65 GP -4.10 7AL 95.68 7AP 167.12 ETS 341.58 7AE 130.26 ETE 183.59 7AC 80.12 ETC 164.64 CLP-167.78
    PLANETOCENTRIC CONIC
     C3 15.573 VHL 3.946 OLA 20.17 RAL 341.81 RAD 6567.6 VEL 11.703 PTH 2.06 VHP 6.654 DPA -13.16 RAP 348.31 ECC 1.2563
     LNCM AZMIM LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 23 46 2841.19 -28.29 84.83 206.08 91.31 2 1 8 2241.2 -27.81 76.20 90.00 19 4 41 4115.44 -2.69 167.26 199.78 61.80 20 13 16 3515.4 -6.44 160.59
                                                                                                     61.80 20 13 16
                    2 58 7 2536.95
20 13 1 3894.92
4 34 12 2236.39
20 53 26 3768.25
        100.00
                                                     -29.75
                                                                                   206.01
                                                                                                     93.02
                                                                                                                 3 40 24
                                                                     62.39
                                                                                                                                  1937.0
                                                                                                                                                  -29.02
                                                                                                                                                                  55.66
                                                                                                     60.14 21 17 56
97.51 5 11 28
55.86 21 56 15
                                                                    150.34
                                                                                   199.07
                                                      -1.41
                                                                                                                                  3294.9
                                                                                                                                                  -5.37
                                                                                                                                                                 143.80
       110.00
                                                    -33.45
                                                                     39.16
                                                                                   205.61
                                                                                                                                  1636.4
                                                                                                                                                  -32.05
                                                                                                                                                                  30.21
                                                      1.74
                                                                    138.77
       110.00
                                                                                   197.11
                                                                                                                                  3168.2
                                                                                                                                                  -2.75
                                                                                                                                                                 132.57
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        SGT 5129.3 SGR 363.1 SG3 179.6
RRT -.0036 RRF -.0066 RTF .8957
SGB 5142.2 R23 .0033 R13 -.8957
    TOE 1.7434 TRA -.3227 TC3-5.6171 BAU 1.1704
                                                                                                                              ST 2539.1 SR 300.0 55 684.2
CRT .9968 CRS -.9606 CST -.9717
     RDE .2056 RRA -. 0622 RC3 .2316 FAU .03569
    FDE .8060 FRA .4573 FC3-1.9839 BSP 16332
BDE 1.7554 BRA .3286 BC3 5.6219 FSP -592
                                                                                                                             LSA 2642.0 MSA 157.1 SSA 21.5
                                                                        5G1 5129.3 5G2 363.1 THA 179.99
                                                                                                                             EL1 2556.7 EL2 23.8 ALF 6.72
LAUNCH DATE DEC 2D 1965
                                                                            FLIGHT TIME 168.00
                                                                                                                                         ARRIVAL DATE JUN 6 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 496.906
    RL 147.18 LAL .00 LOL 87.90 VL 26.743 GAL -.65 A7L 86.39 MCA 247.18 SMA 121.95 ECC .20718 INC 3.6112 V1 30.271
RP 108.88 LAP -3.33 LOP 335.04 VP 36.737 GAP 10.27 A7P 91.40 TAL 182.49 TAP 69.67 RCA 96.68 APO 147.22 V2 34.805
RC 171.096 GL 25.15 GP -3.91 ZAL 92.59 ZAP 167.96 ETS 341.31 ZAE 130.32 ETE 183.44 ZAC 82.32 ETC 165.07 CLP-168.60
   PLANETOCENTRIC CONIC
    C3 15.703 VHL 3.963 DLA 21.03 RAL 345.04 RAD 6567.6 VEL 11.708 PTH
                                                                                                       2.06 VHP 6.797 DPA -12.07 RAP 350.43 ECC 1.2584
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 26 33 2880.11
19 27 41 4080.29
3 2 3 2572.22
20 34 53 3663.42
4 40 11 2265.16
21 13 14 3743.23
                                                                                                                                2280 1
        90.00
                                                    -28.32
                                                                    87.68
                                                                                   209.79
                                                                                                                2 14 34
                                                                                                  89.88
                                                                                                                                                 -28.03
                                                                                                                                                                   79.03
        90.00
                                                      -3.82
                                                                    165.30
                                                                                                                                                   -7.54
                                                                                   203.44
                                                                                                     61.92
                                                                                                               20 35 41
                                                                                                                                  3480.3
                                                                                                                                                                 158.60
       100.00
                                                    -29.85
                                                                     65.01
                                                                                   209.76
                                                                                                     91.65
                                                                                                                3 44 55
                                                                                                                                  1972.2
                                                                                                                                                  -29.30
                                                                                                                                                                   56.24
                                                     -2.47
                                                                    148.61
                                                                                   202.69
                                                                                                     60.20 21 39 16
                                                                                                                                 3263.4
                                                                                                                                                   -6.42
                                                                                                                                                                 142.05
                                                                                                     96.22 5 17 56
55.82 22 15 37
       110.00
                                                   -33.68
                                                                    41.38
                                                                                   209.45
                                                                                                                                 1665.2
                                                                                                                                                                  32.36
                                                       .78
       110.00
                   21 13 14
                                   3743.23
                                                                    137.47
                                                                                   200.66
                                                                                                                                  3143.2
                                                                                                                                                  -3.71
                                                                                                                                                                 131.26
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SGT 5188.9 SGR 373.0 SG3 175.0
RRT .0214 RRF .0120 RTF .8979
    TOE 1.8132 TRA -.1487 TC3-5.6425 BAU 1.1855
                                                                                                                             ST 2626.0 SR 311.7 SS 686.7
CRT .9948 CRS -.9529 CST -.9742
    ROE .2144 RRA -.0686 RC3 .2246 FAU .03387
FOE .7919 FRA .5018 FC3-1.8671 BSP 16607
BDE 1.8258 BRA .1638 BC3 5.6470 FSP -584
                                                                                                                             LSA 2727.8 MSA 152.4 SSA 21.9
                                                                        5GB 5202.2 R23 -.0073 R13 .8979
                                                                       5G1 5188.9 5G2 372.9 THA
                                                                                                                           EL1 2644.2 EL2 31.6 ALF
                                                                                                             .09
LAUNCH DATE DEC 20 1965
                                                                           FLIGHT TIME 170.00
                                                                                                                                        ARRIVAL DATE JUN 8 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 502.561
    RL 147.18 LAL .00 LOL 87.90 VL 26.692 GAL -.18 AZL 86.43 MCA 250.34 SMA 121,65 ECC .20991 INC 3.5681 V1 30.271
RP 108.86 LAP -3.36 LOP 338.21 VP 36.705 GAP 10.53 AZP 91.20 TAL 180.69 TAP 71.03 RCA .96.11 APO 147.18 VZ 34.811
RC 173.196 GL 24.59 GP -3.74 ZAL 89.44 ZAP 168.78 ET5 340.92 ZAE 130.38 ETE 183.30 ZAC 84.55 ETC 165.45 CLP-169.41
   PLANETOCENTRIC CONIC
    C3 15.940 VML 3.992 DLA 21.86 RAT 348.36 RAD 6567.6 VEL 11.719 PTH 2.06 VMP 6.948 DPA -10.97 RAP 352.56 ECC 1.2623
    LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 29 24 2921.24 -28.27 90.69 213.68 88.37 2 18 6 2321.2 -28.20 82.02 90.00 19 51 21 4045.94 -4.92 163.37 207.30 62.08 20 58 47 3445.9 -8.61 156.64
                                                                                               88.37 2 18 6
62.08 20 58 47
90.20 3 49 39
60.29 22 1 11
94.85 5 24 46
55.82 22 35 25
                     3 6 9
                                 2609.28
                                                   -29.89
                                                                    67.76
                                                                               213.70
                                                                                                                                 2009.3
                                                                                                                                                 -29.54
                                                                                                                                                                 58.97
       100.00
                   20 57 18
                                  3833.14
                                                      -3.50
                                                                   146.95
                                                                                  206.52
                                                                                                                                 3233.1
                                                                                                                                                  -7,43
                                                                                                                                                                140.36
                     4 46 31 2295.28
                                                   -33.88
                                                                    43.71
                                                                                  213.49
                                                                                                                                 1695.3
                                                                                                                                                 -32.84
                                                                                                                                                                 34.62
                   21 33 25
                                                     -.11
       110.00
                                  3719.90
                                                                   136.25
                                                                                  204.41
                                                                                                                                 3119.9
                                                                                                                                                  -4.60
                                                                                                                                                                130.04
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SGT 5244.4 SGR 382.1 SG3 170.7
RRT .0468 RRF .0327 RTF .8998
    TOE 1.8856 TRA .0378 TC3-5.6255 BAU 1.1997
                                                                                                                             ST 2709.4 SR 323.6 55 689.4
    RDE .2242 RRA -.0739 RC3 .2148 FAU .03207
FDE .7798 FRA .5481 FC3-1.7420 BSP 16822
BDE 1.8989 BRA .0830 BC3 5.6296 FSP -573
                                                                                                                           CRT .9915 CRS -.9449 CST -.9765
                                                                      SGB 5258.3 R23 -.0096 R13 .8998
SGI 5244.4 SG2 381.7 THA .20
                                                                                                                           LSA 2810.3 MSA 149.4 55A 22.2
ELI 2728.3 ELZ 41.8 ALF 6.76
                                                                                                              .20
LAUNCH DATE DEC 2D 1965
                                                                           FLIGHT TIME 172.00
                                                                                                                                        ARRIVAL DATE JUN 10 1966
                                                                         DISTANCE 508.195
   RL 147.18 LAL .00 LOL 87.90 VL 26.642 GAL .30 A7L 86.47 MCA 253.51 SMA 121.35 ECC .21291 INC 3.5266 V1 30.271
RP 108.84 LAP -3.38 LOP 341.38 VP 36.675 GAP 10.79 A7P 91.00 TAL 178.89 TAP 72.40 RCA 95.51 APO 147.19 V2 34.817
RC 175.278 GL 23.95 GP -3.58 ZAL 86.25 ZAP 169.58 ETS 340.38 ZAE 130.44 ETE 183.19 ZAC 86.80 ETC 165.80 CLP-170.21
  PLANETOCENTRIC CONIC
    C3 16.293 VHL 4.036 DLA 22.66 RAL 351.77 RAD 6567.7 VEL 11.734 PTH 2.07 VHP 7.106 DPA -9.88 RAP 354.70 ECC 1.2681
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   86.80 2 21 47
62.27 21 22 26
       90.00
                     1 32 22 2964.23
                                                   -28.15
                                                                   93.83
                                                                                 217.74
                                                                                                                                2364.2
                                                                                                                                               -28.30
       90.00
                   20 15 33 4012.92
                                                    -5.96
                                                                   161.51
                                                                                 211.37
                                                                                                                                 3412.9
                                                                                                                                                 -9.63
      100.00
                    3 10 31
                                   2647.76
                                                   -29.87
                                                                   70.62
                                                                                  217.82
                                                                                                    88.70
                                                                                                               3 54 39
                                                                                                                                 2047.8
                                                                                                                                                 -29.73
                 21 20 5 3804.63
4 53 14 2326.41
                                                                                                    60.41 22 23 29
93.43 5 32 1
55.83 22 55 30
                                                                                210.54
      100.00
                                                    -4.46
                                                                   145.38
                                                                                                                                3204.6
                                                                                                                                                  -8.37
                                                   -34.03
                                                                                 217.73
      110.00
                                                                   46.12
                                                                                                                                 1726.4
                                                                                                                                                -33.18
                                                                                                                                                                 36.99
                  21 53 51 3698.74
                                                                                208.34
      110.00
                                                   - .92
                                                                  135.15
                                                                                                                                 3098.7
                                                                                                                                                -5.40
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 5290.7 SGR 390.7 SG3 166.3

RRT .0741 RRF .0593 RTF .9008

SGB 5305.1 R23 -.0079 R13 .9008

SGI 5290.8 SG2 389.7 THA .32
   TOE 1.9656 TRA .2385 TC3-5.5497 BAU 1.2096
                                                                                                                             ST 2795.6 SR 335.7 SS 694.5
    RDE .2351 RRA -.0782 RC3 .2029 FAU .03006
                                                                                                                          CRT .9872 CRS -.9371 CST -.9788
LSA 2896.2 MSA 147.8 SSA 22.2
EL1 2815.2 EL2 53.1 ALF 6.76
   FDE .7725 FRA .5956 FC3-1.5971 BSP 16847
```

FLIGHT TIME 166.00

BOE 1.9797 BRA .2510 BC3 5.5534 FSP -543

```
ARRIVAL DATE JUN 12 1966
                                                                     FLIGHT TIME 174.00
LAUNCH DATE DEC 20 1965
                                                                   DISTANCE 513.806
   RL 147.18 LAL .00 LOL 87.90 VL 26.593 GAL .80 A7L 86.51 MCA 256.68 SMA 121.06 ECC .21621 INC 3.4865 V1 30.271
RP 108.82 LAP -3.39 LOP 344.55 VP 36.646 GAP 11.08 A7P 90.80 TAL 177.08 TAP 73.76 RCA 94.88 APO 147.23 V2 34.824
RC 177.341 GL 23.25 GP -3.44 7AL 83.02 ZAP 170.36 ETS 339.67 ZAE 130.52 ETE 183.09 ZAC 89.07 ETC 166.12 CLP-170.99
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 16.774 VHL 4.096 CLA 23.41 RAL 355.23 RAO 6567.7 VEL 11.754 PTH 2.07 VHP 7.273 DPA -8.79 RAP 356.85 ECC 1.2761
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 35 32 3008.68
20 40 2 3981.80
                                                              97.06
                                                                           221.95
                                                                                           85.19
                                               -27.94
       90.00
                                                                                                                                     -10.58
                                                                                                                                                   152.95
                                                                                            62.48
                                                                                                     21 46 24
                                                                                                                      3381.8
                                                                           215.62
                                                             159.75
                                                -6.95
       90.00
                                                                                                                                     -29.85
                                                                                                                      2087.2
                                                               73.55
                                                                           222.09
                                                                                            87.16
                                                                                                      4 0 0
                   3 15 13 2687.25
                                                -29.77
                                                                                            60.54 22 46 0
91.97 5 39 42
55.85 23 15 40
                                                                                                                                                   137.30
                                                                                                                      3178.5
                                                                                                                                     -9.22
                                                                           214.74
                  21 43 1 3778.47
5 0 24 2358.20
22 14 20 3680.28
      100.00
                                                 -5.34
                                                              143.93
                                                                                                                      1758.2
                                                                                                                                     -33.48
                                                               48.60
                                                                           222.13
                                               -34.13
                                                                                                                                     -6.10
                                                                                                                      3080.3
                                                                           212.43
                                                             134.19
                                                -1.63
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2862.6 SR 347.5 SS 692.7
CRT .9822 CRS -.9290 CST -.9806
                                                                 SCT 5335.1 SGR 398.3 SG3 161.9
RRT .0998 RRF .0818 RTF .9030
    TOE 2.0387 TRA .4487 TC3-5.4407 BAU 1.2208
    ROE .2469 RRA -.0814 RC3 .1886 FAU .02829
FOE .7592 FRA .6402 FC3-1.4598 BSP 17082
                                                                                                                  LSA 2961.9 MSA 147.2 SSA 22.1
EL1 2882.9 EL2 64.8 ALF 6.80
                                                                 SGB 5350.0 R23 -.0088 R13 .9029
    BOE 2.0536 BRA .4560 BC3 5.4440 FSP -536
                                                                 SG1 5335.3 SG2 396.3 THA
                                                                                                     .43
                                                                                                                             ARRIVAL DATE JUN 14 1966
                                                                     FLIGHT TIME 176.00
                                                                     DISTANCE 519.393
  HELIOCENTRIC CONIC
                       .00 LOL 87.90 VL 26.544 GAL 1.33 A7L 86.55 HCA 259.85 SMA 120.77 ECC .21982 INC 3.4473 VI 30.271
-3.39 LOP 347.73 VP 36.617 GAP 11.37 A7P 90.61 TAL 175.27 TAP 75.12 RCA 94.22 APO 147.32 V2 34.832
    RC 179.385 GL 22.49 GP -3.32 ZAL 79.79 ZAP 171.13 ETS 338.76 ZAE 130.59 ETE 183.01 ZAC 91.36 ETC 166.39 CLP-171.77
   PLANETOCENTRIC CONIC
    C3 17.397 VHL 4.171 DLA 24.10 RAL 358.74 RAD 6567.7 VEL 11.780 PTH 2.08 VHP 7.450 DPA -7/70 RAP 359.00 ECC 1.2863 LNCH AZWITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZWITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2454.1
                                                                                          83.57 2 29 51
                                                                           226.29
                                                 -27.64
                                                              100.35
                    1 38 57 3054.13
       90.00
                                                                                                                                      -11.44
                  21 4 36 3953.17
3 20 20 2727.26
22 5 54 3755.27
5 8 2 2390.28
                                                                                                                       3353.2
                                                                                            62.70
                                                                                                     22 10 29
                                                 -7.84
                                                              158.13
                                                                            220.03
        90.00
                                                                                            85.61 4 5 47
60.68 23 8 29
90.49 5 47 52
55.88 23 35 46
                                                                                                                                     -29.89
                                                                                                                       2127.3
                                                               76.52
                                                                            226.50
                                                 -29.60
       100.00
                                                                                                                       3155.3
                                                                                                                                      -9.97
                                                 -6.11
                                                              142.64
                                                                            219.09
       100.00
                                                                                                                                     -33.73
                                                                                                                       1790.3
                                                -34.18
                                                               51.11
                                                                            226.69
       110.00
                                                                                                                       3065.0
                                                                                                                                       -6.67
                                                              133.39
                                                                            216.67
                                                -2.21
      110.00
                  22 34 41
                                3665.D1
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2922.9 SR 359.1 SS 690.3
                                                                  SGT 5376.0 SGR 405.0 SG3 157.6
RRT .1263 RRF .1062 RTF .9055
SGB 5391.2 R23 -.0089 R13 .9055
    TOE 2.1141 TRA .6720 TC3-5.2862 BAU 1.2301
                                                                                                                   CRT .9766 CR5 -.9211 CST -.9822
    ROE .2600 RRA -.0834 RC3 .1726 FAU .02655
FOE .7472 FRA .6845 FC3-1.3211 BSP 17199
BOE 2.1300 BRA .6771 BC3 5.2890 FSP -522
                                                                                                                   LSA 3021.0 MSA 147.8 SSA 21.7
                                                                                                                  EL1 2943.9 EL2 76.7 ALF
                                                                                                    .55
                                                                  SC1 5376.2 SG2 401.8 THA
                                                                                                                             ARRIVAL CATE JUN 16 1966
                                                                     FLIGHT TIME 178.00
LAUNCH DATE DEC 20 1965
                                                                     DISTANCE 524.951
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 26.495 GAL 1.87 A7L 86.59 HCA 263.02 SMA 120.49 ECC .22377 INC 3.4090 V1 30.271 RP 108.77 LAP -3.38 LOP 350.90 VP 36.590 GAP 11.68 A7P 90.41 TAL 173.47 TAP 76.48 RCA 93.53 APO 147.45 V2 34.840
    RC 181.409 GL 21.67 GP -3.20 TAL 76.56 TAP 171.89 ETS 337.60 TAE 130.67 ETE 182.94 TAC 93.65 ETC 166.64 CLP-172.54
   PLANETOCENTRIC CONIC
     C3 18.177 VHL 4.264 DLA 24.72 RAL 2.27 RAD 6567.7 VEL 11.814 PTH 2.09 VHP 7.637 DPA
                                                                                                                          -6.61 RAP
    ENCH AZMTH LNCH TIME LET TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    2500.0
                                                                                            81.96 2 34 24
62.93 22 34 25
                                                                                                                                    -28.07
                                                                                                        2 34 24
                                                                         230.73
                                                 -27.24
                  1 42 44 3100.03
21 28 57 3927.70
3 25 56 2767.30
                                                             103.65
        90.00
                                                                                                                                                    149.81
                                                                                                                       3327.7
                                                                                                                                     -12.20
                                                  -8.64
                                                              156.67
                                                                            224.58
        90.00
                                                                                                                       2167.3
                                                                                                                                     -29.86
                                                                                                                                                     70.70
                                                                                                        4 12 3
                                                 -29.35
                                                               79.47
                                                                            231.03
                                                                                             84.07
       100.00
                                                                                             60.81 23 30 42
                                                                                                                                     -10.60
                                                                                                                                                   134.87
                                                                                                                       3135.7
                                                                            223.57
                  22 28 27 3735.66
5 16 12 2422.32
22 54 40 3653.40
                                                              141.55
                                                 -6.76
       100.00
                                                                                            89.01 5 50 50
55 91 23 35 33
                                                                                                                                     -33.93
                                                                                                                                                    44.37
                                                                                                                       1822.3
                                                                            231.37
                                                 -34.17
                                                                53.61
       110.00
                                                                                                                     3053.4
                                                                                                                                     -7.11
                                                                                                                                                    126.53
                                                              132.78
                                                                            221.03
                                                 -2.65
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2965.9 SR 370.3 SS 685.0
CRT .9706 CRS -.9134 CST -.9837
                                                                  SGT 5414.3 SGR 410.9 SG3 153.4
RRT .1522 RRF .1305 RTF .9083
SGB 5429.9 R23 -.0086 R13 .9083
     TOE 2.1845 TRA .9043 TC3-5.0993 BAU 1.2398
     ROE .2742 RRA -.0841 RC3 .1555 FAU .02491
FOE .7338 FRA .7274 FC3-1.1864 BSP 17365
BOE 2.2017 BRA .9082 BC3 5.1017 FSP -510
                                                                                                                   LSA 3062.7 MSA 149.7 SSA 21.2
EL1 2987,6 EL2 88.5 ALF 6.92
                                                                   SG1 5414.7 SG2 406.1 THA
                                                                                                      .67
                                                                                                                               ARRIVAL DATE JUN 18 1966
                                                                      FLIGHT TIME 180.00
 LAUNCH DATE DEC 20 1965
                                                                     DISTANCE 530.477
    RL 147.18 LAL .00 LOL 87.90 VL 26.448 GAL 2.45 A7L 86.63 MCA 266.19 SMA 120.22 ECC .22810 INC 3.3711 VI 30.271 RP 108.74 LAP -3.36 LOP 354.08 VP 36.564 GAP 12.01 A7P 90.22 TAL 171.67 TAP 77.85 RCA 92.79 APO 147.64 V2 34.849 RC 183.413 GL 20.81 GP -3.10 TAL 73.36 ZAP 172.62 ETS 336.13 ZAE 130.75 ETE 182.88 ZAC 95.96 ETC 166.86 CLP-173.30
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 19.135 VHL 4.374 DLA 25.26 RAL 5.80 RAD 6567.8 VEL 11.854 PTH 2.10 VHP 7.837 DPA -5.53 RAP
                                                                                                                                          3.31 ECC 1.3149
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2545.7
                                                                                                                                     -27.82
                                                                                                        2 39 26
                                                                            235.26
                                                                                             80.39
                                                  -26.77
                                                               106.91
                                  3145.74
                     1 47 I
         90.00
                                                                                             63.13 22 57 56
82.58 4 18 55
                                                                                                                                                     148.54
                                                                                                                        1306.1
                                                                                                                                      -12.84
                                                                             229.23
                   21 52 50 3906.09
                                                  -9.30
                                                               155.44
         90.00
                                                                                                                                                      73.63
                                                                                                                                      -29.76
                                                                                                                        2206.8
                                                  -29.04
                                                                82.36
                                                                             235.64
                      3 32 8 2806.80
       100.00
                                                                                             60.93 23 52 23
                                                                                                                        3120.3
                                                                                                                                      -11.10
                                                                                                                                                     133.99
                                                               140.69
                   22 50 23 3720.26
                                                  -7.27
                                                                             228.14
       100.00
                                                                                                                                     -34.07
                                                                                                                                                      46.83
                                                                                             87.54
                                                                                                         6
                                                                                                                        1854.0
                   5 24 55 2453.96
23 14 6 3645.87
                                                 -34.11
                                                                56.08
                                                                             236.15
                                                                                             87.54 6 5 49
55.93 24 14 52
        110.00
                                                                                                                        3045.9
                                                                                                                                       -7.39
                                                                                                                                                     126.13
                                                                             225.47
                                                               132.39
                                                 -2.94
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2994.8 SR 381.0 SS 677.7
                                                                   SGT 5447.6 SGR 415.9 SG3 149.2
RRT .1781 RRF .1554 RTF .9113
     TOE 2.2523 TRA 1.1495 TC3-4.8766 BAU 1.2480
                                                                                                             CRT .9643 CRS -.007. --
LSA 3090.2 MSA 152.6 55A 20.5
ELI 3017.3 EL2 100.2 ALF 7.00
                                                                                                                    CRT .9643 CRS -.9057 CST -.9849
     ROE .2895 RRA -.0835 RC3 .1377 FAU .02331
FOE .7199 FRA .7698 FC3-1.0548 BSP 17532
                                                                  SGB 5463.5 R23 -.0080 R13 .9113
SG1 5448.1 SG2 409.2 THA .78
     BOE 2.2708 BRA 1.1525 BC3 4.8786 FSP -499
```

```
LAUNCH DATE DEC 20 1965
                                                      FLIGHT TIME 182.00
  HELIOCENTRIC CONIC
                                                     DISTANCE 535.967
```

RL 147.18 LAL .00 LOL 87.90 VL 26.401 GAL 3.04 A7L 86.67 MCA 269.36 SMA 119.95 ECC .23284 INC 3.3335 V1 30.271 RP 108.71 LAP -3.33 LOP 357.26 VP 36.539 GAP 12.36 A7P 90.04 TAL 169.87 TAP 79.23 RCA 92.02 APO 147.88 V2 34.858 RC 185.395 GL 19.90 GP -3.00 TAL 70.21 TAP 173.35 ETS 334.24 TAE 130.84 ETE 182.83 TAC 98.28 ETC 167.04 CLP-174.06 PLANE TOCENTRIC CONIC

C3 20.290 VHL 4.504 CLA 25.73 RAL 9.30 RAC 6567.8 VEL 11.903 PTH 2.11 VHP 8.049 DPA -4.44 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 51 56 3190.54 22 15 52 3889.13 3 39 3 2845.21 23 11 26 3709.69 5 34 12 2484.91 23 32 46 3642.76 2590.5 90.00 -26.22 110.08 239.84 78.90 2 45 6 90.00 -9.82 154.46 233.97 63.31 23 20 41 3289.1 100.00 -28.67 85.16 240.33 81.15 4 26 28 2245.2 61.01 24 13 16 86.12 6 15 37 55.94 24 33 29 3109.7 100.00 -7.62 140.10 232.79 -33.99 58.49 241.02 1884.9 110.00 3042.8 -3.06 110.00 132.23 229.98 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 2.3169 TRA 1.4089 TC3-4.6242 BAU 1.2548

DIFFERENTIAL CORRECTIONS SGT 5476.9 SGR 420.0 SG3 145.2 RRT .2040 RRF .1805 RTF .9145 SGB 5493.0 R23 -.0073 R13 .9145 SGI 5477.6 SG2 411.1 THA .90 ST 3009.4 SR 390.8 SS 668.9 CRT .9576 CRS -.8980 CST -.9861 RCE .3060 RRA -.0813 RC3 .1198 FAU .02178 FDE .7058 FRA .8126 FC3 -.9295 BSP 17681 CRT .9576 CM3 -.0500 CM LSA 3103.5 MSA 156.6 SSA 19.7 EL1 3032.6 EL2 111.7 ALF 7.10 BDE 2.3370 BRA 1.4112 BC3 4.6257 FSP -488

LAUNCH DATE DEC 20 1965

FLIGHT TIME 184.00

ARRIVAL CATE JUN 20 1966

HELIOCENTRIC CONIC 015TANCE 541.417 RL 147.18 LAL .00 LOL 87.90 VL 26.355 GAL 3.67 ATL 86.70 HCA 272.54 SMA 119.68 ECC .23803 INC 3.2959 VI 30.271
RP 108.68 LAP -3.29 LOP .44 VP 36.515 GAP 12.74 AZP 89.85 TAL 168.08 TAP 80.61 RCA 91.19 APO 148.17 VZ 34.868
RC 187.357 GL 18.95 GP -Z.92 TAL 67.12 ZAP 174.06 ETS 331.80 TAE 130.92 ETE 182.79 TAC 100.60 ETC 167.19 CLP-174.82 PLANETOCENTRIC CONIC

C3 21.671 VHL 4.655 DLA 26.11 RAL 12.76 RAD 6567.9 VEL 11.960 PTH 2.13 VHP 8.276 DPA -3.36 RAP 7.65 ECC 1.3566 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH TIME L-1 11ML 1 57 40 3233.62 22 37 44 3877.64 3 46 44 2882.00 23 31 21 3704.49 5 44 3 2514.95 23 50 32 3644.31 2633.6 90.00 244.47 77.50 2 51 34 -25.62 113.09 90.00 -10.17 153.80 238.74 63.43 23 42 22 3277.6 100.00 245.07 -28.25 87.81 79.81 4 34 46 2282 0 61.05 24 33 6 100.00 -7.79 139.81 237.47 3104.5 60.82 84.75 6 25 58 55.93 24 51 16 110.00 -33.83 245.95 1914.9 110.00 -3.00 132.31 234.52 3044.3 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 5501.0 SGR 423.3 SG3 141.3 RRT .2306 RRF .2074 RTF .9174 SGB 5517.2 R23 -.0055 R13 .9174 ST 3014.5 SR 399.8 SS 660.6 CRT .9506 CRS -.8903 CST -.9872 TOE 2.3815 TRA 1.6866 TC3-4.3398 BAU 1.2577 ROE .3238 RRA -.0775 RC3 .1025 FAU .02019 FOE .6934 FRA .8579 FC3 -.8064 BSP 17723 LSA 3107.5 MSA 161.5 SSA 18.9 BOE 2.4034 BRA 1.6883 BC3 4.3410 FSP -472 SG1 5501.8 SG2 411.8 THA 1.02

LAUNCH DATE DEC 20 1965

FLIGHT TIME 186.00

CISTANCE 546.819 HELIOCENTRIC CONIC

RL 147.18 LAL .00 LOL 87.90 VL 26.309 GAL 4.33 AZL 86.74 HCA 275.71 SMA 119.42 ECC .24371 INC 3.2581 V1 30.271 RP 108.65 LAP -3.24 LOP 3.62 VP 36.492 GAP 13.14 AZP 89.68 TAL 166.30 TAP 82.01 RCA 90.32 APO 148.53 VZ 34.878 RC 189.297 GL 17.99 GP -2.84 ZAL 64.10 ZAP 174.75 ETS 328.62 ZAE 131.00 ETE 182.75 ZAC 102.93 ETC 167.31 CLP-175.58 PLANFTOCENTRIC CONIC

C3 23.306 VHL 4.828 DLA 26.40 RAL 16.15 RAD 6567.9 VEL 12.028 PTH 2.15 VHP 8.520 DPA -2.29 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 4 25 3274.09 22 58 3 3872.49 -24.99 115.89 249.13 2 58 59 2674.1 -26.64 90.00 -10.33 153.50 243.51 3272.5 249.84 3 55 17 2916.67 23 49 52 3705.15 4 43 54 100.00 -27.81 90.29 78.58 2316.7 61.05 24 51 37 83.44 6 36 50 100.00 -7.77 139.85 242.15 3105.1 5 54 26 2543.88 0 11 9 3650.70 110.00 -33.62 63.05 250.91 1943.9 110 00 -2.76 132.64 239.06 55.91 1 11 59 3050.7 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CIFFERENTIAL CORRECTIONS TOE 2.4378 TRA 1.9754 TC3-4.0464 BAU 1.2611

ST 3000.2 SR 407.4 SS 649.5 CRT .9433 CRS -.8825 CST -.9881 LSA 3092.1 MSA 167.0 SSA 18.1 EL1 3024.8 EL2 134.1 ALF 7.31 SGT 5521.5 SGR 425.6 SG3 137.4 RRT .2563 RRF .2332 RTF .9208 SGB 5537.8 R23 -.0043 R13 .9208 SGI 5522.5 SG2 411.3 THA 1.14 ROE .3424 RRA -.0720 RC3 .0858 FAU .01874 FDE .6792 FRA .9018 FC3 -.6961 BSP 17861 BDE 2.4618 BRA 1.9767 BC3 4.0473 FSP -462

LAUNCH DATE DEC 20 1965

ELICHT TIME 188.00

HEL TOCENTRIC CONTC OISTANCE 552.167 RL 147.18 LAL .00 LOL 87.90 VL 26.264 GAL 5.02 A7L 86.78 HCA 278.89 SMA 119.17 ECC .24993 INC 3.2198 VI 30.271
RP 108.62 LAP -3.18 LOP 6.81 VP 36.470 GAP 13.57 A7P 89.50 TAL 164.53 TAP 83.42 RCA 89.39 APO 148.96 V2 34.889
RC 191.216 GL 17.01 GP -2.77 7AL 61.18 7AP 175.41 ETS 324.37 7AE 131.07 ETE 182.72 7AC 105.26 ETC 167.40 CLP-176.34 PLANETOCENTRIC CONIC

C3 25.234 VHL 5.023 DLA 26.62 RAL 19.46 RAD 6568.0 VEL 12.108 PTH 2.17 VHP 8.782 DPA -1.22 RAP 11.99 ECC 1.4153 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 12 23 3311.11 -24.37 118.42 253.82 75.11 3 7 34 2711.1 -26.18 110.22 75.11 63.47 90.00 253.82 -26.18 24 21 3 90.00 23 16 29 3874.47 -10.27 153.62 248.25 3274.5 -13.75 146.67 4 53 54 100.00 4 4 46 2948.85 -27.36 92.58 254.63 77.46 2348.9 -28.81 84.08 0 10 43 3711.96 6 5 19 2571.61 -7.55 140.23 246.80 60.99 1 12 35 3112.0 100.00 -11... -34.11 -6.79 -11.36 133.52 6 48 11 -33.39 255.88 82.20 110.00 65.18 1971.6 56.02 D 26 39 133.23 243.58 55.89 1 27 41 3062.0 110.00 3661.96 -2.33 126.98 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS

SGT 5537.3 SGR 426.9 SG3 133.6 ST 2973.8 SR 413.6 SS 638.0 RRT .2820 RRF .2590 RTF .9244 CRT .9356 CRS -.8745 CST -.9890 SGB 5553.8 R23 -.0032 R13 .9244 LSA 3064.5 MSA 172.9 SSA 17.2 SG1 5538.6 SG2 409.5 THA 1.25 EL1 2998.9 EL2 144.8 ALF 7.43 TOE 2.4904 TRA 2.2806 TC3-3.7411 BAU 1.2623 ROE .3620 RRA -.0649 RC3 .0702 FAU .01734 FDE .6650 FRA .9467 FC3 -.5949 BSP 17976 BDE 2.5166 BRA 2.2816 BC3 3.7418 FSP -451

ARRIVAL DATE JUN 28 1966 FLIGHT TIME 190.00 LAUNCH DATE DEC 20 1965 RL 147.18 LAL .00 LOL 87.90 VL 26.220 GAL 5.75 A7L 86.82 HCA 282.07 SMA 118.92 ECC .25676 INC 3.1809 VL 30.271 RP 108.58 LAP -3.11 LOP 9.99 VP 36.449 GAP 14.03 A7P 89.33 TAL 162.78 TAP 84.86 RCA 88.39 APO 149.46 V2 34.900 RC 193.113 GL 16.03 GP -2.70 ZAL 58.35 ZAP 176.03 ETS 318.59 ZAE 131.14 ETE 182.70 ZAC 107.59 ETC 167.45 CLP-177.10 DISTANCE 557.452 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 27.497 VML 5.244 DLA 26.75 RAL 22.67 RAD 6568.1 VEL 12.201 PTH 2.19 VHP 9.064 CPA -.17 RAP 14.16 ECC 1.4525 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 17 27 2744.0 74.15 2 21 43 3343.97 23 32 44 3884.17 -23.77 120.55 258.52 90.00 3284.2 -13.47 147.24 24 37 28 63.36 -9.98 154.18 252.93 90.00 86.21 2378.3 -28.50 4 15 8 2978.32 0 25 56 3725.06 6 16 38 2598.13 0 40 55 3678.01 76.46 -26.90 94.65 259.43 1 28 1 6 59 56 100.00 3125.1 -10.94 134.27 60.89 140.96 251.40 -7.11 100.00 1998.1 -34.01 58.08 81.03 -33.12 67.21 260.85 110.00 55.85 1 42 13 3078.0 -6.18 127.83 134.07 248.06 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY CIFFERENTIAL CORRECTIONS SGT 5548.7 SGR 427.4 SG3 129.9 RRT .3077 RRF .2852 RTF .9281 ST 2936.9 SR 418.3 SS 626.5 CRT .9276 CRS -.8664 CST -.9899 TOE 2.5396 TRA 2.6040 TC3-3.4294 BAU 1.2609 RDE .3823 RRA -.0559 RC3 .0561 FAU .01597 FCE .6515 FRA .9930 FC3 -.5029 BSP 18073 SGB 5565.1 R23 -.0021 R13 .9281 SGI 5550.3 SGZ 406.5 THA 1.37 LSA 3026.6 MSA 179.0 SSA 16.4 EL1 2962.5 EL2 154.9 ALF 7.55 BCE 2.5683 BRA 2.6046 BC3 3.4299 FSP -440 ARRIVAL DATE JUN 30 1966 FLIGHT TIME 192.00 LAUNCH DATE DEC 20 1965 DISTANCE 562.664 RL 147.18 LAL .00 LOL 87.90 VL 26.176 GAL 6.53 AZL 86.86 MCA 285.26 SMA 118.68 ECC .26426 INC 3.1410 VI 30.271
RP 108.55 LAP -3.03 LOP 13.18 VP 36.429 GAP 14.54 AZP 89.17 TAL 161.06 TAP 86.31 RCA 87.32 APO 150.04 V2 34.912
RC 194.989 GL 15.04 GP -2.64 ZAL 55.64 ZAP 176.60 ETS 310.58 ZAE 131.20 ETE 182.68 ZAC 109.91 ETC 167.47 CLP-177.87 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 30.149 VHL 5.491 DLA 26.81 RAL 25.76 RAD 6568.2 VEL 12.309 PTH 2.22 VHP 9.370 DPA ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 28 39 2172.3 263.23 73.34 90.00 2 32 27 3372.31 -23.23 122.55 3301.9 -12.96 148.29 24 51 42 23 46 40 3901.85 4 26 22 3005.03 0 39 21 3744.35 63.18 -9.43 155.19 257.51 90.00 5 16 27 1 41 46 7 12 2 1 55 33 75.57 2405.0 -28.19 88.14 -26.46 96.51 264.22 100.00 60.75 3144.4 -10.32 135.36 -6.47 142.04 255.92 100.00 2023.5 -33.88 -5.40 60.05 6 28 18 2623.49 0 53 55 3698.66 79.93 -32.84 69.13 265.81 110.00 3098.7 128.92 55.83 110.00 - .92 135.14 252.49 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5557.2 SGR 427.0 SG3 126.5 RRT .3340 RRF .3123 RTF .9318 SGB 5573.6 R23 -.0007 R13 .9318 SGI 5559.0 SG2 402.3 THA 1.48 ST 2895.1 SR 421.3 SS 616.5 CRT .9191 CRS -.8584 CST -.9907 TOE 2.5893 TRA 2.9503 TC3-3.1125 BAU 1.2547 RDE .4035 RRA -.0449 RC3 .0437 FAU .01458 LSA 2984.1 MSA 185.1 SSA 15.7 EL1 2921.0 EL2 164.5 ALF 7.64 FOE .6400 FRA 1.0423 FC3 -.4188 BSP 18066 BOE 2.6206 BRA 2.9507 BC3 3.1128 FSP -426 ARRIVAL CATE JUL 2 1966 FLIGHT TIME 194.00 LAUNCH DATE DEC 20 1965 DISTANCE 567.789 HELIOCENTRIC CONIC RL 147.18 LAL .0D LOL 87.90 VL 26.133 GAL 7.35 AZL 86.90 HCA 288.44 SMA 118.44 ECC .27251 INC 3.0998 V1 30.271 RP 108.51 LAP -2.94 LOP 16.37 VP 36.409 GAP 15.08 AZP 89.02 TAL 159.36 TAP 87.80 RCA 86.17 APO 150.72 V2 34.924 14.07 GP -2.59 7AL 53.04 7AP 177.08 ETS 299.42 7AE 131.25 ETE 182.66 7AC 112.23 ETC 167.45 CLP-178.64 RC 196.842 GL PLANETOCENTRIC CONIC 1.91 RAP 18.51 ECC 1.5473 2.25 VHP 9.702 DPA C3 33.253 VHL 5.767 DLA 26.80 RAL 28.72 RAD 6568.3 VEL 12.435 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.68 3 41 7 62.93 1 7 38 74.79 5 28 51 60.59 1 53 50 78.88 7 24 21 55.82 2 7 41 2796.1 267.94 -22.76 124.14 90.00 2 44 30 3396.14 149.78 3327.3 -12.21 0 2 10 261.98 3927.31 -8.65 156.65 90.00 -27.88 2429.1 268.99 3029.12 -26.05 98.18 100.00 136.79 -9.51 3169.6 260.35 -5.63 143.44 0 51 1 3769.57 100.00 -33.72 61.93 2047.8 270.73 6 40 14 2647.79 1 5 38 3723.67 -32.54 70.96 110.00 -4.45 3123.7 .03 256.83 136.45 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5559.6 SGR 425.6 SG3 123.0 RRT .3595 RRF .3383 RTF .9359 SCB 5575.9 R23 .0001 R13 .9359 SGI 5561.8 SG2 396.9 THA 1.58 ST 2841.2 SR 422.5 SS 605.6 CRT .9102 CRS -.8500 CST -.9916 TOE 2.6320 TRA 3.3128 TC3-2.8058 BAU 1.2474 ROE .4251 RRA -.0320 RC3 .0328 FAU .01331 FOE .6276 FRA 1.0919 FC3 -.3464 BSP 18146 BDE 2.6661 BRA 3.3129 BC3 2.8059 FSP -416 LSA 2929.3 MSA 191.1 SSA 14.9 EL1 2867.2 EL2 173.4 ALF 7.74 ARRIVAL DATE JUL 4 1966 FLIGHT TIME 196.00 LAUNCH DATE DEC 20 1965 OISTANCE 572.813 RL 147.18 LAL .00 LOL 87.90 VL 26.091 GAL 8.23 A7L 86.94 HCA 291.63 SMA 118.21 ECC .28160 INC 3.0571 V1 30.271 RP 108.47 LAP -2.84 LOP 19.56 VP 36.391 GAP 15.68 A7P 88.87 TAL 157.69 TAP 89.32 RCA 84.92 APO 151.50 V2 34.936 RC 198.673 GL 13.11 GP -2.54 TAL 50.57 TAP 177.40 ETS 284.44 TAE 131.28 ETE 182.65 TAC 114.53 ETC 167.40 CLP-179.44 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 36.888 VHL 6.074 DLA 26.73 RAL 31.55 RAD 6568.4 VEL 12.580 PTH 2.28 VHP 10.064 DPA 2.93 RAP 20.68 ECC 1.6071 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.15 3 54 38 2815.9 -24.59 272.64 125.44 2 57 42 3415.95 -22.35 90.00 -11.24 151.68 3359.9 62.65 1 17 32 158.51 266.32 -7.63 0 11 32 3959.89 62.65 1 17 32 74.10 5 41 48 60.43 2 4 18 77.90 7 36 49 55.83 2 18 39 91.41 2450.9 -25.65 99.67 273.73 4 50 57 3050.85 100.00 145.13 -8.51 138.52 3200.2 1 0 58 3800.21 6 52 18 2671.15 1 16 7 3752.69 264.67 -4.61 3800.21 100.00 63.73 2071.1 -33.55 72.71 275.60 -32.22 110.00 3152.7 1.14 137.96 261.09 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2782.2 SR 421.9 SS 595.9 SGT 5558.9 SGR 423.2 SG3 119.6 ST 2782.2 SR 421.9 SS 595.9 RRT .3850 RRF .3644 RTF .9400 CRT .9000 CRS -.8415 CST -.9924 SGB 5575.0 R23 .0000 R13 .9400 LSA 2869.6 MSA 196.6 SSA 14.2 SG1 5561.3 SG2 390.4 THA 1.69 EL1 2808.2 EL2 181.5 ALF 7.81 TOE 2.6731 TRA 3.6985 TC3-2.5080 BAU 1.2369 RDE .4471 RRA -.0171 RC3 .0236 FAU .01206 FOE .6164 FRA 1.1442 FC3 -.2830 BSP 18246 BOE 2.7102 BRA 3.6986 BC3 2.5082 FSP -406

```
LAUNCH DATE DEC 20 1965
                                                                                    FLIGHT TIME 198.00
                                                                                                                                                       ARRIVAL CATE JUL 6 1966
    HELIOCENTRIC CONIC
                                                                                   DISTANCE 577.717
     RL 147.18 LAL .00 LOL 87.90 VL 26.050 GAL 9.17 AZL 86.99 HCA 294.82 SMA 117.98 ECC .29163 INC 3.0124 V1 30.271 RP 108.43 LAP -2.73 LOP 22.75 VP 36.373 GAP 16.33 AZP 88.73 TAL 156.06 TAP 90.88 RCA 83.58 APO 152.39 VZ 34.948
     RC 200.481 GL 12.16 GP -2.49 7AL 48.22 7AP 177.50 ETS 266.46 7AE 131.30 ETE 182.63 7AC 116.83 ETC 167.31 CLP 179.76
    PLANETOCENTRIC CONIC
     C3 41.149 VHL 6.415 CLA 26.60 RAL 34.23 RAC 6568.6 VEL 12.748 PTH 2.32 VHP 10.460 CPA
                                                                            3.93 PO CST TIM  
277.31 71.71 4 8 56 2832.4  
160.70 270.52 62.36 1 25 33 3398.6  
101.02 278.42 73.48 5 55 9 2470.6  
47.09 268.87 60.28 2 13 17 3235.7  
74.38 280.41 76.96 7 49 19 2093.7  
39.67 265.26 55.89 2 28 29 3185.3  
MID-COURSE EXECUTION ACCURACY ORBIT DETER  
SCT 5553.1 5GR 419.9 SG3 11F 4  
RRT .410A PPP
     C3 41.149 VML 6.415 CLA 26.60 RAL 34.23 RAG 6588.6 VEL 12.748 PTH 2.32 VMP 10.480 CPA 3.93 RAP 22.84 ECC 1.6772

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 11 44 3432.45 -22.00 126.53 277.51 71.71 4 8 56 2832.4 -24.30 118.61

90.00 0 18 55 3998.61 -6.42 160.70 270.52 62.36 1 25 33 3398.6 -10.07 153.93

100.00 5 3 58 3070.59 -25.27 101.02 278.42 73.48 5 55 9 2470.6 -27.29 92.80

100.00 1 9 21 3835.70 -3.41 147.09 268.87 60.28 2 13 17 3235.7 -7.34 140.51

110.00 7 4 25 2693.71 -31.88 74.38 280.41 76.96 7 49 19 2093.7 -33.35 65.46

110.00 1 25 23 3785.35 2.39 139.67 265.26 55.89 2 28 29 3185.3 -2.10 133.46
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                              SGT 5553.1 SGR 419.9 SG3 116.4
RRT .4104 RRF .3907 RTF .9444
SGB 5569.0 R23 .0013 R13 .9444
SGI 5555.8 SG2 382.7 THA 1.79
                                                                                                                                     ST 2719.4 SR 419.3 SS 587.6
CRT .8909 CRS -.8330 CST -.9932
LSA 2806.3 MSA 201.6 SSA 13.5
     TOE 2.7127 TRA 4.1103 TC3-2.2195 BAU 1.2210
     RDE .4695 RRA -.0001 RC3 .0161 FAU .01084
FCE .6064 FRA 1.1996 FC3 -.2280 BSP 18267
                                                                                                                                         EL1 2745.1 EL2 188.7 ALF 7.86
     BCE 2.7530 BRA 4.1103 BC3 2.2195 FSP -396
                                                                                    FLIGHT TIME 200.00
LAUNCH DATE DEC 20 1965
                                                                                                                                                       ARRIVAL CATE JUL 8 1966
    HELIOCENTRIC CONIC
                                                                                   DISTANCE 582.476
    RL 147.18 LAL .00 LOL 87.90 VL 26.010 GAL 10.18 A7L 87.03 MCA 298.01 SMA 117.76 ECC .30274 INC 2.9653 V1 30.271
RP 108.39 LAP -2.62 LOP 25.94 VP 36.356 GAP 17.04 A7P 88.61 TAL 154.48 TAP 92.49 RCA 82.11 APO 153.42 V2 34.961
RC 202.264 GL 11.24 GP -2.45 TAL 46.00 TAP 177.33 ETS 248.54 TAE 131.29 ETE 182.62 TAC 119.10 ETC 167.18 CLP 178.93
   PLANETOCENTRIC CONIC
     C3 46.154 VHL 6.794 DLA 26.42 RAL 36.77 RAD 6568.7 VEL 12.943 PTH 2.36 VHP 10.894 DPA
                                                                                                                                                    4.91 RAP 25.00 ECC 1.7596
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           127.45 281.93 71.35 4 23 43 163.17 274.59 62.10 1 31 57 102.25 283.06 72.93 6 8 44 149.27 272.96 60.17 2 20 53 76.00 285.14 76.06 8 1 45 141.54 269.33 56.00 2 37 13 MIC-COURSE EXECUTION ACCURACY 5GT 5544.8 5GR 415.8 5GR 113.4
                     3 26 17 3446.47

0 24 35 4042.39

5 17 15 3088.72

1 16 18 3875.37

7 16 30 2715.61

1 33 32 3821.25
         90.00
                                                                                                                                           2846.5
                                                        -21.70
                                                                         127.45
                                                                                                                                                              -24.05 119.56
         90.00
                                                           -5.03
                                                                           163.17
                                                                                                                                                3442.4
                                                                                                                                                                  -B.72
       100.00
                                                         -24.92
                                                                           102.25
                                                                                                                                                2488.7
                                                                                                                                                                 -27.02
                                                                                                                                                                                   94.08
       100.00
                                                          -2.07
                                                                          149.27
                                                                                                                                               3275.4
                                                                                                                                                                 -6.02
                                                                                                                                                                                  142.71
       110.00
                                                         -31.53
                                                                                                                                               2115.6
                                                                                                                                                               -33.13
                                                                                                                                                                                  67.13
        110.00
                                                           3.76
                                                                           141.54
                                                                                                                                               3221.2
                                                                                                                                                                  -.73
                                                                                                                                                                                  135.34
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                               SGT 5544.8 SGR 415.8 SG3 113.4
RRT .4364 RRF .4175 RTF .9488
SGB 5560.4 R23 .0017 R13 .9488
                                                                                                                                          ST 2658.6 SR 415.2 55 581.8
CRT .8809 CRS -.8249 CST -.9940
     TOE 2.7574 TRA 4.5518 TC3-1.9420 BAU 1.1983
    RDE .4922 RRA .0192 RC3 .0103 FAU .00957
FDE .5991 FRA 1.2598 FC3 -.1795 BSP 18209
                                                                                                                                          LSA 2745.2 MSA 205.7 SSA 12.9
  - BOE 2.8010 BRA 4.5519 BC3 1.9420 FSP -384
                                                                               SG1 5547.8 SG2 373.9 THA 1.88
                                                                                                                                       EL1 2683.7 EL2 194.6 ALF 7.87
                                                                                   FLIGHT TIME 202.00
                                                                                                                                                     ARRIVAL DATE JUL 10 1966
LAUNCH DATE DEC 20 1965
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 587.062
     RL 147.18 LAL .00 LOL 87.90 VL 25.970 GAL 11.26 AZL 87.08 MCA 301.20 SMA 117.55 ECC .31506 INC 2.9152 V1 30.271 RP 108.35 LAP -2.49 LOP 29.14 VP 36.341 GAP 17.83 AZP 88.49 TAL 152.95 TAP 94.15 RCA 80.52 APO 154.58 V2 34.974
    RC 204.023 GL 10.34 GP -2.41 ZAL 43.92 TAP 176.92 ETS 233.67 TAE 131.26 ETE 182.61 TAC 121.35 ETC 167.01 CLP 178.08
   PLANETOCENTRIC CONIC
     C3 52.051 VHL 7.215 OLA 26.19 RAL 39.15 RAD 6568.9 VEL 13.169 PTH 2.40 VHP 11.374 OPA
                                                                                                                                                  5.87 RAP 27.15 ECC 1.8566
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
        90.00 3 41 4 3458.73
90.00 0 28 47 4090.18
100.00 5 30 37 3105.56
100.00 1 21 56 3918.58
110.00 7 28 26 2736.93
110.00 1 40 36 3859.97
                                                                                                                                                                            120.39
                                                                                                                                          2858.7 -23.82
                                                        -21.43
                                                                          -3.50
                                                                                                                                              3490.2
                                                                                                                                                                -7.23
                                                                                                                                                                                159.16
       100.00
                                                        -24.58
                                                                          103.38
                                                                                          287.61
                                                                                                              72.42 6 22 22
60.11 2 27 14
                                                                                                                                              2505.6
3318.6
                                                                                                                                                              -26.75
                                                                                                                                                                                  95.26
       100.00
                                                           -.61
                                                                          151.64
                                                                                          276.92
                                                                                                                                                                -4.58
                                                                                                                                                                                145.11
                                                                                                              75.21
       110.00
                                                                                       289.78
273.30
                                                                                                                          8 14 2
2 44 56
                                                                                                                                              2136.9 -32.89
3260.0 .75
                                                        -31.17
                                                                           77.55
                                                                                                                                                                                  68.75
       110.00
                                                         5.23
                                                                         143.58
                                                                                                              56.17
                                                                                                                                                                                137.36
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5530.5 SGR 410.6 SG3 110.4
RRT .4616 RRF .4435 RTF .9533
SGB 5545.8 R23 .0017 R13 .9533
                                                                                                                                     ST 2592.4 SR 409.0 SS 576.7
CRT .8705 CRS -.8165 CST -.9947
LSA 2678.9 MSA 209.0 SSA 12.3
     TOE 2.7983 TRA 5.0205 TC3-1.6842 BAU 1.1720
    RCE .5149 RRA .0406 RC3 .0058 FAU .00838
FOE .5919 FRA 1.3228 FC3 -.1394 BSP 18253
BOE 2.8453 BRA 5.0207 BC3 1.6842 FSP -374
                                                                              SG1 5533.8 SG2 364.0 THA 1.97
                                                                                                                                        EL1 2616.9 EL2 199.5 ALF 7.87
LAUNCH DATE DEC 20 1965
                                                                                   FLIGHT TIME 204.00
                                                                                                                                                      ARRIVAL DATE JUL 12 1966
  HELIOCENTRIC CONIC
                                                                                   DISTANCE 591.437
    RL 147.18 LAL .00 LOL 87.90 VL 25.932 GAL 12.44 AZL 87.14 MCA 304.40 SMA 117.34 ECC .32877 INC 2.8617 V1 30.271
RP 108.31 LAP -2.36 LOP 32.34 VP 36.326 GAP 18.70 AZP 88.38 TAL 151.49 TAP 95.89 RCA 78.76 APO 155.92 V2 34.987
RC 205.757 GL 9.47 GP -2.37 ZAL 41.97 ZAP 176.33 ETS 222.57 ZAE 131.19 ETE 182.60 ZAC 123.57 ETC 166.80 CLP 177.20
   PLANETOCENTRIC CONIC
    C3 59.027 VHL 7.683 DLA 25.92 RAL 41.37 RAD 6569.1 VEL 13.431 PTH 2.45 VHP 11.905 DPA
                                                                                                                                                   5.80 RAP 29.28 ECC 1.9714
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           2869.8
                                                                                                                                                             -23.62
        90.00
                       3 55 49 5469.81
                                                         -21.19
                                                                         128.96
                                                                                         290.95
                                                                                                              70.76
                                                                                                                           4 53 39
                                                                                                                                                                               121.13
                      0 31 46 4141.05
5 43 54 5121.41
1 26 23 3964.68
7 40 7 2757.74
                                                                                          282.33
                                                                                                              61.74
                                                                                                                           1 40 47
                                                                                                                                               3541.0
        90.00
                                                          -1.86
                                                                          168.69
                                                                                                                                                                -5.63
                                                                                                                                                                                162.03
                                                        -24.25
                                                                                                                           6 35 55
       100.00
                                                                          104.45
                                                                                          292.07
                                                                                                              71.96
                                                                                                                                              2521.4
                                                                                                                                                                -26.48
                                                                                                                                                                                  96.36
                                                                                                              60.12 2 32 28
                                                                                                                                              3364.7
2157.7
                                                                         154.17
                                                                                          280.76
       100.00
                                                             .96
                                                                                                                                                                -3.02
                                                                                                                                                                                147.65
                                                        -30.80
                                                                                        294.30
       110.00
                                                                           79.06
                                                                                                              74.38
                                                                                                                           8 26 5
                                                                                                                                                              -32.63
                                                                                                                                                                                 70.32
                                                                                                              56.42 2 51 40
                       1 46 38
                                                        6.78
                                                                         145.75
                                                                                          277.15
                                                                                                                                              3301.1
       110.00
                                      3901.11
                                                                                                                                                                 2.32
                                                                                                                                                                                139.50
                                                                        MID-COURSE EXECUTION ACCURACY
SGT 5512.3 SGR 404.5 SG3 107.5 ST 2527.1 SR 401.2 SS 573.7
RRT .4867 RRF .4695 RTF .9579 CRT .8598 CRS -.8084 CST -.9954
SGB 5527.1 R23 .0016 R13 .9579 LSA 2613.8 MSA 211.2 SSA 11.7
SG1 5515.8 SG2 353.1 THA 2.05 EL1 2550.7 EL2 203.0 ALF 7.82
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
    TDE 2.8425 TRA 5.5244 TC3-1.4420 BAU 1.1379
    ROE .5376 RRA .0643 RC3 .0027 FAU .00718
FDE .5866 FRA 1.3910 FC3 -.1053 BSP 18280
BDE 2.8929 BRA 5.5248 BC3 1.4420 FSP -365
```

ARRIVAL DATE JUL 14 1966

```
FLIGHT TIME 206.00
LAUNCH DATE DEC 20 1965
                                                                           DISTANCE 595.553
   RL 147.18 LAL .0D LOL 87.90 VL 25.894 GAL 13.73 A7L 87.20 MCA 307.60 SMA 117.14 ECC .34407 INC 2.8038 V1 30.271 RP 108.27 LAP -2.22 LOP 35.53 VP 36.312 GAP 19.67 A7P 88.29 TAL 150.11 TAP 97.71 RCA 76.84 APO 157.45 V2 35.000 RC 207.465 GL 8.63 GP -2.34 7AL 40.16 7AP 175.60 ETS 214.54 7AE 131.09 ETE 182.58 7AC 125.75 ETC 166.54 CLP 176.28
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 10 22 3480.09 -20.95 129.63 295.30 70.51 5 8 22 2880.1 -23.42 121.82 90.00 0 33 40 4194.21 -.15 171.66 286.00 61.68 1 43 35 3594.2 -3.93 164.02
                    5 56 58 3136.44
1 29 46 4013.09
7 51 31 2778.03
1 51 42 3944.26
                                                    -23.92
                                                                    105.45
                                                                                   296.41
                                                                                                     71.52
       100.00
                                                                                                                                 3413.1 -1.39
2178.0 -32.36
                                                                                                    60.21 2 36 39
73.60 8 37 49
                                                                                                                                                                150.31
                                                                                  284.47
                                                      2.60
                                                                   156.83
       100.00
                                                   -30.42
                                                                                  298.70
                                                                     80.52
       110.00
                                                                                                                                                    3.97
                                                                                280.90
                                                                                                                                  3344.3
                                                                                                     56.74
                                                                                                                2 57 26
                                                    8.40
                                                                   148.04
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 5490.3 SCR 397.5 SC3 104.7
RRT .5118 RRF .4956 RTF .9625
SCB 5504.7 R23 .0013 R13 .9625
SCI 5494.1 SC2 341.2 THA 2.13
                                                                                                                             ST 2463.4 SR 391.8 SS 573.4
CRT .8492 CRS -.8007 CST -.9961
    TOE 2.8915 TRA 6.0678 TC3-1.2165 BAU 1.0948
    RCE .5602 RRA .0904 RC3 .0007 FAU .00595
FCE .5837 FRA 1,4654 FC3 -.0765 BSP 18288
                                                                                                                             LSA 2550.6 MSA 212.0 SSA 11.1
EL1 2485.9 ELZ 205.0 ALF 7.75
    BOE 2.9453 BRA 6.0685 BC3 1.2165 FSP -356
                                                                                                                                         ARRIVAL DATE JUL 16 1966
                                                                            FLIGHT TIME 208.00
LAUNCH DATE DEC 20 1965
                                                                           DISTANCE 599.351
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 25.858 GAL 15.14 AZL 87.26 HCA 310.80 SMA 116.95 ECC .36121 INC 2.7407 V1 30.271
RP 108.23 LAP -2.07 LOP 38.73 VP 36.299 GAP 20.76 AZP 88.21 TAL 148.83 TAP 99.63 RCA 74.70 APO 159.19 V2 35.014
RC 209.146 GL 7.81 GP -2.31 ZAL 38.50 ZAP 174.77 ETS 208.69 ZAE 130.93 ETE 182.57 ZAC 127.89 ETC 166.24 CLP 175.31
   PLANETOCENTRIC CONIC
                                                                                                                                     8.58 RAP. 33.46 ECC 2.2710
    C3 77.227 VHL 8.788 DLA 25.27 RAL 45.33 RAD 6569.5 VEL 14.092 PTH 2.57 VHP 13.157 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 24 33 3489.78 -20.73 130.25 299.52 70.27 5 22 43 2889.8 -23.23 122.47
                                                                                                                                                                 168.09
                                                                                                                                  3649.0
                                                                                                                                                   -2.17
                                                                                   289.52
                                                                                                     61.73
                                                                                                                 1 45 26
        90.00
                      0 34 37
                                   4249.01
                                                       1.62
                                                                    174.71
                                                                     106.39 300.61 71.12 7 2 14
159.59 288.04 60.39 2 39 52
81.93 302.95 72.85 8 49 10
150.44 284.51 57.16 3 2 18
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  -25.97
                                                                                                                                                                   98.39
                                                                                                                                  2550.7
                     6 9 43 3150.73
                                                     -23.61
                                                                    106.39
       100.00
                     1 32 9 4063.29
8 2 32 2797.75
1 55 49 3989.03
                                                                                                                                                                 153.06
                                                                                                                                  3463.3
                                                                                                                                                     . 32
                                                                   159.59
       100.00
                                                       4.29
                                                                                                                                2197.8
                                                                                                                                                  -32.08
                                                                                                                                                                   73.31
                                                   -30.03
       110.00
                                                                                                                                                    5.67
                                                                                                                                  3389.0
                      1 55 49
                                    3989.03
                                                     10.07
                                                                   150.44
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2404.2 SR 381.0 SS 576.5
                                                                        SGT 5466.8 SGR 389.7 SG3 102.2
RRT .5372 RRF .5221 RTF .9670
SGB 5480.7 R23 .0009 R13 .9670
    TOE 2.9512 TRA 6.6602 TC3-1.0059 BAU 1.0385
                                                                                                                              CRT .8390 CRS -.7939 CST -.9968
    ROE .5830 RRA .1191 RC3 -.0002 FAU .00460
                                                                                                                              LSA 2492.6 MSA 211.5 SSA 10.5
    FOE .5841 FRA 1.5481 FC3 -.0516 BSP 18174
                                                                                                                             EL1 2425.5 EL2 205.5 ALF 7.63
    BOE 3.0082 BRA 6.6612 BC3 1.0059 FSP -345
                                                                        SG1 5470.8 SG2 328.4 THA 2.20
                                                                                                                                         ARRIVAL CATE JUL 18 1966
                                                                            FLIGHT TIME 210.00
LAUNCH DATE DEC 20 1965
   HELIOCENTRIC CONIC
    DISTANCE 602.751
   PLANETOCENTRIC CONIC
    UNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 38 15 3498.90 -20.52 130.84 303.58 70.05 5 36 34 2898.9 -23.06 123.08 90.00 0 34 41 4304.94 3.42 177.84 292.89 61.87 1 46 26 3704.9 -.37 171.21 100.00 6 22 3 3164.25 -23.31 107.29 304.65 70.74 7 14 47 2564.3 -25.73 99.32
                                                                                                              7 14 ~.
2 42 9
9 0 3
3 6 15
                                                                    162.44
                     1 33 34 4114.82
                                                       6.02
       100.00
                                                                                                                                                                  74.72
                                                                                                                                  2216.8
                                                                                                                                                  -31.79
                     8 13 7 2816.78
                                                                     83.27
                                                                                   307.03
                                                                                                     72.14
                                                   -29.64
       110.00
                                                                                                    57.67
                                                                                                                                  3435.1
                                                                                                                                                    7.40
                                                                                                                                                                146.55
                      1 59 D
                                                                   152.94
                                                                                   288.00
                                    4035.06
                                                    11.75
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5436.2 SGR 380.9 SG3 99.7
RRT .5618 RRF .5479 RTF .9714
SGB 5449.5 R23 .DOD4 R13 .9714
                                                                                                                              ST 2343.8 SR 368.6 SS 581.7
CRT .8289 CRS -.7873 CST -.9974
    TDE 3.0145 TRA 7.2977 TC3 -.8153 BAU .9717
    RDE .6054 RRA .1501 RC3 -.0003 FAU .00323
                                                                                                                             LSA 2433.9 MSA 209.6 SSA 9.9
    FDE .5861 FRA 1.6379 FC3 -.0314 BSP 18180
                                                                                                                              EL1 2363.8 EL2 204.5 ALF
                                                                        SG1 5440.4 SG2 314.8 THA 2.26
    BDE 3.0747 BRA 7.2993 BC3 .8153 FSP -337
                                                                                                                                          ARRIVAL DATE JUL 20 1966
                                                                            FLIGHT TIME 212.00
LAUNCH DATE DEC 20 1965
                                                                           DISTANCE 605.651
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 25.790 GAL 18.42 AZL 87.41 HCA 317.21 SMA 116.59 ECC .40223 INC 2.5935 VI 30.271 RP 108.15 LAP -1.76 LOP 45.14 VP 36.276 GAP 23.37 AZP 88.10 TAL 146.66 TAP 103.87 RCA 69.69 APO 163.48 V2 35.040 RC 212.427 GL 6.25 GP -2.25 TAL 35.64 ZAP 172.83 ETS 200.92 ZAE 130.44 ETE 182.53 ZAC 131.99 ETC 165.49 CLP 173.20
   PLANETOCENTRIC CONIC
    C3 103.598 VHL 10.178 OLA 24.49 RAL 48.60 RAD 6570.0 VEL 14.998 PTH 2.70 VHP 14.743 DPA 10.21 RAP 37.49 ECC 2.7050
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               123.64
                                                                                                                                                  -22.89
                                                                                                                  5 49 50
                                                                                                                                  2907.4
                     4 51 23 3507.36
0 33 52 4361.54
                                                                                                     69.85
                                                     -20.32
                                                                    131.38
                                                                                   307.45
                                                                                                     62.13 1 46 34
70.39 7 26 50
61.04 2 43 31
71.48 9 10-26
58.27
                                                                                                                                                                  174.36
                                                                                                                                   3761.5
                                                                                                                                                    1.46
                                                                                    296.10
                                                       5.23
                                                                    181.01
                    6 33 53 3176.89
1 34 3 4167.25
8 23 11 2834.92
2 1 15 4081-98
                                                                                                                                   2576.9
                                                                                                                                                   -25.49
                                                                                                                                                                  100.18
                                                                                    308.50
                                                     -23.03
                                                                    108.12
                                                                                                                                                                  158.77
                                                                                                                                   3567.2
                                                                                                                                                    3.84
                                                                                    294.73
                                                       7.76
                                                                    165.36
                                                                                                                                   2234.9
                                                                                                                                                  -31.50
                                                                                                                                                                   76.06
                                                    -29.26
                                                                     84.54
                                                                                   310.90
       110.00
                                                                                                                  3 9 16
                                                                                                                                   3482.0
                                                                                                                                                    9.16
                                                                                                                                                                  149.05
                                                                                                     58.27
                                                    13.45
                                                                    155.52
                                                                                   291.34
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 5402.2 SGR 371.2 SG3 97.3 ST 2286.5 SR 355.0 SS 590.4

RRT .5862 RRF .5754 RTF .9756 CRT .8194 CRS -.7816 CST -.9979

SGB 5414.9 R23 -.0003 R13 .9756 LSA 2379.1 MSA 206.3 SSA 9.4

SGI 5406.6 SG2 300.5 THA 2.31 ELI 2305.1 ELZ 201.9 ALF 7.31
     TOE 3.0900 TRA 7.9945 TC3 -.6409 BAU .8877
     ROE .6278 RRA .1835 RC3 .0002 FAU .00171
FOE .5913 FRA 1.7381 FC3 -.0143 BSP 18153
     BOE 3.1531 BRA 7.9966 BC3 .6409 FSP -329
```

```
FLIGHT TIME 214.00
                                                                                                                                    ARRIVAL CATE JUL 22 1966
LAUNCH DATE DEC 20 1965
                                                                         CISTANCE 607.916
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 121.261 VHL 11.012 CLA 24.06 RAL 49.95 RAC 6570.3 VEL 15.576 PTH 2.77 VHP 15.701 CPA 10.95 RAP 39.41 ECC 2.9957
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   5 3 53 3514.95

D 32 10 4418.47

6 45 9 3188.43

1 33 35 4220.22

8 32 42 2851.94
                                                                                                           6 2 27
                                                                                                                            2914.9
        90.00
                                                   -20.15
                                                                 131.86
                                                                               311.10
                                                                                               69.67
                                                                                                                                           -22.73
                                                                                                                                                         124.15
                                                                                                           1 45 49
7 38 17
                                                                                                                                                            177.54
        90.00
                                                    7.03
                                                                 184.23
                                                                                299.13
                                                                                                 62.50
                                                                                                                              3818.5
                                                                                                                                              3.29
                                                                                                                             2588.4
                                                                                                                                                            100.97
       100.00
                                                   -22.76
                                                                 108.87
                                                                                312.13
                                                                                                 70.08
                                                                                                                                             -25.27
                                                                                                           2 43 55
9 20 14
                                                                                                                             3620.2
       100.00
                                                    9.49
                                                                 168.34
                                                                                297.81
                                                                                                 61.52
                                                                                                                                              5.61
                                                                                                                                                            161.70
      110.00
                                                  -28.88
                                                                   85.73
                                                                                314.54
                                                                                                 70.87
                                                                                                                             2251.9
                                                                                                                                             -31.22
                                                                                                                                                            77.30
                                                                    18.17 294.51 58.98 3 11 21 MID-COURSE EXECUTION ACCURACY
                                                  15.13
      110.00
                    2 2 31 4129.48
                                                                 158.17
                                                                                                                             3529.5
                                                                                                                                            10.91
                                                                                                                                                           151.61
                                                                                                                         ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                    SCI 5363.8 SGR 360.6 SG3 95.0
RRT .6102 RRF .5987 RTF .9796
SGB 5375.9 R23 -.0010 R13 .9796
SGI 5368.3 SG2 285.4 THA 2.36
                                                                                                                         ST 2231.8 SR 340.3 S5 603.1
CRT .8109 CRS -.7768 CST -.9983
    TOE 3.1807 TRA 8.7577 TC3 -.4827 BAU .7825
    RCE .6501 RRA .2193 RC3 .0013 FAU-.00002
FDE .6005 FRA 1.8504 FC3 .0001 BSP 18112
BOE 3.2464 BRA 8.7604 BC3 .4827 FSP -322
                                                                                                                         LSA 2328.1 MSA 201.5 55A 8.8
EL1 2248.9 EL2 197.7 ALF 7.10
                                                                         FLIGHT TIME 216.00
                                                                                                                                     ARRIVAL CATE JUL 24 1966
LAUNCH CATE DEC 20 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 609.365
    RL 147.18 LAL .00 LOL 87.90 VL 25.729 GAL 22.51 AZL 87.59 HCA 323.63 SMA 116.27 ECC .45488 INC 2.4053 V1 30.271
RP 108.07 LAP -1.43 LOP 51.56 VP 36.258 GAP 26.78 AZP 88.06 TAL 145.19 TAP 108.82 RCA 63.38 APO 169.16 V2 35.067
RC 215.599 GL 4.78 GP -2.20 ZAL 33.48 ZAP 170.48 ETS 196.08 ZAE 129.61 ETE 182.47 ZAC 135.74 ETC 164.58 CLP 170.74
   PLANETOCENTRIC CONIC
    C3 143.054 VHL 11.961 OLA 23.59 RAL 51.10 RAD 6570.6 VEL 16.260 PTH 2.85 VHP 16.800 CPA 11.65 RAP 41.24 ECC 3.3543 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 15 40 3521.33
0 29 31 4475.42
                                                                                                           6 14 21
                                                  -19.99
                                                                132.27
                                                                               314.49
                                                                                                69.52
                                                                                                                             2921.3
                                                                                                                                            -22.60
        90.00
                                                                                                                                                           124.57
                                                                                                             1 44 6
                                                                                301.94
                                                                                                                              3875.4
                                                                                                                                                            180.74
        90.00
                                                     8.81
                                                                 187.47
                                                                                                 62.98
                                                                                                                                               5.11
                                                                                                           7 49 5
2 43 19
                   6 55 46 3198.56
1 32 5 4273.42
8 41 35 2867.51
2 2 46 4177.24
      100.00
                                                                 109.53
                                                                                315.50
                                                                                                                              2598.6
                                                                                                                                             -25.07
                                                                                                                                                            101.66
                                                   -22.52
                                                                                                 69.AI
                                                                                                                                              7.38
                                                                                300.68
                                                                                                                              3673.4
                                                   11.20
                                                                171.36
                                                                                                 62.10
                                                                                                                                                            164.66
      100.00
                                                                                                           9 29 23
3 12 23
                                                   -28.53
                                                                  86.80
                                                                                                                             2267.5
                                                                                                                                            -30.94
                                                                                                                                                             78.43
      110.00
                                                                                317.91
                                                                                                 70.32
                                                   16.79
                                                                 160.88
                                                                                297.48
                                                                                                 59.78
                                                                                                                             3577.2
                                                                                                                                             12.65
                                                                                                                                                            154.22
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SCT 5323.6 5GR 349.3 5G3 92.9

RRT .6341 RRF .6239 RTF .9833

SGB 5335.1 R23 -.0017 R13 .9833
                                                                                                                         5T 2181.7 SR 324.8 SS 621.0
CRT .8038 CRS -.7736 CST -.9987
    TOE 3.2952 TRA 9.6022 TC3 -.3388 BAU .6480
    RDE .6727 RRA .2576 RC3 .0027 FAU-.00210
FDE .6152 FRA 1.9781 FC3 .0127 BSP 17943
BDE 3.3632 BRA 9.6056 BC3 .3388 FSP -313
                                                                                                                         LSA 2283.1 MSA 195.1 SSA 8.3
                                                                     SG1 5328.3 SG2 269.9 THA 2.39
                                                                                                                         EL1 2197.3 EL2 191.8 ALF 6.88
                                                                        FLIGHT TIME 218.00
                                                                                                                                   ARRIVAL DATE JUL 26 1966
LAUNCH DATE DEC 20 1965
                                                                        DISTANCE 609.755
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 25.703 GAL 24.98 A7L 87.17 HCA 326.84 SMA 116.13 ECC .48686 INC 2.2881 VI 30.271 RP 108.03 LAP -1.25 LOP 54.76 VP 36.252 GAP 28.88 A7P 88.08 TAL 144.83 TAP 111.68 RCA 59.59 APO 172.67 V2 35.080 RC 217.144 GL 4.09 GP -2.18 TAL 32.72 TAP 169.11 ETS 194.28 TAE 129.00 ETE 182.43 TAC 137.44 ETC 164.08 CLP 169.33
   PLANETOCENTRIC CONIC
    C3 170.220 VHL 13.047 OLA 23.09 RAL 52.01 RAD 6570.8 VEL 17.075 PTH 2.93 VHP 18.066 OPA 12.29 RAP 42.96 ECC 3.8014
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           6 25 27
1 41 20
                                                                                                                                            -22.51
                   5 26 41 3526.08
0 25 48 4532.16
                                                                                                                          2926.1
        90.00
                                                  -19.88
                                                                132.57
                                                                               317.57
                                                                                                69.41
                                                                                                                                                           124.88
                                                                                                                                                           183.94
        90.00
                                                   10.55
                                                                 190.73
                                                                                304.51
                                                                                                 63.57
                                                                                                                             3932.2
                                                                                                                                             6.91
                                                                                                           7 59 8
2 41 35
       100.00
                   7 5 41 3206.88
                                                  -22.33
                                                                110.07
                                                                                318.56
                                                                                                 69.59
                                                                                                                             2606.9
                                                                                                                                            -24.90
                                                                                                                                                           102.22
                    1 29 29
                                                                174.42
                                                                                303.30
                                                                                                 62.79
                                                                                                                             3726.6
                                                                                                                                              9.13
                                                                                                                                                           167.64
       100.00
                                  4326.60
                                                    12.88
                                                                   07.74 320.96 69.83 9 37 48
63.64 300.22 60.67 3 12 18
HID-COURSE EXECUTION ACCURACY
                                                 -28.21
                                                                  87.74
                                                                                                                             2281.2
                                                                                                                                            -30.69
                                                                                                                                                            79.42
                    8 49 47 2881.23
                                   4225.00
                     2 1 53
                                                   18.40
                                                                 163.64
                                                                                                                             3625.0
                                                                                                                                            14.36
                                                                                                                                                           156.86
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2130.8 SR 308.3 SS 643.4
CRT .7976 CRS -.7711 CST -.9990
                                                                     SGT 5275.5 SGR 337.0 SG3 90.9
RRT .6568 RRF .6477 RTF .9866
SGB 5286.2 R23 -.0024 R13 .9866
    TOE 3.4284 TRAID.5277 TC3 -.2119 BAU .4822
    RDE .6952 RRA .2977 RC3 .0044 FAU-.00453
FDE .6341 FRA 2.1218 FC3 .0231 BSP 17894
                                                                                                                        LSA 2239.2 MSA 187.5 SSA 7,7
    BDE 3.4982 BRAID.5320 BC3 .2119 FSP -306
                                                                     SG1 5280.1 SG2 253.9 THA 2.41
                                                                                                                         ELI 2145.1 EL2 184.7 ALF 6.63
LAUNCH DATE DEC 20 1965
                                                                         FLIGHT TIME 220.00
                                                                                                                                    ARRIVAL DATE JUL 28 1966
                                                                        DISTANCE 608.762
   HELIOCENTRIC CONIC
    RL 147.18 LAL .00 LOL 87.90 VL 25.679 GAL 27.00 AZL 87.85 HCA 330.06 SMA 116.01 ECC .52344 INC 2.1488 VI 30.271
RP 107.99 LAP -1.07 LOP 57.98 VP 36.248 GAP 31.34 AZP 88.14 TAL 144.81 TAP 114.86 RCA 55.28 APO 176.73 V2 35.092
RC 218.662 GL 3.41 GP -2.15 ZAL 32.19 ZAP 167.57 ETS 192.74 ZAE 128.24 ETE 182.39 ZAC 138.99 ETC 163.56 CLP 167.76
   PLANETOCENTRIC CONIC
    C3 204.458 VHL 14.299 DLA 22.54 RAL 52.67 RAD 6571.1 VEL 18.049 PTH 3.01 VHP 19.538 DPA 12.87 RAP 44.54 ECC 4.3649 LNCH AZMTH LNCH TIME I-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 36 53 3528.68 -19.82 132.74 320.30 69.35 6 35 41 2928.7 -22.45 125.06
                                                                                                            1 37 19
                                                                                306.78
                                                                                                                              3988.5
                                                                                                                                              8.67
                                                                                                                                                           187.15
        90.00
                    0 20 51 4588.54
                                                   12.23
                                                                 194.01
                                                                                                 64.26
                                                                                                            8 8 22
                                                                                                                              2612.9
                                                                                                                                             -24.78
                                                                                                                                                           102.63
                    7 14 49 3212.90
                                                  -22.18
                                                                 110.46
                                                                                321.26
                                                                                                 69.43
       100.00
                                                                                                           2 38 35
9 45 23
                                                                 177.51
                                                                                                                                                           170.64
                    1 25 36 4379.55
                                                   14.50
                                                                                305.64
                                                                                                 63.57
                                                                                                                              3779.5
                                                                                                                                            10.84
       100.00
                    8 57 10 2892.66
                                                  -27.94
                                                                  88.52
                                                                                323.64
                                                                                                 69.46
                                                                                                                             2292.7
                                                                                                                                            -30.48
                                                                                                                                                            80.24
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                             3672.6
                                                                                                                                             16.02
                                                                                                                                                           159.54
      110.00
                    1 59 43 4272.56
                                                  19.97
                                                                 166.44
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 5222.2 SCR 323.7 SC3 89.0 ST 2081.7 SR 291.1 S5 672.0 RRT .6785 RRF .6706 RTF .9895 CRT .7932 CRS -.7700 CST -.9993 SCB 5232.2 R23 -.0031 R13 .9895 LSA 2199.5 MSA 178.7 SSA 7.1 SG1 5226.8 SG2 237.6 THA 2.41 EL1 2094.6 EL2 176.2 ALF 6.37
                                                                                                                        ST 2081.7 SR 291.1 SS 672.0 CRT .7932 CRS -.7700 CST -.9993
    TOE 5.5932 TRAIL .5517 TC3 -.0992 BAU .2717
    ROE .7182 RRA .3392 RC3 .0061 FAU-.00757
    FDE .6600 FRA 2.2859 FC3 .0321 89P 17811
BDE 3.6643 BRAIT.5567 BC3 .0994 FSP -300
```

ARRIVAL DATE MAR 1 1966

LAUNCH DATE DEC 21 1965

```
DISTANCE 200.341
  RL 147.17 LAL ... .00 LOL 88.92 VL 28.700 GAL -12.19 A7L 86.71 HCA 91.66 SNA 135.44 ECC .22748 INC 3.2920 V1 30.273 RP 107.73 LAP 3.29 LOP 180.58 VP 38.522 GAP -5.83 A7P 90.10 TAL 235.96 TAP 327.62 RCA 104.63 APO 166.25 V2 35.176 RC 61.127 GL 14.21 GP 5.45 7AL 154.93 7AP 37.83 ETS 351.60 7AE 158.05 ETE 350.22 7AC 57.35 ETC 165.24 CLP -37.50
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                 2.33 VHP 5.187 CPA -11.60 RAP 324.71 ECC 1.7087
   C3 43.060 VHL 6.562 CLA -7.91 RAL 289.35 RAC 6568.6 VEL 12.823 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   -14.98
                                                                                                                                  30.63
                                                                 161.73
                                                                             112.13
                                                                                         2 17 37
                                                                                                      1557.1
                1 41 39 2157.14
11 40 26 5296.82
                                                      37.88
                                         -18.13
                                                                               81.93 13 8 42
                                                                                                        4696.8
                                                                                                                    25.84
                                                                                                                                 231.73
                                                                  167.20
                                         27.24
                                                     240.12
                                                                               113.18
                                                                                          3 30 58
                                                                                                        1307.0
                                                                                                                    -16.11
                                                                                                                                 11.69
                2 59 11 1907.03
13 5 35 5022.16
                                                                  161.17
                                         -19.42
                                                       18.92
                                                                                                                                 211.22
                                                                                80.95 14 29 17
                                                                                                        4422.2
                                                                                                                   27.06
     100.00
               13 5 35
                                         28.61
                                                      219.69
                                                                  166.96
               3 58 43 1720.62
14 22 32 4781.33
                                                                               116.15 4 27 24
78.19 15 42 14
                                                                                                        1120.6
                                                                                                                   -19.14
                                                                                                                                 355.91
                                                                  159.48
                                         -22.84
                                                       3.09
                                                                                                       4181.3
                                                                                                                    30.35
                                                                                                                                191.95
                                                                  166.17
                                          32.31
                                                     200.61
                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                    ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                                                    ST 157.0 SR 383.9 SS 239.6
CRT .7171 CRS .8279 CST .2203
                                                         SGT 464.8 SGR 393.1 SG3 208.2
RRT .0492 RRF -.2002 RTF -.2809
   TOE -.1368 TRA -.3836 TC3 .2253 BAU .1303
   RDE - .4387 RRA .0946 RC3 - .0221 FAU .08025
                                                                                                    L5A 448.0 MSA 167.9 SSA
                                                         SCB 608.8 R23 -.1518 R13 -.3011
                                                                                                                                    22.2
   FCE .4842 FRA-1.2141 FC3-1.6135 BSP 826
BDE .4595 BRA .3951 BC3 .2264 FSP -583
                                                                                                     EL1 401.3 EL2 104.7 ALF 72.42
                                                         SG1 466.2 SG2 391.5 THA 8.14
                                                            FLIGHT TIME 72.00
                                                                                                              ARRIVAL DATE MAR 3 1966
                                                            DISTANCE 207.052
      HELIOCENTRIC CONIC
   RL 147.17 LAL
  PLANETOCENTRIC CONIC
                                                                                  2.33 VHP 4.873 DPA -11.57 RAP 323.51 ECC 1.6947
   C3 42.211 VHL 6.497 DLA -7.98 RAL 288.92 RAD 6568.6 VEL 12.790 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      1550.1
                                                                                                                   -14.78
                                                                                                                                  30.20
                                                                              112.27 2 16 16
                                                                 160.96
                                                      37.44
                 1 40 26 2150.07
                                          -17.95
      90.00
               11 38 12 5293.85
2 57 55 1900.07
13 3 24 5019.08
3 57 23 1713.89
14 20 25 4778.03
                                                                                         13 6 26
                                                                                                        4693.9
                                                                                                                     25.80
                                                                                                                                 231.52
                                                      239.91
                                                                   166.41
                                                                                 81.83
                                          27.21
      90.00
                                                                                         3 29 36
                                                                                                        1300.1
                                                                                                                     -15.91
                                                                                                                                  11.27
                                                                                113.34
                                                                  160.39
                                          -19.23
                                                       18.49
     100,00
                                                                                         14 27 3
                                                                                                                                 211.01
                                                                                                        4419.1
                                                                                                                     27.02
                                                      219.46
                                                                  166.18
                                                                                 80.84
                                          24.58
     100.00
                                                                                 116.33 4 25 57
78.05 15 40 3
                                                                                                       1113.9
                                                                  158.70
                                                                                                                    -18.91
                                                                                                                                 355.52
                                                        2.67
                                                                               116.33
                                          -22.64
     110.00
                                                                                                        4178.0
                                                                                                                     30.28
                                                                                                                                  191.71
                                                      200.36
                                                                  165.38
     110.00
                                          32.27
                                                                                                     ORBIT DETERMINATION ACCURACY
                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                     ST 154.5 SR 384.6 SS 254.2
CRT .6677 CRS .8245 CST .1460
LSA 452.3 MSA 177.0 SSA 22.2
   TOE -.1257 TRA -.4014 TC3 .2048 BAU .1158
ROE -.4350 RRA .1004 RC3 -.0129 FAU .08941
                                                         SGT 459.2 SGR 394.3 SG3 235.1
RRT .0339 RRF -.2344 RTF -.1987
                                                         SCB 605.2 R23 - .2083 R13 - .2190
   FDE .5368 FRA-1.3771 FC3-1.8338 BSP 739
BDF .4529 BRA .4137 BC3 .2052 FSP -673
                                                                                                     EL1 399.4 EL2 110.7 ALF 73.70
                                                         SG1 459.9 SG2 393.4 THA 6.24
       .4529 BRA .4137 BC3 .2052 FSP
                                                                                                              ARRIVAL CATE MAR 5 1966
                                                            FLIGHT TIME 74.00
LAUNCH DATE DEC 21 1965
                                                            DISTANCE 213.724
   HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 41.421 VHL 6.436 DLA -8.04 RAL 288.59 RAD 6568.6 VEL 12.759 PTH 2.32 VHP 4.593 DPA -11.57 RAP 322.D8 ECC 1.6817
   LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       1543.1
               1 39 38 2143.14
11 36 21 5291.25
2 57 6 1893.26
13 1 35 5016.37
                                                                160.30 112.41
                                                                                          2 15 21
                                          -17.77
                                                      37.01
      90.00
                                                                                                                                 231.34
                                                                                         13 4 32
                                                                                                        4691.2
                                                      239.72
                                                                   165.75
                                                                                81.74
                                           27.18
      90.00
                                                                                                                     -15.71
                                                                                                                                  10.86
                                                                                         3 28 39
                                                                                                        1293.3
                                                       18.07
                                                                  159.73
                                                                                113.48
                                          -19.05
      100.00
                                                                                         14 25 11
                                                                                                                     26.97
                                                                                                                                 210.82
                                                                                80.74
                                                                                                        4416.4
                                                      219.27
                                                                  165.51
                                          28.55
     100.00
                                                                                                                     -18.70
                                                                                                                                 355.13
                                                                                116.49 4 24 56
77.92 15 38 16
                                                                                                       1107.3
                                                        2.27
                                                                  158.04
               3 56 29 1707.32
14 18 41 4775.06
                                          -22.44
     110.00
                                                                                                        4175.1
                                                                                                                      30.23
                                                      200.14
                                                                   164.71
                                          32.22
     110.00
                                                                                                     ORBIT DETERMINATION ACCURACY
                                                         MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                     ST 153.6 SR 384.7 S5 269.0
CRT .6012 CRS .8243 CST .0590
LSA 456.9 MSA 186.3 SSA 22.1
                                                          SGT 456.7 SGR 395.5 SG3 263.5
RRT .0066 RRF -.2735 RTF -.0862
SGB 604.2 R23 -.2711 R13 -.0916
   TOE -.1138 TRA -.4273 TC3 .1749 BAU .0969
   ROE -.4309 RRA .1073 RC3 -.0020 FAU .09902
   FDE .5943 FRA-1.5440 FC3-2.0696 BSP
                                             609
-764
                                                                                                     EL1 396.7 EL2 119.0 ALF 75.13
                                                          SG1 456.8 SG2 395.5 THA 1.31
   BDE .4456 BRA .4406 BC3 .1750 FSP
                                                                                                              ARRIVAL CATE MAR 7 1966
                                                             FLIGHT TIME 76.00
LAUNCH DATE DEC 21 1965
                                                             OISTANCE 220.358
  HELIOCENTRIC CONTC
   RL 147.17 LAL .00 LOL 88.92 VL 28.835 GAL -11.87 A7L 86.83 MCA 101.35 SMA 136.52 ECC .21947 INC 3.1654 V1 30.273
RP 107.83 LAP 3.10 LOP 190.29 VP 38.593 GAP -3.71 A7P 90.62 TAL 237.77 TAP 339.12 RCA 106.56 APO 166.48 V2 35.143
RC 67.327 GL 14.14 GP 6.67 7AL 155.81 ZAP 51.53 ETS 353.11 ZAE 165.41 ETE 354.28 ZAC 53.17 ETC 165.64 CLP -51.22
  PLANETOCENTRIC CONIC
   C3 40.672 VHL 6.377 DLA -8.12 RAL 288.35 RAC 6568.6 VEL 12.729 PTH 2.31 VHP 4.346 DPA -11.60 RAP 320.43 ECC 1.6694
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    -14.39
                                                                                                       1536.3
                                                                                           2 14 51
                                           -17.59
                                                       36.58
                                                                  159.75
                                                                                112.55
                1 39 15 2136.27
11 34 52 5288.90
       90.00
                                                                                81.66 13 3 1
113.63 3 28 7
                                                                                                                      25.72
                                                                                                                                  231.18
                                                                                                         4688.9
                                           27.16
                                                       239.55
                                                                   165.20
       90.00
                                                                                                                                   10.46
                2 56 40 1886.50
13 0 7 5013.90
                                                                                                         1286.5
                                                                                                                     -15.51
                                                        17.65
                                                                   159.18
                                           -18.86
      100.00
                                                                                                                                  210.65
                                                                                 80.65 14 23 41
                                                                                                         4413.9
                                                                                                                      26.93
                                                       219.09
                                                                   164.96
                                           28.52
      100.00
                           1700.83
                                                                                           4 24 19
                                                                                                         1100.8
                                                                                                                     -18.48
                                                                                                                                  354.75
                                                        1.87
                                                                   157.49
                                                                                116.65
                                                                                 116.65 4 24 19
77.81 15 36 51
                  3 55 58
                                          -22.24
      110.00
                                                                                                         4172.3
                                                                                                                     30.17
                                                                                                                                  191.30
                14 17 19
                                                       199.94
                                                                   164.15
                             4772.34
      110.00
                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                          SGT 461.0 SGR 397.0 SG3 293.6
RRT -.0403 RRF -.3157 RTF .0507
                                                                                                    ST 153.5 SR 384.0 SS 282.6
CRT .5092 CRS .8233 CST -.0544
    TOE -.0987 TRA -.4597 TC3 .1372 BAU .0748
    ROE - .4260 RRA .1153 RC3 .0105 FAU .10913
                                                         SGB 608.4 R23 .3063 R13 -.0856
SG1 462.1 SG2 395.7 THA 172.49
                                                                                                     LSA 460.5 MSA 195.7 SSA 22.1
    FOE .6493 FRA-1.7161 FC3-2.3229 BSP 506
                                                                                                   EL1 392.8 EL2 129.1 ALF 77.08
                                              -868
```

FLIGHT TIME 70.00

BOE .4372 BRA .4740 BC3 .1376 FSP

```
LAUNCH DATE DEC 21 1965
                                                                             FLIGHT TIME 78.00
                                                                                                                                          ARRIVAL DATE MAR 9 1966
                                                                             CISTANCE 226.952
   HELIGCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.858 GAL -11.77 A7L 86.88 MCA 104.58 SMA 136.71 ECC .21737 INC 3.1217 V1 30.273
RP 107.87 LAP 3.02 LOP 193.52 VP 38.599 GAP -3.08 A7P 90.79 TAL 238.06 TAP 342.64 RCA 106.39 APO 166.42 V2 35.132
RC 69.470 GL 14.09 GP 7.11 7AL 155.97 7AP 56.51 ETS 353.61 7AE 168.43 ETE 356.84 7AC 51.36 ETC 165.79 CLP -56.21
   PLANETOCENTRIC CONIC
     C3 39.948 VML 6.320 CLA -8.19 RAL 288.21 RAC 6568.5 VEL 12.701 PTM 2.31 VMP 4.134 CPA -11.66 RAP 318.59 ECC 1.6574
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                    1 39 15 2129.39
11 33 43 5286.72
                                                     -17.41
                                                                      36.16
                                                                                   159.29
                                                                                                   112.69
                                                                                                                  2 14 44
                                                                                                                                  1529.4
                                                                                                                                                  -14.19
                                                                                                               13 1 49
                                                     27.14
                                                                    239.40
                                                                                    164.75
                                                                                                     81.58
                                                                                                                                    4686.7
                                                                                                                                                   25.69
                                                                                                                                                                   231.03
                    2 56 38 1879.75
12 59 1 5011.59
3 55 50 1694.35
14 16 18 4769.76
       100.00
                                                      -18.68
                                                                      17.23
                                                                                    158.72
                                                                                                    113.77
                                                                                                                  3 27 57
                                                                                                                                   1279.7
                                                                                                                                                   -15.31
                                                                                                                                                                    10.06
                                                                                                   113.77 3 27 57

80.56 14 22 32

116.81 4 24 5

77.70 15 35 47
                                                     28.50
                                                                    218.92
                                                                                   164.51
                                                                                                                                                                   210.48
                                                                                                                                 4411.6
                                                                                                                                                  26.90
       110.00
                                                    -22.04
                                                                       1.47
                                                                                   157.03
                                                                                                                                  1094.3
                                                                                                                                                  -18.27
                                                                                                                                                                  354.37
       110.00
                                                   32.15
                                                                    199.75
                                                                                                                                                  30.12
                                                                                                                                                                  191.12
                                                                                    163.69
                                                                                                                                   4169.8
   CIFFERENTIAL CORRECTIONS
                                                                       MIC-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    TCE -.0825 TRA -.5009 TC3 .0890 BAU .0493 RDE -.4204 RRA .1240 RC3 .0245 FAU .11913
                                                                        SCT 478.2 SGR 398.8 SG3 323.6
RRT -.1055 RRF -.3619 RTF .2094
SGB 622.7 R23 .2895 R13 -.2772
                                                                                                                               5T 156.7 SR 382.6 55 295.9
CRT .3971 CRS .8254 CST -.1768
    FCE .7061 FRA-1.8808 FC3-2.5818 BSP 457
RDE .4284 BRA .5160 BC3 .0923 FSP -967
                                                                                                                              LSA 464.8 MSA 204.9 SSA 22.0
    BDE .4284 BRA .5160 BC3 .0923 FSP
                                                                        SG1 483.8 SG2 392.0 THA 164.99
                                                                                                                               EL1 388.4 EL2 141.6 ALF 79.33
LAUNCH DATE DEC 21 1965
                                                                             FLIGHT TIME 80.00
                                                                                                                                           ARRIVAL CATE MAR 11 1966
   HELIOCENTRIC CONIC
                                                                            CISTANCE 233.507
    RL 147.17 LAL .00 LOL 88.92 VL 28.871 GAL -11.67 AZL 86.92 HCA 107.80 SMA 136.81 ECC .21546 INC 3.0768 V1 30.273 RP 107.90 LAP 2.93 LOP 196.74 VP 38.598 GAP -2.47 AZP 90.94 TAL 238.21 TAP 346.01 RCA 107.34 APO 166.29 V2 35.120 RC 71.643 GL 14.02 GP 7.57 ZAL 156.06 ZAP 61.64 ETS 354.13 ZAE 171.66 ETE 1.32 ZAC 49.39 ETC 165.97 CLP -61.37
   PLANETOCENTRIC CONIC
    C3 39.239 VHL 6.264 DLA -8.26 RAL 288.15 RAD 6568.5 VEL 12.673 PTH
                                                                                                        2.30 VHP 3.954 CPA -11.73 RAP 316.58 ECC 1.6458
    ENCH AZMTH ENCH TIME E-I TIME. INJ LAT. INJ LONG INJ RT ASC. INJ AZMTH. INJ TIME. PO CST. TIM. INJ. 2 LAT. INJ. 2 LONG
                   1 39 36 2122.44
11 32 53 5284.63
2 56 57 1872.92
12 58 13 5009.38
3 56 4 1687.80
14 15 35 4767.26
                                                     -17.23
                                                                     35.73
                                                                                  158.93
                                                                                                                                1522.4
        90.00
                                                                                                  112.82
                                                                                                                  2 14 59
                                                                                                     81.51 13 0 58
113.91 3 28 10
80.48 14 21 43
116.98 4 24 12
77.60 15 35 3
                                                      27.12
        90.00
                                                                    239.25
                                                                                    164.38
                                                                                                                                    4684.6
                                                                                                                                                    25.66
       100.00
                                                     -18.49
                                                                      16.81
                                                                                   158.35
                                                                                                     113.91
                                                                                                                                   1272.9
                                                                                                                                                   -15.10
                                                                                                                                                                     9.66
       100.00
                                                      28.47
                                                                                   164.14
                                                                    218.76
                                                                                                                                   4409.4
                                                                                                                                                   26.86
                                                    -21.84
                                                                      1.07
       110.00
                                                                                   156.66
                                                                                                    116.98
                                                                                                                                  1087.8
                                                                                                                                                  -18.05
                                                                                                                                                                  353.99
       110.00
                                                    32.11
                                                                    199.56
                                                                                    163.32
                                                                                                                                    4167.3
                                                                                                                                                    30.07
   CIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                              5T 162.9 SR 380.3 SS 306.9
CRT .2637 CRS .8262 CST -.3133
                                                                        SGT 512.1 SGR 401.2 SG3 353.5
RRT -.1877 RRF -.4098 RTF .3690
    TOE -.0634 TRA -.5488 TC3 .0319 BAU .0269
    ROE -.4138 RRA .1334 RC3 .0401 FAU .12901
    FCE .7547 FRA-2.0386 FC3-2.8463 BSP 564
BCE .4186 BRA .5648 BC3 .0512 FSP -1073
                                                                        SGB 650.5 R23 .2479 R13 -.4415
                                                                                                                               LSA 468.1 MSA 213.8 55A 21.9
                                                                        SG1 524.6 SG2 384.7 THA 161.36
                                                                                                                              EL1 383.2 EL2 155.9 ALF 82.27
LAUNCH DATE DEC 21 1965
                                                                            FLIGHT TIME 82.00
                                                                                                                                          ARRIVAL DATE MAR 13 1966
   HELIOCENTRIC CONIC
                                                                            CISTANCE 240.022
    RL 147.17 LAL .00 LOL 88.92 VL 28.876 GAL -11.57 A7L 86.97 HCA 111.02 SMA 136.85 ECC .21371 INC 3.0302 V1 30.273 RP 107.94 LAP 2.83 LOP 199.97 VP 38.591 GAP -1.89 A7P 91.09 TAL 238.22 TAP 349.24 RCA 107.61 APO 166.10 VZ 35.108 RC 73.845 GL 13.94 GP 8.02 ZAL 156.10 ZAP 66.89 ETS 354.69 ZAE 174.97 ETE 11.73 ZAC 47.30 ETC 166.16 CLP -66.65
   PLANETOCENTRIC CONIC
    C3 38.536 VHL 6.208 DLA -8.34 RAL 288.17 RAD 6568.5 VEL 12.645 PTH 2.30 VMP 3.805 DPA -11.81 RAP 314.44 ECC 1.6342
    20.00 the 0.200 ula -0.34 Mal 200.17 Mau 0000.0 VEL 12.040 PTH 2.30 VMP 3.805 CPA -11.81 RAP 314.44 ECC 1.6342 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 19 2115.34 -17.04 35.29 158.64 112.96 2 15 34 1515.3 -13.79 28.13 90.00 11 32 21 5282.59 27.10 239.10 164.09 81.44 13 0 24 4682.6 25.63 230.74 100.00 2 57 37 1865.96 -18.30 16.39 158.06 114.06 3 28 43 1266.0 -14.89 9.25
                                                                                                    80.40 14 21 11
117.14 4 24 40
77.49 15 34 37
                    12 57 44 5007.20
3 56 38 1681.13
14 15 12 4764.80
       100.00
                                                     28.45
                                                                    218.60
                                                                                   163.85
                                                                                                                                   4407.2
                                                                                                                                                   26.83
                                                                        .66
                                                     -21.63
                                                                                   156.36
                                                                                                                                   1081.1
                                                                                                                                                                  353.60
       110.00
                                                     32.07
                                                                    199.38
                                                                                   163.03
                                                                                                                                   4164.8
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 174.0 SR 377.2 SS 317.1 CRT .1269 CRS .8299 CST -.4371
    TOE -.0436 TRA -.6047 TC3 -.0357 BAU .0346
                                                                        SGT 567.3 SGR 404.3 5G3 381.2
    RDE -.4064 RRA .1429 RC3 .0568 FAU .13797
FDE .8011 FRA-2.1734 FC3-3.0995 BSP 815
                                                                        RRT -.2756 RRF -.4592 RTF .5133
SGB 696.6 R23 .2101 R13 -.5732
                                                                                                                             LSA 472.5 MSA 222.2 SSA 21.7
                                                                                                                             EL1 378.0 EL2 172.2 ALF 85.77
    BOE .4087 BRA .6213 BC3 .0671 FSP -1166
                                                                        SG1 586.4 SG2 375.9 THA 160.70
LAUNCH DATE DEC 21 1965
                                                                            FLIGHT TIME 84.00
                                                                            DISTANCE 246.498
   RL 147.17 LAL .00 LOL 88.92 VL 28.873 GAL -11.46 A7L 87.02 HCA 114.24 SMA 136.83 ECC .2120H INC 2.9816 V1 30.273
RP 107.98 LAP 2.72 LOP 203.19 VP 38.577 GAP -1.34 A7P 91.23 TAL 238.10 TAP 352.34 RCA 107.81 APO 165.85 V2 35.095
RC 76.070 GL 13.85 GP 8.48 ZAL 156.08 ZAP 72.21 ET$ 355.29 ZAE 177.71 ETE 53.55 ZAC 45.14 ETC 166.37 CLP -72.00
  PLANETOCENTRIC CONIC
    C3 37.831 VHL 6.151 DLA -8.42 RAL 288.27 RAO 6568.5 VEL 12.617 PTH 2.29 VHP 3.687 DPA -11.88 RAP 312.23 ECC 1.6226
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 21 2108.02 -16.85 34.85 158.42 113.10 2 16 29 1508.0 -13.58 27.70
                    11 32 6 5280.58
                                                     27.07
                                                                    238.96
                                                                                   163.88
                                                                                                               13 0 6
                                                                                                                                   4680.6
        90.00
                                                                                                    81.37
                                                                                                                                                   25.60
                      2 58 36
                                    1858.78
                                                    -18.10
                                                                     15.95
                                                                                   157.84
                                                                                                                3 29 35
       100.00
                                                                                                    114.20
                                                                                                                                   1258.8
                                                                                                                                                   -14.68
                    12 57 31
                                    5005.05
                                                                                                     80.33
                                                                                                               14 20 56
       100.00
                                                     28.42
                                                                    218.45
                                                                                   163.63
                                                                                                                                   4405.1
                   3 57 32 1674.25
14 15 5 4762.34
                                                    -21.42
                                                                       .24
                                                                                   156.14
                                                                                                    117.30
                                                                                                                4 25 27
                                                                                                                                   1074.3
       110.00
                                                                                                                                                  -17.59
                                                                                                                                                                  353.21
                                                                                                    77.39 15 34 27
                                                   32.04
                                                                    199.20
                                                                                   162.81
                                                                                                                                 4162.3
                                                                                                                                                 29.97
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    TOE -.0221 TRA -.6663 TC3 -.1120 BAU .0681
                                                                       SGT 642.7 SGR 4D7.9 SG3 4D6.6
RRT -.363D RRF -.5D81 RTF .629D
SGB 761.2 R23 .1795 R13 -.6735
                                                                                                                             ST 189.4 SR 373.0 SS 324.1
CRT -.0072 CRS .8318 CST -.5514
    RDE -.3977 RRA .1525 RC3 .0748 FAU .14603
                                                                                                                        CRT -.0072 CRS .8318 CST -.5514
LSA 476.1 MSA 229.9 SSA 21.6
Fil 373.0 Fiz 189.4 AFF 90.28
   FOE .8328 FRA-2.2880 FC3-3.3417 BSF 1147
BDE .3984 BRA .6835 BC3 .1347 FSP -1260
                                                                        SG1 667.5 SG2 366.0 THA 161.18
                                                                                                                             EL1 373.0 EL2 189.4 ALF 90.28
```

```
ARRIVAL CATE HAR 17 1966
                                                                     FLIGHT TIME 86.00
LAUNCH DATE DEC 21 1965
                                                                     DISTANCE 252.937
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 28.863 GAL -11.35 A7L 87.07 HCA 117.45 SHA 136.75 ECC .21055 INC 2.9305 V1 30.273 RP 108.02 LAP 2.60 LOP 206.40 VP 38.558 GAP -.81 A7P 91.35 TAL 237.87 TAP 355.32 RCA 107.96 APO 165.54 V2 35.082 RC 78.316 GL 13.74 GP 8.93 TAL 156.01 TAP 77.53 ETS 355.94 TAE 176.51 ETE 130.92 TAC 42.96 ETC 166.61 CLP -77.38
   PLANETOCENTRIC CONIC
    C3 37.119 VML 6.093 OLA -8.51 RAL 288.44 RAC 6568.4 VEL 12.589 PTH 2.28 VHP 3.598 CPA -11.93 RAP 310.01 ECC 1.6109
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        113.24
                                                                                                                     1500.4
                                                                                                                                   -13.36
                   1 42 43 2100.39
11 32 5 5278.60
                                                                          158.26
                                                -16.64
                                                              34.38
                                                                                                       2 17 44
       90.00
                                                                                                                                      25.57
                   11 32 5
                                                                            163.73
                                                                                           81.30 13 0 4
                                                                                                                       4678.6
                                                27.05
                                                              238.82
       90.00
                  2 59 56 1851.30
12 57 34 5002.92
3 58 45 1667.10
14 15 13 4759.89
                                                                                                                                     -14.45
                                               -17.89
                                                               15.49
                                                                            157.69
                                                                                           114.36
                                                                                                      3 30 47
                                                                                                                       1251.3
      100.00
                                                                                          80.25 14 20 56
117.47 4 26 33
77.29 15 34 33
                                                                                                                                                   209.88
                                                                                                                       4402.9
1067.1
                                                                                                                                     26.76
                                                              218.30
                                                                            163.48
                                               28.40
      100.00
                                                                                                                                    -17.35
                                                                                                                                                   352.79
                                               -21.19
                                                              359.81
                                                                            155.98
      110.00
                                                                                                                                      29.92
                                                                                                                                                    190.42
                                                                                                                      4159.9
                                                             199.01
                                                                           162.65
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 209.5 SR 367.9 SS 329.6
CRT -.1231 CRS .8362 CST -.6388
                                                                 SGT 738.1 SGR 412.0 SG3 427.3
RRT -.4419 RRF -.5558 RTF .7154
SGB 845.3 R23 .1588 R13 -.7470
    TOE -.0005 TRA -.7338 TC3 -.1975 BAU .1084
ROE -.3881 RRA .1615 RC3 .0933 FAU .15236
                                                                                                                   LSA 481.0 MSA 236.7 SSA 21.4
    FOE .8582 FRA-2.3662 FC3-3.5536 BSP 1544
                                                                                                                   EL1 369.2 EL2 207.1 ALF 95.86
                                                                 SG1 766.8 SG2 355.8 THA 162.19
    BOE .3881 BRA .7514 BC3 .2185 FSP -1330
                                                                                                                              ARRIVAL DATE MAR 19 1966
                                                                     FLIGHT TIME 88.00
LAUNCH DATE DEC 21 1965
                                                                     DISTANCE 259.338
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 28.847 GAL -11.24 A7L 87.12 MCA 120.67 SMA 136.62 ECC .20910 INC 2.8763 V1 30.273 RP 108.06 LAP 2.47 LOP 209.62 VP 38.534 GAP -.31 A7P 91.47 TAL 237.52 TAP 358.19 RCA 108.05 APO 165.19 V2 35.069 RC 80.581 GL 13.61 GP 9.37 ZAL 155.89 ZAP 82.80 ETS 356.63 ZAE 173.15 ETE 150.25 ZAC 40.83 ETC 166.88 CLP -82.70
   PLANETOCENTRIC CONIC
    C3 36.395 VHL 6.033 OLA -8.61 RAL 288.68 RAD 6568.4 VEL 12.560 PTH 2.28 VHP 3.536 CPA -11.95 RAP 307.83 ECC 1.5990 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          113.39
                                                                                                      2 19 18
                                                                                                                      1492.4
                                                                                                                                     -13.12
                                                                                                                                                     26.77
                   1 44 25 2092.36
                                                -16.43
                                                              33.89
                                                                          158.17
                  11 32 18 5276.68
3 1 35 1843.43
12 57 49 5000.84
4 0 18 1659.58
14 15 36 4757.45
                                                                                                                        4676.7
                                                                                                                                      25.55
                                                                                                      13 0 14
                                                 27.03
                                                              238.68
                                                                            163.63
                                                                                            81.24
       90.00
                                                                                                                                                      7.92
                                                                                                      3 32 18
                                                                                                                       1243.4
                                                                                                                                      -14.21
                                               -17.67
                                                              15.01
                                                                            157.59
                                                                                           114.51
      100.00
                                                                                           80.17 14 21 10
117.64 4 27 57
77.19 15 34 53
                                                                                                                                                    209.73
                                                                                                                        4400.8
                                                                                                                                      26.72
                                                28.37
                                                              218.15
                                                                            163.38
      100.00
                                                                                                                       1059.6
                                                                                                                                     -17.09
                                                                                                                                                    352.36
                                               -20.96
                                                              359.35
                                                                            155.88
                                                                                                                        4157.5
                                                                                                                                       29.87
      110.00
                                                 31.97
                                                              198.83
                                                                           162.55
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 848.6 SGR 416.3 SG3 444.2
RRT -.5126 RRF -.60]1 RTF .7770
SGB 945.3 R23 .1436 R13 -.7993
                                                                                                                   ST 233.0 SR 361.4 SS 331.5

CRT -.2216 CRS .8381 CST -.7101

LSA 485.3 MSA 242.3 SSA 21.3
    TOE .0213 TRA -.8046 TC3 -.2901 BAU .1514
    ROE -.3769 RRA .1701 RC3 .1127 FAU .15725
    FOE .8643 FRA-2.4160 FC3-3.7406 BSP 1973
BOE .3775 BRA .8223 BC3 .3112 FSP -1398
                                                                  SG1 880.8 SG2 344.7 THA 163.24
                                                                                                                   EL1 367.3 ELZ 223.5 ALF 103.03
                                                                                                                             ARRIVAL DATE MAR 21 1966
                                                                     FLIGHT TIME 90.00
LAUNCH DATE DEC 21 1965
                                                                     DISTANCE 265.703
   PLANETOCENTRIC CONIC
    C3 35.656 VHL 5.971 CLA -8.71 RAL 288.98 RAD 6568.4 VEL 12.531 PTH 2.27 VMP 3.499 DPA -11.92 RAP 305.75 ECC 1.5868
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
20 00 1.46 24 2003 81 -15 20 33 37 168 12 113 68 2 21 12 1483 8 -12 87 26 27
                                                                                       113.55
                                                                                                                                   -12.87
                  1 46 28 2003.81
11 32 41 5274.86
3 3 34 1835.06
12 58 16 4998.85
                                                                                                       2 21 12
                                                                            158.12
                                               -16.20
                                                              33.37
                                                                                           81.18 13 0 36
                                                                                                                       4674.9
                                                                                                                                      25.52
                                                                                                                                                   230.20
                                                                            163.59
        90.00
                                                27.02
                                                              238.55
                                                                                                                       1235.1
                                                                                                                                     -13.96
                                                                                                                                                     7.43
                                                                                           114.68
                                                                                                       3 34 9
                                                                            157.54
                                               -17.43
                                                               14.50
                                                                                            80.10 14 21 35
                                                                                                                       4398.8
                                                                                                                                     26.69
                                                                                                                                                   209.59
                                                28.35
                                                              218.00
                                                                            163.35
                                                                                          117.83 4 29 41
77.09 15 35 25
                  4 2 9 1651.60
14 16 10 4755.07
                                                                                                                                    -16.82
                                                                                                                                                   341.90
                                                                                                                      1051.6
                                                                           155.84
                                             -20.70
                                                              358.87
                                                                                                                     4155.1
                                                                                                                                    29.82
                                                                                                                                                   190.08
                                                                            162.51
                                                31.93
                                                              198.66
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  5T 259.2 SR 353.8 SS 331.8
CRT -.2984 CRS .8426 CST -.7585
                                                                  SCT 971.9 SCR 420.8 SC3 455.1
RRT -.5730 RRF -.6439 RTF .8200
SCB 1059.0 R23 .1352 R13 -.8362
    TOE .0419 TRA -.8780 TC3 -.3896 BAU .1961
    ROE -.3648 RRA .1775 RC3 .1320 FAU .15998
                                                                                                                   LSA 491.1 MSA 246.6 SSA 21.1
    FOE .8636 FRA-2.4243 FC3-3.8843 BSP 2435
BOE .3672 BRA .8957 BC3 .4114 FSP -1436
                                                                  SG1 1005.2 SG2 333.4 THA 164.29
                                                                                                                   EL1 368.9 EL2 237.3 ALF 111.67
                                                                                                                              ARRIVAL DATE MAR 23 1966
                                                                      FLIGHT TIME 92.00
LAUNCH DATE DEC 21 1965
                                                                     DISTANCE 272.034
    RL 147.17 LAL .00 LOL 88.92 VL 28.798 GAL -10.99 AZL 87.24 MCA 127.09 SMA 136.22 ECC .20639 INC 2.7562 V1 30.273
RP 108.14 LAP 2.20 LOP 216.04 VP 38.473 GAP .62 AZP 91.66 TAL 236.53 TAP 3.62 RCA 108.10 APO 164.33 V2 35.043
RC 85.157 GL 13.30 GP 10.25 ZAL 155.52 ZAP 92.94 ETS 358.18 ZAE 166.06 ETE 159.76 ZAC 36.92 ETC 167.57 CLP -92.99
   PLANETOCENTRIC CONIC
    C3 34.900 VHL 5.908 DLA -8.83 RAL 289.35 RAC 6568.4 VEL 12.501 PTH 2.26 VHP 3.484 DPA -11.83 RAP 303.84 ECC 1.5744
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     1474.6
                                                                                                                                                     25.72
                                                                           158.13
                                                                                                       2 23 26
                                                                                                                                      -12.60
                                                               32.81
                                                                                          113.71
        90.00
                    1 48 52 2074.60
                                                -15.94
                  11 33 14 5273.25
3 5 54 1826.05
                                                                                                                                                    230.09
                                                                                                      13 1 7
                                                                                                                        4673.3
                                                                                                                                      25.49
                                                                            163.61
                                                                                             81.12
                                                 27.00
                                                              238.44
        90.00
                                                                                                      3 36 20
                                                                                                                        1226.0
                                                                                                                                      -13.68
                                                                                                                                                      6.91
                                                -17.17
                                                               13.96
                                                                            157.55
                                                                                           114.85
      100.00
                                                               217.87
                                                                                                      14 22 9
                                                                                                                        4397.0
                                                                                                                                      26.66
                                                                                                                                                    209.47
                  12 58 52 4997.03
                                                                            163.36
                                                                                             80.04
                                                28.33
      100.00
                                                                                                     4 31 44
15 36 8
                                                                                                                                                    351.41
                                                               358.36
                                                                            155.84
                                                                                           118.02
                                                                                                                        1043.0
                                                                                                                                     -16.52
                    4 4 21 1643.03
                                                -20.43
      110.00
                                                                                                                                                    189.92
                                                               198.49
                                                                            162.52
                                                                                            77.00
                                                                                                                        4152.8
                                                                                                                                      29.78
                                                31.89
                  14 15 55
                                 4752.81
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                   ST 287.1 SR 344.8 SS 328.7

CRT -.3582 CRS .8450 CST -.7956

LSA 496.7 MSA 249.4 SSA 20.9
    TDE .0611 TRA -.9521 TC3 -.4944 BAU .2413
                                                                  SGT 1103.7 SGR 425.2 SG3 461.4
    RDE -.3510 RRA .1841 RC3 .1519 FAU .16107
FDE .8449 FRA-2.4030 FC3-3.9956 BSP 2915
BDE .3563 BRA .9697 BC3 .5172 FSP -1467
```

```
ARRIVAL DATE MAR 25 1966
                                                                        FLIGHT TIME 94.00
LAUNCH DATE DEC 21 1965
                                                                        01STANCE 278.330
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.766 GAL -10.86 A7L 87.31 HCA 130.30 SHA 135.96 ECC .20512 INC 2.6885 V1 30.273
RP 108.18 LAP 2.05 LOP 219.25 VP 38.437 GAP 1.05 A7P 91.74 TAL 235.90 TAP 6.19 RCA 108.08 APO 163.85 V2 35.030
RC 87.465 GL 13.11 GP 10.70 7AL 155.27 ZAP 97.72 ETS 359.04 ZAE 162.65 ETE 161.54 ZAC 35.24 ETC 168.02 CLP -97.86
   PLANETOCENTRIC CONIC
    C3 34.125 VML 5.842 CLA -8.96 RAL 289.78 RAD 6568.3 VEL 12.470 PTH 2.26 VHP 3.489 CPA -11.68 RAP 302.11 ECC 1.5616
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -12.31
                                                                                             113.89
                                                                                                          2 26 4
                                                                                                                           1464.5
                                                                                                                                                          25.13
        90.00
                     1 51 39 2064.55
                                                  -15.67
                                                                 32.20
                                                                              158.17
                  11 33 52 5271.96
3 8 37 1816.23
12 59 35 4995.50
4 6 55 1633.73
14 17 48 4750.77
                                                                                                          13 1 44
3 38 54
                                                                                                                            4672.0
                                                                                                                                           25.47
                                                                                                                                                          230.00
                                                  26.99
                                                                 238.34
                                                                               163.67
                                                                                                81.08
        90.00
                                                                                                                                           -13.38
                                                                                                                                                            6.33
       100.00
                                                  -16.89
                                                                 13.36
                                                                               157.59
                                                                                               115.04
                                                                                                                            1216.2
                                                                                                                                                          209.36
                                                                                               79.98 14 22 51
118.23 4 34 8
                                                                                                                            4395.5
                                                                                                                                           26.64
                                                  28.31
                                                                 217.76
                                                                               163.42
       100.00
                                                                                                                                                          350.88
                                                                                                                           1033.7
                                                                                                                                          -16.20
                                                  -20.13
                                                                 357.80
                                                                               155.88
                                                                                              118.23
       110.00
                                                                                                         15 36 58
                                                                                                                           4150.8
                                                                                                                                                          189.78
                                                                                                76.91
                                                                                                                                            29.74
                                                   31.86
                                                                198.34
                                                                              162.58
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 1241.1 SGR 429.3 SG3 462.1
RRT -.6718 RRF -.7207 RTF .8709
                                                                                                                        ST 315.6 SR 334.7 SS 324.1 CRT -.4029 CRS .8494 CST -.8192
    TOE .0780 TRA-1.0256 TC3 -.6037 BAU .2863
    ROE -.3363 RRA .1891 RC3 .1717 FAU .16017
                                                                                                                       LSA 503.4 MSA 250.8 SSA 20.7
                                                                    SGB 1313.3 R23 .1305 R13 -.8803
    FOE .8201 FRA-2.3450 FC3-4.0634 BSP 3403
BOE .3453 BRA 1.0429 BC3 .6276 FSP -1470
                                                                                                                       EL1 385.8 EL2 250.6 ALF 130.85
                                                                    SG1 1276.3 SG2 309.3 THA 166.08
                                                                         FLIGHT TIME 96.00
                                                                                                                                   ARRIVAL DATE MAR 27 1966
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 284.595
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.730 GAL -10.73 AZL 87.39 HCA 133.50 SHA 135.68 ECC .20389 INC 2.6140 V1 30.273 RP 108.22 LAP 1.90 LOP 222.45 VP 38.398 GAP 1.47 AZP 91.80 TAL 235.18 TAP 8.68 RCA 108.01 APO 163.34 V2 35.016
    RC 89.783 GL 12.89 GP 11.17 ZAL 154.99 ZAP 102.25 ETS 359.97 ZAE 159.42 ETE 162.63 ZAC 33.77 ETC 168.57 CLP-102.50
   PLANETOCENTRIC CONIC
    C3 33.329 VHL 5.773 DLA -9.12 RAL 290.27 RAD 6568.3 VEL 12.438 PTH 2.25 VHP 3.512 CPA -11.45 RAP 300.62 ECC 1.5485 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 53 2053.43 -15.36 31.53 158.27 114.08 2 29 6 1453.4 ·11.98 24.48
                  1 54 53 2053.43
11 34 34 5271.17
3 11 46 1805.39
13 0 22 4994.44
4 9 51 1623.49
14 18 46 4749.11
                                                                                                81.05
                                                                                                          13 2 25
                                                                                                                             4671.2
                                                                 238.29
                                                                               163.79
        90.00
                                                  26.98
                                                                                                           3 41 51
                                                                                                                            1205.4
                                                                                                                                           -13.04
                                                 -16.5A
                                                                  12.71
                                                                               157.68
                                                                                               115.24
      100.00
                                                                                                         14 23 37
                                                                                                79.94
                                                                                                                                                          209.29
                                                                 217.68
                                                                              163.54
                                                  28.30
      100.00
                                                                              155.97
                                                                                               118.45
                                                                                                           4 36 55
                                                                                                                            1023.5
                                                                                                                                           -15.85
                                                                                                                                                          350.30
                                                 -19.80
                                                                 357.19
      110.00
                                                                                                118.45 4 36 55
76.84 15 37 55
                                                                                                                             4149.1
                                                                                                                                          29.70
                                                                               162.70
                                                  31.84
                                                                 198.22
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                    SGT 1382.0 SGR 433.5 SG3 459.2
RRT -.7126 RRF -.7552 RTF .8857
SGB 1448.4 R23 .1333 R13 -.8933
                                                                                                                        ST 344.1 SR 323.1 SS 316.1 CRT -.4350 CRS .8511 CST -.8371
    TOE .0917 TRA-1.0973 TC3 -.7169 BAU .3307
    ROE -.3201 RRA .1933 RC3 .1922 FAU .15803
FOE .7791 FRA-2.2666 FC3-4.1048 BSP 3901
BDE .3330 BRA 1.1142 BC3 .7422 FSP -1470
                                                                                                                        LSA 509.4 MSA 250.6 SSA 20.5
                                                                    SGI 1417.7 SG2 296.5 THA 166.81
                                                                                                                        EL1 400.3 EL2 250.0 ALF 139.12
                                                                                                                                  ARRIVAL DATE MAR 29 1966
                                                                        FLIGHT TIME 98.00
LAUNCH DATE DEC 21 1965
                                                                        CISTANCE 290.828
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.690 GAL -10.58 AZL 87.47 MCA 136.70 SMA 135.36 ECC .20269 INC 2.5313 V1 30.273 RP 108.26 LAP 1.74 LOP 225.65 VP 38.357 GAP 1.86 AZP 91.84 TAL 234.39 TAP 11.09 RCA 107.92 APO 162.80 V2 35.003
    RC 92.112 GL 12.62 GP 11.68 TAL 154.67 TAP 106.52 ETS
                                                                                    .97 TAE 156.37 ETE 163.28 TAC 32.55 ETC 169.26 CLP-106.88
   PLANETOCENTRIC CONIC
    C3 32.512 VHL 5.702 DLA -9.32 RAL 290.83 RAD 6568.3 VEL 12.405 PTH 2.24 VHP 3.551 DPA -11.13 RAP 299.36 ECC 1.5351 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           114.29
                   1 58 36 2040.95
11 35 14 5271.14
3 15 23 1793.25
                                                                                                                           1440.9
                                                                                                                                         -11.61
                                                                              158.40
                                                                                                           2 32 37
        90.00
                                                  -15.01
                                                                 30.78
                                                                                                                            4671.1
                                                                                               81.05
                                                                                                         13 3 6
                                                                               163.95
        90.00
                                                  26.98
                                                                 238.29
                                                                                                           3 45 16
                                                                                                                            1193.2
                                                                                                                                          -12.66
       100.00
                                                 -16.22
                                                                 11.98
                                                                               157.81
                                                                                              115.46
                                                                                               79.93 14 24 23
                                                                                                                            4394.1
                                                                                                                                          26.61
                                                                                                                                                          209.26
                                 4994.07
                                                  28.29
                                                                217.66
                                                                               163.70
       100.00
                   13 1 9
                                                                                                                                                         349.65
                   4 13 15 1612.08
14 19 47 4748.02
                                                                              156.09
                                                                                              118.69
                                                                                                          4 40 7
                                                                                                                           1012.1
                                                                                                                                          -15.45
                                                 -19.43
                                                                356.51
                                                                                               118.69 4 40 7
76.80 15 38 55
                                                                                                                            4146.0
                                                                                                                                         29.68
                                                  31.82
                                                                198.14
                                                                               162.86
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 371.6 SR 310.1 SS 306.0 CRT -.4569 CRS .8521 CST -.8490
                                                                   SGT 1524.4 SGR 438.0 SG3 452.8
RRT -.7489 RRF -.7877 RTF .8962
SGB 1586.1 R23 .1394 R13 -.9026
    TDE .1017 TRA-1.1659 TC3 -.8337 BAU .3741
    RDE -.3027 RRA .1963 RC3 .2136 FAU .15466
FDE .7291 FRA-2.1672 FC3-4.1182 BSP 4403
                                                                                                                       LSA 515.3 MSA 248.9 SSA 20.3
                                                                    SG1 1560.5 SG2 283.5 THA 167.43
                                                                                                                       EL1 416.9 EL2 245.9 ALF 145.86
    BDE .3194 BRA 1.1824 BC3 .8606 FSP -1459
                                                                                                                                   ARRIVAL DATE HAR 31 1966
                                                                        FLIGHT TIME 100.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 297.032
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.647 GAL -10.43 A7L 87.56 HCA 139.90 SMA 135.02 ECC .20154 INC 2.4382 VI 30.273
RP 108.31 LAP 1.57 LOP 228.85 VP 38.312 GAP 2.24 A7P 91.87 TAL 233.53 TAP 13.43 RCA 107.81 APO 162.23 VZ 34.990
RC 94.449 GL 12.30 GP 12.25 ZAL 154.31 ZAP 110.51 ETS 2.08 ZAE 153.53 ETE 163.61 ZAC 31.57 ETC 170.12 CLP-111.01
   PLANETOCENTRIC CONIC
                                                                                                  2.23 VHP 3.602 OPA -10.71 RAP 298.36 ECC 1.5212
    C3 31.672 VHL 5.628 DLA -9.55 RAL 291.44 RAD 6568.3 VEL 12.371 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                         -11.18
                                                                                                           2 36 43
                                                                                                                           1426.7
                                                                                                                                                          22.93
                                                  -14.61
                                                                 29.92
                                                                              158.57
                                                                                             114.53
        90 00
                    2 2 56 2026.71
                                                                                                                                                          230.02
                                                                                                          13 3 41
                   11 35 48 5272.20
3 19 35 1779.43
                                                                               164.18
                                                                                                81.09
                                                                                                                             4672.2
                                                                                                                                            25.48
                                                  26.99
                                                                 238.36
        90.00
                                                                  11.16
                                                                               157.98
                                                                                              115.70
                                                                                                         3 49 14
                                                                                                                            1179.4
                                                                                                                                           -12.23
                                                                                                                                                           4.20
       100.00
                                                  -15.82
                  13 1 51 4994.72
4 17 9 1599.15
14 20 46 4747.76
                                                                               163.93
                                                                                                79.95
                                                                                                          14 25 5
                                                                                                                           4394.7
                                                                                                                                                          209.31
                                                  28.30
                                                                 217.71
       100.00
                                             -19.01
                                                                                                          4 43 48
                                                                                                                                                          348.93
                                                                                               118.96
                                                                 355.75
                                                                              156.26
      110.00
       110.00
                                                                                                                           4147.8
                                                                                                76.79 15 39 53
                                                                                                                                           29.67
                                                                                                                                                          189.56
                                                                 198.12
                                                                               163.09
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 1665.5 SGR 442.7 SG3 442.3 ST 397.9 SR 296.4 SS 294.9 RRT -.7805 RRF -.8180 RTF .9033 CRT -.4714 CRS .8556 CST -.8538 SGB 1723.3 R23 .1501 R13 -.9089 LSA 521.8 MSA .245.9 SSA 20.0 SG1 1701.9 SG2 270.8 THA 167.97 EL1 434.6 EL2 239.3 ALF 151.18
    TOE .1084 TRA-1.2298 TC3 -.9526 BAU .4155
    RDE -.2847 RRA .1978 RC3 .2555 FAU .14991
FDE .6791 FRA-2.0439 FC3-4.0978 BSP 4882
BOE .3047 BRA 1.2456 BC3 .9813 FSP -1421
```

```
ARRIVAL DATE APR 2 1966
                                                                  FLIGHT TIME 102.00
LAUNCH DATE DEC 21 1965
  HELIOCENTRIC CONIC
                                                                  DISTANCE 303.207
   RL 147.17 LAL .00 LOL 88.92 VL 28.601 GAL -10.28 AZL 87.67 MCA 143.10 SMA 134.66 ECC .20043 INC 2.3319 V1 30.273 RP 108.35 LAP 1.40 LOP 232.04 VP 38.266 GAP 2.60 AZP 91.87 TAL 232.60 TAP 15.69 RCA 107.67 APO 161.65 V2 34.977 RC 96.794 GL 11.91 GP 12.90 ZAL 153.94 ZAP 114.22 ETS 3.30 ZAE 150.88 ETE 163.67 ZAC 30.84 ETC 171.18 CLP-114.89
  PLANETOCENTRIC CONIC
    C3 30.810 VHL 5.551 DLA -9.84 RAL 292.11 RAC 6568.2 VEL 12.336 PTH 2.22 VHP 3.666 DPA -10.16 RAP 297.60 ECC 1.5071
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                 2 7 59 2010.19
11 36 9 5274.86
                                                                                    114.79
       90.00
                                              -14.14
                                                           28.94
                                                                       158.78
                                                                                                 2 41 30
                                                                                                               1410.2
                                                                                                                             -10.68
                                                                                                                                             21.97
                                                                        164.46
                                                                                       81.18
                                                                                                13 4 4
                                                                                                                 4674.9
                                                                                                                               25.52
                                                                                                                                            230.20
       90.00
                                              27.02
                                                           238.55
                 3 24 29 1763.42
13 2 21 4996.85
4 21 41 1584.28
14 21 37 4748.76
                                             -15.34
                                                            10.21
                                                                        158.19
                                                                                       115.97
                                                                                                  3 53 52
                                                                                                                 1163.4
                                                                                                                               -11.73
                                                                                                                                              3.26
                                                                                        80.03 14 25 37
                                                                                                                 4396.9
                                                                                                                               26.66
                                                                                                                                            209.45
                                              28.33
                                                           217.86
                                                                        164.22
                                                                                      119.26 4 48 6
76.83 15 40 46
                                                           354.88
                                                                                                                  984.3
                                                                                                                               -14.47
                                                                                                                                            348.09
                                             -18.51
                                                                        156.46
                                                                        163.39
                                                                                                                4148.8
                                                                                                                              29.69
                                                                                                                                            189.63
                                                           198.19
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 1806.8 SGR 448.8 SG3 430.5
RRT -.8096 RRF -.8469 RTF .9084
                                                                                                             ST 422.2 SR 281.0 SS 280.6

CRT -.4764 CRS .8547 CST -.8573

LSA 526.7 MSA 241.2 SSA 19.8
   TCE .1093 TRA-1.2894 TC3-1.0760 BAU .4559
    RDE -.2652 RRA .1987 RC3 .2597 FAU .14478
   FOE .6156 FRA-1.9164 FC3-4.0680 BSP 5378
                                                              SGB 1861.7 R23 .1637 R13 -.9135
                                                              SG1 1843.7 SG2 258.2 THA 168.40
                                                                                                              EL1 451.5 EL2 231.0 ALF 155.65
    BOE .2869 BRA 1.3047 BC3 1.1069 FSP -1391
                                                                  FLIGHT TIME 104.00
                                                                                                                        ARRIVAL DATE APR 4 1966
LAUNCH DATE DEC 21 1965
  HELIOCENTRIC CONIC
                                                                  DISTANCE 309.356
   RL 147.17 LAL .00 LOL 88.92 VL 28.553 GAL -10.11 A7L 87.79 MCA 146.29 SMA 134.28 ECC .19936 INC 2.2087 V1 30.273 RP 108.39 LAP 1.23 LOP 235.23 VP 38.218 GAP 2.95 A7P 91.84 TAL 231.61 TAP 17.90 RCA 107.51 APO 161.06 V2 34.964 RC 99.145 GL 11.42 GP 13.67 ZAL 153.53 ZAP 117.63 ETS 4.68 ZAE 148.41 ETE 163.48 ZAC 30.35 ETC 172.48 CLP-118.51
  PLANETOCENTRIC CONIC
   C3 29.924 VHL 5.470 DLA -10.22 RAL 292.86 RAO 6568.2 VEL 12.300 PTH 2.22 VHP 3.741 DPA -9.45 RAP 297.07 ECC 1.4925
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               1390.6
                                                                                                                             -10.09
                  2 13 59 1990.61
                                              -13.58
                                                           27.77
                                                                      159.04
                                                                                     115.09 2 47 9
                                                                                                                                             20.84
       90.00
                 11 36 5
                               5279.79
                                               27.07
                                                           238.90
                                                                         164.82
                                                                                        81.35
                                                                                                 13 4 5
                                                                                                                  4679.8
                                                                                                                                25.59
                                                                                                                                             230.54
       90.00
                 11 36 5 5279.79
3 30 15 1744.52
13 2 30 5001.11
4 27 0 1566.83
14 22 15 4751.56
                                                            9.09
                                                                                       116.28
                                                                                                 3 59 20
                                                                                                                  1144.5
                                                                                                                                              2.20
      100.00
                                             -14.78
                                                                        158.44
                                                                                                                               -11.13
                                               28.38
                                                           218.17
                                                                        164.58
                                                                                        80.18
                                                                                                 14 25 51
                                                                                                                  4401.1
                                                                                                                               26.73
                                                                                                                                             209.75
      100.00
                                                                                                 4 53 7
                                             -17.93
                                                                                       119.60
                                                                                                                  965.8
                                                                                                                               -13.85
                                                                                                                                             347.12
      110.00
                                                           353.86
                                                                        156.70
                                                           198.40
                                                                                                 15 41 26
      110.00
                                              31.88
                                                                        163.76
                                                                                        76.94
                                                                                                                  4151.6
                                                                                                                               29.75
                                                                                                                                             189.83
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              SGT 1944.9 SGR 456.2 SG3 416.2
RRT -.8347 RRF -.8737 RTF .9115
                                                                                                              ST 444.3 SR 264.7 SS 265.2
CRT -.4748 CRS .8551 CST -.8555
    TOE .1055 TRA-1.3423 TC3-1.2021 BAU .4943
    RDE -.2452 RRA .1981 RC3 .2857 FAU .13880
   FOE .5525 FRA-1.7741 FC3-4.0155 BSP 5843
BOE .2669 BRA 1.3568 BC3 1.2356 FSP -1342
                                                                                                              LSA 531.1 MSA 235.4 SSA 19.5
                                                               508 1997.7 R23 .1823 R13 -.9163
                                                              5G1 1982.5 SG2 246.5 THA 168.75
                                                                                                              EL1 467.4 EL2 221.5 ALF 159.38
                                                                                                                       ARRIVAL DATE APR 6 1966
                                                                 FLIGHT TIME 106.00
LAUNCH DATE DEC 21 1965
                                                                 DISTANCE 315.478
  HELIOCENTRIC CONIC
   RL 147.17 LAL .0D LOL 88.92 VL 28.502 GAL -9.94 AZL 87.94 MCA 149.48 SMA 133.89 ECC .19833 INC 2.0630 VI 30.273 RP 108.43 LAP 1.05 LOP 238.42 VP 38.169 GAP 3.28 AZP 91.78 TAL 230.56 TAP 20.04 RCA 107.34 APO 160.45 V2 34.951
   RC 101.502 GL 10.81 GP 14.61 7AL 153.11 7AP 120.75 ETS 6.26 7AE 146.11 ETE 163.04 7AC 30.10 ETC 174.09 CLP-121.90
  PLANETOCENTRIC CONIC
   C3 29.013 VHL 5.386 DLA -10.70 RAL 293.68 RAD 6568.2 VEL 12.263 PTH 2.21 VHP 3.826 DPA
                                                                                                                    -8.55 RAP 296.75 ECC 1.4775
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                      159.34
                                                                                    115.43
                                                                                                                 1366.9
                                                                                                                                -9.36
                                                                                                  2 53 58
       90.00
                 2 21 12 1966.88
11 35 24 5288.04
                                             -12.89
                                                           26.37
                                                                                       81.63 13 3 32
                                                                                                                 4688.0
                                                                                                                                25.71
                                                                        165.27
       90.00
                                             27.15
                                                           239.49
                  3 37 12 1721.68
13 2 5 5008.47
                                                                                                  4 5 53
                                                                                                                 1121.7
                                                                                                                               -10.39
                                                            7.75
                                                                                      116.64
      100.00
                                             -14.08
                                                                        158.75
                                                                                                                                            210.26
                                                                                       80.45 14 25 33
                                                                        165.04
                                                                                                                 4408.5
                                                                                                                               26.85
      100.00
                 13 2 5
                                             28.46
                                                           218.70
                                                                                      119.99 4 59 5
77.17 15 41 44
                                                                                                                  945.9
                                                                                                                              -13.11
                                                                                                                                            345.96
                 4 33 19 1545.92
14 22 27 4757.00
                                                           352.65
                                                                        156.99
      110.00
                                             -17.22
                                                           198.80
                                                                        154.24
                                                                                                                 4157.0
      110.00
                                              31.96
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                              SGT 2082.0 SGR 466.6 SG3 401.3
RRT -.8573 RRF -.8988 RTF ..9137
SGB 2133.7 R23 .2046 R13 -.9183
                                                                                                             ST 463.9 SR 246.6 SS 246.2
CRT -.4633 CRS .8490 CST -.8541
   TOE .0937 TRA-1.3889 TC3-1.3337 BAU .5316
   ROE -.2237 RRA .1970 RC3 .3157 FAU .13268
FOE .4770 FRA-1.6321 FC3-3.9590 BSP 6319
                                                                                                             LSA 533.5 MSA 227.3 SSA 19.3
                                                              SG1 2120.6 SG2 235.8 THA 168.99
   BCE .2425 BRA 1.4028 BC3 1.3706 FSP -1299
                                                                                                              FL1 481.3 EL2 210.6 ALF 162.77
                                                                  FLIGHT TIME 108.00
                                                                                                                        ARRIVAL DATE APR 8 1966
LAUNCH DATE DEC 21 1965
                                                                 DISTANCE 321.577
  HELLOCENTRIC CONIC
                      .00 LOL 88.92 VL 28.450 GAL -9.76 A7L 88.11 MCA 152.67 SMÁ 133.49 ECC .19734 INC 1.8872 V1 30.273
.87 LOP 241.60 VP 38.118 GAP 3.60 A7P 91.68 TAL 229.46 TAP 22.13 RCA 107.15 APO 159.83 V2 34.939
10.04 GP 15.76 7AL 152.68 7AP 123.56 ETS 8.13 7AE 143.93 ETE 162.33 7AC 30.08 ETC 176.07 CLP-125.06
   RL 147.17 LAL
   RP 108.46 LAP
   RC 103.862 GL
  PLANETOCENTRIC CONIC
   C3 28.077 VHL 5.299 DLA -11.35 RAL 294.58 RAD 6568.1 VEL 12.225 PTH
                                                                                         2.20 VHP 3.923 OPA -7.40 RAP 296.62 ECC 1.4621
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 30 5 1937.36 -12.02 24.64 159.72 115.83 3 2 22 1337.4 -8.45 17.78
                                                                                                                  4701.2
                                                                                                                                25.90
                                                                                                                                             232.04
                 11 33 42
                               5301.17
                                              27.28
                                                           240.43
                                                                        165.84
                                                                                        82.08
                                                                                                 13 2 3
       90.00
                 3 45 42
13 0 46 5020.35
41 0 1520.20
                                                                                                                 1093.4
                                                                                                 4 13 56
                                                                                                                                -9.48
                                                                                                                                             359.29
      100.00
                                             -13.21
                                                            6.10
                                                                        159.11
                                                                                       117.06
                                                                                                 14 24 26
                                                                                                                 4420.4
                                                                                                                                27.04
                                                                                                                                             211.10
      100.00
                                              28.59
                                                           219.56
                                                                        165.62
                                                                                        80.89
      110.00
                                             -16.34
                                                           351.18
                                                                        157.33
                                                                                      120.45
                                                                                                 5 6 20
                                                                                                                  920.2
                                                                                                                              -12.18
                                                                                                                                             344.55
      110.00
                               4766.33
                                              32.10
                                                           199.49
                                                                        164.84
                                                                                        77.56 15 41 23
                                                                                                                 4166.3
                                                                                                                               30.05
                                                                                                                                             190.88
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                           ST 481.0 SR 227.1 55 225.1
CRT -.4414 CR5 .8395 CST -.8497
                                                              SGT 2215.6 SGR 480.2 SG3 384.6
RRT -.8760 RRF -.9217 RTF .9146
    TDE .0737 TRA-1.4266 TC3-1.4701 BAU .5672
   ROE -.2012 RRA .1944 RC3 .3497 FAU .12602
   FDE .3984 FRA-1.4812 FC3-3.8858 BSP 6769
BDE .2142 BRA 1.4398 BC3 1.5111 FSP -1243
                                                              5GB 2267.1 R23 .2320 R13 -.9193
                                                                                                             LSA 534.7 MSA 217.4 SSA 19.1
```

5G1 2255.6 SG2 227.6 THA 169.14

EL1 493.4 EL2 198.6 ALF 165.90

FLIGHT TIME 110.00

LAUNCH DATE DEC 21 1965

100.00

110.00

110.00

DIFFERENTIAL CORRECTIONS

TOE -.2026 TRA-1.4502 TC3-2.0997 BAU .7039 ROE -.0721 RRA .1679 RC3 .5831 FAU .09531

FOE -.0967 FRA -.8345 FC3-3.4150 BSP 8604 BOE .2150 BRA 1.4599 BC3 2.1791 FSP -992

29.81

-8.32

33.72

338.97

210.71

ARRIVAL DATE APR 10 1966 2.19 VHP 4.032 DPA -5.92 RAP 296.63 ECC 1.4462 15.63 1299.4 -7.27 4721.7 26.18 233.48 1057.2 -8.30 357.26 4439.2 27.32 212.43 887.6 -10.99 342.77 4181.6 30.35 191.96 ORBIT DETERMINATION ACCURACY ST 496.2 SR 204.8 SS 199.7 CRT -.4039 CRS .8130 CST -.8513 LSA 535.3 MSA 202.9 55A 19.0 EL1 504.2 EL2 184.4 ALF 169.05 ARRIVAL DATE APR 12 1966 1248.8 -5.67 12.76 26.59 235.75 4754.0 1008.8 -6.71 354.57 4469.0 27.75 214.54 844.7 -9.41 340,46 30.81 193.72 4206.1 ORBIT DETERMINATION ACCURACY ST 512.1 SR 178.9 SS 171.0 CRT -.3473 CRS .7536 CST -.8662 LSA 538.6 MSA 181.7 55A 19.3 EL1 516.3 EL2 166.4 ALF 172.28 ARRIVAL DATE APR 14 1966 1177.3 -3.39 A.75 4806.2 27.16 239.47 941.6 -4.45 350.83 4517.2 28.36 217.99 -7.20 337.30 785.5 31.51 4246.0 196.63 ORBIT DETERMINATION ACCURACY ST 534.9 SR 147.6 55 142.6 CRT -.2720 CRS .6160 CST -.9107 LSA 552.4 MSA 150.4 SSA 20.3 EL1 536.5 EL2 141.6 ALF 175.39 ARRIVAL DATE APR 16 1966 2.25 RAP 296.95 ECC 1.3976 1068.4 245.92 4895.8 27.88 345.23 839.8 -1.01

4599.6

698.1

4314.I

29.18

-3.89

32.52

ORBIT DETERMINATION ACCURACY

ST 586.0 SR 105.6 SS 133.3 CRT -.2278 CRS .3098 CST -.9794

LSA 601.0 MSA 103.3 SSA 23.5

223.98

332.69

201.68

160.39

170.58

MID-COURSE EXECUTION ACCURACY

SGT 2733.2 SGR 614.8 SG3 303.4 RRT -.9097 RRF -.9845 RTF .9140

123.27

84.00

6 7 13

15,19 33

SGB 2801.5 R23 .3517 R13 -.9207 L5A 601.0 M5A 103.3 S5A 23.5 SG1 2790.3 SG2 250.0 THA 168.34 EL1 586.6 EL2 102.8 ALF 177.57

ARRIVAL CATE APR 18 1966

EL1 2908.3 EL2 136.8 ALF 10.00

LAUNCH DATE DEC 21 1965

```
CISTANCE 351.738
  HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 28.166 GAL -8.76 A7L 90.34 MCA 168.58 SMA 131.37 ECC .19315 INC .3295 V1 3D.273
RP 108.64 LAP -.07 LOP 257.50 VP 37.854 GAP 5.00 A7P 89.67 TAL 223.27 TAP 31.84 RCA 106.00 APO 156.74 V2 34.881
    RC 115.673 GL -1.94 GP 30.54 TAL 149.68 TAP 130.18 ETS 27.05 TAE 131.54 ETE 151.52 TAC 34.88 ETC 197.49 CLP-138.52
   PLANETOCENTRIC CONIC
    C3 23.366 VHL 4.834 DLA -22.22 RAL 301.77 RAD 6567.9 VEL 12.031 PTH 2.15 VHP 4.819 DPA 7.54 RAP 296.71 ECC 1.3845 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         118.21 5 12 46
95.51 11 47 30
                                                                          166.30
                                                                                                                        875.5
       90.00
                   4 48 11 1475.46
10 12 57 5672.38
                                                                                                                                                    351.87
                                                  2.56
                                                              358.54
                                                                                                                                       6.31
       90.00
                                                 27.82
                                                              267.44
                                                                            174.16
                                                                                                                        5072.4
                                                                                                                                       28.29
                                                                                                                                                    258.81
                                                                                           119.88 6 14 35
93.90 13 19 37
                  5 53 31 1264.59
11 50 18 5358.48
                                                                                                                        664.6
                                                                                                                                                    335.60
      100.00
                                                   .94
                                                              342.14
                                                                            165.40
                                                                                                                                        4.91
      100.00
                                                 29.66
                                                              244.52
                                                                            174.33
                                                                                                                        4758.5
                                                                                                                                       29.89
                                                                                                                                                    235.72
                  6 28 37 1154.55
13 31 42 5041.28
                                                                           163.01
                                                                                           124.08 6 47 52
89.84 14 55 43
      110.00
                                                 -2.90
                                                              331.40
                                                                                                                        554.6
                                                                                                                                       1.60
                                                                                                                                                    325,20
                                                                                                                        4441.3
      110.00
                                                 34.18
                                                              220.60
                                                                            174.50
                                                                                                                                      33.76
                                                                                                                                                    211.38
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SCT 2851.5 SCR 685.3 SC3 270.6

RRT -.9047 RRF -.9917 RTF ..9134

SCB 2932.7 R23 ..3683 R13 -.9216
                                                                                                                   ST 713.8 SR 60.3 55 186.0 CRT -.6433 CRS .4680 CST -.9608
    TOE -.3975 TRA-1.3854 TC3-2.2574 BAU
                                                     .7366
   ROE -.0065 RRA .1468 RC3 .6816 FAU .08389
FOE -.3077 FRA -.6292 FC3-3.1081 BSP 8990
                                                                                                                  LSA 736.9 MSA 63.3 SSA 25.7
ELI 714.8 ELZ 46.1 ALF 176.88
    BOE .3976 BRA 1.3932 BC3 2.3580 FSP -882
                                                                  SG1 2918.8 SG2 285.2 THA 167.61
LAUNCH DATE DEC 21 1965
                                                                      FLIGHT TIME 120.00
                                                                                                                              ARRIVAL CATE APR 20 1966
                                                                     DISTANCE 357.707
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 28.107 GAL -8.53 AZL 91.77 HCA 171.74 SMA 130.94 ECC .19247 INC 1.7715 V1 30.273 RP 108.68 LAP -.25 LOP 260.67 VP 37.800 GAP 5.25 AZP 88.25 TAL 221.91 TAP 33.65 RCA 105.74 APO 156.14 V2 34.870
   RC 118.029 GL -10.24 GP 38.79 7AL 146.99 7AP 127.50 ETS 34.99 7AE 126.27 ETE 146.77 7AC 38.65 ETC 206.91 CLP-141.36
  PLANETOCENTRIC CONIC
                                                                                               2.15 VHP 5.383 DPA
    C3 23.381 VHL 4.835 DLA -30.04 RAL 305.20 RAO 6567.9 VEL 12.032 PTH
                                                                                                                          15.73 RAP 295.66 ECC 1.3848
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       79.54
                   6 19 20 1203.89
                                                 19.77
                                                              347.26
                                                                           176.74
                                                                                           113.08
                                                                                                      6 39 24
                                                                                                                         603.9
                                                                                                                                     22.73
                                                                                                                                                   339.70
      100.45
                   9 9 12
                                 656.22
                                                 19.78
                                                              306.97
                                                                            176.75
                                                                                           113.07
                                                                                                       9 20 A
                                                                                                                          56.2
                                                                                                                                       22.74
                                                                                                                                                    299.41
       79.54
                   6 19 20
                                 1203.89
                                                 19.77
                                                              347.26
                                                                            176.74
                                                                                           113.08
                                                                                                       6 39 24
                                                                                                                         603.9
                                                                                                                                       22.73
                                                                                                                                                    339.70
                                                                                                      9 20 8
8 21 49
                  9 9 12 656.22
8 7 39 850.78
      100.46
                                                 19.78
                                                              306.97
                                                                            176.75
                                                                                           113.07
                                                                                                                          56.2
                                                                                                                                       22.74
                                                                                                                                                    299.41
      110.00
                                                  8.65
                                                              315.46
                                                                            170.62
                                                                                           123.20
                                                                                                                         250.8
                                                                                                                                      12.96
                                                                                                                                                    309.02
                                                                                           103.36 13 49 9
      110.00
                  12 20 4
                                5345.36
                                                 31.76
                                                              243.90
                                                                            181.12
                                                                                                                       4745.4
                                                                                                                                       33.27
                                                                                                                                                    235.00
  DIFFERENTIAL CORRECTIONS
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 2980.3 SGR 782.4 SG3 225.1

RRT -.8932 RRF -.9949 RTF .9158

SGB 3081.3 R23 .3689 R13 -.9259

SG1 3062.2 SG2 342.4 THA 166.63
                                                                                                                   5T 1054.9 SR 147.5 SS 339.9
CRT -.9737 CRS .9960 CST -.9593
    TOE -.7764 TRA-1.2459 TC3-2.3414 BAU .7717
    ROE .1177 RRA .1032 RC3 .7826 FAU .06838
   FOE -.5986 FRA -.3909 FC3-2.5320 BSP 9504
BOE .7853 BRA 1.2502 BC3 2.4688 FSP -739
                                                                                                                   LSA 1113.9 MSA 96.0 SSA 8.6
EL1 1064.6 EL2 33.3 ALF 172.24
                                                                                                                             ARRIVAL DATE APR 22 1966
                                                                     FLIGHT TIME 122.00
LAUNCH DATE DEC 21 1965
                                                                     CISTANCE 363.648
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 28.047 GAL -8.30 AZL 94.97 HCA 174.90 SMA 130.51 ECC .19183 INC 4.9716 VI 30.273
RP 108.71 LAP -.44 LOP 263.84 VP 37.746 GAP 5.49 AZP 85.05 TAL 220.51 TAP 35.41 RCA 105.47 APO 155.54 VZ 34.860
RC 120.382 GL -26.97 GP 52.67 ZAL 137.85 ZAP 120.18 ETS 45.71 ZAE 116.60 ETE 141.94 ZAC 46.26 ETC 219.96 CLP-146.00
  PLANETOCENTRIC CONTC
   C3 28.136 VHL 5.304 DLA -45.62 RAL 313.39 RAD 6568.1 VEL 12.227 PTH 2.20 VMP 6.836 DPA 29.26 RAP 292.11 ECC 1.4630
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 24 49 1687.13
12 9 5 5552.45
4 24 49 1687.13
                                                                         193.50
                                                                                         128.29
                                                                                                      4 52 57
                                                                                                                    1087.1
                                                              30.70
       52.61
                                                26.98
                                                                                                    13 41 38
4 52 57
                                                                                           128.29
                                                                                                                       4952.5
                                                                                                                                       31.76
                                                                            193.51
                                                 27.00
                                                              258.18
      127.39
                                                                                                                       1087.1
                                                                                                                                       31.75
                                                                           193.50
                                                                                           128.29
                                                               30.70
       52.61
                                                 26.98
                                                                                                    13 41 38
4 52 57
13 41 38
                                                                                                                       4952.5
                                                                                                                                       31.76
                                                                                                                                                   251.21
                 12 9 5 5552.45
4 24 49 1687.13
12 9 5 5552.45
                                                 27.00
                                                                                           128.29
                                                                           193.51
      127.39
                                                              258.18
                                                                                                                       1087.1
                                                                                                                                       31.75
                                                                                                                                                     23.74
                                                                           193.50
                                                                                           128.29
       52.61
                                                 26.98
                                                               30.70
                                                                                           128.29
                                                                                                                       4952.5
      127.39
                                                 27.00
                                                              258.18
                                                                            193.51
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                 SGT 3108.1 SGR 869.1 SG3 155.3
RRT -.8629 RRF -.9879 RTF .9272
                                                                                                                   ST 1897.1 SR 431.2 SS 611.8
CRT -.9710 CRS .9977 CST -.9849
    TOF-1.7148 TRA -.8739 TC3-1.9791 BAU .7910
   ROE .3985 RRA -.0238 RC3 .7109 FAU .04483
FOE -.9573 FRA -.0924 FC3-1.3793 BSP 9918
BOE 1.7605 BRA .8742 BC3 2.1028 FSP -507
                                                                 SGB 3227.3 R23 .3411 R13 -.9389
SGI 3199.0 SG2 426.8 THA 166.18
                                                                                                                   LSA 2034.7 MSA 138.0 SSA 2.1
                                                                                                                   EL1 1942.9 EL2 100.7 ALF 167.52
                                                                     FLIGHT TIME 124.00
                                                                                                                              ARRIVAL DATE APR 24 1966
LAUNCH DATE DEC 21 1965
                                                                     DISTANCE 369.506
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 27.987 GAL -8.04 AZL 108.16 MCA 177.99 SMA 130.07 ECC .19109 INC18.1591 V1 30.273 RP 108.74 LAP -.63 LOP 267.01 VP 37.693 GAP 5.70 AZP 71.85 TAL 219.04 TAP 37.02 RCA 105.22 APO 154.93 VZ 34.851 RC 122.731 GL -57.63 GP 75.40 ZAL 111.82 ZAP 104.60 ET5 76.74 ZAE 95.25 ETE 158.62 ZAC 61.18 ETC 254.88 CLP-179.21
  PLANETOCENTRIC CONIC
   C3 104.577 VHL 10.226 DLA -67.76 RAL 358.25 RAD 6570.0 VEL 15.031 PTH
                                                                                              2.71 VHP 14.196 OPA 51.07 RAP 274.20 ECC 2.7211
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  6 7 36 2161.65
16 24 11 5711.22
                                                                                                        6 43 37
                                                                                                                                     23.81
                                                 16.49
                                                               70.75
                                                                            261.29
                                                                                           156.75
                                                                                                                       1561.7
      25.46
                                                                                                    17 59 22
                                                 16.50
                                                              261.37
                                                                            261.31
                                                                                           156.75
                                                                                                                        5111.2
                                                                                                                                       23.82
                                                                                                                                                    258.34
      154.54
                    6 7 36 2161.65
16 24 11 5711.22
                                                 16.49
                                                               70.75
                                                                            261.29
                                                                                           156.75
                                                                                                        6 43 37
                                                                                                                        1561.7
                                                                                                                                       23.81
                                                                                                                                                     67.72
       25.46
                                                                                                     17 59 22
                  16 24 11
                                                 16.50
                                                              261.37
                                                                            261.31
                                                                                           156.75
                                                                                                                                                    258.34
      154.54
                               2161.65
5711.22
                                                                                                        6 43 37
                                                                                                                                                     67.72
       25.46
                    6 7 36
                                                 16.49
                                                               70.75
                                                                            261.29
                                                                                           156.75
                                                                                                                        1561.7
                                                                                                                                       23.81
                                                                                           156.75 17 59 22
                  16 24 11
                                                                                                                        5111.2
                                                                                                                                     23.82
                                                                                                                                                   258.34
      154.54
                                                 16.50
                                                              261.37
                                                                            261.31
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                SGT 3315.7 SGR 554.2 SG3 71.4
RRT .6211 RRF .4929 RTF .9880
SGB 3361.7 R23 -.1675 R13 .9858
                                                                                                             ST 2864.2 SR 522.9 SS 793.5
CRT .9641 CR5 -.9448 CST -.9979
LSA 3014.1 MSA 147.9 SSA .6
    TOE-5.0437 TRA 1.0495 TC3 -.3770 BAU .5285
    ROE -.9281 RRA -.1236 RC3 .0279 FAU .01290
```

FLIGHT TIME 118.00

-218

SG1 3333.9 SG2 431.9 THA 6.03

FOE-1.1245 FRA .3300 FC3 -.1068 BSP 9839

BOE 5.1284 BRA 1.0568 BC3 .3780 FSP

ARRIVAL DATE APR 26 1966

```
LAUNCH DATE DEC 21 1965
                                                                        CISTANCE 375.776
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 27.927 GAL -7.87 AZL 57.15 HCA 181.49 SMA 129.65 ECC .19152 INC32.8552 VI 30.273 RP 108.76 LAP -.81 LOP 270.17 VP 37.640 GAP 6.03 AZP 122.85 TAL 217.77 TAP 39.27 RCA 104.82 APO 154.47 V2 34.842
    RC 125.075 GL 62.08 GP -76.51 ZAL 102.61 ZAP 101.53 ETS 225.55 ZAE 82.64 ETE 147.58 ZAC 92.07 ETC 51.91 CLP 149.02
    C3 288.465 VHL 16.984 DLA 46.11 RAL 306.25 RAD 6571.7 VEL 20.243 PTH 3.15 VHP 18.984 DPA -73.98 RAP 129.42 ECC 5.7474 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 51.95 15.52 4 4823.24 -4.56 223.69 211.87 44.06 17.12.28 4223.2 -10.28 218.46
   PLANETOCENTRIC CONIC
                                                                                             44.06 17 12 28

44.06 24 37 25

44.06 17 12 28

44.06 24 37 25

44.06 17 12 28

44.06 17 12 28

44.06 24 37 25
                                                                                                                                                           106.90
                                                                                                                              2788.7
                                                                                                                                             -10.26
                  23 40 56 3388.71
15 52 4 4823.24
                                                    -4.54
                                                                 112.13
                                                                                211.86
      126.05
                                                                                                                              4223.2
                                                                                                                                            -10.28
                                                                                                                                                           218.46
                                                    -4.56
                                                                 223.69
                                                                                211.87
        51.95
                                                                                                                              2788.7
                                                                                                                                            -10.26
                                                                                                                                                           106.90
                   23 40 56 3388.71
                                                   -4.54
                                                                 112.13
                                                                                211.86
      128.05
                                                                                                                                            -10.28
                                                                                                                              4223.2
                                                                                                                                                           218.46
                                                                 223.69
                                                                              211.87
                                 4823.24
                                                    -4.56
                  15 52 4
        51.95
                                                                                                                                           -10.26
                                                                                                                             2788.7
                                                                 112.13
                                                                               211.86
                  23 40 56
                                  3388.71
                                                    -4.54
      128.05
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1593.5 SR 2442.2 SS 1001.6
CRT -.9875 CRS ..9965 CST -.9972
                                                                    SCT 1634.8 SGR 3021.7 SG3 58.2
RRT -.9054 RRF -.9768 RTF ..9748
SGB 3435.6 R23 -.1207 R13 -.9924
    TOE 4.7117 TRA -.7786 TC3 -.0152 BAU .2248
    RDE-7.0491 RRA 3.8110 RC3 -.0563 FAU .00030
                                                                                                                         LSA 3075.9 MSA 213.9 SSA .8
    FOE 1.7908 FRA -.6110 FC3 -.0009 BSP 10971
BDE 8.4788 BRA 3.8897 BC3 .0583 FSP -201
                                                                      SG1 3379.1 SG2 620.8 THA 117.09
                                                                                                                         EL1 2908.5 EL2 211.2 ALF 122.99
                                                                                                                                     ARRIVAL DATE APR 28 1966
                                                                         FLIGHT TIME 128.00
LAUNCH DATE DEC 21 1965
                                                                         01STANCE 381.556
   HELIOCENTRIC CONIC
                       .00 LOL 88.92 VL 27.866 GAL -7.59 AZL 77.35 HCA 184.53 SMA 129.22 ECC .19081 INC12.6533 V1 30.273
-.99 LOP 273.34 VP 37.587 GAP 6.21 AZP 102.62 TAL 216.22 TAP 40.75 RCA 104.56 APO 153.87 V2 34.834
51.16 GP -54.01 ZAL 117.32 ZAP 121.44 ETS 298.30 ZAE 109.32 ETE 209.84 ZAC 74.61 ETC 121.25 CLP-152.57
    RL 147.17 LAL
RP 108.79 LAP
    RC 127.413 GL
    C3 6U.334 VHL 7.769 DLA 31.93 RAL 299.57 RAD 6569.1 VEL 13.480 PTH 2.46 VHP 7.518 CPA -73.67 RAP 334.39 ECC 1.9933 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 74.60 17 19 41 4195.93 -13.61 179.19 186.72 60.84 18 20 37 3505 0
   PLANETOCENTRIC CONIC
                                                                                                  60.83 22 17 5
60.84 18 29 37
60.83 22 17 5
64.80 24 13 43
56.00 21 16 17
                                                                                                                              2825.8
                                                                                                                                              -17.38
                    21 19 59
                                                   -13.60
                                                                 122.16
                                                                                186.70
                                 3425.76
       105.40
                                                                                                                              3595.9
                                                                                                                                             -17.40
                                                                                                                                                            172.29
                                                   -13.61
                                                                  179.19
                                                                                186.72
                    17 19 41
                                  4195.93
        74.60
                                                                                186,70
                                                                                                                              2825.8
                                                                                                                                             -17.38
                                                                                                                                                            115.26
                    21 19 59
                                3425.76
                                                   -13.60
                                                                  122.16
       105.40
                                                                                                                                                             90.74
                                                                                                                                             -27.09
                    23 22 58 3044.88
20 15 52 3624.80
                                                   -23.90
                                                                   98.50
                                                                               192.28
       110.00
                                                                                                                              3024.8
                                                                                                                                              -8.18
                                                                                                                                                            125.01
                                                   -3.74
                                                                  131.29
                                                                                180.59
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 3546.4 SGR 363.6 SG3 134.6
RRT .1937 RRF .4837 RTF .9517
SGB 3565.0 R23 .3033 R13 .9524
SGI 3547.1 SG2 356.6 THA 1.15
                                                                                                                          ST 2365.7 SR 246.9 SS 772.4
CRT .8402 CRS -.9089 CST -.9898
    TOE 3.0578 TRA-2.7367 TC3 -.8721 BAU .7091
     ROE .3228 RRA .2496 RC3 -.1086 FAU .03580
                                                                                                                          LSA 2495.2 MSA 167.4 SSA
    FOE 1.5905 FRA -.7419 FC3 -.5135 BSP 10978
BDE 3.0748 BRA 2.7481 BC3 -8788 FSP -455
                                                                                                                       EL1 2374.8 EL2 133.3 ALF 5.03
                                                                                                                                    ARRIVAL DATE APR 30 1966
                                                                         FLIGHT TIME 130.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 387.434
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 27.806 GAL -7.33 A7L 81.21 HCA 187.68 SMA 128.80 ECC .19046 INC 8.7895 V1 30.273
RP 108.81 LAP -1.17 LOP 276.51 VP 37.535 GAP 6.42 A7P 98.71 TAL 214.70 TAP 42.38 RCA 104.27 APO 153.33 V2 34.826
RC 129.747 GL 42.69 GP -37.57 7AL 123.49 7AP 133.61 ETS 310.02 7AE 120.12 ETE 207.58 7AC 64.34 ETC 131.61 CLP-150.48
    PLANETOCENTRIC CONIC
     C3 38.629 VHL 6.215 DLA 23.51 RAL 301.20 RAD 6568.5 VEL 12.649 PTH 2.30 VHP 5.890 DPA -57.42 RAP 323.08 ECC 1.6357
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                        103.65
                                                                                                                           2618.5 -27.23
                   21 50 35 3218.47
17 2 7 4180.68
                                                                               183.38
                                                                                               77.99 22 44 14
                                                  -25.84
                                                                 112.04
        90.00
                                                                                                  61.69 18 11 48
79.30 24 18 47
60.14 19 11 11
82.45 2 2 45
56.29 19 40 30
                                                                                                                              3580.7
                                                                                                                                              -4.37
                                                                                                                                                            164.26
                                                                  170.90
                                                                                 173.96
                                                     - .59
         90.00
                                                                                                                              2296.3
                                                                                                                                             -29.27
                                                                                                                                                            80.23
                    23 30 31 2896.27
18 4 53 3978.11
                                                                   88.84
                                                                                 183.89
                                                   -28.08
       100.00
                                                                                                                                                            148.38
                                                                                                                              3378.1
                                                                                                                                              -2.57
                                                     1.41
                                                                 154.91
                                                                                 172.85
       100.00
                                                                                                                                                             55.58
                                                                                                                                            -34.12
                     1 19 59 2566.07
18 35 49 3881.07
                                                    -33.44
                                                                   64.76
                                                                                 184.89
       110.00
                                                                                                                                                            138.46
                                                                                                                              3261.1
                                                                                                                                              1.56
                                                                  144.69
                                                                                169.98
                                                     6.03
                    18 35 49
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      RRT .5629 RRF .8228 RTF .9289
SGB 3632.3 R23 .3588 R13 .9305
SGI 3620.7 SG2 289.1 THA 3.14
                                                                                                                          ST 2038.2 SR 267.9 SS 749.9
CRT 8983 CRS -.9688 CST -.9792
     TOE 2.0668 TRA-2.3928 TC3-1.5378 BAU .7990
     ROE .2893 RRA .0825 RC3 -.1702 FAU .05516
FOE 1.5778 FRA -.7663 FC3-1.2362 BSP 11328
                                                                                                                          LSA 2180.7 MSA 181.3 SSA 2.0
                                                                                                                          EL1 2052.4 EL2 116.9 ALF 5.76
     BDE 2.0869 BRA 2.3942 BC3 1.5471 FSP -658
                                                                                                                                     ARRIVAL DATE MAY 2 1966
                                                                          FLIGHT TIME 132.00
 LAUNCH DATE DEC 21 1965
                                                                          DISTANCE 393.313
    HELIOCENTRIC CONIC
     RL 147.17 LAL .00 LOL 88.92 VL 27.745 GAL -7.06 AZL 82.83 HCA 190.83 SMA 128.38 ECC .19024 INC 7.1670 VI 30.273 RP 108.84 LAP -1.34 LOP 279.67 VP 37.484 GAP 6.63 AZP 97.04 TAL 213.16 TAP 44.00 RCA 103.95 APO 152.80 V2 34.819
                                      -27.93 ZAL 126.01 ZAP 140.62 ETS 317.35 ZAE 125.05 ETE 202.79 ZAC 59.44 ETC 138.09 CLP-151.03
                         37.84 GP
     RC 132.074 GL
    PLANETOCENTRIC CONIC
     C3 31.361 VHL 5.600 DLA 18.97 RAL 303.07 RAD 6568.2 VEL 12.359 PTH 2.23 VHP 5.439 DPA -47.62 RAP 321.01 ECC 1.5161
     LNCH AZHTH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZHTH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                                                                                                                              2360.2
                                                                                                  86.95 23 44 6
                                                                               179.89
                    22 54 46 2960.22
                                                    -28.17
                                                                   93.53
         90.00
                                                                                                            17 25 6
                                                                                                                               3733.7
                                                                                                                                                            172.81
                                                                                                                                                .56
                                                                                                   61.99
                                    4333.74
                                                     4.34
                                                                  179.45
                                                                                 170.80
                    16 12 52
         90.00
                                                                                                                                              -29.77
                                                                                                                                                              62.76
                                                                                                   88.20
                                                                                                              1 16 0
                                                                                                                               2060.4
                                                    -29.84
                                                                   71.56
                                                                                 179.97
                     0 31 39
                                 2660.44
        100.00
                                                                                                                               3508.7
                                                                                                                                               1.86
                                                                                                                                                            155.55
                                                                                                            18 31 5
                                                      5.82
                                                                   162.10
                                                                                 169.99
                                                                                                   60.63
                    17 22 36
                                    4108.74
        100.00
                                                                                                              2 44 34
                                                                                                                               1768.1
                                                                                                                                              -33.57
                                                                                                                                                             40.18
                                                                                                   91.51
                                                                                 179.99
                                  2368.10
                                                   -34.15
                                                                   49.37
                     2 5 6
        110.00
                                                                                                   57.01 19 11 52 3373.9
                                                                                                                                              5.09
                                                                                                                                                            143.31
                                                                                 167.74
                    18 5 38
                                    3973.85
                                                     9.50
                                                                  149.63
        110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      RRT .5303 RRF .8035 RTF .9180
SCB 3713.0 R23 .3712 R13 .9190
SCI 3705.5 SC2 235.1 THA 2.29
                                                                                                                       ST 1871.3 SR 219.0 SS 714.3
CRT .8792 CRS -.9685 CST -.9701
LSA 2005.9 MSA 189.8 55A 3.3
     TOE 1.6870 TRA-2.2175 TC3-1.9914 BAU .8370
     RDE .2129 RRA .0684 RC3 -.1387 FAU .06324
                                                                                                                          LSA 2005.9 MSA 189.8 55A 3.3
EL1 1881.2 EL2 103.8 ALF 5.89
     FDE 1.4681 FRA -.6977 FC3-1.7457 BSP 11551
BOE 1.7004 BRA 2.2186 BC3 1.9963 FSP -743
```

FLIGHT TIME 126.00

ARRIVAL DATE MAY 4 1966

LAUNCH DATE DEC 21 1965

DISTANCE 399.185 HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 27.685 GAL -6.78 A7L 83.73 MCA 193.99 SMA 127.96 ECC .19013 INC 6.2714 V1 30.273 RP 108.86 LAP -1.51 LOP 282.83 VP 37.433 GAP 6.84 A7P 96.09 TAL 211.60 TAP 45.60 RCA 103.63 APO 152.29 V2 34.812 RC 134.395 GL 34.84 GP -21.90 TAL 126.85 ZAP 145.06 ETS 322.69 ZAE 127.44 ETE 198.77 ZAC 57.33 ETC 142.91 CLP-152.08 PLANETOCENTRIC CONIC C3 27.636 VHL 5.257 DLA 16.34 RAL 304.90 RAC 6568.1 VEL 12.207 PTH 2.19 VHP 5.298 CPA -41.29 RAP 320.94 ECC 1.4548 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23 28 36 2827.72 15 53 35 4402.93 1 3 2 2535.82 178.13 91.80 24 15 43 2227.7 -27.72 90.00 -28.26 83.85 62.39 17 6 58 93.07 1 45 18 3802.9 170.15 90.00 6.54 183.35 -29.01 1935.8 100.00 178.06 -29.75 62.31 100.00 17 5 45 4170.06 110.00 2 31 36 2258.75 110.00 17 53 41 4019.90 61.06 18 15 15 96.51 3 9 14 57.49 19 0 41 3570.1 3.93 158.93 7.85 165.52 169.44 1658.8 -32.37 -33.63 40.88 177.68 3419.9 6.83 11.20 152.11 157.42 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3802.3 SGR 222.3 SG3 234.4 RRT .4215 RRF .7082 RTF .9118 SGB 3808.8 R23 .3559 R13 .9123 SGI 3803.4 SG2 201.6 THA 1.42 ST 1778.1 SR 188.5 55 680.2 CRT .8598 CRS -.9661 CST -.9623 TOE 1.4909 TRA-2.1073 TC3-2.3469 BAU .8677 RDE .1717 RRA .0660 RC3 -.0893 FAU .06596 FDE 1.3487 FRA -.6090 FC3-2.0662 BSP 11914 LSA 1903.0 MSA 195.7 SSA 4.7 ELI 1785.5 ELZ 95.9 ALF 5.22 BDE 1.5008 BRA 2.1083 BC3 2.3486 FSP -782 ARRIVAL DATE MAY 6 1966 FLIGHT TIME 136.00 LAUNCH DATE DEC 21 1965 HELIOCENTRIC CONIC DISTANCE 405.046 RL 147.17 LAL .00 LOL 88.92 VL 27.625 GAL -6.50 AZL 84.30 MCA 197.16 SMA 127.55 ECC .19012 INC 5.7010 V1 30.273 RP 108.87 LAP -1.68 LOP 286.00 VP 37.383 GAP 7.04 AZP 95.45 TAL 210.02 TAP 47.18 RCA 103.30 APO 151.80 V2 34.806 RC 136.709 GL 32.85 GP -17.86 ZAL 126.79 ZAP 148.20 ETS 326.68 ZAE 128.67 ETE 195.67 ZAC 56.70 ETC 146.62 CLP-153.24 PLANETOCENTRIC CONIC C3 25.260 VHL 5.026 DLA 14.78 RAL 306.69 RAD 6568.0 VEL 12.109 PTH 2.17 VHP 5.273 DPA -36.87 RAP 321.68 ECC 1.4157 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23 50 20 2748.92 15 46 11 4437.17 94.66 24 36 9 62.64 17 0 9 -27.96 78.10 177.51 2148.9 -27.02 69.56 90.00 3837.2 3.89 178.59 7.62 170.38 90.00 185.29 1 23 34 2460.90 16 59 34 4200.42 2 49 37 2191.69 17 50 1 4042.39 48.15 1860.9 56.77 177.36 -28.21 100.00 -29.35 3600.4 160.60 100.00 8.85 167.22 169.72 4.95 3 26 8 1591.7 26.92 110.00 -33.00 35.75 176.79 99.48 -31.34 99.48 3 26 8 57.76 18 57 23 153.34 167.82 3442.4 7.68 146.94 110.00 12.02 DIFFERENTIA. CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 3903.5 SGR 192.5 SG3 237.8 RRT .2709 RRF .5543 RTF .9074 SGB 3908.2 R23 .3199 R13 .9076 TOE 1.3795 TRA-2.0206 TC3-2.6487 BAU .8946 ST 1729.3 SR 174.2 SS 654.1 ROE .1516 RRA .0631 RC3 -.0407 FAU .06606 FOE 1.2478 FRA -.5168 FC3-2.2640 BSP 12264 CRT .8493 CRS -.9666 CST -.9558 LSA 1846.2 MSA 200.2 SSA 6.0 5G1 39D3.8 SG2 185.3 THA .77 EL1 1735.6 EL2 91.6 ALF BOE 1.3878 BRA 2.0215 BC3 2.6490 FSP -792 ARRIVAL DATE MAY 8 1966 FLIGHT TIME 138.00 LAUNCH DATE DEC 21 1965 DISTANCE 410.897 HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 27.565 GAL -6.20 A7L 84.70 HCA 200.32 SMA 127.15 ECC .19021 INC 5.3040 V1 30.273 RP 108.89 LAP -1.84 LOP 289.16 VP 37.334 GAP 7.24 A7P 94.98 TAL 208.42 TAP 48.74 RCA 102.96 APO 151.34 V2 34.801 RC 139.015 GL 31.48 CP -15.00 TAL 126.17 TAP 150.61 ETS 329.73 TAE 129.32 ETE 193.30 TAC 56.91 ETC 149.56 CLP-154.42 PLANETOCENTRIC CONIC C3 23.536 VHL 4.851 OLA 13.87 RAL 308.50 RAC 6568.0 VEL 12.038 PTH 2.15 VHP 5.299 OPA -33.57 RAP 322.85 ECC 1.3873 ENCH AZMITH LNCH TIME L'I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 96.43 66.05 D 9 39 2699.42 15 45 13 4451.96 177.58 0 54 39 2099.4 -26.46 -27.64 74.52 90.00 62.77 16 59 23 3852.0 4.37 179.42 8.08 186.13 171.04 90.00 15 45 13 1 38 19 2413.47 16 59 14 4213.14 3 2 59 2148.54 17 51 3 4050.83 44.77 -27.59 177.39 97.74 2 18 33 1813.5 -28.96 53.30 100.00 61.45 18 9 27 161.30 9.26 167.94 170.41 3613.1 5.38 100.00 101.34 3 38 48 57.86 18 58 34 -32.47 32.50 176.71 1548.5 -30.56 23.80 110.00 3450.8 17 51 3 7.99 147.38 12.33 153.80 168.58 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1708.1 SR 169.8 SS 635.0 CRT .8491 CRS -.9704 CST -.9507 SGT 4004.2 SGR 182.8 SG3 237.2 TOE 1.3138 TRA-1.9431 TC3-2.9221 BAU .9195 RDE .1427 RRA .0584 RC3 .0026 FAU .06493 FDE 1.1655 FRA -.4279 FC3-2.3882 BSP 12617 RRT .1179 RRF .3766 RTF .9040 SGB 4008.4 R23 .2717 R13 .9040 SG1 4004.3 SG2 181.6 THA .31 LSA 1818.8 MSA 203.6 SSA 7.3 EL1 1714.2 EL2 89.4 ALF 4.84 BOE 1.3215 BRA 1.9440 BC3 2.9221 FSP ARRIVAL DATE MAY 10 1966 LAUNCH DATE DEC 21 1965 FLIGHT TIME 140.00 **DISTANCE 416.737** HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 27.505 GAL -5.90 AZL 84.99 MCA 203.48 SMA 126.75 ECC .19041 INC 5.0100 VI 30.273 RP 108.90 LAP -1.99 LOP 292.32 VP 37.286 GAP 7.44 AZP 94.60 TAL 206.80 TAP 50.28 RCA 102.62 APO 150.89 VZ 34.797 RC 141.312 GL 30.48 GP -12.88 ZAL 125.19 ZAP 152.59 ETS 332.10 ZAE 129.67 ETE 191.47 ZAC 57.65 ETC 151.95 CLP-155.59 PLANETOCENTRIC CONIC C3 22.182 VHL 4.710 DLA 13.38 RAL 310.34 RAD 6567.9 VEL 11.982 PTH 2.14 VHP 5.352 DPA -30.96 RAP 324.26 ECC 1.3651 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 178.11 97.53 D 21 16 2668.15 15 48 18 4454.39 2068.1 -26.05 63.85 1 5 44 17 2 32 -27.38 72.27 62.79 3854.4 4.44 179.56 8.15 186.27 171.96 42.63 2 29 20 1783.3 -27.14 1 49 36 2383.26 -28.67 51.10 177.90 98.86 17 2 39 4214.51 9.31 168.02 171.35 61.46 18 12 53 3614.5 5.42 161.38 100.00 21.80 3 13 34 2120.52 17 55 10 4050.01 102.52 3 48 55 1520.5 -30.02 -32.07 30.41 177.15 102.52 3 48 55 57.85 19 2 40 110.00 3450.0 7.96 147.34 110.00 12.30 153.76 169.56 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1704.8 SR 171.2 SS 620.7 CRT .8569 CRS -.9761 CST -.9470 SGT 4105.5 SGR 186.0 SG3 254.7 RRT -.0025 RRF .2182 RTF .9015 SGB 4109.7 R23 -.2205 R13 -.9015 TOE 1.2751 TRA-1.8695 TC3-3.1820 BAU .9437 RDE .1399 RRA .0519 RC3 .0404 FAU .06329 CRT .8569 CRS -.9761 C51 -.947U LSA 1810.7 MSA 205.6 SSA 8.6 FOE 1.0968 FRA -.3463 FC3-2.4701 BSP 12994 ELI 1711.1 EL2 88.0 ALF 4.93 SC1 4105.5 SG2 186.0 THA 179.99 BOE 1.2828 BRA 1.8702 BC3 3.1823 FSP -786

FLIGHT TIME 134.00

```
ARRIVAL CATE MAY 12 1966
                                                                            FLIGHT TIME 142.00
LAUNCH DATE DEC 21 1965
                                                                            DISTANCE 422.587
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 27.446 GAL -5.59 AZL 85.22 MCA 206.64 SMA 126.36 ECC .19068 INC 4.7824 V1 30.273 RP 108.92 LAP -2.14 LOP 295.48 VP 37.239 GAP 7.63 AZP 94.28 TAL 205.14 TAP 51.78 RCA 102.27 APO 150.45 V2 34.793
    RC 143.598 GL 29.76 GP -11.26 TAL 123.90 TAP 154.28 ETS 333.97 TAE 129.88 ETE 190.04 TAC 58.76 ETC 153.93 CLP-156.72
   PLANETOCENTRIC CONIC
    C3 21.049 VHL 4.588 DLA 13.21 RAL 312.26 RAD 6567.9 VEL 11.934 PTH 2.12 VHP 5.419 DPA -28.80 RAP 325.87 ECC 1.3464
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 30 21 2649.78 -27.21 70.95 178.99 98.17 1 14 31 2049.8 -25.80 62.57
                                                                                                  98.17 1 14 31
62.73 17 8 37
99.52 2 38 0
61.39 18 19 4
103.23 3 57 22
57.75 19 9 4
                   0 30 21 2649.78
15 54 29 4447.47
1 58 35 2365.24
                                                                                    173.09
                                                                                                                                   3847.5
                                                                                                                                                     4.22
                                                                                                                                                                   179.17
                                                                    185.88
                                                       7.94
        90.00
                                                                                                                                   1765.2
                                                                                   178.77
       100.00
                                                     -28.47
                                                                     49.80
                                                                                                                                   3607.2
                                                                                                                                                      5.18
                                                                                                                                                                   160.98
                   17 8 57
                                                       9.07
                                                                    167.61
                                                                                    172.48
                                    4207.24
       100.00
                   3 22 18 2103.25
18 1 42 4042.00
                                                                                                                                   1503.2
                                                                                                                                                                    20.58
                                                                                  177.99
       110.00
                                                     -31.81
                                                                     29.13
                                                                                    170.73
                                                                                                                                   3442.0
                                                                                                                                                    7.66
       110.00
                                                     12.01
                                                                    153.32
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 3928.9 SCR 220.3 SC3 212.1
RRT -.0675 RRF .2447 RTF .8482
SCB 3935.0 R23 -.3028 R13 -.8482
                                                                                                                             ST 1916.0 SR 189.3 SS 746.7
CRT .9021 CRS -.9919 CST -.9478
    TDE 1.4511 TRA-1.6010 TC3-3.0697 BAU .8643
   RDE .1506 RRA .0563 RC3 .0971 FAU .04946
FDE 1.2762 FRA -.0129 FC3-2.0343 BSP B736
BDE 1.4589 BRA 1.6020 BC3 3.0713 FSP -264
                                                                                                                              LSA 2051.6 MSA 235.1 SSA 8.1
                                                                                                                               EL1 1923.6 EL2 81.4 ALF 5.10
                                                                        SG1 3928.9 SG2 219.8 THA 179.78
                                                                             FLIGHT TIME 144.00
LAUNCH DATE DEC 21 1965
                                                                            DISTANCE 428.386
  HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 27.387 GAL -5.28 A7L 85.40 HCA 209.80 SMA 125.97 ECC .19115 INC 4.6001 VI 30.273 RP 108.93 LAP -2.28 LOP 298.64 VP 37.192 GAP 7.83 A7P 93.99 TAL 203.50 TAP 53.30 RCA 101.89 APO 150.05 V2 34.790 RC 145.874 GL 29.19 GP -9.98 ZAL 122.42 ZAP 155.80 ETS 335.45 ZAE 129.97 ETE 188.87 ZAC 60.08 ETC 155.60 CLP-157.84
  PLANETOCENTRIC CONIC
   C3 20.109 VHL 4.484 DLA 13.24 RAL 314.21 RAD 6567.8 VEL 11.895 PTH 2.11 VHP 5.500 DPA -26.95 RAP 327.56 ECC 1.3309 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 37 54 2639.74
16 2 29 4435.65
                                                                                                                   1 21 54
                                                                                                                                   2039.7
                                                     -27.11
                                                                     70.23
                                                                                  180.12
                                                                                                      98.52
                                                                                                                                                   -25.65
        90.00
                                                                                                      62.63 17 16 25
                                                                                                                                    3035.6
                                                                                                                                                     3.84
                                                                     185.20
                                                                                    174.37
                                                                                                                                                                   178.50
                                                       7.57
        90.00
                   2 6 9 2355.15
17 16 55 4195.47
                                                                                                     99.89 2 -...
61.28 18 26 51
101.65 4 4 48
                                                                                                                                                                    40.66
                                                                                                                                   1755.1
                                                                                                                                                    -26.70
                                                     -28.35
                                                                      49.07
                                                                                    179.89
       100.00
                                                                                                                                   3595.5
                                                                                                                                                                   160.33
                                                       8.68
                                                                    166.95
                                                                                    173.77
                                                                                                                                                      4.79
      100.00
                                                                                                                                                   -29.45
                     3 29 55 2093.04
                                                                                                                                   1493.0
                                                                                                                                                                    19.86
                                                     -31.65
                                                                     28.38
                                                                                   179.10
                                                                                                    103.65
       110.00
                                                                                                                                  3430.3
                                                                                                     57.61 19 16 49
                                                                    152.68
                                                                                    172.04
                                                                                                                                                    7.23
                                                                                                                                                                   146.30
                    18 9 39
                                    4030.35
                                                     11.58
      110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 4271.1 SGR 212.8 SG3 224.6
RRT -.1271 RRF .0328 RTF .8934
SGB 4276.4 R23 -.1479 R13 -.8933
                                                                                                                              ST 1758.9 SR 185.1 55 619.7
CRT .8899 CRS -.9893 CST -.9434
    TOE 1.2713 TRA-1.6958 TC3-3.6387 BAU .9786
   ROE .1444 RRA .0369 RC3 .1050 FAU .05801
FOE 1.0180 FRA -1704 FC3-2.4974 BSP 13248
                                                                                                                               LSA 1862.3 MSA 209.8 SSA 10.9
EL1 1766.6 EL2 84.1 ALF 5.36
                                                                        5G1 4271.2 SG2 211.1 THA 179.64
    BOE 1.2794 BRA 1.6962 BC3 3.6402 FSP -716
                                                                                                                                           ARRIVAL DATE MAY 16 1966
                                                                             FLIGHT TIME 146.00
LAUNCH DATE DEC 21 1965
                                                                            CISTANCE 434.193
   HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 27.329 GAL -4.95 AZL 85.55 HCA 212.96 SHA 125.59 ECC .19171 INC 4.4497 V1 30.273 RP 108.93 LAP -2.42 LOP 301.80 VP 37.147 GAP 8.03 AZP 93.74 TAL 201.82 TAP 54.78 RCA 101.52 APO 149.67 VZ 34.787 RC 148.138 GL 28.75 GP -8.95 ZAL 120.74 ZAP 157.17 ETS 336.65 ZAE 130.02 ETE 187.93 ZAC 61.60 ETC 157.03 CLP-158.91
   PLANETOCENTRIC CONIC
    C3 19.283 VHL 4.391 OLA 13.46 RAL 316.25 RAD 6567.8 VEL 11.860 PTH 2.10 VHP 5.587 OPA -25.31 RAP 329.36 ECC 1.5173 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  181.50
                                                                                                    98.60 1 28 7
62.50 17 26 9
99.99 2 51 46
61.14 18 36 27
                                                                                                                                2037.2
                                                                                                                                                 -25.61
                    0 44 10 2637,23
16 12 31 4418,24
                                                     -27.08
                                                                     70.05
         90.00
                                                                                    175.83
                                                                                                                                   3818.2
                                                                                                                                                     3.29
                                                                                                                                                                   177.53
                                                       7.02
                                                                    184.22
         90.00
                    2 12 33 2352.18
17 26 49 4178.53
3 36 38 2089.11
18 19 14 4014.37
                                                                                                                                   1752.2
                                                                                                                                                   -26.65
                                                                                                                                                                   40.45
                                                                     48.86
                                                                                   181.27
                                                     -28.32
       100.00
                                                                    165.99
                                                                                    175.23
                                                                                                                                   3578.5
                                                                                                                                                     4.22
                                                                                                                                                                  159.39
       100.00
                                                      8.13
                                                                                                              4 11 27
19 26 8
                                                                                                    103.81
                                                                                                                                   1489.1
                                                                                                                                                   -29.36
                                                                                                                                                                    19.58
       110.00
                                                                      28.09
                                                                                    180.48
                                                     -31.58
                                                                                                                                   3414.4
                                                                                                                                                                  145,45
                                                                                    173.50
                                                                                                     57.43
                                                                                                                                                     6.62
                                                                    151.81
       110.00
                                                     11.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 4374.7 SCR 227.6 SC3 220.9

RRT -.1498 RRF -.0228 RTF .8933

SCB 4380.6 R23 -.1127 R13 -.8933
                                                                                                                              ST 1785.9 SR 193.7 SS 613.3
CRT .9060 CRS -.9934 CST -.9432
     TOE 1.2722 TRA-1.6177 TC3-3.8902 BAU 1.0034
    ROE .1482 RRA .0274 RC3 .1301 FAU .05620
FOE .9719 FRA -.1093 FC3-2.5231 BSP 13737
                                                                                                                               LSA 1886.8 MSA 207.7 SSA 12.1
EL1 1794.6 EL2 81.6 ALF 5.62
                                                                        SG1 4374.8 SG2 225.0 THA 179.55
     BOE 1.2808 BRA 1.6179 BC3 3.8923 FSP -721
                                                                                                                                           ARRIVAL DATE MAY 18 1966
                                                                             FLIGHT TIME 148.00
LAUNCH DATE DEC 21 1965
                                                                            OISTANCE 439.991
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 27.271 GAL -4.62 A7L 85.68 MCA 216.12 SMA 125.22 ECC .19239 INC 4.3231 VI 30.273 RP 108.94 LAP -2.55 LOP 304.97 VP 37.103 GAP 8.22 A7P 93.49 TAL 200.13 TAP 56.25 RCA 101.13 APO 149.31 V2 34.786 RC 150.390 GL 28.40 GP -8.10 ZAL 118.88 ZAP 158.44 ETS 337.62 ZAE 130.04 ETE 187.15 ZAC 63.25 ETC 158.27 CLP-159.96
   PLANETOCENTRIC CONIC
    C3 18.560 VHL 4.308 DLA 13.81 RAL 318.38 RAD 6567.8 VEL 11.830 PTH 2.10 VHP 5.679 DPA -23.82 RAP 331.23 ECC 1.3054
    LNCH AZMTH LNCH TIME L-1 TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 49 33 2640.61 -27.12 70.30 183.11 98.49 1 33 33 2040.6 -25.66 61.93
                                                                                                  98.49 1 33 33
62.35 17 37 27
99.90 2 57 25
60.97 18.47 31
103.77 4 17 36
57.22 19 36 43
                                                                                 183.11
                      0 49 33 2640.61
                    16 24 10 4396.85
2 18 11 2354.79
                                                       6.35
                                                                     183.01
                                                                                    177.45
                                                                                                                                    3796.9
                                                                                                                                                     2.60
                                                                                                                                                                   176.33
         90.00
                                                                                                                                    1754.8
                                                                                                                                                   -26.69
                                                                                                                                                                    40.64
                                                     -28.35
                                                                      49.05
                                                                                   182.88
       100.00
                                                                                                                                    3557.9
                                                                                                                                                      3.52
                                                                                                                                                                   158.26
                                                        7,45
                                                                    164.84
                                                                                    176.85
                                   4157.91
       100.00
                    17 38 13
                      3 42 46 2090.10
                                                                                                                                    1490.1
                                                                                                                                                   -29.38
                                                                                                                                                                    19.65
                                                     -31.60
                                                                      28.16
                                                                                    182.10
       110.00
                    18 30 7
                                                     10.30
                                                                    150.78
                                                                                    175.13
                                                                                                                                    3395.4
                                                                                                                                                     5.91
                                                                                                                                                                   144.45
       110.00
                                    3995.36
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4463.3 SGR 243.7 SG3 216.2
RRT -.1560 RRF -.0523 RTF .8917
     TOE 1.2903 TRA-1.5256 TC3-4.1216 BAU 1.0234
                                                                                                                             ST 1830.0 SR 203.7 55 614.9
CRT .9234 CRS -.9962 CST -.9441
    ROE .1531 RRA .0180 RC3 .1528 FAU .05390
FOE .9409 FRA -.0418 FC3-2.5141 BSP 14031
BOE 1.2993 BRA 1.5257 BC3 4.1244 FSP -705
                                                                         SGB 4470.0 R23 -.0883 R13 -.8917
                                                                                                                              LSA 1930.3 MSA 205.7 SSA 13.3
                                                                                                                             ELI 1839.7 ELZ 77.8 ALF 5.88
                                                                         SGI 4463.5 SG2 240.7 THA 179.51
```

```
ARRIVAL CATE MAY 20 1966
                                                                        FLIGHT TIME 150.00
LAUNCH DATE DEC 21 1965
                                                                       DISTANCE 445.777
  HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 27.214 GAL -4.27 AZL 85.79 HCA 219.29 SMA 124.85 ECC .19322 INC 4.2142 VI 30.273 RP 108.94 LAP -2.67 LOP 308.13 VP 37.060 GAP 8.42 AZP 93.26 TAL 198.42 TAP 57.70 RCA 100.73 APO 148.97 V2 34.785
    RC 152.629 GL 28.10 GP -7.40 7AL 116.86 7AP 159.63 ETS 338.39 7AE 130.06 ETE 186.51 7AC 65.02 ETC 159.36 CLP-160.97
   PLANETOCENTRIC CONIC
    C3 17.926 VML 4.234 DLA 14.29 RAL 320.62 RAD 6567.7 VEL 11.803 PTH 2.09 VMP 5.777 DPA -22.44 RAP 333.15 ECC 1.2950
    LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 54 15 2649.03 -27.20 70.90 184.92 98.20 1 38 24 2049.0 -25.78 62.51 90.00 16 37 16 4372.20 5.57 181.61 179.24 62.19 17 50 8 3772.2 1.80 174.96
                                                                                                                                                          41.15
                                                                                                99.63 3 2 34
                                                                                                                            1762.1
                  2 23 12 2362.15
17 51 0 4134.31
                                                                               184.70
                                                  -28.43
                                                                 49.58
      100.00
                                                                                              60.79 18 59 54
103.56 4 23 25
57.01 19 48 26
                                                                                                                                                         156.96
                                                                                                                           3534.3
                                                                                                                                           2.72
                                                                               178.64
                                                   6.67
                                                                163.53
      100.00
                                                                                                                                                          20.02
                                                                                                                          1495.3
                                                                                                                                          -29.50
                  3 48 30 2095.28
18 42 12 3973.94
                                                                              183.93
                                                 -31.68
                                                                 28.54
      110.00
                                                                                                                                                          143.32
                                                                                                                            3373.9
                                                                                                                                             5.10
                                                                               176.91
                                                               149.63
                                                 9.51
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1882.0 SR 214.3 SS 618.1
CRT .9397 CRS -.9974 CST -.9458
                                                                    SGT 4549.7 SGR 259.5 SG3 211.5
RRT -.1520 RRF -.0682 RTF .8906
    TOE 1.3162 TRA-1.4270 TC3-4.3481 BAU 1.0429
    ROE .1583 RRA .0083 RC3 .1726 FAU .05164
FOE .9139 FRA .0219 FC3-2.4939 BSP 14322
                                                                                                                        LSA 1982.1 MSA 202.5 SSA 14.4
                                                                    SGB 4557.1 R23 -. 0684 R13 -. 8906
                                                                                                                        EL1 1892.8 EL2 72.8 ALF 6.12
                                                                    SG1 4549.8 SG2 256.5 THA 179.50
    BOE 1.3257 BRA 1.4270 BC3 4.3515 FSP
                                                     -690
                                                                                                                                   ARRIVAL DATE MAY 22 1966
                                                                        FLIGHT TIME 152.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 451.552
    RL 147.17 LAL .00 LOL 88.92 VL 27.157 GAL -3.92 A7L 85.88 MCA 222.45 SMA 124.49 ECC .19419 INC 4.1191 VI 30.273 RP 108.94 LAP -2.78 LOP 311.29 VP 37.018 GAP 8.62 A7P 93.04 TAL 196.69 TAP 59.14 RCA 100.32 APO 148.66 V2 34.784 RC 154.855 GL 27.83 GP -6.81 TAL 114.69 ZAP 160.74 ETS 339.00 ZAE 130.07 ETE 185.96 ZAC 66.87 ETC 160.32 CLP-161.95
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                  2.08 VHP 5.878 DPA -21.13 RAP 335.12 ECC 1.2859
    C3 17.375 VHL 4.168 DLA 14.85 RAL 322.95 RAD 6567.7 VEL 11.780 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2061.9
                                                                                                                                         -25.97
                  0 58 26 2661.91
16 51 44 4344.80
2 27 48 2373.71
18 5 3 4108.23
3 53 57 2104.14
18 55 23 3950.57
                                                                                               97.75
                                                                                                            1 42 48
                                                                  71.82
                                                                               186.95
                                                  -27.32
                                                                                                62.04 18 4 9
99.21 3 7 22
60.62 19 13 31
                                                                                                                                              .92
                                                                                                                                                          173.43
                                                                                                                             3744.8
                                                                                181.21
                                                    4.70
                                                                 180.07
        90.00
                                                                                                                                                           41.96
                                                                                                                             1773.7
                                                                                                                                            -26.99
                                                                               186.74
                                                  -28.56
                                                                  50.41
       100.00
                                                                                                                                                          155.52
                                                                                                                             3508.2
                                                                                                                                             1.84
                                                                               180.61
                                                                 162.08
                                                    5.80
       100.00
                                                                                              103.20 4 29 1
56.80 20 1 14
                                                                                                                             1504.1
                                                                                                                                           -29.68
                                                                                                                                                           20.64
                                                                  29.19
                                                                               185.99
                                                  -31.82
       110.00
                                                                                                                             3350.6
                                                                                                                                             4.21
                                                                                                                                                          142.09
                                                                                178.87
       110.00
                                                    8.64
                                                                 148.38
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1941.3 SR 225.1 SS 622.8
CRT .9545 CRS -.9970 CST -.9481
                                                                     SGT 4634.0 SGR 275.0 SG3 206.8
     TOE 1.3489 TRA-1.3214 TC3-4.5685 BAU 1.0621
                                                                     RRT -.1414 RRF -.0745 RTF .8898
    RDE .1638 RRA -.0015 RC3 .1895 FAU .04943
FDE .89D6 FRA .0827 FC3-2.4629 BSP 14621
BDE 1.3588 BRA 1.3214 BC3 4.5724 FSP -676
                                                                                                                        LSA 2041.5 MSA 198.3 SSA 15.5
EL1 1953.2 EL2 66.7 ALF 6.32
                                                                     SGB 4642.2 R23 -. 0522 R13 -. 8898
                                                                    SG1 4634.2 SG2 272.2 THA 179.52
                                                                                                                                   ARRIVAL DATE MAY 24 1966
                                                                        FLIGHT TIME 154.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 457.316
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 27.101 GAL -3.55 A7L 85.97 MCA 225.61 5MA 124.13 ECC .19531 INC 4.0349 VI 30.273 RP 108.94 LAP -2.88 LOP 314.46 VP 36.977 GAP 8.82 A7P 92.83 TAL 194.96 TAP 60.56 RCA 99.89 APO 148.38 V2 34.785 RC 157.067 GL 27.58 GP -6.31 7AL 112.37 7AP 161.81 ETS 339.48 7AE 130.08 ETE 185.50 7AC 68.79 ETC 161.18 CLP-162.90
   PLANETOCENTRIC CONIC
    C3 16.901 VML 4.111 DLA 15.51 RAL 325.40 RAD 6567.7 VEL 11.759 PTH 2.08 VMP 5.984 DPA -19.88 RAP 337.12 ECC 1.2781
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2018.9
                                                                                                                                           -26.19
                                                                                                            1 46 52
                   1 2 13 2678.86
17 7 29 4315.08
2 32 4 2389.10
18 20 19 4080.08
                                                                                               97.16
                                                                              189.18
                                                   -27.47
                                                                  73.04
        90.00
                                                                                                 61.91 18 19 24
                                                                                                                             3715.1
                                                                                                                                              -.04
                                                                                183.37
                                                                 178.41
                                                    3.75
         90.00
                                                                                                 98.65 3 11 53
60.47 19 28 19
                                                                                                                                            -27.23
                                                                                                                             1789.1
                                                                                188.99
                                                  -28.73
                                                                  51.53
       100.00
                                                                                                                                                          153.98
                                                                                                                                              .89
                                                                                                                             3480.1
                                                                                182.76
                                                    4.86
                                                                 160.52
       100.00
                                                                                                                                           -29.93
                                                                                               102.69 4 34 31
66.59 20 15 4
                                                                                                                             1516.3
                                                                                188.27
                    3 59 15 2116.33
19 9 38 3925.62
                                                                  30.10
                                               -32.01
       110.00
                                                                                                                                              3.26
                                                                                                                             3325.6
                                                                 147.05
                                                                                181.00
                                                   7.71
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2011.3 SR 236.3 SS 630.3
CRT .9675 CRS -.9950 CST -.9510
                                                                    SGT 4710.6 SGR 290.0 SG3 201.9
RRT -.1252 RRF -.0717 RTF .8887
SG8 4719.5 R23 -.0403 R13 -.8887
     TOE 1.3910 TRA-1.2050 TC3-4.7719 BAU 1.0792
     ROE .1695 RRA -.0113 RC3 .2038 FAU .04712
FOE .8726 FRA .1434 FC3-2.4136 BSP 14840
                                                                                                                       LSA 2112.1 MSA 193.5 SSA 16.5
EL1 2024.3 ELZ 59.3 ALF 6.49
                                                                     SG1 4710.8 SG2 287.7 THA 179.56
     BOE 1.4013 BRA 1.2051 BC3 4.7763 FSP -656
                                                                                                                                    ARRIVAL DATE MAY 26 1966
                                                                         FLIGHT TIME 156.00
     RL 147.17 LAL .00 LOL 88.92 VL 27.045 GAL -3.18 AZL 86.04 MCA 228.77 SMA 123.79 ECC .19659 INC 3.9592 V1 30.273 RP 108.94 LAP -2.98 LOP 317.62 VP 36.938 GAP 9.03 AZP 92.61 TAL 193.21 TAP 61.97 RCA 99.45 APO 148.12 V2 34.786 RC 159.265 GL 27.32 GP -5.87 ZAL 109.92 ZAP 162.82 ETS 339.83 ZAE 130.10 ETE 185.11 ZAC 70.78 ETC 161.95 CLP-163.82
                                                                         DISTANCE 463.068
    PLANETOCENTRIC CONIC
     C3 16.504 VHL 4.062 DLA 16.22 RAL 327.97 RAD 6567.7 VEL 11.743 PTH 2.07 VHP 6.095 DPA -18.67 RAP 339.15 ECC 1.2716
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               96.43 1 50 40
61.80 18 35 53
97.95 3 16 14
60.33 19 44 15
102.06 4 39 59
56.41 20 29 53
                                                                                                             1 50 40
                                                                                                                             2099.6
                                                                              191.63
                                                   -27.64
                                                                  74.53
         90.00
                     1 5 40 2699.59
                                                                                                                                              -1.06
                                                                                                                                                           170.01
                                                                                                                              3683.4
                                                                  176.64
                                                                                185.73
                                                      2.73
         90.00
                    17 24 29
                                   4283.44
                                                                                                                              1808.0
                                                                                                                                             -27.51
                                                                                                                                                            44.38
                                  2408.00
                                                    -28.91
                                                                   52.90
                                                                                191.45
        100.00
                      2 36 6
                                                                                                                                                           152.34
                                                                                                                             3450.3
                                                                                                                                               -.12
                                                                                185.11
        100.00
                    18 36 45
                                   4050.26
                                                      3.85
                                                                 158.87
                                                                                                                                                            22.58
                                                                                                                             1531.5
                                                                                                                                            -30.24
                                                    -32.23
                                                                   31.23
                                                                                190.77
        110.00
                      4 4 27 2131.55
                                                                                                                             3299.5
                                                                                                                                                           139.42
                                                                  145.66
                                                                                 183.33
                                                    6.72
                    19 24 53
                                   3899.48
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                   SGT 4789.9 SGR 304.3 SGS 197.4 ST 2085.0 SR 247.5 S5 636.9 RRT -.1067 RRF -.0662 RRF .8887 CRT .9781 CRS -.9916 CST -.9542 SGB 4799.6 R23 -.0291 R13 -.8887 LSA 2186.0 MSA 187.6 SSA 17.5 SG1 4790.0 SG2 302.5 THA 179.61 EL1 2099.0 EL2 51.2 ALF 6.63
      TOE 1.4364 TRA-1.0836 TC3-4.9699 BAU 1.0976
      RDE .1753 RRA -.0208 RC3 .2150 FAU .04502
     FDE .8544 FRA .1986 FC3-2.3615 BSP 15127
BDE 1.4471 BRA 1.0838 BC3 4.9745 FSP -644
```

```
LAUNCH CATE CEC 21 1965
                                                                               FLIGHT TIME 158.00
                                                                                                                                               ARRIVAL CATE MAY 28 1966
   HELIOCENTRIC CONIC
                                                                               CISTANCE 468.808
    RL 147.17 LAL .00 LOL 88.92 VL 26.990 GAL -2.79 AZL 86.11 MCA 231.93 SMA 123.44 ECC .19805 INC 3.8906 V1 30.273
RP 108.93 LAP -3.06 LOP 320.78 VP 36.899 GAP 9.24 AZP 92.40 TAL 191.44 TAP 63.37 RCA 99.00 APO 147.89 V2 34.788
RC 161.449 GL 27.05 GP -5.49 ZAL 107.34 ZAP 163.79 ETS 340.06 ZAE 130.13 ETE 184.78 ZAC 72.82 EYC 162.64 CLP-164.73
    PLANETOCENTRIC
    C3 16.183 VHL 4.023 CLA 17.00 RAL 330.65 RAC 6567.6 VEL 11.729 PTM 2.07 VMP 6.209 CPA -17.50 RAP 341.20 ECC 1.2663
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 8 53 2723.89 -27.81 76.29 194.30 95.56 1 54 17 2123.9 -26.75 67.78
                    17 42 41 4250.19
2 39 58 2430.20
16 54 18 4019.11
4 9 39 2149.59
         90.00
                                                                                       188.29
                                                         1.66
                                                                       174.78
                                                                                                         61.73
                                                                                                                   18 53 31
                                                                                                                                        3650.2
                                                                                                                                                        -2.13
                                                                                                                                                                        168.15
       100.00
                                                       -29.11
                                                                        54.52
                                                                                      194.13
                                                                                                         97.11
                                                                                                                      3 20 28
                                                                                                                                       1830.2
                                                                                                                                                        -27.82
                                                                                                                                                                         45.96
                                                                                                       60.23 20 1 17
101.29 4 45 29
56.24 20 45 38
       100.00
                                                        2.80
                                                                      157.16
                                                                                      187.66
                                                                                                                                       3419.1
                                                                                                                                                        -1.16
                                                                                                                                                                       150.64
       110.00
                                                      -32.48
                                                                                      193.50
                                                                       32.58
                                                                                                                                       1549.6
                                                                                                                                                      -30.56
                                                                                                                                                                         23.87
       110.00
                    19 41 6
                                     3872.49
                                                       5.70
                                                                     144.24
                                                                                      185.86
                                                                                                                                       3272.5
                                                                                                                                                         1.23
                                                                                                                                                                       134.01
   CIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SGT 4865.0 SGR 317.9 SG3 192.9
RRT -.0860 RRF -.0568 RTF .8890
SGB 4875.4 R23 -.0201 R13 -.8890
                                                                                                                                 ST 2164.4 SR 258.8 55 644.1
CRT .9863 CRS -.9871 CST -.9576
    TOE 1.4874 TRA -.9533 TC3-5.1494 BAU 1.1152
    ROE .1814 RRA -.0301 RC3 .2232 FAU .04294
FOE .8383 FRA .2521 FC3-2.2971 BSP 15401
BOE 1.4984 BRA .9537 BC3 5.1543 FSP -631
                                                                                                                                  LSA 2265.6 MSA 181.4 SSA 18.5
ELI 2179.4 EL2 42.5 ALF 6.73
                                                                           SG1 4865.1 SG2 316.7 THA 179.68
LAUNCH DATE DEC 21 1965
                                                                               FLIGHT TIME 160.00
                                                                                                                                               ARRIVAL DATE MAY 30 1966
   HELIOCENTRIC CONIC
                                                                              DISTANCE 474.534
    RL 147.17 LAL .00 LOL 88.92 VL 26.936 GAL -2.39 A7L 86.17 MCA 235.09 SMA 123.11 ECC .19969 INC 3.8276 V1 30.273
RP 108.92 LAP -3.14 LOP 323.95 VP 36.862 GAP 9.45 A7P 92.19 TAL 189.67 TAP 64.76 RCA 98.52 APO 147.69 V2 34.791
RC 163.619 GL 26.74 GP -5.17 ZAL 104.63 ZAP 164.73 ETS 340.19 ZAE 130.16 ETE 184.49 ZAC 74.90 ETC 163.27 CLP-165.61
   PLANETOCENTRIC CONIC
    C3 15.942 VHL 3.993 DLA 17.81 RAL 333.46 RAD 6567.6 VEL 11.719 PTH 2.06 VHP 6.329 DPA -16.34 RAP 343.27 ECC 1.2624 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 11 55 2751.56 -27.98 78.30 197.18 94.57 1 57 47 2151.6 -27.05 69.75 90.00 18 2 2 4215.70 .55 172.86 191.08 61.69 19 12 18 3615.7 -3.24 166.22
      100.00 2 43 44 2455.50
100.00 19 12 55 3986.99
110.00 4 14 54 2170.23
110.00 19 58 14 3845.02
                                                                                                      96.16 3 24 39
60.15 20 19 22
100.41 4 51 5
56.10 21 2 19
                                                     -29.31
                                                                        56.38
                                                                                      197.04
                                                                                                                                       1855.5
                                                                                                                                                        -28.15
                                                                                                                                                                         47.77
                                                        1.72
                                                                      155.39
                                                                                     190.43
                                                                                                                                       3387.0
                                                                                                                                                        -2.27
                                                                                                                                                                        148.87
                                                       -32.74
                                                                        34.13
                                                                                     196.45
                                                                                                                                       1570.2
                                                                                                                                                      -30.96
                                                                                                                                                                         25.36
                                                                      142.79
                                                        4.66
                                                                                      188.59
                                                                                                                                       3245.0
                                                                                                                                                           .18
                                                                                                                                                                        136.58
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 4936.6 SGR 330.8 SG3 188.3
RRT -. 0636 RRF -. 0442 RTF .8896
SGB 4947.7 R23 -. 0127 R13 -. 8895
    TOE 1.5440 TRA -.8136 TC3-5.3066 BAU 1.1321
                                                                                                                                   ST 2249.5 SR 270.2 55 651.5
    RDE .1879 RRA -.0390 RC3 .2285 FAU .04089
                                                                                                                                   CRT .9921 CRS -.9816 CST -.9610
                                                                                                                                LSA 2350.9 MSA 174.8 SSA 19.4
    FDE .8238 FRA .3037 FC3-2.2207 85P 15658
    BDE 1.5554 BRA .8146 BC3 5.3116 FSP -618
                                                                          5G1 4936.7 5G2 330.1 THA 179.75
                                                                                                                                  EL1 2265.4 EL2 33.6 ALF
                                                                                                                                                                          6.80
LAUNCH DATE DEC 21 1965
                                                                              FLIGHT TIME 162.00
                                                                                                                                              ARRIVAL DATE JUN 1 1966
                                                                              DISTANCE 480.248
    RL 147.17 LAL .00 LOL 88.92 VL 26.882 GAL -1.98 AZL 86.23 MCA 238.25 SMA 122.78 ECC .20152 INC 3.7694 V1 30.273
RP 108.91 LAP -3.20 LOP 327.12 VP 36.826 GAP 9.67 AZP 91.99 TAL 187.89 TAP 66.14 RCA 98.04 APO 147.52 VZ 34.794
RC 165.775 GL 26.40 GP -4.88 ZAL 101.80 ZAP 165.63 ETS 340.21 ZAE 130.21 ETE 184.24 ZAC 77.03 ETC 163.83 CLP-166.47
   PLANETOCENTRIC CONIC
    C3 15.784 VHL 3.973 DLA 18.66 RAL 336.38 RAD 6567.6 VEL 11.712 PTH 2.06 VHP
                                                                                                                        6.454 OPA -15.20 RAP 345.36 ECC 1.2598
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   200.28
                                                                                                        93.45 2 1 11
61.69 19 32 10
3 28 51
                  1 14 49 2782.43
18 22 30 4180.29
                                                      -28.12
                                                                      80.54
                                                                                                                     2 1 11
                                                                                                                                       2182.4
                                                                                                                                                     -27.35
                                                                                                                                                                        71.96
                                                        - .60
                                                                      170.88
                                                                                     194.09
                                                                                                                                                        -4.38
                                                                                                                                       3580.3
                                                                                                                                                                       164.24
                                                                                                        95.08 3 28 51
60.11 20 38 27
99.41 4 56 50
55.99 21 19 50
                 2 47 28 2483.68
19 32 32 3954.27
       100.00
                                                     -29.50
                                                                        58.45
                                                                                     200.17
                                                                                                                                       1883.7
                                                                                                                                                                        49.79
                                                                                                                                                      -28.48
                                                                                  193.42
                                                                      153.60
                                                         . 6 t
                                                                                                                                       3354.3
                                                                                                                                                         -3.38
                                                                                                                                                                       147.07
                                                                                 199.64
                   4 20 17 2193.28
20 16 13 3817.44
       110.00
                                                     -33.01
                                                                       35.87
                                                                                                                                       1593.3
                                                                                                                                                      -31.36
                                                                                                                                                                        27.04
       110.00
                                                      3.61
                                                                     141.34
                                                                                     191.54
                                                                                                                                       3217.4
                                                                                                                                                         - .87
                                                                                                                                                                       135.14
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                                                ST 2341.4 SR 281.7 SS 659.9
CRT .9958 CRS -.9752 CST -.9645
                                                                        56T 5001.2 SGR 343.0 SG3 183.8
RRT - 0394 RRF - 0278 RTF .8900
SGB 5013.0 R23 - 0075 R13 - 8900
    TOE 1.6074 TRA -.6625 TC3-5.4309 BAU 1.1470
    ROE .1947 RRA -.0473 RC3 .2308 FAU .03881
FOE .8121 FRA .3554 FC3-2.1290 89P 15856
BOE 1.6192 BRA .6642 BC3 5.4358 FSP -602
                                                                                                                                 LSA 2443.0 MSA 168.6 SSA 20.3
                                                                          SG1 5001.2 SG2 342.8 THA 179.84
                                                                                                                                  EL1 2358.1 EL2 25.6 ALF
                                                                                                                                                                          6.83
LAUNCH DATE DEC 21 1966
                                                                              FLIGHT TIME 164.00
                                                                                                                                              ARRIVAL DATE JUN 3 1966
   HELIOCENTRIC CONIC
                                                                              DISTANCE 485.946
   RL 147.17 LAL .00 LOL 88.92 VL 26.829 GAL -1.55 A7L 86.29 MCA 241.42 SMA 122.45 ECC .20356 INC 3.7149 V1 30.273
RP 108.90 LAP -3.26 LOP 330.28 VP 36.791 GAP 9.90 AZP 91.78 TAL 186.10 TAP 67.51 RCA 97.53 APO 147.38 VZ 34.798
RC 167.915 GL 26.00 GP -4.62 ZAL 98.87 ZAP 166.51 ETS 340.11 ZAE 130.26 ETE 184.03 ZAC 79.19 ETC 164.35 CLP-167.31
   PLANETOCENTRIC CONIC
    C3 15.712 VHL 3.964 DLA 19.52 RAL 339.43 RAD 6567.6 VEL 11.709 PTH 2.06 VHP 6.584 CPA -14.07 RAP 347.46 ECC 1.2586
   LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 17 37 2816.31 -28.24 83.01 203.60 92.22 2 4 34 2216.3 -27.63 74.40
                                                                                                     92.22 2 4 34
61.73 19 53 4
93.89 3 33 7
60.11 20 58 27
98.30 5 2 48
55.90 21 38 8
                                                                                                                                       2216.3
        90.00
                   18 44 D
                                    4144.36
                                                       -1.76
                                                                      168.88
                                                                                     197.32
                                                                                                                                       3544.4
                                                                                                                                                         -5.52
                                                                                                                                                                       162.22
       100.00
                     2 51 12 2514.54
                                                                       60.73
                                                                                     203.51
                                                                                                                                       1914.5
                                                                                                                                                       -28.81
                                                                                                                                                                        52.03
      100.00
                   19 53 6 3921.36
                                                        - . 51
                                                                      151.79
                                                                                     196.63
                                                                                                                                       3321.4
                                                                                                                                                         -4.48
                                                                                                                                                                      145.26
      110.00
                     4 25 50 2218.50
                                                      -33.28
                                                                       37.79
                                                                                    203.06
                                                                                                                                       1618.5
                                                                                                                                                    -31.77
                                                                                                                                                                        28.89
      110.00
                   20 34 58
                                    3790.17
                                                       2.57
                                                                      139.92
                                                                                     194.70
                                                                                                                                       3190.2
                                                                                                                                                       -1.92
                                                                                                                                                                       133.71
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY
                                                                       SGT 5067.5 SGR 354.4 SG3 179.5 ST 2431.5 SR 293.2 SS 665.9 RRT -.0153 RRF -.0118 RTF .8915 CRT .9973 CR5 -.9682 CST -.9676 SGB 5079.9 R23 -.0019 R13 -.8915 LSA 2532.8 MSA 162.4 SSA 21.0 SG1 5067.5 SG2 354.4 THA 179.94 EL1 2449.1 EL2 21.3 ALF 6.86
    TOE 1.6721 TRA -.5046 TC3-5.5328 BAU 1.1632
   ROE .2021 RRA -.0551 RC3 .2297 FAU .03693
FOE .7989 FRA .4033 FC3-2.0346 BSP 16105
                                                                     SG1 5067.5 SG2 354.4 THA 179.94
    BOE 1.6842 BRA .5076 BC3 5.5375 FSP -590
```

ARRIVAL DATE JUN 5 1966 FLIGHT TIME 166.00 LAUNCH DATE DEC 21 1965 DISTANCE 491.629 HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 26.776 GAL -1.11 A7L 86.34 HCA 244.58 SMA 122.14 ECC .20583 INC 3.6636 VI 30.273 RP 108.89 LAP -3.31 LOP 333.45 VP 36.757 GAP 10.13 A7P 91.57 TAL 184.30 TAP 68.88 RCA 97.00 APO 147.28 V2 34.803 RC 170.040 GL 25.55 GP -4.39 ZAL 95.84 ZAP 167.36 ETS 339.90 ZAE 130.32 ETE 183.85 ZAC 81.37 ETC 164.81 CLP-168.14 PLANETOCENTRIC CONIC C3 15.734 VHL 3.967 DLA 20.39 RAL 342.59 RAD 6567.6 VEL 11.710 PTH 2.06 VHP 6.721 CPA -12.95 RAP 349.58 ECC 1.2589 LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.88 90.87 2 7 56 2253.0 77.06 1 20 23 2852.99 19 6 27 4108.31 207.13 A5.70 -28.30 90.00 61.82 20 14 55 3508.3 -6.66 160.19 200.78 -2.92 166.86 92.60 3 37 29 1947.8 -29.11 54.46 207.08 2 55 1 2547.85 -29.79 63.20 60.15 21 19 19 3288.7 -5.58 143.45 200.06 100.00 20 14 30 3888.69 -1.62 150.00 97.10 5 9 2 55.85 21 57 7 1645.7 -32.18 30.90 4 31 37 2245.65 20 54 24 3763.65 206.70 -33.53 39.87 110.00 -2.93 132.33 3163.6 198.07 1.56 138.53 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5127.6 SGR 365.1 SG3 175.1 RRT .0094 RRF .0064 RTF .8930 ST 2521.8 SR 304.8 SS 671.0 CRT .9970 CRS -.9607 CST -.9706 TOE 1.7401 TRA -.3367 TC3-5.5955 BAU 1.1780 ROE .2101 RRA -.0621 RC3 .2257 FAU .03501 FDE .7863 FRA .4499 FC3-1.9264 BSP 16334 SGB 5140.6 R23 -.0021 R13 .8930 LSA 2622.5 MSA 156.9 SSA 21.7 SG1 5127.6 SG2 365.0 THA EL1 2540.1 EL2 23.4 ALF .04 6.87 BOE 1.7527 BRA .3424 BC3 5.6000 FSP -577 ARRIVAL DATE JUN 7 1966 FLIGHT TIME 168.00 **DISTANCE 497.295** HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 26.724 GAL -.66 AZL 86.39 MCA 247.74 SMA 121.83 ECC .20833 INC 3.6149 VI 30.273 RP 108.87 LAP -3.35 LOP 336.62 VP 36.724 GAP 10.38 AZP 91.37 TAL 182.49 TAP 70.24 RCA 96.45 APO 147.21 V2 34.808 RC 172.148 GL 25.03 GP -4.19 ZAL 92.73 ZAP 168.19 ETS 339.57 ZAE 130.38 ETE 183.69 ZAC 83.59 ETC 165.23 CLP-168.95 PLANETOCENTRIC CONIC 2.06 VHP 6.864 DPA -11.83 RAP 351.70 ECC 1.2610 15.857 VHL 3.982 OLA 21.25 RAL 345.86 RAD 6567.6 VEL 11.715 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 89.43 2 11 21 2292.2 -28.09 79.91 210.86 1 23 9 2892.25 -28.31 88.57 90.00 61.95 20 37 37 91.22 3 42 1 60.22 21 40 54 95.80 5 15 35 55.82 22 16 41 -7.79 158.16 3472.6 90.00 19 29 44 4072.56 -4.06 154.86 204.47 57.06 1983.3 -29.38 210.85 2 58 58 2583.32 -29.87 65.83 100.00 3256.7 -6.64 141.68 100.00 20 36 37 3856.73 4 37 41 2274.47 21 14 23 3738.34 203.72 -2.70 148.24 1674.5 -32.58 33.06 210.57 42.10 110.00 -33.75 3138.3 -3.89 131.00 110.00 . 59 201.66 137.21 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5183.4 SGR 375.0 SG3 170.9 RRT .0353 RRF .0273 RTF .8948 ST 2614.1 SR 316.6 SS 676.8 CRT .9951 CRS -.9530 CST -.9734 TOE 1.8137 TRA -.1559 TC3-5.6153 BAU 1.1913 RDE .2189 RRA -.0682 RC3 .2187 FAU .03313 LSA 2714.4 MSA 152.5 SSA 22.1 FOE .7763 FRA .4969 FC3-1.8090 BSP 16503 BOE 1.8269 BRA .1701 BC3 5.6195 FSP -562 SGB 5196.9 R23 -.0045 R13 .8948 SG1 5183.4 SG2 374.8 THA EL1 2633.0 EL2 31.1 ALF 6.87 .15 ARRIVAL DATE JUN 9 1966 FI IGHT TIME 170.00 LAUNCH DATE DEC 21 1965 DISTANCE 502.942 HELLOCENTRIC CONIC PLANETOCENTRIC CONIC C3 16.088 VHL 4.011 DLA 22.08 RAL 349.22 RAD 6567.6 VEL 11.725 PTH 2.07 VHP 7.014 OPA -10.72 RAP 353.84 ECC 1.2648 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 87.91 2 14 52 62.12 21 1 1 89.76 3 46 46 2333.8 -28.24 214.77 2 14 52 -28.25 91.60 1 25 58 2933.78 90.00 -8.87 3437.6 -5.18 162.90 208.38 4037.61 90.00 19 53 44 -29.61 59.81 2020.6 -29.89 68.60 214.81 3 3 6 2620.62 89.76 3 46 46 60.32 22 3 4 94.43 5 22 30 55.82 22 36 42 100.00 -7.66 207.58 3226.0 -3.74 146.55 3826.00 100.00 20 59 18 1704.6 -32.94 4 44 6 2304.65 21 34 47 3714.74 214.64 -33.93 44.43 110.00 5114.7 -4.79 205.44 135.98 -.31 110.00 DUI 7237.8 SGR 383.9 SG3 166.5 ST 2694.4 SR 328.2 S5 675.5 RRT .0601 RRF .0447 RTF .8982 CRT .9919 CRS -.9450 CST -.9758 SGB 5251.9 R23 -.0096 R13 .8982 LSA 2793.1 MSA 144 # .000 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE 1.8838 TRA .0312 TC3-5.6014 BAU 1.2056 ROE .2285 RRA -.0735 RC3 .2086 FAU .03146 FDE .7601 FRA .5385 FC3-1.6930 BSP 16774 BDE 1.8976 BRA .0798 BC3 5.6053 FSP -561 .25 5G1 5237.9 SG2 383.2 THA ARRIVAL DATE JUN 11 1966 FLIGHT TIME 172.00 LAUNCH DATE DEC 21 1965 DISTANCE 508.568 HELTOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 26.623 GAL .31 A7L 86.48 MCA 254.08 SMA 121.22 ECC .21411 INC 3.5236 V1 30.273
RP 108.83 LAP -3.39 LOP 342.97 VP 36.662 GAP 10.90 A7P 90.97 TAL 178.87 TAP 72.94 RCA 95.27 APO 147.18 V2 34.821
RC 176.312 GL 23.80 GP -3.84 7AL 86.34 ZAP 169.79 ETS 338.45 ZAE 130.53 ETE 183.44 ZAC 88.08 ETC 165.96 CLP-170.53 PLANETOCENTRIC CONIC -9.61 RAP 355.98 ECC 1.2705 C3 16.439 VHL 4.054 DLA 22.88 RAL 352.66 RAD 6567.7 VEL 11.740 PTH 2.07 VHP 7.173 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2377.2 -28.31 1 28 54 2977.24 20 18 15 4004.00 94.77 218.86 86.33 2 18 32 -28.10 90.00 3404.0 -9.91 62.32 21 24 59 161.01 212.49 -6.25 90.00 3 51 49 2059.4 -29.77 71.48 218.95 88.24 3 7 29 2659.38 -29.85 100.00 3197.1 -8.61 60.45 22 25 38 144.96 211.65 21 22 21 3797.09 -4.71 100.00 1735.8 2335.83 -34.07 46.86 218.90 93.00 5 29 50 110.00 4 50 54 55.83 22 56 59 3093.4 -5.60 3693.40 21 55 25 134.87 209.42 110.00 -1.12 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5283.9 SGR 392.6 SG3 162.3 RRT .0865 RRF .0723 RTF .8981 ST 2777.5 SR 340.3 SS 682.3 CRT .9877 CRS -.9371 CST -.9781 TOE 1.9617 TRA .2348 TC3-5.5296 BAU 1.2160 RDE .2395 RRA -.0774 RC3 .1969 FAU .02941 FDE .7547 FRA .5877 FC3-1.5490 BSP 16907 BDE 1.9762 BRA .2472 BC3 5.5331 FSP -537 SGB 5298.5 R23 -.0058 R13 .8981 LSA 2876.4 MSA 147.4 SSA 22.5 EL1 2797.8 EL2 52.8 ALF 6.90 SG1 5284.0 SG2 391.1 THA . 37

```
FLIGHT TIME 174.00
                                                                                                                                                   ARRIVAL CATE JUN 13 1966
LAUNCH DATE DEC 21 1965
                                                                                DISTANCE 514.171
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 26.573 GAL .82 AZL 86.52 MCA 257.24 SMA 120.93 ECC .21744 INC 3.4802 VI 30.273
RP 108.81 LAP -3.39 LOP 346.14 VP 36.633 GAP 11.18 AZP 90.77 TAL 177.05 TAP 74.30 RCA 94.63 APO 147.22 VZ 34.828
RC 178.366 GL 23.09 GP -3.70 ZAL 83.09 ZAP 170.56 ETS 337.62 ZAE 130.61 ETE 183.34 ZAC 90.36 ETC 166.27 CLP-171.31
   PLANETOCENTRIC CONIC
    C3 16.921 VHL 4.114 DLA 23.63 RAL 356.16 RAD 6567.7 VEL 11.760 PTH 2.08 VHP 7.340 CPA -8.51 RAP 358.12 ECC 1.2785 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         223.10
                                                                                                         84.71
                                                                                                                         2 22 24
                                                                                                                                            2422.2
                                                                                                                                                           -28.30
                      1 32 1 3022.23
20 43 5 3972.27
                                                         -27.86
                                                                         98.04
         90.00
                                                                                                             62.55 21 49 18
                                                                                                                                            3372.3
                                                                                         216.79
                                                                                                                                                             -10.87
         90.00
                                                         -7.25
                                                                         159.21
                    3 12 13 2699.16
21 45 35 3770.56
4 58 10 2367.68
22 16 7 3674.81
                                                                                                            86.69 3 77 12
60.59 22 48 25
91.53 5 37 38
55.86 23 17 22
                                                                                         223.26
                                                                                                             86.69
                                                                                                                          3 57 12
                                                                                                                                            2099.2
                                                                                                                                                             -29.87
                                                                                                                                                                               65.63
                                                        -29.73
                                                                          74.44
       100.00
                                                                                                                                            3170.6
                                                                                         215.89
                                                                                                                                                               -9.48
                                                                                                                                                                              136.85
       100.00
                                                         -5.60
                                                                         143.49
                                                                                         223.34
                                                                          49.34
                                                                                                                                            1767.7
                                                                                                                                                             -33.56
                                                                                                                                                                               40.15
       110.00
                                                       -34.15
                                                                                                                                            3074.8
                                                         -1.84
                                                                         133.90
                                                                                         213.56
                                                                                                                                                              -6.30
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            SCT 5329.8 SCR 399.9 SC3 158.3
RRT .1117 RRF .0930 RTF .9007
SCB 5344.8 R23 -.0082 R13 .9007
    TOE 2.0329 TRA .4469 TC3-5.4260 BAU 1.2281
ROE .2513 RRA -.0804 RC3 .1824 FAU .02778
FOE .7406 FRA .6323 FC3-1.4214 BSP 17080
BOE 2.0484 BRA .4540 BC3 5.4291 FSP -524
                                                                                                                                      ST 2842.0 SR 351.9 S5 679.7

CRT .9827 CRS -.9288 CST -.9799

LSA 2939.6 MSA 147.0 SSA 22.3
                                                                                                                                                                               22.3
                                                                              5G1 5330.0 SG2 397.4 THA
                                                                                                                                       EL1 2863.0 EL2 64.6 ALF
                                                                                                                       .48
                                                                                                                                                                                  5.94
                                                                                  FLIGHT TIME 176.00
                                                                                                                                                    ARRIVAL DATE JUN 15 1966
LAUNCH DATE DEC 21 1965
                                                                                 DISTANCE 519.749
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 26.523 GAL 1.35 AZL 86.56 HCA 260.41 SMA 120.64 ECC .22109 INC 3.4378 V1 30.273
RP 108.78 LAP -3.39 LOP 349.32 VP 36.605 GAP 11.48 AZP 90.57 TAL 175.24 TAP 75.65 RCA 93.97 APO 147.31 V2 34.836
RC 180.400 GL 22.31 GP -3.56 ZAL 79.82 ZAP 171.32 ETS 336.57 ZAE 130.70 ETE 183.25 ZAC 92.65 ETC 166.54 CLP-172.08
   PLANETOCENTRIC CONIC
                                                                                                               2.08 VHP 7.518 OPA
    C3 17.548 VHL 4.189 DLA 24.31 RAL 359.71 RAD 6567.7 VEL 11.787 PTH
                                                                                                                                               -7.40 RAP
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 35 24 3068.26 -27.52 101.37 227.46 83.07 2 26 32 2468.3 -28.20 92.77
         90.00
                     21 8 1
                                      3943.05
                                                          -8.16
                                                                         157.55
                                                                                         221.25
                                                                                                             62.79 22 13 44
                                                                                                                                            3343.1
                                                                                                            85.14 4 3 2
60.74 23 11 11
                       3 17 22
                                    2739.48
                                                         -29.53
                                                                          77.42
                                                                                         227.70
                                                                                                                                            2139.5
       100.00
                   22 8 43 3747.07
5 5 56 2399.82
                                                                                                                                            3147.1
                                                                                                                                                                              135.52
       100.00
                                                        -6.38
                                                                         142.19
                                                                                         220.29
                                                                                                                                                             -10.24
                                                                                                             90.04 5 45 56
55.89 23 37 38
                                                                                                                                            1799.8
       110.00
                                                        -34.18
                                                                          51.85
                                                                                         227.93
                                                                                                                                                             -33.80
                                                                                                                                                                              42.63
                     22 36 39
                                      3659.49
                                                         -2.42
                                                                         133.10
                                                                                         217.64
                                                                                                                                            3059.5
                                                                                                                                                             -6.88
                                                                                                                                                                              126.85
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                           SGT 5369.D SGR 406.7 SG3 154.2
RRT .1383 RRF .1183 RTF .9033
                                                                                                                                     ST 2903.0 SR 363.5 $5 678.4
CRT .9771 CRS -.9211 CST -.9817
     TOE 2.1086 TRA .6736 TC3-5.2689 BAU 1.2367
     RDE .2644 RRA -. 0820 RC3 .1667 FAU .02602
    FOE .7301 FRA .6764 FC3-1.2839 BSP 17176
BOE 2.1251 BRA .6786 BC3 5.2715 FSP -509
                                                                            SGB 5384.4 R23 -.0073 R13 .9033
                                                                                                                                       LSA 2999.6 MSA 147.6 55A 21.9
                                                                                                                                    EL1 2924.6 EL2 76.7 ALF
                                                                             SG1 5369.3 SG2 402.8 THA
                                                                                                                    .60
                                                                                 FLIGHT TIME 178.00
                                                                                                                                                   ARRIVAL DATE JUN 17 1966
LAUNCH DATE DEC 21 1965
                                                                                 DISTANCE 525.299
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 26.475 GAL 1.90 AZL 86.60 HCA 263.59 SMA 120.36 ECC .22509 INC 3.3962 VI 30.273
RP 108.76 LAP -3.37 LOP 352.49 VP 36.578 GAP 11.79 AZP 90.38 TAL 173.42 TAP 77.01 RCA 93.27 APO 147.45 VZ 34.845
RC 182.414 GL 21.47 GP -3.44 ZAL 76.57 ZAP 172.06 ETS 335.23 ZAE 130.78 ETE 183.18 ZAC 94.96 ETC 166.79 CLP-172.84
   PLANETOCENTRIC CONTC
    C3 18.337 VHL 4.282 DLA 24.93 RAL 3.28 RAD 6567.7 VEL 11.820 PTH 2.09 VHP 7.706 DPA -6.30 RAP 2.43 ECC 1.3018
LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 39 9 3114.76 -27.10 104.71 231.93 81.45 2 31 4 2514.8 -28.00 96.16
90.00 21 32 44 3917.05 -8.97 156.06 225.86 63.03 22 38 1 3317.1 -12.51 149.18
100.00 3 23 3 2779.77 -29.26 80.38 232.26 83.60 4 9 23 2179.8 -29.84 71.63
                                                                                                       81.45 2 31 4
63.03 22 38 1
83.60 4 9 23
60.87 23 33 38
88.56 5 54 47
55.92 23 57 36
                                                                                                                                            3127.3
                                                                                                                                                             -10.87
                                                                         141.09
                                                                                         224.82
                                                                                                                                                                             134.39
                  22 31 31 3727.27
        100.00
                                                        -7.04
                                                                          54.35
                                                                                         232.65
                                                                                                                                            1831.9
                                                                                                                                                             -33.98
                                                                                                                                                                              45.11
                    5 14 15 2431.86
22 56 49 3647.94
                                                        -34.16
       110.00
                                                                         132.50
                                                                                         222.24
                                                                                                                                            3047.9
                                                                                                                                                             -7.31
                                                                                                                                                                              126.24
                                                        -2.86
        110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5406.3 SGR 412.4 SG3 150.2
RRT .1638 RRF .1415 RTF .9064
                                                                                                                                       ST 2944.0 SR 374.5 S5 672.5
     TOE 2.1775 TRA .9092 TC3-5.0816 BAU 1.2463
    ROE .2785 RRA -.0824 RC3 .1496 FAU .02445
FOE .7161 FRA .7190 FC3-1.1544 BSP 17350
BOE 2.1952 BRA .9129 BC3 5.0838 FSP -499
                                                                                                                                     CRT .9711 CRS -.9131 CST -.9831
                                                                                                                                       LSA 3039.2 MSA 149.6 55A 21.3
                                                                            SGB 5422.0 R23 -.0079 R13 .9064
                                                                             SG1 5406.7 SG2 406.8 THA
                                                                                                                                       EL1 2966.4 EL2 88.7 ALF 7.05
                                                                                  FLIGHT TIME 180.00
                                                                                                                                                    ARRIVAL DATE JUN 19 1966
LAUNCH DATE DEC 21 1965
                                                                                 DISTANCE 530.815
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 26.427 GAL 2.48 A7L 86.64 MCA 266.76 SMA 120.08 ECC .22947 INC 3.3551 V1 30.273 RP 108.73 LAP -3.35 LOP 355.67 VP 36.552 GAP 12.12 A7P 90.19 TAL 171.61 TAP 78.37 RCA 92.53 APO 147.64 V2 34.854 RC 184.407 GL 20.59 GP -3.33 ZAL 73.34 ZAP 172.78 ETS 333.53 ZAE 130.87 ETE 183.11 ZAC 97.27 ETC 166.99 CLP-173.60
   PLANETOCENTRIC CONIC
                                                             6.85 RAD 6567.8 VEL 11.861 PTH
                                                                                                               2.10 VHP 7.906 DPA -5.21 RAP
     C3 19.307 VHL 4.394 DLA 25.47 RAL
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 24 3161.04 -26.59 108.00 236.49 79.88 2 36 5 2561.0 -27.71 99.51
                      21 56 57 3895.02
                                                                         154.80
                                                                                         230.57
                                                                                                             63.25 23 1 52
                                                                                                                                            3295.0
                                                                                                                                                             -13.16
                                                                                                                                                                              147.89
                                                         -9.64
         90.00
                      3 29 21 2819.47
22 53 41 3711.83
                                                                                                                         4 16 21
                                                                                                                                            2219.5
                                                                                                                                                             -29.71
                                                                                                                                                                               74.57
                                                        -28.92
                                                                          83.28
                                                                                         236.90
                                                                                                             82.10
       100.00
                                                                                                                                                                              133.51
                                                                                                             60.99 23 55 33
                                                                                                                                                             -11.36
                                                         -7.55
                                                                         140.22
                                                                                         229.45
                                                                                                                                            3111.8
        100.00
                                                                                                            87.11 6 4 12
55.94 24 17 4
                       5 23 8 2463.46
23 16 23 3640.59
                                                                                                                                            1863.5
                                                                                                                                                             -34.10
                                                                                                                                                                              47.57
                                                        -34.08
                                                                          56.82
                                                                                         237.48
        110.00
                                                                         132.11
                                                                                         226.73
                                                                                                                                           3040.6
                                                                                                                                                             -7.59
                     23 16 23
                                                        -3.14
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                                    ST 2971.5 SR 384.9 SS 665.6

CRT .9647 CRS -.9052 CST -.9845

LSA 3065.5 MSA 152.7 SSA 20.6

EL1 2994.6 EL2 100.6 ALF 7.13
                                                                            SGT 5438.8 SGR 417.3 SG3 146.2
RRT .1893 RRF .1663 RTF .9095
     TOE 2.2439 TRA 1.1582 TC3-4.8573 BAU 1.2542
    RDE .2939 RRA -.0813 RC3 .1320 FAU .02287
FDE .7027 FRA .7616 FC3-1.0257 BSP 17512
                                                                           SGB 5454.8 R23 -.0070 R13 .9095
SGI 5439.4 SGZ 409.8 THA .84
```

BDE 2.2631 BRA 1.1611 BC3 4.8591 FSP -488

ARRIVAL CATE JUN 21 1966

```
LAUNCH DATE DEC 21 1965
                                                                            DISTANCE 536.295
   HELIOCENTRIC CONIC
   RL 147.17 LAL .00 LOL 88.92 VL 26.380 GAL 3.09 A7L 86.69 HCA 269.93 SHA 119.81 ECC .23427 INC 3.3142 VI 30.273 RP 108.70 LAP -3.31 LOP 358.85 VP 36.527 GAP 12.48 A7P 90.00 TAL 169.80 TAP 79.74 RCA 91.74 APO 147.88 V2 34.863 RC 186.379 GL 19.66 GP -3.23 ZAL 70.17 ZAP 173.49 ETS 331.37 ZAE 130.96 ETE 183.06 ZAC 99.59 ETC 167.17 CLP-174.35
   PLANETOCENTRIC CONIC
                                                                                                                                                      6.76 ECC 1.3370
    C3 20.480 VHL 4.525 OLA 25.92 RAL 10.39 RAD 6567.8 VEL 11.911 PTH 2.12 VMP 8.120 CPA -4.11 RAP
    UNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 48 20 3206.34 -26.00 111.19 241.10 78.38 2 41 46 2606.3 -27.35 102.78
                                                                                                                                    3277.8
                                                                                                      63.43 23 24 55
                    22 20 17 3877.77
3 36 23 2857.97
                                                     -10.17
                                                                    153.81
                                                                                   235.36
         90.00
                                                                                                                                                                    77.42
                                                                                                      80.68
                                                                                                                  4 24 1
                                                                                                                                   2258.0
                                                                                                                                                   -29.52
                                                    -28.53
                                                                     86.08
                                                                                   241.62
       100.00
                                                                                                      61.08 24.16 36
85.69 6 14 11
55.95 24 35 48
                                                                                                                                                                  132.91
                                                                                                                                   3101.4
                                                                                                                                                  -11.70
                    23 14 54 3701.38
5 32 37 2494.32
                                                      -7.90
                                                                     139.64
                                                                                   234.14
       100.00
                                                                                                                                    1894.3
                                                                                                                                                  -34.17
                                                                                                                                                                    49.98
                                                    -33.94
                                                                     59.22
                                                                                   242.38
       110.00
                                                                                                                                                                  125.70
                                                                                                                                 3037.8
                                                                                                                                                   -7.70
                    23 35 10
                                                     -3.25
                                                                    131.97
                                                                                   231.28
                                    3637.79
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 5467.0 SGR 421.3 SG3 142.3

RRT .2148 RRF .1911 RTF .9128

SGB 5483.2 R23 -.0062 R13 .9128

SGI 5467.8 SG2 411.4 THA .95
                                                                                                                               ST 2984.0 SR 394.5 SS 656.8
CRT .9579 CRS -.8973 CST -.9857
     TOE 2.3066 TRA 1.4211 TC3-4.6032 BAU 1.2607
    ROE .3105 RRA -.0788 RC3 .1144 FAU .02136
FOE .6888 FRA .8047 FC3 -.9029 BSP 17654
BOE 2.3274 BRA 1.4233 BC3 4.6046 FSP -477
                                                                                                                              LSA 3076.8 MSA 156.9 SSA 19.8
EL1 3007.9 EL2 112.4 ALF 7.23
                                                                                                                                           ARRIVAL DATE JUN 23 1966
                                                                             FLIGHT TIME 184.00
LAUNCH DATE DEC 21 1965
                                                                             DISTANCE 541.734
    RL 147.17 LAL .00 LOL 88.92 VL 26.333 GAL 3.72 A7L 86.73 MCA 273.11 SMA 119.55 ECC .23953 INC 3.2733 VI 30.273 RP 108.67 LAP -3.27 LOP 2.03 VP 36.503 GAP 12.86 A7P 89.82 TAL 168.01 TAP 81.11 RCA 90.91 APO 148.18 V2 34.873 RC 188.330 GL 18.71 GP -3.14 TAL 67.05 TAP 174.18 ETS 328.59 TAE 131.05 ETE 183.01 TAC 101.92 ETC 167.31 CLP-175.10
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 21.883 VHL 4.678 DLA 26.29 RAL 13.88 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 8.349 OPA -3.03 RAP 8.93 ECC 1.3601
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 54 7 3249.77
22 42 23 3669.21
3 44 15 2894.71
23 34 55 3696.50
5 42 40 2524.19
23 53 0 3639.79
                                                                                                                                2649.8
                                                                                                     76.99 2 48 17
                                                                                                                                                  -26.91
                                                                                   245.76
                                                      -25.37
                                                                     114.21
         90.00
                                                                                                      63.56 23 46 49
79.36 4 32 30
61.12 24 36 32
84.33 6 24 45
55.95 24 53 40
                                                                                                                                    3266.2
                                                                                                                                                    -13.99
                                                                                                                                                                    146.18
                                                      -10.52
                                                                     153.14
                                                                                    240.18
         90.00
                                                                                                                                    2294.7
                                                                                                                                                   -29.28
                                                                                                                                                                     80.12
                                                                                    246.39
                                                      -28.10
                                                                      88.72
       100.00
                                                                                                                                    3096.5
                                                                                                                                                   -11.85
                                                                                                                                                                    132.63
                                                                                    238.87
                                                      -8.06
                                                                     139.37
       100.00
                                                                                                                                    1924.2
                                                                                                                                                   -34.1A
                                                                                                                                                                     52.31
                                                                                    247.34
       110.00
                                                     -33.77
                                                                      61.53
                                                                                                                                    3039.8
                                                                                                                                                    -7.62
                                                                                                                                                                    125.81
                                                                                    235.87
                                                 -3.17
                                                                     132.07
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5490.5 SGR 424.5 SG3 138.6

RRT .2411 RRF .2176 RTF .9159

SGB 5506.9 R23 -.0046 R13 .9159

SG1 5491.5 SG2 411.9 THA 1.07
                                                                                                                                ST 2987.0 SR 403.1 SS 648.5
CRT .9507 CRS -.8894 CST -.9868
     TOE 2.3692 TRA 1.7027 TC3-4.3172 BAU 1.2634
     ROE .3282 RRA -.0745 RC3 .0974 FAU .D1980
FOE .6764 FRA .8501 FC3 -.7831 BSP 17694
                                                                                                                                LSA 3078.7 MSA 162.0 55A 19.0
                                                                                                                              EL1 3011.5 EL2 124.0 ALF 7.32
     BOE 2.3918 BRA 1.7043 BC3 4.3183 FSP -463
                                                                                                                                           ARRIVAL DATE JUN 25 1966
                                                                             FLIGHT TIME 186.00
 LAUNCH DATE DEC 21 1965
     RL 147.17 LAL .00 LOL 88.92 VL 26.287 GAL 4.39 A7L 86.77 HCA 276.29 SMA 119.29 ECC .24528 INC 3.2322 V1 30.273 RP 108.63 LAP -3.21 LOP 5.22 VP 36.480 GAP 13.26 A7P 89.65 TAL 166.22 TAP 82.50 RCA 90.03 APO 148.55 V2 34.884 RC 190.259 GL 17.73 GP -3.06 7AL 64.02 ZAP 174.85 ETS 324.97 ZAE 131.13 ETE 182.98 7AC 104.26 ETC 167.42 CLP-175.85
                                                                            DISTANCE 547.124
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.549 VML 4.853 DLA 26.57 RAL 17.31 RAD 6568.0 VEL 12.039 PTH 2.15 VMP 8.594 CPA
                                                                                                                                       -1.95 RAP 11.10 ECC 1.3875
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 117.00
                                                                                 250.44
                    2 1 0 3290.34
23 2 49 3861.29
3 53 2 2929.16
                                                      -24.72
         90.00
                                                                                                                                                   -14.13
                                                                                                                                                                    145.89
                                                                                                                                    3261.3
                                                      -10.67
                                                                    152.86
                                                                                     245.00
         90.00
                                                                                                                                                                     82.64
                                                                                                                                    2329.2
                                                                                                                                                    -29.00
                                                     -27.64
                                                                      91.18
                                                                                    251.20
        100.00
                                                                                                                                                                   132.70
                                                                                                                                    3097.7
                                                                                                                                                   -11.61
                                                                                     243.59
                                                       -8.02
                                                                    139.43
                    23 53 28
5 53 18
0 13 38
                                     3697.70
        100.00
                                                                                                                                                  -34.15
-7.36
                                                                                                                                                                     54.55
                                                                                                                                    1952.9
                                                                                     252.34
                                                     -33.55
                                                                       63.75
                                     2552.89
        110.00
                                                                                                                                  3046.7
                                                                                                                                                                    126.18
                                                                     132.43
                                                                                    240.45
                                                      -2.91
        110.00
                                    3646.74
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 5509.9 SGR 426.7 SG3 134.8
RRT .2663 RRF .2429 RTF .9195
SGB 5526.4 R23 -.0036 R13 .9195
SGI 5511.1 SG2 411.2 THA 1.19
                                                                                                                               ST 2970.4 SR 410.4 SS 637.4
CRT .9432 CRS -.8812 CST -.9878
      TDE 2.4231 TRA 1.9950 TC3-4.0220 BAU 1.2665
     ROE .3468 RRA -.0686 RC3 .081D FAU .01838
FOE .6621 FRA .8940 FC3 -.6757 BSP 17826
BOE 2.4478 BRA 1.9962 BC3 4.0228 FSP -453
                                                                                                                               LSA 3060.9 MSA 167.7 SSA 18.1
EL1 2995.5 EL2 135.2 ALF 7.44
                                                                                                                                            ARRIVAL DATE JUN 27 1966
                                                                              FLIGHT TIME 188.00
 LAUNCH DATE DEC 21 1965
                                                                             DISTANCE 552.458
     RL 147.17 LAL .00 LOL 88.92 VL 26.242 GAL 5.09 A7L 86.81 MCA 279.47 SMA 119.03 ECC .25160 INC 3.1905 V1 30.273 RP 108.60 LAP -3.15 LOP 8.40 VP 36.458 GAP 13.69 A7P 89.47 TAL 164.45 TAP 83.91 RCA 89.08 APO 148.98 V2 34.895 RC 192.167 GL 16.74 GP -2.99 TAL 61.07 TAP 175.48 ETS 320.18 TAE 131.21 ETE 182.94 TAC 106.59 ETC 167.50 CLP-176.60
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 25.513 VHL 5.051 DLA 26.77 RAL 20.65 RAD 6568.0 VEL 12.120 PTH 2.17 VHP 8.859 CPA
                                                                                                                                         -.88 RAP 13.28 ECC 1.4199
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   -25.96
                                                                                   255.16
                                                                                                     74.64
                                                                                                                    3 4 39
                                                       -24.08
                                                                     119.51
                       2 9 12
                                      3327.12
                   2 9 12 23 21 15
          90.00
                                                                                                                                                                     146.04
                                                                                                                                                     -14.06
                                                                                                                 24 25 39
                                                                                                                                     3263.9
                                                                                                        63.59
                                                                                     249.78
                                                       -10.59
                                                                      153.01
                                      3863.89
          90.00
                                                                                                                                                                      84.95
                                                                                                                 4 52 8
                                                                                                                                                     -28.69
                                                                                                                                     2361.0
                                                                                     256.02
                                                                                                        77.04
                                                       -27.18
                                                                       93.43
                       4 2 47
                                     2960.95
         100.00
                                                                                                                                                                     133.14
                                                                                                                   1 16 2
                                                                                                                                     3105.3
                                                                                                                                                    -11.57
                                                                                                        61.04
                                                                                     248.28
                                                        -7.77
                                                                     139.86
                       0 14 17
                                     3705.29
                                                                                                                                                  -34.08
         100.00
                                                                                                                                                                      56.69
                                                                                                        81.82
                                                                                                                 6 47 26
                                                                                                                                    1980.3
                                                       -33.31
                                                                       65.85
                                                                                     257.35
                       6 4 26
                                    2580.33
         110.00
                                                                                                        55.89
                                                                                                                    1 30 7
                                                                                                                                     3058.7
                                                                                                                                                      -6.91
                                                                                                                                                                     126.81
                                                                                     245.01
                       0 29 8
                                                                   133.06
                                   3658.68
                                                       -2.45
                                                                                                                             ORBIT DETERMINATION ACCURACY
         110.00
                                                                        MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                        SGT 5525.1 SGR 427.9 SG3 131.2 ST 2941.7 SR 416.2 SS 625.9 RRT .2916 RRF .2663 RTF .9233 CRT .9353 CRS -.8729 CST -.9887 SGB 5541.6 R23 -.0026 R13 .9233 LSA 3031.2 MSA 173.8 SSA 17.2 SGI 5526.5 SG2 409.2 THA 1.30 EL1 2967.4 EL2 146.0 ALF 7.56
      TOE 2.4730 TRA 2.3046 TC3-3.7149 BAU 1.2673
      RDE .3663 RRA -.0609 RC3 .0658 FAU .01701
FDE .6479 FRA .9393 FC3 -.5771 BSP 17935
      BOE 2.5000 BRA 2.3054 BC3 3.7155 FSP -442
```

FLIGHT TIME 182.00

LAUNCH DATE DEC 21 1965

ARRIVAL DATE JUN 29 1966

Ì

```
DISTANCE 557.728
     RL 147.17 LAL .00 LOL 88.92 VL 26.197 GAL 5.83 AZL 86.85 MCA 282.65 SMA 118.78 ECC .25852 INC 3.1480 V1 30.273
RP 108.57 LAP -3.07 LOP 11.59 VP 36.436 GAP 14.16 AZP 89.31 TAL 162.69 TAP 85.34 RCA 88.08 APO 149.49 V2 34.906
RC 194.054 GL 15.74 GP -2.92 ZAL 58.23 ZAP 176.07 ETS 313.75 ZAE 131.28 ETE 182.92 ZAC 108.92 ETC 167.55 CLP-177.36
    PLANETOCENTRIC CONIC
     C3 27.823 VHL 5.275 DLA 26.89 RAL 23.88 RAD 6568.1 VEL 12.215 PTH 2.19 VHP 9.144 DPA
                                                                                                                                                          .18 RAP 15.46 ECC 1.4579
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 18 52 3359.36
23 37 22 3874.65
4 13 29 2989.87
0 29 22 3719.38
6 16 0 2606.51
0 43 21 3675.50
                                                           -23.48
                                                                            121.68
                                                                                             259.89
                                                                                                                 73.71
                                                                                                                               3 14 51
                                                                                                                                                2759.4
                                                                                                                                                                    -25.49
                                                                              -10.27
                                                                            153.63
                                                                                                                                                   3274.6
                                                                                                                                                                    -13.75
                                                                                                                                                                                     146.68
        100.00
                                                           -26.72
                                                                              95.46
                                                                                                                                                   2389.9
                                                                                                                                                                    -28.37
                                                                                                                                                                                       87.04
        100.00
                                                            -7.30
                                                                            140.65
                                                                                                                                                   3119.4
                                                                                                                                                                                     133.94
                                                                                                                                                                    -11.12
        110.00
                                                          -33.03
                                                                              67.85
                                                                                                                                                  2006.5
                                                                                                                                                                    -33.97
                                                                                                                                                                                       58.73
                                                      -1.81
        110.00
                                                                            133.94
                                                                                                                                                  3075.5
                                                                                                                                                                      -6.28
                                                                                                                                                                                      127.70
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 5535.4 SGR 428.2 SG3 127.6

RRT .3168 RRF .2939 RTF .9272

SGB 5551.9 R23 -.0015 R13 .9272

SGI 5537.1 SG2 406.0 THA 1.41
                                                                                                                                             ST 2902.2 SR 420.4 SS 614.4
CRT .9269 CRS -.8643 CST -.9896
     TOE 2.5189 TRA 2.6320 TC3-3.4017 BAU 1.2655
     ROE .3867 RRA -.0515 RC3 .0521 FAU .01566
FDE .6344 FRA .9859 FC3 -.4874 BSP 18030
                                                                                                                                       CRT .9269 CRS -.8643 CST -.9896
LSA 2990.7 MSA 180.2 SSA 16.4
     BDE 2.5484 BRA 2.6325 BC3 3.4021 FSP -432
                                                                                                                                            EL1 2928.3 EL2 156.4 ALF 7.67
LAUNCH DATE DEC 21 1965
                                                                                      FLIGHT TIME 192.00
                                                                                                                                                           ARRIVAL CATE JUL 1 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 562.923
    RL 147.17 LAL .00 LOL 88.92 VL 26.153 GAL 6.62 AZL 86.90 MCA 285.83 SMA 118.54 ECC .26614 INC 3.1044 VI 30.273 RP 108.53 LAP -2.99 LOP 14.77 VP 36.416 GAP 14.67 AZP 89.15 TAL 160.96 TAP 86.79 RCA 86.99 APO 150.09 VZ 34.918 RC 195.918 GL 14.75 GP -2.85 ZAL 55.51 ZAP 176.59 ETS 305.01 ZAE 131.35 ETE 182.89 ZAC 111.25 ETC 167.56 CLP-178.13
   PLANETOCENTRIC CONIC
     C3 30.533 VHL 5.526 OLA 26.94 RAL 26.99 RAD 6568.2 VEL 12.325 PTH
                                                                                                                    2.22 VHP 9.453 OPA
                                                                                                                                                       1.23 RAP 17.64 ECC 1.5025
    C3 30.533 VHL 5.526 DLA 26.94 RAL 26.99 RAD 6568.2 VEL 12.325 PTH 2.22 VHP 9.453 DPA 1.23 RAP 17.64 ECC 1.5025 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 3 0 3 3366.69 -22.95 123.51 264.63 72.94 3 26 30 2786.7 -25.07 115.48 90.00 23 51 1 3693.81 -9.68 154.73 259.09 63.26 24 55 55 3293.8 -13.19 147.81 100.00 4 25 5 3015.89 -26.28 97.27 265.68 75.21 5 15 21 2415.9 -28.05 88.91 100.00 0 42 37 3739.84 -6.62 141.79 257.45 60.78 1 44 56 3139.8 -10.47 135.11 110.00 6 27 55 2631.50 -32.74 69.74 267.34 79.58 7 11 47 2031.5 -33.83 60.67 110.00 0 56 15 3697.00 -.99 135.06 253.97 55.83 1 57 52 3097.0 -5.46 128.83
                                                                             24 55 55 75 21 5 15 21 141.79 257.45 60.78 1 44 56 69.74 267.34 79.58 7 11 47 135.06 253.97 55.83 1 57 52 HID-COURSE EXECUTION ACCURACY SGT 5543.0 SGR 427 7 227
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                SGT 5543.0 SGR 427.7 SG3 124.3

RRT .3427 RRF .3206 RTF .9311

SGB 5559.5 R23 -.0002 R13 .9311

SGI 5545.0 SG2 401.6 THA 1.52
                                                                                                                                             ST 2858.4 SR 423.0 SS 604.6
CRT .9181 CRS -.8559 CST -.9904
    TDE 2.5656 TRA 2.9828 TC3-3.0835 BAU 1.2588
    ROE .4077 RRA -.0399 RC3 .0402 FAU .01429
FOE .6229 FRA 1.0358 FC3 -.4053 8SP 18024
BDE 2.5978 BRA 2.9831 BC3 3.0838 FSP -419
                                                                                                                                        CRT .516. _
LSA 2946.2 MSA 186.5 SSA ...
ELI 2884.8 ELZ 166.2 ALF 7.76
LAUNCH DATE DEC 21 1965
                                                                                     FLIGHT TIME 194.00
                                                                                                                                                          ARRIVAL DATE JUL 3 1966
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 568.029
    RL 147.17 LAL .00 LOL 88.92 VL 26.110 GAL 7.45 A7L 86.94 MCA 289.02 SMA 118.30 ECC .27451 INC 3.0594 V1 30.273
RP 108.49 LAP -2.89 LOP 17.96 VP 36.397 GAP 15.22 A7P 89.00 TAL 159.26 TAP 88.28 RCA 85.83 APO 150.78 VZ 34.930
RC 197.761 GL 13.77 GP -2.79 ZAL 52.90 ZAP 177.00 ETS 293.28 ZAE 131.40 ETE 182.87 ZAC 113.57 ETC 167.53 CLP-178.90
   PLANETOCENTRIC CONIC
     C3 33.708 VHL 5.806 DLA 26.91 RAL 29.97 RAD 6568.3 VEL 12.453 PTH 2.25 VHP 9.789 DPA 2.27 RAP 19.81 ECC 1.5547
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      2 42 39 3409.24
0 6 8 3921.06
4 37 27 3039.19
0 54 2 3766.34
                                                          -22.49
                                                                           125.00 269.38 72.33 3 39 29
                                                                                                                                             2809.2 -24.70 117.03
         90.00
                                                                                                                 62.99 1 11 29
74.47 5 28 6
         90.00
                                                            -8.84
                                                                           156.29
                                                                                            263.57
                                                                                                                                                  3321.1
                                                                                                                                                                    -12.40
       100.00
                                                          -25.86
                                                                             98.87
                                                                                        270.48
                                                                                                                                                  2439.2
                                                                                                                                                                   -27.74
                                                                                                                             1 56 48
7 24 21
2 9 55
        100.00
                                                            -5.74
                                                                           143.26
                                                                                             261.90
                                                                                                                 60.61
                                                                                                                                                  3166.3
                                                                                                                                                                    -9.61
                                                                                                                                                                                    136.61
                        6 40 6 2655.39
1 7 52 3722.90
                       6 40 6
                                                                                       272.28
                                                                                                                                                                   -33.67
                                                          -32.43
                                                                             71.53
                                                                                                                 78.56
                                                                                                                 55.82
        110.00
                                                            .00
                                                                           136.41
                                                                                             258.33
                                                                                                                                                  3122.9
                                                                                                                                                                 -4.48
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SCT 5544.7 SGR 426.0 SG3 120.9

RRT .3676 RRF .3461 RTF .9354

SGB 5561.0 R23 .0005 R13 .9354

SGI 5546.9 SGZ 396.0 THA 1.63
    TOE 2.6041 TRA 3.3504 TC3-2.7760 BAU 1.2511
                                                                                                                                            ST 2802.0 SR 423.7 SS 593.8
                                                                                                                                      CRT .9086 CRS -.8469 CST -.9913
LSA 2888.9 MSA 192.7 SSA 14.9
EL1 2828.4 EL2 175.3 ALF 7.85
    RDE .4292 RRA -.D266 RC3 .0297 FAU .D1304
FDE .61D3 FRA 1.0860 FC3 -.3350 BSP 18105
BDE 2.6393 BRA 3.3505 BC3 2.7762 FSP -409
LAUNCH DATE DEC 21 1965
                                                                                     FLIGHT TIME 196.00
                                                                                                                                                          ARRIVAL DATE JUL 5 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 573.031
    RL 147.17 LAL .00 LOL 88.92 VL 26.068 GAL 8.34 AZL 86.99 MCA 292.21 SMA 118.07 ECC .28375 INC 3.0125 VI 30.273 RP 108.45 LAP -2.79 LOP 21.15 VP 36.378 GAP 15.83 AZP 88.86 TAL 157.59 TAP 89.79 RCA 84.57 APO 151.57 V2 34.942 RC 199.580 GL 12.80 GP -2.74 ZAL 50.42 ZAP 177.24 ETS 278.38 ZAE 131.43 ETE 182.86 ZAC 115.88 ETC 167.47 CLP-179.69
   PLANETOCENTRIC CONIC
    C3 37.429 VHL 6.118 OLA 26.82 RAL 32.81 RAD 6568.5 VEL 12.602 PTH 2.29 VHP 10.156 DPA
    ENCH AZMTH ENCH TIME E-I TIME INJEAT INJEONG INJET ASC INJEATH INJETME PO CST TIM INJEET INJE LONG
        90.00
                       2 56 25
                                       3427.60
                                                          -22.11
                                                                           126.21
                                                                                           274.11
                                                                                                                71.84
                                                                                                                              3 53 32
                                                                                                                                                2827.6
                                                                                                                                                                  -24.38
                       0 15 2 3955.59
4 50 25 3060.09
1 3 43 3798.34
6 52 25 2678.35
1 18 13 3752.84
         90.00
                                                           -7.77
                                                                           158.26
                                                                                            267.92
                                                                                                                 62.68
                                                                                                                             1 20 58
                                                                                                                                                  3355.6
                                                                                                                                                                   -11.37
       100.00
                                                          -25.47
                                                                           100.30
                                                                                            275.25
                                                                                                                 73.81
                                                                                                                              5 41 25
                                                                                                                                                  2460.1
                                                                                                                                                                    -27.45
                                                                                                                                                                                      92.06
                                                                                                                             2 7 i
7 37 3
       100.00
                                                          -4.67
                                                                           145.03
                                                                                            266.23
                                                                                                                 60.44
                                                                                                                                                  3198.3
                                                                                                                                                                    -8.57
       110.00
                                                         -32.11
                                                                             73.25
                                                                                            277.18
                                                                                                                 77.60
                                                                                                                                                  2076.4
                                                                                                                                                                  -33.48
-3.34
                                                                                                                                                                                      64.28
       110.00
                                                                           137.97
                                                                                           262.61
                                                                                                                 55.83
                                                                                                                             2 20 45
                                                                                                                                               3152.8
                                                                                                                                                                                   131.76
                                                          1.15
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5542.2 SGR 423.4 SG3 117.7 ST 2740.8 SR 422.5 S5 584.3 RRT .3925 RRF .3717 RTF .9396 CRT .8987 CRS -.8379 CST -.9921 SGB 5558.3 R23 .0012 R13 .9396 LSA 2827.1 MSA 198.4 SSA 14.2 SG1 5544.7 SG2 389.2 THA 1.73 EL1 2767.1 EL2 183.5 ALF 7.92
    TOE 2.6410 TRA 3.7402 TC3-2.4779 BAU 1.2400
    RDE .4511 RRA -.0112 RC3 .0209 FAU .01182 FDE .5990 FRA 1.1390 FC3 -.2734 BSP 18221
    BOE 2.6792 BRA 3.7402 BC3 2.4780 FSP -399
```

FLIGHT TIME 190.00

```
ARRIVAL CATE JUL 7 1966
                                                                         FLIGHT TIME 198.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 577.908
   HELIOCENTRIC CONIC
   RL 147.17 LAL .0D LOL 88.92 VL 26.027 GAL 9.30 A7L 87.04 HCA 295.40 SMA 117.84 ECC .29395 INC 2.9635 V1 30.273 RP 108.41 LAP -2.68 LOP 24.35 VP 36.361 GAP 16.48 A7P 88.73 TAL 155.96 TAP 91.35 RCA 83.20 APO 152.49 V2 34.955 RC 201.376 GL 11.85 GP -2.69 TAL 48.06 TAP 177.26 ETS 261.62 TAE 131.45 ETE 182.84 TAC 118.17 ETC 167.36 CLP 179.50
   PLANETOCENTRIC CONIC
                                                                                                                                 4.28 RAP 24.16 ECC 1.6879
    C3 41.796 VHL 6.465 DLA 26.67 RAL 35.50 RAC 6568.6 VEL 12.774 PTH 2.32 VHP 10.557 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           2842.7
                                                                                                                                                        119.30
                    3 11 U 3442.66
U 21 56 3996.28
                                                                                                           4 8 22
                                                   -21.78
                                                                 127.20
                                                                               278.82
                                                                                                71.45
                                                                                                                                          -24.12
        90.00
                                                                                                 62.38 1 28 32
73.22 5 55 7
60.29 2 15 44
76.68 7 49 46
55.89 2 30 27
                                                                                                                                                           153.79
                                                                                                                                            -10.14
                                                                                272.12
                                                                                                                             3396.3
                                                    -6.49
                                                                 160.57
        90.00
                     5 3 48 3079.00
1 11 49 3835.17
                                                                                                                                            -27.17
                                                                                                                                                            93.40
                                                   -25.11
                                                                 101.59
                                                                                279.97
                                                                                                                             2479.0
       100.00
                                                                                                                             3235.2
                                                                                                                                             -7.36
                                                                                                                                                           140.48
                                                                                270.44
                                                    -3.43
                                                                 147.06
       100.00
                                                                                                                                            -33.28
                                                                                                                                                            65.98
                    7 4 46 2700.52
1 27 21 3786.42
                                                 -31.78
                                                                                282.01
                                                                                                                             2100.5
                                                                   74.89
       110.00
                                                                                                                                                           133.52
                                                                                                                                             -2.06
                                                                               266.80
                                                                                                55.89
                                                                                                                            3186.4
                                                                 139.72
                                                   2.43
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2677.7 SR 419.4 55 576.1
CRT .8884 CRS -.8288 CST -.9929
                                                                     SGT 5535.6 SGR 419.9 SG3 114.6
RRT .4175 RRF .3973 RTF .9441
    TOE 2.6781 TRA 4.1564 TC3-2.1896 BAU 1.2235
    RDE .4733 RRA .0063 RC3 .0139 FAU .01061
FDE .5889 FRA 1.1952 FC3 -.2199 BSP 18221
                                                                                                                        LSA 2763.4 MSA 203.5 SSA 13.5
EL1 2703.6 EL2 190.7 ALF 7.96
                                                                     SGB 5551.5 R23 .0013 R13 .9441
SGI 5538.4 SG2 381.3 THA 1.82
    BQE 2.7196 BRA 4.1564 BC3 2.1897 FSP -390
                                                                                                                                    ARRIVAL DATE JUL 9 1966
                                                                         FLIGHT TIME 200.00
LAUNCH DATE DEC 21 1965
                                                                         DISTANCE 582.637
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 25.986 GAL 10.32 A7L 87.09 HCA 298.59 SMA 117.62 ECC .30525 INC 2.9117 V1 30.273
RP 108.37 LAP -2.56 LOP 27.54 VP 36.344 GAP 17.21 A7P 88.61 TAL 154.37 TAP 92.96 RCA 81.72 APO 153.53 V2 34.968
RC 203.147 GL 10.93 GP -2.65 ZAL 45.84 ZAP 177.04 ETS 245.63 ZAE 131.44 ETE 182.83 ZAC 120.45 ETC 167.22 CLP 178.68
   PLANETOCENTRIC CONIC
    C3 46.932 VHL 6.851 DLA 26.48 RAL 38.04 RAD 6568.8 VEL 12.973 PTH 2.37 VHP 10.999 DPA
                                                                                                                                 5.26 RAP 26.32 ECC 1.7724
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 26 3 3455.35 -21.51 128.02 283.47 71.12 4 23 38 2855.3 -23.89 120.16
                   0 27 9 4041.90 -5.04

5 17 25 3096.33 -24.76

1 18 28 3876.15 -2.04

7 17 2 2722.03 -31.43

1 35 20 3823.21 3.83
                                                                                                                                              -8.74
                                                                                                                                                            156.41
        90.00
                                                                                276.19
                                                                                                 62.10
                                                                                                            1 34 30
                                                                                                                              3441.9
                                                                  163.14
                                                                                                 72.70 6 9 1
60.17 2 23 4
75.80 8 2 24
                                                                                                                              2496.3
                                                                                                                                             -26.90
                                                                                                                                                             94.61
                                                                 102.76
                                                                                284.63
       100.00
                                                                                                                                                            142.76
                                                                                                                                             -6.00
                                                                 149.31
                                                                                274.54
                                                                                                                              3276.1
       100.00
                                                                                                                                           -33.06
                                                                                                                                                             67.62
                                                                                286.76
                                                                                                                              2122.0
       110.00
                                                                  76.47
       110.00
                                                                 141.65
                                                                                270.88
                                                                                                 56.01
                                                                                                             2 39 3
                                                                                                                              3223.2
                                                                                                                                               -.65
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2615.4 SR 414.7 SS 570.7
    TOE 2.7181 TRA 4.6052 TC3-1.9123 BAU 1.1999
                                                                     SGT 5527.0 SGR 415.5 SG3 111.7
    ROE .4957 RRA .0261 RC3 .0085 FAU .00937
FOE .5815 FRA 1.2563 FC3 -.1728 RSP 18168
                                                                                                                         CRT .8777 CRS -.8201 CST -.9938
                                                                     RRT .4429 RRF .4237 RTF .9487
SGB 5542.6 R23 .0018 R13 .9487
    FOE .5815 FRA 1.2563 FC3 -.1728 BSP 18168
BDE 2.7629 BRA 4.6052 BC3 1.9123 FSP -378
                                                                                                                         LSA 2700.8 MSA 207.8 SSA 12.8
                                                                                                                        EL1 2640.7 EL2 196.8 ALF 7.97
                                                                     SG1 5530.0 SG2 372.3 THA 1.92
                                                                                                                                    ARRIVAL CATE JUL 11 1966
                                                                         FLIGHT TIME 202.00
LAUNCH DATE DEC 21 1965
                                                                        DISTANCE 587.186
    RL 147.17 LAL .00 LOL 88.92 VL 25.946 GAL 11.43 AZL 87.14 HCA 301.79 SMA 117.41 ECC .31760 INC 2.8567 VI 30.273 RP 108.33 LAP -2.43 LOP 30.74 VP 36.328 GAP 18.01 AZP 88.49 TAL 152.85 TAP 94.64 RCA 80.10 APO 154.72 V2 34.981
    RC 204.893 GL 10.03 GP -2.61 TAL 43.76 TAP 176.61 ETS 232.43 TAE 131.41 ETE 182.81 TAC 122.70 ETC 167.03 CLP 177.83
   PLANETOCENTRIC CONIC
    C3 52.991 VHL 7.279 DLA 26.23 RAL 40.43 RAD 6568.9 VEL 13.204 PTH 2.41 VHP 11.486 DPA
                                                                                                                                 6.21 RAP 28.47 ECC 1.8721
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                70.84 4 39 3
61.88 1 39 7
72.22 6 22 57
60.11 2 29 10
74.97 8 14 52
56.19 2 46 37
                                                                                                                          2866.4
                                                                                                                                           -23.68
                  3 41 16 3466.42
0 30 56 4091.36
5 31 4 3112.44
1 23 49 3920.57
                                                                               288.05
                                                   -21.26
                                                                 128.74
                                                                                                                                             -7.20
                                                                                                                             3491.4
                                                                                                                                                           159.23
                                                                                280.12
                                                   -3.46
                                                                 165.92
                                                                                                                             2512.4
                                                                                                                                            -26.63
                                                                                                                                                            95.74
                                                                                289.20
                                                  -24.43
                                                                 103.85
                                                                                                                             3320.6
                                                                                                                                            -4.51
                                                                                                                                                           145.22
                     1 23 49
                                   3920.57
                                                    -.54
                                                                 151.75
                                                                                278.50
       100.00
                                                                                                                             2143.0
                                                                                                                                           -32.82
                                                                                                                                                            64.71
                     . c9 9
1 42 14
                                                                               291.41
                                   2742.99
                                                  -31.07
                                                                  78.00
       110.00
                    7 29 9
                                                                                                                           3262.8
                                                                                                                                               .86
                                                                                                                                                           137.50
                                                                                274.85
                                                    5.34
                                                                 143.73
       110.00
                                   3862.79
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                     SGT 5512.0 SGR 410.0 SG3 108.8
RRT .4675 RRF .4492 RTF .9533
SGB 5527.3 R23 .0018 R13 .9533
SGI 5515.4 SG2 362.2 THA 2.00
                                                                                                                         ST 2548.8 SR 408.0 SS 565.9
CRT .8666 CRS -.8111 CST -.9946
    TOE 2.7550 TRA 5.0809 TC3-1.6547 BAU 1.1723
    ROE .5181 RRA .0480 RC3 .0044 FAU .00819
FOE .5743 FRA 1.3205 FC3 -.1338 BSP 18209
BOE 2.8033 BRA 5.0812 BC3 1.6547 FSP -369
                                                                                                                         LSA 2634.1 MSA 211.1 SSA 12.2
EL1 2573.3 EL2 201.6 ALF 7.95
                                                                                                                                     ARRIVAL DATE JUL 13 1966
                                                                         FLIGHT TIME 204,00
                                                                         DISTANCE 591.516
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 25.908 GAL 12.63 AZL 87.20 MCA 304.98 9MA 117.20 ECC .33177 INC 2.7977 V1 30.273
RP 108.29 LAP -2.29 LOP 33.93 VP 36.313 GAP 18.90 AZP 88.40 TAL 151.40 TAP 96.38 RCA 78.32 APO 156.09 V2 34.994
RC 206.614 GL 9.15 GP -2.57 ZAL 41.81 ZAP 176.01 ETS 222.37 ZAE 131.34 ETE 182.80 ZAC 124.91 ETC 166.80 CLP 176.94
   PLANE TOCENTRIC CONIC
    C3 60.167 VHL 7.757 DLA 25.95 RAL 42.65 RAD 6569.1 VEL 13.473 PTH 2.46 VHP 12.026 DPA
                                                                                                                                 7.14 RAP 30.60 ECC 1.9902
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -23.49
                                                                                                                                                           121.58
                                                                                                 70.59 4 54 20
                                                                                                                             2876.5
                                                                 129.39
                                                                               292.54
        90 00
                     3 56 24 3476.49
                                                   -21.03
                                                                                                                                                            162.18
                                                                                                              1 42 36
                                                                                                                              3543.7
                                                                                                                                             -5.54
                                                                                283.92
                                                                                                  61.73
                                   4143.69
                                                    -1.78
                                                                  168.84
        90.00
                     0 33 32
                                                                                                 71.78 6 36 44
60.12 2 34 8
74.16 8 27 3
                                                                                                                                                             96.79
                                                                                                                              2527.6
                                                                                                                                            -26.38
                                                   -24.11
                                                                  104.86
                                                                                293.67
       100.00
                     5 44 36
                                   3127.63
                                                                                                                              3367.8
                                                                                                                                             -2.92
                                                                                                                                                            147.82
                                                                  154.34
                                                                                282.34
                                                     1.06
       100.00
                     1 28 0
                                   3967.78
                                                                                                                                                             70.75
                                                                   79.47
                                                                                295.94
                                                                                                                              2163.5
                                                                                                                                            -32.56
                                                   -30.70
       110.00
                      7 41 0
                                   2763.46
                                                                  145.94
                                                                                278.71
                                                                                                  56.44
                                                                                                             2 53 11
                                                                                                                              3304.7
                                                                                                                                               2.46
                                                                                                                                                            139.69
       110.00
                      1 48 6
                                  3904.72
                                                   6.92
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                    SGT 5493.1 SGR 403.6 SG3 106.0 ST 2483.3 SR 399.6 SS 563.5 RRT .4921 RRF .4748 RTF .9580 CRT .8553 CRS -.8025 CST -.9953 SGB 5507.9 R23 .0016 R13 .9580 LSA 2568.7 MSA 213.2 SSA 11.6 SG1 5496.7 SG2 351.1 THA 2.08 EL1 2506.8 EL2 205.1 ALF 7.89
     TDE 2.7952 TRA 5.5921 TC3-1.4135 BAU 1.1370
    RDE .5405 RRA .0721 RC3 .0016 FAU .00700
FDE .5691 FRA 1.3901 FC3 -.1008 BSP 18225
```

BOE 2.8470 BRA 5.5926 BC3 1.4135 FSP -360

ARRIVAL CATE JUL 15 1966

```
LAUNCH DATE DEC 21 1965
                                                                                              CISTANCE 595.578
   HELIOCENTRIC CONIC
     RL 147.17 LAL .00 LOL 88.92 VL 25.870 CAL 13.94 A7L 87.27 MCA 308.18 SMA 117.00 ECC .34738 INC 2.7338 V1 30.273
RP 108.25 LAP -2.15 LOP 37.13 VP 36.299 CAP 19.89 A7P 88.31 TAL 150.03 TAP 98.21 RCA 76.36 APO 157.65 V2 35.007
RC 208.309 GL 8.31 GP -2.53 7AL 40.01 7AP 175.28 ETS 214.89 7AE 131.23 ETE 182.78 7AC 127.09 ETC 166.52 CLP 176.02
   PLANETOCENTRIC CONIC
    C3 68.708 VHL 8.289 DLA 25.63 RAL 44.71 RAD 6569.3 VEL 13.786 PTH 2.52 VHP 12.628 CPA 8.03 RAP 32.71 ECC 2.1308 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 11 14 3485.92 -20.82 130.00 296.91 70.36 5 9 20 2885.9 -23.31 122.21 90.00 0 35 6 4198.10 -.02 171.87 287.57 61.68 1 45 4 3598.1 -3.81 165.24 100.00 5 57 53 3142.06 -23.80 105.82 298.02 71.36 6 50 15 2542.1 -26.13 97.79 100.00 1 31 8 4017.19 2.74 157.05 286.04 60.22 2 38 5 3417.2 -1.25 150.53 110.00 7 52 31 2783.42 -30.32 80.91 300.35 73.39 8 38 54 2183.4 -32.29 72.25 110.00 1 53 0 3948.60 8.56 148.27 282.45 56.78 2 58 48 3348.6 4.13 141.99
                                                                                                                                                                       8.03 RAP 32.71 ECC 2.1308
     C3 68.708 VHL 8.289 DLA 25.63 RAL 44.71 RAD 6569.3 VEL 13.786 PTH
                                                                                                                                2.52 VHP 12.628 CPA
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         RRT .5166 RRF .5003 RTF .9627
SGB 5484.7 R23 .0012 R13 .9627
SGI 5474.2 SG2 339.1 THA 2.15
                                                                                                                                                             ST 2419.5 SR 389.7 SS 563.6
CRT .8440 CRS -.7942 CST -.9960
     TOE 2.8401 TRA 6.1438 TC3-1.1891 BAU 1.0922
     RDE .5628 RRA .0986 RC3 -.0001 FAU .00577 FDE .5660 FRA 1.4661 FC3 -.0727 BSP 18227
                                                                                                                                                            LSA 2505.5 MSA 214.0 SSA 11.0
EL1 2441.9 EL2 207.1 ALF 7.80
     BOE 2.8953 BRA 6.1445 BC3 1.1891 FSP -351
                                                                                                                                                                            ARRIVAL CATE JUL 17 1966
                                                                                               FLIGHT TIME 208.00
LAUNCH DATE DEC 21 1965
                                                                                              DISTANCE 599.309
   HELIOCENTRIC CONIC
    RL 147.17 LAL .00 LOL 88.92 VL 25.834 GAL 15.38 AZL 87.34 MCA 311.39 SMA 116.81 ECC .36487 INC 2.6640 VI 30.273 RP 108.21 LAP -2.00 LOP 40.34 VP 36.286 GAP 21.00 AZP 88.24 TAL 148.76 TAP 100.14 RCA 74.19 APO 159.43 V2 35.020 RC 209.976 GL 7.49 GP -2.50 ZAL 38.36 ZAP 174.45 ETS 209.29 ZAE 131.07 ETE 182.76 ZAC 129.23 ETC 166.20 CLP 175.05
   PLANETOCENTRIC CONIC
     C3 78.931 VHL 8.884 DLA 25.27 RAL 46.59 RAD 6569.5 VEL 14.152 PTH 2.58 VHP 13.303 DPA 8.89 RAP 34.79 ECC 2.2990 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            5 23 53
          90.00
                                                                                                      301.13
                                                                                                                              70.15
                                                                                                                                                                 2894.9
                                                                                                                                                                                      -23.13
                                                                                                                                                                                                          122.81
                         4 25 38 3494.88
                                                                 -20.61
                                                                                    130.58
                                                                                                                                              1 46 39
                                                                                                                                                                   3654.0
                                                                                                                                                                                        -2.01
                                                                                                        291.09
                                                                                                                               61.73
          90.00
                           0 35 45
                                           4253.97
                                                                    1.78
                                                                                     174.99
                         6 10 48 3155.82
1 33 16 4068.26
8 3 38 2802.82
1 56 56 3994.02
                                                                                                                                           7 3 24 2 41 5
                                                                                                                                                                   2555.8
                                                                                                                                                                                                            98.74
                                                                                                        302.23
                                                                                                                               70.98
                                                                                                                                                                                       -25.88
        100.00
                                                                 -23.50
                                                                                    106.73
                                                                                                                                                                   3468.3
                                                                                                                                                                                                          153.33
                                                                                    159.87
                                                                                                       289.60
                                                                                                                               60.41
        100.00
                                                                   4.46
                                                                                                                                           8 50 21
3 3 30
                                                                                                                                                                   2202.8
3394.0
                                                                                                                               72.66
                                                                                                                                                                                      - 32.01
                                                                                                                                                                                                            73.69
        110.00
                                                                 -29.93
                                                                                      82.28
                                                                                                        304.59
                                                                                  150.71
                                                                                                       286.07
                                                                                                                                                                                          5.86
                                                                                                                               57.21
        110.00
                                                                  10.25
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SCT 5446.0 SCR 388.2 SG3 100.9

RRT .5414 RRF .5263 RTF .9673

SCB 5459.8 R23 .0009 R13 .9673

SCI 5450.1 SC2 326.2 THA 2.22
                                                                                                                                                             ST 2360.6 SR 378.4 55 567.2
CRT .8331 CRS -.7868 CST -.9967
     TOE 2.8955 TRA 6.7451 TC3 -.9799 BAU 1.0340
     RDE .5892 RRA .1276 RC3 -.0007 FAU .00443
FDE .5664 FRA 1.5505 FC3 -.0486 BSP 18115
BDE 2.9541 BRA 6.7463 BC3 .9799 FSP -341
                                                                                                                                                             LSA 2447.8 MSA 213.4 55A 1D.4
                                                                                                                                                             EL1 2381.7 EL2 207.4 ALF
                                                                                                                                                                                                             7.66
                                                                                                                                                                          ARRIVAL DATE JUL 19 1966
                                                                                               FLIGHT TIME 210.00
LAUNCH DATE DEC 21 1965
                                                                                              DISTANCE 602.626
    HELIOCENTRIC CONIC
     RL 147.17 LAL .00 LOL 88.92 VL 25.799 GAL 16.96 AZL 87.41 MCA 314.59 SMA 116.62 ECC .38456 INC 2.5868 VI 30.273 RP 108.17 LAP -1.84 LOP 43.54 VP 36.274 GAP 22.25 AZP 88.18 TAL 147.61 TAP 102.20 RCA 71.78 APO 161.47 VZ 35.034 RC 211.617 GL 6.70 GP -2.47 ZAL 36.86 ZAP 173.53 ETS 205.00 ZAE 130.86 ETE 182.74 ZAC 131.30 ETC 165.82 CLP 174.02
    PLANETOCENTRIC CONIC
     C3 91.249 VHL 9.552 OLA 24.89 RAL 48.30 RAD 6569.8 VEL 14.581 PTH 2.64 VHP 14.063 OPA 9.72 RAP 36.82 ECC 2.5017 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 39 30 3503.38 -20.42 131.12 305.19 69.94 5 37 54 2903.4 -22.97 125.38 90.00 0 35 33 4510.76 3.61 178.16 294.44 61.89 1 47 23 5710.8 -18 171.53 100.00 6 23 16 3168.85 -23.21 107.59 306.27 70.61 7 16 5 2568.9 -25.64 99.63 100.00 1 34 28 4120.52 6.21 162.76 293.02 60.70 2 43 9 3520.5 2.26 156.20 110.00 8 14 16 2821.53 -29.54 83.60 308.66 71.97 9 1 18 2221.5 -31.72 75.07 110.00 1 59 57 4040.60 11.96 153.24 289.55 57.73 3 7 17 3440.6 7 41 144.84
     C3 91.249 VHL 9.552 OLA 24.89 RAL 48.30 RAD 6569.8 VEL 14.581 PTH 2.64 VHP 14.063 OPA
                                                                                                                                                                      9.72 RAP 36.82 ECC 2.5017
                                                                                     153.24
                                                                                                        289.55
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                         SGT 5414.8 SGR 379.0 SG3 98.5
RRT .5653 RRF .5514 RTF .9718
SGB 5428.1 R23 .0003 R13 .9718
SGI 5419.1 SG2 312.4 THA 2.27
                                                                                                                                                             ST 2300.9 SR 365.6 SS 572.9
CRT .8223 CRS -.7797 CST -.9973
      TOE 2.9549 TRA 7.3935 TC3 -.7905 BAU .9644
     ROE .6072 RRA .1587 RC3 -.0006 FAU .00305
FOE .5683 FRA 1.6425 FC3 -.0289 BSP 18112
BOE 3.0167 BRA 7.3952 BC3 .7905 FSP -333
                                                                                                                                                            LSA 2389.8 MSA 211.3 SSA 9.9
                                                                                                                                                           EL1 2320.6 EL2 206.2 ALF 7.50
                                                                                                                                                                            ARRIVAL DATE JUL 21 1966
                                                                                               FLIGHT TIME 212.00
LAUNCH DATE DEC 21 1965
                                                                                               DISTANCE 605.422
    HELIOCENTRIC CONIC
     RL 147.17 LAL .00 LOL 88.92 VL 25.766 CAL 18.72 AZL 87.50 MCA 317.80 SMA 116.45 ECC .40678 INC 2.5006 VI 30.273
RP 108.13 LAP -1.68 LOP 46.74 VP 36.264 CAP 23.67 AZP 88.15 TAL 146.62 TAP 104.42 RCA 69.08 APO 163.82 V2 35.047
RC 213.230 GL 5.93 CP -2.44 ZAL 35.53 ZAP 172.51 ETS 201.64 ZAE 130.57 ETE 182.71 ZAC 133.30 ETC 165.40 CLP 172.91
    PLANETOCENTRIC CONIC
     C3 106.207 VHL 10.306 DLA 24.47 RAL 49.83 RAD 6570.0 VEL 15.085 PTH 2.71 VHP 14.923 DPA 10.50 RAP 38.81 ECC 2.7479
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                          3511.29
4368.07
                                                                                                        309.05
                                                                                                                              69.75
                                                                                                                                             5 51 16
                                                                                                                                                                  2911.3
                                                                                                                                                                                    -22.81
                                                                                                                                                                                                          123.91
                           4 52 45
                                                                  -20.23
                                                                                     131.63
          90.00
                                                                                                                                                                                                          174.73
                                                                                                        297.64
                                                                                                                               62.17
                                                                                                                                             1 47 17
                                                                                                                                                                   3768.1
                                                                                                                                                                                         1.67
                           0 34 29
                                                                     5.44
                                                                                     181.38
          90.00
                          6 35 11 3181.04
1 34 44 4173.55
8 24 23 2839.36
2 2 1 4088.00
                                                                                                        310.10
                                                                                                                               70.28
                                                                                                                                              7 28 12
                                                                                                                                                                   2581.0
                                                                                                                                                                                       -25.41
                                                                                                                                                                                                          100.47
                                                                  -22.93
                                                                                     108.39
         100.00
                                                                                    165.72
                                                                                                                               61.09
                                                                                                                                            2 44 18
                                                                                                                                                                   3573.6
                                                                                                                                                                                        4.05
                                                                                                                                                                                                          159.12
                                                                     7.97
                                                                                                        296.26
         100.00
                                                                 -29.16
                                                                                       84.85
                                                                                                        312.52
                                                                                                                              71.32
                                                                                                                                              9 11 43
                                                                                                                                                                   2239.4
                                                                                                                                                                                      -31.43
                                                                                                                                                                                                           76.38
         110.00
                                                                                                                                                                                                         149.37
                                                                                    155.85
                                                                                                        292.88
                                                                                                                              58.36
                                                                                                                                            3 10 9
                                                                                                                                                                   3488.0
                                                                                                                                                                                     9.38
         110.00
    DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                                        SGT 5379.7 SGR 368.9 SG3 96.2
RRT .5891 RRF .5764 RTF .9761
SGB 5392.3 R23 -.0004 R13 .9761
SGI 5384.1 SG2 297.9 THA 2.32
                                                                                                                                                        ST 2244.1 SR 351.5 55 582.2
CRT .8122 CRS -.7734 CST -.9978
LSA 2335.6 MSA 207.8 SSA 9.3
EL1 2262.3 EL2 203.4 ALF 7.31
      TOE 3.0261 TRA 8.1014 TC3 -.6180 BAU .8774
     RDE .6291 RRA .1922 RC3 .0001 FAU .00151
FDE .5734 FRA 1.7450 FC3 -.0123 BSP 18090
```

FLIGHT TIME 206.00

BDE 3.0908 BRA 8.1037 BC3 .6180 FSP -326

ARRIVAL CATE JUL 23 1966

EL1 2055.1 EL2 176.6 ALF 6.32

LAUNCH DATE DEC 21 1965

DISTANCE 607.553 HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 25.735 GAL 20.69 A7L 87.60 HCA 321.01 SHA 116.28 ECC .43199 INC 2.4030 V1 30.273 RP 108.09 LAP -1.51 LOP 49.95 VP 36.254 GAP 25.29 A7P 88.13 TAL 145.80 TAP 106.81 RCA 66.05 APO 166.52 VZ 35.060 5.19 GP -2.41 TAL 34.38 TAP 171.38 ETS 198.94 TAE 130.19 ETE 182.68 TAC 135.22 ETC 164.94 CLP 171.72 RC 214.816 GL PLANETOCENTRIC CONIC C3 124.524 VHL 11.159 DLA 24.02 RAL 51.16 RAD 6570.3 VEL 15.680 PTH 2.79 VHP 15.905 CPA 11.24 RAP 40.72 ECC 3.0494 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 6 3 56 2918.4 -22.66 5 5 18 0 32 33 3518.38 -20.06 132.08 312.67 69.59 90.00 177.94 1 46 18 3825.5 3.52 184.63 300.64 62.55 7.25 1 46 18 7 39 41 2 44 30 9 21 31 4425.53 90.00 101.22 2592.1 -25.20 6 46 29 3192.14 1 34 3 4227.00 8 33 54 2856.04 -22.67 109.11 313.71 69.98 100.00 3627.0 5.84 162.07 168.72 299.32 61.59 9.71 100.00 2256.0 77.60 86.01 316.13 70.72 -28.79 110.00 3 12 2 3535.9 11.14 151.96 296.03 59.08 158.53 2 3 7 4135.86 15.36 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5340.7 SGR 358.0 SG3 94.0 RRT .6124 RRF .6010 RTF .9800 SGB 5352.7 R23 -.0011 R13 .9800 SGI 5345.2 SG2 282.7 THA 2.36 ST 2190.2 SR 336.4 55 595.6 CRT .8031 CRS -.7682 CST -.9983 TOE 3.1128 TRA 8.8782 TC3 -.4614 BAU .7682 ROE .6509 RRA .2280 RC3 .0013 FAU-.00025 FOE .5825 FRA 1.8602 FC3 .0018 BSP 18046 LSA 2285.6 HSA 202.7 SSA 8.7 EL1 2207.0 EL2 199.0 ALF 7.09 BDE 3.1801 BRA 8.8811 BC3 .4614 FSP -318 FLIGHT TIME 216.00 LAUNCH DATE DEC 21 1965 01STANCE 608.830 HELIOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 25.706 GAL 22.92 A7L 87.71 HCA 324.22 SHA 116.13 ECC .46067 INC 2.2908 VI 30.273 RP 108.05 LAP -1.34 LOP 53.16 VP 36.246 GAP 27.16 A7P 88.14 TAL 145.22 TAP 109.43 RCA 62.63 APO 169.63 V2 35.073 RC 216.375 GL 4.47 GP -2.39 7AL 33.42 7AP 170.13 ETS 196.73 7AE 129.70 ETE 182.64 7AC 137.03 ETC 164.43 CLP 170.42 PLANETOCENTRIC CONIC C3 147.172 VHL 12.131 DLA 23.55 RAL 52.28 RAD 6570.6 VEL 16.386 PTH 2.86 VHP 17.030 DPA 11.92 RAP 42.54 ECC 3.4221 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 17 6 3524 28 -19.90 130 46 316 03 60 48 618 60 2001 3 2001 -19.92 132.46 5 17 6 3524.28 90.00 1 44 23 3882.9 181.16 187.90 303.42 63.05 90.00 0 29 40 4482.86 9.04 69.72 7 50 28 62.19 2 43 41 2601.8 -25.00 101.88 6 57 6 109.74 317.04 3201.83 -22.45 100.00 3680.6 7.62 165.05 11.43 171.77 302.16 100.00 1 32 20 4280.55 70.19 9 30 37 59.90 3 12 54 2271.3 -30.87 78.70 -28.45 87.06 319.46 8 42 46 2871.25 110.00 3583.9 12.89 2 3 10 4183.89 17.02 161.26 298.97 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5299.5 SGR 346.2 SG3 92.0 RRT .6355 RRF .6254 RTF .9837 SG8 5310.8 R23 -.0018 R13 .9837 ST 2140.8 SR 320.5 SS 614.2 CRT .7954 CRS -.7646 CST -.9987 TOE 3.2234 TRA 9.7374 TC3 -.3195 BAU .6286 RDE .6730 RRA .2660 RC3 .0029 FAU-.00238 FDE .5971 FRA 1.9913 FC3 .0140 BSP 17878 BDE 3.2929 BRA 9.7411 BC3 .3195 FSP -309 LSA 2241.6 MSA 196.1 SSA 8.2 SG1 5304.1 SG2 267.1 THA 2.38 EL1 2156.1 EL2 192.9 ALF ARRIVAL DATE JUL 27 1966 FI 16HT TIME 218.00 LAUNCH DATE DEC 21 1965 CISTANCE 608.997 HELTOCENTRIC CONIC RL 147.17 LAL .00 LOL 88.92 VL 25.680 GAL 25.44 A7L 87.84 HCA 327.43 SWA 116.00 ECC .49343 INC 2.1595 V1 30.273 RP 108.01 LAP -1.16 LOP 56.37 VP 36.240 GAP 29.32 A7P 88.18 TAL 144.90 TAP 112.34 RCA 58.76 APO 173.23 V2 35.086 RC 217.906 GL 3.78 GP -2.36 TAL 32.69 TAP 168.74 ETS 194.87 TAE 129.07 ETE 182.60 TAC 138.70 ETC 163.90 CLP 168.99 PLANETOCENTRIC CONIC C3 175.463 VHL 13.246 DLA 23.03 RAL 53.16 RAD 6570.9 VEL 17.228 PTH 2.94 VHP 18.331 DPA 12.55 RAP 44.25 ECC 3.8877 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 2928.6 125.05 69.35 6 26 53 63.66 1 41 22 -22.45 319.08 -19.82 132.73 90.00 5 28 5 3528.57 7.15 191.18 305.95 3939.9 0 25 42 10.78 90.00 4539.85 102.41 -24.85 7 6 58 3209.70 110.25 320.06 69.52 8 0 28 2609.7 -22.26 100.00 168.05 304.75 62.89 2 41 44 3733.9 9.37 174.85 1 29 30 4333.95 13.11 100.00 8 50 53 2884.59 2 2 4 4231.83 79.66 2284.6 -30.63 322.47 69.73 9 38 58 -28.13 87.97 110.00 3631.8 14.60 60.81 3 12 36 164.04 301.68 18.63 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2090.9 SR 303.7 55 637.4 SGT 5250.4 SGR 333.3 SG3 90.0 RRT .6574 RRF .6484 RTF .9870 SGB 5261.0 R23 -.0025 R13 .9870 TOE 3.3535 TRAID.6799 TC3 -.1944 BAU .4560 CRT .7888 CR5 -.7618 CST -.9990 ROE .6949 RRA .3055 RC3 .0046 FAU-.00489 LSA 2198.9 MSA 188.2 SSA 7.6 FOE .6162 FRA 2.1388 FC3 .0241 BSP 17826 BOE 3.4247 BRA10.6843 BC3 .1944 FSP -303 EL1 2104.7 EL2 185.4 ALF 6.59 SG1 5255.0 SG2 251.0 THA 2.40 ARRIVAL DATE JUL 29 1966 FLIGHT TIME 220.00 LAUNCH DATE DEC 21 1965 DISTANCE 607.710 HELIOCENTRIC CONIC .00 LOL 88.92 VL 25.657 GAL 28.34 AZL 88.00 HCA 330.65 SMA 115.88 ECC .53092 INC 2.0028 V1 30.273
-.98 LOP 59.58 VP 36.237 GAP 31.85 AZP 88.25 TAL 144.94 TAP 115.58 RCA 54.36 APO 177.40 V2 35.099
3.11 GP -2.33 ZAL 32.21 ZAP 167.18 ETS 193.27 ZAE 128.28 ETE 182.54 ZAC 140.22 ETC 163.36 CLP 167.39 RL 147.17 LAL RP 107.97 LAP RC 219.410 GL PLANETOCENTRIC CONIC LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 38 10 3530.68 -19.77 132.87 321.75 69.30 6 37 1 2930.7 -22.41 125.19 90.00 0 20 31 4596.35 12.46 194.47 308.18 64.37 1 37 7 3996 4 8 9 1 7 16 0 3215.26 1 25 22 4387.01 8 58 10 2895.58 1 59 41 4279.45 8 9 35 2615.3 -24.74 322.70 69.37 -22.13 110.61 100.00 2 38 29 3787.0 11.08 177.95 307.04 63.69 14.73 100.00 2295.6 -27.87 88.72 325.09 69.36 9 46 26 110.00 16.26 3 11 0 3679.4 166.85 304.10 61.A1 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2042.7 SR 286.2 SS 667.0 CRT .7840 CRS -.7605 CST -.9993 SGT 5196.0 SGR 319.5 SG3 88.2 RRT .6781 RRF .6703 RTF .9899 TOE 3.5154 TRA11.7225 TC3 -.0836 BAU .2368 ROE .7173 RRA .3460 RC3 .0063 FAU-.00805 FOE .6422 FRA 2.3074 FC3 .0330 BSP 17737 SGB 5205.8 R23 -.0032 R13 .9899 SG1 5200.5 SG2 234.6 THA 2.39 LSA 2160.4 MSA 179.1 SSA

FLIGHT TIME 214.00

-298

BDE 3.5878 BRA11.7276 BC3 .0839 FSP

Ī

```
LAUNCH DATE DEC 22 1965
                                                                     FILIGHT TIME 70.00
                                                                                                                             ARRIVAL DATE MAR 2 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 201.414
    RL 147.16 LAL .00 LOL 89.94 VL 28.820 GAL -12.49 A7L 86.73 MCA 92.26 SMA 136.39 ECC .22957 INC 3.2683 VL 30.275
RP 107.75 LAP 3.27 LOP 182.20 VP 38.605 GAP -5.44 A7P 90.13 TAL 237.89 TAP 330.15 RCA 105.08 APO 167.70 V2 35.171
RC 62.133 GL 13.86 GP 6.04 7AL 156.15 7AP 40.63 ETS 351.50 7AE 159.73 ETE 351.61 7AC 56.12 ETC 165.50 CLP -40.25
   PLANETOCENTRIC CONIC
    C3 44.845 VHL 6.697 CLA -8.29 RAL 289.16 RAD 6568.7 VEL 12.892 PTH 2.35 VHP 5.069 DPA -11.37 RAP 323.43 ECC 1.7380
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 39 56 2155.19
11 32 46 5319.22
       90.00
                                                -18.08
                                                              37.76
                                                                           162.16
                                                                                        112.17
                                                                                                       2 15 51
                                                                                                                      1555.2
                                                                                                                                    -14.92
                                                                                                                                                     30.51
                                                                                                                       4719.2
        90.00
                  11 32 46
                                                27.44
                                                              241.73
                                                                            167.96
                                                                                            82.71 13 1 25
                                                                                                                                     26.15
                                                                                                                                                   233.30
                 2 57 16 1905.72
12 58 7 5043.92
3 56 21 1720.70
14 15 31 4801.70
       100.00
                                                -19.38
                                                               18.84
                                                                            161.58
                                                                                           113.21
                                                                                                       3 29 2
                                                                                                                       1305.7
                                                                                                                                     -16.08
                                                                                                                                                    11.61
                                                                                            81.75 14 22 11
      100.00
                 12 58 7
                                                28.83
                                                              221.26
                                                                            167.75
                                                                                                                       4443.9
                                                                                                                                     27.39
                                                                                                                                                   212.76
                                                                                          116.15 4 25 2
79.05 15 35 33
      110.00
                                               -22.84
                                                                3.10
                                                                           159.88
                                                                                                                      1120.7
                                                                                                                                    -19.14
                                                                                                                                                   355.92
      110.00
                                                              202.14
                                                                            167.01
                                                                                                                       4201.7
                                                                                                                                      30.73
                                                                                                                                                   193.41
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
    TOE -.1282 TRA -.4059 TC3 .1980 BAU .1190 ROE -.4487 RRA .1031 RC3 -.0121 FAU .08412
                                                                 SGT 453.4 SGR 394.4 SG3 214.2
RRT .D364 RRF -.2261 RTF -.2041
                                                                                                                   ST 152.3 SR 384.8 SS 233.2
CRT .6706 CRS .8089 CST .1238
LSA 442.1 MSA 172.4 SSA 21.9
                                                                 SGB 600.9 R23 -.1950 R13 -.2270
SG1 454.3 SG2 393.4 THA 7.30
    FOE .4775 FRA-1.2926 FC3-1.6239 BSP 723
    BOE .4666 BRA .4188 BC3 .1984 FSP
                                                    -605
                                                                                                                   EL1 399.3 EL2 108.9 ALF 73.91
LAUNCH DATE DEC 22 1965
                                                                     FLIGHT TIME 72.00
                                                                                                                              ARRIVAL DATE MAR 4 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 208.110
   RL 147.16 LAL .00 LOL 89.94 VL 28.869 GAL -12.37 A7L 86.78 MCA 95.49 SMA 136.78 ECC .22672 INC 3.2232 VI 30.275
RP 107.78 LAP 3.21 LOP 185.44 VP 38.632 GAP -4.71 A7P 90.31 TAL 238.55 TAP 334.04 RCA 105.77 APO 167.79 VZ 35.160
RC 64.180 GL 13.84 GP 6.46 ZAL 156.46 ZAP 45.12 ETS 352.05 ZAE 162.06 ETE 352.98 ZAC 54.79 ETC 165.65 CLP -44.75
  PLANETOCENTRIC CONIC
    C3 43.961 VHL 6.630 DLA -8.37 RAL 288.80 RAD 6568.7 VEL 12.858 PTH
                                                                                             2.34 VHP 4.772 DPA -11.34 RAP 322.07 ECC 1.7235
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        112.32
       90.00
                   1 39 4 2147.81
                                                -17.89
                                                              37.30
                                                                          161.45
                                                                                                      2 14 52
                                                                                                                    1547.8
                                                                                                                                   -14.71
                                                                                                                                                    30.07
                 11 30 45 5316.58
2 56 22 1898.47
12 56 9 5041.16
       90.00
                                                27.42
                                                              241.54
                                                                            167.26
                                                                                            82.62
                                                                                                     12 59 21
                                                                                                                       4716.6
                                                                                                                                      26.11
                                                                                                                                                   233.11
                                                                                           113.37 3 28 0
81.65 14 20 10
      100.00
                                               -19.19
                                                               18.39
                                                                            160.88
                                                                                                                       1298.5
      100.00
                                                28.81
                                                              221.06
                                                                           167.04
                                                                                                                       4441.2
                                                                                                                                      27.35
                                                                                                                                                   212.56
                3 55 22 1713.73
14 13 38 4798.67
                                                                                        116.33 4 23 56
78.92 15 33 36
      110.00
                                                -22.63
                                                               2.66
                                                                           159.17
                                                                                                                     1113.7
                                                                                                                                    -18.91
      110.00
                                               32.55
                                                              201.91
                                                                           166.29
                                                                                                                      4198.7
                                                                                                                                     30.68
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                  ST 150.8 SR 385.5 55 246.6
CRT .6087 CR5 .8056 CST .0369
                                                                 SGT 451.0 SGR 396.3 SG3 241.0
RRT .0114 RRF -.2629 RTF -.1056
    TOE -.1163 TRA -.4284 TC3 .1741 BAU .1023
    ROE -.4448 RRA .1101 RC3 -.0020 FAU .09346
   FOE .5260 FRA-1.4567 FC3-1.8404 BSP 632
BOE .4598 BRA .4423 BC3 .1741 FSP -696
                                                                 SG8 600.3 R23 -.2575 R13 -.1157
                                                                                                                   LSA 445.6 MSA 181.9 55A
                                                                                                                                                       21.9
                                                                                                                EL1 397.3 EL2 116.1 ALF 75.33
                                                                 SG1 451.1 SG2 396.1 THA 2.52
LAUNCH DATE DEC 22 1965
                                                                     FLIGHT TIME 74.00
                                                                                                                            ARRIVAL DATE MAR 6 1966
                                                                     DISTANCE 214.766
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.906 GAL -12.26 AZL 86.82 MCA 98.72 SMA 137.08 ECC .22421 INC 3.1777 VI 30.275
RP 107.81 LAP 3.14 LOP 188.67 VP 38.649 GAP -4.02 AZP 90.48 TAL 239.05 TAP 337.77 RCA 106.35 APO 167.82 VZ 35.149
RC 66.268 GL 13.79 GP 6.90 ZAL 156.71 ZAP 49.82 ETS 352.58 ZAE 164.69 ETE 354.78 ZAC 53.26 ETC 165.82 CLP -49.47
   PLANETOCENTRIC CONIC
    C3 43.130 VHL 6.567 DLA -8.44 RAL 288.54 RAO 6568.6 VEL 12.826 PTH 2.33 VMP 4.509 DPA -11.35 RAP 320.50 ECC 1.7098
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                       112.47 2 14 18
82.54 12 57 40
113.53 3 27 24
81.56 14 18 30
116.50 4 23 14
78.80 15 32 2
       90.00
                  1 38 38 2140.53
11 29 5 5314.25
                                               -17.71
                                                              36.85 160.86
                                                                                                                   1540.5 -14.51
                                                                                                                                                   29.63
       90.00
                                                27.40
                                                             241.37
                                                                           166.66
                                                                                                                      4714.2
                                                                                                                                     26.08
                                                                                                                                                  232.95
      100.00
                   2 55 53 1891.32
                                              -18.99
                                                              17.95
                                                                           160.28
                                                                                                                      1291.3
                                                                                                                                   -15.65
                                                                                                                                                   10.75
      100.00
                  12 54 32
                               5038.69
                                               28.78
                                                             220.88
                                                                           166.44
                                                                                                                      4438.7
                                                                                                                                     27.32
                                                                                                                                                  212.39
      110.00
                   3 54 47 1706.86
                                              -22.42
                                                               2.24
                                                                           158.57
                                                                                                                      1106.9
                                                                                                                                   -18.68
                                                                                                                                                  355.10
      110.00
                 14 12 6
                                4795.91
                                                32.51
                                                             201.70
                                                                           165.69
                                                                                                                      4195.9
                                                                                                                                    30.63
                                                                                                                                                  192.99
                                                               MID-COURSE EXECUTION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                                                               ORBIT DETERMINATION ACCURACY
   TDE -.1037 TRA -.4594 TC3 .1407 BAU .0813 RDE -.4405 RRA .1179 RC3 .0097 FAU .10306
                                                                SCT 454.5 SGR 398.3 SG3 268.9
RRT -.0279 RRF -.3045 RTF .0222
SGB 604.3 R23 .3007 R13 -.0497
                                                                                                                  ST 151.6 SR 385.6 SS 260.2
CRT .5298 CRS .8063 CST -.0590
                                                                                                                 LSA 449.6 MSA 191.5 SSA 21.8
   FOE .5792 FRA-1.6211 FC3-2.0687 BSP 515
   BOE .4525 BRA .4743 BC3 .1411 FSP
                                                   -786
                                                                 SG1 455.0 SG2 397.7 THA 174.05
                                                                                                                 EL1 394.8 EL2 125.6 ALF 76.88
LAUNCH DATE DEC 22 1965
                                                                     FLIGHT TIME 76.00
                                                                                                                             ARRIVAL DATE MAR 8 1966
  HELIOCENTRIC CONIC
                                                                    DISTANCE 221.382
                       .00 LOL 89.94 VL 28.932 GAL -12.15 A7L 86.87 HCA 101.95 SMA 137.29 ECC .22196 INC 3.1314 V1 30.275 3.06 LOP 191.90 VP 38.658 GAP -3.36 A7P 90.65 TAL 239.39 TAP 341.34 RCA 106.82 APO 167.77 V2 35.138 13.74 GP 7.35 7AL 156.89 7AP 54.72 ETS 353.12 7AE 167.59 ETE 357.38 7AC 51.52 ETC 166.00 CLP -54.38
   RL 147.16 LAL
   RP 107.85 LAP
   RC 68.394 GL 13.74 GP
  PLANETOCENTRIC CONIC
   C3 42.334 VML 6.506 DLA -8.52 RAL 288.36 RAD 6568.6 VEL 12.795 PTH 2.33 VMP 4.280 DPA -11.38 RAP 318.73 ECC 1.6967
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        1 38 34 2133.27
                                                                          160.37
       90.00
                                               -17.52
                                                             36.40
                                                                                         112.61
                                                                                                                                   -14.30
                                                                                                                                                   29.20
                 11 27 47
       90.00
                               5312.12
                                               27.38
                                                             241.22
                                                                           166.17
                                                                                                                                                  232.80
                   2 55 17
                                1884.20
      100.00
                                               -18.80
                                                              17.51
                                                                           159.79
                                                                                                                                                   10.33
                 12 53 15
                               5036.43
                                                                         165.95
                                                28.76
                                                             220.72
      100.00
                                                                                                                                                  212.23
                                                                        158.07
                   3 54 35 1700.03
      110.00
                                               -22.21
                                                               1.82
                                                                                                                                                  354.70
                 14 10 56
                               4793.36
                                                             201.51
                                                                           165.20
      110.00
                                                32.48
                                                                                                                                                  192.81
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                               SGT 468.2 SGR 400.7 SG3 297.4

RRT - .0863 RRF - .3490 RTF .1704

SGB 616.3 R23 .2921 R13 - .2373

SGI 472.6 SG2 395.5 THA 165.55
                                                                                                               ST 154.4 SR 384.8 SS 272.7

CRT .4293 CRS .8076 CST -.1717

LSA 453.2 MSA 201.2 SSA 21.8

EL1 391.3 EL2 137.1 ALF 78.84
   TOE -.0889 TRA -.4979 TC3 .0988 BAU .0574
ROE -.4353 RRA .1267 RC3 .0228 FAU .11285
   FOE .6310 FRA-1.7839 FC3-2.3077 BSP 453
BOE .4443 BRA .5138 BC3 .1014 FSP -879
```

```
ARRIVAL CATE MAR 10 1966
LAUNCH DATE DEC 22 1965
                                                                      FLIGHT TIME 78.00
                                                                      DISTANCE 227.958
  HELIOCENTRIC CONIC
   RL 147.16 LAL ... OD LOL 89.94 VL 28.947 GAL -12.05 A7L 86.92 HCA 105.17 SHA 137.42 ECC .21991 INC 3.0840 V1 30.275 RP 107.89 LAP 2.98 LOP 195.13 VP 38.659 GAP -2.73 A7P 90.81 TAL 239.59 TAP 344.76 RCA 107.20 APO 167.64 V2 35.126 RC 70.553 GL 13.67 GP 7.81 ZAL 157.01 ZAP 59.79 ETS 353.68 ZAE 170.71 ETE 1.70 ZAC 49.61 ETC 166.20 CLP -59.48
  PLANETOCENTRIC CONIC
    C3 41.562 VHL 6.447 CLA -8.60 RAL 288.28 RAC 6568.6 VEL 12.764 PTH 2.32 VHP 4.085 CPA -11.43 RAP 316.78 ECC 1.6840
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                     28.76
                   1 38 53 2125.97
11 26 47 5310.13
                                                -17.32
                                                               35.95
                                                                           159.96
                                                                                         112.75
                                                                                                       2 14 19
                                                                                                                      1526.0
                                                                                                                                    -14.09
       90.00
                                                                                                                                      26.02
                                                                                                                                                    232.66
                                                                                           82.40 12 55 17
                                                                                                                       4710.1
                                                              241.08
                                                                            165.77
                                                27.36
       90.00
                   11 26 47
                  2 56 2 1877.03
12 52 19 5034.30
3 54 45 1693.18
14 10 5 4790.92
                                                               17.07
                                                                            159.38
                                                                                           113.83
                                                                                                       3 27 19
                                                                                                                       1277.0
                                                                                                                                      -15.23
                                               -18.60
      100.00
                                                                                                                       4434.3
                                                                                           81.40 14 16 13
116.84 4 22 59
78.59 15 29 56
                                                                                                                                                    212.08
                                                                                                                                      27.25
                                               28.74
                                                              220.57
                                                                            165.55
      100.00
                                                                                                                                     -18.23
                                                                                                                                                    354.30
                                                                            157.67
                                                                                                                      1093.2
                                               -22.00
                                                                1.40
      110.00
                                                                                                                                                    192.63
                                                                                                                      4190.9
                                                                                                                                      30.53
                                               32.44
                                                              201.33
                                                                            164.79
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                                                                                   ST 159.7 SR 383.2 55 283.5

CRT .3078 CRS .8078 CST -.2992

LSA 455.8 MSA 210.8 SSA 21.7

EL1 386.9 EL2 150.5 ALF 81.38
                                                                 SGT 496.4 SGR 403.5 SG3 326.2
RRT -.1624 RRF -.3955 RTF .3247
SGB 639.7 R23 .2532 R13 -.4025
   TDE -.0714 TRA -.5433 TC3 .0484 BAU .0341
RDE -.4292 RRA .1362 RC3 .0376 FAU .12261
   FDE .6763 FRA-1.9418 FC3-2.5540 BSP 523
                                                                  SG1 507.5 SG2 389.4 THA 161.05
    BDE .4351 BRA .5601 BC3 .0613 FSP
                                                                                                                              ARRIVAL CATE MAR 12 1966
                                                                      FLIGHT TIME 80.00
LAUNCH DATE OFC 22 1965
                                                                      DISTANCE 234.493
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.954 GAL -11.94 A7L 86.96 MCA 108.39 SMA 137.48 ECC .21804 INC 3.0352 V1 30.275
RP 107.92 LAP 2.88 LOP 198.35 VP 38.653 GAP -2.13 A7P 90.96 TAL 239.64 TAP 348.03 RCA 107.50 APO 167.46 V2 35.114
RC 72.741 GL 13.58 GP 8.28 TAL 157.07 ZAP 64.99 ETS 354.26 ZAE 173.94 ETE 10.66 ZAC 47.57 ETC 166.42 CLP -64.71
  PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 39 32 2118.54 -17.13 35.49 159.64 112.90 2 14 51 1518.5 -13 88 28 32
                  11 26 6 5308.23
2 56 39 1869.76
12 51 40 5032.25
3 55 16 1686.22
14 9 32 4788.55
                                                                                                                                                    232.53
                                                                                             82.33
                                                                                                       12 54 34
                                                                                                                        4708.2
                                                                                                                                       26.00
                                                 27.34
                                                              240.94
                                                                             165.45
       90.00
                                                                                                                                      -15.01
                                                                                                                                                       9.47
                                                                             159.06
                                                                                            113.98
                                                                                                       3 27 49
                                                                                                                        1269.8
                                                -18.40
                                                               16.62
       100.00
                                                                                                                                                    211.93
                                                                                                      14 15 32
                                                                            165.23
                                                                                             81.32
                                                                                                                        4432.2
                                                                                                                                      27.22
       100.00
                                                 28.72
                                                              220.42
                                                                                                                                                    353.90
                                                                            157.34
                                                                                            117.01
                                                                                            117.01 4 23 22
78.49 15 29 21
                                                                                                                       1086.2
                                                                                                                                     -17.99
                                                -21.79
                                                                 .97
      110.00
                                                                                                                                                     192.46
                                                 32.41
                                                              201.15
                                                                             164.47
                                                                                                                       4188.5
                                                                                                                                       30.49
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 168.9 SR 380.7 SS 292.6

CRT .1770 CRS .8085 CST -.4244

LSA 458.4 MSA 220.2 SSA 21.6
                                                                  SGT 543.1 SGR 406.9 SG3 353.8
RRT -.2481 RRF -.4434 RTF .4696
    TOE -.0525 TRA -.5960 TC3 -.0112 BAU .0299
    ROE - .4220 RRA .1461 RC3 .0537 FAU .13186
    FOE .7155 FRA-2.0853 FC3-2.7979 BSP 725
                                                                  SGB 678.6 R23 .2138 R13 -.5372
                                                                                                                    EL1 382.1 ELZ 165.6 ALF 84.46
    BDE .4253 BRA .6136 BC3 .0548 FSP -1081
                                                                  5G1 561.3 SG2 381.4 THA 159.85
                                                                                                                              ARRIVAL DATE HAR 14 1966
                                                                      FLIGHT TIME 82.00
LAUNCH DATE DEC 22 1965
                                                                     DISTANCE 240.988
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.953 GAL -11.83 AZL 87.02 HCA 111.61 SMA 137.47 ECC .21629 INC 2.9845 V1 30.275 RP 107.96 LAP 2.77 LOP 201.58 VP 38.641 GAP -1.57 AZP 91.10 TAL 239.57 TAP 351.18 RCA 107.73 APO 167.20 V2 35.101
    RC 74.954 GL 13.48 GP 8.75 7AL 157.07 7AP 70.27 ETS 354.89 TAE 176.85 ETE 38.43 TAC 45.44 ETC 166.66 CLP -70.03
   PLANETOCENTRIC CONIC
    C3 40.042 VHL 6.328 DLA -8.78 RAL 288.35 RAD 6568.5 VEL 12.705 PTH 2.31 VHP 3.791 DPA -11.54 RAP 312.52 ECC 1.6590
    LNCH AZHTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    -13.66
                  1 40 32 2110.93
11 25 41 5306.36
2 57 36 1862.30
12 51 18 5030.23
                                                                                                                     1510.9
                                                                                          113.05
                                                                                                       2 15 43
                                                -16.93
                                                               35.02
                                                                            159.39
                                                                                            82.27
                                                                                                      12 54 8
                                                                                                                                                    232.40
                                                                                                                        4706.4
                                                                                                                                      25.97
                                                                            165.21
        90.00
                                                 27.32
                                                              240.80
                                                                                                                                                      9.03
                                                                                                        3 28 39
                                                                                                                       1262.3
                                                                                                                                      -14.78
                                                                                           114.13
                                                                            158.81
       100.00
                                               -18.20
                                                               16.16
                                                                                                                                                    211.79
                                                                                                                       4430.2
                                                                                                                                      27.19
                                                                                            81.25 14 15 8
                                                 28.70
                                                              220.27
                                                                            164.99
       100.00
                                                                                           117.19 4 24 6
78.39 15 29 3
                                                                                                                       1079.1
                                                                                                                                     -17.75
                                                                                                                                                    353.49
                                                                            157.09
                  3 56 7 1679.10
14 9 17 4786.20
                                               -21.57
                                                                  .54
       110.00
                                                                                                                                      30.44
                                                                                                                      4186.2
                                                                                                                                                    192.29
                                                              200.97
                                                                            154.22
                                                 32.38
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 192.9 SR 377.3 SS 300.6

CRT .D511 CRS .8122 CST -.5308

LSA 461.8 MSA 228.9 SSA 21.5

EL1 377.4 EL2 182.6 ALF 88.15
                                                                  SGT 61D.5 SGR 41D.9 SG3 378.5
RRT -.3335 RRF -.4916 RTF .5917
SGB 735.9 R23 .1838 R13 -.6433
    TOE -.0332 TRA -.6562 TC3 -.0806 BAU .0573
    ROE -.4140 RRA .1558 RC3 .0706 FAU .13993
    FOE .7512 FRA-2.2015 FC3-3.0255 BSP 1030
                                                                  SG1 634.5 SG2 372.7 THA 160.31
    BOE .4153 BRA .6744 BC3 .1071 FSP -1163
                                                                                                                               ARRIVAL DATE MAR 16 1966
                                                                      FLIGHT TIME 84.00
                                                                      DISTANCE 247.444
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.944 GAL -11.72 AZL 87.07 MCA 114.83 SMA 137.40 ECC .21465 INC 2.9316 V1 30.275 RP 108.00 LAP 2.66 LOP 204.80 VP 38.623 GAP -1.02 AZP 91.23 TAL 239.37 TAP 354.20 RCA 107.90 APO 166.89 V2 35.089 RC 77.191 GL 13.37 GP 9.21 ZAL 157.03 ZAP 75.58 ETS 355.56 ZAE 177.01 ETE 112.23 ZAC 43.27 ETC 166.94 CLP -75.39
   PLANETOCENTRIC CONIC
    C3 39.280 VHL 6.267 DLA -8.87 RAL 288.49 RAD 6568.5 VEL 12.675 PTH 2.30 VHP 3.690 DPA -11.57 RAP 310.31 ECC 1.6465
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      1503.0
                                                                                                                                      -13.43
                                                               34.54
                                                                                          113.19
                                                                                                       2 16 55
                                                                            159.21
                    1 41 52 2103.05
                                                 -16.72
        90.00
                                                                                                                                                     232.27
                                                                                                                                       25.95
                                                                                                      12 53 56
                                                                                                                        4704.5
                                                               240.67
                                                                             165.03
                                                                                             82.20
                                                  27.31
        90.00
                   11 25 32
                                 5304.55
                                                                                                      3 29 47
14 15 0
                                                                                                                                                        8.58
                                                                                                                                       -14.55
                                                                15.69
                                                                                                                        1254.6
                                                                             158.62
                                                                                            114.29
                    2 58 53 1854.57
                                                -17.98
       100.00
                                                                                                                                                     211.65
                                                                                             81.17
                                                                                                                        4428.3
                                                                                                                                       27.16
                  12 51 12 5028.25
3 57 17 1671.72
                                                               220.13
                                                                             164.81
                                                 28.68
       100.00
                                                                                                                                      -17.50
                                                                                                                      1071.7
                                                                                                                                                     353.06
                                                                  .09
                                                                             156.90
                                                                                            117.36
                                                                                                        4 25 8
                                                -21.34
       110.00
                                                                                                     15 29 1
                                                               200.80
                                                                             164.03
                                                                                             78.29
                                                                                                                        4183.9
                                                                                                                                        30.40
                                                32.35
      110.00
                  14 9 17
                                 4783.87
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 200.6 SR 372.6 SS 305.6
CRT -.0662 CRS .8137 CST -.6247
LSA 464.7 MSA 236.9 SSA 21.4
                                                                   SGT 696.2 SGR 415.3 SG3 400.5
RRT -.4144 RRF -.5385 RTF .6853
    TOE -.0126 TRA -.7213 TC3 -.1577 BAU .0950
    ROE - 4045 RRA .1654 RC3 .0886 FAU .14695
FOE .7720 FRA-2.2951 FC3-3.2388 BSP 1389
BDE .4047 BRA .7400 BC3 .1809 FSP -1247
                                                                  SGB 810.6 R23 .1608 R13 -.7225
                                                                                                                  EL1 372.9 EL2 200.0 ALF 92.87
                                                                  SG1 724.8 SG2 363.0 THA 161.25
```

```
FLIGHT TIME 86.00
                                                                                                                                                ARRIVAL CATE HAR 18 1966
LAUNCH DATE DEC 22 1965
                                                                                DISTANCE 253.862
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.928 GAL -11.60 A7L 87.12 MCA 118.04 SMA 137.27 ECC .21310 INC 2.8759 V1 30.275
RP 108.04 LAP 2.54 LOP 208.01 VP 38.600 GAP -.51 A7P 91.35 TAL 239.06 TAP 357.10 RCA 108.02 APO 166.52 V2 35.076
RC 79.446 GL 13.24 GP 9.66 ZAL 156.93 ZAP 80.86 ETS 356.27 ZAE 174.05 ETE 143.33 ZAC 41.14 ETC 167.24 CLP -80.72
   PLANETOCENTRIC CONIC
    C3 38.510 VHL 6.206 CLA -8.97 RAL 288.71 RAD 6568.5 VEL 12.644 PTH 2.30 VHP 3.616 CPA -11.59 RAP 308.13 ECC 1.6338
    CS 38.510 VH 6.206 OLA -8.97 RAL 288.71 RAD 6568.5 VEL 12.644 PIH 2.30 VHP 3.616 OPA -11.59 RAP 308.13 ECC 1.6358

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 11 43 31 2094.80 -16.49 34.04 159.08 113.35 2 18 26 1494.8 -13.19 26.91

90.00 11 25 36 5302.78 27.29 240.55 164.92 82.14 12 53 58 4702.8 25.92 232.15

100.00 3 0 29 1846.50 -17.75 15.20 158.50 114.45 3 31 15 1246.5 -14.31 8.10

100.00 12 51 19 5026.31 28.66 219.99 164.69 81.10 14 15 5 4426.3 27.13 211.52

110.00 3 58 45 1664.03 -21.10 359.62 156.77 117.54 4 26 29 1064.0 -17.24 352.62

110.00 14 9 32 4781.55 32.32 200.63 163.91 78.20 15 29 13 4181.6 30.35 191.96
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 798.8 SGR 419.9 SG3 417.7
RRT -.4856 RRF -.5835 RTF .7536
                                                                                                                                    ST 222.2 SR 367.0 SS 309.0
CRT -.1640 CRS .8178 CST -.6937
    TOE .0075 TRA -.7914 TC3 -.2429 BAU .1366
    ROE -.3939 RRA .1741 RC3 .1068 FAU .15212
                                                                            SGB 902.5 R23 .1460 R13 -.7801
SG1 830.5 SG2 353.1 THA 162.40
    FDE .7866 FRA-2.3510 FC3-3.4199 BSP 1799
                                                                                                                                    LSA 468.7 MSA 243.7 SSA 21.2
    BDE .3940 BRA .8103 BC3 .2654 FSP -1305
                                                                                                                                    EL1 369.7 EL2 217.5 ALF 98.71
                                                                                FLIGHT TIME 88.00
                                                                                                                                                 ARRIVAL DATE HAR 20 1966
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 260.243
    RL 147.16 LAL .00 LOL 89.94 VL 28.907 GAL -11.48 AZL 87.18 MCA 121.26 SMA 137.09 ECC .21161 INC 2.8168 VI 30.275
RP 108.08 LAP 2.41 LOP 211.23 VP 38.572 GAP -.02 AZP 91.46 TAL 238.64 TAP 359.89 RCA 108.08 APO 166.10 VZ 35.063
RC 81.719 GL 13.10 GP 10.11 ZAL 156.79 ZAP 86.04 ETS 357.04 ZAE 170.57 ETE 152.88 ZAC 39.08 ETC 167.58 CLP -85.98
   PLANETOCENTRIC CONIC
    C3 37.728 VHL 6.142 DLA -9.08 RAL 288.99 RAD 6568.5 VEL 12.613 PTH 2.29 VHP 3.569 DPA -11.56 RAP 306.03 ECC 1.6209 LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                                                                                                      113.51
                                                                                                                                      1486.1
                                                                                                                                                        -12.94
                      1 45 30 2086.07
                                                       -16.26
                                                                        33.51
                                                                                      159.01
                                                                                                                      2 20 16
                                                                                                                                                                           26.40
                                                                                                        82.08 12 54 12
114.62 3 33 3
81.04 14 15 22
117.73 4 28 9
78.10 15 29 38
        90.00
                     11 25 51
                                      5301.14
                                                        27.28
                                                                       240.43
                                                                                       164.85
                                                                                                                                          4701.1
                                                                                                                                                           25.90
                                                                                                                                                                          232.03
                    3 2 25 1837.96
12 51 38 5024.48
4 0 33 1655.90
14 9 58 4779.31
       100.00
                                                      -17.51
                                                                        14.68
                                                                                       158.43
                                                                                                                                        1238.0
                                                                                                                                                         -14.05
                                                                                                                                                                           7.60
       100.00
                                                        28.64
                                                                       219.85
                                                                                       164.63
                                                                                                                                        4424.5
                                                                                                                                                         27.10
                                                                                                                                                                          211.39
                                                                                                                                      1055.9
                                                                                    156.70
                                                                                                                                                      -16.97
       110.00
                                                      -20.84
                                                                       359.13
                                                                                                                                                                          352.15
       110.00
                                                       32.28
                                                                       200.46
                                                                                       163.85
                                                                                                                                         4179.3
                                                                                                                                                           30.31
                                                                                                                                                                          191.80
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SCT 913.4 SCR 424.6 SC3 432.9

RRT -.5516 RRF -.6256 RTF .8028

SCB 1007.3 R23 .1322 R13 -.8217

SCI 947.7 SC2 341.4 THA 163.40
    TDE .0275 TRA -.8635 TC3 -.3339 BAU .1801 ROE -.3809 RRA .1830 RC3 .1265 FAU .15654
                                                                                                                                    5T 246.4 SR 359.1 SS 306.6
CRT -.2471 CRS .8112 CST -.7596
LSA 469.9 MSA 249.8 SSA 21.2
    FOE .7658 FRA-2.3951 FC3-3.5921 BSP 2234
BOE .3819 BRA .8827 BC3 .3571 FSP -1396
                                                                                                                                    EL1 367.9 EL2 233.0 ALF 106.32
                                                                               FLIGHT TIME 90.00
                                                                                                                                               ARRIVAL DATE MAR 22 1966
LAUNCH DATE DEC 22 1965
                                                                               DISTANCE 266.587
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.880 GAL -11.35 AZL 87.25 MCA 124.47 SMA 136.87 ECC .21018 INC 2.7536 VI 30.275
RP 108.12 LAP 2.27 LOP 214.44 VP 38.539 GAP .45 AZP 91.56 TAL 238.12 TAP 2.59 RCA 108.10 APO 165.64 VZ 35.050
RC 84.008 GL 12.94 GP 10.55 ZAL 156.61 ZAP 91.07 ETS 357.86 ZAE 167.07 ETE 157.24 ZAC 37.16 ETC 167.98 CLP -91.09
   PLANETOCENTRIC CONIC
    C3 36.927 VHL 6.077 DLA -9.20 RAL 289.34 RAD 6568.4 VEL 12.582 PTH 2.28 VHP 3.545 DPA -11.49 RAP 304.08 ECC 1.6077
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     1476.8
                                                                                                                                                      -12.67
                                                                                    158.99 113.68 2 22 27
164.84 82.03 12 54 36
        90.00
                      1 47 50 2076.75
                                                       -16.00
                                                                       32.94
                                                                                                                                                                          25.85
                    11 26 16 5299.62
3 4 41 1828.85
12 52 7 5022.75
                                                        27.26
                                                                       240.32
                                                                                                                                         4699.6
                                                                                                                                                         25.88
                                                                                                                                                                         231.93
                                                                                                                    3 35 10
14 15 50
                                                                                                                                       1228.9
                                                      -17.25
                                                                        14.13
                                                                                       158.41
                                                                                                        114.80
                                                                                                                                                        -13.77
                                                                                                                                                                           7.07
                                                        28.62
                                                                       219.73
                                                                                       164.62
                                                                                                         80.97
                                                                                                                                         4422.8
                                                                                                                                                         27.07
                                                                                                                                                                         211.27
                     4 2 41 1647.25
14 10 36 4777.12
                                                                                                        117.93 4 30 8
78.01 15 30 13
                                                     -20.57
                                                                       358.61
                                                                                       156.67
                                                                                                                                         1047.2
                                                                                                                                                        -16.67
                                                                                                                                                                         351.65
                                                       32.25
                                                                       200.30
                                                                                       163.83
                                                                                                                                         4177.1
                                                                                                                                                         30.27
                                                                                                                                                                         191.65
        110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 1039.5 SGR 429.0 SG3 438.2
RRT -.6023 RRF -.6653 RTF .8361
SGB 1124.5 R23 .1308 R13 -.8503
                                                                                                                                   ST 272.7 SR 351.7 55 307.7 CRT -.3071 CRS .8233 CST -.7862
    TOE .0452 TRA -.9383 TC3 -.4318 BAU .2248
    ROE -.3685 RRA .1889 RC3 .1444 FAU .15728
                                                                                                                                   LSA 477.5 MSA 253.6 SSA 20.9
    FDE .7739 FRA-2.3646 FC3-3.6874 BSP 2696
    BDE .3713 BRA .9572 BC3 .4553 FSP -1386
                                                                           SGI 1074.6 SG2 331.3 THA 164.54
                                                                                                                                   EL1 370.7 EL2 246.2 ALF 115.04
                                                                                FLIGHT TIME 92.00
                                                                                                                                                ARRIVAL DATE MAR 24 1966
LAUNCH DATE DEC 22 1965
                                                                               DISTANCE 272.896
    RL 147.16 LAL .00 LOL 89.94 VL 28.848 GAL -11.22 AZL 87.31 HCA 127.67 SMA 136.61 ECC .20880 INC 2.6854 V1 30.275 RP 108.16 LAP 2.13 LOP 217.64 VP 38.503 GAP .89 AZP 91.64 TAL 237.51 TAP 5.18 RCA 108.09 APO 165.14 V2 35.036 RC 86.309 GL 12.75 GP 10.99 ZAL 156.39 ZAP 95.90 ETS 358.73 ZAE 163.65 ETE 159.69 ZAC 35.42 ETC 168.44 CLP -96.01
   PLANE TOCENTRIC CONIC
    C3 36.111 VHL 6.009 DLA -9.34 RAL 289.74 RAD 6568.4 VEL 12.549 PTH 2.27 VHP 3.542 DPA -11.35 RAP 302.30 ECC 1.5943
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2 25 0
        90.00
                      1 50 33 2066.67
                                                       -15.73
                                                                        32.33
                                                                                      159.02
                                                                                                       113.86
                                                                                                                                     1466.7
                                                                                                                                                        -12.37
                                                                                                                                                                          25.26
        90.00
                                                                                                                    12 55 6
                                                                                                                                         4698.4
                    11 26 48
                                     5298.41
                                                       27.25
                                                                       240.23
                                                                                       164.89
                                                                                                         81.99
                                                                                                                                                         25.86
                                                                                                                                                                         231.84
                    3 7 19 1819.01
12 52 43 5021.30
                                                       -16.97
                                                                        13.53
                                                                                       158.43
                                                                                                        114.98
                                                                                                                     3 37 38
                                                                                                                                         1219.0
                                                                                                                                                         -13.46
                                                                                                                                                                           6.49
       100.00
                                                                                                         80.92 14 16 24
                                                       28.50
                                                                       219.62
                                                                                       164.66
                                                                                                                                         4421.3
                                                                                                                                                         27.05
                                                                                                                                                                         211.15
       100.00
                                                                                                         118.13 4 32 27
77.93 15 30 58
                    4 5 9 1637.92
14 11 23 4775.15
                                                      -20.27
                                                                       358.05
                                                                                       156.69
                                                                                                        118.13
                                                                                                                                         1037.9
                                                                                                                                                        -16.35
                                                                                                                                                                         351.12
       110.00
                                                                                                                                         4175.1
                                                      32.22
                                                                       200.15
                                                                                       163.87
                                                                                                                                                         30.23
                                                                                                                                                                         191.50
       110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 1171.4 SGR 433.2 SG3 441.5 ST 299.9 SR 341.9 SS 303.2 RRT -.6498 RRF -.7021 RTF .8601 CRT -.3547 CRS .8245 CST -.8149 SGB 1249.0 R23 .1290 R13 -.8710 LSA 482.4 MSA 256.3 SSA 20.8 SG1 1207.4 SG2 319.5 THA 165.45 EL1 377.1 EL2 254.2 ALF 124.83
    TOE .0613 TRA-1.0126 TC3 -.5337 BAU .2695
    ROE -.3536 RRA .1946 RC3 .1636 FAU .15736
    FOE .7482 FRA-2.3258 FC3-3.7725 BSP 3171
BDE .3589 BRA 1.0311 BC3 .5582 FSP -1407
```

```
FLIGHT TIME 94.00
                                                                                                                            ARRIVAL CATE MAR 26 1966
LAUNCH DATE DEC 22 1965
                                                                    DISTANCE 279.173
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.812 GAL -11.08 A7L 87.39 HCA 130.88 SMA 136.32 ECC .20747 INC 2.6110 V1 30.275 RP 108.20 LAP 1.97 LOP 220.85 VP 38.464 GAP 1.32 A7P 91.71 TAL 236.82 TAP 7.70 RCA 108.04 APO 164.60 VZ 35.023
    RC 88.623 GL 12.53 GP 11.45 TAL 156.13 TAP 100.51 ETS 359.67 TAE 160.39 ETE 161.20 TAC 33.90 ETC 169.00 CLP-100.72
   PLANETOCENTRIC CONTC.
    C3 35.275 VML 5.939 DLA -9.50 RAL 290.21 RAD 6568.4 VEL 12.516 PTH 2.27 VMP 3.557 DPA -11.15 RAP 300.74 ECC 1.5805 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       114.05
                                                                                                                   1455.6
                                                                         159.09
                                                                                                     2 27 56
                   1 53 40 2055.62
11 27 24 5297.61
        90.00
                                               -15.42
                                                              31.66
                                                                                                                                   -12.04
                                                                                                                                                  24.61
        90.00
                                                27.24
                                                             240.18
                                                                           164.98
                                                                                           81.96
                                                                                                    12 55 42
                                                                                                                     4697.6
                                                                                                                                    25.85
                                                                                                                                                  231.79
                   3 10 21 1808.24
12 53 24 5020.23
      100.00
                                               -16.66
                                                              12.88
                                                                           158.50
                                                                                          115.18
                                                                                                     3 40 29
                                                                                                                     1208.2
                                                                                                                                   -13.13
                                                                                                                                                   5.87
                                                                                          80.88 14 17 5
118.36 4 35 7
77.86 15 31 49
      100.00
                  12 53 24
                                 5020.23
                                                28.59
                                                             219.55
                                                                           164.75
                                                                                                                     4420.2
                                                                                                                                   27.03
                                                                                                                                                  211.09
       110.00
                   4 7 59 1627.76
                                               -19.94
                                                             357.44
                                                                           156.76
                                                                                                                      1027.8
                                                                                                                                   -16.00
                                                                                                                                                 340.54
      110.00
                  14 12 15
                                 4773.48
                                                 32.20
                                                             200.02
                                                                           163.96
                                                                                                                     4173.5
                                                                                                                                    30.19
                                                                                                                                                 191.39
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 1307.3 SGR 437.1 SG3 439.8
RRT -.6906 RRF -.7363 RTF .8768
                                                                                                                 5T 327.3 SR 331.1 SS 297.3
CRT -.3897 CRS .8281 CST -.8327
    TOE .0748 TRA-1.0853 TC3 -.6393 BAU .3136
    RDE -.3378 RRA .1987 RC3 .1826 FAU .15557
                                                                                                                 LSA 488.5 MSA 257.2 SSA 20.6
                                                                 SGB 1378.4 R23 .1315 R13 -.8856
    FDE .7184 FRA-2.2537 FC3-3.8181 BSP 3648
                                                                                                                  EL1 388.2 EL2 257.2 ALF 134.15
                                                                 SG1 1343.6 SG2 307.6 THA 166.26
    BDE .3460 BRA 1.1034 BC3 .6649 FSP -1402
LAUNCH DATE DEC 22 1965
                                                                     FLIGHT TIME 96.00
                                                                                                                            ARRIVAL DATE MAR 28 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 285.417
    RL 147.16 LAL .00 LOL 89.94 VL 28.772 GAL -10.94 AZL 87.47 MCA 134.08 SMA 135.99 ECC .20617 INC 2.5292 VI 30.275 RP 108.24 LAP 1.82 LOP 224.05 VP 38.422 GAP 1.73 AZP 91.76 TAL 236.04 TAP 10.13 RCA 107.96 APO 164.03 V2 35.010 RC 90.946 GL 12.27 GP 11.94 ZAL 155.83 ZAP 104.85 ETS .67 ZAE 157.29 ETE 162.15 ZAC 32.60 ETC 169.66 CLP-105.19
   PLANETOCENTRIC CONIC
    C3 34.419 VHL 5.867 DLA -9.68 RAL 290.73 RAD 6568.4 VEL 12.482 PTH
                                                                                             2.26 VMP 3.589 DPA -10.87 RAP 299.41 ECC 1.5664
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1443.4
                                                                                                     2 31 18
        90.00
                   1 57 15 2043.37
                                               -15.08
                                                              30.92
                                                                          159.20
                                                                                         114.25
                                                                                                                                   -11.68
                                                                                                                                                  23.90
        90.00
                  11 28 0 5297.47
                                                27.24
                                                             240.17
                                                                           165.12
                                                                                           81.96
                                                                                                    12 56 18
                                                                                                                      4697.5
                                                                                                                                    25.85
                                                                                                                                                  231.78
                    3 13 50 1796.31
      100.00
                                               -16.31
                                                              12.17
                                                                           158.60
                                                                                          115.40
                                                                                                     3 43 46
                                                                                                                      1196.3
                                                                                                                                    -12.76
                                                                                                                                                   5.1A
                                                                                          80.86 14 17 47
118.60 4 38 11
77.81 15 32 44
                  12 54 7 5019.75
4 11 14 1616.55
                                                                                                                                                  211.06
      100.00
                                                28.59
                                                             219.51
                                                                           164.89
                                                                                                                      4419.8
                                                                                                                                    27.03
      110.00
                                               -19.58
                                                             356.78
                                                                           156.86
                                                                                                                     1016.5
                                                                                                                                    -15.61
                                                                                                                                                  349.91
      110.00
                  14 13 12
                                4772.29
                                                32.18
                                                             199.94
                                                                           164.10
                                                                                                                     4172.3
                                                                                                                                    30.17
                                                                                                                                                  191.30
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE .0849 TRA-1.1557 TC3 -.7485 BAU .3568
                                                                 SGT 1445.5 SGR 441.0 SG3 435.1
RRT -.7275 RRF -.7685 RTF .8889
SGB 1511.2 R23 .1364 R13 -.8961
                                                                                                                 ST 354.4 SR 318.8 SS 288.6
CRT -.4139 CRS .8284 CST -.8465
    RDE -. 3205 RRA . 2020 RC3 . 2025 FAU . 15276
    FOE .6746 FRA-2.1652 FC3-3.8423 BSP 4154
BDE .3315 BRA 1.1733 BC3 .7754 FSP -1395
                                                                                                                 LSA 494.3 MSA 256.4 SSA 20.5
EL1 402.3 EL2 255.6 ALF 142.18
                                                                 SG1 1482.1 SG2 295.1 THA 166.96
                                                                    FLIGHT TIME 98.00
                                                                                                                           ARRIVAL DATE MAR 30 1966
LAUNCH DATE DEC 22 1965
                                                                    DISTANCE 291.630
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.728 GAL -10.79 AZL 87.56 HCA 137.28 SMA 135.65 ECC .20491 INC 2.4380 V1 30.275
RP 108.29 LAP 1.65 LOP 227.25 VP 38.377 GAP 2.11 AZP 91.79 TAL 235.20 TAP 12.48 RCA 107.85 APO 163.44 VZ 34.996
RC 93.279 GL 11.96 GP 12.47 ZAL 155.50 ZAP 108.93 ETS 1.76 ZAE 154.40 ETE 162.71 ZAC 31.55 ETC 170.47 CLP-109.40
   PLANETOCENTRIC CONTC
    C3 33.541 VHL 5.791 DLA -9.91 RAL 291.32 RAD 6568.3 VEL 12.446 PTH 2.25 VHP 3.635 OPA -10.49 RAP 298.34 ECC 1.5520
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                               -14.69
                                                             30.09
                                                                        159.35
                                                                                       114.48
                                                                                                     2 35 12
                                                                                                                  1429.6 -11.27 23.09
                   2 1 23 2029.56
       90.00
                  11 28 33 5298.24
3 17 50 1782.90
12 54 47 5020.13
4 14 58 1603.99
                                                                                           81.98 12 56 51
                                                                                                                     4698.2
                                                             240.22
                                                                           165.31
                                               27.25
       90.00
                                                                                         115.64 3 47 33

00.08 14 18 27

118.86 4 41 42

77.79 15 33 40
                                                                           158.75
                                                                                                                    1182.9
                                              -15.92
                                                             11.36
      100.00
                                                                           165.08
                                                                                                                     4420.1
                                                                                                                                    27.03
                                                                                                                                                 211.08
                                                             219.54
      100.00
                                               28.59
                                                             356.04
                                                                           157.00
                                                                                                                     1004.0
                                                                                                                                   -15.17
                                               -19.17
      110.00
                                                                           164.30
                                                                                                                     4171.8
                                                                                                                                    30.16
                                                                                                                                                 191.27
                                                             199.90
      110.00
                  14 14 8
                                4771.80
                                                32.18
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 380.4 SR 305.5 SS 278.8
CRT -.4296 CRS .8307 CST -.8533
LSA 500.8 MSA 254.1 SSA 20.3
EL1 418 K E12 260 7 ...
                                                                 SGT 1583.6 SGR 444.9 SG3 426.6
    TOF .0915 TRA-1.2222 TC3 -.8603 BAU .3985
   FOE -.3024 RRA .2037 RC3 .2229 FAU .14862
FOE .6294 FRA-2.0530 FC3-3.8360 BSP 4608
BDE .3159 BRA 1.2390 BC3 .8887 FSP -1366
                                                                RRT -.7598 RRF -.7988 RTF .8971
                                                                SGB 1644.9 R23 .1456 R13 -.9034
                                                                SG1 1620.5 SG2 282.7 THA 167.56
                                                                                                                 EL1 418.5 EL2 250.7 ALF 148.61
                                                                    FLIGHT TIME 100.00
                                                                                                                            ARRIVAL CATE APR 1 1966
LAUNCH DATE DEC 22 1965
                                                                    DISTANCE 297.814
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.681 GAL -10.63 AZL 87.66 MCA 140.48 SMA 135.27 ECC .20369 INC 2.3351 V1 30.275 RP 108.33 LAP 1.49 LOP 230.44 VP 38.330 GAP 2.48 AZP 91.80 TAL 234.29 TAP 14.77 RCA 107.72 APO 162.83 V2 34.983 RC 95.621 GL 11.60 GP 13.07 ZAL 155.15 ZAP 112.72 ETS 2.96 ZAE 151.70 ETE 162.97 ZAC 30.75 ETC 171.46 CLP-113.36
   PLANE TOCENTRIC CONIC
    C3 32.642 VHL 5.713 DLA -10.18 RAL 291.96 RAD 6568.3 VEL 12.410 PTH 2.24 VHP 3.693 DPA -10.00 RAP 297.50 ECC 1.5372
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               2013.75
                                               -14.24
                                                                           159.54
                                                                                         114.73
                                                                                                     2 39 44
                                                                                                                     1413.7
                                                                                                                                  -10.79
                                                                                                                                                  22.17
                   2 6 10
                                                             29.15
                                                                                                                                                  231.98
                  11 28 55
                                                27.27
                                                             240.37
                                                                                          82.06
                                                                                                    12 57 15
                                                                                                                     4700.4
                                                                                                                                   25.89
                                5300.36
                                                                           165.56
                                                                           158.94
                                                                                         115.90
                                                                                                     3 51 55
                                                                                                                     1167.6
                                                                                                                                   -11.86
                                                                                                                                                   3.52
      100.00
                    3 22 28
                               1767.59
                                               -15.47
                                                              10.45
                 12 55 18 5021.75
4 19 15 1589.74
14 14 59 4772.36
                                                                                          80.94 14 18 59
                                                                                                                     4421.8
                                                                                                                                   27.06
                                                                                                                                                  211.20
                                                28.61
                                                             219.66
                                                                           165.34
                                               -18.70
                                                             355.20
                                                                           157.18
                                                                                         119.15
                                                                                                     4 45 45
                                                                                                                     989.7
                                                                                                                                   -14.67
                                                                                                                                                 348.40
                                                                                          77.81 15 34 32
                                                                                                                    4172.4
                                                                                                                                   30.17
                                                                                                                                                 191.31
      110.00
                                                             199.94
                                                                           164.56
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SCT 1721.5 SCR 449.7 SG3 416.4
RRT -.7895 RRF -.8277 RTF .9030
SGB 1779.3 R23 .1575 R13 -.9086
                                                                                                                 ST 405.0 SR 290.6 SS 266.3
CRT -.4367 CRS .8291 CST -.8585
    TOE .0934 TRA-1.2843 TC3 -.9755 BAU .4389
    ROE - .2829 RRA .2046 RC3 .2449 FAU .14389
                                                                                                              CRT -.4367 CRS .DZ91 CD.
LSA 506.5 MSA 249.8 SSA 20.1
EL1 435.0 EL2 243.4 ALF 153.86
    FOE .5732 FRA-1.9330 FC3-3.8163 BSP 5084
```

SG1 1758.7 SG2 270.1 THA 168.06

BOE .2979 BRA 1.3005 BC3 1.0058 FSP -1339

ARRIVAL DATE APR 3 1966

```
FLIGHT TIME 102.00
LAUNCH DATE DEC 22 1965
                                                                       DISTANCE 303.970
   RL 147.16 LAL .00 LOL 89.94 VL 28.632 GAL -10.47 AZL 87.78 HCA 143.68 SMA 134.89 ECC .20251 INC 2.2174 VI 30.275 RP 108.37 LAP 1.31 LOP 233.64 VP 38.282 GAP 2.84 AZP 91.79 TAL 233.31 TAP 16.99 RCA 107.57 APO 162.20 V2 34.970 RC 97.969 GL 11.15 GP 13.78 ZAL 154.76 ZAP 116.23 ETS 4.29 ZAE 149.18 ETE 162.97 ZAC 30.19 ETC 172.67 CLP-117.07
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 31.721 VHL 5.632 DLA -10.52 RAL 292.67 RAD 6568.3 VEL 12.373 PTH 2.23 VHP 3.763 CPA
    ENCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 11 46 1995.32
11 28 58 5304.38
3 27 52 1749.78
12 55 33 5025.15
                                                                            159.77
                                                                                             115.02
                                                                                                           2 45 1
                                                                                                                           1395.3
                                                                                                                                           -10.23
                                                 -13.72
                                                                 28.05
        90.00
                                                                                                          12 57 22
                                                                                                                            4704.4
                                                                                                                                                          232.26
                                                                 240.66
                                                                               165.88
                                                                                               82.20
                                                   27.31
        90.00
                                                                                                           3 57 2
                                                                                                                            1149.8
                                                                                                                                                           2.50
                                                                                               116.20
                                                 -14.93
                                                                  9.40
                                                                               159.16
      100.00
                                                                                                81.06 14 19 18
                                                                                                                            4425.1
                                                                                                                                                          211.43
                                                   28.64
                                                                 219.90
                                                                               165.66
      100.00
                                                                                              119.48 4 50 27
77.89 15 35 15
                                                                                                                                                          347.48
                                                                                                                            973.3
                  4 24 14 1573.28
14 15 40 4774.41
                                                                 354.24
                                                                               157.39
                                                 -18.15
      110.00
                                                                                                                            4174.4
                                                                                                                                           30.21
                                                                                                                                                         191.45
                                                                 200.09
                                                                               164.89
                                                   32.21
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 1858.9 SCR 455.7 SC3 404.5
RRT -.8163 RRF -.8551 RTF .9072
SCB 1914.0 R23 .1731 R13 -.9123
SCI 1896.5 SC2 258.0 THA 168.47
                                                                                                                        ST 427.9 SR 274.4 55 251.8
CRT -.4352 CR5 .8246 CST -.8612
    TDE .0896 TRA-1.3415 TC3-1.0948 BAU .4781
    RDE -.2622 RRA .2046 RC3 .2689 FAU .13862
FDE .5102 FRA-1.8052 FC3-3.7832 BSP 5567
BDE .2771 BRA 1.3570 BC3 1.1273 FSP -1308
                                                                                                                        LSA 511.8 MSA 243.8 SSA 19.9
                                                                                                                        EL1 451.0 EL2 234.3 ALF 158.26
                                                                                                                                   ARRIVAL DATE APR 5 1966
                                                                         FLIGHT TIME 104,00
LAUNCH DATE DEC 22 1965
                                                                        DISTANCE 310.100
    RL 147.16 LAL .00 LOL 89.94 VL 28.580 GAL -10.30 A7L 87.92 MCA 146.87 SMA 134.48 ECC .20137 INC 2.0806 V1 30.275
RP 108.41 LAP 1.14 LOP 236.82 VP 38.231 GAP 3.18 A7P 91.74 TAL 232.28 TAP 19.15 RCA 107.40 APO 161.56 V2 34.957
RC 100.323 GL 10.60 GP 14.61 7AL 154.36 ZAP 119.45 ETS 5.80 ZAE 146.84 ETE 162.72 ZAC 29.87 ETC 174.13 CLP-120.53
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                               -8.58 RAP 296.52 ECC 1.5065
                                                                                                  2.22 VHP 3.844 DPA
    C3 30.777 VHL 5.548 OLA -10.95 RAL 293.45 RAO 6568.2 VEL 12.335 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1373.4
                                                                                                                                                           19.85
                                                                                                            2 51 18
                                                                                                                                           -9.56
                                                                                              115.34
                   2 18 25 1973.40
11 28 31 5311.11
                                                   -13.08
                                                                 26.76
                                                                              160.05
        90.00
                                                                                                         12 57 2
                                                                                                                                                           232.73
                                                                                                82.43
                                                                                                                             4711.1
                                                                                                                                             26.04
                                                   27.37
                                                                 241.15
                                                                                166.28
        90.00
                                                                                               116.53 4 3 5
81.28 14 19 12
119.85 4 55 59
78.07 15 35 41
                                                                                                                                           -10.62
                                                                                                                                                            1.30
                   3 34 16 1728.67
12 55 21 5031.07
                                                                                                                             1128.7
                                                   -14.30
                                                                   8.16
                                                                               159.44
       100.00
                                                                                                                             4431.1
                                                                                                                                            27.20
                                                                                                                                                           211.85
                                                                               166.06
                                                   28.70
                                                                 220.33
       100.00
                                                                                                                              953.9
                                                                                                                                           -13.39
                                                                                                                                                           346.40
                   4 30 5 1553.90
14 16 2 4778.60
                                                                               157.66
                                                  -17.49
                                                                 353.11
       110.00
                                                                                                                             4178.6
                                                                                                                                           30.29
                                                                                                                                                           191.75
                                                    32.27
                                                                 200.41
                                                                               165.31
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 1993.2 SGR 463.3 SG3 390.4
RRT -.8394 RRF -.8808 RTF .9095
                                                                                                                         ST 448.8 SR 257.2 SS 236.1
CRT -.4265 CRS .8205 CST -.8594
    TOE .0805 TRA-1.3915 TC3-1.2169 BAU .5152
     ROE - .2410 RRA .2030 RC3 .2949 FAU .13262
                                                                     SGB 2046.3 R23 .1938 R13 -.9145
                                                                                                                         LSA 516.8 MSA 236.3 SSA 19.7
    FOE .4479 FRA-1.6647 FC3-3.7304 BSP 6016
BDE .2541 BRA 1.4062 BC3 1.2522 FSP -1259
                                                                     SG1 2031.3 SG2 247.0 THA 168.79
                                                                                                                        EL1 466.3 EL2 223.9 ALF 161.97
                                                                                                                                   ARRIVAL DATE APR 7 1966
                                                                        FIRST TIME 106.00
LAUNCH DATE DEC 22 1965
                                                                        DISTANCE 316.205
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 28.526 GAL -10.12 A7L 88.08 HCA 150.06 SMA 134.06 ECC .20028 INC 1.9182 VI 30.275
RP 108.44 LAP .96 LOP 240.01 VP 38.180 GAP 3.50 A7P 91.66 TAL 231.19 TAP 21.25 RCA 107.21 APO 160.91 V2 34.945
RC 102.682 GL 9.91 GP 15.63 7AL 153.93 7AP 122.37 ETS 7.54 7AE 144.64 ETE 162.22 7AC 29.78 ETC 175.90 CLP-123.77
   PLANETOCENTRIC CONIC
    C3 29.811 VML 5.460 CLA -11.51 RAL 294.31 RAD 6568.2 VEL 12.296 PTH 2.21 VMP 3.934 DPA -7.58 RAP 296.34 ECC 1.4906 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             115.71 2 58 55
82.80 12 55 59
                                                                                                                         1346.7
                                                                                                                                         -8.74
                   2 26 28 1946.71
11 27 17 5321.78
                                                                              160.38
                                                   -12.30
                                                                 25.19
        90.00
                                                                                                                            4721.8
                                                                                                                                            26.18
                                                                                                                                                          233.48
                                                   27.46
                                                                 241.91
                                                                               166.78
        90.00
                                                                                                           4 10 22
                                                                                                                           1103.1
                                                                                                                                            -9.79
                                                                                                                                                          359.84
                                                                                               116.92
                                                   -13.51
                                                                  6.66
                                                                               159.77
                                   1703.05
       100.00
                     3 41 59
                                                                                                                                                          212.53
                                                                                                81.63 14 18 28
120.27 5 2 35
                                                                                                                            4440.7
                                                                                                                                            27.35
                                   5040.67
                                                  28.80
                                                                 221.03
                                                                               166.58
                   12 54 27
       100.00
                                                                                                                             930.6
                                                                                                                                                          345.12
                   4 37 4 1530.57
14 15 52 4785.93
                                                   -16.70
                                                                 351.77
                                                                               157.97
                                                                                               120.27
       110.00
                                                                                                         15 35 37
                                                                                                                            4185.9
                                                                                                                                                          192.27
                                                                 200.95
                                                                               165.84
                                                                                                78.38
                                                  32.38
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     RTI -.8602 RRF -.9048 RTF ..9112
SGB 2178.9 R23 .2179 R13 -.9160
SG1 2165.9 SG2 237.4 THA 169.01
                                                                                                                       ST 467.8 SR 238.0 SS 217.2
CRT -.4070 CRS .8060 CST -.8603
LSA 520.8 MSA 225.8 SSA 19.6
     TDE .0628 TRA-1.4349 TC3-1.3449 BAU .5515
    RDE -.2180 RRA .2010 RC3 .3252 FAU .12655
FDE .3732 FRA-1.5258 FC3-3.6752 BSP 6485
                                                                                                                         EL1 480.2 EL2 211.7 ALF 165.40
     BDE .2269 BRA 1.4490 BC3 1.3837 FSP -1219
                                                                                                                                    ARRIVAL DATE APR 9 1966
                                                                         FLIGHT TIME 108.00
 LAUNCH DATE DEC 22 1965
                                                                         DISTANCE 322.285
    RL 147.16 LAL .00 LOL 89.94 VL 28.471 GAL -9.93 A7L 88.28 MCA 153.25 SMA 133.64 ECC .19922 INC 1.7210 V1 30.275
RP 108.48 LAP .77 LOP 243.20 VP 38.127 GAP 3.81 A7P 91.54 TAL 230.05 TAP 23.30 RCA 107.01 APO 160.26 V2 34.932
RC 105.043 GL 9.03 GP 16.90 ZAL 153.49 ZAP 124.97 ETS 9.58 ZAE 142.54 ETE 161.42 ZAC 29.93 ETC 178.06 CLP-126.80
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 28.821 VHL 5.368 DLA -12.25 RAL 295.25 RAD 6568.2 VEL 12.255 PTH 2.20 VHP 4.037 DPA -6.30 RAP 296.32 ECC 1.4743
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                8 20
                                                                                                                            1313.3
                                                                                                                                            -7 70
                                                                                                                                                            16.41
                                                                                               116.14
                                                                               160.80
                     2 36 27 1913.33
                                                   -11.30
                                                                  23.24
                                                                                                                             4738.3
                                                                                                 83.39 12 53 48
                                                                                                                                             26.39
                                                                                                                                                           234.64
                                                                                167.42
         90.00
                    11 24 49
                                   5338.26
                                                    27.60
                                                                  243.10
                                                                                                                             1071.1
                                                                                                                                             -B.75
                                                                                                                                                           358.04
                                                                                                117.37
                                                                                                             4 19 23
                                                   -12.52
                                                                   4.81
                                                                                160.17
                    3 51 31
                                  1671.13
        100.00
                                                                                               82.19 14 16 42
120.76 5 10 38
78.89 15 34 48
                                                                                                                             4455.7
                                                                                                                                            27.56
                                                                                                                                                           213.59
                                   5055.70
                                                    28.95
                                                                  222.12
                                                                                167.23
                    12 52 26
        100,00
                                                                                                                              901.7
                                                                                                                                           -11.51
                                                                                                                                                           343.54
                                                                                158.35
                                  1501.73
                                                  -15.70
                                                                  350.13
        110.00
                     4 45 37
                                                                                                                            4197.9
                                                                                                                                            30.66
                                                                                                                                                           193.13
                                                                                166.53
                    14 14 50 4797.85
                                                                  201.85
        110.00
                                                    32.54
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 485.0 SR 217.2 SS 196.4
CRT -.3766 CRS .7845 CST -.8602
                                                                     SCT 2255.9 SCR 488.5 SC3 359.7
RRT -.8770 RRF -.9266 RTF .9116
SCB 2308.2 R23 .2471 R13 -.9165
     TOE .0364 TRA-1.4685 TC3-1.4772 BAU .5858
     ROE - 1940 RRA 1972 RC3 3597 FAU 11995
FOE 2962 FRA-1.3776 FC3-3.6031 BSP 6909
BDE 1974 BRA 1.4817 BC3 1.5203 FSP -1162
                                                                                                                       LSA 524.8 MSA 212.8 SSA 19.5
                                                                SG1 2296.6 SG2 230.5 THA 169.14
                                                                                                                        EL1 493.3 EL2 197.9 ALF 168.56
```

ARRIVAL DATE APR 11 1966

FILIGHT TIME 110.00 LAUNCH DATE DEC 22 1965 DISTANCE 328.343 HELIOCENTRIC CONIC RL 147.16 LAL .0D LOL 89.94 VL 28.414 GAL -9.74 AZL 88.52 HCA 156.43 5MA 133.20 ECC .19822 INC 1.4753 V1 30.275 RP 108.52 LAP .59 LOP 246.38 VP 38.073 GAP 4.11 AZP 91.35 TAL 228.86 TAP 25.29 RCA 106.80 APO 159.61 V2 34.920 RC 107.406 GL 7.86 GP 18.51 ZAL 153.04 ZAP 127.23 ETS 12.05 ZAE 140.48 ETE 160.28 ZAC 30.32 ETC 180.70 CLP-129.64 PLANETOCENTRIC CONIC C3 27.810 VHL 5.273 DLA -13.26 RAL 296.30 RAD 6568.1 VEL 12.214 PTH 2.19 VHP 4.153 CPA -4.66 RAP 296.43 ECC 1.4577 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113 AZHIH INJ 11ME
116.63 3 20 26
84.29 12 49 48
117.89 4 30 51
83.06 14 13 19
121.34 5 20 48
79.70 15 32 44 161.33 1270.1 -6.34 90.00 2 49 16 1870.15 -10.00 20.74 4763.6 26.70 236.43 11 20 24 5363.62 27.78 244.93 168.25 90.00 1030.0 -7.40 355.74 160.69 4 3 41 1630.02 -11.22 2.44 27.88 4479.D 215.25 100.00 12 48 40 5078.99 29.15 223.82 168.08 -10.16 31.01 865.0 341.55 4 56 23 1464.98 -14.41 348.07 158.83 4216.8 194.50 14 12 28 32.78 203.27 167.44 110.00 4816.79 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2385.8 SGR 508.7 SG3 343.2 RRT -.8906 RRF -.9462 RTF ..9169 SGB 2439.4 R23 .2785 R13 -.9169 SGI 2428.8 SG2 227.3 THA 169.15 ST 502.6 SR 193.1 SS 172.3 CRT -.3287 CRS .7314 CST -.8730 TOE -.0052 TRA-1.4931 TC3-1.6186 BAU .6200 RDE -.1671 RRA .1927 RC3 .4017 FAU .11331 LSA 530.7 MSA 193.8 SSA 19.7 FDE .2017 FRA-1.2317 FC3-3.5275 BSP 7369 BDE .1672 BRA 1.5054 BC3 1.6677 FSP -1114 EL1 507.2 EL2 180.7 ALF 171.75 ARRIVAL DATE APR 13 1966 LAUNCH DATE DEC 22 1965 FLIGHT TIME 112.00 DISTANCE 334.379 HELIOCENTRIC CONIC .00 LOL 89.94 VL 28.356 GAL -9.54 AZL 88.84 MCA 159.62 SMA 132.76 ECC .19727 INC 1.1581 V1 30.275 .40 LOP 249.56 VP 38.019 GAP 4.39 AZP 91.09 TAL 227.63 TAP 27.25 RCA 106.57 APO 158.95 V2 34.909 6.27 GP 20.62 ZAL 152.56 ZAP 129.06 ETS 15.08 ZAE 138.39 ETE 158.71 ZAC 30.98 ETC 184.00 CLP-132.32 RL 147.16 LAL RC 109.770 GL PLANETOCENTRIC CONIC -2.50 RAP 296.60 ECC 1.4408 2.18 VHP 4.290 DPA C3 26.784 VHL 5.175 DLA -14.66 RAL 297.50 RAD 6568.1 VEL 12.172 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 162.06 117.20 3 36 40 1211.9 10.69 90.00 3 6 28 1811.85 -8.20 17.40 85.71 12 42 49 118.49 4 46 10 4803.2 27.13 239.25 90.00 11 12 45 5403.23 28.02 247.81 169.37 4 19 56 1574.83 12 41 59 5115.49 5 10 33 1416.24 14 7 50 4846.84 974.8 -5.57 100.00 -9.45 359.31 161.39 84.45 14 7 14 122.02 5 34 10 81.01 15 28 37 226.50 169.24 159.48 4515.5 28.34 217.87 100.00 29.42 816.2 -8.35 338.93 345.37 110.00 -12.67 4246.8 31.52 110.00 33.12 205.55 168.68 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 524.6 SR 164.6 SS 147.9 CRT -.2632 CRS .6164 CST -.9080 SGT 2514.3 SGR 536.9 SG3 325.3 RRT -.8999 RRF -.9628 RTF .9116 TDE -.0665 TRA-1.5046 TC3-1.7687 BAU .6538 RDE -.1364 RRA .1864 RC3 .4531 FAU .10625 FDE .0911 FRA-1.0809 FC3-3.4343 BSP 7831 BDE .1517 BRA 1.5161 BC3 1.8258 FSP -1061 SGB 2571.0 R23 .3106 R13 -.9172 SG1 2560.7 SG2 229.9 THA 169.03 LSA 544.0 MSA 166.7 SSA 20.3 EL1 526.6 ELZ 158.2 ALF 174.81 ARRIVAL DATE APR 15 1966 FLICHT TIME 114.00 LAUNCH DATE DEC 22 1965 DISTANCE 340.394 HELIOCENTRIC CONIC .00 LOL 89.94 VL 28.296 GAL -9.33 AZL 89.27 HCA 162.79 5MA 132.32 ECC .19637 INC .7284 VL 30.275 .22 LOP 252.73 VP 37.964 GAP 4.67 AZP 90.70 TAL 226.36 TAP 29.15 RCA 106.34 APO 158.30 V2 34.897 4.02 GP 23.46 ZAL 152.02 ZAP 130.33 ETS 18.90 ZAE 136.10 ETE 156.59 ZAC 31.99 ETC 188.18 CLP-134.87 RL 147.16 LAL RP 108.59 LAP RC 112.133 GL PLANETOCENTRIC CONIC .39 RAP 296.77 ECC 1.4240 C3 25.766 VHL 5.076 DLA -16.70 RAL 298.91 RAD 6568.0 VEL 12.130 PTH 2.17 VHP 4.461 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.81 3 59 56 88.05 12 30 26 1128.4 6.02 -1.81 12.67 163.17 3 59 56 3 31 8 1728.38 10 59 19 5467.49 4 43 1 1496.46 -5.58 90.00 243.87 27.69 4867.5 28.26 252.49 170.96 90.00 10 59 19 119.16 5 7 57 86.73 13 56 22 122.81 5 52 48 83.17 15 20 53 348.34 -2.93 354.92 162.46 896.5 -6.87 100.00 222.15 170.88 4574.6 28.96 12 30 8 5174.64 5 30 20 1348.19 13 59 17 4895.68 29.73 230.87 100.00 -5.79 335.33 748.2 -10.18 341.66 160.45 110.00 4295.7 32.27 200.30 209.29 170.48 33.58 110.00 ORBIT CETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 550.4 SR 129.6 55 131.6 CRT -.1944 CRS .3838 CST -.9641 LSA .575.2 MSA 129.4 55A 22.0 SGT 2636.7 SGR 574.5 SG3 303.9 RRT -.9039 RRF -.9760 RTF .9107 SGB 2698.5 R23 .3410 R13 -.9170 TOE -.1558 TRA-1.4958 TC3-1.9236 BAU .6860 ROE - .0997 RRA .1764 RC3 .5158 FAU .09816 FOE - .0376 FRA - .9155 FC3-3.2980 BSP 8236 BDE .1849 BRA 1.5062 BC3 1.9916 FSP - 988 EL1 561.0 EL2 127.0 ALF 177.29 SG1 2687.7 SG2 241.1 THA 168.77 ARRIVAL DATE APR 17 1966 FLIGHT TIME 116.00 LAUNCH DATE DEC 22 1965 DISTANCE 346.389 HELIOCENTRIC CONIC .00 LOL 89.94 VL 28.236 GAL -9.12 A7L 89.89 HCA 165.97 SMA 131.87 ECC .19552 INC .1106 V1 30.275 .03 LOP 255.91 VP 37.909 GAP 4.93 A7P 90.11 TAL 225.04 TAP 31.01 RCA 106.09 APO 157.65 V2 34.886 RL 147.16 LAL RP 108.63 LAP .64 GP 27.45 TAL 151.26 TAP 130.75 ETS 23.81 TAE 133.36 ETE 153.74 TAC 33.54 ETC 193.62 CLP-137.36 RC 114.493 GL PLANETOCENTRIC CONIC 4.43 RAP 296.80 ECC 1.4085 C3 24.824 VHL 4.982 DLA -19.81 RAL 300.66 RAD 6568.0 VEL 12.091 PTH 2.16 VHP 4.693 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1597.09 5580.41 997.1 -1.37 5.32 165.14 118.29 4 37 8 4 10 31 90.00 12 6 56 4980.4 28.24 252.08 28.24 260.75 173.32 92.18 10 33 56 90.00 5 19 18 1375.15 12 7 50 5277.59 6 0 33 1245.90 13 43 5 4979.61 5 42 13 775.1 1.18 348.21 164.34 119.77 -2.80 100.00 90.75 13 35 48 123.66 6 21 18 86.99 15 6 5 4677.6 29.67 229.72 238.52 173.37 29.88 100.00 645.9 -1.90 329.96 -6.36 336.20 162.14 110.00 4379.6 33.27 206.64 34.07 215.79 173.27 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 639.8 SR 83.7 SS 151.3 CRT -.2535 CRS .1393 CST -.9773 LSA 657.1 MSA 82.9 SSA 25.8 SGT 2762.3 SGR 628.3 SG3 279.1 RRT -.9033 RRF -.9860 RTF .9105 TOE -.2987 TRA-1.4624 TC3-2.0852 BAU .7197 ROE -. 0490 RRA .1618 RC3 .5958 FAU .08897 SGB 2832.9 R23 .3635 R13 -.9177 SG1 2820.5 SG2 264.0 THA 168.29 FOE -.2072 FRA -.7410 FC3-3.1027 BSP 8705 BOE .3026 BRA 1.4713 BC3 2.1686 FSP -913 EL1 640.2 EL2 80.9 ALF 178.07 BOE .3026 BRA 1.4713 BC3 2.1686 FSP

```
ARRIVAL CATE APR 19 1966
LAUNCH DATE DEC 22 1965
                                                                           FILIGHT TIME 118.00
                                                                           DISTANCE 352.363
  HELIOCENTRIC CONIC
                        .00 LOL 89.94 VL 28.175 GAL -8.90 AZL 90.85 MCA 169.14 SMA 131.42 ECC .19473 INC .8504 V1 30.275
-16 LOP 259.08 VP 37.854 GAP 5.18 AZP 89.16 TAL 223.69 TAP 32.83 RCA 105.83 APO 157.01 V2 34.875
    RL 147.16 LAL
RP 108.66 LAP
                        -4.83 GP 33.33 7AL 149.78 7AP 129.74 ETS 30.23 7AE 129.59 ETE 149.96 7AC 36.08 ETC 200.87 CLP-139.91
    RC 116.852 GL
   PLANETOCENTRIC CONIC
    C3 24.201 VHL 4.919 OLA -24.91 RAL 303.10 RAD 6568.0 VEL 12.066 PTH
                                                                                                      2.16 VHP 5.058 CPA 10.32 RAP 296.43 ECC 1.3983
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     5 30 26 1340.62
9 33 29 5824.40
                                                      6.86
                                                                   350.96
                                                                                 169.74
                                                                                                  117.54
                                                                                                                5 52 46
                                                                                                                                  740.6
                                                                                                                                                 10.49
        90.00
                                                                                                   100.77 11 10 33
                                                                                                                                  5224.4
                                                                                                                                                  27.57
                                                                                                                                                                269.86
                                                     26.35
                                                                   278.32
                                                                                  176,76
        90.00
                  6 29 16 1150.66
11 17 20 5489.60
                                                       4.79
                                                                   335.87
                                                                                  168.61
                                                                                                   119.54
                                                                                                                 6 48 27
                                                                                                                                   550.7
                                                                                                                                                   8.69
                                                                                                                                                                329.25
       100.00
                                                                                                    98.86 12 48 49
                                                                                                                                                              245.45
                                                     28.67
                                                                   254.14
                                                                                177.21
                                                                                                                                  4889.6
                                                                                                                                                  29.59
       100.00
                                                                                                                                  471.1
                                                                   327.05
                                                                                                  124.18 7 12 29
94.47 14 34 9
                                                                                                                                                                320.83
                     6 54 38 1071.11
                                                        .29
                                                                                 165.81
                                                                                                                                                   4.78
       110.00
                                                                                177.93
                                                                                                                            4541.9
                                                                                                                                                  34.17
                                                     33.92
                                                                   228.45
                                                                                                                                                               219.21
                   13 8 27
      110.00
                                   5141.91
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 2881.2 SGR 699.6 SG3 245.4

RRT -.8959 RRF -.9922 RTF .9106

SGB 2964.9 R23 .3763 R13 -.9194

SGI 2949.3 SG2 303.6 THA 167.59
                                                                                                                             ST 823.6 SR 65.4 SS 236.7
CRT -.9370 CRS .8321 CST -.9512
    TOE -.5375 TRA-1.3790 TC3-2.2206 BAU .7522
    ROE .0299 RRA .1338 RC3 .6883 FAU .07701
FDE -4242 FRA -.5364 FC3-2.7548 BSP 9109
BDE .5383 BRA 1.3855 BC3 2.3248 FSP -801
                                                                                                                            LSA 856.3 MSA 71.9 SSA 18.7
EL1 825.9 EL2 22.8 ALF 175.74
                                                                                                                                         ARRIVAL DATE APR 21 1966
                                                                            FLIGHT TIME 120.00
LAUNCH DATE DEC 22 1965
                                                                            DISTANCE 358.315
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.114 GAL -8.67 AZL 92.60 HCA 172.31 SMA 130.97 ECC .19399 INC 2.6005 VI 30.275
RP 108.69 LAP -.35 LOP 262.25 VP 37.799 GAP 5.43 AZP 87.42 TAL 222.30 TAP 34.61 RCA 105.57 APO 156.38 V2 34.865
RC 119.206 GL -14.63 GP 42.54 ZAL 145.78 ZAP 126.03 ETS 38.62 ZAE 123.58 ETE 145.30 ZAC 40.62 ETC 210.63 CLP-142.98
  PLANETOCENTRIC CONIC
    C3 24.946 VHL 4.995 DLA -34.12 RAL 307.30 RAD 6568.0 VEL 12.096 PTH 2.17 VHP 5.774 DPA 19.43 RAP 295.00 ECC 1.4105
   C3 24.946 VHL 4.995 DLA -34.12 RAL 307.30 RAD 6568.0 VEL 12.096 PTH 2.17 VHP 5.774 DPA 19.43 RAP 295.DD ECC 1.4105 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG TO.12 5 19 48 1419.84 21.79 4.67 181.12 116.93 5 43 28 819.8 25.22 357.21 109.88 10 17 36 5760.07 21.80 271.89 181.13 116.92 11 53 36 5160.1 25.23 264.43 109.88 10 17 36 5760.07 21.80 271.89 181.13 116.92 11 53 36 5160.1 25.23 264.43 110.00 10 2 8 5807.21 20.28 274.73 180.28 118.12 11 38 55 5207.2 23.88 267.43 110.00 10 34 27 5708.73 25.32 268.74 181.94 115.73 12 9 35 5108.7 26.59 261.06 OXESTICATION CORPECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 3008.3 SGR 790.1 SG3 197.7
RRT -.8801 RRF -.9936 RTF ..9149
SGB 3110.3 R23 ..3712 R13 -.9255
                                                                                                                            ST 1265.9 SR 212.0 SS 414.2
CRT -.9656 CRS .9995 CST -.9675
LSA 1344.1 MSA 111.3 SSA 5.8
    TOE-1.0130 TRA-1.1972 TC3-2.2267 BAU .7842
 ROE .1817 RRA .0739 RC3 .7560 FAU .06049
    FOE -.7137 FRA -.2969 FC3-2.0993 BSP 9601
BOE 1.0291 BRA 1.1995 BC3 2.3516 FSP -650
                                                                       SG1 3088.8 SG2 365.3 THA 166.80
                                                                                                                            EL1 1282.4 EL2 54.4 ALF 170.80
                                                                                                                                        ARRIVAL CATE APR 23 1966
                                                                           FLIGHT TIME 122.00
LAUNCH DATE DEC 22 1965
                                                                           DISTANCE 364.233
   HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 28.052 GAL -8.43 AZL 96.76 MCA 175.45 SMA 130.53 ECC .19328 INC 6.7578 V1 30.275
RP 108.72 LAP -.53 LOP 265.42 VP 37.744 GAP 5.66 AZP 83.26 TAL 220.87 TAP 36.33 RCA 105.30 APO 155.76 V2 34.856
RC 121.557 GL -34.01 GP 57.83 ZAL 133.30 ZAP 117.19 ETS 50.15 ZAE 112.43 ETE 141.83 ZAC 49.41 ETC 224.39 CLP-149.11
   PLANETOCENTRIC CONIC
    C3 34.075 VHL 5.837 DLA -51.84 RAL 318.79 RAD 6568.3 VEL 12.468 PTH 2.26 VHP 7.773 DPA 34.21 RAP 290.10 ECC 1.5608
    ENCH ATHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                  4 15 23 1800.96
12 53 40 5534.81
4 15 23 1800.96
12 53 40 5534.81
                                                                                                                                             33.20
                                                                              204.49
                                                                                                                             1201.0
                                                                                                135.78 4 45 24
135.78 14 25 55
                                                                                                                                                                 36.35
                                                    27.62
                                                                   42.60
        44.58
                                                     27.64
                                                                   257.09
                                                                                  204.50
                                                                                                                                 4934.8
                                                                                                                                                  33.21
                                                                                                                                                                250.84
       135.42
                                                                                                  27.62
                                                                    42.60
                                                                                204.49
                                                                                                  135.78
                                                                                                                                 1201.0
                                                                                                                                                  33.20
                                                                                                                                                                 36.35
        44.58
                                                                                  204.50
                                                                                                                                 4934.8
                                                                                                                                                  33.21
                                                                                                                                                               250.84
                                                                   257.09
                                                     27.64
       135.42
                                                                                                                                                  33.20
                                                                                                                                 1201.0
                                                                                                                                                                 36.35
                     4 15 23
                                  1800.96
                                                     27.62
                                                                     42.60
                                                                                  204.49
        44.58
                                                                                  204.50
                                                                                                                                 4934.8
                                                                                                                                                  33.21
                                                                                                                                                                250 84
                   12 53 40
                                                                   257.09
                                   5534.81
                                                    27.64
       135.42
  CIFFERENTIAL CORRECTIONS
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SGT 3157.5 SGR 831.2 SG3 129.0
RRT -.8318 RRF -.9739 RTF .9341
SGB 3265.0 R23 .3256 R13 -.9447
SGI 3233.8 SG2 450.6 THA 167.40
                                                                                                                            ST 2278.7 SR 491.4 SS 592.7
CRT -.9710 CRS .9952 CST -.9898
LSA 2427.5 MSA 144.7 SSA 1.5
    TOE-2.2961 TRA -.6962 TC3-1.6403 BAU .7896
    ROE .4980 RRA -.0976 RC3 .5604 FAU .03643
FOE-1.0504 FRA -.0070 FC3 -.9256 BSP 10159
BDE 2.3495 BRA .7030 BC3 1.7334 FSP -423
                                                                                                                             EL1 2328.3 EL2 114.9 ALF 168.14
                                                                                                                                         ARRIVAL DATE APR 25 1966
                                                                            FLIGHT TIME 124.00
LAUNCH DATE DEC 22 1965
                                                                           DISTANCE 370.010
  HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 27.990 GAL -8.15 AZL 118.10 MCA 178.47 SMA 130.08 ECC .19232 INC28.0995 V1 30.275
RP 108.75 LAP -.72 LOP 268.59 VP 37.690 GAP 5.84 AZP 61.91 TAL 219.34 TAP 37.82 RCA 105.07 APO 155.10 V2 34.846
    RC 123.903 CL -61.81 GP 76.61 7AL 105.12 7AP 100.55 ETS 113.98 7AE 86.45 ETE 193.45 7AC 64.91 ETC 292.82 CLP 142.26
   PLANETOCENTRIC CONIC
    CS 219.227 VHL 14.806 OLA -65.86 RAL
                                                       15.75 RAO 6571.3 VEL 18.454 PTH 3.04 VHP 20.084 OPA 55.03 RAP 260.97 ECC 4.6079
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                      8.05
                                                                    72.29
                                                                                  282.10
                                                                                                 155.60
                                                                                                                7 56 34
                                                                                                                                 1687.0
                                                                                                                                                15.32
                                                                                                                                                                  69.29
                      7 18 27
                                  2287.04
       27.68
                   17 25 4 5851.04
                                                                                  282.12
                                                                                                   155.60 19 2 35
                                                                                                                                  5251.0
                                                                                                                                                  15.33
                                                                                                                                                                262.35
                                                       8.06
                                                                   265.35
       152.32
                     7 18 27 2287.04
17 25 4 5851.04
                                                                                  282.10
                                                                                                   155.60
                                                                                                                7 56 34
                                                                                                                                  1687.0
                                                                                                                                                  15.32
                                                                                                                                                                 69.29
                                                       8.05
                                                                    72.29
        27.68
                                                                                  282.12
                                                                                                   155.60 19 2 35
                                                                                                                                  5251.0
                                                                                                                                                  15.33
                                                                                                                                                                262.35
                   17 25 4
                                    5851.04
                                                       8.06
                                                                   265.35
       152.32
                     7 18 27
                                                       8.05
                                                                                  282.10
                                                                                                   155.60
                                                                                                                7 56 34
                                                                                                                                  1687.0
                                                                                                                                                  15.32
                                                                                                                                                                  69.29
                                   2287.04
                                                                    72.29
        27.68
                                                                                                  155.60 19 2 35
                                                                   265.35
                                                                                  282.12
                                                                                                                                5251.0
                                                                                                                                                 15.33
                                                                                                                                                                262.35
       152.32
                    17 25 4
                                   5851 .04
                                                       8.06
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                     SCT 2350.1 SGR 2321.6 SG3 56.8

RRT .9461 RRF .9577 RTF .9993

SGB 3303.4 R23 -.1244 R13 .9922

SGI 3258.6 SG2 542.3 THA 44.63
                                                                                                                           ST 1488.5 SR 1927.5 SS 751.1
CRT .984D CRS -.9883 CST -.9997
    TOE-3.5549 TRA 2.0033 TC3 -.0657 BAU .1927
    RDE-4.8686 RRA 1.4338 RC3 .D021 FAU .00397
FDE-1.0445 FRA .5458 FC3 -.0157 BSP 11423
                                                                                                                            LSA 2539.1 MSA 219.8 SSA .3
EL1 2426.2 EL2 210.8 ALF 52.44
    BDE 6.0284 BRA 2.4635 BC3 .0658 FSP -203
```

```
LAUNCH DATE DEC 22 1965
                                                                          FLIGHT TIME 126.00
                                                                                                                                      ARRIVAL DATE APR 27 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 376.320
                          .00 LOL 89.94 VL 27.928 GAL -7.98 AZL 63.64 MCA 182.03 SMA 129.64 ECC .19285 INC26.3552 VI 30.275
-.90 LOP 271.76 VP 37.636 GAP 6.18 AZP 116.34 TAL 218.08 TAP 40.11 RCA 104.64 APO 154.64 V2 34.838
    RL 147.16 LAL
    RP 108.78 LAP
    RC 126.245 GL 61.52 GP -75.02 7AL 105.66 7AP 104.89 ETS 250.53 7AE 88.69 ETE 171.96 7AC 89.25 ETC 77.12 CLP 173.96
   PLANETOCENTRIC CONIC
    C3 195.157 VHL 13.970 DLA 44.33 RAL 303.31 RAD 6571.1 VEL 17.790 PTH 2.99 VMP 15.178 DPA -79.80 RAP 114.98 ECC 4.2118
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                46.11 17 4 29
46.11 24 12 13
46.11 17 4 29
46.11 24 12 13
46.11 17 4 29
46.11 24 12 13
                  15 45 24 4745.32
23 16 16 3357.49
15 45 24 4745.32
23 16 16 3357.49
15 45 24 4745.32
23 16 16 3357.49
                                                     -7.00
                                                                                 206.10
                                                                                                                              4145.3
        54.34
                                                                 218.94
                                                                                 206.09
                                                                                                                               2757.5
                                                                  111.69
       125.66
                                                     -6.99
                                                                                 206.10
                                                                                                                               4145.3
                                                                                                                                              -12.50
                                                                  218.94
                                                    -7.00
        54.34
                                                                                                                               2757.5
                                                                                                                                              -12.49
                                                                                 206.09
       125.66
                                                    -6.99
                                                                  111.69
                                                                                                                                                              213.46
                                                    -7.00
                                                                  218.94
                                                                                 206.10
                                                                                                                               4145.3
                                                                                                                                              -12.50
        54.34
                                                                                                                               2757.5
                                                                                                                                             -12.49
                                                                  111.69
                                                                                 206.09
       125.66
                                                     -6.99
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 2668.8 SGR 2217.7 SG3 65.5
RRT -.9541 RRF -.9420 RTF ..9989
SGB 3469.9 R23 -.1597 R13 -.9868
                                                                                                                           ST 2339.7 SR 1594.1 SS 881.0
CRT -.9905 CRS .9889 CST -.9999
    TOE 5.6214 TRA-2.3146 TC3 -.0764 BAU
                                                        .1993
    ROE-3.7027 RRA 2.8184 RC3 .0015 FAU .00707
FOE 1.6172 FRA -.6215 FC3 -.0313 BSP 9275
BOE 6.7313 BRA 3.6470 BC3 .0764 FSP -195
                                                                                                                           LSA 2959.1 MSA 187.4 SSA
                                                                      SG1 3431.3 SG2 516.4 THA 140.52
                                                                                                                           EL1 2825.3 EL2 181.7 ALF 145.82
                                                                                                                                      ARRIVAL DATE APR 29 1966
LAUNCH DATE DEC 22 1965
                                                                          FLIGHT TIME 128.00
                                                                          DISTANCE 382.122
  HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 27.866 GAL -7.70 AZL 77.75 MCA 185.10 SMA 129.20 ECC .19218 INC12.2495 V1 30.275
RP 108.80 LAP -1.08 LOP 274.92 VP 37.582 GAP 6.37 AZP 102.20 TAL 216.52 TAP 41.62 RCA 104.37 APO 154.04 V2 34.830
    RC 128.581 GL 50.11 GP -52.19 TAL 118.37 TAP 123.07 ETS 298.85 TAE-110.49 ETE 209.71 TAC 73.59 ETC 123.02 CLP-152.89
   PLANETOCENTRIC CONIC
    C3 58.309 VHL 7.636 DLA 30.98 RAL 300.11 RAD 6569.1 VEL 13.404 PTH 2.45 VHP 7.383 DPA -71.74 RAP 333.00 ECC 1.9596 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 76.88 17 33 46 4137.78 -13.51 174.74 186.53 61.86 18 42 44 3537.8 -17.17 167.78 103.12 21 224 3467.09 -13.50 125.23 186.53 61.85 22 0 11 2867.1 -17.16 118.27 76.88 17 33 46 4137.78 -13.51 174.74 186.53 61.85 22 0 11 2867.1 -17.16 118.27 103.12 21 2 24 3467.09 -13.50 125.23 186.53 61.85 22 0 11 2867.1 -17.16 118.27 110.00 23 38 51 2979.33 -25.74 94.29 192.77 66.69 24 28 31 2379.3 -28.66 86.34 110.00 19 56 29 3673.54 -1.88 133.83 179.46 55.86 20 57 42 3073.5 -5.35 103.00 CC
                    19 56 29
                                                                                                   55.86 20 57 42
                                                                                                                                3073.5
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 3551.9 SGR 358.2 SG3 136.5
RRT .1944 RRF .4968 RTF .9470
                                                                                                                           ST 2307.5 SR 245.2 SS 754.2
CRT .8368 CRS -.9108 CST -.9882
    TOE 2.9195 TRA-2.7570 TC3 -.9249 BAU .7260
    ROE .3157 RRA .2404 RC3 -.1094 FAU .03731
    FOE 1.5539 FRA -.7410 FC3 -.5540 BSP 11021
BOE 2.9365 BRA 2.7675 BC3 .9314 FSP -461
                                                                      SGB 3569.9 R23 .3169 R13 .9476
SG1 3552.6 SG2 351.3 THA 1.13
                                                                                                                           LSA 2434.0 MSA 170.8 SSA
                                                                                                                                                                   1.1
                                                                                                                           EL1 2316.6 EL2 - 133.7 ALF
                                                                                                                                      ARRIVAL DATE MAY 1 1966
                                                                          FLIGHT TIME 130.00
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 387.989
    RL 147.16 LAL .00 LOL 89.94 VL 27.804 GAL -7.43 AZL 81.20 HCA 188.25 SMA 128.77 ECC .19181 INC 8.7985 V1 30.275
RP 108.82 LAP -1.26 LOP 278.09 VP 37.529 GAP 6.58 AZP 98.71 TAL 214.98 TAP 43.23 RCA 104.07 APO 153.47 VZ 34.822
    RC 130.911 GL 42.39 GP -37.21 TAL 123.91 TAP 134.29 ETS 309.38 TAE 120.15 ETE 207.16 TAC 64.54 ETC 132.49 CLP-151.27
   PLANETOCENTRIC CONIC
    C3 39.139 VHL 6.256 DLA 23.35 RAL 301.78 RAD 6568.5 VEL 12.669 PTH 2.30 VHP 5.968 DPA -56.86 RAP 323.92 ECC 1.6441
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              78.16 22 44 56 61.68 18 7 56 79.45 24 19 8 60.16 19 7 40 82.55 2 2 34 56.34 19 37 32
       90.00 21 51 22 3213.23
90.00 16 58 3 4192.53
                                                                                                                                                         103.27
                                                                 111.67 184.18
                                                                                                                            2613.2 -27.28
                                                   -25.91
                                                      -.20
                                                                  171.56
                                                                                 174.64
                                                                                                                               3592.5
                                                                                                                                               -3.99
                                                                                                                                                             164.93
      100.00
                  23 30 56 2892.22
                                                   -28.13
                                                                   88.55
                                                                               184.67
                                                                                                                               2292.2
                                                                                                                                              -29.30
                                                                                                                                                              79.94
                                                                                                                               3388.8
                                                                                                                                               -2.21
                                                                                                                                                             146.97
                                   3988.77
                                                      1.78
                                                                  155.49
                                                                                173.54
       100.00
                   18 1 11
                                                                                                                                             -34.13
                                                                                                                               1963.8
                                                                                                                                                               55.41
                     1 19 50
                                   2563.82
                                                   -33.46
                                                                   64.59
       110.00
                                                                                                                               3289.9
                                                                                                                                              1.90
                                                                                                                                                             138.92
                                   3889.94
                                                    6.36
                                                                  145.16
                                                                                 170.69
       110.00
                   18 32 42
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 3626.5 SGR 334.1 SG3 188.2
RRT .5094 RRF .7896 RTF .9254
SGB 3641.9 R23 .3663 R13 .9268
                                                                                                                           ST 2016.3 SR 255.9 SS 728.9
CRT .8853 CRS -.9634 CST -.9775
    TOE 2.0508 TRA-2.4430 TC3-1.5343 BAU .8069
    ROE .2775 RRA .0961 RC3 -.1555 FAU .05415
    FOE 1.5233 FRA -.7464 FC3-1.1978 BSP 11351
BOE 2.0695 BRA 2.4449 BC3 1.5421 FSP -635
                                                                                                                          LSA 2151.4 MSA 183.6 SSA 2.2
                                                                      SG1 3630.5 SG2 287.2 THA 2.70
                                                                                                                           EL1 2029.0 EL2 118.3 ALF 6.43
                                                                                                                                      ARRIVAL DATE MAY 3 1966
                                                                          FLIGHT TIME 132.00
LAUNCH DATE DEC 22 1965
  HELIOCENTRIC CONIC
                                                                          DISTANCE 393.857
    RL 147.16 LAL .00 LOL 89.94 VL 27.742 GAL -7.16 AZL 82.75 HCA 191.40 SMA 128.34 ECC .19155 INC 7.2481 V1 30.275
RP 108.85 LAP -1.43 LOP 281.25 VP 37.477 GAP 6.78 AZP 97.11 TAL 213.43 TAP 44.83 RCA 103.76 APO 152.93 VZ 34.816
RC 133.236 GL 37.81 GP -28.15 ZAL 126.25 ZAP 141.01 ETS 316.27 ZAE 124.77 ETE 202.68 ZAC 60.13 ETC 138.67 CLP-151.81
   PLANETOCENTRIC CONIC
    C3 32.096 VHL 5.665 DLA 19.08 RAL 303.63 RAO 6568.3 VEL 12.388 PTH 2.24 VMP 5.541 DPA -47.59 RAP 322.11 ECC 1.5282
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    22 51 47
                                  2970.74
                                                   -28.13
                                                                  94.30
                                                                                180.94
                                                                                                 86.57
                                                                                                            23 41 18
                                                                                                                             2370.7
                                                                                                                                              -28.30
                                                                                                                                                              85.64
        90.00
                                                                                                                                                              172.87
                   16 12 24
                                  4334.86
                                                     4.38
                                                                  179.52
                                                                                 171.74
                                                                                                   62.00 17 24 39
                                                                                                                               3734.9
                                                                                                                                                  .60
        90.00
                     0 28 48
                                 2670.56
                                                   -29.82
                                                                   72.32
                                                                                 181.04
                                                                                                   87.81
                                                                                                              1 13 19
                                                                                                                               2070.6
                                                                                                                                               -29.80
                                                                                                                                                               63.51
       100.00
                                                                                                                               3510.3
1777.5
                   17 22 0
                                 4110.27
                                                                                 170.92
                                                                                                   60.64 18 30 31
                                                                                                                                                1.91
                                                                                                                                                             155.64
       100.00
                                                     5.87
                                                                  162.19
                   2 2 29 2377.46
18 4 49 3976.13
                                                   -34.17
                                                                   50.10
                                                                                 181.09
                                                                                                   91.08
                                                                                                              2 42 7
                                                                                                                                             -33.64
                                                                                                                                                              40.90
       110.00
                                                                                                   57.03 19 11 5
                                                                                                                                                 5.18
                                                                                                                                                              143.43
                                                    9.59
                                                                  149.75
                                                                                 168.65
                                                                                                                               3376.1
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 3717.0 SGR 270.0 SG3 213.5

RRT .4778 RRF .7694 RTF .9146

SGB 3726.8 R23 .3764 R13 .9154

SGI 3719.2 SG2 237.0 THA 2.00
                                                                                                                        ST 1859.9 SR 214.9 55 694.4
CRT .8674 CRS -.9643 CST -.9682
    TOE 1.6900 TRA-2.2750 TC3-1.9671 BAU .8458
    ROE .2110 RRA .0781 RC3 -.1260 FAU .06143
    FOE 1.4170 FRA -.6776 FC3-1.6570 BSP 11635
BOE 1.7031 BRA 2.2763 BC3 1.9711 FSP -713
                                                                                                                        LSA 1987.6 M5A 192.0 SSA 3.5
EL1 1869.2 EL2 106.4 ALF 5.74
```

ARRIVAL DATE HAY 5 1966

```
FLIGHT TIME 134.00
LAUNCH DATE DEC 22 1965
                                                                 DISTANCE 399.717
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 27.680 GAL -6.88 AZL 83.64 HCA 194.56 SMA 127.92 ECC .19140 INC 6.3639 V1 30.275
RP 108.87 LAP -1.60 LOP 284.41 VP 37.425 GAP 6.98 AZP 96.16 TAL 211.85 TAP 46.41 RCA 103.44 APO 152.40 V2 34.809
   RC 135.553 GL 34.90 GP -22.33 TAL 127.04 TAP 145.37 ETS 321.38 TAE 127.11 ETE 198.87 TAC 58.21 ETC 143.32 CLP-152.81
  PLANETOCENTRIC CONIC
                                                                                         2.20 VHP 5.399 DPA -41.45 RAP 322.11 ECC 1.4664
   C3 28.342 VHL 5.324 CLA 16.56 RAL 305.44 RAD 6568.1 VEL 12.236 PTH
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             -27.81
                                                           84.90
                                                                      179.27
                                                                                      91.27 24 12 6
                                                                                                              2242.1
                                                                                                                                             76.27
       90.00 23 24 44 2842.14
90.00 15 53 57 4401.09
                                             -28.29
                                                                                       62.38 17 7 18
                                                                                                                 3801.1
                                                                                                                               2.73
                                                                                                                                           176.57
                                                                        171.12
                                                          183.24
                                              6.48
                 0 59 22 2549.65
17 5 56 4168.81
                                                                                       92.53
                                                                                                  1 41 51
                                                                                                                 1949.7
                                                                                                                              -29.13
                                                                                                                                             54.59
                                                                        179.21
                                                           63.33
                                             -29.80
                                                                                       61.05 18 15 25
                                                                                                                 3568.8
                                                                                                                               3.89
                                                                                                                                           158.86
                                                                       170.40
      100.00
                 17 5 56
                                               7.81
                                                          165.45
                                                                                                 3 6 9
                                                                       178.87
                                                                                                                 1671.4
                                                                                                                             -32.54
                                                                                                                                            32.83
                 2 28 17 2271.41
17 53 30 4019.81
                                                                                       95.94
                                             -33.73
                                                           41.86
      110.00
                                                                                       57.49 19 0 29
                                                                                                               3419.8
                                                                                                                               6.83
                                                                                                                                           145.74
                                                                        168.36
                                              11.20
                                                          152.11
      110.00
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 3814.2 SGR 221.6 SG3 224.2
RRT .3720 RRF .6733 RTF .9081
SGB 3820.7 R23 .3603 R13 .9085
                                                                                                             ST 1773.0 SR 188.9 SS 663.1
CRT .8502 CR5 -.9632 CST -.9602
   TOE 1.5004 TRA-2.1622 TC3-2.3095 BAU .8756
   RDE .1740 RRA .0729 RC3 -.0805 FAU .06389
FDE 1.3064 FRA -.5898 FC3-1.9515 BSP 11949
BDE 1.5105 BRA 2.1635 BC3 2.3109 FSP -746
                                                                                                             LSA 1892.0 MSA 197.7 SSA
                                                                                                                                                4.8
                                                                                                             ELI 1780.3 ELZ 99.1 ALF 5.19
                                                              SG1 3815.1 SG2 205.7 THA 1.24
                                                                                                                       ARRIVAL DATE MAY 7 1966
                                                                  FLIGHT TIME 136.00
                                                                 DISTANCE 405.567
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 27.619 GAL -6.59 AZL 84.21 HCA 197.72 SMA 127.50 ECC .19136 INC 5.7901 V1 30.275
RP 108.88 LAP -1.76 LOP 287.58 VP 37.375 GAP 7.18 AZP 95.52 TAL 210.25 TAP 47.97 RCA 103.10 APO 151.90 V2 34.804
RC 137.863 GL 32.95 GP -18.36 ZAL 126.98 ZAP 148.49 ETS 325.26 ZAE 128.35 ETE 195.89 ZAC 57.68 ETC 146.94 CLP-153.93
  PLANETOCENTRIC CONIC
   C3 25.902 VML 5.089 DLA 15.03 RAL 307.24 RAD 6568.0 VEL 12.136 PTH 2.18 VMP 5.369 DPA -37.08 RAP 322.88 ECC 1.4263 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                      178.65
                                                                                      94.11 24 32 20
                                                                                                                2164.2
                                              -28.04
                                                           79.22
                 23 46 16 2764.20
       90.00
                15 46 46 4434.28
1 19 41 2475.58
16 59 58 4198.13
2 46 7 2205.13
17 50 1 4041.34
                                                                                                                                            178.43
                                                                                                17 D 41
                                                                                                                 3834.3
                                                                                                                                 3.80
                                                7.53
                                                           185.12
                                                                        171.34
                                                                                        62.62
       90.00
                                                                                               2 0 57
18 9 56
3 22 52
18 57 22
                                                                                                                                             49.21
                                                                                        95.39
                                                                                                                 1875.6
                                                                                                                               -28.39
                                                            57.85
                                                                        178.52
                                              -29.45
      100.00
                                                                                                                                            160.47
                                                                                        61.31
                                                                                                                 3598.1
                                                                                                                                4.87
                                               8.77
                                                           167.09
                                                                       170.67
      100.00
                                                                      177.97
                                                                                                                                             27.90
                                                                                        98.89
                                                                                                                 1605.1
                                                                                                                              -31.56
                                              -33.14
                                                            36.77
      110.00
                                                                                                                                            146.88
                                                           153.28
                                                                        168.75
                                                                                        57.74
                                                                                                                 3441.3
                                                                                                                                7.64
                                              11.98
     110.00
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                             ST 1725.2 SR 176.7 S5 638.1
                                                              SGT 3914.6 SGR 195.6 SG3 227.7
RRT .2317 RRF .5251 RTF .9036
SGB 3919.5 R23 .3240 R13 .9038
    TOE 1.3887 TRA-2.0736 TC3-2.6062 BAU .9025
                                                                                                             CRT .8416 CRS -.9648 CST -.9535
    RDE .1555 RRA .0681 RC3 -.0353 FAU .06405
   FOE 1.2104 FRA -.5011 FC3-2.1406 BSP 12305
BDE 1.3974 BRA 2.0747 BC3 2.6064 FSP -758
                                                                                                             LSA 1836.8 MSA 202.2 55A 6.2
                                                                                                             ELI 1731.6 EL2 95.1 ALF 4.94
                                                              5G1 3914.8 SG2 190.3 THA
                                                                                               .66
                                                                                                                       ARRIVAL DATE MAY 9 1966
                                                                  FLIGHT TIME 138.00
LAUNCH DATE DEC 22 1965
                                                                 DISTANCE 411.407
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 24.113 VHL 4.910 DLA 14.13 RAL 309.06 RAD 6568.0 VEL 12.062 PTH 2.16 VHP 5.391 DPA -33.78 RAP 324.06 ECC 1.3968
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                    95.89 0 50 51
62.74 16 59 58
97.20 2 14 55
                                                                                                             2114.5
                                                                                                                            -26.64
                                                                      178.70
                                                                                                                                            67.12
                 0 5 36 2714.54
15 45 50 4448.69
                                              -27.75
                                                           75.61
       90.00
                                                                                                                 3848.7
                                                                                                                               4.26
                                                                                                                                            179.24
                                                                        171.98
       90.00
                                               7.98
                                                           185.94
                                                                                                                 1828.0
                                                                                                                              -27.79
                                                                                                                                             45.80
                                                                       178.53
                                              -29.09
                                                           54.36
      100.00
                   1 34 27
                              2428.01
                                                                                       61.43 18 9 50
100.77 3 35 32
                                                                                                                 3610.4
                                                                                                                                5.29
                                                                                                                                            161.16
                                                                        171.34
      100.00
                 16 59 40
                              4210.45
                                               9.17
                                                           167.79
                                                                                                                 1561.9
                                                                                                                              -30.81
                                                                                      100.77
                                                                                                                                             24.76
                 2 59 30 2161.87
17 51 6 4049.35
                                              -32.64
                                                            33.50
                                                                       177.87
      110.00
                                                                                       57.84 18 58 35
                                                                                                                 3449.4
                                                                                                                                7.94
                                                                                                                                            147.31
                                              12.27
                                                           153.72
                                                                        169.49
      110.00
                                                                                                             ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SGT 4014.2 SGR 187.7 SG3 227.5
RRT .0934 RRF .3599 RTF .9000
SGB 4018.6 R23 .2768 R13 .9001
                                                                                                            ST 1704.2 SR 173.5 SS 620.4
CRT .8429 CRS -.9695 CST -.9482
    TOE 1.3220 TRA-1.9933 TC3-2.8768 BAU .9274
    ROE .1475 RRA .0622 RC3 .0056 FAU .06301
FDE 1.1329 FRA -.4145 FC3-2.2622 BSP 12651
                                                                                                             LSA 1810.2 MSA 205.7 SSA 7.5
                                                              SG1 4014.3 SG2 186.9 THA
                                                                                                             EL1 1710.5 EL2 93.0 ALF 4.92
    BOE 1.3302 BRA 1.9943 BC3 2.8768 FSP
                                                 -756
                                                                                                                        ARRIVAL DATE MAY 11 1966
                                                                  FLIGHT TIME 140.00
   HELIOCENTRIC CONIC
                                                                  DISTANCE 417.237
    RL 147.16 LAL .00 LOL 89.94 VL 27.497 GAL -5.99 AZL 84.92 HCA 204.05 SMA 126.68 ECC .19160 INC 5.0833 V1 30.275 RP 108.91 LAP -2.07 LOP 293.90 VP 37.276 GAP 7.57 AZP 94.64 TAL 206.99 TAP 51.03 RCA 102.41 APO 150.96 V2 34.795 RC 142.456 GL 30.57 GP -13.38 ZAL 125.40 ZAP 152.90 ETS 330.61 ZAE 129.44 ETE 191.78 ZAC 58.72 ETC 152.20 CLP-156.21
   PLANETOCENTRIC CONIC
    C3 22.700 VHL 4.764 DLA 13.64 RAL 310.91 RAD 6567.9 VEL 12.003 PTH 2.14 VHP 5.440 OPA -31.14 RAP 325.49 ECC 1.3736
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                       179.21
                                                                                                   1 2 1
                                                                                                                 2082.8
                                                                                                                              -26.25
                                                                                                                                             64.88
                                                            73.32
                                                                                        97.02
                                              -27.50
        90.00
                    0 17 18 2682.76
                                                                                        62.76 17 3 4
                                                                                                                  3851.0
                                                                                                                                 4.33
                                                                                                                                             179.36
                                                                        172.89
                  15 48 53
                                                           186.08
                               4450.99
                                               A.05
                                                                                                                                             43.62
                                                                                                  2 25 46
                                                                                                                 1797.3
                                                                                                                               -27.35
                                                                        179.01
                                                                                        98.34
                                                            52.12
                   1 45 49 2397.31
                                              -28.81
       100.00
                                                                                       61.44 16 13 15
101.98 3 45 43
57.83 19 2 41
                                                                                                                 3611.7
                                                                                                                                 5.33
                                                                                                                                             161.22
                                                                        172.26
                  17 3 4
                               4211.67
                                                9.21
                                                           167.86
       100.00
                                                                                                                 1533.4
                                                                                                                               -30.27
                                                                                                                                             22.71
                                                             31.37
                                                                        178.29
                                                                                      101.98
                                              -32.26
                   3 10 9 2133.41
       110.00
                                                                                                                 3448.3
                                                                                                                                 7.90
                                                                                                                                            147.25
                                                           153.66
                                                                        170.46
                               4048.34
       110.00
                  17 55 12
                                              12.24
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                             ST 1699.9 SR 175.5 SS 606.7
CRT .8516 CRS -.9757 CST -.9443
                                                              SCT 4115.0 SGR 191.2 SG3 225.6
RRT -.0134 RRF .2143 RTF .8976
SGB 4119.5 R23 -.2264 R13 -.8976
     TOE 1.2815 TRA-1.9174 TC3-3.1359 BAU .9518
     RDE .1450 RRA .0548 RC3 .0416 FAU .06151
                                                                                                            LSA 1801.5 MSA 207.7 SSA 8.8
EL1 1706.5 EL2 91.7 ALF 5.04
    FOE 1.0669 FRA -.3357 FC3-2.3457 BSP 13031
BOE 1.2897 BRA 1.9181 BC3 3.1361 FSP -754
                                                               SG1 4115.0 SG2 191.2 THA 179.96
```

```
FLIGHT TIME 142.00
                                                                                                                                ARRIVAL DATE MAY 13 1966
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 423.065
    RL 147.16 LAL' .00 LOL 89.94 VL 27.437 GAL -5.67 A7L 85.15 MCA 207.21 SMA 126.29 ECC .19188 INC 4.8476 V1 30.275 RP 108.92 LAP -2.21 LOP 297.06 VP 37.229 GAP 7.77 A7P 94.31 TAL 205.32 TAP 52.53 RCA 102.05 APO 150.52 V2 34.791
    RC 144.737 GL 29.82 GP -11.74 7AL 124.14 7AP 154.60 ETS 332.49 7AE 129.67 ETE 190.35 7AC 59.84 ETC 154.16 CLP-157.31
   PLANETOCENTRIC CONIC
    C3 21.525 VHL 4.639 OLA 13.46 RAL 312.82 RAC 6567.9 VEL 11.954 PTH 2.13 VHP 5.505 OPA -28.95 RAP 327.09 ECC 1.3542
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                            180.06
                                                                                                         1 10 56
        90.00
                    0 26 33 2663.51
                                                 -27.34
                                                                71.94
                                                                                             97.69
                                                                                                                         2063.5
                                                                                                                                       -25.99
                                                                                                                                                        63.53
        90.00
                   15 54 54
                                 4444.49
                                                   7.85
                                                                185.71
                                                                              174.00
                                                                                               62.70 17 8 58
99.04 2 34 34
                                                                                                                          3844.5
                                                                                                                                          4.13
                                                                                                                                                       179.00
       100.00
                    1 54 56 2378.46
                                                 -28.61
                                                                50.76
                                                                             179.85
                                                                                             99.04 2 34 34
61.37 18 19 17
102.73 3 54 16
57.74 19 8 57
                                                                                                                          1778.5
                                                                                                                                         -27.07
                                                                                                                                                        42.29
                                                                          173.38
179.10
                 17 9 12 4204.78
3 19 0 2115.38
18 1 37 4040.62
       100.00
                                                   8.99
                                                                167.47
                                                                                                                          3604.8
                                                                                                                                          5.10
                                                                                                                                                       160.84
       110.00
                                                 -31.99
                                                                30.03
                                                                                                                          1515.4
                                                                                                                                        -29.91
                                                                                                                                                        21.43
      110.00
                                                 11.96
                                                               153.24
                                                                             171.61
                                                                                                                          3440.6
                                                                                                                                          7.61
                                                                                                                                                       146.84
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                 SGT 4101.9 SGR 210.8 SG3 214.1
RRT -.0829 RRF .1539 RTF .8778
SG8 4107.3 R23 -.2276 R13 -.8777
SG1 4102 0 662 000
                                                                                                                      ST 1784.5 SR 186.2 SS 648.6
CRT .8796 CRS -.9870 CST -.9426
    TOE 1.3366 TRA-1.7642 TC3-3.2479 BAU .9349
    ROE .1500 RRA .0514 RC3 .0827 FAU .05519
FOE 1.1019 FRA -.1639 FC3-2.2199 BSP 11597
                                                                                                                      LSA 1895.0 MSA 220.4 SSA 9.2
    80E 1.3450 BRA 1.7650 BC3 3.2490 FSP -554
                                                                  SG1 4102.0 SG2 210.1 THA 179.76
                                                                                                                     EL1 1792.0 EL2 88.2 ALF 5.26
LAUNCH DATE DEC 22 1965
                                                                       FLIGHT TIME 144.00
                                                                                                                                 ARRIVAL CATE MAY 15 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 428.867
    RL 147.16 LAL .00 LOL 89.94 VL 27.377 GAL -5.35 AZL 85.34 HCA 210.37 SMA 125.89 ECC .19230 INC 4.6578 V1 30.275 RP 108.93 LAP -2.35 LOP 300.22 VP 37.182 GAP 7.96 AZP 94.02 TAL 203.65 TAP 54.02 RCA 101.68 APO 150.10 V2 34.788 RC 147.008 GL 29.24 GP -10.43 ZAL 122.66 ZAP 156.11 ETS 333.98 ZAE 129.81 ETE 189.19 ZAC 61.19 ETC 155.82 CLP-158.39
   PLANETOCENTRIC CONIC
    C3 20.531 VHL 4.531 OLA 13.48 RAL 314.79 RAO 6567.8 VEL 11.913 PTH 2.12 VHP 5.582 OPA -27.06 RAP 328.80 ECC 1.3379
    LNCH AZMTH LNCH TIME L-I TIME
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 34 9 2653.12
16 3 0 4432.19
2 2 34 2368.00
17 17 16 4192.53
3 26 41 2104.80
18 9 39 4028.50
                                                                                            98.06 1 18 23
62.60 17 16 52
99.42 2 42 2
61.26 18 27 9
103.17 4 1 46
57.59 19 16 47
       90.00
                                                                           181.18
                                                 -27.24
                                                                71.19
                                                                                                                          2053.1
                                                                                                                                       -25.84
                                                                                                                                                        62.80
        90.00
                                                    7.46
                                                                185.01
                                                                              175.28
                                                                                                                          3832.2
                                                                                                                                           3.73
                                                                                                                                                        178.31
      100.00
                                                 -28.50
                                                                50.00
                                                                              180.96
                                                                                                                          1768.0
                                                                                                                                         -26.90
                                                                                                                                                        41.56
      100.00
                                                   8.59
                                                               166.78
                                                                             174.67
                                                                                                                          3592.5
                                                                                                                                          4.69
                                                                                                                                                       160.17
                                                 -31.83
      110.00
                                                                29.24
                                                                            180.19
                                                                                                                          1504.8
                                                                                                                                        -29.69
                                                                                                                                                        20.69
      110.00
                                                 11.51
                                                               152.58
                                                                             172.91
                                                                                                                          3428.5
                                                                                                                                          7.16
                                                                                                                                                        146.20
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 4287.4 SGR 216.7 SG3 217.2
RRT -.1238 RRF .0388 RTF .8906
SGB 4292.9 R23 -.1505 R13 -.8905
    TOE 1.2690 TRA-1.7436 TC3-3.6039 BAU .9896
                                                                                                                      ST 1745.6 SR 189.7 SS 602.3
CRT .8848 CR5 -.9890 CST -.9405
    ROE .1495 RRA .0383 RC3 .1033 FAU .05683
FDE .9848 FRA -.1715 FC3-2.3965 BSP 13408
BDE 1.2778 BRA 1.7440 BC3 3.6054 FSP -703
                                                                                                                     LSA 1844.2 MSA 210.9 SSA 11.1
                                                                SG1 4287.5 SG2 215.1 THA 179.64
                                                                                                                    EL1 1753.6 EL2 88.0 ALF 5.51
LAUNCH DATE DEC 22 1965
                                                                                                                                ARRIVAL DATE MAY 17 1966
                                                                       FLIGHT TIME 146.00
                                                                      DISTANCE 434.666
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 27.318 GAL -5.02 A7L 85.50 MCA 213.53 SMA 125.51 ECC .19284 INC 4.5007 VI 30.275 RP 108.94 LAP -2.48 LOP 303.39 VP 37.137 GAP 8.15 A7P 93.75 TAL 201.96 TAP 55.49 RCA 101.30 APO 149.71 V2 34.786 RC 149.266 GL 28.79 GP -9.38 ZAL 120.98 ZAP 157.49 ETS 335.19 ZAE 129.89 ETE 188.24 ZAC 62.73 ETC 157.24 CLP-159.44
  PLANETOCENTRIC CONIC
   C3 19.664 VHL 4.434 DLA 13.69 RAL 316.84 RAD 6567.8 VEL 11.876 PTH 2.11 VHP 5.666 DPA -25.38 RAP 330.61 ECC 1.3236 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          182.55
                                                                                              98.16 1 24 42
62.47 17 26 36
                 0 40 32 2650.05
16 13 1 4414.70
2 9 5 2364.49
17 27 10 4175.49
                                                                                                                                       -25.80
                                                                                                         1 24 42
                                                                                                                         2050.1
                                                                70.97
                                                                                                                                                        62.59
       90.00
                                                 -27.21
                                                                             176.72
                                                                                                                         3814.7
                                                                                                                                          3.17
       90.00
                                                               184.01
                                                  6.91
                                                                49.75
                                                                                              99.55
                                                                                                         2 48 29
                                                                                                                         1764.5
                                                                                                                                                        41.31
                                                 -28.46
                                                                             182.33
                                                                                                                                        -26.85
      100.00
                                                                                              99.55 2 48 29
61.11 18 36 45
                                                                                                                         3575.5
      100.00
                                                  8.03
                                                               165.82
                                                                            176.12
                                                                                                                                          4.11
                                                                                            103.35 4 0 -- 41 19 26 6
                                                                          181.55
                                                                                                         4 8 30
                                                                                                                         1500.4
                                                                                                                                                       20.37
                   3 33 30 2100.35
18 19 14 4012.39
                                                -31.76
                                                                                                                                        -29.60
      110.00
                                                                28.91
                                                               151.71
                                                                             174.37
                                                                                                                         3412.4
                                                                                                                                          6.55
                                                                                                                                                       145.35
      110.00
                  18 19 14
                                                 10.93
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 4380.3 SGR 231.8 SG3 213.2

RRT -.1423 RRF -.0093 RTF .8891

SGB 4386.5 R23 -.1188 R13 -.8891
                                                                                                                     ST 1777.8 SR 198.7 55 600.5
CRT .9025 CRS -.9934 CST -.9404
    TOE 1.2748 TRA-1.6566 TC3-3.8437 BAU 1.0110
   RDE .1535 RRA .0287 RC3 .1281 FAU .05476
FOE .9475 FRA -.1043 FC3-2.4110 BSP 13743
                                                                                                                     LSA 1875.2 MSA 209.7 SSA 12.3
   BDE 1.2840 BRA 1.6568 BC3 3.8459 FSP -693
                                                                   SG1 4380.5 SG2 229.4 THA 179.57
                                                                                                                      ELI 1786.8 EL2 85.2 ALF
                                                                                                                                                          5.77
LAUNCH DATE DEC 22 1965
                                                                       FLIGHT TIME 148.00
                                                                                                                                ARRIVAL DATE MAY 19 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 440.454
   RL 147.16 LAL .00 LOL 89.94 VL 27.259 GAL -4.68 AZL 85.63 MCA 216.69 SMA 125.13 ECC .19352 INC 4.3677 V1 30.275
RP 108.94 LAP -2.61 LOP 306.55 VP 37.092 GAP 8.35 AZP 93.50 TAL 200.25 TAP 56.94 RCA 100.91 APO 149.34 V2 34.785
RC 151.511 GL 28.42 GP -8.52 ZAL 119.13 ZAP 158.75 ETS 336.16 ZAE 129.94 ETE 187.46 ZAC 64.40 ETC 158.48 CLP-160.46
  PLANETOCENTRIC CONIC
   C3 18.905 VHL 4.348 OLA 14.04 RAL 318.99 RAD 6567.8 VEL 11.844 PTH 2.10 VHP 5.757 OPA -23.85 RAP 332.48 ECC 1.3111
   UNCH AZMTH UNCH TIME L-I TIME
90.00 0 46 0 2652.93
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         1 30 13
                                                 -27.24
                                                               71.18
                                                                                                                         2052.9
                                                                           184.14
                                                                                              98.06
                  16 24 40
                                                                                                       17 37 54
       90.00
                                 4393.20
                                                   6.23
                                                               182.80
                                                                             178.34
                                                                                              62.32
                                                                                                                          3793.2
                                                                                                                                          2.48
                                                                                                                                                       176.13
      100.00
                    2 14 47 2366.60
                                                  -28.48
                                                                49.90
                                                                             183.92
                                                                                              99.47
                                                                                                        2 54 14
                                                                                                                          1766.6
                                                                                                                                         -26.88
                                                                                              60.94 18 47 49
      100.00
                  17 38 34
                                 4154.77
                                                   7.35
                                                               164.67
                                                                             177.74
                                                                                                                          3554.8
                                                                                                                                           3.41
                                                                                                                                                       158.08
                   3 39 43
                               2100.86
                                                 -31.77
                                                                28.95
                                                                            183.15
                                                                                             103.33
                                                                                                         4 14 44
                                                                                                                         1500.9
      110.00
                  18 30 8
                                 3993.27
                                                               150.67
                                                                             175.99
                                                                                              57.20 19 36 41
                                                                                                                          3393.3
                                                                                                                                           5.83
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1819.8 SR 208.7 SS 601.8
CRT .9202 CRS -.9963 CST -.9413
    TDE 1.2911 TRA-1.5625 TC3-4.0775 BAU 1.0312
                                                                   SGT 4469.0 SGR 247.4 SG3 209.0
                                                               RRT -.1467 RRF -.0380 RTF .8817
SCB 4475.8 R23 -.0936 R13 -.8877
SGI 4469.2 SGZ 244.7 THA 179.53
    RDE .1583 RRA .0188 RC3 .1501 FAU .05260
                                                                                                                   LSA 1916.8 MSA 207.6 SSA 13.4
EL1 1829.9 EL2 81.3 ALF 6.04
          .9169 FRA -.0390 FC3-2.4087 8SP 14052
    BOE 1.3008 BRA 1.5626 BC3 4.0803 FSP -680
```

BOF 1.4457 BRA 1.1100 BC3 4.9381 FSP -624

APRIVAL DATE MAY 29 1966

FLIGHT TIME 158.00 LAUNCH DATE DEC 22 1965 DISTANCE 469.231 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.974 GAL -2.82 AZL 86.09 MCA 232.49 SMA 123.33 ECC .19915 INC 3.9104 V1 30.275 RP 108.93 LAP -3.10 LOP 322.37 VP 36.887 GAP 9.35 AZP 92.38 TAL 191.50 TAP 63.99 RCA 98.77 APO 147.89 V2 34.789 26.98 GP -5.82 TAL 107.56 TAP 164.06 ETS 338.55 TAE 130.14 ETE 185.05 TAC 74.03 ETC 162.83 CLP-165.13 RC 162.536 GL PLANETOCENTRIC CONTC C3 16.399 VHL 4.050 DLA 17.21 RAL 331.34 RAD 6567.7 VEL 11.738 PTH 2.07 VHP 6.279 DPA -17.36 RAP 342.46 ECC 1.2699 ENCH AZMTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 5 37 2734.90 17 43 36 4245.21 2 36 52 2440.61 18 55 1 4014.73 4 6 56 2158.82 19 41 27 3869.29 195.31 95.17 1 51 12 2134.9 -26.87 68.57 -27.88 77.09 90.00 189.21 61.72 18 54 21 3645.2 -2.29 167.87 90.00 1.50 174.50 96.72 3 17 33 1840.6 -27.96 46.70 55.28 195.15 100.00 -29.20 20 1 56 3414.7 -1.33 150.40 60.21 188.57 100.00 2.65 156.92 4 42 55 1558.8 -30.75 24.54 110.00 100.90 194.54 -32.60 33.27 56.22 20 45 56 3269.3 137.84 144.07 1.11 186.75 110.00 5.58 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4866.0 SGR 320.4 SG3 187.4 RRT -.0737 RRF -.0427 RTF .8854 SGB 4876.6 R23 -.0229 R13 -.8854 ST 2148.9 SR 263.8 55 631.2 CRT .9853 CRS -.9871 CST -.9557 TOE 1.4849 TRA -. 9768 TC3-5.1164 BAU 1.1227 ROE .1862 RRA -.0302 RC3 .2184 FAU .04203 FOE .8177 FRA .2487 FC3-2.2189 BSP 15407 LSA 2247.7 MSA 182.2 SSA 18.7 EL1 2164.5 EL2 44.7 ALF 6.90 SG1 4866.1 SG2 319.5 THA 179.72 BOE 1.4965 BRA .9772 BC3 5.1211 FSP -612 ARRIVAL DATE MAY 31 1966 FLIGHT TIME 160.00 LAUNCH DATE DEC 22 1965 HELIOCENTRIC CONIC DISTANCE 474.950 RL 147.16 LAL .00 LOL 89.94 VL 26.919 GAL -2.42 A7L 86.16 MCA 235.65 SMA 122.99 ECC .20079 INC 3.8434 VI 30.275 RP 108.92 LAP -3.17 LOP 325.53 VP 36.850 GAP 9.56 AZP 92.17 TAL 189.71 TAP 65.37 RCA 98.30 APO 147.69 V2 34.792 RC 164.699 GL 26.66 GP -5.48 ZAL 104.84 ZAP 164.99 ETS 338.65 ZAE 130.19 ETE 184.76 ZAC 76.13 ETC 163.45 CLP-166.00 PLANE TOCENTRIC CONIC C3 16.140 VHL 4.017 DLA 18.03 RAL 334.17 RAD 6567.6 VEL 11.727 PTH 2.07 VMP 6.398 DPA -16.18 RAP 344.54 ECC 1.2656 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.03 1 54 43 2162.6 -27.16 70.54 1 8 40 2762.56 198.20 94.17 79.10 90.00 18 3 7 4210.29 2 40 41 2465.85 3610.3 172.55 192.01 61.69 19 13 17 -3.42 165.92 .37 90.00 3 21 47 95.76 -28.27 48.51 1865.8 -29.38 57.14 198.06 100.00 20 20 10 4 48 35 21 2 44 19 13 48 3982.23 4 12 15 2179.33 19 58 42 3841.52 60.14 3382.2 -2.43 148.61 1.55 155.13 191.35 100.00 1579.3 100.02 -32.85 -31.12 110.00 34.82 197.50 3241.5 110.00 4.53 142.61 189.50 56.08 .05 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 4937.5 SGR 333.2 SG3 183.2 RRT -.0512 RRF -.0305 RTF .8863 ST 2233.2 SR 275.1 55 638.7 CRT .9915 CRS -.9816 CST -.9594 TOE 1.5410 TRA -.8351 TC3-5.2774 BAU 1.1397 ROE .1925 RRA -. 0391 RC3 .2234 FAU .04006 FOE .8038 FRA .2990 FC3-2.1488 BSP 15668 BOE 1.5529 BRA .8360 BC3 5.2821 FSP -600 SGB 4948.7 R23 -.0152 R13 -.8863 LSA 2332.3 MSA 175.4 SSA 19.6 EL1 2249.8 EL2 35.4 ALF 6.97 SG1 4937.5 SG2 332.7 THA 179.80 ARRIVAL DATE JUN 2 1966 FLIGHT TIME 162.00 LAUNCH DATE DEC 22 1965 DISTANCE 480.656 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.865 GAL -2.00 AZL 86.22 HCA 238.82 SMA 122.66 ECC .20264 INC 3.7813 VI 30.275
RP 108.91 LAP -3.23 LOP 328.70 VP 36.814 GAP 9.78 AZP 91.96 TAL 187.92 TAP 66.74 RCA 97.81 APO 147.52 V2 34.796
RC 166.847 GL 26.30 GP -5.18 ZAL 102.00 ZAP 165.88 ETS 338.62 ZAE 130.24 ETE 184.51 ZAC 78.26 ETC 164.02 CLP-166.85 PLANETOCENTRIC CONIC C3 15.966 VHL 3.996 DLA 18.87 RAL 337.12 RAD 6567.6 VEL 11.720 PTH 2.06 VMP 6.522 DPA -15.02 RAP 346.63 ECC 1.2628 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 11 34 2793.52 18 23 47 4174.40 93.05 1 58 8 2193.5 -27.45 72.76 81.35 201.31 -28.17 90.00 19 33 21 3574.4 -4.57 163.91 170.55 195.04 61.69 -.79 90.00 1894.1 2 44 26 2494.06 -29.56 59.22 201.20 94.68 3 26 0 -28.59 50.54 100.00 20 39 25 19 33 36 3949.10 4 17 41 2202.30 60.11 3349.1 -3.55 146.79 .43 153.31 194.36 100.00 99.02 4 54 24 55.97 21 20 24 1602.3 -33.11 36.56 200.70 -31.51 27.70 110.00 141.14 192.46 3213.6 -1.02 114.94 20 16 50 3.47 3813.62 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS ST 2325.3 SR 286.6 SS 647.7 CRT .9955 CRS -.9751 CST -.9630 SGT 4999.7 SGR 345.3 SG3 178.9 TOE 1.6047 TRA -.6801 TC3-5.4025 BAU 1.1541 ROE .1992 RRA -.0474 RC3 .2255 FAU .03800 RRT -.0269 RRF -.0140 RTF .8865 FOE .7930 FRA .3512 FC3-2.0603 BSP 15836 BDE I.6170 BRA .6818 BC3 5.4072 FSP -583 LSA 2424.8 MSA 169.1 SSA 20.5 SGB 5011.6 R23 -.0100 R13 -.8864 SG1 4999.7 SG2 345.2 THA 179.89 EL1 2342.8 EL2 26.9 ALF 7.00 ARRIVAL DATE JUN 4 1966 LAUNCH DATE DEC 22 1965 FLIGHT TIME 164.00 DISTANCE 486.347 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.811 GAL -1.57 AZL 86.28 HCA 241.98 SMA 122.33 ECC .20469 INC 3.7232 V1 30.275
RP 108.89 LAP -3.29 LOP 331.87 VP 36.779 GAP 10.01 AZP 91.75 TAL 186.12 TAP 68.10 RCA 97.29 APO 147.38 V2 34.800
RC 168.980 GL 25.89 GP -4.91 ZAL 99.05 ZAP 166.75 ETS 338.48 ZAE 130.31 ETE 184.29 ZAC 80.43 ETC 164.53 CLP-167.68 PLANETOCENTRIC CONIC C3 15.882 VHL 3.985 OLA 19.74 RAL 340.20 RAD 6567.6 VEL 11.716 PTH 2.06 VHP 6.652 OPA -13.86 RAP 348.73 ECC 1.2614 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 14 22 2827.57 -28.26 83.84 204.64 91.80 2 1 30 2227.6 -27.71 75.22 19 54 28 -5.73 161.86 3538.0 18 45 30 4137.96 -1.96 168.52 198.30 61.75 -28.91 52.79 2 48 12 2525.01 -29.71 61.50 204.56 93.49 3 30 17 1925.0 19 54 22 3915.75 4 23 18 2227.49 20 35 46 3786.03 -.70 151.49 197.60 60.12 20 59 38 3315.7 -4.67 144.95 -33.37 38.48 204.14 97.91 5 0 25 1627.5 -31.91 29.55 110.00 55.89 21 38 52 133.50 139.70 195.65 3186.0 -2.08 2.42 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2415.3 SR 298.0 SS 654.0 CRT .9973 CRS -.9682 CST -.9664 SGT 5064.4 SGR 356.6 SG3 174.8 RRT -.0028 RRF .0021 RTF .8881 TOE 1.6692 TRA -.5194 TC3-5.5061 BAU 1.1700 ROE .2065 RRA -.0551 RC3 .2242 FAU .03613 LSA 2514.6 MSA 162.6 SSA 21.2 EL1 2433.5 EL2 21.8 ALF 7.02 SGB 5077.0 R23 -.0046 R13 -.8881 FOE .7805 FRA .3981 FC3-1.3695 BSP 16092 BOE 1.6820 BRA .5223 BC3 5.5107 FSP -573

5G1 5064.4 5G2 356.6 THA 179.99

```
ARRIVAL DATE JUN 6 1966
                                                                 FLIGHT TIME 166.00
LAUNCH DATE DEC 22 1965-
                                                                01STANCE 492.022
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 26.758 GAL -1.12 A7L 86.33 HCA 245.14 SMA 122.01 ECC .20697 INC 3.6683 VI 30.275
RP 108.88 LAP -3.33 LOP 335.04 VP 36.745 GAP 10.24 A7P 91.54 TAL 184.30 TAP 69.45 RCA 96.76 APO 147.27 V2 34.805
   RC 171.096 GL 25.43 GP -4.67 TAL 96.00 TAP 167.59 ETS 338.21 TAE 130.38 ETE 184.10 TAC 82.63 ETC 164.99 CLP-168.49
  PLANETOCENTRIC CONIC
   C3 15.893 VHL 3.987 DLA 20.61 RAL 343.39 RAD 6567.6 VEL 11.717 PTH 2.06 VHP 6.788 DPA -12.72 RAP 350.85 ECC 1.2616
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                1 17 8 2864.151
19 8 13 4101.35
2 52 2 2558.46
20 16 0 3882.63
4 29 9 2254.66
20 55 23 3759.19
                                                                                      90.45
                                                                                                 2 4 52
                                                                                                               2264.5
                                                                       208.19
                                                                                                                             -27.95
                                            -28.31
                                                          86.54
                                                                                                20 16 34
                                                                                                                3501.3
                                                                                                                              -6.88
                                                                                                                                          159.79
                                              -3.14
                                                          166.47
                                                                       201.80
                                                                                      61.84
                                                                                                 3 34 41
                                                                                                                1958.5
                                                                                                                             -29.20
                                                                                                                                           55.24
                                                                                      92.19
                                             -29.82
                                                           63.99
                                                                       20A . 15
                                                                                      60.16 21 20 42
                                                                                                                              -5.78
                                                                                                                                          143.12
                                                                                                                3282.6
                                             -1.82
                                                          149.67
                                                                       201.06
                                                                                                               1654.7
                                                                                                                             -32.31
                                                                                                                                            31.57
                                                                                                 5 6 43
                                            -33.60
                                                          40.57
                                                                       207.80
                                                                                      96.69
                                                                                      55.84 21 58 2
                                                                                                                              -3.10
                                                                                                                                           132.10
                                                                                                                3159.2
      110.00
                                              1.39
                                                          138.30
                                                                       199.06
                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SCT 5125.5 SCR 367.2 SC3 170.8
RRT .0217 RRF .0195 RTF .8900
SCB 5138.7 R23 .0001 R13 .8900
                                                                                                            ST 2504.9 SR 309.6 SS 659.2
CRT .9971 CRS -.9607 CST -.9695
   TOE 1.7369 TRA -.3487 TC3-5.5742 BAU 1.1853
   RDE .2145 RRA -.0619 RC3 .2200 FAU .03432
                                                                                                            LSA 2603.8 MSA 157.0 SSA 21.9
EL1 2523.9 EL2 23.2 ALF 7.03
         .7684 FRA .4442 FC3-1.8692 BSP 16334
   BDE 1.7501 BRA .3542 BC3 5.5786 FSP -562
                                                              561 5125.5 562 367.1 THA
                                                                                               .09
                                                                                                                      ARRIVAL DATE JUN 8 1966
LAUNCH DATE DEC 22 1965
                                                                 FLIGHT TIME 168.00
  HELIOCENTRIC CONIC
                                                                DISTANCE 497.681
   RL 147.16 LAL .00 LOL 89.94 VL 26.706 GAL -.66 A7L 86.38 HCA 248.31 SMA 121.70 ECC .20949 INC 3.6162 V1 30.275
RP 108.86 LAP -3.36 LOP 338.21 VP 36.712 GAP 10.49 A7P 91.34 TAL 182.49 TAP 70.80 RCA 96.21 APO 147.20 VZ 34.811
RC 173.196 GL 24.90 GP -4.46 7AL 92.87 7AP 168.41 ETS 337.80 7AE 130.45 ETE 183.94 7AC 84.85 ETC 165.41 CLP-169.29
  PLANETOCENTRIC CONIC
   C3 16.008 VHL 4.001 DLA 21.47 RAL 346.69 RAD 6567.6 VEL 11.721 PTH 2.07 VHP 6.931 DPA -11.59 RAP 352.97 ECC 1.2634
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 2 8 16
                                                                                                              2304.1
                                                                                      89.00
                                                                                                                            -28.14
                   1 19 52 2904.11
                                             -28.30
                                                          89.44
                                                                      211.94
                  19 31 48 4065.01
2 56 0 2594.14
                                                                                       61.99
                                                                                               20 39 33
                                                                                                                3465.0
                                                                                                                               -8.02
                                                                                                                                           157.73
                                                          164.44
                                                                       205.52
                 19 31 48
                                              -4.31
       90.00
                                                                                       90.79
                                                                                                3 39 14
                                                                                                                1994.1
                                                                       211.94
      100.00
                                             -29.88
                                                           66.64
     100.00 20 38 22 3850.21
110.00 4 35 17 2283.52
110.00 21 15 34 3733.60
                                                                                               21 42 32
                                                                                                                3250.2
                                                                                                                               -6.86
                                              -2.92
                                                          147.89
                                                                       204.75
                                                                                       60.24
                                                                                                5 13 21
                                                                                                                1683.5
                                                                                                                              -32.69
                                                                                       95.39
                                             -33.81
                                                           42.79
                                                                       211.69
                                                                                               22 17 47
                                                                                                                3133.6
                                                                                                                              -4.07
                                               . 41
                                                          136.97
                                                                       202.67
                                                                                       55.82
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 5178.6 SGR 376.9 SG3 166.7
RRT .0471 RRF .0385 RTF .8915
    TOE 1.8090 TRA -.1640 TC3-5.5948 BAU 1.1982
                                                                                                            ST 2595.1 SR 321.2 55 663.4
                                                                                                            CRT .9954 CRS -.9526 CST -.9723
   ROE .2232 RRA -.0678 RC3 .2128 FAU .03247
   FOE .7566 FRA .4921 FC3-1.7560 BSP 16487
BOE 1.8227 BRA .1775 BC3 5.5989 FSP -548
                                                              SG8 5192.3 R23 -.0037 R13 .8915
                                                                                                            LSA 2693.4 MSA 152.7 55A 22.3
                                                                                                            EL1 2614.8 EL2 30.6 ALF
                                                              SG1 5178.6 SG2 376.5 THA .20
                                                                                                                      ARRIVAL DATE JUN 10 1966
                                                                 FLIGHT TIME 170.00
LAUNCH DATE DEC 22 1965
                                                                DISTANCE 503.320
   RL 147.16 LAL .00 LOL 89.94 VL 26.654 GAL -.18 AZL 86.43 HCA 251.48 SMA 121.39 ECC .21227 INC 3.5664 V1 30.275
RP 108.84 LAP -3.38 LOP 341.38 VP 36.680 GAP 10.74 AZP 91.13 TAL 180.67 TAP 72.14 RCA 95.63 APO 147.16 V2 34.817
RC 175.278 GL 24.30 GP -4.27 ZAL 89.67 ZAP 169.21 ETS 337.24 ZAE 130.54 ETE 183.80 ZAC 87.10 ETC 165.79 CLP-170.08
PLANFIOCENTRIC CONTY
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONTC
    C3 16.235 VHL 4.029 CLA 22.30 RAL 350.09 RAO 6567.7 VEL 11.731 PTH 2.07 VHP 7.081 OPA -10.46 RAP 355.11 ECC 1.2672
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              2346.1
                                                                                                2 11 46
                                                                                                                                          83.84
                 1 22 40 2946.06
19 56 7 4029.46
                                                                                    87.46
                                             -28.21
                                                          92.50
                                                                      215.88
                                                                                               21 3 16
                                                                                                                3429.5
                                                                                                                              -9.12
                                                                                                                                          155.70
                                                                       209.47
                                                                                       62.17
                                              -5.44
                                                          162.44
                                                                                                                2031.7
                                                                                                                             -29.66
                                                                                                                                           60.63
                   3 0 9 2631.70
                                                                                      89.32
                                                                                                 3 44 1
                                             -29.89
                                                           69.43
                                                                       215.93
      100.00
                                                                                      60.35 22 4 57
                                                                                                                3219.1
                                                                                                                              -7.89
                                                                                                                                          139.58
                 21 1 18 3819.05
                                              -3.97
                                                          146.17
                                                                       208.66
      100.00
                                                                                                 5 20 21
                                                                                                                             -33.05
                                                                                                               1713.8
                                             -33.98
                                                           45.14
                                                                       215.79
                                                                                      94.01
      110.00
                   4 41 47
                              2313.76
                                                                                      55.82 22 38 0
                                                                                                                3109.8
                                                                                                                               -4.98
                 21 36 10 3709.76
                                                          135.72
                                                                       206.50
      110.00
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 5231.1 SGR 385.9 SG3 162.2
RRT .0717 RRF .0574 RTF .8950
                                                                                                            ST 2673.9 SR 332.8 SS 662.8
CRT .9923 CRS -.9450 CST -.9749
    TOE 1.8780 TRA .0228 TC3-5.5817 BAU 1.2123
   ROE .2328 RRA -.0730 RC3 .2029 FAU .03074
FDE .7416 FRA .5308 FC3-1.6395 BSP 16762
BDE 1.8924 BRA .0765 BC3 5.5854 FSP -543
                                                              SGB 5245.3 R23 -.0071 R13 .8950
                                                                                                            LSA 2770.8 MSA 148.3 SSA
                                                                                                            EL1 2694.3 EL2 40.8 ALF
                                                              SG1 5231.2 SG2 384.9 THA
                                                                                               . 30
                                                                                                                      ARRIVAL DATE JUN 12 1966
                                                                 FLIGHT TIME 172.00
LAUNCH DATE DEC 22 1965
                                                                DISTANCE 508.938
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 26.603 GAL .32 AZL 86.48 HCA 254.64 5MA 121.09 ECC .21533 INC 3.5183 V1 30.275
RP 108.82 LAP -3.39 LOP 344.55 VP 36.650 GAP 11.01 AZP 90.93 TAL 178.84 TAP 73.49 RCA 95.02 APO 147.17 V2 34.824
    RC 177.341 GL 23.63 GP -4.10 ZAL 86.42 ZAP 169.99 ETS 336.49 ZAE 130.62 ETE 183.68 ZAC 89.37 ETC 166.13 CLP-170.86
  PLANETOCENTRIC CONIC
    C3 16.583 VHL 4.072 DLA 23.09 RAL 353.56 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 7.240 DPA
                                                                                                                  -9.33 RAP 357.25 ECC 1.2729
   LNCH ATHTH LNCH TIME L-1 TIME" INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           87.05
                                                                       219.99
                                                                                      85.87
                                                                                                 2 15 23
                                                                                                               2390.0
                                                           95.70
                  1 25 33 2990.02
                                             -28.04
       90.00
                                                                                       62.38
                                                                                                21 27 34
                                                                                                                3395.2
                                                                                                                              -10.17
                                                                                                                                           153.73
                                                          160.51
                                                                       213.63
                 20 20 58
                               3995.23
                                              -6.52
       90.00
                                                                                       87.80
                                                                                                  3 49 5
                                                                                                                2010.8
                                                                                                                              -29.81
                                                                                                                                            63.52
                                                                       220.10
                                                           72.33
                  3 4 34
                               2670.75
                                             -29.82
      100.00
                                                                                               22 27 48
                                                                                                                3189.7
                                                                                                                              -8.85
                                                                                                                                           137.93
                                                                       212.77
                                                                                       60.48
                 21 24 38
                               3789.72
                                              -4.96
                                                          144.55
                                                                       220.09
                                                                                       92.58
                                                                                                                1745.0
                                                                                                                              -33.37
                                                                                                                                            38.41
                                                           47.57
      110.00
                  4 48 41 2345.02
                                             -34.10
                                                                                               22 58 29
                                                                                                                             -5.80
                                                                                       55.84
                                                                                                                3088.2
                                                                                                                                           128.37
                                                          134.60
      110.00
                 21 57 1
                               3688.22
                                              -1.32
                                                                       210.51
                                                             MIO-COURSE EXECUTION ACCURACY
SGT 5280.1 SGR 394.3 SG3 158.5
RRT .0976 RRF .0821 RTF .8963
SGB 5294.8 R23 -.0059 R13 .8963
LSA 2851.8 MSA 146.9 SSA 22.7
EL1 2775.9 EL2 52.4 ALF 7.05
                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
```

TOE 1.9543 TRA .2298 TC3-5.5177 BAU 1.2240 ROE .2437 RRA -.0767 RC3 .1908 FAU .02893 FOE .7346 FRA .5787 FC3-1.5103 BSP 16911 BDE 1.9694 BRA .2423 BC3 5.5210 FSP -525

JPL TM 33-99

ARRIVAL DATE JUN 14 1966 FLIGHT TIME 174.00 LAUNCH DATE DEC 22 1965 DISTANCE 514.533 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.553 GAL .83 AZL 86.53 HCA 257.81 SHA 120.80 ECC .21869 INC 3.4716 V1 30.275
RP 108.79 LAP -3.39 LOP 347.73 VP 36.621 GAP 11.29 AZP 90.73 TAL 177.02 TAP 74.83 RCA 94.38 APO 147.22 V2 34.832 RC 179.385 GL 22.90 GP -3.95 ZAL 83.14 ZAP 170.75 ETS 335.53 ZAE 130.71 ETE 183.57 ZAC 91.65 ETC 166.43 CLP-171.62 PLANETOCENTRIC CONIC C3 17.067 VHL 4.131 CLA 23.84 RAL 357.11 RAD 6567.7 VEL 11.766 PTH 2.08 VHP 7.408 CPA -8.21 RAP 359.39 ECC 1.2809 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.28 90.38 84.23 2 19 13 2435.6 224.26 1 28 38 3035.57 -27.77 99.01 62.63 21 52 14 86.24 3 54 31 151.86 3362.9 -11.15 20 46 11 3962.88 3 9 20 2710.85 -7.54 158.68 217.98 66.50 3 54 31 2110.9 -29.68 75.30 224.44 60.64 22 50 52 91.10 5 35 41 55.87 23 19 4 3162.8 -9.73 136.41 21 48 9 3762.83 4 56 4 2376.94 22 17 55 3669.51 217.06 -5.86 143.06 1776.9 40.86 110.00 -34.17 50.06 224.56 3069.5 -6.50 127.38 -2.04 133.62 214.69 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5322.7 SGR 401.7 SG3 154.7 RRT .1236 RRF .1053 RTF .8983 ST 2824.0 SR 356.4 SS 668.3 CRT .9832 CRS -.9287 CST -.9793 TOE 2.0286 TRA .4474 TC3-5.4066 BAU 1.2343 RDE .2556 RRA -.0793 RC3 .1765 FAU .02721 SGB 5337.8 R23 -.0064 R13 .8983 LSA 2920.0 MSA 146.7 SSA 22.5 FDE .7240 FRA .6249 FC3-1.3802 BSP 17031 BDE 2.0446 BRA .4543 BC3 5.4095 FSP -510 EL1 2845.6 EL2 64.5 ALF 7.08 SG1 5322.9 SG2 398.6 THA . 54 ARRIVAL DATE JUN 16 1966 FLIGHT TIME 176.00 LAUNCH DATE DEC 22 1965 DISTANCE 520.103 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.503 GAL 1.37 AZL 86.57 HCA 260.98 SMA 120.51 ECC .22238 INC 3.4260 V1 30.275 RP 108.77 LAP -3.38 LOP 350.90 VP 36.593 GAP 11.59 AZP 90.54 TAL 175.19 TAP 76.18 RCA 93.71 APO 147.31 V2 34.840 RC 181.409 GL 22.11 GP -3.81 ZAL 79.85 ZAP 171.49 ETS 334.32 ZAE 130.80 ETE 183.48 ZAC 93.95 ETC 166.70 CLP-172.38 PLANETOCENTRIC CONIC .70 RAD 6567.7 VEL 11.793 PTH 2.09 VHP 7.586 DPA -7.10 RAP C3 17.699 VHL 4.207 DLA 24.52 RAL LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 31 58 3082.19 21 11 28 3933.09 3 14 33 2751.45 22 11 34 3739.07 5 3 58 2409.11 22 38 38 3654.17 90.00 102.37 228.65 82.58 2 23 20 2482.2 -28.15 93.79 -27.41 22 17 1 3333.1 150.12 62.88 -8.47 156.98 222.49 90.00 4 0 24 2151.4 -29.88 69.52 84.58 -29.46 78.30 228.91 100.00 60.79 23 13 53 3139.1 135.06 100.00 -6.65 141.74 221.51 5 44 7 1809.1 43.35 110.00 89.62 -34.18 52.58 229.19 55.91 23 39 32 3054.2 110.00 -2.62 132.82 219.02 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5363.8 SGR 408.3 SG3 150.8 RRT .1488 RRF .1279 RTF .9015 SGB 5379.3 R23 -.0071 R13 .9015 ST 2877,2 SR 367.6 S5 664.7 TOE 2.0987 TRA .6734 TC3-5.2596 BAU 1.2451 CRT .9776 CRS -.9207 CST -.9810 RDE .2686 RRA -.0807 RC3 .1606 FAU .02562 LSA 2972.1 MSA 147.3 SSA 22.0 .7111 FRA .6671 FC3-1.2531 8SP 17235 EL1 2899.6 EL2 76.7 ALF SG1 5364.1 SG2 403.7 THA .65 BDE 2.1158 BRA .6782 BC3 5.2621 FSP -501 ARRIVAL CATE JUN 18 1966 FLIGHT TIME 178.00 LAUNCH DATE DEC 22 1965 DISTANCE 525.643 HELIOCENTRIC CONIC RL 147.16 LAL .00 LOL 89.94 VL 26.454 GAL 1.93 A7L 86.62 HCA 264.15 SMA 120.23 ECC .22643 INC 3.3812 V1 30.275 RP 108.74 LAP -3.36 LOP 354.08 VP 36.565 GAP 11.90 A7P 90.34 TAL 173.37 TAP 77.52 RCA 93.00 APO 147.45 V2 34.849 RC 183.413 GL 21.26 GP -3.68 TAL 76.57 ZAP 172.22 ETS 332.79 ZAE 130.90 ETE 183.41 ZAC 96.26 ETC 166.93 CLP-173.14 PLANETOCENTRIC CONIC C3 18.497 VHL 4.301 DLA 25.13 RAL 4.31 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 7.775 DPA -5.98 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2529.3 -27.92 80.95 2 27 49 1 35 40 3129.31 21 36 33 3906.56 233.15 -26.95 105.75 90.00 22 41 40 3306.6 -12.82 148.57 63.13 227.15 90.00 -9.29 155.46 3 20 18 2792.00 22 34 37 3719.10 4 6 50 2192.0 -29.81 72.53 233.50 83.13 81.28 100.00 -29.16 60.94 23 36 36 3119.1 -11.13 133.93 226.09 -7.31 140.63 100.00 88.14 5 53 7 55.94 23 59 41 1841.2 -34.02 45.84 5 12 26 2441.16 22 58 58 3642.71 55.08 233.94 -34.14 110.00 3042.7 -7.51 125.96 132.22 223.47 -3.06 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5397.8 SGR 414.0 SG3 147.0 RRT .1748 RRF .1526 RTF .9044 SGB 5413.7 R23 -.0064 R13 .9043 ST 2921.6 SR 378.5 SS 660.6 CRT .9715 CRS -.9127 CST -.9826 TOE 2.1697 TRA .9157 TC3-5.0630 BAU 1.2525 ROE .2829 RRA -.0807 RC3 .1438 FAU .02396 FOE .6992 FRA .7112 FC3-1.1214 BSP 17336 LSA 3015.4 MSA 149.5 SSA EL1 2944.7 EL2 89.1 ALF 21.4 7.18 5G1 5398.3 SG2 4D7.6 THA BOE 2.1881 BRA .9193 BC3 5.0651 FSP -488 ARRIVAL DATE JUN 20 1966 FLIGHT TIME 180.00 LAUNCH DATE DEC 22 1965 HELIOCENTRIC CONIC DISTANCE 531.150 RL 147.16 LAL .UD LOL 89.94 VL 26.406 GAL 2.52 AZL 86.66 MCA 267.33 SMA 119.95 ECC .23086 INC 3.3369 V1 30.275 RC 108.71 LAP -3.33 LOP 357.26 VP 36.559 GAP 12.24 AZP 90.16 TAL 171.55 TAP 78.88 RCA 92.26 APO 147.64 V2 34.858 RC 185.395 GL 20.36 GP -3.56 ZAL 73.32 ZAP 172.93 ETS 330.87 ZAE 130.99 ETE 183.34 ZAC 98.58 ETC 167.13 CLP-173.89 PLANETOCENTRIC CONIC C3 19.480 VHL 4.414 DLA 25.66 RAL 7.91 RAD 6567.8 VEL 11.868 PTH 2.11 WHP 7.976 DPA -4.88 RAP 5.87 FCC 1.3206 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2576.2 100.61 237.73 79.37 2 32 50 -27.60 3176.18 109.07 90.00 1 39 54 -26.40 22 1 6 3884.10 3 26 42 2831.87 147.24 23 5 50 3284.1 -13.48 154.17 231.92 63.36 -9.98 90.00 75.49 4 13 54 2231.9 -29.66 -28.80 84.19 238.18 81.64 100.00 133.04 22 56 59 5 21 29 61.06 23 58 42 3103.6 -11.62 3703.64 -7.82 139.77 230.77 100.00 -34.13 48.29 2472.71 -34.04 57.54 238.81 86.68 6 2 42 1872.7 110.00 86.68 6 2 42 55.96 24 19 16 -7.78 -3.33 131.85 228.01 3035.6 125.58 23 18 41 3635.57 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2946.8 SR 388.7 SS 653.4 SGT 5429.7 SGR 418.8 SG3 143.1 TOE 2.2343 TRA 1.1679 TC3-4.8382 BAU 1.2604 CRT .9650 CRS -.9046 CST -.9840 RDE .2983 RRA -.0792 RC3 .1264 FAU .02243 RRT .1999 RRF .1767 RTF .9077 LSA 3039.4 MSA 152.8 SSA 20.7 FDE .6856 FRA .7537 FC3 -.9968 BSP 17492 SGB 5445.8 R23 -.0059 R13 .9077 SG1 5430.3 SG2 410.3 THA .89 EL1 2970.7 EL2 101.2 ALF 7.26 BOE 2.2541 BRA 1.1706 BC3 4.8399 FSP -478

```
FLIGHT TIME 182.00
                                                                                                                                                                                         ARRIVAL CATE JUN 22 1966
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 536.620
     RL 147.16 LAL .00 LOL 89.94 VL 26.358 GAL 3.13 A7L 86.71 MCA 270.50 SMA 119.68 ECC .23572 INC 3.2928 V1 30.275
RP 108.68 LAP -3.29 LOP .44 VP 36.514 GAP 12.59 A7P 89.97 TAL 169.74 TAP 80.24 RCA 91.47 APO 147.89 V2 34.868
RC 187.357 GL 19.42 GP -3.46 ZAL 70.12 ZAP 173.62 ETS 328.42 ZAE 131.09 ETE 183.29 ZAC 100.91 ETC 167.30 CLP-174.63
   PLANETOCENTRIC CONIC
      C3 20.671 VHL 4.547 DLA 26.10 RAL 11.49 RAD 6567.8 VEL 11.919 PTH
                                                                                                                                          2.12 VHP 8.191 CPA -3.78 RAP
                                                                                                                                                                                                        8.04 ECC 1.3402
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 44 50 3221.98 -25.79 112.28 242.37 77.87 2 38 32 2622.0 -27.20 103.90
                        22 24 44 3866.57
3 33 52 2870.44
23 18 22 3693.35
5 31 10 2503.45
23 37 34 3633.10
           90.00
                                                                       -10.51
                                                                                           153.16
                                                                                                               236.76
                                                                                                                                        63.55 23 29 10
                                                                                                                                                                               3266.6
                                                                                                                                                                                                    -13.98
                                                                                                                                                                                                                         146.20
                                                                                                                                                                                                                           78.34
         100.00
                                                                       -28.39
                                                                                           86.98
                                                                                                               242.93
                                                                                                                                        80.23
                                                                                                                                                      4 21 43
                                                                                                                                                                               2270.4
                                                                                                                                                                                                    -29.45
                                                                                                                                       61.14 24 19 55
85.28 6 12 53
55.97 24 38 7
                                                                                                                                                                               3093.4
                                                                                                                                                                                                   -11.95
                                                                                                                                                                                                                         132.45
         100.00
                                                                        -8.16
                                                                                           139.19
                                                                                                               235.51
                                                                                                                                                                                                  -34.18
                                                                                                                                                                               1903.5
                                                                                                                                                                                                                           50.69
         110.00
                                                                      -33.89
                                                                                            59.93
                                                                                                               243.75
                                                                                                                                                                               3033.1
                                                                                                                                                                                                     -7.87
                                                                                                                                                                                                                         125.45
        110.00
                                                                       -3.43
                                                                                           131.72
                                                                                                               232.61
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                SGT 5456.8 SGR 422.7 SG3 139.4
RRT .2252 RRF .2012 RTF .9111
SGB 5473.2 R23 -.0053 R13 .9111
      TOE 2.2955 TRA 1.4348 TC3-4.5813 BAU 1.2664
                                                                                                                                                                       ST 2957.8 SR 398.0 SS 644.7
CRT .9580 CRS -.8963 CST -.9852
     ROE .3148 RRA -.0762 RC3 .1090 FAU .02093 FOE .6718 FRA .7972 FC3 -.8768 BSP 17623
                                                                                                                                                                        LSA 3049.2 MSA 157.3 S5A 19.9
EL1 2982.4 EL2 113.2 ALF 7.36
                                                                                               SG1 5457.7 SG2 411.8 THA 1.01
     BOE 2.3170 BRA 1.4369 BC3 4.5826 FSP -467
                                                                                                      FLIGHT TIME 184.00
                                                                                                                                                                                         ARRIVAL DATE JUN 24 1966
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 542.047
    RL 147.16 LAL .00 LOL 89.94 VL 26.311 GAL 3.77 AZL 86.75 MCA 273.68 SMA 119.41 ECC .24104 INC 3.2486 V1 30.275
RP 108.65 LAP -3.24 LOP 3.62 VP 36.490 GAP 12.97 AZP 89.79 TAL 167.93 TAP 81.61 RCA 90.63 APO 148.19 VZ 34.878
RC 189.297 GL 18.45 GP -3.36 ZAL 66.98 ZAP 174.28 ETS 325.30 ZAE 131.18 ETE 183.24 ZAC 103.25 ETC 167.44 CLP-175.38
    RC 189.297 GL 18.45 GP -3.36 CRL 00.32

PLANETOCENTRIC CONIC

C3 22.099 VHL 4.701 DLA 26.46 RAL 15.02 RAD 6567.9 VEL 11.978 PTH 2.13 VHP 8.422 OPA -2.68 RAP 10.22 ECC 1.3637 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 50 41 3265.75 -25.12 115.32 247.05 76.49 2 45 6 2665.7 -26.74 107.02 90.00 22 47 2 3854.97 -10.86 152.49 241.64 63.69 23 51 17 3255.0 -14.31 145.51 100.00 3 41 56 2907.09 -27.94 89.61 247.73 78.92 4 30 23 207.1 -29.18 81.03 100.00 23 38 28 3688.86 -8.51 138.94 240.28 61.18 24 39 57 3088.9 -12.09 132.19 110.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 -33.70 62.22 248.75 83.93 6 23 40 1933.1 -34.18 53.01 10.00 5 41 27 2533.14 10.00 5 41 27 2533.14 10.00 5 41 27 2533.14 10.00 5 41 27 25
   PLANETOCENTRIC CONIC
   DIFFERENTIAL CORRECTIONS
                                                                                               SCT 5479.5 SCR 425.8 SC3 135.9

RRT .2510 RRF .2271 RTF .9145

SCB 5496.0 R23 -.0038 R13 .9145

SCI 5480.6 SC2 412.1 THA 1.12
                                                                                                                                                                          ST 2958.1 SR 406.4 SS 636.2
     TOF 2.3555 TRA 1.7195 TC3-4.2945 BAU 1.2690
     ROE .3325 RRA -.0715 RC3 .0923 FAU .01942
FOE .6593 FRA .8424 FC3 -.7607 BSP 17661
                                                                                                                                                                         CRT .9507 CR5 -.8882 CST -.9864
                                                                                                                                                                        LSA 3048.5 MSA 162.6 55A 19.0
EL1 2983.2 EL2 125.0 ALF 7.45
     BDE 2.3788 BRA 1.7210 BC3 4.2955 FSP -453
                                                                                                                                                                        EL1 2983.2 EL2 125.0 ALF
                                                                                                     FLIGHT TIME 186.00
                                                                                                                                                                                        ARRIVAL DATE JUN 26 1966
LAUNCH DATE DEC 22 1965
                                                                                                     DISTANCE 547.425
   HELIOCENTRIC CONIC
     RL 147.16 LAL .00 LOL 89.94 VL 26.265 GAL 4.45 AZL 86.80 HCA 276.86 SMA 119.15 ECC .24688 INC 3.2040 VI 30.275
RP 108.62 LAP -3.18 LOP 6.81 VP 36.467 GAP 13.38 AZP 89.62 TAL 166.14 TAP 83.00 RCA 89.73 APO 148.56 VZ 34.889
RC 191.216 GL 17.46 GP -3.28 ZAL 63.92 ZAP 174.92 ETS 321.25 ZAE 131.27 ETE 183.20 ZAC 105.59 ETC 167.54 CLP-176.12
    PLANETOCENTRIC CONIC
     C3 23.795 VHL 4.878 DLA 26.73 RAL 18.48 RAD 6568.0 VEL 12.049 PTH 2.15 VMP 8.669 DPA -1.60 RAP 12.39 ECC 1.3916 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         1 57 42 3306.38
23 7 36 3850.34
3 50 57 2941.29
0 0 58 3690.66
                                                                       -24.45
                                                                                           118.10
                                                                                                             251.77
                                                                                                                                    75.25
                                                                                                                                                       2 52 49
                                                                                                                                                                             2706.4
                                                                                                                                                                                                                         109.89
           90.00
                                                                                                                                        63.74 24 11 46
                                                                                           152.22
                                                                                                               246.50
                                                                                                                                                                               3250.3
                                                                      -11.00
           90.00
                                                                                                                                                    4 39 58
1 2 29
                                                                                                                                        77.72
                                                                                            92.04
                                                                                                               252.57
                                                                                                                                                                               2341.3
                                                                                                                                                                                                    -28.88
                                                                                                                                                                                                                          83.53
                                                                      -27.47
         100.00
                                                                                           139.04
                                                                                                               245.05
                                                                                                                                       61.17
                                                                                                                                                                               3090.7
                                                                                                                                                                                                   -12.03
                                                                                                                                                                                                                         132.30
         100.00
                                                                       -8.25
                                                                                                                                                     6 35 0
1 16 50
                            5 52 18 2561.58
                                                                                                               253.78
                                                                                                                                       82.65
                                                                                                                                                                               1961.6
                                                                                                                                                                                                  -34.13
                                                                                                                                                                                                                          55.23
                                                                     -33.48
                                                                                             64.41
         110.00
                             0 16 6
                                                                       -3.04
                                                                                          132.25
                                                                                                               241.85
                                                                                                                                       55.94
                                                                                                                                                                               3043.1
                                                                                                                                                                                                   -7.49
         110.00
                                               3643.13
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5497.9 SGR 427.8 SG3 132.2
RRT .2758 RRF .2518 RTF .9184
SG8 5514.6 R23 -.0030 R13 .9184
                                                                                                                                                                        ST 2938.8 SR 413.2 SS 625.0
CRT .9429 CRS -.8796 CST -.9873
      TOE 2.4066 TRA 2.0159 TC3-3.9974 BAU 1.2719
     ROE .3511 RRA -.0651 RC3 .0763 FAU .01803
FOE .6447 FRA .8866 FC3 -.6561 BSP 17793
                                                                                                                                                                       LSA 3028.1 MSA 168.5 SSA 18.1
                                                                                                SG1 5499.2 SG2 411.1 THA 1.24
      BDE 2.4321 BRA 2.0169 BC3 3.9981 FSP -444
                                                                                                                                                                         EL1 2964.6 EL2 136.4 ALF
                                                                                                      FLIGHT TIME 188.00
                                                                                                                                                                                         ARRIVAL DATE JUN 28 1966
LAUNCH DATE DEC 22 1965
                                                                                                     DISTANCE 552.746
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 26.219 GAL 5.16 AZL 86.84 MCA 280.04 SMA 118.89 ECC .25328 INC 3.1589 V1 30.275
RP 108.58 LAP -3.11 LOP 9.99 VP 36.445 GAP 13.82 AZP 89.45 TAL 164.36 TAP 84.40 RCA 88.78 APO 149.01 V2 34.900
RC 193.113 GL 16.46 GP -3.20 ZAL 60.96 ZAP 175.53 ETS 315.94 ZAE 131.35 ETE 183.16 ZAC 107.92 ETC 167.61 CLP-176.87
   PLANETOCENTRIC CONIC
     C3 25,799 VHL 5.079 DLA 26.92 RAL 21.85 RAD 6568.0 VEL 12.132 PTH 2.17 VHP 8.936 DPA
                                                                                                                                                                                    -.53 RAP 14.57 ECC 1.4246
     LNCH AZMTH LNCH TIME L-1 TIME
90.00 2 6 9 3342.86
                                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                           2742.9
                                                                                                                                                                                                  -25.74
                                                                                                                                                                                                                     112.44
                                                                       -23.79
                                                                                                             256.51
                                                                                                                                    74.18
                                                                                                                                                        3 1 52
                             2 6 9
                                                                                          120.57
                                                                                                               251.32
                                                                                                                                        63.70 24 30 14
                                                                                                                                                                               3253.6
                                                                                                                                                                                                    -14.35
                                                                                                                                                                                                                         145.43
                         23 26 O
                                               3853.65
                                                                       -10.90
                                                                                           152.41
          90.00
                                                                                                                                                     4 50 32
                            4 0 59
                                                                                                                                                                               2372.6
                                                                                                                                                                                                                          85.80
         100.00
                                               2972.64
                                                                       -26.99
                                                                                            94.25
                                                                                                               257.43
                                                                                                                                        76.65
                                                                                                                                                                                                    -28.56
                           0 17 47 6 3 41
                                                                                                                                                        1 19 26
                                                                                                                                                                               3099.1
                                                                                                                                                                                                   -11.77
                                                3699.09
                                                                        -7.97
                                                                                           139.51
                                                                                                               249.77
                                                                                                                                        61.09
                                                                                                                                                                                                                         132.78
         100.00
                                                                                                                                                                               1988.7
                                                                                                                                                                                                  -34.05
                                               2588.72
                                                                       -33.22
                                                                                             66.49
                                                                                                               258.82
                                                                                                                                                        6 46 50
                                                                                                                                                                                                                          57.35
         110.00
                             0 31 35
                                               3655.78
                                                                        -2.56
                                                                                           132.91
                                                                                                               246.44
                                                                                                                                        55.90
                                                                                                                                                      1 32 30
                                                                                                                                                                               3055.8
                                                                                                                                                                                                    -7.02
                                                                                                                                                                                                                         126.66
         110.00
                                                                                              MID-COURSE EXECUTION ACCURACY
SGT 5512.3 5GR 428.8 5G3 128.8 ST 2908.2 SR 418.7 55 613.6
RRT .3007 RRF .2771 RTF .9222 CRT .9347 CRS -.8710 CST -.9863
SGB 5528.9 R23 -.0019 R13 .9222 L5A 2996.4 MSA 174.9 5SA 17.2
SG1 5513.8 5G2 408.9 THA 1.35 ELI 2934.4 ELZ 147.4 ALF 7.68
   DIFFERENTIAL CORRECTIONS
      TDE 2.4540 TRA 2.3295 TC3-3.6882 BAU 1.2722
     RDE .3706 RRA -.0570 RC3 .0615 FAU .01667
FDE .6310 FRA .9323 FC3 -.5595 BSP 17898
     BOE 2.4819 BRA 2.3302 BC3 3.6887 FSP -434
```

```
FLIGHT TIME 190.00
LAUNCH DATE DEC 22 1965
   HELIOCENTRIC CONIC
                                                                         CISTANCE 558.000
    RL 147.16 LAL .00 LOL 89.94 VL 26.174 CAL 5.91 A7L 86.89 MCA 283.22 SMA 118.64 ECC .26031 INC 3.1128 V1 30.275
RP 108.55 LAP -3.03 LOP 13.18 VP 36.424 CAP 14.29 A7P 89.29 TAL 162.60 TAP 85.82 RCA 87.76 APO 149.53 V2 34.912
RC 194.989 GL 15.45 CP -3.13 7AL 58.11 7AP 176.07 ETS 308.91 7AE 131.43 ETE 183.13 7AC 110.26 ETC 167.65 CLP-177.63
   PLANETOCENTRIC CONIC
    C3 28.157 VML 5.306 CLA 27.02 RAL 25.10 RAC 6568.1 VEL 12.228 PTH 2.20 VMP 9.225 CPA
                                                                                                                                    .54 RAP 16.75 ECC 1.4634
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 73.28 3 12 26
63.57 24 46 22
75.70 5 2 3
60.97 1 34 38
                    2 16 12 3374.36
23 41 56 3865.60
                                                                             261.27
                                                                                                                                          -25.26
        90.00
                                                                                                             3 12 26
                                                                                                                              2774.4
                                                   -23.19
                                                                  122.69
                                                                                                                                                            114.63
                                                                                                                              3265.6
        90.00
                                                   -10.54
                                                                  153.10
                                                                                256.06
                                                                                                                                             -14.01
                                                                                                                                                            146.14
                     4 12 2 3000.95
0 32 43 3714.24
       100.00
                                                                                262.29
                                                                                                                                                             87.84
                                                   -26.53
                                                                   96.23
                                                                                                                              2400.9
                                                                                                                                             -28.24
       100.00
                                                   -7.47
                                                                  140.36
                                                                               254.42
                                                                                                                              3114.2
                                                                                                                                             -11.29
                                                                                                                                                            133.65
                                                                                                  80.32 6 59 6
55.86 1 46 57
       110.00
                     6 15 31 2614.54
                                                  -32.94
                                                                   64.46
                                                                                263.86
                                                                                                                              2014.5
                                                                                                                                            -33.43
                                                                                                                                                             59.36
                    0 45 44
       110.00
                                  3673.41
                                                   -1.89
                                                                  133.83
                                                                                250.98
                                                                                                                              3073.4
                                                                                                                                             -6.36
                                                                                                                                                            127.59
                                                                     MIC-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SCT 5522.0 SGR 428.9 SG3 125.3

RRT .3255 RRF .3022 RTF .9263

SGB 5538.6 R23 -.0010 R13 .9263

SGI 5523.7 SG2 405.5 THA 1.46
                                                                                                                        ST 2866.5 SR 422.4 SS 602.4
CRT .9260 CRS -.8620 CST -.9892
    TOE 2.4970 TRA 2.6612 TC3-3.3736 BAU 1.2701
    RCE .39D9 RRA -.0470 RC3 .0482 FAU .01536
FCE .6173 FRA .9793 FC3 -.4722 BSP 17993
BOE 2.5274 BRA 2.6616 BC3 3.3740 FSP -424
                                                                                                                        LSA 2953.8 MSA 181.5 SSA 16.4
EL1 2893.2 EL2 158.0 ALF 7.79
LAUNCH DATE DEC 22 1965
                                                                          FLIGHT TIME 192.00
                                                                                                                                     ARRIVAL DATE JUL 2 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 563.178
    RL 147.16 LAL .00 LOL 89.94 VL 26.130 GAL 6.71 A7L 86.93 MCA 286.41 SMA 118.40 ECC .26804 INC 3.0654 V1 30.275
RP 108.51 LAP -2.94 LOP 16.37 VP 36.404 GAP 14.81 A7P 89.13 TAL 160.86 TAP 87.27 RCA 86.67 APO 150.14 V2 34.924
RC 196.842 GL 14.45 GP -3.06 ZAL 55.37 ZAP 176.54 ETS 299.59 ZAE 131.49 ETE 183.11 ZAC 112.59 ETC 167.64 CLP-178.39
   PLANETOCENTRIC CONIC
                                                                                                                                  1.59 RAP 18.94 ECC 1.5090
    C3 30.926 VHL 5.561 OLA 27.05 RAL 28.24 RAC 6568.2 VEL 12.341 PTH
                                                                                                    2.23 VHP 9.537 CPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 27 53
                                  3400.54
                                                                               266.05
        90.00
                                                   -22.67
                                                                 124.43
                                                                                               72.56
                                                                                                                              2800.5
                                                                                                              3 24 34
                                                                                                                                            -24.84
                                                                                                                                                           116.43
        90.00
                   23 55 15
                                   3886.39
                                                    -9.91
                                                                  154.30
                                                                                                  63.34 25 0 1
                                                                                                                              3286.4
                                                                                260.68
                                                                                                                                             -13.41
                                                                                                                                                             147.38
      100.00
                    4 24 0
                                  3026.22
                                                   -26.10
                                                                  97.98
                                                                                267.15
                                                                                                            5 14 26
                                                                                                  74.88
                                                                                                                              2426.2
                                                                                                                                             -27.92
                                                                                                                                                              89.65
      100.00
                    0 45 45
                                  3735.94
                                                    -6.75
                                                                  141.57
                                                                                258.99
                                                                                                  60.81
                                                                                                           1 48 1
                                                                                                                              3135.9
                                                                                                                                             -10.59
                                                                                                                                                            134.89
      110.00
                    6 27 42 2639.14
                                                   -32.65
                                                                  70.31
                                                                                268.87
                                                                                                  79.25
                                                                                                                              2039.1
                                                                                                                                            -31.7A
                                                                                                                                                             61.26
                    0 58 32
      110.00
                                  3695.79
                                                   -1.03
                                                                  134.99
                                                                                255.46
                                                                                                  55.83
                                                                                                             2 O B
                                                                                                                              3095.8
                                                                                                                                               -5.51
                                                                                                                                                            128.77
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   SGT 5528.4 SGR 428.2 SG3 122.1
RRT .3508 RRF .3283 RTF .9304
SGB 5545.0 R23 .0002 R13 .9304
SGI 5530.5 SG2 400.8 THA 1.56
                                                                                                                        ST 2820.1 SR 424.5 55 592.5
CRT .9167 CRS -.8530 CST -.9901
    TOE 2.5397 TRA 3.0165 TC3-3.0543 BAU 1.2629
    TOE 2.5397 TRA 3.0105 163 3.0345 FAU .01402 FOE .4119 RRA -.0350 RC3 .0367 FAU .01402 FOE .6055 FRA 1.0296 FC3 -.3924 BSP 17979 COT 2 4728 RRA 3.0167 BC3 3.0545 FSP -411
                                                                                                                        LSA 2906.6 MSA 188.0 SSA 15.6
EL1 2846.9 EL2 168.0 ALF 7.88
                                                                         FLIGHT TIME 194.00
                                                                                                                                    ARRIVAL DATE JUL 4 1966
LAUNCH DATE DEC 22 1965
  HELIOCENTRIC CONIC
                                                                         DISTANCE 568.264
    RL 147.16 LAL .00 LOL 89.94 VL 26.087 GAL 7.56 AZL 86.98 MCA 289.59 SMA 118.16 ECC .27655 INC 3.0165 VI 30.275
RP 108.47 LAP -2.84 LOP 19.56 VP 36.385 GAP 15.37 AZP 88.99 TAL 159.16 TAP 88.75 RCA 85.49 APO 150.84 VZ 34.936
RC 198.673 GL 13.46 GP -3.00 ZAL 52.75 ZAP 176.89 ETS 287.56 ZAE 131.55 ETE 183.09 ZAC 114.91 ETC 167.61 CLP-179.16
   PLANETOCENTRIC CONIC
    C3 34.174 VHL 5.846 OLA 27.01 RAL 31.23 RAD 6568.3 VEL 12.472 PTH 2.26 VHP 9.878 DPA 2.62 RAP 21.12 ECC 1.5624
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 41 4 3421.65 -22.23 125.82 270.83 72.00 3 38 5 2821.7 -24.49 117.87
                                                                            270.83
        90.00
                     0 9 55
                                   3915.58
                                                    -9.01
                                                                 155.98
                                                                                265.17
                                                                                                 63.04
                                                                                                             1 15 11
                                                                                                                             3315.6
                                                                                                                                             -12.56
                   4 36 45
                                  3048.69
                                                                  99.53
                                                                                271.99
                                                                                                           5 27 34
                                                                                                                             2448.7
                                                                                                                                             -27.61
      100.00
                                                   -25.69
                                                                                                 74.16
                                                                                                           1 59 39
7 24 30
      100.00
                    0 56 55
                                  3763.78
                                                                                                                             3163.8
                                                                                                                                              -9.70
                                                                                                                                                           136.47
                                                    -5.83
                                                                 143.12
                                                                                263.45
                                                                                                 60.63
      110.00
                   6 40 8
                                 2662.63
                                                   -32.34
                                                                  72.07
                                                                                273.85
                                                                                                  78.26
                                                                                                                             2062.6
                                                                                                                                             -33.61
                                                                 136.39
      110.00
                    1 10 2
                                                     -.01
                                                                                259.85
                                                                                                  55.82
                                                                                                            2 12 4
                                                                                                                             3122.6
                                                                                                                                             -4.49
                                  3722.60
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SCT 5529.2 SGR 426.4 SG3 118.9

RRT .3753 RRF .3534 RTF .9348

SGB 5545.6 R23 .0009 R13 .9348

SGI 5531.5 SG2 395.0 THA 1.67
                                                                                                                        ST 2762.2 SR 424.6 SS 582.1
CRT .9069 CRS -.8436 CST -.9910
    TOE 2.5751 TRA 3.3883 TC3-2.7463 BAU 1.2548
   RCE .4332 RRA -.0211 RC3 .0267 FAU .01278
FOE .5931 FRA 1.0804 FC3 -.3239 BSP 18075
                                                                                                                         LSA 2847.9 MSA 194.4 5SA 14.8
    BOE 2.6113 BRA 3.3883 BC3 2.7464 FSP -402
                                                                                                                         EL1 2789.0 EL2 177.2 ALF 7.97
                                                                         FLIGHT TIME 196.00
                                                                                                                                     ARRIVAL DATE JUL 6 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 573.243
   RL 147.16 LAL .00 LOL 89.94 VL 26.045 GAL 8.46 AZL 87.03 HCA 292.78 SMA 117.93 ECC .28594 INC 2.9655 V1 30.275 RP 108.43 LAP -2.73 LOP 22.75 VP 36.366 GAP 15.98 AZP 88.85 TAL 157.48 TAP 90.27 RCA 84.21 APO 151.65 V2 34.948 RC 200.481 GL 12.49 GP -2.94 ZAL 50.26 ZAP 177.06 ETS 273.05 ZAE 131.58 ETE 183.07 ZAC 117.23 ETC 167.53 CLP-179.95
  PLANETOCENTRIC CONIC
   C3 37.986 VHL 6.163 OLA 26.90 RAL 34.09 RAO 6568.5 VEL 12.624 PTH
                                                                                                   2.29 VHP 10.249 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                     2 55 25
                                  3438.48
                                                   -21.87
                                                                 126.92
                                                                              275.61
                                                                                                 71.56
                                                                                                             3 52 43
                                                                                                                             2838.5
                                                                                                                                            -24.19
                                                                                                                                                            119.02
                                                                                                             1 24 12
                                                                                                                                             -11.47
       90.00
                    0 18 20 3952.17
                                                   -7.88
                                                                 158.07
                                                                                269.52
                                                                                                  62.71
                                                                                                                              3352.2
                                                                                                                                                            151.24
      100.00
                    4 50 7
                                  3068.73
                                                   -25.31
                                                                 100.89
                                                                                276.79
                                                                                                 73.54
                                                                                                             5 41 15
                                                                                                                              2468.7
                                                                                                                                             -27.32
                                                                                                                                                             92.67
                    1 6 19 3797.16
6 52 41 2685.18
1 20 14 3753.48
      100.00
                                                   -4.71
                                                                 144.96
                                                                                267.80
                                                                                                  60.45
                                                                                                            2 9 36
                                                                                                                              3197.2
                                                                                                                                              -8.61
                                                                                                                                                            138.35
      110.00
                                                  -32.01
                                                                  73.75
                                                                                278.77
                                                                                                 77.31
                                                                                                             7 37 26
                                                                                                                             2085.2
                                                                                                                                            -33.42
                                                                                                                                                             64.81
      110.00
                                                                 138.00
                                                                               264.14
                                                                                                 55.83
                                                                                                            2 22 47
                                                                                                                             3153.5
                                                                                                                                             -3.32
                                                                                                                                                            131.80
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   SGT 5525.0 SGR 423.5 SG3 115.8

RRT .3993 RRF .3785 RTF .9394

SGB 5541.2 R23 .0017 R13 .9394

SGI 5527.6 SG2 388.1 THA 1.76
    TOE 2.6053 TRA 3.7847 TC3-2.4464 BAU 1.2424
                                                                                                                         ST 2697.2 SR 422.8 SS 572.7
CRT .8962 CRS -.8339 CST -.9919
   ROE .4548 RRA -.0052 RC3 .0184 FAU .01158
FOE .5816 FRA 1.1341 FC3 -.2640 BSP 18132
                                                                                                                        LSA 2782.3 MSA 200.4 SSA 14.1
EL1 2723.8 EL2 185.8 ALF 8.03
    BOE 2.6447 BRA 3.7847 BC3 2.4465 FSP -393
```

```
FLIGHT TIME 198.00
                                                                                                                               ARRIVAL CATE JUL 8 1966
                                                                     01STANCE 578.093
   HELIOCENTRIC CONIC
    RL 147.16 LAL .00 LOL 89.94 VL 26.003 GAL 9.43 AZL 87.09 HCA 295.98 SMA 117.70 ECC .29632 INC 2.9121 V1 30.275
RP 108.39 LAP -2.62 LOP 25.94 VP 36.349 GAP 16.65 AZP 88.72 TAL 155.85 TAP 91.83 RCA 82.83 APO 152.58 V2 34.961
                      11.54 GP -2.89 7AL 47.90 7AP 177.01 ETS 257.58 7AE 131.60 ETE 183.05 7AC 119.52 ETC 167.41 CLP 179.25
    RC 202.264 GL
   PLANETOCENTRIC CONIC
    C3 42.463 VHL 6.516 DLA 26.74 RAL 36.79 RAD 6568.6 VEL 12.800 PTH 2.33 VHP 10.656 DPA 4.63 RAP 25.47 ECC 1.6988 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             71.21
                                                                                                        4 8 5
                                                                                                                        2852.1
                                                                                                                                      -23.95
                                                                            280.35
                                                 -21.58
                                                              127.61
       90.00
                  3 10 33 3452.06
                                                                                                                                       -10.18
                                                                                                                                                     153.71
                                                                                                       1 31 19
                                                                                                                        3394.9
                                                                                             62.39
                                                 -6.54
                                                               160.49
                                                                             273.73
        90.00
                    0 24 44
                                 3994.87
                                                                                                       5 55 18
2 18 2
                                                                                                                        2486.8
                                                                                                                                       -27.05
                                                                                                                                                      93.94
                                                                                              72.99
                                                                             281.53
                   5 3 52 3086.80
                                                 -24.96
                                                               102.12
      100.00
                                                                                                                                        -7.35
                                                                                                                                                     140.49
                                                                                                                        3235.4
                                                               147.07
                                                                                              60.29
                                 3835.36
                                                  -3.42
                                                                             272.02
      100.00
                    1 14 7
                                                                                                       7 50 22
2 32 20
                                                                                                                        2106.9
                                                                                                                                                      66.47
                                                                                              76.42
                                                                                                                                       -33.22
                   7 5 15 2706.95
1 29 13 3787.98
                                                 -31.67
                                                                75.36
                                                                             283.62
      110.00
                                                                                                                     3188.0
                                                                                                                                       -2.00
                                                                                                                                                     133.60
                                                                                             55.90
                                                               139.80
                                                                             268.34
      110.00
                                                  2.49
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  RRT .4241 RRF .4037 RTF .9439
SGB 5534.5 R23 .0016 R13 .9439
SGI 5521.4 SG2 379.9 THA 1.86
                                                                                                                     ST 2634.7 SR 419.3 SS 564.9
CRT .8855 CRS -.8242 CST -.9927
    TOE 2.6408 TRA 4.2060 TC3-2.1588 BAU 1.2255
    RDE .4768 RRA .0128 RC3 .0118 FAU .01039
                                                                                                                    LSA 2719.2 MSA 205.6 SSA 13.4
    FDE .5716 FRA 1.1913 FC3 -.2119 BSP 18178
                                                                                                                     EL1 2660.9 EL2 192.9 ALF 8.06
    BOE 2.6835 BRA 4.2061 BC3 2.1588 FSP -384
                                                                                                                                ARRIVAL DATE JUL 10 1966
                                                                       FLIGHT TIME 200.00
LAUNCH DATE DEC 22 1965
                                                                      DISTANCE 582.790
   HELIOCENTRIC CONIC
                       .00 LOL 89.94 VL 25.962 GAL 10.48 AZL 87.14 HCA 299.17 SMA 117.48 ECC .30782 INC 2.8556 VI 30.275
-2.49 LOP 29.14 VP 36.332 GAP 17.38 AZP 88.61 TAL 154.27 TAP 93.44 RCA 81.32 APO 153.65 V2 34.974
    RL 147.16 LAL
RP 108.35 LAP
    RC 204.023 GL 10.61 GP -2.84 ZAL 45.68 ZAP 176.75 ETS 243.23 ZAE 131.59 ETE 183.03 ZAC 121.79 ETC 167.25 CLP 178.42
   PLANETOCENTRIC CONIC
    LO 47.732 VML 0.909 DLA 26.52 RAL 39.33 RAD 6568.8 VEL 13.004 PTH 2.37 VMP 11.105 DPA 5.60 RAP 27.64 ECC 1.7856
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 26 7 3463.40 -21.33 128 48 285 07
                                                                                                          1 36 51
                                                                                                                         3442.3
                                                                                                                                        -A.73
                                                                                                                                                      156.44
                                                               163.17
                                                                             277.79
                                                                                              62.10
                    0 29 29
                                 4042.35
                                                  -5.03
                                                                                                       6 9 31
2 25 6
8 3 12
                                                                                                                         2503.3
                                                                                                                                       -26.78
                                                                                                                                                       95.10
                                                                                              72.49
                                                                             286.21
                    5 17 48
                                 3103.34
                                                 -24.62
                                                               103.23
                   1 20 28 3877.64
7 17 44 2728.08
1 37 2 3825.67
                                                                                              60.17
                                                                                                                         3277.6
                                                                                                                                        -5.95
                                                                                                                                                      142.84
                                                  -1.99
                                                               149.39
                                                                             276.11
       100.00
                                                                                                                         2128.1
                                                                                                                                       -32.99
                                                                                                                                                       68.08
                                                                76.91
                                                                             288.38
                                                                                              75.56
                                                 -31.32
       110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      135.57
                                                               141.78
                                                                                                                         3225.7
                                                                                                                                          - . 56
                                                 3.93
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2571.9 SR 414.0 SS 559.7
CRT .8742 CRS -.8149 CST -.9936
                                                                  SGT 5509.2 SGR 415.1 SG3 110.0
RRT .4490 RRF .4296 RTF .9486
SGB 5524.8 R23 .0019 R13 .9486
    TOE 2.6772 TRA 4.6608 TC3-1.8819 BAU 1.2010
    ROE .4991 RRA .0331 RC3 .0068 FAU .00916
FDE .5641 FRA 1.2535 FC3 -.1662 BSP 18116
BDE 2.7233 BRA 4.6609 BC3 1.8819 FSP -372
                                                                                                                     LSA 2656.2 MSA 209.9 SSA 12.8
                                                                                                                    EL1 2597.4 EL2 199.0 ALF 8.06
                                                                  5G1 5512.4 9G2 370.7 THA 1.95
                                                                                                                                ARRIVAL DATE JUL 12 1966
                                                                       FLIGHT TIME 202.00
LAUNCH DATE DEC 22 1965
                                                                      DISTANCE 587.300
    RL 147.16 LAL .00 LOL 89.94 VL 25.923 GAL 11.60 AZL 87.20 MCA 302.37 SMA 117.27 ECC .32060 INC 2.7955 V1 30.275 RP 108.31 LAP -2.36 LOP 32.34 VP 36.516 GAP 18.20 AZP 88.50 TAL 152.75 TAP 95.12 RCA 79.67 APO 154.87 V2 34.987 RC 205.757 GL 9.71 GP -2.80 TAL 43.60 ZAP 176.29 ETS 231.38 ZAE 131.56 ETE 183.01 ZAC 124.04 ETC 167.04 CLP 177.57
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 53.962 VHL 7.346 DLA 26.26 RAL 41.71 RAD 6569.0 VEL 13.241 PTH 2.42 VHP 11.600 DPA
                                                                                                                             6.55 RAP 29.79 ECC 1.8881
     LNCH ATHTH LNCH TIME L-I TIME. INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           70.67
                                                                                                       4 39 39
1 41 4
                                                                                                                         2873.3
                                                                                                                                      -23.55
                                                                           289.64
                                                 -21.11
                                                              129.19
                    3 41 45 3473.33
        90.00
                                                                                                                                         -7.13
                                                                                                                         3493.4
                                                   -3.40
                                                               166.03
                                                                             281.71
                                                                                              61.87
                                  4093.45
         90.00
                     0 32 51
                                                                                                       6 23 43
2 30 56
                                                                                                                         2518.7
                                                                                                                                        -26.53
                                                                                                                                                       96.18
                                                  -24.30
                                                               104.27
                                                                             290.81
                                                                                              72.04
                                  3118.73
       100.00
                    5 31 45
                                                                                                                         3323.3
                                                                                                                                                      145.36
                                                                             280.08
                                                                                              60.11
                                                    - .45
                                                               151.90
                                  3923.27
                     1 25 33
       100.00
                                                                                                       8 15 50
2 48 12
                                                                                                                         2148.7
                                                                                                                                                      69.64
                                                                             293.05
                                                                                              74.74
                                 2748.68
                                                  -30.97
                                                                 78.41
       110.00
                     7 30 1
                                                                                                                         3266.1
                                                                             276.41
                                                                                              56.20
                                                   5.46
                                                               143.90
       110.00
                    1 43 46
                                 3866.09
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2504.5 SR 406.7 SS 555.3
CRT .8623 CRS -.8053 CST -.9944
                                                                    SGT 5493.3 SGR 409.4 SG3 107.2
     TDE 2.7097 TRA 5.1428 TC3-1.6252 BAU 1.1725
                                                                   RRT .4730 RRF .4545 RTF .9534
SGB 5508.5 R23 .0018 R13 .9534
     RDE .5212 RRA .0554 RC3 .0031 FAU .00801
FDE .5567 FRA 1.3187 FC3 -.1284 BSP 18160
BDE 2.7594 BRA 5.1431 BC3 1.6252 FSP -364
                                                                                                                     LSA 2588.6 MSA 213.2 SSA 12.1
EL1 2529.1 EL2 203.9 ALF 8.02
                                                                    SG1 5496.7 SG2 360.4 THA 2.03
                                                                                                                                 ARRIVAL DATE JUL 14 1966
                                                                        FLIGHT TIME 204.00
 LAUNCH DATE DEC 22 1965
                                                                       DISTANCE 591.585
    HELIOCENTRIC CONIC
     RL 147.16 LAL .00 LOL 89.94 VL 25.884 GAL 12.82 A7L 87.27 HCA 305.56 SMA 117.06 ECC .33483 INC 2.7308 VI 30.275 RP 108.27 LAP -2.22 LOP 35.53 VP 36.301 GAP 19.10 A7P 88.41 TAL 151.30 TAP 96.87 RCA 77.87 APO 156.26 V2 35.000 RC 207.465 GL 8.83 GP -2.76 7AL 41.65 7AP 175.69 ETS 222.18 7AE 131.49 ETE 182.99 7AC 126.26 ETC 166.79 CLP 176.68
    PLANE TOCENTRIC CONIC
                                                                                                2.47 VHP 12.150 DPA
     C3 61.347 VHL 7.832 DLA 25.97 RAL 43.93 RAD 6569.1 VEL 13.517 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         4 55 16
                                                                129.78
                                                                             294.14
                     3 57 13
                                  3482.42
                                                  -20.90
         90.00
                                                                                                                                         -5.43
                                                                                                                                                       162.38
                                 4147.19
                                                                                                          1 44 12
                                                                                                                          3547.2
                                                                                               61.73
                                                                169.04
                                                                              285.50
                                                   -1.67
                     0 35 5
         90.00
                                                                                                                                                       97.1A
                                                                                               71.61
                                                                                                          6 37 45
                                                                                                                          2533.3
                                                                                                                                        -26.28
                                                                105.24
                                                                              295.29
                                  3133.28
                                                  -23.99
                     5 45 31
        100.00
                                                                                                         2 35 39
                                                                                                                                                       148.03
                                                                                                                          3371.6
                                                                                                                                         -2.79
                                                                                               60.13
                                 3971.57
                                                                154.55
                                                                              283.91
                                                    1.19
        100.00
                     1 29 28
                                 2768.80
                                                                                                          8 28 10
                                                                                                                          2168.8
                                                                                                                                        -32.49
                                                                                                                                                       71.15
                                                                 79.86
                                                                              297.59
                                                                                               73.95
                                                  -30.60
                     7 42 1
        110.00
                                                                                                          2 54 37
                                                                                                                         3308.8
                                                                                                                                         2.62
                                                                                                                                                       139.90
                                                                                               56.47
                      1 49 28
                                                                146.16
                                                                              280.27
                                   3908.81
                                                   7.07
        110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                ST 2439.0 SR 397.9 SS 553.3
CRT .8503 CRS -.7960 CST -.9952
LSA 2523.3 MSA 215.3 SSA 11.5
EL1 2462.6 EL2 207.4 ALF 7.95
                                                                   SCT 5473.6 SGR 402.7 SG3 104.5

RRT .4971 RRF .4796 RTF .9582

SCB 5488.4 R23 .0016 R13 .9582

SCI 5477.3 SG2 349.2 THA 2.10
      TOE 2.7459 TRA 5.6616 TC3-1.3847 BAU 1.1356
      RDE .5432 RRA .0799 RC3 .0006 FAU .00682
FDE .5515 FRA 1.3897 FC3 -.0962 BSP 18171
      BOE 2.7991 BRA 5.6622 BC3 1.3847 FSP -355
```

ARRIVAL DATE JUL 16 1966

```
FLIGHT TIME 206.00
LAUNCH DATE DEC 22 1965
                                                                     DISTANCE 595.591
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 25.845 GAL 14.16 AZL 87.34 HCA 308.77 SHA 116.86 ECC .35075 INC 2.6608 V1 30.275 RP 108.23 LAP -2.07 LOP 38.73 VP 36.287 GAP 20.11 AZP 88.33 TAL 149.94 TAP 98.71 RCA 75.87 APO 157.85 V2 35.014 RC 209.146 GL 7.98 GP -2.72 ZAL 39.86 ZAP 174.96 ETS 215.17 ZAE 131.38 ETE 182.97 ZAC 128.43 ETC 166.49 CLP 175.76
  PLANETOCENTRIC CONIC
    C3 70.148 VHL 8.375 CLA 25.63 RAL 45.98 RAD 6569.4 VEL 13.838 PTH 2.53 VHP 12.763 DPA
                                                                                                                           8.36 RAP 34.04 ECC 2.1545
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      5 10 31
1 46 22
                  4 12 20 3491.04
0 36 20 4202.80
5 59 0 3147.14
1 32 20 4021.94
                                                                                             70.24
                                                                                                                      2891.0
                                                                                                                                     -23.21
                                                                           298.52
        90.00
                                                             130.33
                                                -20.70
                                                                                                                                                     165.50
                                                                                                                        3602.8
                                                                                                                                       -3.66
                                                  .13
                                                              172.14
                                                                            289.15
                                                                                             61.68
        90.00
                                                                                                      6 51 27
2 39 22
                                                                                                                        2547.1
                                                                                                                                       -26.04
                                                                                                                                                      98.14
                                                                                             71.22
                                                                             299.65
       100.00
                                              -23.69
                                                              106.16
                                                                                                                                                     150.79
                                                                                                                        3421.9
                                                                                                                                        -1.09
                                                                                             60.24
       100.00
                                                  2.90
                                                              157.31
                                                                            287.61
                                             - 30 . 22
                                                                                                      8 40 7
3 0 5
                                                                                                                                       -32.22
                                                                                                                                                      72.62
                  7 53 39 2788.45
1 54 11 3953.39
                                                                                             73.20
                                                                                                                        2188.4
                                                                61.26
                                                                            301.99
      110.00
                                                                                                                        3353.4
                                                                                                                                        4.32
                                                                                                                                                     142.24
                                                8.74
                                                                            284.02
                                                                                             56.82
                                                              148.53
       110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 5450.2 SGR 395.0 SG3 102.0
RRT .5209 RRF .5046 RTF .9630
SGB 5464.5 R23 .0012 R13 .9630
SGI 5454.1 SG2 336.9 THA 2.17
                                                                                                                    ST 2375.3 SR 387.4 55 553.8
CRT .8383 CRS -.7870 CST -.9959
    TOE 2.7863 TRA 6.2217 TC3-1.1616 BAU 1.0894
   RDE .5652 RRA .1067 RC3 -.0007 FAU .00560
FOE .5483 FRA 1.4673 FC3 -.0691 BSP 18174
                                                                                                                    LSA 2460.1 MSA 216.1 SSA 10.9
EL1 2397.6 EL2 209.3 ALF 7.84
    BDE 2.8430 BRA 6.2226 BC3 1.1616 FSP -347
                                                                                                                               ARRIVAL CATE JUL 18 1966
                                                                      FLIGHT TIME 208.00
LAUNCH DATE DEC 22 1965
                                                                      DISTANCE 599.253
                      .00 LOL 89.94 VL 25.810 GAL 15.62 AZL 87.42 HCA 311.97 SMA 116.67 ECC .36861 INC 2.5841 V1 30.275
-1.92 LOP 41.94 VP 36.274 GAP 21.24 AZP 88.27 TAL 148.69 TAP 100.66 RCA 73.66 APO 159.67 V2 35.027
7.17 GP -2.69 ZAL 38.22 ZAP 174.13 ETS 209.80 ZAE 131.21 ETE 182.95 ZAC 130.56 ETC 166.14 CLP 174.78
    RL 147.16 LAL
   RC 210.800 GL
  PLANETOCENTRIC CONIC
                                                                                                                             9.21 RAP 36.11 ECC 2.3281
                                                                                               2.59 VHP 13.451 OPA
    C3 80.698 VHL 8.983 DLA 25.26 RAL 47.86 RAD 6569.6 VEL 14.214 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ. LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 26 56 3499.32

0 36 42 4259.66

6 12 4 3160.39

1 34 15 4073.83

8 4 51 2807.54

1 57 58 3999.44
                                                                                            70.04 5 25 16
                                                                                                                         2899.3
                                                                                                                                                   123.11
                                                                            302.75
                                                                                                                                      -23.05
       90.00
                                                 -20.51
                                                              130.86
                                                                             292.65
                                                                                              61.75
                                                                                                         1 47 41
                                                                                                                         3659.7
                                                                                                                                         -1.83
                                                                                                                                                      168.68
        40 00
                                                   1.96
                                                               175.31
                                                                                             70.85 7 4 45
60.44 2 42 9
72.48 8 51 38
57.27 3 4 37
                                                                                                                         2560.4
                                                                                                                                        -25.80
                                                                                                                                                       99.05
                                                               107.03
                                                                             303.85
      100.00
                                                 -23.40
                                                                                                                         3473.8
                                                                                                                                                      153.64
                                                  4.65
                                                               160.17
                                                                             291.16
                                                                                                                                          .68
      100.00
                                                                                                                                      -31.94
                                                                                                                         2207.5
                                                                                                                                                      74.04
                                                 -29.83
                                                                             306.24
      110.00
                                                                82.52
                                                                                                                         3399.4
                                                                                                                                         6.06
                                                                                                                                                      144.66
                                                                            287.63
      110.00
                                3999.44
                                                 10.45
                                                              151.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT .5424.9 SGR 386.6 SG3 99.6

RRT .5451 RRF .5300 RTF .9677

SGB 5438.6 R23 .0000 R13 .9677

SGI 5429.0 SG2 323.8 THA 2.23
                                                                                                                   ST 2316.7 SR 375.6 SS 557.9
CRT .8266 CRS -.7791 CST -.9966
    TDE 2.8374 TRA 6.8321 TC3 -.9539 BAU 1.0291
    ROE .5871 RRA .1359 RC3 -.0011 FAU .00425
    FOE .5486 FRA 1.5535 FC3 -.0456 BSP 18060
BDE 2.8975 BRA 6.8335 BC3 .9539 FSP -336
                                                                                                                    LSA 2402.7 MSA 215.3 55A 10.3
                                                                                                                  EL1 2337.6 EL2 209.5 ALF 7.69
                                                                                                                              ARRIVAL DATE JUL 20 1966
                                                                      FLIGHT TIME 210.00
LAUNCH DATE DEC 22 1965
                                                                      DISTANCE 602.483
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 25.775 GAL 17.24 AZL 87.50 HCA 315.18 SMA 116.49 ECC .38871 INC 2.4992 VI 30.275 RP 108.15 LAP -1.76 LOP 45.14 VP 36.262 GAP 22.52 AZP 88.23 TAL 147.56 TAP 102.73 RCA 71.21 APO 161.76 V2 35.040 RC 212.427 GL 6.38 GP -2.66 ZAL 36.73 ZAP 173.20 ETS 205.61 ZAE 130.99 ETE 182.92 ZAC 132.62 ETC 165.74 CLP 173.74
   PLANETOCENTRIC CONTC
    C3 93.432 VHL 9.666 DLA 24.86 RAL 49.56 RAD 6569.8 VEL 14.655 PTH 2.65 VHP 14.227 CPA 10.02 RAP 38.15 ECC 2.5377
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         69.85 5 39 24
61.92 1 48 11
70.50 7 17 31
60.74 2 44 0
71.81 9 2 39
                                                                                                                    2907.3
                                                                                                                                                   123.64
                   4 40 57 3507.25
0 36 13 4317.27
6 24 38 3172.96
1 35 13 4126.79
                                                                          306.80
                                                                                                                                       -22.89
                                                 -20.33
                                                             131.37
        90.00
                                                                                                                                                     171.89
                                                                                                                                         .03
                                                               178.53
                                                                             295.99
                                                                                                                        3717.3
                                                   3.82
        90.00
                                                                                                                                                      99.91
                                                                                                                                       -25.56
                                                 -23.12
                                                              107.86
                                                                            307.88
                                                                                                                        2573.0
      100.00
                                                                                                                                                     156.54
                                                                             294.56
                                                                                                                        3526.8
                                                                                                                                        2.47
                                                   6.42
                                                              163.11
      100.00
                                                                                                                                                      75.40
                   8 15 33 2825.95
2 0 48 4046.57
                                                                                                                                       -31.65
                                                                                                                        2225.9
                                                 -29.45
                                                                83.91
                                                                            310.29
      110.00
                                                                                                                                         7.83
                                                                            291.10
                                                                                              57.81
                                                                                                         3 8 14
                                                                                                                        3446.6
                                                 12.17
                                                               153.57
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2257.6 SR 362.3 55 564.2
                                                                  SCT 5392.9 SCR 377.0 SC3 97.3
RRT .5684 RRF .5545 RTF .9722
SCB 5406.1 R23 .0001 R13 .9722
    TOE 2.8923 TRA 7.4909 TC3 -.7662 BAU .9571
                                                                                                                     CRT .8151 CRS -.7714 CST -.9973
    ROE .6087 RRA .1672 RC3 -.0008 FAU .00287
                                                                                                                    LSA 2345.4 MSA 213.1 SSA 9.8
    FOE .5503 FRA 1.6476 FC3 -.0266 BSP 18059
BOE 2.9556 BRA 7.4927 BC3 .7662 FSP -329
                                                                                                                     EL1 2277.0 EL2 208.1 ALF 7.52
                                                                   SG1 5397.2 SG2 309.9 THA 2.28
                                                                                                                               ARRIVAL DATE JUL 22 1966
                                                                       FLIGHT TIME 212.00
LAUNCH DATE DEC 22 1965
                                                                      DISTANCE 605.169
  HELIOCENTRIC CONIC
   RL 147.16 LAL .00 LOL 89.94 VL 25.742 GAL 19.04 A7L 87.60 HCA 318.38 SMA 116.31 ECC .41144 INC 2.4040 V1 30.275
RP 108.11 LAP -1.60 LOP 48.35 VP 36.252 GAP 23.98 A7P 88.20 TAL 146.58 TAP 104.97 RCA 68.46 APO 164.17 V2 35.053
RC 214.027 GL 5.61 GP -2.63 TAL 35.42 ZAP 172.18 ETS 202.28 TAE 130.69 ETE 182.89 TAC 134.62 ETC 165.30 CLP 172.63
   PLANETOCENTRIC CONIC
    C3 108.921 VHL 10.437 DLA 24.44 RAL 51.06 RAD 6570.1 VEL 15.174 PTH 2.72 VHP 15.108 DPA 10.80 RAP 40.13 ECC 2.7926
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            69.68 5 52 51
                                                                                                                      2914.7
                    4 54 17 3514.66
0 34 56 4375.20
6 36 37 3184.72
                                                 -20.15
                                                               131.85
                                                                            310.65
        90.00
                                                                                                         1 47 51
                                                                                                                         3775.2
                                                                                                                                         1.90
                                                                                                                                                      175.13
                                                                                              62.21
                                                   5.66
                                                               181.78
                                                                             299.16
        90.00
                                                                                                       7 29 41
                                                                                                                         2584.7
                                                                                                                                                      100.72
                                                 -22.85
                                                               108.63
                                                                             311.70
                                                                                              70.18
       100.00
                                                                                                       2 44 57
                                                                                                                         3580.4
                                                                                                                                         4.28
                                                                                                                                                      159.49
                    1 35 17 4180.38
                                                   8.19
                                                               166.10
                                                                             297.79
                                                                                              61.15
       100.00
                    8 25 41 2843.47
2 2 42 4094.40
                                                                                                                         2243.5
                                                 -29.07
                                                               85.14
                                                                             314.13
                                                                                              71.17
       110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                         3494.4
                                                                                                                                          9.62
                                                               156.21
                                             13.89
       110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2202.0 SR 347.8 SS 574.3
CRT .8044 CRS -.7647 CST -.9978
                                                                  SGT 5357.4 SGR 366.5 SG3 95.1
RRT .5915 RRF .5789 RTF .9765
    TOE 2.9599 TRA 8.2115 TC3 -.5949 BAU .8663
    RDE .6301 RRA .2008 RC3 .0001 FAU .00130
                                                                 SGB 5369.9 R23 -.0005 R13 .9765
SGI 5361.8 SGZ 295.3 THA 2.32
                                                                                                                    LSA 2292.5 MSA 209.3 SSA 9.2
    FDE .5555 FRA 1.7528 FC3 -.0104 BSP 18021
                                                                                                                   EL1 2219.8 EL2 205.0 ALF 7.30
```

BDE 3.0263 BRA 8.2140 BC3 .5949 FSP -322

Ξ

```
FLIGHT TIME 214.00
                                                                                                                                                                                       ARRIVAL DATE JUL 24 1966
LAUNCH DATE DEC 22 1965
                                                                                                     DISTANCE 607.161
    HELIOCENTRIC CONIC
     RL 147.16 LAL .00 LOL 89.94 VL 25.711 CAL 21.06 A7L 87.70 MCA 321.59 SMA 116.15 ECC .43723 INC 2.2960 V1 3D.275
RP 108.07 LAP -1.43 LOP 51.56 VP 36.242 CAP 25.64 A7P 88.20 TAL 145.80 TAP 107.39 RCA 65.37 APO 166.93 V2 35.067
RC 215.599 GL 4.88 GP -2.60 TAL 34.29 ZAP 171.04 ETS 199.57 TAE 130.29 ETE 182.85 TAC 136.52 ETC 164.80 CLP 171.42
    PLANETOCENTRIC CONTC
     C3 127.926 VHL 11.310 DLA 23.98 RAL 52.37 RAD 6570.4 VEL 15.788 PTH 2.80 VHP 16.112 CPA 11.52 RAP 42.04 ECC 3.1053 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                           5 6 52 3521.29
0 32 46 4433.14
6 47 56 3195.41
1 34 23 4234.25
                                                                                                               314.25
                                                                                                                                      69.52
                                                                                                                                                      6 5 33
                                                                                                                                                                             2921.3
                                                                                                                                                                                                   -22.60
                                                                                          132.27
                                                                      -19.99
           90.00
                                                                                                                                                      1 46 39
                                                                                                                                                                              3833.1
                                                                                          185.06
                                                                                                               302.14
                                                                                                                                       62.61
           90.00
                                                                       7.49
                                                                                                                                                     7 41 12
2 44 57
                                                                                                                                                                              2595.4
                                                                                                                                                                                                   -25.13
                                                                                                                                                                                                                       101.44
                                                                                           109.33
                                                                                                               315.28
                                                                                                                                       69.89
                                                                     -22.60
         100.00
                                                                                                               300.83
                                                                                                                                                                              3634.3
                                                                                                                                                                                                      6.08
                                                                                                                                       61.67
         100.00
                                                                        9.95
                                                                                          169.13
                                                                                                                                                     9 22 52
3 12 39
                                                                                                               317.72
                                                                                                                                       70.59
                                                                                                                                                                              2259.8
                                                                                                                                                                                                   -31.08
         110.00
                            8 35 12 2859.83
2 3 36 4142.60
                                                                     -28.71
                                                                                             86.27
                                                                                          158.91
                                                                                                              297.55
                                                                                                                                      59.19
                                                                                                                                                                              3542.6
                                                                                                                                                                                                    11.39
         110.00
                                                                      15.59
                                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                               SCT 5317.3 SCR 355.1 SC3 93.0

RRT .6141 RRF .6028 RTF .9805

SCB 5329.2 R23 -.0012 R13 .9805

SCI 5321.8 SC2 280.0 THA 2.35
                                                                                                                                                                        ST 2149.0 SR 332.3 SS 588.3
CRT .7946 CRS -.7590 CST -.9983
     TOE 3.0425 TRA 9.0014 TC3 -.4403 BAU .7530
     RDE .6515 RRA .2364 RC3 .0014 FAU-.00050
FDE .5645 FRA 1.8708 FC3 .0034 BSP 17978
                                                                                                                                                                  CRT .7946 LN3 7.7350 LL
LSA 2243.4 MSA 203.9 SSA 8.6
ELL 2165.3 EL2 200.3 ALF 7.07
     BOE 3.1115 BRA 9.0045 BC3 .4403 FSP -315
                                                                                                                                                                                        ARRIVAL DATE JUL 26 1966
                                                                                                     FLIGHT TIME 216.00
LAUNCH DATE DEC 22 1965
                                                                                                     DISTANCE 608.258
   HELIOCENTRIC CONIC
     RL 147.16 LAL .00 LOL 89.94 VL 25.682 CAL 23.33 A7L 87.83 MCA 324.81 SMA 116.00 ECC .46660 INC 2.1714 VI 30.275
RP 108.03 LAP -1.25 LOP 54.77 VP 36.234 CAP 27.56 A7P 88.23 TAL 145.25 TAP 110.05 RCA 61.87 APO 170.12 V2 35.080
RC 217.144 GL 4.16 GP -2.57 TAL 33.36 TAP 169.78 ETS 197.31 TAE 129.78 ETE 182.81 TAC 138.30 ETC 164.27 CLP 170.11
   PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 18 39 3526.76 -19.86 132.62 317.58 59 39 5 17.25 2026.0
                          29 40 4490.80
6 58 32 3204.69
1 32 27 4288
                                                                         9.28
                                                                                                                                                                               3890.8
                                                                                           188.35
                                                                                                                304.89
                                                                                                                                       63.13
                                                                                                                                                       1 44 30
                                                                                                                                                                                                      5.60
                                                                                                                                                                                                                        181.60
          90.00
                                                                                                                                                     7 51 57
2 43 55
9 31 56
3 13 19
                                                                                                                                                                               2604.7
                                                                                          109.93
                                                                                                               318.58
                                                                                                                                       69.65
                                                                                                                                                                                                    -24.95
                                                                                                                                                                                                                         102.07
         100.00
                                                                      -22.38
                                                                                                                                                                               3688.1
         100.00
                                                                      11.67
                                                                                          172.20
                                                                                                               303.64
                                                                                                                                       62.28
                                                                                                                                                                                                     7.87
                                                                                                                                                                                                                        165.48
                           8 44 1
                                                                                                                                                                              2274.7
                                               2874.69
                                                                     -28.37
                                                                                             87.29
                                                                                                               321.01
                                                                                                                                       70.07
                                                                                                                                                                                                   -30.81
                                                                                                                                                                                                                         78.95
         110.00
                            2 3 28
                                               4190.87
                                                                      17.25
                                                                                          161.66
                                                                                                               300.47
                                                                                                                                       60.02
                                                                                                                                                                              3590.9
                                                                                                                                                                                                   13.14
                                                                                                                                                                                                                        154.97
         110.00
   DIFFERENTIAL CORRECTIONS
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT CETERMINATION ACCURACY
                                                                                                SGT 5275.2 SGR 342.9 SG3 91.0
RRT .6364 RRF .6265 RTF .9842
                                                                                                                                                                        ST 2100.5 SR 316.1 SS 607.7
CRT .7864 CRS -.7550 CST -.9987
     TOE 3.1495 TRA 9.8758 TC3 -.3003 BAU .6081
     RDE .6730 RRA .2740 RC3 .0030 FAU-.00267
FDE .5791 FRA 2.0052 FC3 .0153 BSP 17808
BDE 3.2206 BRA 9.8796 BC3 .3003 FSP -306
                                                                                                SGB 5286.4 R23 -.0019 R13 .9842
SG1 5279.8 SG2 264.2 THA 2.37
                                                                                                                                                                         LSA 2200.6 MSA 197.0 55A 8.1
                                                                                                                                                                     EL1 2115.3 EL2 193.9 ALF 6.81
                                                                                                                                                                                       ARRIVAL CATE JUL 28 1966
                                                                                                     FLIGHT TIME 218.00
LAUNCH CATE CEC 22 1965
                                                                                                     DISTANCE 608.190
    HELIOCENTRIC CONIC
     RL 147.16 LAL .00 LOL 89.94 VL 25.657 GAL 25.93 AZL 87.97 HCA 328.02 SMA 115.86 ECC .50016 INC 2.0252 VI 30.275
RP 107.99 LAP -1.07 LOP 57.98 VP 36.229 GAP 29.78 AZP 88.28 TAL 144.98 TAP 113.01 RCA 57.91 APO 173.81 V2 35.092
RC 218.662 GL 3.48 GP -2.54 ZAL 32.67 ZAP 168.37 ETS 195.40 ZAE 129.13 ETE 182.76 ZAC 139.96 ETC 163.71 CLP 168.65
    PLANETOCENTRIC CONIC
     C3 180.948 VHL 13.452 DLA 22.97 RAL 54.30 RAD 6570.9 VEL 17.386 PTH 2.96 VHP 18.603 CPA 12.80 RAP 45.53 ECC 3.9780 LNCH 180.603 CPA 12.80 RAP 45.53 ECC 3.9780 LNCH 180.603 CPA 180.603 CP
                                                                                                                                                    6 28 24
                                                                                                                                                                          2930.6
                            5 29 34 3530.61
0 25 29 4547.97
7 8 20 3212.14
                                                                                                            320.57
                                                                                                                                   69.31
                                                                                                                                                                                               -22.41 125.18
           90.00
                                                                                         132.86
                                                                     -19.77
                                                                                                                                                      1 41 17
                                                                                                                                                                              3948.0
                                                                                                               307.38
                                                                                                                                       63.75
                                                                                                                                                                                                      7.41
                                                                                                                                                                                                                       184.84
           90.00
                                                                      11.02
                                                                                          191.65
                                                                                                                                                     8 1 52
                                                                                                                                                                                                                      102.57
                                                                                                                                                                              2612.1
                                                                                                                                                                                                   -24.80
                                                                                                               321.55
                                                                                                                                       69.45
         100.00
                                                                     -22.20
                                                                                          110.41
                                                                                                                                                     2 41 45
         100.00
                            1 29 24 4341.67
8 52 3 2887.65
2 2 10 4238.93
                                                                                        175.30
                                                                                                                                       63.00
                                                                                                                                                                                                     9.62
                                                                                                                                                                                                                       168.49
                                                                                                                                                                              3741.7
                                                                      13.34
                                                                                                               306.19
                                                                                                                                                      9 40 11
                                                                                                                                                                                                   -30.57
                                                                                                                                                                              2287.6
                                                                                                                                                                                                                         79.88
         110.00
                                                                      -28.06
                                                                                             88.18
                                                                                                               323.97
                                                                                                                                       69.63
                                                                                                                                                      3 12 49
                                                                                                                                                                              3638.9
                                                                                                                                                                                                    14.85
                                                                                                                                                                                                                       157.64
         110.00
                                                                     18.87
                                                                                          164.46
                                                                                                               303.13
                                                                                                                                       60.95
                                                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               SGT 5225.2 SGR 329.5 SG3 89.2
RRT .6574 RRF .6487 RTF .9875
SGB 5235.6 R23 -.0026 R13 .9875
SGI 5229.7 SG2 248.1 THA 2.38
      TOE 3.2761 TRAID.8356 TC3 -.1770 8AU .4283
                                                                                                                                                                        ST 2051.6 SR 298.9 SS 631.8
                                                                                                                                                                        CRT .7794 CR5 -.7518 CST -.9990
      RDE .6944 RRA .3128 RC3 .0048 FAU-.00527
                                                                                                                                                                       LSA 2159.1 MSA 188.8 SSA 7.5
EL1 2064.9 EL2 186.1 ALF 6.53
     FDE .5981 FRA 2.1567 FC3 .0252 BSP 17750 BDE 3.3489 BRA10.8401 BC3 .1771 FSP -300
                                                                                                     FLIGHT TIME 220.00
                                                                                                                                                                                        ARRIVAL DATE JUL 30 1966
LAUNCH DATE DEC 22 1965
                                                                                                     DISTANCE 606.595
    HELIOCENTRIC CONIC
                                   .00 LOL 89.94 VL 25.634 GAL 28.91 A7L 88.15 MCA 331.24 SMA 115.75 ECC .53858 INC 1.8498 V1 30.275
-.89 LOP 61.19 VP 36.225 GAP 32.38 A7P 88.38 TAL 145.08 TAP 116.32 RCA 53.41 APO 178.09 V2 35.105
2.81 GP -2.51 ZAL 32.23 ZAP 166.78 ETS 193.75 ZAE 128.31 ETE 182.70 ZAC 141.44 ETC 163.14 CLP 167.01
     RL 147.16 LAL
           107.95 LAP
     RC 220.152 GL
    PLANETOCENTRIC CONIC
     C3 218.266 VHL 14.774 DLA 22.42 RAL 54.87 RAD 6571.2 VEL 18.428 PTH 3.04 VHP 20.159 DPA 13.34 RAP 47.06 ECC 4.5921 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                             5 39 32 3532.27
0 20 2 4604.53
                                                                                          132.97
                                                                                                               323.19
                                                                                                                                      69.27
                                                                                                                                                      6 38 25
                                                                                                                                                                             2932.3
                                                                      -19.73
           90.00
                                                                      12.70
                                                                                          194.95
                                                                                                               309.56
                                                                                                                                       64.48
                                                                                                                                                      1 36 47
                                                                                                                                                                              4004.5
                                                                                                                                                                                                      9.17
           90.00
                                                                                                                                                      8 10 52
                             7 17 15 3217.24
1 25 1 4394.79
                                                                                           110.74
                                                                                                               324.14
                                                                                                                                       69.32
                                                                                                                                                                              2617.2
                                                                                                                                                                                                   -24.69
                                                                                                                                                                                                                        102.92
                                                                     -22.08
         100.00
                                                                                          178.41
                                                                                                               308.43
                                                                                                                                       63.82
                                                                                                                                                     2 38 16
                                                                                                                                                                              3794.8
         100.00
                            1 25 1
                                                                      14.96
                            8 59 13 2898.21
1 59 32 4286.58
                                                                                                                                                        9 47 31
                                                                     -27.81
                                                                                             88.90
                                                                                                               326.52
                                                                                                                                       69.27
                                                                                                                                                                              2298.2
                                                                                                                                                                                                  -30.37
         110.00
                                                                                                                                                                         3686.6
                                                                                                                                       61.97
                                                                                                                                                     3 10 59
                                                                      20.42
                                                                                          167.28
                                                                                                               305.50
         110.00
    DIFFERENTIAL CORRECTIONS
                                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                               SGT 5169.7 SGR 315.2 SG3 87.4
RRT .6772 RRF .6696 RTF .9903
SGB 5179.3 R23 -.0033 R13 .9903
SGI 5174.1 SG2 231.7 THA 2.37
      TOE 3.4353 TRAIL.8971 TC3 -.0682 BAU .2000
                                                                                                                                                                       ST 2004.2 SR 281.3 SS 662.3
                                                                                                                                                                   CRT .7741 CRS -.7502 CST -.9993
LSA 2121.9 M5A 17974 55A 6.9
     ROE .7162 RRA .3521 RC3 .0065 FAU-.00855
FOE .6243 FRA 2.3300 FC3 .0339 BSP 17658
                                                                                                                                                                       EL1 2016.1 EL2 177.0 ALF 6.25
      BOE 3.5092 BRAIL.9023 BC3 .0685 FSP -295
```

LAUNCH DATE DEC 23 1965

ARRIVAL DATE MAR 3, 1966 015TANCE 202.496 HELIOCENTRIC CONIC RL 147.15 LAL .DD LOL 9D.96 VL 28.940 GAL -12.78 A7L 86.76 HCA 92.86 SMA 137.35 ECC .23197 INC 3.2424 V1 3D.276
RP 1D7.76 LAP 3.24 LOP 183.82 VP 38.689 GAP -5.06 A7P 9D.16 TAL 239.76 TAP 332.62 RCA 105.49 APO 169.21 V2 35.166
RC 63.191 GL 13.51 GP 6.65 7AL 157.31 7AP 43.53 ETS 351.47 7AE 161.53 ETE 353.28 7AC 54.77 ETC 165.79 CLP -43.12 PLANETOCENTRIC CONIC 2.36 VHP 4.963 DPA -11.15 RAP 322.03 ECC 1.7688 C3 46.713 VHL 6.835 DLA -8.67 RAL 289.03 RAD 6568.7 VEL 12.964 PTH LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1553.4 112.20 2 14 20 -14.87 162.65 90.00 1 38 27 2153.38 11 25 23 5341.52 37.64 -18.04 12 54 24 4741.5 26.43 90.00 27.62 243.33 168.80 83.50 11.54 113.24 3 27 19 1304.6 -16.04 2 55 34 1904.55 12 50 56 5065.58 162.07 100.00 -19.35 18.77 82.56 14 15 22 214.29 100.00 29.04 222.84 168.60 4465.6 27.70 116.15 4 22 54 79.92 15 29 9 355.93 110.00 3 54 13 1720.93 -22.85 3.11 160.34 1120.9 -19.15 4222.0 31.10 194.87 110.00 14 8 47 4821.97 32.84 203.66 167.92 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 148.8 SR 385.5 S3 226.4 CRT .6164 CRS .7883 CST .D188 LSA 436.2 MSA 176.9 SSA 21.5 SGT 445.3 SGR 396.1 SG3 219.7 RRT .0163 RRF -.2524 RTF -.1179 TDE -.1195 TRA -.4318 TC3 .1703 BAU .1064 RDE -.4586 RRA .1124 RC3 -.0023 FAU .08798 SGB 596.0 R23 -.2427 R13 -.1330 FOE .4671 FRA-1.3675 FC3-1.6306 BSP 624 BDE .4739 BRA .4462 BC3 .1703 FSP -626 EL1 397.3 EL2 113.7 ALF 75.39 SG1 445.5 SG2 395.9 THA 3.96 ARRIVAL DATE MAR 5 1966 LAUNCH DATE DEC 23 1965 FLIGHT TIME 72.00 HELIOCENTRIC CONIC DISTANCE 209.176 RL 147.15 LAL .00 LOL 90.96 VL 28.981 GAL -12.66 A7L 86.81 MCA 96.09 SMA 137.68 ECC .22927 INC 3.1940 V1 30.276
RP 107.80 LAP 3.18 LOP 187.06 VP 38.709 GAP -4.34 A7P 90.34 TAL 240.32 TAP 336.41 RCA 106.12 APO 169.25 V2 35.155
RC 65.219 GL 13.46 GP 7.09 ZAL 157.58 ZAP 48.15 ETS 352.05 ZAE 164.04 ETE 355.12 ZAC 53.31 ETC 165.97 CLP -47.76 PLANETOCENTRIC CONIC 2.36 VHP 4.682 DPA -11.13 RAP 320.54 ECC 1.7535 C3 45.786 VHL 6.767 OLA -8.75 RAL 288.74 RAD 6568.7 VEL 12.929 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 37 56 2145.69 11 23 34 5339.15 2 55 1 1897.01 112.36 1545.7 162.01 2 13 41 -14.65 29.94 90.00 -17.84 37.17 83.42 12 52 33 234.70 90.00 27.60 243.16 168.16 4739.2 26.40 113.40 3 26 38 1297.0 -15.82 11.09 100.00 -19.15 18.30 161.43 12 49 10 5063.07 3 53 34 1713.69 14 7 7 4819.15 82.47 14 13 33 100.00 167.96 4463.1 27.67 214.12 29.01 222.66 116.33 4 22 7 1113.7 -18.91 355.50 110.00 -22.63 2.66 159.70 79.80 15 27 26 31.05 110.00 32.80 203.45 167.27 4219.2 194.67 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 149.6 SR 386.3 SS 239.2 CRT ,5458 CRS .7880 CST -.0697 SGT 448.1 SGR 398.7 SG3 245.8 RRT -.0179 RRF -.2922 RTF -.0016 TDE -.1080 TRA -.4603 TC3 .1420 BAU .0871 RDE -.4547 RRA .1203 RC3 .0086 FAU .09724 SGB 599.8 R23 .2917 R13 -.0182 SG1 448.4 SG2 398.4 THA 175.64 FDE .5146 FRA-1.5270 FC3-1.8386 BSP 518 BDE .4673 BRA .4758 BC3 .1422 FSP -710 LSA 439.8 MSA 186.8 SSA 21.5 EL1 395.7 EL2 122.4 ALF 76.77 ARRIVAL DATE MAR 7 1966 FLIGHT TIME 74.00 LAUNCH DATE DEC 23 1965 DISTANCE 215.814 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.009 GAL -12.55 AZL 86.85 MCA 99.32 SMA 137.92 ECC .22685 INC 3.1450 V1 30.276
RP 107.83 LAP 3.10 LOP 190.29 VP 38.720 GAP -3.65 AZP 90.51 TAL 240.72 TAP 340.03 RCA 106.63 APO 169.21 V2 35.143
RC 67.327 GL 13.40 GP 7.56 ZAL 157.78 ZAP 52.98 ETS 352.62 ZAE 166.81 ETE 357.72 ZAC 51.64 ETC 166.17 CLP -52.60 PLANETOCENTRIC CONIC C3 44.908 VHL 6.701 DLA -8.83 RAL 288.54 RAD 6568.7 VEL 12.895 PTH 2.35 VMP 4.437 DPA -11.13 RAP 318.84 ECC 1.7391 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1538.1 -14.44 112.52 2 13 27 83.34 12 51 3 29.48 1 37 49 2138.06 11 22 6 5337.05 2 54 51 1889.52 161.48 -17.64 36.69 90.00 26.38 234.55 27.59 243.01 167.63 4737.0 90.00 113.56 3 26 21 82.38 14 12 5 116.51 4 21 44 79.69 15 26 4 10.64 -18.95 17.84 160.89 113.56 1289.5 -15.60 100.00 167.43 4460.8 27.64 213.96 12 47 44 5060.82 28.99 222.50 100.00 -18.67 355.08 116.51 1106.5 110.00 3 53 18 1706.53 -22.41 2.22 159.16 4216.6 31.00 194.48 32.77 203.26 166.74 110.00 14 5 47 4816.58 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 458.8 SGR 401.5 SG3 273.1 RRT -.0708 RRF -.3346 RTF .1342 SGB 609.7 R23 .2907 R13 -.1994 SG1 462.3 SG2 397.5 THA 166.05 ST 151.6 SR 386.1 SS 250.7 CRT .4531 CRS .7865 CST -.1791 LSA 442.4 MSA 196.9 SSA 21.5 TOE -.0937 TRA -.4954 TC3 .1064 BAU .0651 RDE -.4499 RRA .1291 RC3 .0210 FAU .10688 FDE .5588 FRA-1.6895 FC3-2.0604 BSP BDE .4596 BRA .5120 BC3 .1084 FSP 461 EL1 393.0 EL2 132.8 ALF 78.59 -804 FLIGHT TIME 76.00 ARRIVAL DATE MAR 9 1966 LAUNCH DATE DEC 23 1965 DISTANCE 222.411 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.028 GAL -12.43 AZL 86.90 MCA 102.54 SMA 138.07 ECC .22466 INC 3.0951 V1 30.276
RP 107.87 LAP 3.02 LOP 193.52 VP 38.724 GAP -3.00 AZP 90.67 TAL 240.96 TAP 343.50 RCA 107.05 APO 169.09 V2 35.132
RC 69.470 GL 13.33 GP 8.03 ZAL 157.92 ZAP 57.99 ETS 353.21 ZAE 169.82 ETE 1.85 ZAC 49.80 ETC 166.40 CLP -57.63 PLANETOCENTRIC CONIC C3 44.D61 VHL 6.638 DLA -8.92 RAL 288.43 RAD 6568.7 VEL 12.862 PTH 2.34 VMP 4.226 DPA -11.16 RAP 316.95 ECC 1.7251 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1530.4 29.03 2130.42 -17.44 36.22 161.04 112.67 2 13 34 -14.22 90.00 1 38 4 11 20 57 2 55 3 83.27 12 49 52 4735.1 26.35 234.42 5335.12 27.57 242.87 167.20 90.00 3 26 26 1282.0 -15.38 10.20 1882.03 -18.74 17.37 160.45 113.72 100.00 82.30 14 10 57 213.81 12 46 39 5058.73 4458.7 27.61 28.97 222.34 166.99 100.00 3 53 24 1699.37 14 4 48 4814.16 110.00 4 21 43 -18.43 354.66 -22.19 1.78 158.72 116.69 1099.4 79.58 15 25 2 30.96 194.31 4214.2 110.00 32.74 203.07 166.30 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 482.7 SGR 404.8 SG3 300.2 RRT -.1392 RRF -.3802 RTF .2835 ST 156.7 SR 385.3 SS 261.7 CRT .3461 CRS .7882 CST -.2908 TOE -.0786 TRA -.5390 TC3 .0615 BAU .0416 RDE -.4444 RRA .1385 RC3 .0347 FAU .11633 SGB 630.0 R23 .2561 R13 -.3649 SG1 492.4 SG2 393.0 THA 160.90 FOE .6039 FRA-1.8434 FC3-2.2858 BSP 491 BDE .4513 BRA .5565 BC3 .0706 FSP -894 LSA 445.2 HSA 206.9 SSA 21.5 EL1 389.7 EL2 145.4 ALF 80.68

FLIGHT TIME 70.00

ARRIVAL CATE MAR 11 1966

BOE .4419 BRA .6076 BC3 .0506 FSP

FLIGHT TIME 78.00 LAUNCH DATE DEC 23 1965

015TANCE 228.967 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.036 GAL -12.32 A7L 86.96 HCA 105.76 SMA 138.15 ECC .22265 INC 3.0440 V1 30.276 RP 107.90 LAP 2.93 LOP 196.74 VP 38.719 GAP -2.39 A7P 90.83 TAL 241.06 TAP 346.83 RCA 107.39 APO 168.90 V2 35.120 RC 71.643 GL 13.24 GP 8.51 TAL 158.00 TAP 63.13 ETS 353.82 TAE 172.96 ETE 9.70 TAC 47.80 ETC 166.64 CLP -62.81 PLANETOCENTRIC CONTC 2.34 VHP 4.049 DPA -11.19 RAP 314.92 ECC 1.7115 C3 43.233 VHL 6.575 DLA -9.01 RAL 288.40 RAD 6568.6 VEL 12.830 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG. INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 35.75 160.68 112.82 -17.24 1 38 41 2122.69 11 20 7 5333.30 90.00 83.21 12 49 0 242.74 166.85 90.00 11 20 7 27.56 16.91 160.09 113.88 1874.46 -18.53 100.00 2 55 37 82.23 14 10 8 116.87 4 22 3 79.48 15 24 19 222.20 166.64 100.00 12 45 51 5056.76 28.96 1.33 158.35 116.87 110.00 3 53 51 1692.14 -21.97 202.90 165.94 110.00 32.71 14 4 7 4811.84 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 522.7 SGR 408.6 SG3 327.0 RRT -.2203 RRF -.4267 RTF .4272 SGB 663.4 R23 .2172 R13 -.5016 SGI 539.4 SG2 386.1 THA 159.24 TOE -.0612 TRA -.5892 TC3 .0086 BAU .0293 ROE -.4377 RRA .1485 RC3 .0499 FAU .12555 FOE .6410 FRA-1.9882 FC3-2.5142 BSP 656

FLIGHT TIME 80.00 LAUNCH DATE DEC 23 1965

DISTANCE 235.482 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.036 GAL -12.20 AZL 87.01 HCA 108.98 SMA 138.15 ECC .22078 INC 2.9912 VI 30.276
RP 107.94 LAP 2.83 LOP 199.97 VP 38.708 GAP -1.80 AZP 90.97 TAL 241.03 TAP 350.01 RCA 107.65 APO 168.65 VZ 35.108
RC 73.845 GL 13.14 GP 8.98 ZAL 158.03 ZAP 68.38 ETS 354.47 ZAE 175.93 ETE 30.04 ZAC 45.71 ETC 166.92 CLP -68.09 PLANETOCENTRIC CONIC C3 42.414 VHL 6.513 DLA -9.11 RAL 288.45 RAD 6568.6 VEL 12.798 PTH 2.33 VHP 3.904 DPA -11.23 RAP 312.79 ECC 1.6980 LNCH AZMTH LNCH TIME L-I TIME IN LAT INI LONG IN RT ASC INI AZMTH INI TIME PO CST TIM INI 2 LAT INI 2 LONG 112.97 160.40 -17.03 35.26 1 39 37 2114.80 90.00 166.57 83.15 5331.55 27.54 242.62 90.00 11 19 33 114.04 3 27 38 82.16 14 9 36 -18.32 159.81 2 56 31 1866.73 100.00 166.37 100.00 12 45 21 5054.84 28.94 222.06 117.05 4 22 42 79.39 15 23 53 158.07 117.05 3 54 38 1684.77 -21.75 .88 110.00 32.69 202.73 165.66 14 3 44 4809.57 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SGT 581.9 SGR 412.8 SG3 351.5 RRT -.3038 RRF -.4740 RTF .5533 SGB 713.5 R23 .1868 R13 -.6118 TOE -.0433 TRA -.6470 TC3 -.0536 BAU .0482 ROE -.4300 RRA .1585 RC3 .0660 FAU .13382 FOE .6754 FRA-2.1102 FC3-2.7315 BSP 926 BOE .4322 BRA .6661 BC3 .0850 FSP -1071

FLIGHT TIME 82.00 LAUNCH DATE DEC 23 1965

-989

OISTANCE 241.956 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.029 GAL -12.09 A7L 87.06 HCA 112.20 SHA 138.08 ECC .21903 INC 2.9365 V1 30.276 RP 107.98 LAP 2.72 LOP 203.19 VP 38.691 GAP -1.24 A7P 91.11 TAL 240.86 TAP 353.07 RCA 107.84 APO 168.33 V2 35.095 RC 76.070 GL 13.03 GP 9.46 ZAL 158.01 ZAP 73.66 ETS 355.16 ZAE 177.13 ETE 90.33 ZAC 43.57 EYC 167.22 CLP -73.43 PLANETOCENTRIC CONIC C3 41.597 VHL 6.450 DLA -9.21 RAL 288.57 RAD 6568.6 VEL 12.766 PTH 2.32 VHP 3.789 DPA -11.26 RAP 310.60 ECC 1.6846 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.13 2 16 1 83.09 12 48 5 160.19 113.13 1 40 54 2106.67 -16.81 34.76 5329.86 1858.78 166.37 11 19 15 27.53 242.49 114.20 159.60 2 57 44 -18.10 15.95 100.00 82.09 14 9 19 117.23 4 23 41 79.29 15 23 43 166.17 12 45 6 5052.98 28.92 221.92 3 55 44 1677.20 14 3 36 4807.33 117.23 -21.51 .42 157.85 79.29 32.66 202.56 165.45 MID-COURSE EXECUTION ACCURACY

DIFFERENTIAL CORRECTIONS SGT 659.1 SGR 417.4 SG3 373.6 RRT -.3848 RRF -.5201 RTF .6533 TOE -.0241 TRA -.7102 TC3 -.1234 BAU .0827 ROE -.4209 RRA .1683 RC3 .0831 FAU .14114 SGB 780.1 R23 .1632 R13 -.6963 SG1 687.0 SG2 369.6 THA 160.43 FDE .6967 FRA-2.2110 FC3-2.9376 BSP 1256 BDE .4216 BRA .7299 BC3 .1488 FSP -1153

FLIGHT TIME 84.00 LAUNCH DATE DEC 23 1965

DISTANCE 248.391 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 29.014 GAL -11.97 AZL 87.12 HCA 115.42 SMA 137.96 ECC .21736 INC 2.8792 VI 30.276
RP 108.02 LAP 2.60 LOP 206.40 VP 38.668 GAP -.71 AZP 91.24 TAL 240.59 TAP 356.01 RCA 107.97 APO 167.95 V2 35.082
RC 78.316 GL 12.90 GP 9.92 ZAL 157.94 ZAP 78.93 ETS 355.90 ZAE 174.84 ETE 134.68 ZAC 41.43 ETC 167.55 CLP -78.76 PLANETOCENTRIC CONIC 2.31 VHP 3.704 DPA -11.26 RAP 308.43 ECC 1.6710 C3 40.774 VHL 6.385 OLA -9.31 RAL 288.77 RAD 6568.6 VEL 12.733 PTH

INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZHTH LNCH TIME L-I TIME 113.28 34.25 160.04 -16.59 90.00 1 42 30 2098.22 26.26 12 47 59 4728.2 233.93 166.23 83.03 27.52 242.38 90.00 11 19 11 5328.22 8.34 159.45 114.37 3 30 8 1250.5 -14.43 15.44 2 59 17 1850.51 -17.87 100.00 82.02 14 9 17 213.27 4451.2 27.50 12 45 5 3 57 9 5051.16 28.90 221.79 166.02 100.00 117.42 4 24 58 79.20 15 23 48 -17.42 352.92 157.70 1069.3 3 57 9 1669.33 14 3 43 4805.11 359.94 -21.26 110.00 4205.1 30.80 202.39 165.30 193.65 110.00 32.63

MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 753.3 SGR 422.3 SG3 391.5 RRT -.4572 RRF -.5646 RTF .7282 SGB 863.6 R23 .1475 R13 -.7592 ST 212.6 SR 371.7 SS 287.9 CRT -.1084 CRS .7962 CST -.6789 LSA 454.3 MSA 243.8 SSA 21.1 TOE -.0053 TRA -.7788 TC3 -.2012 BAU .1226 ROE -.4107 RRA .1774 RC3 .1005 FAU .14677 FOE .7129 FRA-2.2774 FC3-3.1164 BSP 1638 SG1 784.8 SG2 360.5 THA 161.61 BDE .4108 BRA .7987 BC3 .2249 FSP -1214 EL1 372.8 EL2 210.8 ALF 95.22

```
LAUNCH DATE DEC 23 1965
                                                                      FLIGHT TIME 86.00
                                                                                                                             ARRIVAL DATE MAR 19 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 254.787
    RL 147.15 LAL .00 LOL 90.96 VL 28.993 GAL -11.84 A7L 87.18 HCA 118.63 SMA 137.79 ECC .21576 INC 2.8187 VI 3D.276
RP 108.06 LAP 2.47 LOP 209.62 VP 38.641 GAP -.21 A7P 91.35 TAL 240.20 TAP 358.83 RCA 108.06 APO 167.51 VZ 35.069
RC 80.581 GL 12.76 GP 10.37 TAL 157.82 TAP 84.13 ETS 356.68 TAE 171.52 ETE 148.54 TAC 39.36 ETC 167.92 CLP -84.03
   PLANETOCENTRIC CONIC
    C3 39.941 VML 6.320 OLA -9.43 RAL 289.02 RAO 6568.5 VEL 12.701 PTH 2.31 VMP 3.645 DPA -11.24 RAP 306.31 ECC 1.6573
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1489.3
                                                                                                                                   -13.04
                                                                          159.95
                   1 44 26 2089.34
11 19 19 5326.68
                                                                                        113.45 2 19 16
        90.00
                                                -16.35
                                                               33.70
                                                                                                                                                    26.59
        90.00
                                                 27.50
                                                              242.26
                                                                            166.14
                                                                                            82.98
                                                                                                      12 48 6
                                                                                                                       4726.7
                                                                                                                                      26.24
                                                                                                                                                   233.82
                  3 1 9 1841.84
12 45 17 5049.42
                                                                                                                                     -14.16
      100.00
                                               -17.62
                                                               14.91
                                                                            159.35
                                                                                           114.54
                                                                                                      3 31 51
                                                                                                                       1241.8
                                                                                                                                                     7.83
                                                                                            81.96 14 9 26
117.61 4 26 34
79.10 15 24 6
      100.00
                                                 28.89
                                                              221.66
                                                                            165.94
                                                                                                                       4449.4
                                                                                                                                      27.47
                                                                                                                                                   213.15
      110.00
                  3 58 53 1661.08
14 4 3 4802.94
                                               -21.00
                                                              359.44
                                                                            157.60
                                                                                           117.61
                                                                                                                       1061.1
                                                                                                                                     -17.14
                                                                                                                                                   352.45
      110.00
                                                 32.60
                                                              202.23
                                                                            165.22
                                                                                                                       4202.9
                                                                                                                                     30.76
                                                                                                                                                   193.50
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  SGT 860.8 SGR 427.1 SG3 405.8
RRT -.5218 RRF -.6065 RTF .7823
                                                                                                                  ST 235.0 SR 365.3 SS 288.7

CRT -.1914 CRS .7969 CST -.7374

LSA 456.7 MSA 251.0 SSA 21.0
    TOE .0133 TRA -.8505 TC3 -.2853 BAU .1649
    RDE -.3989 RRA .1858 RC3 .1185 FAU .15099
    FDE .7124 FRA-2.3161 FC3-3.2727 BSP 2049
BDE .3992 BRA .8705 BC3 .3089 FSP -1273
                                                                  SGB 960.9 R23 .1363 R13 -.8046
                                                                                                                   EL1 369.8 EL2 227.9 ALF 101.40
                                                                  SG1 894.7 SG2 350.5 THA 162.76
LAUNCH DATE DEC 23 1965
                                                                      FLIGHT TIME 88.00
                                                                                                                              ARRIVAL DATE MAR 21 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 261.146
    RL 147.15 LAL .00 LOL 90.96 VL 28.966 GAL -11.72 A7L 87.25 HCA 121.84 SMA 137.56 ECC .21422 INC 2.7546 V1 30.276 RP 108.10 LAP 2.34 LOP 212.83 VP 38.609 GAP .27 A7P 91.45 TAL 239.71 TAP 1.55 RCA 108.09 APO 167.03 V2 35.056
                       12.59 CP 10.81 ZAL 157.66 ZAP 89.20 ETS 357.52 ZAE 168.06 ETE 154.50 ZAC 37.41 ETC 168.34 CLP -89.18
    RC 82.862 GL
   PLANETOCENTRIC CONTC
    C3 39.095 VHL 6.253 DLA -9.55 RAL 289.35 RAD 6568.5 VEL 12.667 PTH 2.30 VHP 3.612 DPA -11.18 RAP 304.32 ECC 1.6434
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM ... INJ 2 LAT INJ 2 LONG
       90.00
                   1 46 42 2079.93
                                                -16.09
                                                               33.13
                                                                           159.90
                                                                                          113.62
                                                                                                      2 21 22
                                                                                                                      1479.9
                                                                                                                                    -12.76
                                                                                                                                                     26.04
                  11 19 37 5325.27
3 3 21 1832.64
        90.00
                                                 27.49
                                                              242.16
                                                                            166.11
                                                                                            82.93
                                                                                                      12 48 22
                                                                                                                       4725.3
                                                                                                                                      26.23
                                                                                                                                                    233.72
      100.00
                                                -17.36
                                                               14.35
                                                                            159.31
                                                                                           114.72
                                                                                                      3 33 54
                                                                                                                       1232.6
                                                                                                                                      -13.88
                                                                                                                                                     7.29
                  12 45 39 5047.79
4 0 56 1652.35
14 4 34 4800.84
                                                                                           81.90 14 9 47
117.81 4 28 28
79.01 15 24 35
      100.00
                                                28.87
                                                              221.55
                                                                            165.90
                                                                                                                       4447.A
                                                                                                                                      27.45
                                                                                                                                                    213.03
      110.00
                                                -20.73
                                                              358.92
                                                                           157.55
                                                                                                                       1052.4
                                                                                                                                     -16.84
                                                                                                                                                   351.94
      110.00
                                                 32.57
                                                              202.07
                                                                           165.18
                                                                                                                       4200.A
                                                                                                                                     30.72
                                                                                                                                                   193.35
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 SGT 979.3 SGR 431.6 SG3 414.8

RRT -.5770 RRF -.6458 RTF .8206

SGB 1070.2 R23 .1307 R13 -.8372

SG1 1014.7 SG2 340.2 THA 163.87
    TOE .0305 TRA -.9245 TC3 -.3753 BAU .2087
                                                                                                                   ST 259.6 SR 357.8 SS 288.1
CRT -.2564 CRS .8004 CST -.7773
    ROE -.3860 RRA .1929 RC3 .1363 FAU .15318
FOE .7067 FRA-2.3163 FC3-3.3922 BSP 2489
BOE .3872 BRA .9444 BC3 .3993 FSP -1304
                                                                                                                  LSA 460.5 MSA 256.7 SSA 20.9
                                                                                                                  EL1 369.1 EL2 243.2 ALF 109.08
                                                                                                                             ARRIVAL DATE MAR 23 1966
LAUNCH DATE DEC 23 1965
                                                                     FLIGHT TIME 90.00
  HELIOCENTRIC CONIC
                                                                     DISTANCE 267.469
   RL 147.15 LAL .00 LOL 90.96 VL 28.934 GAL -11.58 A7L 8T.31 HCA 125.05 SMA 137.30 ECC .21273 INC 2.6858 V1 30.276
RP 108.14 LAP 2.20 LOP 216.04 VP 38.573 GAP .73 A7P 91.54 TAL 239.12 TAP 4.18 RCA 108.09 APO 166.51 V2 35.043
RC 85.157 GL 12.40 GP 11.25 ZAL 157.47 ZAP 94.08 ETS 358.40 ZAE 164.64 ETE 157.74 ZAC 35.62 ETC 168.81 CLP -94.16
   PLANETOCENTRIC CONIC
    C3 38.233 VHL 6.183 DLA -9.69 RAL 289.73 RAD 6568.5 VEL 12.633 PTH 2.29 VMP 3.600 DPA -11.06 RAP 302.50 ECC 1.6292
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 49 20 2069.82
11 20 3 5324.11
3 5 54 1822.78
12 46 9 5046.39
                                               -15.81
                                                              32.52
                                                                        159.90 113.80
                                                                                                      2 23 50
                                                                                                                   1469.8 -12.46
                                                                                                                                                   25.44
       90.00
                                                                                                     12 48 47
       90.00
                                                 27.48
                                                             242.08
                                                                           166.13
                                                                                           82.89
                                                                                                                       4724.1
                                                                                                                                     26.21
                                                                                                                                                   233.64
      100.00
                                               -17.08
                                                              13.76
                                                                           159.31
                                                                                          114.91
                                                                                                      3 36 17
                                                                                                                       1222.8
                                                                                                                                    -13.58
                                                                                                                                                    6.71
                                                                                           81.84 14 10 15
      100.00
                                                28.86
                                                              221.44
                                                                           165.92
                                                                                                                       4446.4
                                                                                                                                     27.43
                                                                                                                                                   212.93
      110.00
                  4 3 19 1643.02
14 5 14 4798.91
                                                                                          118.02 4 30 42
78.93 15 25 13
                                               -20.43
                                                              358.36
                                                                           157.55
                                                                                                                       1043.0
                                                                                                                                    -16.52
                                                                                                                                                   351.41
      110.00
                                                 32.55
                                                              201.93
                                                                           165.19
                                                                                                                       4198.9
                                                                                                                                    30.68
                                                                                                                                                   193 21
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 285.4 SR 348.7 SS 284.6

CRT -.3073 CRS .8008 CST -.8090

LSA 464.4 MSA 260.8 SSA 20.8
    TOE .0460 TRA -.9989 TC3 -.4699 BAU .2528
                                                                  SGT 1105.1 SGR 435.8 SG3 419.9
                                                                 RRT -.6258 RRF -.6823 RTF .8479
SGB 1187.9 R23 .1280 R13 -.8604
   RDE -.3714 RRA .1990 RC3 .1546 FAU .15393
FDE .6854 FRA-2.2904 FC3-3.4855 BSP .2943
BDE .3742 BRA 1.0185 BC3 .4947 FSP -1330
                                                                 5G1 1141.4 5G2 329.1 THA 164.85
                                                                                                                   EL1 371.7 EL2 254.9 ALF 118.37
LAUNCH DATE DEC 23 1965
                                                                     FLIGHT TIME 92.00
                                                                                                                             ARRIVAL DATE MAR 25 1966
  HELIOCENTRIC CONIC
                                                                    DISTANCE 273.758
   RL 147.15 LAL .00 LOL 90.96 VL 28.898 GAL -11.44 AZL 87.39 HCA 128.26 SMA 137.00 ECC .21129 INC 2.6115 V1 30.276
RP 108.18 LAP 2.05 LOP 219.25 VP 38.533 GAP 1.17 AZP 91.62 TAL 238.45 TAP 6.71 RCA 108.05 APO 165.95 V2 35.030
RC 87.465 GL 12.19 GP 11.69 ZAL 157.23 ZAP 98.75 ETS 359.35 ZAE 161.35 ETE 159.72 ZAC 34.04 ETC 169.36 CLP -98.94
  PLANETOCENTRIC CONIC
   C3 37.353 VHL 6.112 DLA -9.84 RAL 290.17 RAD 6568.5 VEL 12.598 PTH 2.29 VMP 3.607 DPA -10.88 RAP 300.87 ECC 1.6147
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   1 52 21 2058.86
                                                -15.51
                                                              31.86
                                                                          159.95
                                                                                        113.99
                                                                                                       2 26 40
                                                                                                                     1458.9
                                                                                                                                    -12.14
                                                                                                                                                    24.80
                                5323.31
                                                                           166.20
                                                                                            82.86
                                                                                                     12 49 17
                                                                                                                       4723.3
       90.00
                  11 20 33
                                                27.47
                                                              242.02
                                                                                                                                     26.20
                                                                                                                                                   233.59
                               1812.09
                                                                                                       3 39 2
      100.00
                   3 8 50
                                               -16.77
                                                               13.11
                                                                           159.35
                                                                                           115.11
                                                                                                                       1212.1
                                                                                                                                     -13.25
                                                                                                                                                     6.09
                 12 46 45 5045.31
4 6 3 1632.93
                                                                                            81.80 14 10 50
      100.00
                                               28.85
                                                              221.37
                                                                           165.99
                                                                                                                       4445.3
                                                                                                                                     27.41
                                                                                                                                                   212.86
      110.00
                                               -20.11
                                                              357.75
                                                                           157.59
                                                                                          118.24
                                                                                                      4 33 16
                                                                                                                      1032.9
                                                                                                                                    -16.18
                                                                                                                                                   350.84
                  14 6 1
                                                                                            78.86 15 25 59
      110.00
                                4797.23
                                                 32.53
                                                              201.80
                                                                           165.26
                                                                                                                       4197.2
                                                                                                                                                   193.09
                                                                                                                                      30.65
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 SGT 1236.1 SGR 439.7 SG3 420.8

RRT -.6685 RRF -.7165 RTF .8673

SGB 1312.0 R23 .1285 R13 -.8772

SG1 1273.0 SG2 317.5 THA 165.72
                                                                                                                ST 311.9 SR 338.3 SS 278.9
CRT - .3445 CRS .8003 CST - .8318
    TOE .0589 TRA-1.0728 TC3 -.5686 BAU .2968
   FOE -.3554 RRA .2038 RC3 .1730 FAU .15311
FOE .6540 FRA-2.2372 FC3-3.5486 BSP 3412
BOE .3602 BRA 1.0920 BC3 .5944 FSP -1344
                                                                                                                LSA 468.8 MSA 263.1 SSA 20.7
EL1 378.4 EL2 261.7 ALF 128.36
```

```
ARRIVAL DATE HAR 27 1966
                                                                     FLIGHT TIME 94.00
LAUNCH DATE DEC 23 1965
   RL 147.15 LAL .00 LOL 90.96 VL 28.857 GAL -11.30 AZL 87.47 HCA 131.46 SHA 136.67 ECC .20988 INC 2.5303 VI 30.276 RP 108.22 LAP 1.90 LOP 222.45 VP 38.491 GAP 1.59 AZP 91.68 TAL 237.70 TAP 9.16 RCA 107.98 APO 165.35 V2 35.016 RC 89.783 GL 11.94 GP 12.16 TAL 156.96 ZAP 103.18 ETS .35 ZAE 158.22 ETE 160.99 ZAC 32.68 ETC 170.01 CLP-103.48
                                                                     DISTANCE 280.013
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                             2.28 VHP 3.632 DPA -10.63 RAP 299.48 ECC 1.5999
   C3 36.454 VHL 6.038 OLA -10.02 RAL 290.67 RAD 6568.4 VEL 12.563 PTH
   ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     1445.8
                  1 55 48 2046.80
11 21 6 5323.05
                                                              31.13
                                                                           160.04
                                                                                          114.20
                                                                                                      2 29 54
                                                                                                                                    -11.78
                                                                                                                                                    24.10
                                               -15.18
                                                                                                     12 49 49
                                                                                                                       4723.0
                                                                                                                                     26.20
                                                                                                                                                   233.57
                                                                                           82.85
                                                                            166.31
                                                27.47
                                                             242.00
       90.00
                                                                                           115.33
                                                                                                      3 42 11
                                                                                                                       1200.4
                                                                                                                                     -12.89
                                                                                                                                                     5.41
                                                                            159.44
                  3 12 11 1800.36
12 47 24 5044.72
                                                              12.41
      100.00
                                               -16.43
                                                                                          81.78 14 11 28
118.48 4 36 12
78.80 15 26 49
                                                                                                                       4444.7
                                                                                                                                     27.40
                                                                                                                                                   212.82
                                                                            166.10
      100.00
                  12 47 24
                                5044.72
                                                28.84
                                                             221.32
                                                                                                                       1021.9
                                                                                                                                     -15.79
                                                                                                                                                   350.21
                 4 9 10 1621.90
14 6 54 4795.95
                                                                            157.67
                                               -19.75
                                                              357.10
      110.00
                                                                                                                      4195.9
                                                                                                                                     30.63
                                                                                                                                                   192.99
                                                                            165.37
                                                             201.70
                                                32.51
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 1369.6 SGR 443.1 SG3 417.1
RRT -.7053 RRF -.7484 RTF .8807
SGB 1439.5 R23 .1334 R13 -.8889
SG1 1406.6 SG2 305.8 THA 166.50
                                                                                                                   ST 338.2 SR 326.8 SS 272.2
CRT -.3712 CRS .8029 CST -.8449
    TOE .0691 TRA-1.1444 TC3 -.6704 BAU .3398
    ROE -.3385 RRA .2069 RC3 .1913 FAU .15061
                                                                                                                   LSA 474.8 MSA 263.4 SSA
                                                                                                                                                      20.6
   FOE .6216 FRA-2.1538 FC3-3.5767 BSP 3875
BDE .3455 BRA 1.1630 BC3 .6972 FSP -1331
                                                                                                                   EL1 389.6 EL2 263.4 ALF 137.62
                                                                                                                             ARRIVAL DATE MAR 29 1966
                                                                     FLIGHT TIME 96.00
                                                                     DISTANCE 286.236
  HELIOCENTRIC CONIC
                      .DD LOL 90.96 VL 28.813 GAL -11.15 AZL 87.56 HCA 134.67 SMA 136.31 ECC .20852 INC 2.4409 V1 30.276
1.74 LOP 225.65 VP 38.445 GAP 1.98 AZP 91.72 TAL 236.87 TAP 11.54 RCA 107.89 APO 164.73 V2 35.003
11.65 GP 12.67 ZAL 156.65 ZAP 107.33 ETS 1.44 ZAE 155.28 ETE 161.80 ZAC 31.55 ETC 170.79 CLP-107.78
   RL 147.15 LAL
RP 108.26 LAP
   PLANETOCENTRIC CONIC
    C3 35.535 VHL 5.961 DLA -10.23 RAL 291.23 RAD 6568.4 VEL 12.526 PTH
                                                                                              2.27 VHP 3.672 DPA -10.29 RAP 298.33 ECC 1.5848
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      2 33 38
                                                                                                                     1433.4
                                                                           160.17
                                                                                          114.42
                                                -14.80
                                                              30.32
                   1 59 44 2033.38
       90.00
                                                                                                      12 50 20
                                                                                                                                                    233.61
                                                                                                                                      26.20
                                                                                            82.87
                                                                                                                       4723.6
                                                27.48
                                                              242.04
                                                                            166.48
       90.00
                   11 21 36
                                5323.57
                                                                                                    3 45 48
14 12 6
                                                                                                                                      -12.48
                                                                                                                                                      4.66
                                                                            159.56
                                                                                           115.56
                                                                                                                      1187.3
                                                -16.05
                                                               11.63
      100.00
                    3 16 1
                                1787.32
                                                                                                                                                    212.83
                                                                                                                       4444.9
                                                                                                                                     27.41
                                                                                            81.79
                  12 48 1
                                5044.87
                                                28.84
                                                              221.33
                                                                            166.27
      100.00
                                                                                           118.74 4 39 34
78.78 15 27 42
                                                                                                                      1009.8
                                                                                                                                     -15.37
                                                                                                                                                    349.52
                   4 12 44 1609.76
                                                                           157.78
      110.00
                                                -19.35
                                                              356.37
                                                                                                                                                    192.94
                                                                                                                                      30.61
                                                 32.50
                                                              201.65
                                                                            165.54
                                                                                                                       4195.3
      110.00
                  14 7 47
                                4795.26
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 363.9 SR 313.8 SS 262.9

CRT -.3878 CRS .8012 CST -.8556

LSA 480.6 MSA 261.9 SSA 20.4
                                                                 SGT 1505.0 SGR 446.6 SG3 411.1
RRT -.7389 RRF -.7788 RTF .8906
SGB 1569.8 R23 .1404 R13 -.8975
    TOE .0753 TRA-1.2134 TC3 -.7757 BAU .3818
   FOE .3201 RRA .2092 RC3 .2106 FAU .14727
FOE .5763 FRA-2.0578 FC3-3.5879 BSP 4352
BOE .3288 BRA 1.2313 BC3 .8037 FSP -1319
                                                                                                                  EL1 403.6 EL2 260.8 ALF 145.49
                                                                  5G1 1542.1 SG2 293.6 THA 167.16
                                                                                                                             ARRIVAL DATE MAR 31 1966
                                                                     FLIGHT TIME 98.00
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 292.430
    RL 147.15 LAL .00 LOL 90.96 VL 28.765 GAL -10.99 AZL 87.66 HCA 137.86 SHA 135.93 ECC .20718 INC 2.3409 VI 30.276 RP 108.31 LAP 1.57 LOP 228.85 VP 38.398 GAP 2.36 AZP 91.74 TAL 235.98 TAP 13.84 RCA 107.77 APO 164.09 VZ 34.990
   HELIOCENTRIC CONIC
    RC 94.449 CL 11.31 GP 13.23 7AL 156.31 7AP 111.21 ETS 2.61 7AE 152.52 ETE 162.27 7AC 30.68 ETC 171.72 CLP-111.82
   PLANETOCENTRIC CONIC
    C3 34.596 VHL 5.882 DLA -10.49 RAL 291.85 RAD 6568.4 VEL 12.489 PTH 2.26 VHP 3.725 DPA -9.86 RAP 297.43 ECC 1.5694
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                   1418.2
                                                                                         114.66 2 37 55
82.93 12 50 44
                                                                                                                                   -10.92
                  2 4 17 2018.20
11 21 59 5325.22
3 20 24 1772.61
                                                                         160.33
                                                -14.37
                                                              29.42
        90.00
                                                                                                                                                   233.72
                                                                            166.70
                                                                                                                       4725.2
                                                                                                                                     26.23
                                                              242.16
        90.00
                                                27.49
                                                                                                    3 49 57
14 12 39
                                                                           159.73
                                                                                           115.82
                                                                                                                      1172.6
                                                                                                                                     -12.02
                                                                                                                                                     3.81
                                                               10.75
                                                -15.62
       100.00
                                                                                                                       4446.0
                                                                                                                                     27.42
                                                                                                                                                   212.91
                                                                                            81.83
                                                                            166.49
                  12 48 33 5046.04
                                                              221.42
      100.00
                                                28.85
                                                                                            119.03 4 43 24
78.78 15 28 33
                                                                                                                       996.0
                                                                                                                                     -14.89
                                                                                                                                                   348.75
                  4 16 48 1595.99
14 8 38 4795.43
                                                                           157.94
                                                                                           119.03
                                                              355.57
      110.00
                                                -18.90
                                                                                                                                                   192.96
                                                                                                                      4195.4
                                                                                                                                     30.62
                                                                            165.77
                                                 32.50
                                                              201.66
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   5T 388.5 SR 299.8 SS 252.7

CRT -.3972 CRS .8014 CST -.8603

LSA 487.3 MSA 258.4 SSA 20.3
                                                                  SGT 1639.2 SGR 450.1 SG3 401.9
    TOE .0781 TRA-1.2777 TC3 -.8831 BAU .4221
                                                                 RRT -.7685 RRF -.8075 RTF .8972
SGB 1699.9 R23 .1515 R13 -.9033
    ROE -.3009 RRA .2099 RC3 .2303 FAU .14278
FOE .5309 FRA-1.9417 FC3-3.5730 BSP 4805
BOE .3109 BRA 1.2948 BC3 .9126 FSP -1287
                                                                                                                   EL1 419.3 EL2 254.9 ALF 151.72
                                                                  SG1 1676.4 SG2 281.6 THA 167.73
                                                                                                                              ARRIVAL DATE APR 2 1966
                                                                      FLIGHT TIME 100.00
LAUNCH DATE DEC 23 1965
                                                                      OISTANCE 298.594
    RL 147.15 LAL .00 LOL 90.96 VL 28.715 GAL -10.83 AZL 87.77 HCA 141.06 SMA 135.53 ECC .20589 INC 2.2279 V1 30.276 RP 108.35 LAP 1.40 LOP 232.04 VP 38.348 GAP 2.73 AZP 91.73 TAL 235.02 TAP 16.08 RCA 107.62 APO 163.43 V2 34.977 RC 96.794 GL 10.90 GP 13.87 TAL 155.95 ZAP 114.81 ETS 3.90 ZAE 149.96 ETE 162.45 ZAC 30.05 ETC 172.83 CLP-115.61
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 33.636 VML 5.800 DLA -10.80 RAL 292.52 RAD 6568.3 VEL 12.450 PTH 2.25 VMP 3.790 DPA -9.30 RAP 296.76 ECC 1.5536
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 9 32 2000.76
11 22 8 5328.46
                                                                                                                     1400.8
                                                                                                                                                     21.42
                                                                           160.54
                                                                                           114.94
                                                                                                       2 42 53
                                                                                                                                     -10.40
                                                 -13.87
                                                               28.38
        90.00
                                                                                                                                                    233.95
                                                                                            83.04 12 50 56
                                                                                                                       4728.5
                                                                                                                                      26.27
                                                              242.39
                                                                            166.98
                                                 27.52
        90.00
                                                                                                                                                      2.84
                                                                                            116.10
                                                                                                      3 54 45
                                                                                                                       1155.8
                                                                                                                                      -11.48
                                                                9.75
                                                                            159.93
                    3 25 29
                                1755.75
                                                 -15.11
       100.00
                                                                                            81.93 14 13 1
119.34 4 47 50
78.84 15 29 18
                                                                                                                                                    213.10
                                                                                                                                      27.46
                                                                                                                       4448.7
                   12 48 52
                                                               221.61
                                                                            166.78
                                 5048.70
                                                 28.88
       100.00
                                                                                           119.34
                                                                                                                       980.4
                                                                                                                                     -14.34
                                                                                                                                                    347.88
                                                               354.65
                                                                            158.13
                   4 21 29 1580.38
14 9 21 4796.84
                                                 -18.38
       110.00
                                                                                                                                       30.54
                                                                                                                                                    193.06
                                                              201.77
                                                                                                                       4196.8
                                                                            166.06
       110.00
                                                 32.52
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 411.9 SR 284.1 55 239.9
CRT -.3974 CRS .7957 CST -.8648
                                                                  SGT 1773.8 SGR 454.6 SG3 391.4
RRT -.7961 RRF -.8351 RTF .9020
SGB 1831.1 R23 .1653 R13 -.9076
     TOE .0755 TRA-1.3377 TC3 -.9945 BAU .4613
     ROE -.2802 RRA .2100 RC3 .2520 FAU .13791
FOE .4745 FRA-1.8214 FC3-3.5495 BSP 5276
                                                                                                                  LSA 493.6 MSA 252.9 SSA 20.2
EL1 435.4 EL2 246.7 ALF 156.86
     BOE .2902 BRA 1.3541 BC3 1.0259 FSP -1260
                                                                  5G1 1811.2 5G2 269.4 THA 168.20
```

ARRIVAL DATE APR 4 1966 FLIGHT TIME 102.00 LAUNCH DATE DEC 23 1965 DISTANCE 304.731 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 28.662 GAL -10.66 AZL 87.90 MCA 144.25 SMA 135.11 ECC .20464 INC 2.0983 VI 30.276
RP 108.39 LAP 1.23 LOP 235.23 VP 38.297 GAP 3.07 AZP 91.70 TAL 234.00 TAP 18.25 RCA 107.46 APO 162.76 V2 34.964
RC 99.145 GL 10.40 GP 14.62 ZAL 155.56 ZAP 118.12 ETS 5.34 ZAE 147.58 ETE 162.38 ZAC 29.66 ETC 174.17 CLP-119.15 PLANETOCENTRIC CONIC C3 32.655 VHL 5.714 DLA -11.19 RAL 293.26 RAD 6568.3 VEL 12.411 PTH 2.24 VHP 3.865 DPA -8.60 RAP 296.32 ECC 1.5374 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1380.4 20.25 160.79 2 48 43 2 15 43 1980.36 11 21 52 5333.95 3 31 26 1736.08 115.24 90.00 -13.28 27.17 12 50 46 4733.9 26.34 234.33 83.23 90.00 27.56 242.79 167.34 4 0 22 1136.1 -10.86 1.72 160.18 116.42 100.00 -14.52 8.59 4453.5 27.53 213.43 167.14 82.11 14 13 4 100.00 12 48 51 5053.45 28.93 221.96 119.69 4 52 58 78.98 15 29 50 962.3 -13.69 110.00 119.69 4 26 56 1562.28 14 9 50 4800.02 -17.78 353.60 158.37 4200.0 30.70 193.29 32.56 202.01 166.43 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1907.3 SGR 460.6 SG3 379.6 RRT -.8210 RRF -.8615 RTF .9053 ST 433.8 SR 267.1 SS 225.5 CRT -. 3895 CRS .7859 CST -. 8678 TDE .0670 TRA-1.3922 TC3-1.1097 BAU .4992 RDE -.2584 RRA .2090 RC3 .2759 FAU .13258 FDE .4129 FRA-1.6944 FC3-3.5148 BSP 5741 BDE .2670 BRA 1.4078 BC3 1.1435 FSP -1228 LSA 499.9 MSA 245.1 55A 20.1 SGB 1962.2 R23 .1830 R13 -.9105 SG1 1945.1 SG2 257.9 THA 168.58 EL1 451.2 EL2 236.5 ALF 161.16 ARRIVAL DATE APR 6 1966 FLIGHT TIME 104.00 LAUNCH DATE DEC 23 1965 DISTANCE 310.842 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 28.607 GAL -10.48 AZL 88.05 MCA 147.45 SMA 134.68 ECC .20343 INC 1.9470 V1 30.276
RP 108.43 LAP 1.05 LOP 238.42 VP 38.244 GAP 3.40 AZP 91.64 TAL 232.92 TAP 20.37 RCA 107.28 APO 162.07 V2 34.951
RC 101.502 GL 9.78 GP 15.53 ZAL 155.15 ZAP 121.14 ETS 6.98 ZAE 145.34 ETE 162.06 ZAC 29.51 ETC 175.77 CLP-122.46 PLANETOCENTRIC CONIC C3 31.653 VHL 5.626 OLA -11.69 RAL 294.08 RAD 6568.3 VEL 12.370 PTH 2.23 VHP 3.951 OPA -7.72 RAP 296.08 ECC 1.5209 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 23 4 1955.98 11 21 0 5342.63 -12.57 25.73 161.10 115.58 2 55 40 1356.0 -9.03 18.85 90.00 83.54 12 50 3 4742.6 26.45 234.95 167.78 90.00 27.63 243.41 3 38 29 1712.66 12 48 16 5061.18 4 7 2 1112.7 -10.10 7.22 160.47 116.78 100.00 -13.A1 14 12 37 167.59 4461.2 27.64 213.98 82.40 222.52 100.00 29.00 -12.92 120.09 4 59 1 940.9 345.69 4 33 20 1540.88 -17.05 158.65 4 55 15 30 0 110.00 352.36 4205.7 79.22 32.64 202.44 166.91 110.00 14 9 54 4805.72 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 454.1 SR 249.0 SS 209.9 CRT -. 3740 CRS . 7749 CST -. 8674 SGT 2037.5 SGR 468.2 SG3 365.8 RRT -.8424 RRF -.8863 RTF .9070 SGB 2090.6 R23 .2056 R13 -.9121 TOE .0529 TRA-1.4391 TC3-1.2279 BAU .5351 ROE -.2360 RRA .2065 RC3 .3019 FAU .12659 FOE .3520 FRA-1.5565 FC3-3.4625 BSP 6175 BDE .2418 BRA 1.4538 BC3 1.2645 FSP -1180 LSA 506.4 MSA 235.4 SSA 19.9 5G1 2075.9 SG2 247.7 THA 168.88 EL1 466.6 EL2 224.8 ALF 164.80 ARRIVAL DATE APR 8 1966 FLIGHT TIME 106.00 LAUNCH DATE DEC 23 1965 DISTANCE 316.927 HELIOCENTRIC CONIC .00 LOL 90.96 VL 28.550 GAL -10.30 AZL 88.23 HCA 150.64 SMA 134.23 ECC .20226 INC 1.7669 VI 30.276
.87 LOP 241.60 VP 38.190 GAP 3.72 AZP 91.54 TAL 231.79 TAP 22.43 RCA 107.08 APO 161.38 V2 34.939
9.00 GP 16.63 ZAL 154.72 ZAP 123.87 ETS 8.87 ZAE 143.23 ETE 161.48 ZAC 29.59 ETC 177.69 CLP-125.56 RL 147.15 LAL RP 108.46 LAP RC 103.862 GL PLANETOCENTRIC CONIC C3 30.630 VHL 5.534 DLA -12.33 RAL 294.97 RAD 6568.2 VEL 12.329 PTH 2.22 VMP 4.047 DPA -6.61 RAP 296.02 ECC 1.5041 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1326.2 2 32 1 1926.16 11 19 10 5355.94 161.47 115.98 3 4 7 -8.10 17.14 -11.69 23.99 90.00 12 48 26 4755.9 26.61 235.89 27.73 244.38 168.34 84.01 90.00 -9.18 358.77 160.84 117.19 4 15 6 1084 - 1 3 47 2 1684.10 12 46 50 5073.23 -12.92 5.56 100.00 27.81 214.84 82.85 14 11 23 4473.2 168.16 29.10 223.40 100.00 1515.01 344.27 159.00 120.54 5 6 17 915.0 -11.99 -16.16 350.89 110.00 4 41 2 79.62 15 29 35 194.37 32.75 167.50 4215.1 30.98 110.00 14 9 20 4815.09 203.14 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 473.4 SR 228.7 SS 191.6 CRT -.3463 CRS .7476 CST -.8723 LSA 513.1 MSA 222.2 SSA 19.9 EL1 481.5 EL2 210.9 ALF 168.21 SGT 2167.7 SGR 479.4 SG3 351.9 RRT -.8615 RRF -.9096 RTF .9081 SGB 2220.1 R23 .2316 R13 -.9132 SG1 2207.2 SG2 239.1 THA 169.08 TOE .0290 TRA-1.4792 TC3-1.3525 BAU .5703 RDE -.2116 RRA .2034 RC3 .3324 FAU .12061 FDE .2786 FRA-1.4212 FC3-3.4090 BSP 6632 BDE .2136 BRA 1.4932 BC3 1.3927 FSP -1141 ARRIVAL DATE APR 10 1966 FLIGHT TIME 108.00 LAUNCH DATE DEC 23 1965 DISTANCE 322.990 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 28.492 GAL -10.10 A7L 88.45 MCA 153.82 SMA 133.78 ECC .20114 INC 1.5472 V1 30.276
RP 108.50 LAP .68 LOP 244.79 VP 38.135 GAP 4.02 A7P 91.39 TAL 230.62 TAP 24.44 RCA 106.87 APO 160.69 V2 34.926
RC 106.225 GL 8.00 GP 18.02 7AL 154.27 7AP 126.27 ETS 11.10 7AE 141.20 ETE 160.59 7AC 29.90 ETC 180.01 CLP-128.47 PLANETOCENTRIC CONIC C3 29.588 VHL 5.439 DLA -13.17 RAL 295.96 RAO 6568.2 VEL 12.287 PTH 2.21 VHP 4.155 DPA -5.20 RAP 296.10 ECC 1.4869 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1288.6 -6.93 15.01 3 14 41 2 43 12 1888.63 -10.56 21.81 161.94 116.43 26.84 12 45 27 4776.1 5376.12 27.86 245.84 169.05 84.73 90.00 11 15 51 356.76 1048.3 -8.01 4 25 9 3.49 161.29 117.66 100.00 3 57 41 1648.31 -11.80 14 8 55 28.05 216.16 4491.7 12 44 3 5091.67 29.25 224.75 168.89 83.54 100.00 4 50 30 1482.89 14 7 44 4829.85 5 15 13 882.9 -10.82 -15.04 349.07 159.42 121.06 15 28 13 4229.9 31.24 110.00 32.93 204.26 168.28 80.26 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 492.1 SR 206.4 SS 171.7 CRT -.3068 CRS .7042 CST -.8806 SGT 2294.1 SGR 494.1 SG3 336.4 RRT -.8767 RRF -.9307 RTF ..9083 SGB 2346.7 R23 ..2621 R13 -.9134 TOE -.0047 TRA-1.5090 TC3-1.4816 BAU .6038 ROE -.1858 RRA .1986 RC3 .3674 FAU .11414 FDE .2013 FRA-1.2779 FC3-3.3397 BSP 7050 BDE .1859 BRA 1.5220 BC3 1.5265 FSP -1087 LSA 521.3 MSA 205.4 55A 19.9 SG1 2335.1 SG2 233.5 THA 169.20 EL1 496.9 ELZ 194.6 ALF 171.33

ARRIVAL DATE APR 12 1966

LSA 730.6 MSA 72.8 SSA 25.5 EL1 709.4 EL2 58.6 ALF 177.81

LAUNCH DATE DEC 23 1965

```
01STANCE 329.030
  HELIOCENTRIC CONIC
                        .00 LOL 90.96 VL 28.432 GAL -9.91 AZL 88.73 HCA 157.01 SMA 133.33 ECC .20007 INC 1.2719 V1 30.276 .50 LOP 247.97 VP 38.080 GAP 4.31 AZP 91.17 TAL 229.39 TAP 26.40 RCA 106.65 APO 160.00 V2 34.914
   RL 147.15 LAL
   RP 108.54 LAP
                        6.68 CP 19.79 TAL 153.80 TAP 128.30 ETS 13.79 TAE 139.18 ETE 159.35 TAC 30.45 ETC 182.83 CLP-131.20
   RC 108.588 GL
  PLANETOCENTRIC CONIC
    C3 28.532 VML 5.342 DLA -14.32 RAL 297.06 RAD 6568.1 VEL 12.244 PTH
                                                                                             2.20 VHP 4.280 DPA -3.39 RAP 296.29 ECC 1.4696
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       3 28 22
                                                                                                                      1239.7
                 2 57 43 1839.69
11 10 10 5406.87
                                                                          162.56
                                                                                         116.94
       90.00
                                                -9.06
                                                              18.99
                                                                                                                       4806.9
                                                                                                     12 40 17
                                                                                                                                      27.16
                                                                                            85.84
                                                28.03
                                                              248.07
                                                                            169.99
       90.00
                4 11 25 1601.87
12 39 9 5119.91
5 2 34 1441.66
14 4 29 4852.89
                                                                                                                       1001.9
                                                                                                                                      -6.47
                                                                                           118.21
                                                                                                       4 38 7
      100.00
                                                -10.32
                                                                 .84
                                                                            161.89
                                                                                          84.62 14 4 29
121.68 5 26 36
81.27 15 25 22
                                                                                                                                      28.39
                                                                                                                                                   218.19
                                                             226.83
                                                                            169.86
                                                                                                                       4519.9
                                               29.45
      100.00
                                                                                                                       841.7
                                                                                                                                      -9.29
                                               -13.58
                                                              346.77
                                                                           159.97
      110.00
                                                                                                                       4252.9
                                                                                                                                      31.62
                                                                           169.32
                                              33.18
                                                             206.01
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 2421.1 SGR 515.4 SG3 320.4
RRT -.8887 RRF -.9495 RTF .9082
                                                                                                                   ST 513.8 SR 180.4 55 150.9
CRT -.2505 CRS .6097 CST -.9069
   TOE -.0551 TRA-1.5288 TC3-1.6197 BAU .6373
   RDE -.1568 RRA .1926 RC3 .4100 FAU .10757
   FOE .1074 FRA-1.1358 FC3-3.2640 BSP 7500
BOE .1662 BRA 1.5409 BC3 1.6708 FSP -1040
                                                                 SGB 2475.4 R23 .2942 R13 -.9137
                                                                                                                   LSA 534.6 MSA 181.9 SSA 20.4
                                                                 SG1 2464.5 SG2 232.2 THA 169.19
                                                                                                                   EL1 516.0 EL2 173.9 ALF 174.33
                                                                                                                              ARRIVAL DATE APR 14 1966
                                                                     FLIGHT TIME 112.00
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 335.049
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 28.371 GAL -9.70 AZL 89.09 MCA 160.19 SMA 132.87 ECC .19905 INC .9138 VI 30.276
RP 108.58 LAP .31 LOP 251.15 VP 38.024 GAP 4.59 AZP 90.86 TAL 228.13 TAP 28.32 RCA 106.42 APO 159.31 V2 34.903
RC 110.951 GL 4.88 GP 22.11 ZAL 153.28 ZAP 129.87 ETS 17.11 ZAE 137.08 ETE 157.66 ZAC 31.30 ETC 186.34 CLP-133.78
  PLANETOCENTRIC CONIC
   C3 27.473 VHL 5.241 DLA -15.92 RAL 298.33 RAD 6568.1 VEL 12.200 PTH 2.19 VMP 4.429 DPA -1.01 RAP 296.51 ECC 1.4521 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 17 30 1772.85
11 0 30 5454.85
4 30 1 1538.89
12 30 41 5164.04
5 18 39 1386.54
13 58 32 4889.16
       90.00
                                                                                                        3 47 3
                                                                                                                      1172.8
                                                                                                                                                      8.50
                                                 -6.98
                                                              15.18
                                                                           163.43
                                                                                          117.51
                                                                                                      12 31 25
                                                                                                                                       27.59
                                                                                                                                                    242.96
                                                 28.22
                                                              251.57
                                                                            171.27
                                                                                            87.58
                                                                                                                        4854.9
       90.00
                                                                            162.73
                                                                                           118.83
                                                                                                        4 55 40
                                                                                                                        938.9
                                                                                                                                       -4.36
                                                                                                                                                    350.68
                                                 -8.27
                                                              357.29
      100.00
                                                29.69
                                                              230.09
                                                                            171.18
                                                                                            86.32 13 56 45
                                                                                                                       4564.0
                                                                                                                                      28.86
                                                                                                                                                    221.38
      100.00
                                                                                          122.39 5 41 45
82.88 15 20 1
                                                                                                                        786.5
                                                                                                                                      -7.23
                                                                                                                                                    337.35
                                                              343.74
                                                                            160.74
                                                -11.59
      110.00
                                                              208.79
                                                                                                                      4289.2
                                                                                                                                      32.17
                                                                                                                                                    199.82
                                                                            170.75
                                                33.52
      110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 2544.1 SGR 543.7 SG3 302.1
RRT -.8957 RRF -.9653 RTF ..9075
SGB 2601.5 R23 .3267 R13 -.9134
                                                                                                                   ST 543.6 SR 149.7 SS 133.9
CRT -.1823 CRS .4294 CST -.9508
    TOE -.1268 TRA-1.5327 TC3-1.7635 BAU .6695
   ROE - 1237 RRA 1839 RC3 .4611 FAU 10030
FOE .0001 FRA - 9835 FC3-3.1606 BSP 7914
BDE .1771 BRA 1.5437 BC3 1.8228 FSP - 979
                                                                                                                   LSA 559.2 MSA 150.5 SSA 21.4
EL1 544.3 EL2 147.0 ALF 176.90
                                                                  SG1 2590.7 SG2 237.3 THA 169.07
                                                                     FLIGHT TIME 114.00
                                                                                                                             ARRIVAL DATE APR 15 1966
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 341.048
  HELIOCENTRIC CONIC
                       .00 LOL 90.96 VL 28.310 GAL -9.49 AZL 89.57 HCA 163.36 SMA 132.40 ECC .19809 INC .4245 V1 30.276 .12 LOP 254.32 VP 37.967 GAP 4.86 AZP 90.41 TAL 226.82 TAP 30.19 RCA 106.17 APO 158.83 VZ 34.892
    RL 147.15 LAL
       108.61 LAP
                        2.31 GP 25.24 ZAL 152.64 ZAP 130.81 ETS 21.27 ZAE 134.71 ETE 155.40 ZAC 32.55 ETC 190.76 CLP-136.26
    RC 113.313 GL
   PLANETOCENTRIC CONIC
    C3 26.449 VHL 5.143 DLA -18.26 RAL 299.85 RAD 6568.71 VEL 12.158 PTH 2.18 VHP 4.619 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 46 37 1675.26
10 43 28 5533.58
4 57 4 1447.93
12 15 42 5236.14
                                                                                        118.07
                                                                                                                                       -.10
                                                                                                                                                     3.05
                                                               9.69 164.83
                                                                                                       4 14 32
                                                                                                                      1075.3
       90.00
                                                 -3.88
                                                                                                                                                   248.67
                                                                                            90.47
                                                                                                      12 15 42
                                                                                                                       4933.6
                                                                                                                                      28.08
                                                              257.32
                                                                            173.08
       90.00
                                                 28.31
                                                                                                                        847.9
                                                                                                                                                   345.68
                                                                            164.07
                                                                                           119.47
                                                                                                        5 21 12
                                                                                                                                      -1.29
                                                              352.22
      100.00
                                                 -5.25
                                                                                            89.13 13 42 59
                                                                            173.08
                                                                                                                       4636.1
                                                                                                                                      29.44
                                                                                                                                                   226.66
      100.00
                                                29.88
                                                              235.44
                                                                                                      6 3 21
                                                                                                                                                   333.24
                                                                                          123.18 6 3 21
85.55 15 10 12
                                                                                                                        708.6
                                                                                                                                      -4.29
      110.00
                  5 41 32 1308.60
13 47 44 4948.23
                                                 -8.72
                                                              339.53
                                                                            161.95
                                                                                                                                     32.94
                                                                                                                      4348.2
                                                              213.35
                                                                            172.85
                                                                                                                                                   204.25
      110.00
                                                 33.45
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 2667.0 SGR 583.5 SG3 281.6

RRT -.8984 RRF -.9779 RTF ..9070

SGB 2730.1 R23 .3547 R13 -.9136

SG1 2718.5 SG2 251.4 THA 168.78
                                                                                                                   ST 597.4 SR 110.5 SS 135.9
CRT -.1426 CRS .1409 CST -.9839
    TDE -.2347 TRA-1.5169 TC3-1.9145 BAU .7020
    RDE -.0818 RRA .1718 RC3 .5249 FAU .09233
FDE -.1357 FRA -.8255 FC3-3.0220 BSP 8350
                                                                                                                   LSA 612.4 MSA 109.4 SSA 23.7
                                                                                                                   EL1 597.6 EL2 109.4 ALF 178.44
    BDE .2485 BRA 1.5266 BC3 1.9852 FSP -916
                                                                                                                              ARRIVAL DATE APR 18 1966
                                                                     FLIGHT TIME 116.00
LAUNCH DATE DEC 23 1965
  HELIOCENTRIC CONIC
                                                                     DISTANCE 347.026
    RL 147.15 LAL .00 LOL 90.96 VL 28.247 GAL -9.27 AZL 90.29 HCA 166.54 SMA 131.94 ECC .19718 INC .2807 V1 30.276
RP 108.64 LAP -.07 LOP 257.50 VP 37.911 GAP 5.12 AZP 89.72 TAL 225.48 TAP 32.02 RCA 105.92 APO 157.95 V2 34.881
RC 115.673 GL -1.58 GP 29.66 ZAL 151.64 ZAP 130.77 ETS 26.58 ZAE 131.76 ETE 152.41 ZAC 34.42 ETC 196.49 CLP-138.71
   PLANETOCENTRIC CONIC
    C3 25.572 VHL 5.057 DLA -21.85 RAL 301.78 RAD 6568.0 VEL 12.122 PTH 2.17 VHP 4.887 DPA
                                                                                                                          6.64 RAP 296.67 ECC 1.4208
    ENCH AZHTH ENCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 35 32 1515.05
                                                                                                       5 0 47
                                                                                                                        915.1
                                                                                                                                       5.05
                                                                                                                                                   354.10
                                                 1.28
                                                                          167.48
                                                                                          118.29
       90.00
                  10 10 0 5677.08
5 41 29 1302.17
                                                                                                      11 44 37
                                                                                                                        5077.1
                                                                                                                                       28.28
                                                                                                                                                    259.15
                                                 27.79
                                                              267.78
                                                                            175.75
                                                                                            95.68
       90.00
                                                                                                      6 3 11
                                                                                                                        702.2
                                                                                                                                       3.65
                                                                                                                                                    337.68
                                                   -.33
                                                              344.20
                                                                            166.58
                                                                                           119.89
      100.00
                                                                                                      13 16 9
                                                                                                                        4765.2
                                                                                                                                      29.89
                                                                                                                                                    236.22
                                                 29.63
                                                              245.02
                                                                            175.93
                                                                                            94.16
                  11 46 44 5365.19
      100.00
                                                                                            123.96 6 37 28
90.30 14 51 15
                                                                                                                                        .29
                                                 -4.20
                                                              333.20
                                                                           164.17
                                                                                           123.96
                                                                                                                        588.8
                                                                                                                                                    326.99
      110.00
                    6 17 39 1188.81
                                                                            176.14
                                                                                                                       4451.3
                                                                                                                                       33.85
                                                                                                                                                    212.16
                                5051.32
                                                 34.18
                                                              221.39
      110.00
                  13 27 3
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 2788.1 SGR 637.9 SG3 256.2

RRT -.8955 RRF -.9870 RTF ..9069

SGB 2860.2 R23 .3746 R13 -.9146
                                                                                                                   ST 708.8 SR 64.5 S5 182.0
CRT -.4167 CRS .2018 CST -.9594
```

FLIGHT TIME 110.00

-837

SG1 2846.6 SG2 278.0 THA 168.31

TOE -.4036 TRA-1.4690 TC3-2.0620 BAU .7344

RDE -.0234 RRA .1524 RC3 .6027 FAU .08280 FDE -.3079 FRA -.6510 FC3-2.8031 BSP 8782

BDE .4043 BRA 1.4769 BC3 2.1482 FSP

ARRIVAL DATE APR 20 1966 FLIGHT TIME 118.00 LAUNCH DATE DEC 23 1965 DISTANCE 352.984 HELIOCENTRIC CONTÉ RL 147.15 LAL .DD LOL 90.96 VL 28.184 GAL -9.04 A7L 91.42 HCA 169.71 SHA 131.47 ECC .19633 INC 1.4239 VI 30.276
RP 108.68 LAP -.25 LOP 260.67 VP 37.854 GAP 5.37 A7P 88.60 TAL 224.10 TAP 33.81 RCA 105.66 APO 157.28 V2 34.870
RC 118.029 GL -7.92 GP 36.18 7AL 149.53 7AP 129.06 ETS 33.41 7AE 127.57 ETE 148.55 7AC 37.44 ETC 204.04 CLP-141.32 PLANETOCENTRIC CONIC C3 25.222 VHL 5.022 DLA -27.77 RAL 304.59 RAD 6568.0 VEL 12.108 PTH 2.17 VHP 5.327 DPA 13.16 RAP 296.12 ECC 1.4151 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.91 7 3 46 506.9 17.17 174.99 90.00 6 45 19 1106.89 13.93 337.43 190.4 24.26 309.79 790.41 108.34 8 35 48 178.34 90.00 8 22 37 21.96 317.71 108.34 8 35 48 118.30 7 37 35 105.09 12 4 3 123.97 7 43 34 99.82 14 7 26 13.76 320.14 391.3 100.00 173.01 7 21 4 991.34 10.05 326.97 179.70 169.39 27.93 5069.2 258.53 100.00 266.86 10 29 33 5669.24 26.11 315.56 371.5 8.53 110.00 7 27 22 971.53 4.09 321.85 12 39 45 5261.81 4661.8 33.91 228.56 181.42 32.91 237.65 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2912.0 SGR 708.8 SG3 221.7 RRT -.8855 RRF -.9921 RTF .9082 ST 956.2 SR 94.5 SS 291.3 CRT -.9857 CRS .9689 CST -.9526 LSA 1000.3 MSA 85.4 SSA 12.9 TDE -.6963 TRA-1.3653 TC3-2.1697 BAU .7672 RDE .0706 RRA .1165 RC3 .6850 FAU .07035 SGB 2997.0 R23 .3830 R13 -.9174 SG1 2979.6 SG2 321.8 THA 167.69 FOE -.5297 FRA -.4492 FC3-2.4147 BSP 9247 BOE .6999 BRA 1.3703 BC3 2.2752 FSP -726 EL1 960.7 EL2 15.9 ALF 174.43 ARRIVAL DATE APR 22 1966 FLIGHT TIME 120.00 LAUNCH DATE DEC 23 1965 HELIOCENTRIC CONIC DISTANCE 358.917 RL 147.15 LAL .00 LOL 90.96 VL 28.121 GAL -8.80 AZL 93.56 HCA 172.87 SMA 131.01 ECC .19553 INC 3.5575 V1 30.276
RP 108.71 LAP -.44 LOP 263.84 VP 37.798 GAP 5.60 AZP 86.47 TAL 222.68 TAP 35.55 RCA 105.39 APO 156.62 V2 34.860 RC 120.382 GL -19.35 GP 46.37 ZAL 143.86 ZAP 124.29 ETS 42.21 ZAE 120.74 ETE 144.14 ZAC 42.76 ETC 214.11 CLP-144.74 PLANETOCENTRIC CONIC C3 27.097 VHL 5.205 OLA -38.46 RAL 309.81 RAD 6568.1 VEL 12.185 PTH 2.19 VHP 6.240 DPA 23.19 RAP 294.18 ECC 1.4459 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 27.55 4 46 10 11 3 27 5 12 8 9.58 1558.46 23.59 16.87 186.45 121.30 958.5 62.81 121.29 12 37 49 121.30 5 12 8 121.30 5 12 8 121.29 12 37 49 121.30 5 12 8 121.29 12 37 49 27.56 257.86 186.46 5062.4 117.19 5662.39 23.60 265.15 4 46 10 11 3 27 9.58 958.5 27.55 23.59 16.87 186.45 62.81 1558.46 5062.4 27.56 257.86 23.60 265.15 186.46 5662.39 117.19 958.5 27.55 9.58 4 46 10 1558.46 11 3 27 5662.39 186.45 23.59 16.87 62.81 5062.4 27.56 257.86 186.46 265.15 117.19 23.60 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 3041.4 SGR 787.9 SG3 172.8 RRT -.8638 RRF -.9906 RTF ..9153 SGB 3141.8 R23 .3709 R13 -.9261 ST 1506.2 SR 278.7 55 486.2 TOE-1.2965 TRA-1.1319 TC3-2.0785 BAU .7953 ROE .2520 RRA .0367 RC3 .7066 FAU .05300 FOE -.8139 FRA -.2117 FC3-1.6933 BSP 9746 BOE 1.3208 BRA 1.1325 BC3 2.1953 FSP -570 CRT -.9641 CRS .9988 CST -.9751 LSA 1602.3 MSA 123.0 SSA 4.1 EL1 1530.0 EL2 72.9 ALF 169.86 SG1 3117.8 SG2 387.3 THA 167.19 ARRIVAL DATE APR 24 1966 FI IGHT TIME 122.00 LAUNCH DATE DEC 23 1965 DISTANCE 364.810 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 28.057 GAL -8.55 AZL 99.03 HCA 176.00 SMA 130.55 ECC .19474 INC 9.0278 V1 30.276
RP 108.74 LAP -.63 LOP 267.01 VP 37.742 GAP 5.82 AZP 80.99 TAL 221.22 TAP 37.22 RCA 105.13 APO 155.97 V2 34.851
RC 122.731 GL -41.13 GP 62.97 ZAL 127.98 ZAP 114.00 ETS 55.19 ZAE 108.00 ETE 142.98 ZAC 52.60 ETC 229.30 CLP-153.48 PLANETOCENTRIC CONIC C3 43.804 VML 6.618 DLA -57.71 RAL 326.33 RAD 6568.7 VEL 12.852 PTH 2.34 VMP 9.010 DPA 39.06 RAP 287.42 ECC 1.7209 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 47.99 1308.0 32.78 217.98 1908.01 26.47 53.24 4 21 1 13 40 21 37.36 32.79 252.56 4954.6 26.48 257.81 217.99 5554.58 142.64 32.78 1308.0 53.24 217.98 4 21 1 1908.01 13 40 21 5554.58 1908.01 26.47 37.36 4954.6 32.79 252.56 217.99 26.48 257.81 142.64 32.78 1306.0 4 21 1 1908.01 217.98 26.47 53.24 37.36 217.99 32.79 13 40 21 4954.6 5554.58 26.48 257.81 142.64 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3206.7 SGR 749.2 SG3 106.8 RRT -.7725 RRF -.9367 RTF .9450 SGB 3293.1 R23 .3003 R13 -.9533 SGI 3259.6 SGZ 468.1 THA 169.55 ST 2652.1 SR 469.0 SS 756.4 CRT -.9629 CRS .9878 CST -.9932 LSA 2793.5 MSA 147.8 SSA 1.0 TDE-3.0531 TRA -.4382 TC3-1.2626 BAU .7731 RDE .5314 RRA -.1846 RC3 .3854 FAU .02893 FDE-1.1214 FRA .0725 FC3 -.5717 BSP 10389 EL1 2690.3 EL2 124.8 ALF 170.32 BOE 3.0990 BRA .4755 BC3 1.3201 FSP ARRIVAL DATE APR 26 1966 FLIGHT TIME 124.00 LAUNCH DATE DEC 23 1965 DISTANCE 370.425 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 27.993 GAL -8.24 AZL 136.02 MCA 178.87 SMA 130.09 ECC .19333 INC46.0144 VI 30.276
RP 108.76 LAP -.81 LOP 270.17 VP 37.686 GAP 5.96 AZP 43.99 TAL 219.59 TAP 38.46 RCA 104.94 APO 155.24 V2 34.842
RC 125.075 GL -59.57 GP 68.73 ZAL 99.74 ZAP 97.08 ETS 155.45 ZAE 74.34 ETE 232.75 ZAC 67.93 ETC 335.97 CLP 109.87 PLANETOCENTRIC CONIC C3 534.482 VML 23.119 DLA -58.78 RAL 22.12 RAD 6572.4 VEL 25.608 PTH 3.36 VHP 30.496 DPA 54.60 RAP 240.35 ECC 9.7962 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1750.4 290.98 148.77 8 39 20 8.67 65.70 8 0 10 2350.39 1.84 69.46 17 37 53 95.7 290.72 148.77 17 26 17 695.75 1.85 294.48 291.01 143.93 8 39 20 1750.4 8.67 65.70 148.77 148.77 8 39 20 148.77 17 37 53 148.77 8 39 20 148.77 17 37 53 1.84 69.46 290.98 36.07 8 0 10 2350.39 95.7 8.68 290.72 17 26 17 695.75 1.85 294.48 291.01 65.70 1750.4 8.67 8 0 10 2350.39 1.84 69.46 290.98 290.72 95.7 8.68 143.93 17 26 17 695.75 1.85 294.48 291.01 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 380.4 SR 1936.2 SS 849.3 SGT 643.8 SGR 3124.7 SG3 50.1 CRT -.6761 CRS -.9966 CST LSA 2128.7 MSA 288.9 SSA EL1 1953 5 F.2 TOE 1.3916 TRA 1.1192 TC3 -.0206 BAU 1.0649 RRT .3180 RRF .9948 RTF .4131 SGB 3190.4 R23 -.0888 R13 .9960 CRT -.6761 CRS -.9966 CST .6128 ROE-7.2174 RRA 5.1643 RC3 .1476 FAU-.01446 FOE-1.1563 FRA 1.0286 FC3 .0234 BSP 8281 BDE 7.3504 BRA 5.2842 BC3 .1490 FSP -138 5G1 3131.7 SG2 609.0 THA 86.10 EL1 1953.5 EL2 277.8 ALF 97.72

```
ARRIVAL CATE APR 28 1966
                                                                   FLIGHT TIME 126.00
LAUNCH DATE DEC 23 1965
                                                                   CISTANCE 376.875
   HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 27.929 GAL -8.10 A7L 67.41 MCA 182.58 SMA 129.64 ECC .19423 INC22.5916 V1 30.276
RP 108.79 LAP -.99 LOP 273.34 VP 37.631 GAP 6.34 A7P 112.57 TAL 218.58 TAP 40.96 RCA 104.46 APO 154.82 V2 34.834
                      60.12 CP -71.95 TAL 108.24 TAP 107.93 ETS 266.18 TAE 93.01 ETE 186.98 TAC 86.72 ETC 93.38 CLP-173.44
   RC 127.413 GL
   PLANETOCENTRIC CONIC
   C3 150.090 VHL 12.251 CLA 42.34 RAL 302.09 RAC 6570.6 VEL 16.475 PTH 2.87 VHP 13.018 CPA -83.53 RAP 90.76 ECC 3.4701
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.10 15 47 40 4671.36 -8.76 213.96 202.38 48.40 17 5 32 4071.4 -14.01 208.22
                                                                                       48.40 17 5 32
                                                                                         48.40 23 52 6
48.40 17 5 32
48.40 23 52 6
48.40 17 5 32
48.40 23 52 6
                                                                                                                    2742.9
                                                                                                                                  -13.99
                                                                                                                                               106.29
                                                -8.74
                                                                          202.36
      122.90
                 22 56 23
                               3342.90
                                                            112.03
                                                                                                                    4071.4
                                                                                                                                  -14.01
                                                -8.76
                                                                          202.38
       57.10
                 15 47 40
                              4671.36
                                                            213.96
                22 56 23 3342.90
15 47 40 4671.36
                                                                                                                    2742.9
                                                                                                                                 -13.99
                                                -8.74
                                                            112.03
                                                                          202.36
      122.90
                                                                                                                    4071.4
                                                                          202.38
                                                                                                                                 -14.01
                                                -8.76
       57.10
                                                            213.96
                                                            112.03
                                                                          202.36
                                                                                                                    2742.9
                                                                                                                                 -13.99
                                                                                                                                                106.29
                                                -8.74
      122.90
                 22 56 23 3342.90
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 2545.8 SR 938.2 SS 813.1
CRT -.9831 CRS .9724 CST -.9987
                                                              SGT 3142.7 SGR 1508.3 SG3 72.6
RRT -.9455 RRF -.8921 RTF .9903
    TOE 5.3093 TRA-2.9596 TC3 -.1845 BAU .3734
   RGE-1.8427 RRA 1.9541 RC3 .0241 FAU .01245
FOE 1.5232 FRA -.6475 FC3 -.0718 BSP 10125
                                                                                                                LSA 2827.3 MSA 171.1 SSA
                                                               SGB 3485.9 R23 -.1948 R13 -.9804
                                                                                                                EL1 2708.4 EL2 161.3 ALF 160.01
                                                                SG1 3457.2 SG2 446.4 THA 155.15
   BOE 5.6200 BRA 3.5465 BC3 .1861 FSP
                                                 -233
                                                                                                                          ARRIVAL CATE APR 30 1966
LAUNCH DATE DEC 23 1965
                                                                   FLIGHT TIME 128.00
                                                                   DISTANCE 382.685
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 27.866 GAL -7.82 AZL 78.08 HCA 185.67 SMA 129.19 ECC .19358 INC11.9209 VI 30.276 RP 108.81 LAP -1.17 LOP 276.51 VP 37.577 GAP 6.53 AZP 101.86 TAL 216.82 TAP 42.49 RCA 104.18 APO 154.20 V2 34.826
                      49.17 GP -50.58 ZAL 119.33 ZAP 124.57 ETS 299.21 ZAE 111.49 ETE 209.46 ZAC 72.76 ETC 124.65 CLP-153.30
   RC 129.747 GL
  PLANETOCENTRIC CONIC
   C3 56.801 VHL 7.537 OLA 30.15 RAL 300.69 RAD 6569.0 VEL 13.348 PTH 2.44 VHP 7.291 CPA -69.98 RAP 332.21 ECC 1.9348 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         62.73 18 57 4
62.73 18 57 4
62.73 21 42 20
62.73 18 57 4
62.73 21 42 20
68.27 24 39 24
55.82 20 43 18
                              4077.46
                                               -13.38
                                                                                                                   3477.5
       79.20
                 17 49 7
                                                            170.15
                                                                         186.53
                                                                                                                                -16.93
                 20 43 45
                               3514.57
                                               -13.37
                                                            128.72
                                                                          186.52
                                                                                                                    2914.6
                                                                                                                                  -16.92
                                                                                                                                                121.71
      100.80
                17 49 7 4077.46
20 43 45 3514.57
                                                            170.15
                                                                          186.53
                                                                                                                    3477.5
                                                                                                                                  -16.93
                                                                                                                                                163.14
       79.20
                                              -13.38
      100.80
                                              -13.37
                                                            128.72
                                                                          186.52
                                                                                                                    2914.6
                                                                                                                                 -16.92
                                                                                                                                                121.71
                23 50 36 2928.74
19 41 27 3711.28
                                              -27.06
                                                              90.95
                                                                          193.15
                                                                                                                    2328.7
                                                                                                                                  -29.76
                                                                                                                                                 82.81
      110.00
                                                            135.80
                                                                          178.81
                                                                                                                                   -4.92
                                                                                                                                                129.58
                                                 - .44
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SCT 3563.4 SGR 351.9 SG3 137.5
RRT .1758 RRF .4916 RTF .9425
SGB 3580.8 R23 .3295 R13 .9430
SGI 3564.0 SG2 346.4 THA 1.00
                                                                                                                ST 2248.4 SR 240.8 SS 734.6
CRT .8273 CRS -.9085 CST -.9864
   TOE 2.7940 TRA-2.7908 TC3 -.9765 BAU .7460
   ROE .3058 RRA .2373 RC3 -.1075 FAU .03864
   FOE 1.5119 FRA -.7402 FC3 -.5890 BSP 11285
                                                                                                               LSA 2371.2 MSA 174.8 55A
                                                                                                                                                  1.3
   BOE 2.8107 BRA 2.8009 BC3 .9824 FSP
                                                                                                                EL1 2257.3 ELZ 134.7 ALF
                                                                                                                                                   5.08
                                                                   FLIGHT TIME 130.00
                                                                                                                          ARRIVAL CATE MAY 2 1966
LAUNCH DATE DEC 23 1965
                                                                  DISTANCE 388.540
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 27.802 GAL -7.54 AZL 81.20 MCA 188.81 SMA 128.74 ECC .19316 INC 8.8018 V1 30.276 RP 108.84 LAP -1.34 LOP 279.67 VP 37.523 GAP 6.73 AZP 98.70 TAL 215.25 TAP 44.07 RCA 103.88 APO 153.61 V2 34.819 RC 132.074 GL 42.06 GP -36.84 ZAL 124.33 ZAP 134.98 ETS 308.79 ZAE 120.20 ETE 206.75 ZAC 64.75 ETC 133.39 CLP-152.03
   PLANETOCENTRIC CONIC
   C3 39.625 VHL 6.295 DLA 23.17 RAL 302.37 RAD 6568.5 VEL 12.688 PTH
                                                                                           2.31 VHP 6.045 OPA -56.27 RAP 324.77 ECC 1.6521
   LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         78.34 22 45 47
61.68 18 4 2
79.61 24 19 38
60.18 19 4 7
82.67 2 2 30
56.40 19 34 33
                                                                                                                   2607.5
                                                                                                                                -27.34
                                                                                                                                              102.86
                21 52 19
16 53 58
                               3207.45
                                              -25.99
                                                                        184.97
       90.00
                                                            111.27
                                                                         175.32
                                                                                                                    3604.6
                                                                                                                                  -3.60
                                                                                                                                               165.60
                                                            172.23
                              4204.56
                                                 .19
       90.00
                                                                                                                                 -29.33
                                                                                                                    2287.7
                                                                                                                                                79.60
                                              -28.19
                                                             88.22
                                                                         185.46
                 23 31 30 2887.65
      100.00
                17 57 28
                                                                                                                                               149.56
                                                                                                                    3399.6
                               3999.59
                                                2.14
                                                            156.09
                                                                       174.23
                                                                                                                                  -1.84
      100.00
                                              -33.48
                                                             64.38
                                                                        186.42
                                                                                                                    1961.1
                                                                                                                                 -34.13
                                                                                                                                                55.19
                   1 19 49
                              2561.09
      110.00
                                                                        171.40
                                                            145.63
                                                                                                                  3298.9
                 18 29 34
                                3898.92
                                                6.70
                                                                                                                                   2.24
                                                                                                                                               139.39
      110.00
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 3640.8 SGR 320.2 SG3 182.4
RRT .4513 RRF .7520 RTF .9218
SGB 3654.8 R23 .3736 R13 .9230
    TOE 2.0277 TRA-2.4962 TC3-1.5362 BAU .8173
                                                                                                                ST 1989.9 SR 245.0 SS 707.7
   ROE .2668 RRA .1092 RC3 -.1417 FAU .05331
FOE 1.4689 FRA -.7286 FC3-1.1648 BSP 11478
                                                                                                               CRT .8704 CRS -.9573 CST -.9756
                                                                                                               LSA 2118.0 MSA 186.4 SSA
                                                                                                                                                 2.4
                                                                SG1 3643.7 SG2 285.5 THA 2.29
                                                                                                               EL1 2001.3 EL2 119.9 ALF
   BOF 2.0452 BRA 2.4986 BC3 1.5427 FSP
                                                   -617
                                                                                                                          ARRIVAL DATE MAY 4 1966
LAUNCH DATE DEC 23 1965
                                                                   FLIGHT TIME 132.00
  HELIOCENTRIC CONIC
                                                                   DISTANCE 394.396
       187.15 LAL .00 LOL 90.96 VL 27.739 GAL -7.26 AZL 82.68 HCA 191.97 SMA 128.31 ECC .19287 INC 7.3170 V1 30.276
108.86 LAP -1.51 LOP 282.83 VP 37.470 GAP 6.93 AZP 97.16 TAL 213.68 TAP 45.65 RCA 103.56 APO 153.05 VZ 34.812
   RL 147.15 LAL
   RC 134.395 GL 37.73 GP -28.29 TAL 126.51 TAP 141.40 ETS 315.27 TAE 124.54 ETE 202.55 TAC 60.79 ETC 139.30 CLP-152.57
  PLANETOCENTRIC CONIC
   C3 32.793 VHL 5.727 OLA 19.16 RAL 304.20 RAD 6568.3 VEL 12.416 PTH 2.24 VHP 5.640 OPA -47.49 RAP 323.20 ECC 1.5397
                                            INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                                         86.25 23 38 55
62.01 17 23 55
                                              -28.09
                                                            94.93
                                                                        181.97
                                                                                                                   2379.4
                                                                                                                                -28.31
                                                                                                                                                86.28
                22 49 16 2979.42
       90.00
                                                                                                                    3737.0
                                                                                                                                    .67
                                                                                                                                               172.99
                 16 11 38
                                4337.01
                                                 4.45
                                                            179.64
                                                                          172.66
       90.00
                                                                                         87.48 1 11 1
60.65 18 29 42
90.71 2 39 59
57.06 19 10 6
                                                                                                                    2079.0
                                                                                                                                  -29.83
                                                                                                                                                64.13
                   0 26 22 2678.96
                                               -29.80
                                                             72.94
                                                                          182.07
      100.00
                                                                                                                    3512.7
                                                                                                                                   1.99
                                                                                                                                               155.77
                 17 21 9 4112.71
                                                 5.95
                                                            162.32
                                                                          171.84
      100.00
                   2 0 14 2385.33
                                               -34.18
                                                             50.72
                                                                        182.15
                                                                                                                    1785.3
                                                                                                                                -33.70
                                                                                                                                                41.51
      110.00
                 18 3 47
                                3979.10
                                                9.70
                                                            149.91
                                                                          169.55
                                                                                                                    3379.1
                                                                                                                                   5.29
                                                                                                                                               143.59
      110.00
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                             ST 1847.9 SR 210.9 55 675.5
CRT .8550 CRS -.9598 CST -.9661
    TOE 1.6910 TRA-2.3289 TC3-1.9437 BAU .8536
                                                             SGT 3728.7 SGR 263.2 SG3 204.8
RRT .4216 RRF .7317 RTF .9109
SGB 3738.0 R23 .3816 R13 .9117
    ROE .2089 RRA .0879 RC3 -.1137 FAU .05972
   FDE 1.3687 FRA -.6563 FC3-1.5766 BSP 11672
BDE 1.7039 BRA 2.3305 BC3 1.9470 FSP -683
```

SG1 3730.4 SG2 238.6 THA 1.71

LSA 1969.2 MSA 194.2 SSA 3.7

EL1 1856.7 EL2 108.9 ALF 5.59

JPL TM 33-99

```
ARRIVAL DATE MAY 6 1966
                                                                  FLIGHT TIME 134.00
LAUNCH DATE DEC 23 1965
                                                                  DISTANCE 400.245
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 27.676 GAL -6.97 AZL 83.55 HCA 195.13 SMA 127.87 ECC .19269 INC 6.4458 V1 30.276
RP 108.87 LAP -1.68 LOP 286.00 VP 37.418 GAP 7.13 AZP 96.22 TAL 212.08 TAP 47.21 RCA 103.23 APO 152.51 V2 34.806
   RC 136.709 GL 34.92 GP -22.68 ZAL 127.26 ZAP 145.68 ETS 320.16 ZAE 126.82 ETE 198.93 ZAC 59.08 ETC 143.79 CLP-153.53
   PLANETOCENTRIC CONIC
    C3 29.022 VHL 5.387 DLA 15.74 RAL 306.01 RAD 6568.2 VEL 12.264 PTH 2.21 VHP 5.499 DPA -41.53 RAP 323.28 ECC 1.4776
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                2254.8
                                                                                                                               -27.89
                                                                                      90.81 24 8 53
                                                                       180.37
       90.00
                  23 21 19 2854.80
                                              -28.31
                                                           85.83
                                                                                                                                             176.53
                 15 54 2 4400.27

0 56 6 2561.82

17 5 52 4168.47

2 25 20 2282.61
                                                                                                 17 7 22
                                                                                                                  3400.3
                                                                                                                                  2.71
                                                                         172.07
                                                                                         62.37
                                                6.46
                                                           183.20
       90.00
                                                                                                                                               55.48
                                                                                                 1 38 47
                                                                                                                  1961.8
                                                                                                                                -29.22
                                                                         180.33
                                                                                         92.06
                                                            64.23
      100.00
                                              -29.83
                                                                                        61.05 18 15 21
95.43 3 3 23
57.50 19 0 7
                                                                                                                                             158.84
                                                                         171.35
                                                                                                                  3568.5
                                                                                                                                3.88
                                                           165.43
                                                7.80
      100.00
                                                                                                                                              33.67
                                                                                                                  1682.6
                                                                                                                               -32.68
                                                                         180.02
                                                            42.72
                                             ~33.80
      110.00
                                                                         169.28
                                                                                                                  3420.5
                                                                                                                                 6.85
                                                                                                                                              145.77
                                             11.22
                                                           152.14
                 17 53 7 4020.45
      110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 3827.4 SGR 220.9 SG3 214.9
RRT .3200 RRF .6353 RTF .9044
                                                                                                               ST 1763.8 SR 189.0 S5 645.5
CRT .8396 CRS -.9600 CST -.9578
    TOE 1.5043 TRA-2.2173 TC3-2.2781 BAU .8843
    ROE .1759 RRA .0798 RC3 -.0717 FAU .06203
                                                                                                               LSA 1877.1 MSA 200.0 SSA 5.0
                                                               SGB 3833.8 R23 .3642 R13 .9047
    FOE 1.2636 FRA -.5719 FC3-1.8505 BSP 12023
                                                                                                               EL1 1771.0 EL2 102.2 ALF 5.16
                                                               SG1 3828.1 SG2 209.3 THA 1.06
    BDE 1.5146 BRA 2.2188 BC3 2.2793 FSP -715
                                                                                                                         ARRIVAL DATE MAY 8 1966
                                                                   FLIGHT TIME 136.00
LAUNCH DATE DEC 23 1965
                                                                  DISTANCE 406.085
  HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 27.613 GAL -6.68 AZL 84.13 HCA 198.29 SMA 127.45 ECC .19262 INC 5.8702 V1 30.276
RP 108.89 LAP -1.84 LOP 289.16 VP 37.367 GAP 7.32 AZP 95.58 TAL 210.46 TAP 48.75 RCA 102.90 APO 152.00 V2 34.801
    RC 139.015 GL 33.00 GP -18.79 ZAL 127.19 ZAP 148.79 ETS 323.93 ZAE 128.07 ETE 196.07 ZAC 58.64 ETC 147.32 CLP-154.60
   PLANETOCENTRIC CONIC
    C3 26.524 VHL 5.150 DLA 15.26 RAL 307.81 RAD 6568.1 VEL 12.161 PTH 2.18 VHP 5.465 DPA -37.22 RAP 324.08 ECC 1.4365 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 23 42 34 2777.97
15 47 8 4432.26
1 16 10 2488.82
17 0 10 4196.65
2 42 57 2217.29
17 49 52 4040.94
                                                                                                                2178.0
                                                                                        93.61 24 28 52
62.61 17 1 0
                                                                                                                                                71.64
                                                                                                                                -27.31
                                               -28.10
                                                            80.22
                                                                        179.77
       90.00
                                                                                                                                               178.32
                                                                                                                   3832.3
                                                                                                                                  3.74
                                                                         172.29
                                                            185.01
       90.00
                                                7.46
                                                                         179.65
                                                                                         94.88
                                                                                                    1 57 39
                                                                                                                   1888.8
                                                                                                                                 -28.54
                                                                                                                                               50.17
                                               -29.53
                                                             58.83
      100.00
                                                                                         61.30 18 10 6
                                                                                                                                              160.39
                                                                         171.61
                                                                                                                   3596.6
                                                                                                                                  4.82
                                                8.72
                                                           167.01
      100.00
                                                                                                   3 19 54
                                                                                                                   1617.3
                                                                                                                                 -31.75
                                                                                                                                               28.80
                                               -33.27
                                                             37.70
                                                                         179.14
                                                                                         98.36
      110.00
                                                                                         57.74 18 57 13
                                                                                                                   3440.9
                                                                                                                                  7.62
                                                                                                                                              146.86
                                                                         169.67
                                                            153.26
                                              11.97
      110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 1717.6 SR 178.9 S5 622.1
CRT .8330 CRS -.9629 CST -.9509
                                                               SGT 3927.1 SGR 198.6 SG3 218.4
RRT .1902 RRF .4934 RTF .8997
SGB 3932.1 R23 .3279 R13 .8999
    TOE 1.3933 TRA-2.1264 TC3-2.5699 BAU .9113
    ROE .1592 RRA .0732 RC3 -.0296 FAU .06221
FDE 1.1733 FRA -.4858 FC3-2.0307 BSP 12374
                                                                                                              LSA 1824.1 MSA 204.4 SSA
                                                                                                                                                  6.3
                                                                                                               ELI 1724.1 ELZ 98.6 ALF 4.98
                                                               SG1 3927.3 SG2 194.9 THA
    BOE 1.4024 BRA 2.1276 BC3 2.5701 FSP -727
                                                                                                 .55
                                                                                                                        ARRIVAL DATE MAY 10 1966
                                                                   FLIGHT TIME 138.00
LAUNCH DATE DEC 23 1965
                                                                  DISTANCE 411.915
   RL 147.15 LAL ... OD LOL 90.96 VL 27.551 GAL -6.38 A7L 84.54 MCA 201.45 SMA 127.03 ECC .19265 INC 5.4595 V1 30.276
RP 108.90 LAP -1.99 LOP 292.32 VP 37.316 GAP 7.52 A7P 95.08 TAL 208.82 TAP 50.27 RCA 102.56 APO 151.50 V2 34.797
RC 141.312 GL 31.63 GP -15.96 ZAL 126.59 ZAP 151.20 ETS 326.87 ZAE 128.80 ETE 193.82 ZAC 58.96 ETC 150.16 CLP-155.71
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 24.676 VHL 4.967 DLA 14.36 RAL 309.63 RAD 6568.0 VEL 12.085 PTH 2.16 VMP 5.483 DPA -33.92 RAP 325.27 ECC 1.4061
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                2128.4
                                                                                                                                -26.80
                  0 1 53 2728.39
15 46 16 4446.16
1 30 53 2441.34
16 59 57 4208.45
                                                                                         95.40
                                                                                                   0 47 21
                                               -27.84
                                                             76.62
                                                                        179.81
        90.00
                                                                                                 17 0 22
                                                                                                                                   4.18
                                                                                                                                              179.09
                                                                                                                   3846.2
                                                            185.80
                                                                         172.92
                                                                                         62.72
                                                7.90
        90.00
                                                                                                                                -27.97
                                                                                                                                               46.75
                                                                                                                   1841.3
                                                                                         96.69
                                                                                                  2 11 34
                                               -29.20
                                                             55.34
                                                                         179.65
      100.00
                                                                                         61.41 18 10 5
100.24 3 32 32
                                                                                                                   3608.4
                                                                                                                                  5.22
                                                                                                                                              161.05
                                                            167.68
                                                                         172.27
      100.00
                                                9.11
                                                                                                                                -31.03
                                           -32.79
12.24
                                                                                                                  1574.1
                                                                         179.03
                                                                                        100.24
                                                             34.42
                   2 56 17 2174.11
17 51 2 4048.44
      110.00
                                                                                        57.83 18 58 30
                                                                                                                                   7.90
                                                           153.67
                                                                                                                   3448.4
                                                                        170.41
      110.00
                  17 51 2
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 1697.8 SR 176.8 SS 605.6
CRT .8362 CRS -.9685 CST -.9454
                                                               SGT 4023.9 SGR 192.3 SG3 218.4
RRT .0668 RRF .3406 RTF .8960
SGB 4028.5 R23 .2812 R13 .8960
    TOE 1.3271 TRA-2.0423 TC3-2.8355 BAU .9354
    ROE .1519 RRA .0660 RC3 .0091 FAU .06122
FOE 1.1001 FRA -.4012 FC3-2.1481 BSP 12682
                                                                                                               LSA 1799.2 MSA 207.8 55A 7.6
                                                                                                               EL1 1704.2 EL2 96.6 ALF 4.99
    BOE 1.3358 BRA 2.0434 BC3 2.8355 FSP -725
                                                               SG1 4023.9 SG2 191.8 THA
                                                                                                 .18
                                                                                                                         ARRIVAL DATE MAY 12 1966
                                                                   FLIGHT TIME 140.00
LAUNCH DATE DEC 23 1965
                                                                   DISTANCE 417.735
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 27.489 GAL -6.07 AZL 84.85 HCA 204.61 SMA 126.62 ECC .19280 INC 5.1501 VI 30.276 RP 108.92 LAP -2.14 LOP 295.48 VP 37.267 GAP 7.71 AZP 94.68 TAL 207.17 TAP 51.78 RCA 102.20 APO 151.03 V2 34.793
    RC 143.598 GL 30.62 GP -13.83 7AL 125.63 7AP 153.19 ETS 329.20 7AE 129.23 ETE 192.05 7AC 59.77 ETC 152.48 CLP-156.81
   PLANETOCENTRIC CONIC
    C3 23.208 VHL 4.817 DLA 13.87 RAL 311.49 RAD 6567.9 VEL 12.024 PTH 2.15 VHP 5.528 DPA -31.27 RAP 326.71 ECC 1.3819
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 13 37 2696.30 -27.61 74.29 180.31 96.54 0 58 34 2096.3 -26.42 65 83
                                                                                         3848.2
                                                                                                                                   4.25
                                                 7.96
                                                            185.92
                                                                          173.82
                  15 49 20
                                4448.22
        90.00
                                                                                                                    1810.3
                                                                                                                                 -27.54
                                                                                                                                                44.54
                   1 42 18 2410.34
                                                             53.07
                                                                         180.12
       100.00
                                               -28.93
                                                                                                                                               161.10
                                                                                                                    3609.4
                                                                                                                                   5.25
                  17 3 21
3 6 59
                                                 9.14
                                                            167.73
                                                                         173.19
                                4209.41
       100.00
                                                                                                                                 -30.50
                                                                                                                                                23.57
                                                                                                                    1545.4
                  3 6 59 2145.37
17 55 10 4047.15
                                                                                        101.47
                                               -32.42
                                                             32.26
                                                                         179.43
       110.00
                                                                                                                                 7.86
                                                                                                                                              147.19
                                                                                                                    3447.1
                                               12.19
                                                            153.60
                                                                          171.36
       110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              SGT 4122.6 SGR 196.3 SG3 216.8 ST 1693.5 SR 179.5 SS 593.1 RRT -.0272 RRF .2073 RTF .8933 CRT .8461 CR5 -.9754 CST -.9413 SGB 4127.2 R23 -.2318 R13 -.8933 LSA 1791.0 MSA 210.0 SSA 8.9 SG1 4122.6 SG2 196.2 THA 179.93 EL1 1700.3 EL2 95.3 ALF 5.14
     TOE 1.2860 TRA-1.9630 TC3-3.0916 BAU .9593
     ROE .1499 RRA .0577 RC3 .0434 FAU .05978
     FOE 1.0378 FRA -.3236 FC3-2.2302 BSP 13047
```

BOE 1.2947 BRA 1.9639 BC3 3.0919 FSP -723

```
ARRIVAL CATE MAY 14 1966
                                                                         FLIGHT TIME 142.00
LAUNCH DATE DEC 23 1965
                                                                        DISTANCE 423.550
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 27.427 GAL -5.75 AZL 85.09 HCA 207.77 SHA 126.21 ECC .19306 INC 4.9073 V1 30.276 RP 108.93 LAP -2.28 LOP 298.64 VP 37.219 GAP 7.90 AZP 94.34 TAL 205.49 TAP 53.26 RCA 101.84 APO 150.58 V2 34.790
    RC 145.874 CL 29.86 CP -12.18 7AL 124.37 ZAP 154.90 ETS 331.06 ZAE 129.50 ETE 190.63 ZAC 60.92 ETC 154.43 CLP-157.88
   PLANETOCENTRIC CONIC
    C3 21.985 VHL 4.689 DLA 13.68 RAL 313.41 RAD 6567.9 VEL 11.973 PTH 2.13 VHP 5.590 DPA -29.04 RAP 328.32 ECC 1.3618
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 22 57 2676.53 -27.45 72.87 181.14 97.24 1 7 34 2076.5 -26.16 64.44
                   15 55 19 4441.68
1 51 30 2390.98
17 9 27 4202.46
3 15 54 2126.88
18 1 32 4039.33
                                                                                                                                                           178.84
                                                                                                           17 9 21
                                                                                                                             3841.7
                                                                                                                                             4.04
                                                     7.76
                                                                 185.55
                                                                                174.92
                                                                                                 62.68
        90.00
                                                                                                          2 31 21
                                                                                                                             1791.0
                                                                                                                                                            43.18
                                                   -28.75
                                                                  51.66
                                                                                180.93
                                                                                                 98.58
                                                                                                                                            -27.26
       100.00
                                                                                                61.35 18 19 30
102.25 3 51 21
57.72 19 8 52
                                                    8.91
                                                                 167.34
                                                                               174.30
                                                                                                                             3602.5
                                                                                                                                              5.02
                                                                                                                                                           160.71
       100.00
                                                                             180.20
                                                  -32.16
                                                                  30.88
                                                                                            102.25
                                                                                                                             1526.9
                                                                                                                                                            22.25
       110.00
                                                  11.91
                                                                 153.17
                                                                                172.50
                                                                                                                             3439.3
                                                                                                                                              7.56
                                                                                                                                                           146.77
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                         ST 1750.7 SR 188.9 SS 617.3
CRT .8705 CRS -.9855 CST -.9392
                                                                     SGT 4146.5 SGR 212.6 SG3 208.8
RRT -. 0884 RRF .1381 RTF .8796
    TOE 1.3140 TRA-1.8329 TC3-3.2522 BAU .9562
    RDE .1538 RRA .0520 RC3 .0800 FAU .05521
                                                                     SGB 4152.0 R23 -.2169 R13 -.8796
                                                                                                                         LSA 1853.0 MSA 218.6 55A 9.6
    FOE 1.0431 FRA -. 1891 FC3-2.1740 BSP 12219
                                                                     SG1 4146.6 SG2 211.8 THA 179.74
                                                                                                                        EL1 1758.4 EL2 92.6 ALF 5.38
    BOE 1.3230 BRA 1.8337 BC3 3.2532 FSP -594
                                                                         FLIGHT TIME 144.00
                                                                                                                                    ARRIVAL DATE MAY 16 1966
LAUNCH DATE DEC 23 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 429.346
    RL 147.15 LAL .00 LOL 90.96 VL 27.367 GAL -5.42 A7L 85.29 MCA 210.93 SMA 125.81 ECC .19347 INC 4.7106 V1 30.276 RP 108.93 LAP -2.42 LOP 301.80 VP 37.172 GAP 8.09 A7P 94.04 TAL 203.80 TAP 54.73 RCA 101.47 APO 150.15 V2 34.787
                        29.27 GP -10.86 TAL 122.90 TAP 156.41 ETS 332.55 TAE 129.66 ETE 189.48 TAC 62.30 ETC 156.07 CLP-158.93
    RC 148.138 GL
   PLANETOCENTRIC CONIC
    C3 20.345 VHL 4.577 DLA 13.71 RAL 315.39 RAD 6567.9 VEL 11.930 PTH 2.12 VHP 5.664 DPA -27.12 RAP 330.04 ECC 1.3447 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00 0 30 39 2665.70

90.00 16 3 26 4429.17

100.00 1 59 12 2380.10

100.00 17 17 34 4190.00

110.00 3 23 39 2115.89

110.00 18 9 36 4026.98
                                                                                                                           2065.7
                                                  -27.36
                                                                  72.09
                                                                              182.24
                                                                                                97.62
                                                                                                            1 15 4
                                                                                                                                           -26.02
                                                                                                                                                            63.68
                                                                                176.19
                                                                                                 62.58
                                                                                                           17 17 15
                                                                                                                             3829.2
                                                                                                                                              3.64
                                                                                                                                                           178.14
                                                    7.37
                                                                 184.83
                                                   -28.63
                                                                  50.87
                                                                                182.03
                                                                                                 98.98
                                                                                                           2 38 52
                                                                                                                             1780.1
                                                                                                                                            -27.09
                                                                                                                                                            42.41
                                                                                                61.24 18 27 24
102.71 3 58 54
57.57 19 16 43
                                                     8.51
                                                                 166.64
                                                                                175.57
                                                                                                                             3590.0
                                                                                                                                              4.60
                                                                                                                                                          160 03
                                                  -32.00
                                                                  30.06
                                                                               181.28
                                                                                                                             1515.9
                                                                                                                                            -29.92
                                                                                                                                                            21.47
                                                                                                                             3427.0
                                                                 152.50
                                                                               173.80
                                                                                                                                            7.10
                                                                                                                                                          146.12
                                               11.46
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT CETERMINATION ACCURACY
                                                                     SGT 4293.5 SGR 221.3 SG3 209.4

RRT -.1223 RRF .0463 RTF .8863

SGB 4299.2 R23 -.1562 R13 -.8863
                                                                                                                         ST 1736.9 SR 194.3 SS 589.2
CRT .8807 CRS -.9890 CST -.9374
    TOE 1.2709 TRA-1.7842 TC3-3.5597 BAU .9972
    RDE .1547 RRA .0399 RC3 .1026 FAU .05537
                                                                                                                        LSA 1832.0 MSA 213.1 SSA 11.2
EL1 1745.3 EL2 91.6 ALF 5.64
    FOE .9590 FRA -.1645 FC3-2.2885 BSP 13420
    BOE 1.2803 BRA 1.7846 BC3 3.5612 FSP -676
                                                                     5G1 4293.6 SG2 219.6 THA 179.64
                                                                                                                                  ARRIVAL DATE MAY 18 1966
LAUNCH DATE DEC 23 1965
                                                                       FLIGHT TIME 146.00
                                                                        DISTANCE 435.135
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 27.306 GAL -5.08 AZL 85.45 MCA 214.09 SMA 125.42 ECC .19399 INC 4.5471 VI 30.276
RP 108.94 LAP -2.55 LOP 304.97 VP 37.126 GAP 8.28 AZP 93.77 TAL 202.09 TAP 56.18 RCA 101.09 APO 149.75 VZ 34.786
RC 150.390 GL 28.80 GP -9.79 ZAL 121.23 ZAP 157.78 ETS 333.76 ZAE 129.78 ETE 188.53 ZAC 63.85 ETC 157.48 CLP-159.95
   PLANETOCENTRIC CONIC
    C3 20.039 VHL 4.476 DLA 13.91 RAL 317.45 RAO 6567.8 VEL 11.892 PTH 2.11 VHP 5.746 DPA -25.40 RAP 331.85 ECC 1.3298
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
               TH LNCH TIME L-1 TIME
0 37 6 2662.17
16 13 27 4411.55
2 5 48 2376.12
17 27 27 4172.83
3 30 32 2110.99
18 19 12 4010.73
                                                                                                                                         -25.97
                                                                               183.59
                                                                                                97.74
                                                                                                           1 21 28
                                                                                                                         2062.2
                                                                                                                                                           63.43
        90.00
                                                  -27.32
                                                                 71.84
                                                    6.81
                                                                183.84
                                                                               177.63
                                                                                                 62.45 17 26 59
                                                                                                                             3811.6
                                                                                                                                             3.07
                                                                                                                                                          177.16
        90.00
                                                                               183.38
                                                                                                 99.12
                                                                                                           2 45 24
                                                                                                                            1776.1
                                                                                                                                            -27.03
                                                                                                                                                           42.13
                                                 -28.59
                                                                  50.59
      100.00
                                                                                                61.09 18 37 0
                                                                                                                            3572.8
                                                                               177.02
                                                                                                                                             4.02
                                                                                                                                                         159.08
      100.00
                                                    7.94
                                                                 165.68
                                                                                               102.91 4 5 43
57.39 19 26 3
                                                                  29.70
                                                                               182.63
                                                                                                                            1511.0
                                                                                                                                          -29.82
                                                                                                                                                           21.12
                                                 -31.93
       110.00
                                                                                                                                                         145.26
                                                             151.62
                                                                                                                           3410.7
                                                                                                                                           6.49
       110.00
                                                10.86
                                                                               175.26
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 4387.1 SCR 235.8 SC3 206.0
RRT -.1374 RRF .0007 RTF .8851
SCB 4393.5 R23 -.1237 R13 -.8850
                                                                                                                        ST 1766.9 SR 203.4 SS 587.1
CRT .8987 CRS -.9934 CST -.9373
    TOE 1.2747 TRA-1.6955 TC3-3.8021 BAU 1.0191
                                                                                                                    CRT .8987 CRS -.9934 LS. ....
LSA 1861.0 MSA 211.7 SSA 12.4
EL1 1776.4 EL2 88.7 ALF 5.92
    RDE .1587 RRA .0298 RC3 .1265 FAU .05344
FOE .9222 FRA -.1000 FC3-2.3090 BSP 13774
    BOE 1.2845 BRA 1.6957 BC3 3.8042 FSP
                                                                    SG1 4387.3 SG2 233.6 THA 179.58
                                                                         FLIGHT TIME 148.00
                                                                                                                                   ARRIVAL DATE MAY 20 1966
LAUNCH DATE DEC 23 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 440.915
    RL 147.15 LAL .00 LOL 90.96 VL 27.247 GAL -4.74 AZL 85.59 MCA 217.25 SMA 125.04 ECC .19465 INC 4.4083 V1 30.276
RP 108.94 LAP -2.67 LOP 308.13 VP 37.081 GAP 8.47 AZP 93.51 TAL 200.37 TAP 57.62 RCA 100.70 APO 149.37 V2 34.785
RC 152.629 GL 28.41 GP -8.90 ZAL 119.37 ZAP 159.04 ETS 334.73 ZAE 129.86 ETE 187.75 ZAC 65.54 ETC 158.71 CLP-160.95
   PLANETOCENTRIC CONIC
    C3 19.244 VHL 4.387 DLA 14.26 RAL 319.61 RAD 6567.8 VEL 11.859 PTH 2.10 VHP 5.834 DPA -23.84 RAP 333.73 ECC 1.3167
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 42 39 2664.63 -27.35 72.02 185.17 97.65 1 27 3 2064.6 -26.00 63.61 90.00 16 25 8 4389.90 6.13 182.61 179.24 62.30 17 38 18 3789.9 2.37 175.95
                  2 11 35 2377.81
17 38 53 4151.95
3 36 50 2111.08
18 30 8 3991.44
                                                                  50.71
                                                                               184.96
                                                                                                 99.06
                                                                                                           2 51 13
                                                                                                                             1777.8
                                                                                                                                            -27.06
                                                                                                                                                           42.25
       100.00
                                                  -28.61
                                                    7.25
                                                                 164.51
                                                                               178.63
                                                                                                 60.92 18 48 5
                                                                                                                            3551.9
                                                                                                                                             3.32
                                                                                                                                                          157.93
      100.00
                                                                                                           4 12 1
                                                  -31.93
                                                                  29.71
                                                                               184.21
                                                                                               102.91
                                                                                                                            1511.1
                                                                                                                                           -29.82
                                                                                                                                                           21.13
                                                                                                57.18 19 36 39
       110.00
                                                   10.15
                                                                 150.57
                                                                               176.87
                                                                                                                            3391.4
                                                                                                                                              5.76
                                                                                                                                                          144.24
                                                                  MID-COURSE EXECUTION ACCURACY
SGT 4473.9 SGR 251.1 SG3 202.1
RRT -.1393 RRF -.0260 RTF .8836
SGB 4480.9 R23 -.0984 R13 -.8835
SGB 4474.0 SG2 248.6 THA 179.55
SGI 4474.0 SG2 248.6 THA 179.55
SGI 4474.0 SG2 248.6 THA 179.55
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.2907 TRA-1.5982 TC3-4.0354 BAU 1.0389
```

ROE .1634 RRA .0196 RC3 .1479 FAU .05134 FOE .8932 FRA -.0358 FC3-2.3097 BSP 14067 BOE 1.3010 BRA 1.5983 BC3 4.0381 FSP -656

ARRIVAL DATE MAY 22 1966

JPL TM 33-99

LAUNCH DATE DEC 23 1965

```
HELIOCENTRIC CONIC
                                                                   DISTANCE 446.685
   RL 147.15 LAL .00 LOL 90.96 VL 27.188 GAL -4.38 A7L 85.71 MCA 220.41 SMA 124.66 ECC .19545 INC 4.2883 V1 30.276
RP 108.94 LAP -2.78 LOP 311.29 VP 37.038 GAP 8.66 A7P 93.27 TAL 198.63 TAP 59.04 RCA 100.29 APO 149.02 V2 34.784
   RC 154.855 GL 28.08 GP -8.16 TAL 117.35 TAP 160.21 ETS 335.50 TAE 129.92 ETE 187.09 TAC 67.34 ETC 159.79 CLP-161.91
   PLANETOCENTRIC CONIC
    C3 18.547 VHL 4.307 DLA 14.72 RAL 321.87 RAD 6567.8 VEL 11.829 PTH
                                                                                           2.10 VHP 5.927 OPA -22.39 RAP 335.66 ECC 1.3052
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    1 32 2
                                                                                                                                -26.11
                   0 47 30 2672.26
                                                                                        97.39
                                                                                                                   2072.3
                                                                                                                                                 64.14
       90.00
                                               -27.41
                                                            72.56
                                                                         186.96
                  16 38 18 4364.89
2 16 46 2384.38
                                                                                                                    3764.9
                                                                                                                                               174.55
       90.00
                                                 5.34
                                                            181.20
                                                                          181.03
                                                                                          62.15
                                                                                                   17 51 3
                                                                                                                                   1.57
                                                                                          98.82
                                                                                                     2 56 30
                                                                                                                    1784.4
                                                                                                                                  -27.16
                                                                                                                                                 42.71
      100.00
                                               -28.68
                                                              51.18
                                                                          186.76
                                                                                                                    3528.0
                 17 51 43 4128.00
3 42 42 2115.47
                                                                                         60.75 19 0 31
102.73 4 17 58
                                                                                                                                   2.51
                                                                                                                                               156.61
      100.00
                                                6.46
                                                            163.17
                                                                          180.42
                                                                                                                    1515.5
                                                                                                                                  -29.91
                                                                                                                                                21.44
      110.00
                                              - 32 .00
                                                             30.03
                                                                         186.03
                                                                                          56.97 19 48 26
                                                                                                                                               143.09
                                              9.35
                                                                                                                    3369.7
                                                                                                                                    4.93
      110.00
                 18 42 16 3969.68
                                                            149.40
                                                                         178.65
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 4559.1 SGR 266.3 SG3 198.1
RRT -.1328 RRF -.D407 RTF .8826
SGB 4566.8 R23 -.D776 R13 -.8825
                                                                                                                ST 1857.3 SR 224.2 S5 592.1
CRT .9343 CRS -.9975 CST -.9402
    TOE 1.3142 TRA-1.4947 TC3-4.2659 BAU 1.0586
    ROE .1684 RRA .0093 RC3 .1665 FAU .04927
                                                                                                               LSA 1951.4 MSA 206.0 SSA 14.7
EL1 1869.1 EL2 79.4 ALF 6.44
   FOE .8679 FRA .0249 FC3-2.2999 BSP 14366
BOE 1.3250 BRA 1.4947 BC3 4.2692 FSP -645
                                                                SG1 4559.2 SG2 264.0 THA 179.55
                                                                                                                           ARRIVAL DATE MAY 24 1966
LAUNCH DATE DEC 23 1965
                                                                    FLIGHT TIME 152.00
  HELIOCENTRIC CONIC
                                                                   DISTANCE 452.443
   RL 147.15 LAL .00 LOL 90.96 VL 27.129 GAL -4.02 AZL 85.82 MCA 223.57 SMA 124.29 ECC .19641 INC 4.1829 V1 30.276 RP 108.94 LAP -2.88 LOP 314.46 VP 36.995 GAP 8.85 AZP 93.03 TAL 196.88 TAP 60.45 RCA 99.88 APO 148.70 V2 34.785 RC 157.067 GL 27.78 GP -7.53 ZAL 115.18 ZAP 161.32 ETS 336.10 ZAE 129.98 ETE 186.54 ZAC 69.22 ETC 160.74 CLP-162.85
  PLANETOCENTRIC CONIC
   C3 17.938 VHL 4.235 DLA 15.28 RAL 324.24 RAD 6567.7 VEL 11.803 PTH 2.09 VHP 6.026 DPA -21.01 RAP 337.63 ECC 1.2952 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 51 48 2684.50
16 52 53 4337.04
       90.00
                                              -27.52
                                                             73.44
                                                                          188.98
                                                                                          96.96
                                                                                                    1 36 33
                                                                                                                   2084.5
                                                                                                                                  -26.27
                                                                                                                                                65.00
                                                                                                                    3737.0
                                                                                                                                                173.00
       90.00
                                                                          183.00
                                                                                          62.01
                                                                                                    18 5 10
                                                 4.45
                                                             179.64
                                                                                                                                     .67
                 2 21 29 2395.29
18 5 53 4101.48
3 48 18 2123.64
18 55 34 3945.89
                                                                                                     3 1 24
                                                                                                                                  -27.32
      100.00
                                              -28.79
                                                              51.98
                                                                          188.78
                                                                                          98.42
                                                                                                                    1795.3
                                                                                                                                                 43.48
                                                                                          60.58 19 14 15
                                                             161.70
                                                                          182.38
                                                                                                                    3501.5
                                                                                                                                                155.15
      100.00
                                                5.57
                                                                                                                                   1.61
                                                                                        102.39 4 23 42
56.76 20 1 19
      110.00
                                              -32.12
                                                                                                                    1523.6
                                                                                                                                                 22.02
                                                              30.64
                                                                          188.07
                                                                                                                                  -30.08
                                                             148.13
                                                                                                                    3345.9
                                                                                                                                    4.03
                                                                                                                                                141.84
      110.00
                                                8.46
                                                                          180.61
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                SGT 4641.4 SGR 281.3 SG3 194.2
RRT -.1201 RRF -.0461 RTF .8819
SGB 4649.9 R23 -.0607 R13 -.8819
                                                                                                                ST 1915.1 SR 235.1 SS 597.4
CRT .9500 CRS -.9970 CST -.9429
   TOE 1.3460 TRA-1.3838 TC3-4.4893 BAU 1.0775
   ROE .1738 RRA -.0010 RC3 .1824 FAU .04721
FDE .8468 FRA .0830 FC3-2.2784 BSP 14646
                                                                                                                LSA 2009.7 MSA 201.5 SSA 15.8
   BDE 1.3572 BRA 1.3838 BC3 4.4931 FSP -632
                                                                SG1 4641.5 SG2 279.2 THA 179.58
                                                                                                                EL1 1928.1 EL2 72.9 ALF
                                                                                                                                                  6.66
                                                                   FLIGHT TIME 154.00
                                                                                                                          ARRIVAL DATE MAY 26 1966
LAUNCH DATE DEC 23 1965
                                                                  DISTANCE 458.191
   RL 147.15 LAL .00 LOL 90.96 VL 27.072 GAL -3.64 A7L 85.91 HCA 226.73 SMA 123.93 ECC .19752 INC 4.0891 V1 30.276
RP 108.94 LAP -2.98 LOP 317.62 VP 36.954 GAP 9.05 A7P 92.80 TAL 195.11 TAP 61.85 RCA 99.45 APO 148.40 V2 34.786
RC 159.265 GL 27.49 GP -7.00 7AL 112.85 7AP 162.36 ETS 336.55 7AE 130.03 ETE 186.07 7AC 71.17 ETC 161.59 CLP-163.77
  PLANETOCENTRIC CONIC
   C3 17.413 VHL 4.173 DLA 15.93 RAL 326.72 RAD 6567.7 VEL 11.781 PTH
                                                                                           2.08 VHP 6.129 CPA -19.70 RAP 339.64 ECC 1.2866
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                0 55 41 2700.98
17 8 48 4306.76
                                                                                                                   2101.0
                                                                                                                                                66.16
                                               -27.65
                                                             74.63
                                                                         191.20
                                                                                         96.38
                                                                                                    1 40 42
                                                                                                                               -26.48
       90.00
                                                                                                                    3706.8
                                                            177.94
                                                                         185.17
                                                                                          61.88 18 20 35
                                                                                                                                   -.31
                                                                                                                                               171.31
       90.00
                                                3.48
                   2 25 51 2410.16
18 21 19 4072.81
                                                                                                                    1810.2
                                                                                                                                  -27.54
                                                                                                                                                44.53
                                              -28.93
                                                              53.06
                                                                         191.02
                                                                                          97.87
                                                                                                    3 6 2
      100.00
                                                4.61
                                                                                          60.43 19 29 12
                                                                                                                    3472.8
                                                                                                                                   .64
                                                                                                                                               153.58
      100.00
                18 21 19
                                                            160.12
                 3 53 43 2135.26
19 9 57 3920.48
                                                                                       101.90 4 29 18
56.55 20 15 17
                                                                                                                    1535.3
                                                                                                                                 -30.31
                                                                                                                                                22.85
                                              -32.28
                                                             31.50
                                                                         190.34
      110.00
                                                                       182.76
                                                                                                                3320.5
                                                            146.77
                                                                                                                                  3.06
                                                                                                                                               140.51
      110.00
                                               7.51
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 4716.5 SGR 295.9 SG3 190.0
RRT -.1029 RRF -.0434 RTF .8810
                                                                                                               ST 1982.8 SR 246.2 55 605.1
CRT .9640 CRS -.9950 CST -.9462
   TOE 1.3867 TRA-1.2620 TC3-4.6979 BAU 1.0946
   ROE .1793 RRA -.0111 RC3 .1958 FAU .04506
FDE .8301 FRA .1414 FC3-2.2403 BSP 14869
                                                                                                              LSA 2078,3 MSA 196.3 SSA 16.8
                                                              SGB 4725.8 R23 -. 0479 R13 -. 8810
   BOE 1.3983 BRA 1.2621 BC3 4.7020 FSP -616
                                                               SG1 4716.6 SG2 294.3 THA 179.63
                                                                                                                EL1 1997.0 EL2 65.0 ALF
                                                                                                                                                   6.83
                                                                                                                          ARRIVAL DATE MAY 28 1966
LAUNCH DATE DEC 23 1965
                                                                    FLIGHT TIME 156.00
  HELIOCENTRIC CONIC
                                                                   DISTANCE 463.928
   RL 147.15 LAL .00 LOL 90.96 VL 27.015 GAL -3.25 A7L 86.00 MCA 229.90 SMA 123.57 ECC .19880 INC 4.0045 V1 30.276 RP 108.93 LAP -3.06 LOP 320.78 VP 36.914 GAP 9.25 A7P 92.58 TAL 193.33 TAP 63.23 RCA 99.00 APO 148.14 V2 34.788
   RC 161.449 GL 27.21 GP -6.53 7AL 110.38 7AP 163.36 ETS 336.86 7AE 130.09 ETE 185.66 7AC 73.18 ETC 162.35 CLP-164.66
  PLANETOCENTRIC CONIC
   C3 16.970 VHL 4.120 DLA 16.64 RAL 329.32 RAD 6567.7 VEL 11.762 PTH 2.08 VHP 6.237 DPA -18.44 RAP 341.67 ECC 1.2793
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   0 59 13 2721.39
                                               -27.79
                                                             76.11
                                                                         193.65
                                                                                         95.65
                                                                                                    1 44 34
                                                                                                                   2121.4
                                                                                                                                  -26.72
                                                                                                                                                67.61
                                                                                                    18 37 16
                  17 26 2
                               4274.45
                                                2.44
                                                            176.13
                                                                          187.55
                                                                                          61.78
                                                                                                                    3674.5
                                                                                                                                  -1.35
                                                                                                                                                169.51
       90.00
                   2 29 59 2428.69
18 37 57 4042.38
                                                                                          97.17 3 10 27
60.30 19 45 19
                                               -29.10
                                                             54.41
                                                                          193.49
                                                                                                                    1828.7
                                                                                                                                  -27.80
                                                                                                                                                45.85
      100.00
                  18 37 57
                                                 3.59
                                                            158.44
                                                                          186.91
                                                                                                                    3442.4
                                                                                                                                   -.39
                                                                                                                                                151.91
      100.00
                  3 59 3 2150.02
19 25 22 3893.81
                                                                                         101.28 4 34 53
56.37 20 30 16
                                                                                                                    1550.0
                                                                                                                                 -30.59
      110.00
                                              -32.49
                                                              32.61
                                                                          192.85
                                                                                                                                                 23.90
      110.00
                                                6.51
                                                            145.36
                                                                          185.10
                                                                                                                    3293.8
                                                                                                                                   2.05
                                                                                                                                                139.12
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                SGT 4793.9 SGR 309.7 SG3 186.1
RRT -.0036 RRF -.0384 RTF .8813
SGB 4803.9 R23 -.0357 R13 -.8813
                                                                                                                ST 2054.5 SR 257.4 SS 611.6
   TOE 1.4311 TRA-1.1355 TC3-4.9007 BAU 1.1128
                                                                                                             CRT .9754 CRS -.9917 CST -.9499
LSA 2150.5 MSA 189.9 SSA 17.8
EL1 2069.8 EL2 56.4 ALF 6.97
   RDE .1849 RRA -.0209 RC3 .2062 FAU .04310
FDE .8129 FRA .1942 FC3-2.1987 BSP 15148
```

FLIGHT TIME 150.00

SG1 4794.0 SG2 308.6 THA 179.69

BOE 1.4430 BRA 1.1356 BC3 4.9050 FSP -606

```
ARRIVAL DATE MAY 30 1966
                                                                                          FLIGHT TIME 158.00
LAUNCH DATE DEC 23 1965
                                                                                          DISTANCE 469.652
    HELIOCENTRIC CONIC
     RL 147.15 LAL .00 LOL 90.96 VL 26.958 GAL -2.86 AZL 86.07 HCA 233.06 SMA 123.22 ECC .20026 INC 3.9274 VI 30.276
RP 108.92 LAP -3.14 LOP 323.95 VP 36.875 GAP 9.46 AZP 92.36 TAL 191.55 TAP 64.60 RCA 98.54 APO 147.90 V2 34.791
     RC 163.619 GL 26.90 GP -6.13 ZAL 107.78 ZAP 164.31 ETS 337.04 ZAE 130.15 ETE 185.32 ZAC 75.25 ETC 163.03 CLP-165.53
    PLANETOCENTRIC CONIC
     C3 16.610 VHL 4.076 DLA 17.41 RAL 332.05 RAD 6567.7 VEL 11.747 PTH 2.07 VHP 6.349 OPA -17.21 RAP 343.73 ECC 1.2734
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                        2145.5
                                                                                                                     94.78 1 48 15
                                                                                                                                                                           -26.99
                       1 2 29 2745.53
17 44 30 4240.44
          90.00
                                                               -27.94
                                                                                 77.86
                                                                                                 196.32
                                                                                                                                                                                                167.61
                                                                                                                                    18 55 11
                                                                                                                                                           3640.4
                                                                                                                                                                              -2.45
                                                                                                                        61.71
                                                                                 174.24
                                                                                                   190.14
                                                                 1.34
          90.00
                                                                                                                                                                                                47.42
                                                                                                                                      3 14 46
                                                                                                                                                           1850.7
                                                                                                                                                                              -28.09
                       2 33 55 2450.66
18 55 45 4010.54
                                                                                                                        96.34
                                                               -29.27
                                                                                  56.02
                                                                                                   196.18
         100.00
                                                                                                                        60.20 20 2 36
100.52 4 40 29
                                                                                                                                                           3410.5
                                                                                                                                                                               -1.47
                                                                                                                                                                                                150.17
                                                                                156.69
                                                                                                   189.49
                                                                 2.51
         100.00
                                                                                                                                                          1567.7
                                                                                                                                                                                                 25.18
                                                                                                                      100.52
                         4 4 21 2167.72
19 41 48 3866.25
                                                               -32.71
                                                                                  33.94
                                                                                                   195.58
         110.00
                                                                                                                        56.20 20 46 15
                                                                                                                                                           3266.2
                                                                                                                                                                                                137.68
                                                                                143.91
                                                                                                  147.65
                       19 41 48
        110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                     ST 2132.1 SR 268.6 SS 618.7
CRT .9844 CRS -.9871 CST -.9537
                                                                                    SGT 4867.0 SGR 323.0 SG3 182.1
RRT -.0625 RRF -.0296 RTF .8818
     TOE 1.4811 TRA -.9996 TC3-5.0855 BAU 1.1303
     ROE .1908 RRA -.0304 RC3 .2139 FAU .04114
FOE .7976 FRA .2457 FC3-2.1445 BSP 15421
                                                                                    SGB 4877.7 R23 -.0258 R13 -.8818
                                                                                                                                                      LSA 2228.7 MSA 183.1 SSA 18.8
                                                                                                                                                     ELI 2148.5 EL2 47.0 ALF 7.07
                                                                                     SG1 4867.0 SG2 322.4 THA 179.76
     BDE 1.4933 BRA 1.0001 BC3 5.0900 FSP -595
                                                                                                                                                                    ARRIVAL DATE JUN 1 1966
                                                                                          FLIGHT TIME 160.00
LAUNCH DATE DEC 23 1965
                                                                                          DISTANCE 475.364
   HELIOCENTRIC CONIC
     RL 147.15 LAL .00 LOL 90.96 VL 26.902 CAL -2.44 AZL 86.14 HCA 236.22 SHA 122.88 ECC .20191 INC 3.8565 V1 30.276
RP 108.91 LAP -3.20 LOP 327.12 VP 36.838 CAP 9.67 AZP 92.15 TAL 189.75 TAP 65.97 RCA 98.07 APO 147.69 V2 34.794
RC 165.775 GL 26.57 CP -5.78 ZAL 105.04 ZAP 165.23 ETS 337.10 ZAE 130.21 ETE 185.02 ZAC 77.35 ETC 163.65 CLP-166.38
    PLANETOCENTRIC CONIC
     C3 16.333 VHL 4.041 DLA 18.23 RAL 334.90 RAD 6567.7 VEL 11.735 PTH 2.07 VHP 6.467 DPA -16.00 RAP 345.80 ECC 1.2688 ENCH AZMTH ENCH TIME L-I TIME INJECT INJE
                                                                                                                                       1 51 46
                                                                                                                                                        2173.2
                                                                                                                                                                            -27.26
                                                                                                                                                                                                 71.30
                        1 5 33 2773.22
18 4 12 4205.07
                                                               -28.08
                                                                                  79.87
                                                                                                  199.22
                                                                                                                       93.78
          90.00
                                                                                                                                                            3605.1
                                                                                                                                                                               -3.58
                                                                                                                                                                                                 165.63
                                                                                                    192.95
                                                                                                                         61.68
                                                                                                                                   19 14 17
                                                                   .20
                                                                                 172.26
          90.00
                        2 37 45 2475.87
19 14 41 3977.65
                                                                                                                         95.38
                                                                                                                                       3 19 1
                                                                                                                                                            1875.9
                                                                                                                                                                              -28.39
                                                                                                                                                                                                  49.23
                                                                                                   199,10
                                                               -29.45
                                                                                  57.87
                                                                                                                        95.38 3.5 .

60.14 20 20 58

99.64 4 46 12

56.07 21 3 10
                                                                                                  192.29
                                                                                                                                                            3377.7
                                                                                                                                                                               -2 50
                                                                                                                                                                                                146.36
                                                                 1.40
                                                                                 154.88
         100.00
                                                                                                                                                            1588.1
                                                                                                                                                                             -31.28
                                                                                                                                                                                                 26.66
                                                                                                  198.56
                                                               -32.96
                                                                                   35.48
                       4 9 44 2188.13
19 59 12 3838.16
         110.00
                                                                                                                                                            3238.2
                                                                                                                                                                                -.08
                                                                                                                                                                                                136.22
                                                                                                   190.42
                                                                                 142.43
         110.00
                                                                 4.40
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 2216.0 SR 279.9 SS 626.4
CRT .9909 CRS -.9815 CST -.9576
                                                                                      SGT 4937.0 SGR 335.6 SG3 178.2
      TOE 1.5370 TRA -.8545 TC3-5.2487 BAU 1.1471
                                                                                     RRT -.0398 RRF -.0175 RTF .8826
SGB 4948.4 R23 -.0178 R13 -.8826
     ROE .1970 RRA -.0393 RC3 .2185 FAU .03923
FDE .7843 FRA .2960 FC3-2.0792 BSP 15667
BDE 1.5496 BRA .8554 BC3 5.2533 FSP -583
                                                                                                                                                     LSA 2313.0 MSA 176.1 SSA 19.8
EL1 2233.3 EL2 37.3 ALF 7.14
                                                                                     SG1 4937.0 SG2 335.4 THA 179.84
                                                                                                                                                                   ARRIVAL DATE JUN 3 1966
                                                                                          FLIGHT TIME 162.00
LAUNCH DATE CEC 23 1965
                                                                                          DISTANCE 481.062
    HELIOCENTRIC CONIC
     RL 147.15 LAL .00 LOL 90.96 VL 26.847 GAL -2.02 ATL 86.21 HCA 239.38 SMA 122.54 ECC .20376 INC 3.7906 VI 30.276 RP 108.90 LAP -3.26 LOP 330.28 VP 36.801 GAP 9.89 ATP 91.93 TAL 187.94 TAP 67.33 RCA 97.57 APO 147.51 V2 34.798
     RC 167.915 GL 26.20 GP -5.46 TAL 102.18 TAP 166.12 ETS 337.04 TAE 130.28 ETE 184.76 TAC 79.50 ETC 164.21 CLP-167.22
    PLANETOCENTRIC CONIC
     C3 16.144 VHL 4.018 DLA 19.08 RAL 337.88 RAD 6567.6 VEL 11.727 PTH 2.07 VHP 6.591 DPA -14.81 RAP 347.89 ECC 1.2657
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                 73.53
                        i 8 27 2804.28
18 25 4 4168.70
2 41 32 2504.12
19 34 40 3944.10
                                                                                                                                      1 55 12
                                                                                                                                                         2204.3
                                                                                                                                                                             -27.54
                                                                                                                       92.65
                                                               -28.20
                                                                                 82.14
                                                                                                  202.34
          90.00
                                                                                                                                   19 34 33
                                                                                                                                                                              -4.75
                                                                                                                                                                                                163.59
                                                                                                                         61.70
                                                                 -.97
                                                                                 170.24
                                                                                                   196.01
          90.00
                                                                                                                                                                                                 51.27
                                                                                                                                       3 23 16
                                                                                                                                                           1904.1
                                                                                                                                                                             -28.70
                                                                                                                        94.30
                                                               -29.61
                                                                                   59.96
                                                                                                   202.25
         100.00
                                                                                                                         60.11 20 40 24
                                                                                                                                                                                                146.51
                                                                                                                                                           3344.1
                                                                                                                                                                              -3.72
                                                                  .26
                                                                                153.04
                                                                                                   195.32
         100.00
                                                                                                                                                                             -31.66
-1.16
                                                                                                                                                                                                 26.34
                                                                                                                                       4 52 4
                                                                                                                                                           1611.0
                          4 15 13 2211.04
                                                                                                                        98.63
                                                            -33.20
                                                                                  37.22
                                                                                                   201.77
         110.00
                                                                                                                                  21 20 59
                                                                                                                                                                                                134.75
                                                                                                  193.40
                                                                                                                        55.96
                                                                                                                                                         3209.9
                                                                                 140.95
                        20 17 29
                                           3809.94
                                                                 3.33
         110.00
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                     SCT 4999.8 SCR 347.6 SC3 174.2
RRT -.0154 RRF -.0017 RTF .8833
SCB 5011.8 R23 -.0120 R13 -.8833
                                                                                                                                                     ST 2307.4 SR 291.3 S5 635.1
      TOE 1.6003 TRA -.6976 TC3-5.3786 BAU 1.1619
                                                                                                                                                      CRT .9952 CRS -.9751 CST -.9614
     ROE .2037 RRA -.0475 RC3 .2203 FAU .03725
FOE .7737 FRA .3462 FC3-1.9976 BSP 15860
BOE I.6132 BRA .6992 BC3 5.3832 FSP -569
                                                                                                                                                     LSA 2404.8 MSA 169.4 SSA 20.7
EL1 2325.5 EL2 28.2 ALF 7.16
                                                                                      SG1 4999.8 SG2 347.6 THA 179.94
                                                                                                                                                                    ARRIVAL DATE JUN 5 1966
                                                                                           FLIGHT TIME 164.00
LAUNCH DATE DEC 23 1965
                                                                                           DISTANCE 486.746
    HELIOCENTRIC CONIC
     RL 147.15 LAL .00 LOL 90.96 VL 26.793 GAL -1.58 A7L 86.27 MCA 242.55 SHA 122.21 ECC .20583 INC 3.7289 V1 30.276 RP 108.89 LAP -3.31 LOP 333.45 VP 36.766 GAP 10.11 A7P 91.72 TAL 186.13 TAP 68.67 RCA 97.06 APO 147.37 V2 34.803 RC 170.040 GL 25.77 GP -5.19 TAL 99.22 TAP 166.97 ETS 336.84 TAE 130.36 ETE 184.54 TAC 81.68 ETC 164.72 CLP-168.04
     PLANETOCENTRIC CONIC
                                                                                                                          2.07 VHP 6.720 DPA -13.64 RAP 350.00 ECC 1.2641
      C3 16.048 VHL 4.006 DLA 19.94 RAL 340.98 RAD 6567.6 VEL 11.723 PTH
      LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 11 15 2838.53

18 47 2 4131.72

2 45 20 2535.18

19 55 39 3910.31

4 20 53 2236.22

20 36 35 3782.03
                                                                                                                                                                            -27.79
                                                                                                                                        1 58 34
                                                                                                                                                           2238.5
                                                                                                                                                                                                  76.01
                                                                                                  205.69
                                                                                                                         91.40
                                                               -28.29
                                                                                  84.64
                                                                                                                                    19 55 54
                                                                                                                                                            3531.7
                                                                                                                                                                               -5.92
                                                                                                                                                                                                 161.51
                                                                                                    199.29
                                                                                                                         61.76
                                                                                  168.17
                                                                 -2.16
                                                                                                                                       3 27 35
                                                                                                                                                            1935.2
                                                                                                                                                                             -29.00
                                                                                                                                                                                                  53.53
                                                                                                    205.62
                                                                                                                         93.09
                                                                -29.75
                                                                                   62.26
                                                                                                                                    21 0 49
                                                                                                                                                            3310.3
                                                                                                                                                                               -4.86
                                                                                                                                                                                                144.65
                                                                                                    198.58
                                                                                                                         60.12
                                                                                 151.19
                                                                  -.89
                                                                                                    205.22
                                                                                                                         97.52
                                                                                                                                      4 58 9
                                                                                                                                                            1636.2
                                                                                                                                                                             -32.04
                                                                                                                                                                                                  30.20
                                                               -33.44
                                                                                   39.15
          110.00
                                                                                                                                   21 39 37
                                                                                                                         55.88
                                                                                                                                                            3182.0
                                                                                                                                                                              -2.23
                                                                                                                                                                                                133.29
                                                                                                    196.62
                                                                                 139.49
                                                                2.26
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5062.8 SGR 358.9 SG3 170.4

RRT .0088 RRF .0149 RTF .8847

SGB 5075.5 R23 .0070 R13 .8847

SGI 5062.8 SG2 358.9 THA .04

CRT .9972 CRS -.9681 CST -.9650

LSA 2495.2 MSA 162.9 SSA 21.5

SGI 5062.8 SG2 358.9 THA .04
      TOE 1.6652 TRA -.5534 TC3-5.4834 BAU 1.1774
      ROE .2109 RRA -.0551 RC3 .2189 FAU .03540
FOE .7625 FRA .3936 FC3-1.9096 BSP 16090
BDE 1.6785 BRA .5363 BC3 5.4878 FSP -557
```

ARRIVAL DATE JUN 7 1966

```
FLIGHT TIME 166.00
                                                                    DISTANCE 492.413
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 26.740 GAL -1.13 A7L 86.33 HCA 245.71 SHA 121.89 ECC .20812 INC 3.6706 V1 30.276 RP 108.87 LAP -3.35 LOP 336.62 VP 36.732 GAP 10.35 A7P 91.51 TAL 184.31 TAP 70.02 RCA 96.52 APO 147.26 V2 34.808 RC 172.148 GL 25.29 GP -4.94 7AL 96.15 7AP 167.81 ETS 336.50 7AE 130.44 ETE 184.35 7AC 83.89 ETC 165.17 CLP-168.84
  PLANETOCENTRIC CONIC
   C3 16.049 VML 4.006 DLA 20.81 RAL 344.21 RAC 6567.6 VEL 11.723 PTH 2.07 VMP 6.856 DPA -12.48 RAP 352.11 ECC 1.2641 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 13 59 2875.75
19 10 1 4094.55
2 49 11 2568.80
20 17 30 3876.73
4 26 48 2263.41
20 56 23 3754.89
                                                                          209.25
                                                                                            90.04
                                                                                                        2 1 55
                                                                                                                       2275.8
                                                                                                                                    -28.01
                                                                                                                                                     78.71
                                                -28.32
                                                             87.36
       90.00
                                                                                                                                      -7.10
                                                                                                                                                    159.41
                                                                                             61.87 20 18 15
                                                                                                                        3494.6
                                                 -3.36
                                                              166.09
                                                                            202.82
       90.00
                                                                                            91.78 3 32 0
60.17 21 22 7
                                                                                                                        1968.8
                                                                                                                                      -29.28
                                                                                                                                                     55.99
                                                -29.84
                                                               64.75
                                                                            209.23
      100.00
                                                                                                                                                     142.79
                                                                                                                        3276.7
                                                                                                                                       -5.98
                                                 -2.02
                                                            149.34
                                                                            202.08
      100.00
                                                                                                                                                     32.23
                                                                                            96.30 5 4 31
55.84 21 58 58
                                                                                                                        1663.4
                                                                                                                                     -32.43
                                                              41.24
                                                                            208.91
                                               -33.67
      110.00
                                                                                                                       3154.9
                                                                                                                                     -3.26
                                                              138.08
                                                                            200.05
      110.00
                                                 1.23
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5121.4 SGR 369.3 SG3 166.4

RRT .0333 RRF .0315 RTF .8866

SGB 5134.7 R23 .0018 R13 .8866

SGI 5121.4 SGZ 369.1 THA .14
                                                                                                                   ST 2486.8 SR 314.2 5S 646.8
CRT .9973 CRS -.9605 CST -.9683
    TOE 1.7324 TRA -.3592 TC3-5.5518 BAU 1.1921
   ROE .2188 RRA -.0618 RC3 .2144 FAU .03360
                                                                                                                   LSA 2583.8 HSA 157.1 SSA 22.1
EL1 2506.4 EL2 23.1 ALF 7.18
   FDE .7497 FRA .4395 FC3-1.8123 BSP 16319
BDE 1.7462 BRA .3645 BC3 5.5559 FSP -547
                                                                                                                               ARRIVAL DATE JUN 9 1966
                                                                      FLIGHT TIME 168.00
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 498.064
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 26.687 GAL -.66 A7L 86.38 HCA 248.88 SMA 121.58 ECC .21066 INC 3.6151 VI 30.276 RP 108.85 LAP -3.37 LOP 339.79 VP 36.700 GAP 10.59 A7P 91.30 TAL 182.48 TAP 71.36 RCA 95.97 APO 147.19 V2 34.814 RC 174.239 GL 24.75 GP -4.72 TAL 92.99 TAP 168.61 ETS 336.02 TAE 130.53 ETE 184.18 TAC 86.12 ETC 165.59 CLP-169.63
  PLANETOCENTRIC CONIC
                                                                                               2.07 VHP 6.998 OPA -11.33 RAP 354.24 ECC 1.2659
    C3 16.157 VHL 4.020 DLA 21.67 RAL 347.54 RAD 6567.6 VEL 11.728 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           88.57
                                                                                                        2 5 18
                                                                                                                     2315.7
                                                                                                                                     -28.18
                                                                                                                                                     81.62
                                                                           213.03
                    1 16 43 2915.71
                                                -28.28
                                                              90.28
                                                                                             62.02 20 41 31
90.38 3 36 34
60.26 21 44 11
94.99 5 11 13
55.82 22 18 55
                                                                                                                                                     157.31
                                                                                                                        3457.6
                                                                                                                                        -8.25
                  19 33 53
                                4057.63
                                                 -4.54
                                                              164.03
                                                                            206.58
                 2 53 10 2604.71
20 40 7 3843.86
4 33 1 2292.33
21 16 46 3729.01
                                                                                                                                                     58.64
                                                                                                                        2004.7
                                                                                                                                       -29.52
                                                 -29.89
                                                               67.42
                                                                            213.04
      100.00
                                                                                                                        3243.9
                                                                                                                                       -7.07
                                                                                                                                                     140.96
                                                                            205.81
                                                 -3.14
                                                              147.54
                                                                                                                                    -32.80
                                                                                                                                                      34.40
                                                                                                                        1692.3
                                                                            212.82
                                                -33.86
                                                               43.48
      110.00
                                                                                                                                                     130.52
                                                                                                                        3129.0
                                                                                                                                      -4.25
                                                 .24
                                                                            203.70
                                                              136.73
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2575.4 SR 325.9 SS 651.9
CRT .9957 CRS -.9528 CST -.9714
                                                                  SGT 5176.8 SGR 379.1 SG3 162.6
RRT .0584 RRF .0513 RTF .8887
    TOE 1.8034 TRA -.1750 TC3-5.5795 BAU 1.2060
    ROE .2275 RRA -.0676 RC3 .2072 FAU .03182
FOE .7395 FRA .4844 FC3-1.7047 BSP 16528
                                                                 5GB 5190.6 R23 -.0009 R13 .8887
5G1 5176.8 SG2 378.4 THA .25
                                                                                                                    LSA 2672.1 MSA 152.3 SSA 22.6
                                                                                                                    EL1 2595.7 EL2 30.1 ALF 7.18
    BDE 1.8177 BRA .1876 BC3 5.5833 FSP -536
                                                                                                                              ARRIVAL CATE JUN 11 1966
                                                                      FLIGHT TIME 170.00
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 503.695
    HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.379 VHL 4.047 DLA 22.51 RAL 350.97 RAD 6567.7 VEL 11.737 PTH 2.07 VHP 7.149 DPA -10.18 RAP 356.37 ECC 1.2696
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        87.02 2 8 46
62.21 21 5 33
88.90 3 41 23
60.38 22 6 53
93.60 5 18 18
55.82 22 39 20
                                                                                                                                   -28.29
                                                                                                                    2358.1
                                                                          216.99
                    1 19 28 2958.11
                                                 -28.17
                                                               93.38
                                                                                                                                                     155.24
                                                                            210.57
                                                                                                                        3421.5
                                                                                                                                       -9.37
                                                              161.99
                  19 58 32 4021.46
                                                 -5.69
                                                                             217.06
                                                                                                                        2042.5
                                                                                                                                     -29.71
                                                                                                                                                      61.43
                    2 57 20 2642.54
                                                 -29.87
                                                              70.23
                                                                                                                        3212.3
                                                                                                                                      -A.11
                                                                                                                                                     139.19
                                                                             209.75
                                                              145.80
                  21 3 21
                                 3812.26
                                                 -4.20
                                                                                                                                                      36.70
                                                                                                                        1722.6
                                                                                                                                     -33.14
                  4 39 35 2322.64
21 37 35 3704.93
                                                                             216.95
                                                                45.83
      110.00
                                                 -34.02
                                                                                                                                                     129.25
                                                                                                                        3104.9
                                                                                                                                      -5.16
                                                                             207.56
                                                 - .68
                                                              135.47
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5229.0 SGR 387.8 SG3 158.7
RRT .0826 RRF .0695 RTF .8909
                                                                                                                    ST 2655.4 SR 337.4 S5 652.7
CRT .9927 CRS -.9444 CST -.9739
    TOE 1.8732 TRA .0208 TC3-5.5675 BAU 1.2199
    RDE .2371 RRA -.0723 RC3 .1971 FAU .03011
FDE .7258 FRA .5294 FC3-1.5914 BSP 16727
BDE 1.8882 BRA .0753 BC3 5.5710 FSP -524
                                                                                                                    LSA 2751.0 MSA 149.0 SSA 22.9
                                                                  SGB 5243.3 R23 -.0046 R13 .8909
                                                                                                                    EL1 2676.4 EL2 40.5 ALF 7.19
                                                                  SG1 5229.1 SG2 386.5 THA
                                                                      FLIGHT TIME 172.00
                                                                                                                               APRIVAL DATE JUN 13 1966
LAUNCH DATE DEC 23 1965
                                                                      01STANCE 509.306
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 26.583 GAL .33 A7L 86.49 HCA 255.21 SMA 120.96 ECC .21656 INC 3.5106 V1 30.276
RP 108.81 LAP -3.39 LOP 346.14 VP 36.638 GAP 11.12 A7P 90.90 TAL 178.82 TAP 74.03 RCA 94.77 APO 147.16 V2 34.828
RC 178.366 GL 23.45 GP -4.35 ZAL 86.49 ZAP 170.17 ETS 334.50 ZAE 130.71 ETE 183.92 ZAC 90.65 ETC 166.29 CLP-171.17
   PLANETOCENTRIC CONIC
    C3 16.727 VHL 4.090 DLA 23.30 RAL 354.49 RAD 6567,7 VEL 11.752 PTH 2.07 VHP 7.307 DPA -9.04 RAP 358.52 ECC 1.2753
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           221.13
214.78
                                                                                                                                      -28.32
                                                                                                                                                    87.97
                                                                                            85.41
                                                                                                         2 12 22
                                                                                                                        2402.6
        90.00
                                                 -27.97
                                                                96.62
                    1 22 19 3002.57
20 23 44 3986.61
                                                                                                                         3386.6
                                                                                                                                      -10.43
                                                                                                                                                      153.23
                                                                                              62.44 21 30 10
                                                              160.02
                                                 -6.80
        90.00
                   20 23 44
                                                                                                                                       -29.83
                                                                                                                                                      64.35
                                                                                              87.36
                                                                                                         3 46 29
                                                                                                                         2081.9
                                                                73.16
                                                                             221.26
                                2681.89
3782.53
                                                 -29.79
       100.00
                    3 1 47
                                                                                                                                       -9.09
                                                                                                                                                     137.52
                                                                                                                         3182.5
                                                                                              60.52 22 30 0
                                                                             213.91
       100.00
                   21 26 57
                                                 -5.20
                                                              144.15
                                                                                              92.16 5 25 50
55.85 23 0 1
                                                                                                                                      -33.45
                                                                                                                         1754.0
                                                 -34.12
                                                                48.27
                                                                             221.28
                    4 46 36 2353.97
       110.00
                                                                                                                                         -5.99
                                                                                                                         3083.2
                   21 58 38
                                                 -1.51
                                                              134.34
                                                                             211.62
                                                                                                                ORBIT DETERMINATION ACCURACY
       110.00
                                 3683.21
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ST 2735.8 SR 349.2 SS 657.0 CRT .9886 CRS -.9365 CST -.9765
                                                                  SCT 5274.8 SGR 396.2 SG3 155.1
RRT .1090 RRF .0936 RTF .8933
SG8 5289.7 R23 -.0043 R13 .8932
                                                                                                              ST 2737.0 ...

CRT .9886 CRS -.9365 CST -.9109

LSA 2831.3 MSA 147.0 SSA 22.9

EL1 2757.5 EL2 52.3 ALF 7.19
    TOE 1.9490 TRA .2292 TC3-5.5009 BAU 1.2308
    RDE .2480 RRA -.0759 RC3 .1849 FAU .02837
FDE .7182 FRA .5743 FC3-1.4684 BSP 16881
BDE 1.9647 BRA .2415 BC3 5.5040 FSP -510
                                                                   SG1 5275.0 SG2 393.8 THA .47
```

```
FLIGHT TIME 174.00
                                                                                                                                                   ARRIVAL DATE JUN 15 1966
LAUNCH DATE DEC 23 1965
                                                                                DISTANCE 514.893
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 26.532 GAL .85 A7L 86.54 HCA 258.38 SMA 120.67 ECC .21995 INC 3.4608 VI 30.276
RP 108.78 LAP -3.39 LOP 349.32 VP 36.608 GAP 11.40 A7P 90.70 TAL 176.98 TAP 75.36 RCA 94.13 APO 147.21 VZ 34.836
RC 180.400 GL 22.71 GP -4.19 7AL 83.18 7AP 170.92 ETS 333.41 7AE 130.81 ETE 183.81 7AC 92.95 ETC 166.59 CLP-171.93
   PLANETOCENTRIC CONTC.
    C3 17.212 VHL 4.149 DLA 24.04 RAL 358.07 RAD 6567.7 VEL 11.773 PTH 2.08 VHP 7.476 DPA -7.91 RAP .67 ECC 1.2833 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      225.42
                                                                                                                                        2448.7
                      1 25 21 3048.70
20 49 18 3953.65
                                                        -27.68
                                                                                                            83.76
                                                                         99.96
                                                                                                                         2 16 9
         90.00
                                                                                                                                                           -28.25
                                                                                                                                                                              91.34
                                                                                                             62.70 21 55 11
         90.00
                                                         -7.83
                                                                         158.15
                                                                                         219.18
                                                                                                                                            3353.7
                                                                                                                                                             -11.43
                                                                                                                                                                             151.32
                     3 6 35 2722.29
21 50 45 3755.30
                                                                                                                         3 51 57
                                                                                                             85.80
       100.00
                                                       -29.62
                                                                          76.15
                                                                                         225.63
                                                                                                                                            2122.3
                                                                                                                                                             -29.89
                                                                                                                                                                              67.35
                                                                                                            60.68 22 53 20
       100.00
                                                         -6.11
                                                                         142.64
                                                                                        218.25
                                                                                                                                            3155.3
                                                                                                                                                             -9.97
                                                                                                                                                                            135.99
                     4 54 5 2385.96
22 19 44 3664.39
       110.00
                                                       -34.18
                                                                          50.77
                                                                                         225.79
                                                                                                            90.69
                                                                                                                        5 33 51
                                                                                                                                            1786.0
                                                                                                                                                           -33.70
                                                                                                                                                                              41.56
                                                                                                            55.88 23 20 48
       110.00
                                                         -2.23
                                                                        133.36
                                                                                        215.85
                                                                                                                                            3064.4
                                                                                                                                                             -6.70
                                                                                                                                                                             127.11
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE 2.0224 TRA .4486 TC3-5.3893 BAU 1.2407
RDE .2599 RRA -.0782 RC3 .1707 FAU .02666
FDE .7074 FRA .6182 FC3-1.3412 BSP 17016
                                                                             SCT 5315.8 SGR 403.5 SG3 151.3
RRT .1347 RRF .1166 RTF .8958
SCB 5331.1 R23 -.0047 R13 .8958
                                                                                                                                       ST 2803.7 SR 360.7 SS 656.8
CRT .9836 CRS -.9284 CST -.9786
                                                                                                                                    CRT .9836 LRS -.7204 LL.
LSA 2898.3 MSA 146.5 SSA 22.7
EL1 2826.0 EL2 64.5 ALF 7.21
    BOE 2.0390 BRA .4554 BC3 5.3920 FSP -498
                                                                             SG1 5316.1 SG2 399.8 THA
                                                                                                                       .59
LAUNCH DATE DEC 23 1965
                                                                                  FLIGHT TIME 176.00
                                                                                                                                                    ARRIVAL DATE JUN 17 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 520.454
    RL 147.15 LAL .00 LOL 90.96 VL 26.482 GAL 1.40 AZL 86.59 MCA 261.55 SHA 120.38 ECC .22368 INC 3.4120 V1 30.276
RP 108.76 LAP -3.37 LOP 352.49 VP 36.580 GAP 11.70 AZP 90.50 TAL 175.15 TAP 76.70 RCA 93.45 APO 147.30 V2 34.845
RC 182.414 GL 21.90 GP -4.04 ZAL 79.87 ZAP 171.65 ETS 332.04 ZAE 130.91 ETE 183.72 ZAC 95.25 ETC 166.85 CLP-172.68
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 28 38 3095.95 -27.28 103.36 229.84 82.10 2 20 14 2495.9 -28.09 94.79 90.00 21 14 57 3923.28 -8.77 156.42 223.75 62.97 22 20 20 3323.3 -12 33 140 55
                                                             1.70 RAD 6567.7 VEL 11.800 PTH
                                                                                                               2.09 VHP 7.654 OPA -6.78 RAP
                       3 11 50 2763.19
                                                        -29.38
                                                                                                                          3 57 54
       100.00
                                                                          79.16
                                                                                         230.13
                                                                                                             84.23
                                                                                                                                            2163.2
                                                                                                                                                             -29.87
                                                                                                                                                                               70.39
                                   3731.27
2418.17
       100.00
                     22 14 26
                                                          -6.91
                                                                        141.31
                                                                                         222.75
                                                                                                             60.84 23 16 37
                                                                                                                                            3131.3
                                                                                                                                                            -10.74
                                                                                                                                                                              134.62
       110.00
                                                       -34.17
                                                                          53.28
                                                                                         230.45
                                                                                                            89.20
                                                                                                                        5 42 25
                                                                                                                                            1818.2
                                                                                                                                                           -33.91
                                                                                                                                                                              44.05
                     22 40 38
                                      3649.05
                                                        -2.82
                                                                        132.55
                                                                                         220.22
                                                                                                             55.92 23 41 27
                                                                                                                                            3049.1
                                                                                                                                                              -7.27
       110.00
                                                                                                                                                                              126.30
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             SGT 5353.8 SGR 410.0 SG3 147.6
RRT .1604 RRF .1400 RTF .8988
                                                                                                                                       ST 2860.3 SR 371.8 55 654.3
CRT .9779 CRS -.9202 CST -.9805
    TOE 2.0948 TRA .6817 TC3-5.2337 BAU 1.2495
    ROE .2729 RRA -.0792 RC3 .1550 FAU .02502
FDE .6957 FRA .6619 FC3-1.2133 BSP 17122
BDE 2.1125 BRA .6863 BC3 5.2360 FSP -486
                                                                             SGB 5369.5 R23 -.0051 R13 .8988
SG1 5354.2 SG2 404.7 THA .71
                                                                                                                                       LSA 2953.9 MSA 147.3 SSA 22.2
                                                                                                                                                                               7.25
                                                                             SG1 5354.2 SG2 404.7 THA
                                                                                                                                    EL1 2883.3 EL2 77.1 ALF
                                                                                                                      .71
LAUNCH DATE DEC 23 1965
                                                                                 FLIGHT TIME 178.00
                                                                                                                                                   ARRIVAL DATE JUN 19 1966
                                                                                CISTANCE 525.985
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 26.433 GAL 1.96 AZL 86.64 MCA 264.72 SMA 120.09 ECC .22778 INC 3.3640 V1 30.276
RP 108.73 LAP -3.35 LOP 355.67 VP 36.553 GAP 12.01 AZP 90.31 TAL 173.31 TAP 78.04 RCA 92.74 APO 147.45 V2 34.854
RC 184.407 GL 21.03 GP -3.91 ZAL 76.56 ZAP 172.36 ETS 330.31 ZAE 131.01 ETE 183.64 ZAC 97.57 ETC 167.08 CLP-173.43
   PLANETOCENTRIC CONIC
    C3 18.656 VHL 4.319 OLA 25.32 RAL 5.35 RAD 6567.8 VEL 11.834 PTH 2.10 VHP 7.844 CPA -5.66 RAP 4.99 ECC 1.3070 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 18 3143.68 -26.79 106.77 234.37 80.46 2 24 42 2543.7 -27.83 98.26 90.00 21 40 24 3896.23 -9.61 154.87 228.47 63.23 22 45 20 3296.2 -13.12 147.96 100.00 3 17 40 2803.97 -29.06 82.15 234.75 82.68 4 4 24 2204.0 -29.77 73.42
                                                                                                           61.00 23 39 34
87.72 5 51 34
55.95 24 1 45
                                                                                        227.38
                                                                                                                                           3111.2
                                                                                                                                                           -11.39
       100.00 22 37 43 3711.17
                                                         -7.57
                                                                        140.19
                                                                                                                                                                            133.47
                                                                                    235.25
                   5 10 44 2450.20
23 1 8 3637.71
                                                                                                                                           1850.2
                                                                                                                                                          -34.06
       110.00
                                                        -34.12
                                                                          55.78
                                                                                                                                                                              46.54
                                                                                                                                                             -7.70
                                                                                                                                           3037.7
       110.00
                                                       -3.25
                                                                        131.96
                                                                                        224.72
                                                                                                                                                                            125.70
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SCT 5389.7 SGR 415.6 SG3 143.9
RRT .1852 RRF .1628 RTF .9024
                                                                                                                                     ST 2897.9 SR 382.5 SS 648.6
CRT .9718 CRS -.9120 CST -.9821
    TDE 2.1608 TRA .9232 TC3-5.0456 BAU 1.2589
    ROE .2871 RRA -.0789 RC3 .1381 FAU .02350
FDE .6822 FRA .7039 FC3-1.0905 BSP 17314
BDE 2.1798 BRA .9265 BC3 5.0475 FSP -478
                                                                           SG8 5405.7 R23 -.0054 R13 .9024
                                                                                                                                     LSA 2990.3 MSA 149.5 SSA 21.6
EL1 2921.6 EL2 89.5 ALF 7.32
                                                                            SG1 5390.3 SG2 408.3 THA
                                                                                                                     .82
                                                                                 FLIGHT TIME 180.00
                                                                                                                                                   ARRIVAL CATE JUN 21 1966
LAUNCH DATE DEC 23 1965
   HELIOCENTRIC CONIC
                                                                                DISTANCE 531.482
    RL 147.15 LAL .00 LOL 90.96 VL 26.384 GAL 2.56 A7L 86.68 HCA 267.90 SMA 119.81 ECC .23226 INC 3.3165 V1 30.276
RP 108.70 LAP -3.31 LOP 358.85 VP 36.527 GAP 12.35 AZP 90.12 TAL 171.49 TAP 79.38 RCA 91.98 APO 147.64 VZ 34.863
RC 186.379 GL 20.12 GP -3.79 ZAL 73.28 ZAP 173.05 ETS 328.15 ZAE 131.12 ETE 183.57 ZAC 99.90 ETC 167.28 CLP-174.17
   PLANETOCENTRIC CONIC
    C3 19.654 VHL 4.433 DLA 25.84 RAL
                                                            9.00 RAD 6567.8 VEL 11.876 PTH 2.11 VMP 8.046 DPA
                                                                                                                                              -4.54 RAP
                                                                                                                                                                7.15 ECC 1.3234
    LNCH AZHTH LNCH TINE L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           78.88 2 29 41
63.48 23 9 50
                     1 36 30 3191.15
22 5 16 3873.35
                                                                                       238.98
        90.00
                                                        -26.21
                                                                        110.12
                                                                                                                                           2591.1
                                                                                                                                                          -27.48
                                                        -10.31
                                                                        153.55
                                                                                        233.29
                                                                                                                                           3273.3
                                                                                                                                                            -13.79
        90.00
                                    2844.00
3695.72
                                                                          85.07
                                                                                        239.47
                                                                                                            81.20
                                                                                                                        4 11 35
                                                                                                                                           2244.0
                                                                                                                                                                              76.38
                       3 24 11
                                                       -28.68
                                                                                                                                                            -29.60
       100.00
                                                                                                           61.12 24 1 52
86.27 6 1 20
55.98 24 21 29
                  23 0 17
       100.00
                                                        -8.08
                                                                        139.32
                                                                                        232.11
                                                                                                                                            3095.7
                                                                                                                                                            -11.87
                                                                                                                                                                             132.59
                    5 19 59 2481.69
23 20 58 3630.80
                                                       -34.00
       110.00
                                                                          58.24
                                                                                        240.15
                                                                                                                                           1881.7
                                                                                                                                                           -34.15
                                                                                                                                                                              48.99
                                                                        131.60
                                                                                                                                                            -7.96
                                                       -3.51
                                                                                        229.30
                                                                                                                                           3030.8
                                                                                                                                                                            125.33
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SGT 5420.6 SGR 420.2 SG3 140.3

RRT .2101 RRF .1863 RTF .9060

SGB 5436.8 R23 -.0053 R13 .9060

SGI 5421.3 SG2 410.8 THA .94
                                                                                                                                   ST 2921.1 SR 392.4 SS 641.2

CRT .9652 CRS -.9037 CST -.9835

LSA 3012.3 MSA 153.1 SSA 20.8

EL1 2945.5 EL2 101.8 ALF 7.40
    TOE 2.2235 TRA 1.1790 TC3-4.8192 BAU 1.2666
    RDE .3025 RRA -.0770 RC3 .1208 FAU .02201 FDE .6685 FRA .7466 FC3 -.9697 BSP 17465
    BDE 2.2440 BRA 1.1816 BC3 4.8207 FSP -468
```

ARRIVAL DATE JUN 23 1966

```
LAUNCH DATE DEC 23 1965
                                                                    DISTANCE 536.942
  HELIOCENTRIC CONIC
   RE 147.15 LAL .00 LOL 90.96 VE 26.336 GAL 3.18 AZE 86.73 MCA 271.07 SMA 119.54 ECC .23718 INC 3.2691 VI 30.276 RP 108.67 LAP -3.27 LOP 2.03 VP 36.502 GAP 12.71 AZP 89.94 TAL 169.66 TAP 80.74 RCA 91.19 APO 147.89 V2 34.873 RC 188.330 GL 19.16 GP -3.68 ZAL 70.06 ZAP 173.72 ETS 325.42 ZAE 131.22 ETE 183.51 ZAC 102.23 ETC 167.44 CLP-174.91
   PLANETOCENTRIC CONIC
                                                                                              2.12 VHP 8.263 DPA -3.44 RAP
    C3 20.864 VHL 4.568 CLA 26.28 RAL 12.61 RAD 6567.8 VEL 11.927 PTH
    LNCH AZMTH LNCH TIME LTI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          243.64
                                                                                                                      2637.5
                                                                                                                                   -27.05
                                                                                           77.38
                                                                                                      2 35 23
                                                              113.36
                    1 41 26 3237.45
22 29 12 3855.56
                                                -25.56
       90.00
                                                                                                                                     -14.29
                                                                                                      23 33 27
                                                                                                                       3255.6
                                                                           238.18
                                                                                            63.68
                   22 29 12
                                                -10.84
                                                              152.52
        90.00
                                                                                                                                     -29.37
                                                                            244.25
                                                                                            79.79
                                                                                                       4 19 33
                                                                                                                       2282.6
                                                               87.86
                   3 31 30 2882.61
                                               -28.25
                                                                                            61.21 24 23 14
84.87 6 11 44
                                                                                                                       3085.6
                                                                                                                                     -12.19
                                                                                                                                                   132.01
                                                                            236.90
      100.00
                  23 21 49
                              3685.64
                                                 -8.41
                                                              138.76
                                                                                                                                                     51.38
                                                                                                                                     -34.18
                  5 29 51 2512.30
23 39 57 3628.72
                                                                                                      6 11 44
                                                                                                                       1912.3
                                                                            245.13
                                               -33.84
                                                               60.61
      110.00
                                                                                            55,98 24 40 26
                                                                                                                                                   125.22
                                                                                                                                      -8.03
                                                                                                                       3028.7
                                                                           233.94
                                                              131.49
                                                 -3.59
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2930.1 SR 401.5 SS 632.8
CRT .9581 CRS -.8953 CST -.9848
                                                                 SCT 5446.8 SGR 424.0 SG3 136.7
RRT .2350 RRF .2107 RTF .9096
SGB 5463.3 R23 -.0044 R13 .9096
    TOE 2.2829 TRA 1.4495 TC3-4.5602 BAU 1.2723
    ROE .3191 RRA -.0736 RC3 .1037 FAU .02054
FOE .6550 FRA .7900 FC3 -.8522 BSP 17591
BOE 2.3051 BRA 1.4514 BC3 4.5614 FSP -457
                                                                                                                  LSA 3020.2 MSA 157.7 SSA 19.9
EL1 2955.3 EL2 114.0 ALF 7.49
                                                                  5G1 5447.7 SG2 412.1 THA 1.05
                                                                                                                              ARRIVAL DATE JUN 25 1966
                                                                      FLIGHT TIME 184.00
                                                                     DISTANCE 542.357
  HELIOCENTRIC CONIC
   RL 147.15 LAL .00 LOL 90.96 VL 26.289 GAL 3.83 A7L 86.78 MCA 274.25 SMA 119.27 ECC .24258 INC 3.2216 V1 30.276
RP 108.63 LAP -3.21 LOP 5.22 VP 36.478 GAP 13.09 A7P 89.76 TAL 167.85 TAP 82.10 RCA 90.34 APO 148.21 V2 34.884
RC 190.259 GL 18.18 GP -3.58 ZAL 66.90 ZAP 174.37 ETS 321.94 ZAE 131.31 ETE 183.46 ZAC 104.57 ETC 167.57 CLP-175.65
   PLANETOCENTRIC CONIC
                                                                                               2.14 VHP 8.495 DPA -2.34 RAP 11.50 ECC 1.3673
    C3 22.317 VHL 4.724 DLA 26.62 RAL 16.18 RAD 6567.9 VEL 11.987 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2681.5
                                                                                           76.00 2 42 2
                                                              116.40
                                                                          248.35
                    1 47 21 3281.53
                                                -24.87
       90.00
                   22 51 43 3843.95
3 39 46 2919.14
23 41 59 3681.58
5 40 22 2541.78
0 1 49 3631.70
                                                                                                                                                    144.85
                                                                                             63.82
                                                                                                       23 55 47
                                                                                                                        3244.0
                                                                                                                                      -14.62
                                                              151.85
                                                                            243.11
                                                -11.19
        90.00
                                                                                                                                      -29.08
                                                                                                                                                     81.91
                                                                                                       4 28 25
                                                                                                                        2319.1
                                                                            249.09
                                                                                             78.49
                                                                90.47
                                                -27.78
       100.00
                                                                                                                                                    131.77
                                                                                                                                      -12.32
                                                                                             61.25
                                                                                                      24 43 21
                                                                                                                        3061.6
                                                 -8.55
                                                              138.53
                                                                            241.71
       100.00
                                                                                                      6 22 43
                                                                                                                                                     53.69
                                                                                             83.54
                                                                                                                        1941.8
                                                                                                                                     -34.17
                                                                62.89
                                                                            250.16
                                               -33.64
       110.00
                                                                                                                                       -7.92
                                                                             238.61
                                                                                             55.97
                                                                                                        1 2 20
                                                                                                                        3031.7
                                             -3.48
                                                              131.65
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2927.5 SR 409.4 55 623.8
                                                                  SGT 5468.3 SGR 426.9 SG3 133.2

RRT .2603 RRF .2359 RTF .9131

SGB 5484.9 R23 -.0032 R13 .9131

SGI 5469.4 SG2 412.1 THA 1.17
    TOE 2.3401 TRA 1.7378 TC3-4.2716 BAU 1.2747
                                                                                                                    CRT .9506 CRS -.8867 CST -.9859
    ROE .3368 RRA -.0684 RC3 .0873 FAU .01905
FDE .6420 FRA .8352 FC3 -.7390 BSP 17639
BDE 2.3642 BRA 1.7391 BC3 4.2725 FSP -445
                                                                                                                    LSA 3016.6 MSA 163.3 SSA 19.0
                                                                                                                  EL1 2953.3 EL2 126.0 ALF 7.59
                                                                                                                              ARRIVAL DATE JUN 27 1966
                                                                      FLIGHT TIME 186.00
LAUNCH DATE DEC 23 1965
                                                                     DISTANCE 547.723
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 24.046 VHL 4.904 DLA 26.88 RAL 19.67 RAD 6568.0 VEL 12.059 PTH 2.16 VHP 8.745 DPA
                                                                                                                           -1.25 RAP 13.68 ECC 1.3957
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2722.2
                                                                                         74.78
                                                                         253.10
                                                                                                       2 49 54
                   1 54 32 3322.18
23 12 22 3839.68
3 49 2 2953.03
                                                              119.17
                                                -24.17
        90.00
                                                                                                                                                    144.60
                                                                                                                        3239.7
                                                                                                      24 15 22
                                                               151.60
                                                                             248.02
                                                                                             63.87
                                                -11.32
                                                                                                                                                     84.38
                                                                                                                        2353.0
                                                                                                                                      -28.77
                                                                92.87
                                                                             253.96
                                                                                             77.31
                                                                                                      4 38 15
                                                -27.30
       100.00
                                                                                                                                                    131.92
                                                                                                                        3064.1
                                                                                                                                      -12.24
                                                                  82.28 6 34 18
82.28 6 34 18
82.28 6 34 18
10 243.26 55.95 1 19 13
MID-COURSE EXECUTION ACCURACY
SCT 5486.1 5GR 428.8 677
RRT 2840 7
                                                                                             61.22
                                                               138.67
                                                                             246.51
                                                 -8.47
                   0 4 29 3684.06
                                                                                                                                                     55.89
                                                                                                                        1970.0
                                                                65.06
                   5 51 28 2569.96
0 18 33 3639.89
                                                -33.40
       110.00
                                                                                                                                      -7.62
                                                                                                                        3039.9
                                                                                                                                                    125.81
                                                               132.08
                                                 -3.17
                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2906.6 SR 416.0 SS 613.0
CRT .9426 CRS -.8779 CST -.9869
                                                                   SGT 5486.1 SGR 428.8 SG3 129.8
RRT .2848 RRF .2605 RTF .9171
SGB 5502.9 R23 -.0023 R13 .9171
     TOE 2.3892 TRA 2.0383 TC3-3.9721 BAU 1.2771
     ROE .3554 RRA -.0616 RC3 .0716 FAU .01769
FOE .6280 FRA .8798 FC3 -.6368 BSP 17759
BOE 2.4154 BRA 2.0392 BC3 3.9728 FSP -435
                                                                                                                   LSA 2994.7 MSA 169.4 SSA 18.1
EL1 2933.0 EL2 137.7 ALF 7.70
                                                                   SG1 5487.5 SG2 410.9 THA 1.28
                                                                                                                               ARRIVAL DATE JUN 29 1966
                                                                       FLIGHT TIME 188.00
 LAUNCH DATE DEC 23 1965
                                                                      DISTANCE 553.029
    RL 147.15 LAL .00 LOL 90.96 VL 26.196 GAL 5.23 AZL 86.87 MCA 280.61 SMA 118.76 ECC .25499 INC 3.1250 V1 30.276 RP 108.57 LAP -3.07 LOP 11.59 VP 36.433 GAP 13.95 AZP 89.42 TAL 164.27 TAP 84.88 RCA 88.47 APO 149.04 V2 34.906 RC 194.034 GL 16.17 GP -3.41 ZAL 60.84 ZAP 175.55 ETS 311.68 ZAE 131.49 ETE 183.38 ZAC 109.26 ETC 167.72 CLP-177.14
    PLANETOCENTRIC CONIC
                                                                                                                            -.17 RAP 15.87 ECC 1.4294
     C3 26.090 VHL 5.108 DLA 27.05 RAL 23.06 RAD 6568.1 VEL 12.144 PTH 2.18 VHP 9.014 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2758.3
                                                                                              75.74
                                                                                                         2 59 14
                    2 3 16
23 30 43
                                                 -23.50
                                                               121.61
                                                                            257.87
                                  3358.25
         90.00
                                                                                                      24 34 47
                                                                                                                         3243.8
                                                                                                                                       -14.63
                                                                                                                                                     144.84
                                                                             252.87
                                                                                              63.82
                                                               151.84
                                                 -11.20
                                  3843.81
         90.00
                                                                                                       4 49 7
1 22 46
6 46 23
                                                                                                                                      -28.44
                                                                                                                                                       86.61
                                                                                              76.27
                                                                                                                         2383.9
                                                                95.04
                                                                             258.85
                     3 59 23
D 21 12
                                  2983.89
                                                  -26.82
       100.00
                                                                                                                         3093.4
                                                                                                                                      -11.95
                                                                                                                                                     132.45
                                                                                              61.14
                                                               139.19
                                                                             251.27
                                  3693.40
                                                   -8.16
       100.00
                     6 3 6
                                                                                                                                      -34.01
                                                                                                                                                       57.97
                                                                                                                         1996.8
                                                                                              81.09
                                                 -33.14
                                                                67.10
                                                                             260.31
                                  2596.76
                                                                 HID-COURSE EXECUTION ACCURACY
       110.00
                                                                                                                         3053.3
                                                                                                                                       -7.11
                                                                                                                                                     126.52
                     0 33 59
                                                               132.78
                                  3653.29
                                                                                                              ORBIT DETERMINATION ACCURACY
       110.00
    DIFFERENTIAL CORRECTIONS
                                                                 SGT 5499.3 SGR 429.7 SG3 126.4 ST 2872.7 SR 420.9 SS 601.4 RRT .3092 RRF .2850 RTF .9213 CRT .9340 CRS -.8687 CST -.9879 SGB 5516.0 R23 -.0015 R13 .9213 LSA 2959.8 MSA 176.1 SSA 17.2 SG1 5500.9 SG2 408.5 THA 1.39 EL1 2899.6 EL2 149.0 ALF 7.81
     TDE 2.4329 TRA 2.3555 TC3-3.6617 BAU 1.2774
     RDE .3748 RRA -.0530 RC3 .0572 FAU .01636
FDE .6136 FRA .9255 FC3 -.5430 BSP 17867
      BOE 2.4616 BRA 2.3561 BC3 3.6621 FSP -426
```

FLIGHT TIME 182.00

```
LAUNCH DATE DEC 23 1965
                                                                                 FLIGHT TIME 190.00
                                                                                                                                                  ARRIVAL DATE JUL 1 1966
    HELIOCENTRIC CONIC
                                                                                 DISTANCE 558.268
     RL 147.15 LAL .00 LOL 90.96 VL 26.151 GAL 6.00 A7L 86.92 MCA 283.80 SMA 118.51 ECC .26212 INC 3.0753 V1 30.276
RP 108.53 LAP -2.99 LOP 14.77 VP 36.412 GAP 14.43 A7P 89.27 TAL 162.50 TAP 86.30 RCA 87.44 APO 149.57 VZ 34.918
RC 195.918 GL 15.15 GP -3.33 ZAL 57.97 ZAP 176.06 ETS 304.13 ZAE 131.57 ETE 183.35 ZAC 111.60 ETC 167.74 CLP-177.89
    PLANETOCENTRIC CONIC
     C3 28.499 VHL 5.338 DLA 27.14 RAL 26.34 RAD 6568.1 VEL 12.242 PTH
                                                                                                              2.20 VHP 9.306 OPA
                                                                                                                                                  .89 RAP 18.05 ECC 1.4690
     LNCM AZMTM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 13 44 3388.88 -22.91 123.65 262.67 72.88 3 10 13 2788.9 -25.03 115.63 90.00 23 46 25 3857.10 -10.80 152.61 257.64 63.66 24 50 42 3257.1 -14.25 145.64
                                                                                                                      5 D 59
1 37 48
6 58 54
1 49 15
        100.00
                      4 10 47
                                      3011.52
                                                         -26.35
                                                                          96.96
                                                                                         263.75
                                                                                                           75.36
                                                                                                                                           2411.5
                                                                                                                                                            -28.11
                                                                                                                                                                             88.60
                      4 10 47 3011.52
0 35 58 3709.68
6 15 12 2622.21
0 48 3 3671.76
        100.00
                                                         -7.62
                                                                         140.10
                                                                                         255.95
                                                                                                            61.01
                                                                                                                                           3109.7
                                                                                                                                                            -11.43
                                                                                                                                                                            133.39
        110.00
                                                       -32.85
                                                                                         265.38
                                                                          69.04
                                                                                                           79.98
                                                                                                                                           2022.2
                                                                                                                                                           -33.89
                                                                                                                                                                             59.95
       110.00
                                                                         133.74
                                                                                        252.46
                                                       -1.95
                                                                                                           55.87
                                                                                                                                          3071.8
                                                                                                                                                           -6.42
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            SGT 5508.0 SGR 429.6 SG3 123.1
RRT .3336 RRF .3099 RTF .9255
SGB 5524.8 R23 -.0005 R13 .9255
SGI 5509.9 SGZ 404.9 THA 1.50
                                                                                                                                     ST 2829.0 SR 424.2 SS 590.2
CRT .9249 CR5 -.8593 CST -.9888
     TDE 2.4727 TRA 2.6916 TC3-3.3454 BAU 1.2747
    ROE .3950 RRA -.0425 RC3 .0444 FAU .01507
FOE .6001 FRA .9730 FC3 -.4577 BSP 17961
                                                                                                                                 BDE 2.5041 BRA 2.6919 BC3 3.3457 FSP -416
                                                                                                                                      EL1 2856.1 EL2 159.8 ALF 7.92
LAUNCH DATE DEC 23 1965
                                                                                 FLIGHT TIME 192.00
                                                                                                                                                   ARRIVAL DATE JUL 3 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 563.428
    RL 147.15 LAL .00 LOL 90.96 VL 26.107 GAL 6.81 AZL 86.98 HCA 286.98 SMA 118.26 ECC .26997 INC 3.0242 VI 30.276
RP 108.49 LAP -2.89 LOP 17.96 VP 36.392 GAP 14.95 AZP 89.12 TAL 160.77 TAP 87.75 RCA 86.33 APO 150.19 V2 34.930
RC 197.761 GL 14.14 GP -3.26 ZAL 55.22 ZAP 176.47 ETS 294.40 ZAE 131.64 ETE 183.32 ZAC 113.93 ETC 167.73 CLP-178.65
   PLANETOCENTRIC CONIC
    C3 31.330 VHL 5.597 DLA 27.15 RAL 29.49 RAD 6568.2 VEL 12.357 PTH 2.23 VHP 9.622 DPA 1.94 RAP 20.24 ECC 1.5156 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 25 58 3413.76 -22.40 125.30 267.48 72.21 3 22 51 2813.8 -24.62 117.34
                    2 25 58 3413.76

0 3 16 3879.68

4 23 9 3036.00

0 48 46 3732.67

6 27 39 2646.41

1 0 45 3695.04
                                                                                                                                           3279.7
         90.00
                                                        -10.11
                                                                        153.92
                                                                                        262.28
                                                                                                           63.41
                                                                                                                        1 7 56
                                                                                                                                                            -13.60
                                                                            8.65 268.63 74.57 5 13 45
1.39 260.54 60.83 1 50 59
0.86 270.42 78.94 7 11 45
4.96 256.95 55.83 2 2 20
MID-COURSE EXECUTION ACCURACY
       100.00
                                                       -25.92
                                                                         98.65
                                                                                                                                           2436.0
                                                                                                                                                           -27.79
                                                                                                                                                                             90.35
       100.00
                                                         -6.86
                                                                       141.39
                                                                                                                                           3132.7
                                                                                                                                                           -10.70
                                                                                                                                                                            134.70
       110.00
                                                       -32.55
                                                                         70.86
                                                                                                                                           2046.4
                                                                                                                                                           -33.73
                                                                                                                                                                            61.82
                                                                                                                                                           -5.54
       110.00
                                                        -1.06
                                                                        134.96
                                                                                                                                          3095.0
                                                                                                                                                                            128.73
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
    TOE 2.5121 TRA 3.0511 TC3-3.0250 BAU 1.2671
                                                                            SGT 5513.6 SGR 428.7 SG3 120.0
RRT .3584 RRF .3356 RTF .9297
SGB 5530.2 R23 .0006 R13 .9297
                                                                                                                                      ST 2780.6 SR 425.8 55 580.5
CRT .9152 CRS -.8498 CST -.9898
    ROE .4158 RRA -.0300 RC3 .0333 FAU .01375
FOE .5883 FRA 1.0237 FC3 -.3798 BSP 17948
BOE 2.5463 BRA 3.0513 BC3 3.0252 FSP -404
                                                                                                                                     LSA 2865.9 MSA 189.7 SSA 15.5
EL1 2807.8 EL2 169.9 ALF 8.01
                                                                            SG1 5515.8 SG2 400.0 THA 1.60
LAUNCH DATE DEC 23 1965
                                                                                FLIGHT TIME 194.00
                                                                                                                                                 ARRIVAL DATE JUL 5 1966
   HELIOCENTRIC CONIC
                                                                                OISTANCE 568.494
    RL 147.15 LAL ..00 LOL 90.96 VL 26.064 GAL 7.67 A7L 87.03 HCA 290.17 SMA 118.02 ECC .27862 INC 2.9713 V1 30.276 RP 108.45 LAP -2.79 LOP 21.15 VP 36.372 GAP 15.51 A7P 88.97 TAL 159.06 TAP 89.23 RCA 85.14 APO 150.91 V2 34.942 RC 199.580 GL 13.15 GP -3.20 ZAL 52.59 ZAP 176.75 ETS 282.32 ZAE 131.70 ETE 183.30 ZAC 116.26 ETC 167.68 CLP-179.42
   PLANETOCENTRIC CONIC
    C3 34.654 VHL 5.887 DLA 27.09 RAL 32.50 RAD 6568.4 VEL 12.491 PTH 2.26 VHP 9.967 DPA
                                                                                                                                             2.97 RAP 22.42 ECC 1.5703
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 39 45 3433.32
2 0 13 31 3910.96
4 36 18 3057.60
0 59 39 3761.90
6 40 20 2669.48
1 12 7 3722.79
                                                                                                                     3 36 58
1 18 42
        90.00
                                                       -21.99
                                                                      126.59
                                                                                    272.31
                                                                                                      71.69
                                                                                                                                     2833.3 -24.28 118.67
        90.00
                                                        -9.15
                                                                       155.72
                                                                                        266.77
                                                                                                           63.09
                                                                                                                                          3311.0
                                                                                                                                                          -12.69
                                                                                                                      5 27 15
2 2 21
7 24 49
       100.00
                                                      -25.52
                                                                       100.13
                                                                                        273.50
                                                                                                           73.89
                                                                                                                                          2457.6
                                                                                                                                                          -27.49
                                                                                                                                                                            91.88
       100.00
                                                         -5.89
                                                                       143.01
                                                                                        265.01
                                                                                                           60.64
                                                                                                                                          3161.9
                                                                                                                                                           -9.76
       110.00
                                                      -32.24
                                                                                        275.42
                                                                                                           77.97
                                                                         72.59
                                                                                                                                          2069.5
                                                         -.00
                                                                       136.40
                                                                                       261.36
                                                                                                           55.82
       110.00
                                                                                                                       2 14 9
                                                                                                                                          3122.8
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TDE 2.5436 TRA 3.4279 TC3-2.7163 BAU 1.2585
                                                                            SGT 5513.6 SGR 426.6 SG3 116.9
                                                                                                                                     ST 2720.7 SR 425.4 SS 570.1
                                                                                                                                    CRT .9048 CRS -.8397 CST -.9907
LSA 2805.3 MSA 196.3 SSA 14.8
    RDE .4370 RRA -.0156 RC3 .0238 FAU .01254
FDE .5756 FRA 1.0752 FC3 -.3133 BSP 18030
BDE 2.5809 BRA 3.4279 BC3 2.7164 FSP -396
                                                                            RRT .3824 RRF .3601 RTF .9343
SGB 5530.1 R23 .0011 R13 .9343
                                                                            SG1 5516.0 SG2 394.0 THA 1.70
                                                                                                                                     EL1 2747.9 EL2 179.3 ALF 8.09
LAUNCH DATE DEC 23 1965
                                                                                FLIGHT TIME 196.00
                                                                                                                                                  ARRIVAL DATE JUL 7 1966
  HELIOCENTRIC CONTC
                                                                               DISTANCE 573.449
    RL 147.15 LAL .00 LOL 90.96 VL 26.021 GAL 8.59 ATL 87.08 HCA 293.36 SMA 117.79 ECC .28816 INC 2.9161 V1 30.276
RP 108.41 LAP -2.68 LOP 24.35 VP 36.354 GAP 16.13 AZP 88.84 TAL 157.38 TAP 90.74 RCA 83.85 APO 151.73 V2 34.955
RC 201.376 GL 12.17 GP -3.14 ZAL 50.10 ZAP 176.85 ETS 268.43 ZAE 131.74 ETE 183.27 ZAC 118.57 ETC 167.59 CLP 179.80
   PLANETOCENTRIC CONIC
    C3 38.559 VHL 6.210 DLA 26.97 RAL 35.37 RAD 6568.5 VEL 12.646 PTH 2.30 VMP 10.343 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        an nn
                      2 54 43
                                    3448.53
                                                       -21.66
                                                                       127.58
                                                                                      277.12
                                                                                                          71.30 - 3 52 11
62.73 1 27 13
                                                                                                                                         2848.5
                                                                                                                                                         -24.01
                                   3949.70
3076.76
                                                                                                                      1 27 13
5 41 19
        90.00
                      0 21 24
                                                        -7.95
                                                                       157.93
                                                                                       271.12
                                                                                                                                          3349.7
                                                                                                                                                          -11.55
                                                                                                                                                                           151.09
       100.00
                      4 50 2
                                                       -25.15
                                                                       101.44
                                                                                       278.33
                                                                                                           73.29
                                                                                                                                          2476.8
                                                                                                                                                          -27.20
                                                                                                                                                                            93.24
                      1 8 45 3796.70
6 53 7 2691.61
                                                                                                                      2 12 2
7 37 59
                                                                                                                                                           -8.62
       100.00
                                                        -4.72
                                                                       144.94
                                                                                       269.37
                                                                                                           60.45
                                                                                                                                          3196.7
                                                                                                                                                                           138.32
                                                       -31.91
      110.00
                                                                         74.23
                                                                                       280.37
                                                                                                           77.04
                                                                                                                                          2091.6
                                                                                                                                                         -33.36
                                                                                                                                                                            65.30
                      1 22 10 3754.61
                                                       1.22
      110.00
                                                                       138.06
                                                                                       265.68
                                                                                                           55.84
                                                                                                                       2 24 44
                                                                                                                                          3154.6
                                                                                                                                                          -3.27
                                                                                                                                                                          131.86
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                          SCT 5508.4 SGR 423.5 SG3 113.9
RRT .4063 RRF .3648 RTF .9389
SG6 5524.7 R23 .0016 R13 .9389
SG1 5511.1 SG2 386.8 THA 1.80
                                                                                                                                 ST 2656.3 SR 423.1 SS 561.2

CRT .8938 CRS -.8295 CST -.9916

LSA 2740.2 MSA 202.3 SSA 14.0

EL1 2683.3 EL2 187.8 ALF 8.14
    TOE 2.5726 TRA 3.8279 TC3-2.4161 BAU 1.2455
    ROE .4585 RRA .0008 RC3 .0180 FAU .01135
FDE .5644 FRA 1.1297 FC3 -.2549 BSP 18088
BDE 2.6131 BRA 3.8279 BC3 2.4162 FSP -386
```

ARRIVAL DATE JUL 9 1966

LAUNCH DATE DEC 23 1965

DISTANCE 578.271 HELIOCENTRIC CONIC RL 147.15 LAL .00 LOL 90.96 VL 25.979 GAL 9.57 A7L 87.14 MCA 296.55 SMA 117.56 ECC .29872 INC 2.8582 VI 30.276
RP 108.37 LAP -2.56 LOP 27.54 VP 36.336 GAP 16.81 A7P 88.72 TAL 155.75 TAP 92.30 RCA 82.44 APO 152.68 V2 34.968
RC 203.147 GL 11.21 GP -3.09 TAL 47.74 TAP 176.75 ETS 254.18 TAE 131.75 ETE 183.25 TAC 120.87 ETC 167.45 CLP 179.00 PLANETOCENTRIC CONIC C3 43.151 VHL 6.569 DLA 26.79 RAL 38.08 RAD 6568.6 VEL 12.826 PTH 2.33 VMP 10.757 DPA 4.98 RAP 26.78 ECC 1.7102 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 8 6 1 33 52 3 10 26 3460.59 0 27 17 3994.44 281.89 70.99 2860.6 -21.39 128.36 90.00 3394.4 -10.20 275.33 62.39 90.00 -6.55 160.47 5 55 43 2 20 11 7 51 8 2 34 9 5 4 9 3093.98 1 16 15 3836.29 72.77 2494.0 94.45 283.11 -26.93 100.00 -24.81 102.60 -7.32 60.28 3236.3 100.00 -3.39 147.12 273.59 66.93 285.24 2113.0 -33.15 110.00 7 5 55 2712.98 1 30 59 3790.04 -31.58 75.80 76.17 139.91 269.88 55.90 3190.0 -1.92 110.00 2.57 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5501.4 SGR 419.5 SG3 111.1 RRT .4302 RRF .4096 RTF .9437 SGB 5517.4 R23 .0018 R13 .9437 ST 2590.9 SR 418.9 S5 553.7 CRT .8822 CRS -.8191 CST -.9925 TOE 2.6015 TRA 4.2569 TC3-2.1281 BAU 1.2277 ROE .4802 RRA .0193 RC3 .0098 FAU .01018 FOE .5542 FRA 1.1877 FC3 -.2042 BSP 18127 LSA 2674.2 MSA 207.7 SSA 13.3 SG1 5504.4 SG2 378.5 THA 1.89 BOE 2.6455 BRA 4.2570 BC3 2.1281 FSP -378 EL1 2617.3 EL2 195.3 ALF 8.16 FLIGHT TIME 200.00 ARRIVAL DATE JUL 11 1966 LAUNCH DATE DEC 23 1965 HELIOCENTRIC CONIC DISTANCE 582.935 RL 147.15 LAL .00 LOL 90.96 VL 25.938 GAL 10.63 A7L 87.20 MCA 299.75 SMA 117.34 ECC .31043 INC 2.7969 VI 30.276 RP 108.33 LAP -2.43 LOP 30.74 VP 36.319 GAP 17.56 AZP 88.61 TAL 154.17 TAP 93.92 RCA 80.92 APO 153.77 V2 34.981 RC 204.893 GL 10.28 GP -3.04 ZAL 45.51 ZAP 176.45 ETS 241.22 ZAE 131.75 ETE 183.23 ZAC 123.14 ETC 167.28 CLP 178.17 PLANETOCENTRIC CONIC 2.38 VHP 11.212 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 26 29 3470.60 -21.17 129.01 286.60 70.74 4 24 19 2870.6 -23 60 121 14 3443.8 0 31 34 4043.76 163.25 279.38 62.09 1 38 58 -8.68 156.52 90.00 -4.98 6 10 15 2509.7 100.00 5 18 25 3109.73 -24.49 103.66 287.81 72.30 -26.68 2 26 59 8 4 9 1 22 19 3879.86 7 18 35 2733.74 100.00 -1.92 149.52 277.69 60.16 3279.9 -5.87 142.96 110.00 -31.23 77.32 290.02 75.33 2133.7 MID-COURSE EXECUTION ACCURACY
SGT 5491-1 SCP 3228.6 110.00 1 38 38 3828.62 4.04 141.93 DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5491.1 SGR 414.6 SG3 108.4 RRT .4546 RRF .4349 RTF .9486 5T 2527.3 SR 413.1 SS 548.7 CRT .8702 CRS -.8092 CST -.9934 TDE 2.6338 TRA 4.7176 TC3-1.8516 BAU 1.2022 RDE .5022 RRA .0400 RC3 .0052 FAU .00897 FDE .5465 FRA 1.2508 FC3 -.1599 BSP 18071 SGB 5506.8 R23 .0020 R13 .9486 SG1 5494.4 SG2 369.1 THA 1.97 LSA 2610.4 MSA 212.1 55A 12.7 EL1 2552.9 EL2 201.5 ALF 8.15 BOE 2.6813 BRA 4.7178 BC3 1.8516 FSP -367 ARRIVAL DATE JUL 13 1966 FLIGHT TIME 202.00 LAUNCH DATE DEC 23 1965 HELIOCENTRIC CONIC DISTANCE 587.407 RL 147.15 LAL .00 LOL 90.96 VL 25.898 GAL 11.78 A7L 87.27 HCA 302.95 SNA 117.13 ECC .32344 INC 2.7315 VI 30.276
RP 108.29 LAP -2.29 LOP 33.93 VP 36.304 GAP 18.39 A7P 88.51 TAL 152.65 TAP 95.60 RCA 79.24 APO 155.01 V2 34.994
RC 206.614 GL 9.38 GP -2.99 7AL 43.43 7AP 175.98 ETS 230.48 7AE 131.71 ETE 183.21 7AC 125.39 ETC 167.05 CLP 177.32 PLANETOCENTRIC CONIC C3 54.967 VHL 7.414 DLA 26.28 RAL 43.01 RAC 6569.0 VEL 13.279 PTH 2.43 VHP 11.716 DPA 6.89 RAP 31.11 FCC 1.9046 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 40 31 1 42 48 6 24 43 2 32 33 2879.4 -23.44 90.00 3 42 31 3479.41 90.00 0 34 32 4096.47 291.23 70.52 121.78 -20.97 129.58 -3.30 166.20 263.30 61.86 3496.5 -7.04 159.52 100.00 5 32 38 3124.43 -24.18 104.65 292.42 71.87 2524.4 -26.43 96.57 -.33 152.08 281.66 60.11 3326.7 -4.31 145.55 100.00 1 27 6 3926.68 8 16 56 2154.0 70.04 7 31 2 2753.99 -30.87 294.69 74.53 -32.68 110.00 78.79 144.10 277.97 56.22 2 49 42 3269.9 1.13 137.87 110.00 1 45 12 3869.89 5.61 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2460.0 SR 405.3 SS 544.8 CRT .8577 CRS -.7989 CST -.9942 TOE 2.6625 TRA 5.2067 TC3-1.5955 BAU 1.1725 SGT 5474.6 SGR 408.6 SG3 105.7 RRT .4781 RRF .4595 RTF .9535 SGB 5489.8 R23 .DD19 R13 .9535 ROE .5240 RRA .0627 RC3 .0018 FAU .00782 FDE .5392 FRA 1.3174 FC3 -.1232 BSP 18106 LSA 2542.8 MSA 215.5 SSA 12.0 EL1 2484.6 EL2 206.3 ALF 8.10 BOE 2.7136 BRA 5.2070 BC3 1.5955 FSP -358 SG1 5478.1 SG2 358.6 THA 2.05 FLIGHT TIME 204.00 ARRIVAL DATE JUL 15 1966 HELIOCENTRIC CONIC DISTANCE 591.643 RL 147.15 LAL .00 LOL 90.96 VL 25.860 GAL 13.02 AZL 87.34 HCA 306.15 SMA 116.92 ECC .33796 INC 2.6611 V1 30.276
RP 108.25 LAP -2.15 LOP 37.13 VP 36.289 GAP 19.31 AZP 88.43 TAL 151.21 TAP 97.36 RCA 77.41 APO 156.44 V2 35.007
RC 208.309 GL 8.50 GP -2.95 ZAL 41.50 ZAP 175.37 ETS 222.00 ZAE 131.64 ETE 183.19 ZAC 127.60 ETC 166.78 CLP 176.43 PLANETOCENTRIC CONIC 7.80 RAP 33.25 ECC 2.0297 C3 62.568 VHL 7.910 DLA 25.97 RAL 45.22 RAO 6569.2 VEL 13.562 PTH 2.48 VHP 12.275 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 56 26 2887.6 -23.2A 90.00 3 58 19 3487.59 -20.78 130.11 295.75 70.32 3551.6 162.63 1 45 36 -5.29 90.00 0 36 24 4151.57 -1.52 169.28 287.08 61.72 5 46 39 3138.35 6 38 57 2538.4 -26.19 97.54 100.00 -23.88 105.57 296.91 71.47 2 37 2 8 29 24 3376.0 -2.64 148.27 1 30 46 3976.04 7 43 10 2773.78 60.13 100.00 1.34 154.79 285.49 71.53 2173.8 -32.42 110.00 -30.50 80.22 299.24 73.76 MID-COURSE EXECUTION ACCURACY 2.79 3313.4 110.00 1 50 44 3913.38 7.25 146.40 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5454.3 SGR 401.6 SG3 103.1 RRT .5016 RRF .4840 RTF .9584 SGB 5469.0 R23 .0015 R13 .9584 SGI 5458.0 SG2 347.1 THA 2.12 ST 2394.6 SR 395.9 SS 543.3 CRT .8449 CRS -.7889 CST -.9951 TOE 2.6945 TRA 5.7334 TC3-1.3558 BAU 1.1341 ROE .5457 RRA .0876 RC3 -.0003 FAU .00664 FDE .5339 FRA 1.3899 FC3 -.0919 BSP 18111 LSA 2477.6 MSA 217.6 SSA 11.4 EL1 2418.0 EL2 209.7 ALF 8.01

FLIGHT TIME 198,00

BDE 2.7492 BRA 5.7341 BC3 1.3558 FSP -350

ARRIVAL DATE JUL 17 1966

LAUNCH DATE DEC 23 1965

```
OISTANCE 595.591
     RL 147.15 LAL .00 LOL 90.96 VL 25.822 GAL 14.38 A7L 87.42 HCA 309.35 SMA 116.72 ECC .35419 INC 2.5847 VI 30.276 RP 108.21 LAP -2.00 LOP 40.34 VP 36.275 GAP 20.34 A7P 88.36 TAL 149.86 TAP 99.21 RCA 75.38 APO 158.06 V2 35.020 RC 209.976 GL 7.66 GP -2.91 7AL 39.71 ZAP 174.64 ETS 215.40 ZAE 131.52 ETE 183.16 ZAC 129.77 ETC 166.46 CLP 175.49
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 71.641 VHL 8.464 DLA 25.62 RAL 47.26 RAD 6569.4 VEL 13.892 PTH 2.54 VHP 12.901 DPA 8.68 RAP 35.36 ECC 2.1790 ENCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00 4 13 40 3495.46

90.00 0 37 20 4208.32

100.00 6 0 18 3151.68

100.00 1 33 24 4027.33

110.00 7 54 54 2793.12

110.00 1 55 17 3958.66
                                                                                                                                                            5 11 56
                                                                                                                                                                                                        -23.12
                                                                                              130.62
                                                                                                                   300.14
                                                                                                                                           70.13
                                                                                                                                                                                 2895.5
                                                                         -20.60
                                                                                                                                                           1 47 29
                                                                                                                                                                                                                                 165.81
                                                                                                 1 47 29

57.61 289.18 60.25 2 40 51
81.60 303.65 73.02 8 41 27
48.81 285.58 56.87 3 1 15

MID-COURSE EXECUTION ACCURACY
SCT 5430.0 SGR 393.6 572
RRT 50.00
                                                                                                                    290.72
                                                                                                                                             61.68
                                                                                                                                                                                     3608.3
                                                                                                                                                                                                            -3.48
                                                                                              172.44
                                                                            . 31
                                                                                                                                                                                                                                  98.45
                                                                                              106.46
                                                                                                                                                                                     2551.7
                                                                                                                                                                                                           -25.95
                                                                         -23.59
          100.00
                                                                                                                                                                                     3427.3
                                                                                                                                                                                                              -.90
                                                                                                                                                                                                                                 151.09
                                                                                              157.61
         100.00
                                                                            3.08
                                                                                                                                                                                                                                  72.97
                                                                                                                                                                                                           -32.15
                                                                                                                                                                                     2193.1
                                                                       -30.13
                                                                                                81.60
         110.00
                                                                                                                                                                                                                                 142.51
                                                                                                                                                                                                              4.52
                                                                                                                                                                                     3358.7
                                                                                              148.81
         110.00
                                                                         8.94
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                    SCT 5430.0 SCR 393.6 SC3 100.7

RRT .5249 RRF .5085 RTF .9633

SCB 5444.2 R23 .0011 R13 .9633

SCI 5433.9 SC2 334.7 THA 2.19
                                                                                                                                                                               ST 2331.2 SR 384.9 55 544.3
CRT .8320 CRS -.7793 CST -.9958
      TOE 2.7306 TRA 6.3018 TC3-1.1339 BAU 1.0861
      ROE .5673 RRA .1147 RC3 -.0013 FAU .00542
FCE .5306 FRA 1.4690 FC3 -.0655 BSP 18112
                                                                                                                                                                              LSA 2414.8 MSA 218.2 SSA 10.8
      FCE
                                                                                                                                                                              EL1 2353.3 EL2 211.5 ALF 7.89
      BOE 2.7889 BRA 6.3028 BC3 1.1339 FSP -342
                                                                                                                                                                                                ARRIVAL CATE JUL 19 1966
                                                                                                          FLIGHT TIME 208.00
LAUNCH DATE DEC 23 1965
                                                                                                         DISTANCE 599.180
    HELIOCENTRIC CONIC
     RL 147.15 LAL .00 LOL 90.96 VL 25.786 GAL 15.87 AZL 87.50 HCA 312.55 SMA 116.53 ECC .37242 INC 2.5009 VI 30.276
RP 108.17 LAP -1.84 LOP 43.54 VP 36.282 GAP 21.49 AZP 88.31 TAL 148.61 TAP 101.17 RCA 73.13 APO 159.93 VZ 35.034
RC 211.617 GL 6.84 GP -2.88 ZAL 38.08 ZAP 173.81 ETS 210.25 ZAE 131.35 ETE 183.14 ZAC 131.89 ETC 166.08 CLP 174.51
    PLANETOCENTRIC CONIC
      C3 82.533 VHL 9.085 DLA 25.24 RAL 49.13 RAD 6569.6 VEL 14.279 PTH 2.60 VHP 13.603 DPA 9.52 RAP 37.44 ECC 2.3583
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TJM INJ 2 LAT INJ 2 LONG
                                                                                                                                           69.95
                                                                                                                    304.37
                             4 28 27 3503.13
                                                                         -20.42
                                                                                             131.11
           90.00
                                                                                                                                                                                       3666.1
                                                                                                                                                                                                               -1.62
                                                                                                                                                               1 48 32
                                                                                               175.67
                                                                                                                    294.21
                                                                                                                                             61.76
                             0 37 26
                                                  4266.10
                                                                             2.17
            90.00
                                                                                                                                                           7 6 15
2 43 4
                            6 13 30 3164.45
1 35 4 4080.01
                                                                                                                                                                                      2564.4
                                                                                                                                                                                                                                    99.33
                                                                                                                                             70.73
                                                                                               107.30
                                                                                                                    305.48
                                                                          -23.31
          100.00
                                                                                                                                                                                      3480.0
                                                                                                                                                                                                                                  153.98
                                                                            4.85
                                                                                             160.51
                                                                                                                    292.72
                                                                                                                                             60.47
          100.00
                                                                                                                                                          8 53 3
                                                                                                                                                                                      2211.9
                                                                                                                                                                                                       -31.87
                                                                                                                                                                                                                                   74.36
                            8 6 11 2811.91
                                                                         -29.74
                                                                                                82.93
                                                                                                                    307.88
                                                                                                                                             72.32
          110.00
                                                                                                                                                              3 5 38
                                                                                                                                                                                      3405.3
                                                                                               151.32
                              1 58 53
                                                  4005.31
                                                                           10.67
                                                                                                                    289.19
                                                                                                                                             57.33
          110.00
                                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                               ST 2273.0 SR 372.6 SS 548.9
CRT .8196 CRS -.7708 CST -.9966
                                                                                                   SGT 5403.7 SGR 384.7 SG3 98.4
RRT .5484 RRF .5333 RTF .9680
SGB 5417.4 R23 .0007 R13 .9680
      TDE 2.7772 TRA 6.9215 TC3 -.9278 BAU 1.0237
      ROE .5888 RRA .1442 RC3 -.0015 FAU .00408
FOE .5307 FRA 1.5571 FC3 -.0428 BSP 18002
BDE 2.8389 BRA 6.9230 BC3 .9278 FSP -332
                                                                                                                                                                               LSA 2357.8 MSA 217.3 SSA 10.3
ELI 2293.6 EL2 211.5 ALF 7.72
                                                                                                     5G1 5407.9 SG2 321.5 THA 2.24
                                                                                                                                                                                               ARRIVAL DATE JUL 21 1966
                                                                                                          FLIGHT TIME 210.00
LAUNCH DATE DEC 23 1965
                                                                                                         DISTANCE 602.321
      RL 147.15 LAL .00 LOL 90.96 VL 25.751 GAL 17.53 AZL 87.59 MCA 315.76 SMA 116.35 ECC .39296 INC 2.4079 V1 30.276
RP 108.13 LAP -1.68 LOP 46.74 VP 36.250 GAP 22.80 AZP 88.27 TAL 147.50 TAP 103.26 RCA 70.63 APO 162.07 V2 35.047
RC 213.230 GL 6.05 GP -2.84 ZAL 36.61 ZAP 172.88 ETS 206.15 ZAE 131.12 ETE 183.10 ZAC 133.95 ETC 165.66 CLP 173.46
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      ENCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 42 35 3510.53 -20.25 131.58 308.42 69.77 5 41 5 2910.5 -22.82 123.85 90.00 0 36 43 4324.44 4.05 178.93 297.54 61.95 1 48 48 3724.4 .26 172.29 100.00 6 26 9 3176.59 -23.03 108.10 309.50 70.40 7 19 6 2576.6 -25.49 100.16
                                                                                                                                                          5 41 5
1 48 48
7 19 6
2 44 44
                             1 35 50 4133.61
8 16 56 2830.03
                                                                                               163.49
                                                                                                                    296.11
                                                                             6.64
          100.00
                                                                                                                                                            9 4 6
                                                                                                                                                                                                           -31.58
                                                                                                                                                                                                                                   75.70
                                                                                                                                                                                      2230.0
                                                                                                                    311.93
                                                                                                                                             71.66
                                                                      -29.36
                                                                                                 84.20
          110.00
                                                                                                                                                              3 9 6
                                                                                                                                                                                      3452.9
                                                                                               153.92
                                                                                                                    292.65
                                                                                                                                             57.89
                                                                        12.40
                                                  4052.94
          110.00
                               2 1 33
                                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                              ST 2214.6 SR 358.9 SS 555.8
CRT .8073 CRS -.7625 CST -.9972
                                                                                                     SGT 5370.9 SGR 374.8 SG3 96.1
RRT .5711 RRF .5573 RTF .9726
SGB 5383.9 R23 .0000 R13 .9726
SGI 5375.1 SG2 307.4 THA 2.29
       TOE 2.8276 TRA 7.5908 TC3 -.7417 BAU .9490
      ROE .6100 RRA .1756 RC3 -.0010 FAU .00268
FOE .5323 FRA 1.6534 FC3 -.0242 BSP 17999
                                                                                                                                                                               LSA 2301.2 MSA 214.9 SSA 9.7
                                                                                                                                                                                EL1 2233.6 EL2 210.0 ALF 7.52
       BCE 2.8927 BRA 7.5928 BC3 .7417 FSP -325
                                                                                                                                                                                                ARRIVAL DATE JUL 23 1966
                                                                                                           FLIGHT TIME 212.00
 LAUNCH DATE DEC 23 1965
      RL 147.15 LAL .00 LOL 90.96 VL 25.718 GAL 19.36 AZL 87.70 HCA 318.97 SMA 116.17 ECC .41620 INC 2.3035 VI 30.276 RP 108.09 LAP -1.51 LOP 49.95 VP 36.239 GAP 24.29 AZP 88.26 TAL 146.55 TAP 105.52 RCA 67.82 APO 164.53 V2 35.060 RC 214.816 GL 5.29 GP -2.81 ZAL 34.32 ZAP 171.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GO CTE 143.03 TAP 172.84 ETG 202 GA ZAE 130 GA Z
     HELIOCENTRIC CONIC
                                       5.29 GP -2.81 ZAL 35.32 ZAP 171.84 ETS 202.85 ZAE 130.80 ETE 183.07 ZAC 135.93 ETC 165.18 CLP 172.34
       RC 214.816 GL
     PLANETOCENTRIC CONIC
       C3 111.748 VHL 10.571 DLA 24.39 RAL 52.30 RAD 6570.1 VEL 15.267 PTH 2.74 VHP 15.296 OPA 11.08 RAP 41.45 ECC 2.8391
       ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                               124.32
                                                                                                                                              69.61 5 54 36
                                                                                                                                                                                      2917.5
                                                                                                                                                                                                            -22.68
                             4 55 58 3517.49
0 35 12 4382.94
                                                                                                                    312.25
                                                                           -20.08
                                                                                               132.03
             90.00
                                                                                                                                                            1 48 15
7 31 19
2 45 28
9 14 32
                                                                                                                                                                                       3782.9
                                                                                                                                                                                                               2.15
                                                                                                                                                                                                                                  175.56
                                                                                                                                              62.26
                                                                                                                     300.69
                                                                             5.91
                                                                                                182.22
                                                                                                                                                                                                                                  100.94
                              6 38 11 3187.95
1 35 41 4187.71
8 27 5 2847.25
2 3 16 4101.18
                                                                                                                                                                                       2587.9
                                                                                                                     313.31
                                                                                                                                              70.09
                                                                                                                                                                                                             -25.28
                                                                           -22.77
                                                                                                108.84
            100.00
                                                                                                                                                                                       3587.7
                                                                                                                                                                                                                                  159.90
                                                                                                                                                                                                              4.52
                                                                                              166.51
                                                                                                                                              61.21
                                                                            8.43
                                                                                                                     299.32
           100.00
                                                                                                                                                                                       2247.2
                                                                                                                                                                                                                                   76.96
                                                                          -28.99
                                                                                                 85.40
                                                                                                                     315.74
                                                                                                                                              71.04
           110.00
                                                                   14.13
                                                                                                                                                               3 11 37
                                                                                                                                                                                       3501.2
                                                                                                                                                                                                               9.87
                                                                                                                                                                                                                                  150.08
                                                                                                                                              58.55
                                                                                                                     295.95
                                                                                                156.58
                                                                                                                                                                       ORBIT DETERMINATION ACCURACY
           110.00
                                                                                                  HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                  SGT 5334.3 SGR 363.9 SG3 94.0 ST 2159.7 SR 344.0 SS 566.4

RRT .5935 RRF .5810 RTF .9769 CRT .7958 CR5 -.7552 CST -.9978

SGB 5346.7 R23 -.0006 R13 .9769 LSA 2249.2 MSA 210.8 SSA 9.1

SGI 5338.7 SG2 292.6 THA 2.33 ELI 2177.1 EL2 206.6 ALF 7.29
        TOE 2.8907 TRA 8.3231 TC3 -.5724 BAU .8551
       ROE .6309 RRA .2091 RC3 .0001 FAU .00110
FOE .5374 FRA 1.7610 FC3 -.0085 BSP 17969
BOE 2.9587 BRA 8.3258 BC3 .5724 FSP -318
```

FI 16HT TIME 206.00

ARRIVAL DATE JUL 25 1966

LAUNCH DATE DEC 23 1965

```
DISTANCE 606.738
   HELIOCENTRIC CONIC
    RL 147.15 LAL .00 LOL 90.96 VL 25.687 GAL 21.43 A7L 87.82 MCA 322.18 SMA 116.01 ECC .44259 INC 2.1845 V1 30.276
RP 108.05 LAP -1.34 LOP 53.16 VP 36.230 GAP 25.99 A7P 88.27 TAL 145.80 TAP 107.98 RCA 64.67 APO 167.36 V2 35.073
RC 216.375 GL 4.56 GP -2.78 7AL 34.21 ZAP 170.70 ETS 200.13 ZAE 130.39 ETE 183.03 ZAC 137.81 ETC 164.65 CLP 171.12
   PLANETOCENTRIC CONIC
    C3 131.474 VHL 11.466 DLA 23.93 RAL 53.58 RAD 6570.4 VEL 15.900 PTH 2.81 VHP 16.325 DPA 11.79 RAP 43.35 ECC 3.1637
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      6 7 18
                                                                                                          69.47
                                                                                                                                         2923.7
                                                                                                                                                          -22.55
                                                                                        315.83
        90.00
                      5 8 34 3523.70
0 32 50 4441.28
                                                       -19.94
                                                                       132.42
                                                                                                                                                             4.02
                                                                                                                                          3841.3
        90.00
                                                        7.75
                                                                       185.52
                                                                                        303.64
                                                                                                           62.68
                                                                                                                     7 42 49
2 45 17
                                                                                                                                          2598.3
                                                                                                                                                          -25.08
                                                                                                                                                                          101.64
                                                                                                           69.82
                     6 49 30 3198.25
1 34 35 4241.96
                                                                                        316.86
       100.00
                                                       -22.53
                                                                       109.51
                                                                                                                                                             6.34
                                                                                                                                                                         162.90
                                                                                                                                          3642.0
       100.00
                                                        10.19
                                                                       169.57
                                                                                        302.33
                                                                                                           61.75
                                                                                                          70.47 9 24 17
59.30 3 13 10
                      8 36 34 2863.29
2 4 0 4149.69
                                                                                                                                         2263.3
                                                                                                                                                          -31.02
                                                                                                                                                                            78.12
       110.00
                                                      -28.63
                                                                        86.51
                                                                                        319.30
                                                                                                                                         3549.7
                                                                                                                                                           11.65
                                                                                                                                                                           152.71
       110.00
                                                        15.84
                                                                       159.31
                                                                                       299.06
                                                                           MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                                     ST 2108.1 SR 328.1 SS 581.3
CRT .7855 CRS -.7491 CST -.9983
                                                                           RRT .6154 RRF .6043 RTF .9810
SGB 5305.7 R23 -.0013 R13 .9810
SGI 5298.4 SGZ 277.3 THA 2.35
    TOE 2.9700 TRA 9.1277 TC3 -.4193 BAU .7370
    ROE .6518 RRA .2445 RC3 .0015 FAU-.00074
FCE .5464 FRA 1.8822 FC3 .0049 BSP 17907
                                                                                                                                            .7855 CRS -.7491 CST -.9983
                                                                                                                                    LSA 2201.7 MSA 205.2 SSA 8.5
                                                                                                                                     EL1 2124.0 EL2 201.6 ALF
                                                                                                                                                                              7.03
    BDE 3.0406 BRA 9.1310 BC3 .4193 FSP -311
                                                                                                                                                 ARRIVAL CATE JUL 27 1966
LAUNCH DATE DEC 23 1965
                                                                                FLIGHT TIME 216.00
  HELIOCENTRIC CONIC
                                                                               DISTANCE 607.647
    RL 147.15 LAL .00 LOL 90.96 VL 25.659 GAL 23.76 A7L 87.95 MCA 325.40 SMA 115.86 ECC .47266 INC 2.0469 V1 30.276
RP 108.01 LAP -1.16 LOP 56.37 VP 36.222 GAP 27.96 A7P 88.31 TAL 145.28 TAP 110.68 RCA 61.10 APO 170.63 V2 35.086
RC 217.906 GL 3.85 GP -2.75 ZAL 33.31 ZAP 169.42 ETS 197.84 ZAE 129.87 ETE 182.98 ZAC 139.58 ETC 164.09 CLP 169.78
   C3 155.964 VHL 12.489 DLA 23.43 RAL 54.63 RAD 6570.7 VEL 16.652 PTH 2.89 VHP 17.510 CPA 12.45 RAP 45.15 ECC 3.5668 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 20 19 3528.77 -19.82 132.74 319.12 69.55 6 19 7 2928.8 -22.45 125.06 90.00 0 29 31 4499.20 9.54 188.83 306.36 63.21 1 44 30 3899.2 5.87 182.08 100.00 7 0 4 3207.15 -22.32 110.09 320.12 69.58 7 53 31 2607.2 -24.90 102.24 100.00 1 32 27 4296.06 11.92 172.66 305.11 62.38 2 44 3 3696.1 8.13 165.92 110.00 8 45 20 2877.82 -28.29 87.51 322.55 69.96 9 33 18 2277.8 -30.75 79.17 110.00 2 3 40 4198.15 17.50 162.00
   PLANETOCENTRIC CONIC
                                                                          10.09 320.12 69.58 7 53 31 72.66 305.11 62.38 2 44 3 87.51 322.55 69.96 9 33 18 62.08 301.95 60.16 3 13 38 MID-COURSE EXECUTION ACCURACY SGT 5250.7 SGR 330 3 5 5 7
                       2 3 40
                                     4198.15
                                                        17.50
                                                                        162.08
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                                     ST 2060.5 SR 311.5 SS 601.4
CRT .7767 CRS -.7446 CST -.9987
                                                                            SGT 5250.7 SGR 339.3 SG3 90.1
RRT .6369 RRF .6271 RTF .9846
    TOE 3.0725 TRA10.0173 TC3 -.2813 BAU .5866
    ROE .6727 RRA .2816 RC3 .0032 FAU-.00298
FOE .5608 FRA 2.0200 FC3 .0165 BSP 17745
BOE 3.1453 BRA10.0212 BC3 .2813 FSP -303
                                                                                                                              CR1 .....
LSA 2159.8 MSA 198.U 30...
EL1 2074.7 EL2 194.9 ALF
                                                                            SGB 5261.6 R23 -.0020 R13 .9846
SG1 5255.1 SG2 261.4 THA 2.36
                                                                                                                                     LSA 2159.8 MSA 198.0 SSA
                                                                                                                                                                                8.0
                                                                                                                                                 ARRIVAL DATE JUL 29 1966
                                                                                FLIGHT TIME 218.00
LAUNCH DATE DEC 23 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 607.333
    RL 147.15 LAL .00 LOL 90.96 VL 25.633 GAL 26.42 A7L 88.12 MCA 328.61 SMA 115.73 ECC .50705 INC 1.8849 VI 30.276
RP 107.97 LAP -.98 LOP 59.58 VP 36.217 GAP 30.25 A7P 88.39 TAL 145.07 TAP 113.68 RCA 57.05 APO 174.42 V2 35.099
RC 219.410 GL 3.17 GP -2.72 TAL 32.65 TAP 167.99 ETS 195.89 TAE 129.19 ETE 182.92 TAC 141.21 ETC 163.50 CLP 168.30
   PLANETOCENTRIC CONIC
    C3 186.690 VHL 13.663 CLA 22.90 RAL 55.44 RAC 6571.0 VEL 17.550 PTH 2.97 VHP 18.882 CPA 13.04 RAP 46.82 ECC 4.0724
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
        90.00 5 31 9 3532.22
90.00 0 25 7 4556.50
100.00 7 9 46 3214.20
100.00 1 29 10 4349.75
                                                                                                                                      2932.2
                                                                                                      69.27
                                                                                                                                                                         125.29
                                                      -19.73
                                                                      132.96
                                                                                       322.06
                                                                                                                     6 30 1
                                                                                                                                                        -22.38
                                                                                                                                                                           185.32
                                                         11.28
                                                                        192.14
                                                                                        308.81
                                                                                                           63.85
                                                                                                                                         3956.5
                                                                                                                                                           7.67
                                                                                                                     8 3 21
2 41 40
                                                                                                                                                                          102.71
       100.00
                                                      -22.15
                                                                       110.54
                                                                                        323.04
                                                                                                           69.40
                                                                                                                                         2614.2
                                                                                                                                                          -24.76
                                                        13.59
                                                                       175.77
                                                                                        307.62
                                                                                                           63.12
                                                                                                                                         3749.7
                                                                                                                                                           9.88
                                                                                                                                                                          168.95
       100.00
                                                                                                                     9 41 27
                                                                                                                                                                           80.08
                       8 53 16 2890.41
                                                      -28.00
                                                                         88.37
                                                                                        325.46
                                                                                                           69.53
                                                                                                                                         2290.4
                                                                                                                                                          -30.52
                                                                       164.89
                                                                                                                                                          15.11
                                                                                                                                                                           158.06
                       2 2 9
                                                                                        304.58
                                                                                                           61.10
                                                                                                                       3 12 56
                                                                                                                                         3646.3
                                                        19.11
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 2012.6 5R 294.1 SS 626.4
CRT .7692 CRS -.7412 CST -.9990
                                                                            SGT 5199.8 SGR 325.5 SG3 88.3
RRT .6570 RRF .6484 RTF .9879
SGB 5209.9 R23 -.0027 R13 .9879
    TOE 3.1959 TRAID.9946 TC3 -.1599 BAU
                                                            . 3993
    ROE .6936 RRA .3195 RC3 .0050 FAU-.00567
FDE .5799 FRA 2.1756 FC3 .0263 BSP 17681
                                                                                                                                    LSA 2119.8 MSA 189.4 SSA 7.4
                                                                                                                                     EL1 2025.4 EL2 186.8 ALF 6.47
                                                                            SG1 5204.2 SG2 245.2 THA 2.36
    BOE 3.2703 BRA10.9992 BC3 .1600 FSP -297
                                                                                                                                                 ARRIVAL DATE JUL 31 1966
                                                                                 ELIGHT TIME 220.00
LAUNCH DATE DEC 23 1965
                                                                               DISTANCE 605.414
   HELIOCENTRIC CONIC
                           .00 LOL 90.96 VL 25.612 GAL 29.48 A7L 88.31 MCA 331.83 SMA 115.62 ECC .54643 INC 1.6900 VI 30.276
-.80 LOP 62.80 VP 36.214 GAP 32.93 A7P 88.51 TAL 145.23 TAP 117.06 RCA 52.44 APO 178.80 V2 35.111
2.51 GP -2.69 ZAL 32.26 ZAP 166.37 ETS 194.19 ZAE 128.33 ETE 182.85 ZAC 142.65 ETC 162.91 CLP 166.63
    RL 147.15 LAL
    RP 107.93 LAP
    RC 220.887 GL
   PLANETOCENTRIC CONIC
    C3 225.677 VHL 15.023 OLA 22.34 RAL 55.96 RAD 6571.3 VEL 18.628 PTH 3.05 VHP 20.482 DPA 13.57 RAP 48.32 ECC 4.7141
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           69.24
                                                                                                                       6 39 52
                                                                                                                                        2933.5
        90.00
                       5 40 59 3533.46
                                                       -19.70
                                                                       133.04
                                                                                        324.61
                                                                                                                       1 36 19
                                                                                                                                          4013.0
                                                                                                                                                             9.43
                                                                                                                                                                            188.55
                                                                        195.45
                                                                                        310.93
                                                                                                           64.60
        90.00
                      D 19 26
                                      4613.05
                                                        12.95
                                                                                                                      8 12 12
                                                                        110.85
                                                                                        325.56
                                                                                                           69.28
                                                                                                                                          2618.9
                                                                                                                                                           -24.66
                                                                                                                                                                           103.03
       100.00
                      7 18 33
                                      3218.88
                                                        -22.04
                                                                                                                      2 37 56
9 48 38
                                                                                        309.81
                                                                                                           63.95
                                                                                                                                          3802.9
                                                                                                                                                           11.58
                                                                                                                                                                          171.97
                                                        15.21
                                                                        178.89
       100.00
                      1 24 33
                                      4402.86
                                    2900.56
                                                                                                                                          2300.6
                                                                                                                                                                            80.81
                                                                                        327.95
                                                                                                           69.19
       110.00
                      9 0 18
                                                       -27.75
                                                                         89.06
                                                                          MID-COURSE EXECUTION ACCURACY
SGT 5142-A SCG
                      1 59 18
                                                                                                                                          3693.9
                                                                                                                                                           16.76
                                                                                                                                                                           160.76
                                                       20.65
                                                                        167.72
       110.00
                                      4293.94
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5142.8 SGR 310.6 SG3 86.7 ST 1966.0 SR 276.2 SS 657.9 RRT .6757 RRF .6683 RTF .9907 CRT .7635 CR5 -.7392 CST -.9993 SGB 5152.2 R23 -.0034 R13 .9907 LSA 2083.7 MSA 179.7 SSA 6.8 SGI 5147.1 SG2 228.8 THA 2.34 EL1 1977.4 EL2 177.3 ALF 6.17
     TOE 3.3517 TRA12.0745 TC3 -.0532 BAU .1618
    ROE .7148 RRA .3575 RC3 .0067 FAU-.00907
FOE .6061 FRA 2.3534 FC3 .0348 BSP 17594
BDE 3.4271 BRA12.0798 BC3 .0536 FSP -293
```

FLIGHT TIME 214.00

```
ARRIVAL DATE MAR 4 1966
                                                                         FLIGHT TIME 70.00
LAUNCH DATE DEC 24 1965
                                                                         DISTANCE 203.587
  HELIOCENTRIC CONIC
        147.14 LAL .00 LOL 91.98 VL 29.060 GAL -13.08 A7L 86.79 HCA 93.46 SMA 138.33 ECC .23467 INC 3.2143 V1 30.278 107.78 LAP 3.21 LOP 185.44 VP 38.772 GAP -4.67 A7P 90.19 TAL 241.58 TAP 335.04 RCA 105.87 APO 170.79 V2 35.160 64.180 GL 13.15 GP 7.27 ZAL 158.42 ZAP 46.53 ETS 351.51 ZAE 165.45 ETE 355.35 ZAC 53.32 ETC 166.10 CLP -46.09
    RL 147.14 LAL
   PLANETOCENTRIC CONIC
                                                                                                   2.38 VHP 4.868 DPA -10.95 RAP 320.54 ECC 1.8009
    C3 48.662 VHL 6.976 DLA -9.03 RAL 288.97 RAD 6568.8 VEL 13.039 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             112.24
                                                                                                                            1551.7
                                                                                                            2 13 1
                    1 37 10 2151.71
                                                  -17.99
                                                                 37.54
                                                                              163.20
                                                                                                                             4763.7
                                                                                                84.29
                                                                                                           12 47 40
                               5363.66
                                                  27.78
                                                                 244.93
                                                                               169.69
                   11 18 16
                                                                                                            3 25 49
                                                                                                                                            -16.01
                                                                                                                                                            11.48
                                                                                                                             1303.5
                     2 54 5
                                 1903.52
                                                  -19.32
                                                                  18.70
                                                                               162.61
                                                                                               113.26
                                                                                             83.37 14 8 48
116.14 4 20 59
80.80 15 23 1
                                                                                                                                            27.99
                                                                                                                                                           215.83
                                                                                                                             4487.1
                 12 44 1 5087.08
                                                  29.21
                                                                 224.42
                                                                               169.51
                  3 52 18 1721.28
14 2 19 4842.09
                                                                                                                            1121.3
                                                                                                                                            -19.16
                                                  -22.86
                                                                   3.13
                                                                               160.87
                                                                                                                             4242.1
                                                                                                                                             31.44
                                                                               168.89
                                                 33.07
                                                                 205.19
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 441.3 SGR 398.2 SG3 224.5
RRT -.0113 RRF -.2787 RTF -.0231
SGB 594.4 R23 .2797 R13 .0093
SG1 441.5 SG2 398.1 THA 176.87
                                                                                                                         ST 146.9 SR 386.1 S5 219.3
CRT .5558 CRS .7664 CST -.0910
   TOE -.1108 TRA -.4614 TC3 .1420 BAU .0925
ROE -.4686 RRA .1224 RC3 .0074 FAU .09174
                                                                                                                        LSA 430.4 MSA 181.6 SSA 21.2
EL1 395.5 EL2 119.2 ALF 76.84
    FOE .4533 FRA-1.4366 FC3-1.6320 BSP 535
BDE .4815 BRA .4774 BC3 .1422 FSP -645
                                                                                                                                    ARRIVAL CATE MAR 6 1966
                                                                         FLIGHT TIME 72.00
LAUNCH DATE DEC 24 1965
                                                                        OISTANCE 210.248
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 29.091 GAL -12.95 A7L 86.84 HCA 96.68 SMA 138.59 ECC .23207 INC 3.1625 V1 30.278 RP 107.81 LAP 3.14 LOP 188.67 VP 38.786 GAP -3.96 A7P 90.37 TAL 242.03 TAP 338.72 RCA 106.43 APO 170.76 V2 35.149 RC 66.288 GL 13.09 GP 7.74 ZAL 158.64 ZAP 51.29 ETS 352.12 ZAE 166.10 ETE 357.92 ZAC 51.72 ETC 166.32 CLP -50.86
  PLANETOCENTRIC CONIC
    C3 47.687 VHL 6.906 DLA -9.12 RAL 288.74 RAD 6568.8 VEL 13.002 PTH 2.37 VHP 4.605 DPA -10.92 RAP 318.91 ECC 1.7848 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1543.7
                    1 36 59 2143.71
                                                  -17.79
                                                                  37.04
                                                                               162.63
                                                                                              112.40
                                                                                                            2 12 42
                                                                                                                                           -14.60
                                                                                                                                                            29.82
       90.00
                                                                                                                                                            236.28
                                                                 244.78
                                                                                169.12
                                                                                                 84.21
                                                                                                                              4761.5
                                5361.53
                                                  27.77
       90.00
                   11 16 39
                    2 53 52 1895.68
12 42 27 5084.79
                                                                                               113.43
                                                                                                             3 25 27
                                                                                                                             1295.7
                                                                                                                                            -15.78
                                                                                                                                                            11.01
                                                  -19.11
                                                                  18.22
                                                                                162.04
      100.00
                                                                                168.94
                                                                                                 83.28 14 7 12
                                                                                                                             4484.8
                                                                                                                                             27.96
                                                                                                                                                            215.66
                                                  29.20
                                                                 224.25
      100.00
                   12 42 27
                    3 51 57 1713.78
14 0 51 4839.46
                                                                                               116.33 4 20 31
80.68 15 21 30
                                                                                160.29
                                                                                                                             1113.8
                                                                                                                                            -18.91
                                                                                                                                                            355.51
      110.00
                                                                   2.67
                                                  -22.63
                                                                                                                                            31.40
                                                                 204.99
                                                                                168.31
                                                                                                                             4239.5
                                                                                                                                                           196.15
                   14 () 51
                                                   33.04
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                     SGT 450.6 SGR 401.6 SG3 249.9

RRT -.0566 RRF -.3201 RTF .1045

SGB 603.6 R23 .2875 R13 -.1653
                                                                                                                         ST 149.4 SR 386.7 SS 230.7
CRT .4756 CRS .7666 CST -.1845
    TDE -.0988 TRA -.4950 TC3 .1106 BAU .0715
RDE -.4644 RRA .1311 RC3 .0188 FAU .10094
    FDE .4960 FRA-1.5922 FC3-1.8324 BSP 458
BDE .4748 BRA .5120 BC3 .1122 FSP -728
                                                                                                                         LSA 433.4 MSA 191.8 SSA 21.2
                                                                                                                         EL1 394.0 EL2 129.0 ALF 78.32
                                                                     SG1 453.2 SG2 398.6 THA 166.95
                                                                                                                                    ARRIVAL DATE MAR 8 1966
                                                                         FLIGHT TIME 74.00
LAUNCH DATE DEC 24 1965
                                                                        DISTANCE 216.868
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 29.112 GAL -12.83 AZL 86.89 HCA 99.91 SMA 138.77 ECC .22973 INC 3.1100 V1 30.278 RP 107.85 LAP 3.06 LOP 191.90 VP 38.791 GAP -3.29 AZP 90.54 TAL 242.33 TAP 342.24 RCA 106.89 APO 170.65 VZ 35.138
    RC 68.394 GL 13.02 GP 8.22 7AL 158.80 7AP 56.22 ETS 352.74 7AE 169.00 ETE 1.84 7AC 49.94 ETC 166.57 CLP -55.82
   PLANETOCENTRIC CONIC
    C3 46.755 VHL 6.838 DLA -9.22 RAL 288.60 RAD 6568.7 VEL 12.966 PTH
                                                                                                  2.36 VHP 4.378 DPA -10.92 RAP 317.09 ECC 1.7695
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 37 10 2135.73
11 15 21 5359.62
                                                                                             112.56
                                                                                                            2 12 46
                                                                                                                            1535.7
                                                                                                                                          -14.37
                                                                                                                                                           29.34
                                                                  36.55
                                                                              162.15
                                                  -17.58
        90.00
                                                                                                84,14 12 44 41
                                                                                                                                            26.65
                                                                                                                                                           236.15
                                                                 244.64
                                                                                168.65
                                                                                                                             4759.6
                                                  27.75
        90.00
                   2 54 0 1887.86
12 41 12 5082.72
                                                                  17.73
                                                                                               113.60
                                                                                                            3 25 28
                                                                                                                             1287.9
                                                                                                                                            -15.55
                                                                                                                                                            10.54
                                                                                161.56
                                                  -18.90
      100.00
                                                                                              83.21 14 5 55
116.52 4 20 25
80.58 15 20 20
                                                                 224.10
                                                                                                                            4482.7
                                                                                                                                            27.93
                                                                                                                                                           215.52
                                                                                168.47
       100.00
                                                  29.18
                                                                                                                            1106.3
                                                                                                                                            -18.66
                                                                                                                                                           355.07
                                                  -22.41
                                                                   2.21
                                                                               159.81
                    3 51 59 1706.32
       110.00
                                                                                                                                            31.36
                                                                                                                            4237.0
                                                                                                                                                           195.97
                                                 33.01
                                                                 204.80
                                                                                167.83
       110 00
                    13 59 43
                                  4837.03
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 470.1 SCR 405.2 SC3 276.1
RRT -.1196 RRF -.3636 RTF .2442
SCB 620.6 R23 .2555 R13 -.3283
SCI 478.5 SC2 395.2 THA 160.65
                                                                                                                       ST 153.5 SR 386.4 SS 240.8

CRT .3757 CRS .7650 CST -.2949

LSA 435.3 MSA 202.3 55A 21.2

EL1 391.3 EL2 140.5 ALF 80.24
    TOE -.0842 TRA -.5351 TC3 .0721 BAU .0492
    RDE -.4591 RRA .1406 RC3 .0318 FAU .11035
FDE .5338 FRA-1.7475 FC3-2.0433 BSP 469
BDE .4668 BRA .5532 BC3 .0788 FSP -819
    FOE .5338 FRA-1.7475 FC3-2.0433 BSP
                                                                                                                                    ARRIVAL DATE MAR 10 1966
                                                                         FLIGHT TIME 76.00
LAUNCH DATE DEC 24 1965
   HELLOCENTRIC CONIC
                                                                         DISTANCE 223.445
                         .00 LOL 91.98 VL 29.123 GAL -12.71 AZL 86.94 HCA 103.14 SMA 138.86 ECC .22757 INC 3.0565 VI 30.278 2.98 LOP 195.13 VP 38.788 GAP -2.65 AZP 90.70 TAL 242.47 TAP 345.61 RCA 107.26 APO 170.46 V2 35.126 12.93 GP 8.70 ZAL 158.91 ZAP 61.31 ETS 353.38 ZAE 172.04 ETE 8.83 ZAC 48.01 ETC 166.84 CLP -60.95
    RL 147.14 LAL
    RP 107.89 LAP
    RC 70.553 GL
                        12.93 GP
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 44 2127.70 -17.37 36.05 161.76 112.72 2 11 11
                                                                                                           12 43 40
                                                                                                                             4757.8
                                                                                                                                             26.63
                                                                                                                                                           236.02
                                                    27.74
                                                                 244.51
                                                                                168.27
                                                                                                 84.08
                   11 14 22
                                  5357.85
        90.00
                                                                                                                             1280.0
                                                                                                                                                            10.08
                                 1880.00
                                                                                                            3 25 50
                                                                                                                                            -15.31
                                                                  17.25
                                                                                161.16
                                                                                               113.77
       100.00
                    2 54 30
                                                  -18.69
                                                                                                83.13 14 4 57
                                                                                                                                                           215.38
                                                                 223.96
                                                                                168.09
                                                                                                                             4480.8
                                                                                                                                            27.91
       100.00
                   12 40 17
                                  5080.78
                                                    29.16
                                                                                               116.70 4 20 41
80.48 15 19 29
                   3 52 22 1698.82
13 58 54 4834.72
                                                                                                                             1098.8
                                                                                                                                           -18.41
                                                                                                                                                           354.63
                                                  -22.18
                                                                   1.74
                                                                                159.41
       110.00
                                                                                                                             4234.7
                                                                                                                                             31.32
                                                   32.99
                                                                 204.63
                                                                                167.45
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 504.9 SGR 409.3 SG3 301.4 ST 161.1 SR 385.3 S5 250.3 RRT -.1941 RRF -.4093 RTF .3864 CRT .2673 CR5 .7672 CST -.3998 SG8 649.9 R23 .2190 R13 -.4664 L5A 437.4 MSA 212.8 SSA 21.2
    TDE -. 0691 TRA -. 5835 TC3 . 0246 BAU . 0319
    RDE -.4531 RRA .1505 RC3 .0459 FAU .11934
    FOE .5722 FRA-1.8893 FC3-2.2533 BSP 597
BOE .4583 BRA .6026 BC3 .0521 FSP -903
```

SG1 520.1 SG2 389.7 THA 158.73

ELI 388.2 EL2 154.1 ALF 82.42

```
ARRIVAL DATE MAR 12 1966
                                                                     FLIGHT TIME 78.00
LAUNCH DATE DEC 24 1965
                                                                     DISTANCE 229.980
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 29.125 GAL -12.59 A7L 87.00 MCA 106.36 SMA 138.87 ECC .22557 INC 3.0016 VI 30.278 RP 107.92 LAP 2.88 LOP 198.35 VP 38.779 GAP -2.05 A7P 90.85 TAL 242.48 TAP 348.84 RCA 107.55 APO 170.20 V2 35.114 RC 72.741 GL 12.82 GP 9.19 7AL 158.96 ZAP 66.51 ETS 354.05 ZAE 175.01 ETE 24.73 ZAC 45.96 ETC 167.13 CLP -66.19
   PLANETOCENTRIC CONIC
    C3 44.963 VHL 6.705 DLA -9.41 RAL 288.57 RAD 6568.7 VEL 12.897 PTH 2.35 VHP 4.026 CPA -10.96 RAP 313.03 ECC 1.7400
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 38 38 2119.55
11 13 41 5356.18
2 55 21 1872.02
12 39 38 5078.94
                                                                                                                    1519.5
                                                                                                                                    -13.91
                                                                                                                                                     28.38
                                                                                          112.88 2 13 57
       90.00
                                                -17.15
                                                              35.55
                                                                           161.45
                                                                                                                                                    235.90
                                                27.73
                                                              244.39
                                                                            167.97
                                                                                           84.02
                                                                                                     12 42 57
                                                                                                                       4756.2
                                                                                                                                     26.61
       90.00
                                                                                                                      1272.0
                                                                                                                                     -15.08
                                                                                                                                                      9.60
      100.00
                                                -18.47
                                                               16.76
                                                                            160.85
                                                                                           113.93
                                                                                                    3 26 33
                                                                                          83.06 14 4 17
116.89 4 21 17
80.38 15 18 56
                                                                                                                                     27.88
                                                                                                                                                    215.25
                                                              223.82
                                                                            167.78
                                                                                                                      4478.9
      100.00
                                                29.15
                                                                                                                     1091.2
                 3 53 5 1691.22
13 58 23 4832.50
                                                                                                                                     -18.16
                                                                                                                                                   354.19
                                                                           159.09
      110.00
                                                -21.94
                                                                1.28
                                                                                                                                                   195.64
                                                                                                                                      31.28
                                                              204.46
                                                                          167.14
                                                                                                                      4232.5
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 556.1 SGR 413.7 SG3 325.9
RRT -.2758 RRF -.4551 RTF .5141
SGB 693.1 R23 .1871 R13 -.5793
SG1 577.9 SG2 382.7 THA 158.70
                                                                                                                  ST 171.7 SR 383.1 SS 257.5
CRT .1513 CRS .7667 CST -.5068
    TDE -.0519 TRA -.6382 TC3 -.0303 BAU .0411
    ROE -.4457 RRA .1608 RC3 .0613 FAU .12790
                                                                                                                  LSA 438.5 MSA 223.2 55A
                                                                                                                                                       21.2
    FDE .6001 FRA-2.0194 FC3-2.4627 BSP 827
                                                                                                                  EL1 384.2 EL2 169.2 ALF 85.19
    BDE .4487 BRA .6582 BC3 .0684 FSP
                                                     -992
                                                                                                                              ARRIVAL DATE MAR 14 1966
                                                                      FLIGHT TIME 80.00
LAUNCH DATE DEC 24 1965
  HELIOCENTRIC CONIC
                                                                     DISTANCE 236.473
   RL 147.14 LAL .00 LOL 91.98 VL 29.118 GAL -12.47 A7L 87.06 MCA 109.58 SMA 138.82 ECC .22369 INC 2.9450 V1 30.278
RP 107.96 LAP 2.77 LOP 201.58 VP 38.762 GAP -1.47 A7P 90.99 TAL 242.36 TAP 351.94 RCA 107.77 APO 169.87 V2 35.101
RC 74.954 GL 12.71 GP 9.67 ZAL 158.96 ZAP 71.77 E1S 354.76 ZAE 176.89 ETE 70.29 ZAC 43.84 ETC 167.46 CLP -71.50
  PLANETOCENTRIC CONIC
   C3 44.081 VHL 6.639 DLA -9.52 RAL 288.67 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 3.898 DPA -10.98 RAP 310.87 ECC 1.7255 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          1511.2
                  1 39 51 2111.19
11 13 15 5354.57
                                                                          161.21
                                                                                                                                     -13.67
                                                                                                                                                     27.88
                                                -16.93
                                                              35.04
       90.00
                                                                                                                        4754.6
                                                                                                                                      26.59
                                                 27.72
                                                              244.28
                                                                            167.74
       90.00
                 2 56 31 1863.85
12 39 16 5077.15
3 54 8 1683.45
13 58 8 4830.32
                                                                                                                                                       9.12
                                                                                                                       1263.8
                                                                                                                                     -14.83
                                                -18.24
                                                               16.26
                                                                            160.61
      100.00
                                                                                                                                                    215.12
                                                                                                                       4477.1
                                                                                                                                      27.86
                                                 29.13
                                                              223.69
                                                                            167.55
      100.00
                                                                                                                       1083.4
                                                                                                                                    -17.90
                                                                                                                                                    353.74
                                                -21.70
                                                                 .80
                                                                            158.84
      110.00
                                                                                                                       4230.3
                                               32.94
                                                              204.30
                                                                            166.90
                                                                                                                                       31.24
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 625.7 SGR 418.6 SG3 347.6
RRT -.3550 RRF -.5008 RTF .6200
SGB 752.8 R23 .1644 R13 -.6690
                                                                                                                   ST 186.2 SR 380.0 SS 263.8
CRT .0430 CRS .7700 CST -.5937
LSA 440.3 MSA 233.2 SSA 21.1
    TOE -.0347 TRA -.6999 TC3 -.0938 BAU .0716
    ROE -.4372 RRA .1707 RC3 .0773 FAU .13526
    FOE .6262 FRA-2.1221 FC3-2.6564 BSP 1134
BOE .4386 BRA .7205 BC3 .1216 FSP -1064
                                                                 SG1 652.7 SG2 375.2 THA 159.66
                                                                                                                  EL1 380.1 EL2 186.0 ALF 88.41
                                                                                                                             ARRIVAL CATE HAR 16 1966
                                                                     FLIGHT TIME 82.00
LAUNCH DATE DEC 24 1965
                                                                     DISTANCE 242.926
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 29.104 GAL -12.34 A7L 87.11 MCA 112.79 SMA 138.70 ECC .22190 INC 2.8860 V1 30.278 RP 108.00 LAP 2.66 LOP 204.80 VP 38.741 GAP -.92 A7P 91.12 TAL 242.11 TAP 354.91 RCA 107.92 APO 169.48 V2 35.089 RC 77.191 GL 12.58 GP 10.14 7AL 158.91 7AP 77.03 ETS 355.51 7AE 175.49 ETE 123.90 7AC 41.72 ETC 167.82 CLP -76.82
  PLANETOCENTRIC CONIC
                                                                                              2.34 VHP 3.800 OPA -10.98 RAP 308.70 ECC 1.7110
    C3 43.200 VHL 6.573 DLA -9.63 RAL 288.84 RAD 6568.6 VEL 12.828 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1502.6
                                                                                                                                   -13.42
                                                                                                                                                    27.37
                                                                           161.03
                                                                                          113.20
                                                                                                       2 16 27
                  1 41 24 2102.55
11 13 3 5353.04
       90.00
                                                -16.70
                                                              34.51
                                                                                           83.91 12 42 16
                                                                                                                                                    235.68
                                                                                                                      4753.0
                                                                                                                                     26.57
                                                                            167.57
                                                              244.17
       90.00
                                                27.71
                                                                                                      3 28 56
                                                                                                                      1255.4
                                                                                                                                     -14.58
                                                                                                                                                     8.62
                                                                            160.43
                                                                                           114.27
                                                               15.74
      100.00
                  2 58 1 1855.40
12 39 7 5075.42
                                                -18.00
                                                                                           82.93 14 3 43
                                                                                                                    4475.4
                                                                                                                                     27.84
                                                                                                                                                   215.00
                                                              223.56
                                                                           167.38
      100.00
                                                29.12
                                                                                           117.27 4 23 25
80.19 15 18 36
                   3 55 29 1675.42
13 58 8 4828.17
                                                                                                                      1075.4
                                                                                                                                     -17.63
                                                                                                                                                   353.27
                                                                                          117.27
                                                                           158.66
      110.00
                                               -21.45
                                                                 .31
                                                                                                                     4228.2
                                                                                                                                     31.21
                                                                                                                                                   195.32
                                                              204.13
                                                                            166.73
      110.00
                  13 58 8
                                                 32.91
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 203.9 SR 375.5 SS 267.4
CRT -.0567 CRS .7701 CST -.6710
    TDE -.0166 TRA -.7663 TC3 -.1641 BAU .1093
                                                                  SGT 711.3 SGR 423.6 SG3 366.6
                                                                 RRT -.4292 RRF -.5446 RTF .7011
SGB 827.8 R23 .1470 R13 -.7367
   RDE -.4272 RRA .1803 RC3 .0941 FAU .14153
FDE .6380 FRA-2.2025 FC3-2.8364 BSP 1483
                                                                                                                  LSA 441.3 MSA 242.7 SSA 21.0
                                                                                                                   EL1 375.8 EL2 203.4 ALF 92.50
    BDE .4276 BRA .7873 BC3 .1892 FSP -1137
                                                                  SG1 742.2 SG2 366.6 THA 160.81
                                                                                                                              ARRIVAL DATE MAR 18 1966
                                                                      FLIGHT TIME 84.00
LAUNCH DATE DEC 24 1965
                                                                     DISTANCE 249.339
  HELTOCENTRIC CONTC.
   RL 147.14 LAL .00 LOL 91.98 VL 29.084 GAL -12.22 A7L 87.18 MCA 116.01 SMA 138.53 ECC .22019 INC 2.8242 VI 30.278
RP 108.04 LAP 2.54 LOP 208.01 VP 38.713 GAP -.40 A7P 91.24 TAL 241.76 TAP 357.77 RCA 108.03 APO 169.03 V2 35.076
RC 79.446 GL 12.43 GP 10.59 7AL 158.82 7AP 82.24 ETS 356.31 7AE 172.41 ETE 143.49 7AC 39.64 ETC 168.21 CLP -82.10
  PLANETOCENTRIC CONIC
    C3 42.311 VHL 6.505 DLA -9.74 RAL 289.08 RAD 6568.6 VEL 12.794 PTH 2.33 VHP 3.730 DPA -10.96 RAP 306.58 ECC 1.6963
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     1493.5
                                                                                                                                    -13.16
                                                                                                                                                     26.84
                                                                          160.91
                                                                                          113.37
                                                                                                       2 18 10
                                 2093.54
                                                 -16.46
                                                               33.96
       90.00
                    1 43 16
                                                                                            83.86 12 42 15
114.45 3 30 36
82.87 14 3 46
117.47 4 24 56
80.10 15 18 47
                                                                                                                                                    235.58
                                                                                                                        4751.6
                                                                                                                                      26.56
                                 5351.58
                                                 27.70
                                                              244.06
                                                                            167.46
       90.00
                  11 13 4
                                                                                                                                                      8.11
                                                                                                                                     -14.31
                                                 -17.76
                                                                                           114.45
                                                                                                                       1246.6
                   2 59 49
                                 1846.59
                                                               15.20
                                                                            160.31
      100.00
                                                                                                                                     27.81
                                                                                                                                                    214.88
                                                                                                                       4473.8
                  12 39 12
                                 5073.76
                                                 29.11
                                                              223.44
                                                                            167.27
      100.00
                                                                                                                                                    352.79
                               1667.06
                                                 -21.19
                                                              359.80
                                                                            158.54
                                                                                           117.47
                                                                                                                       1067.1
                                                                                                                                    -17.35
      110.00
                  13 58 21
                                 4826.06
                                                 32.89
                                                              203.97
                                                                            166.61
                                                                                                                       4226.1
                                                                                                                                       31.17
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                             ST 224.7 SR 370.0 SS 269.5
CRT -.1394 CRS .7732 CST -.7270
LSA 443.3 MSA 251.1 SSA 20.9
    TOE .0006 TRA -.8373 TC3 -.2415 BAU .1503
                                                                  SGT 811.6 SGR 428.5 SG3 381.2
RRT -.4940 RRF -.5862 RTF .7607
    ROE -.4161 RRA .1888 RC3 .1110 FAU .14604
    FOE .6451 FRA-2.2466 FC3-2.9881 BSP 1875
BOE .4161 BRA .8583 BC3 .2658 FSP -1187
                                                                  5GB 917.8 R23 .1365 R13 -.7866
                                                                 SG1 845.1 SG2 357.8 THA 162.06
                                                                                                                 EL1 372.1 EL2 221.3 ALF 97.50
```

```
ARRIVAL DATE HAR 20 1966
                                                                      FLIGHT TIME 86.00
LAUNCH DATE DEC 24 1965
                                                                       DISTANCE 255.713
  HELIOCENTRIC CONIC
                       .00 LOL 91.98 VL 29.057 GAL -12.09 A7L 87.24 HCA 119.22 SMA 138.30 ECC .21853 INC 2.7590 V1 30.278 2.41 LOP 211.23 VP 38.682 GAP .09 A7P 91.35 TAL 241.30 TAP .52 RCA 108.08 APO 168.53 V2 35.063
    RL 147.14 LAL
    RC 81.719 GL 12.27 GP 11.04 ZAL 158.68 ZAP 87.33 ETS 357.16 ZAE 169.02 ETE 151.48 ZAC 37.66 ETC 168.65 CLP -87.28
   PLANETOCENTRIC CONIC
                                                                                               2.32 VHP 3.685 OPA -10.90 RAP 304.57 ECC 1.6815
    C3 41.412 VHL 6.435 DLA -9.87 RAL 289.38 RAC 6568.6 VEL 12.758 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 45 28 2084.03
11 13 15 5350.25
                                                                                          113.55
                                                                                                                                      -12.88
                                                                                                         2 20 12
                                                                                                                       1484.0
                                                                                                                                                       26.28
                                                 -16.20
                                                               33.38
                                                                            160.85
                                                                                            83.81 12 42 25
114.63 3 32 34
                                                                                                                         4750.3
                                                                                                                                        26.54
                                                                                                                                                      235.49
                                                 27.69
                                                               243.96
                                                                             167.41
                3 1 57 1837.31
12 39 27 5072.20
3 59 8 1658.26
13 58 46 4824.02
                                                                                                                                        -14.03
                                                                                                                                                        7.56
      100.00
                                                -17.49
                                                                14.64
                                                                             160.24
                                                                                                                         1237.3
                                                                                                                         4472.2
                                                                                          82.81 14 4 0
117.67 4 26 46
80.01 15 19 10
                                                                                                                                        27.79
                                                                                                                                                      214.77
                                                               223.33
                                                                             167.22
                                                29.09
      100.00
                                                                                                                                      -17.05
                                                                                                                                                      352.28
                                             -20.92
32.86
                                                               359.27
                                                                             158.46
                                                                                                                        1058.3
      110.00
                                                               203.82
                                                                                                                        4224.0
                                                                                                                                        31.14
                                                                                                                                                      195.02
                                                                            166.56
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 922.9 SGR 433.2 SG3 391.4

RRT -.5504 RRF -.6253 RTF .8036

SGB 1019.5 R23 .1304 R13 -.8227

SG1 958.2 SG2 348.4 THA 163.23
                                                                                                                    ST 247.7 SR 363.3 SS 269.8
CRT -.2069 CRS .7769 CST -.7687
LSA 446.1 MSA 258.2 SSA 20.8
   TDE .0169 TRA -.9106 TC3 -.3244 BAU .1931
RDE -.4036 RRA .1961 RC3 .1280 FAU .14880
   FDE .6438 FRA-2.2582 FC3-3.1107 BSP 2291
BDE .4039 BRA .9315 BC3 .3487 FSP -1220
                                                                                                                     EL1 369.6 EL2 238.2 ALF 103.89
                                                                                                                                ARRIVAL DATE MAR 22 1966
                                                                       FLIGHT TIME 88.00
LAUNCH DATE DEC 24 1965
                                                                      01STANCE 262.050
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 29.025 GAL -11.95 AZL 87.31 HCA 122.43 SMA 138.04 ECC .21693 INC 2.6897 VI 30.278 RP 108.12 LAP 2.27 LOP 214.44 VP 38.646 GAP .56 AZP 91.44 TAL 240.74 TAP 3.17 RCA 108.09 APO 167.98 V2 35.050 RC 84.008 GL 12.09 GP 11.47 ZAL 158.51 ZAP 92.27 ETS 358.06 ZAE 165.61 ETE 155.66 ZAC 35.83 ETC 169.13 CLP -92.31
  PLANETOCENTRIC CONIC
   C3 40.500 VHL 6.364 DLA -10.01 RAL 289.74 RAD 6568.6 VEL 12.723 PTH 2.31 VHP 3.664 DPA -10.80 RAP 302.70 ECC 1.6665 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           113.73
                                                                32.77
                                                                            160.83
                                                                                                         2 22 35
                                                                                                                        1473.9
                                                                                                                                       -12.58
                                                                                                                                                        25.58
       90.00
                   1 48 1 2073.92
                                                -15.93
                                                                                                                         4749.1
                  11 13 35 5349.13
3 4 25 1827.44
12 39 52 5070.83
                                                                                             83.77
                                                                                                         12 42 44
                                                                              167.40
                                                 27.68
                                                               243.88
       90.00
                                                                                                         3 34 52
                                                                                                                         1227.4
                                                                                                                                        -13.72
                                                                             160.22
                                                                                            114.82
      100.00
                                                -17.21
                                                                14.04
                                                                                              82.76 14 4 23
                                                                                                                         4470 .8
                                                29.08
                                                               223.23
                                                                             167.21
      100.00
                   4 1 25 1648.92
13 59 21 4822.12
                                                                                                                                        -16.73
                                                                                            117.89
                                                                                                         4 28 54
                                                                                                                         1048.9
      110.00
                                                -20.62
                                                               358.71
                                                                             158.44
                                                                                              79.93 15 19 43
                                                                                                                         4222.1
                                                               203.67
                                                                             156.55
      110.00
                  13 59 21
                                                32.84
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 1042.5 SGR 437.4 SG3 398.3

RRT -.6008 RRF -.6617 RTF .8344

SGB 1130.6 R23 .1265 R13 -.8488
                                                                                                                     ST 272.1 SR 354.8 SS 266.8 CRT -.2603 CRS .7751 CST -.8043
    TOE .0318 TRA -.9850 TC3 -.4121 BAU .2366
   ROE - 3891 RRA .2027 RC3 .1454 FAU .15027
FOE .6241 FRA-2.2467 FC3-3.2122 BSP .2728
BOE .3904 BRA 1.0056 BC3 .4370 FSP -1256
                                                                                                                     LSA 448.3 MSA 264.0 SSA 20.8
                                                                   5G1 1078.9 SG2 337.9 THA 164.27
                                                                                                                     EL1 368.8 EL2 252.7 ALF 112.06
                                                                      FLIGHT TIME 90.00
                                                                                                                                ARRIVAL DATE MAR 24 1966
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 268.351
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 28.988 GAL -11.81 A7L 87.38 HCA 125.64 SMA 137.73 ECC .21537 INC 2.6152 V1 30.278
RP 108.16 LAP 2.13 LOP 217.64 VP 38.606 GAP 1.01 A7P 91.52 TAL 240.09 TAP 5.73 RCA 108.07 APO 167.39 V2 35.036
    RC 86.309 GL 11.88 GP 11.91 TAL 158.29 TAP 96.99 ETS 359.01 TAE 162.31 ETE 158.18 TAC 34.19 ETC 169.68 CLP -97.15
   PLANETOCENTRIC CONIC
    C3 39.572 VHL 6.291 CLA -10.16 RAL 290.16 RAC 6568.5 VEL 12.686 PTH 2.30 VHP 3.664 CPA -10.64 RAP 301.02 ECC 1.6513
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 50 56 2063.02

11 14 0 5348.31

3 7 14 1816.83

12 40 23 5069.74

4 4 4 1638.91

14 0 3 4820.42
                                                                          160.85
                                                                                          113.92
                                                                                                         2 25 19
                                                                                                                        1463.0
                                                                                                                                      -12.26
                                                -15.63
                                                                32.11
                                                                                         83.74
115.02 3 37 31
82.72 14 4 52
118.11 4 31 22
79.85 15 20 23
                                                                                             83.74 12 43 9
                                                                                                                         4748.3
                                                                                                                                       26.52
                                                27.67
                                                               243.82
                                                                             167.45
                                                                                                                                       -13.40
                                                                                                                         1216.8
                                                -16.91
                                                                13.40
                                                                             160.24
                                                                                                                         4469.7
                                                                                                                                       27.76
                                                29.07
                                                               223.15
                                                                            167.26
      100.00
                                                                                                                         1038.9
                                                                                                                                      -16.38
31.07
                                                                                                                                                      351.18
                                                                            158.45
                                                -20.30
                                                               358.11
                                                                                                                         4220.4
                                                 32.82
                                                               203.55
                                                                             166.59
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 297.4 SR 345.1 SS 262.4
CRT -.3003 CRS .7745 CST -.8287
                                                                  5GT 1168.0 5GR 441.2 5G3 4DD.7
RRT -.6444 RRF -.6957 RTF .8564
SCB 1248.6 R23 .1264 R13 -.8676
    TOE .0443 TRA-1.0594 TC3 -.5038 BAU .2801
    ROE - 3735 RRA .2078 RC3 .1628 FAU .15003
FOE .5987 FRA-2.2046 FC3-3.2823 BSP 3178
                                                                                                                    LSA 451.9 MSA 267.9 SSA 20.7
    BOE .3761 BRA 1.0796 BC3 .5295 FSP -1272
                                                                   SG1 1205.0 SG2 327.0 THA 165.21
                                                                                                                     EL1 371.7 EL2 263.4 ALF 121.80
                                                                                                                                ARRIVAL DATE MAR 26 1966
                                                                       FLIGHT TIME 92.00
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 274.618
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 28.947 GAL -11.67 AZL 87.47 HCA 128.84 SMA 137.39 ECC .21385 INC 2.5347 V1 30.278
RP 108.20 LAP 1.97 LOP 220.85 VP 38.563 GAP 1.44 AZP 91.59 TAL 239.36 TAP 8.20 RCA 108.01 APO 166.77 V2 35.023
RC 88.623 GL 11.64 GP 12.36 ZAL 158.04 ZAP 101.49 ETS .02 ZAE 159.14 ETE 159.81 ZAC 32.76 ETC 170.32 CLP-101.76
   PLANETOCENTRIC CONIC
    C3 38.626 VHL 6.215 DLA -10.33 RAL 290.63 RAD 6568.5 VEL 12.649 PTH 2.30 VHP 3.681 CPA -10.41 RAP 299.57 ECC 1.6357
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           114.12
                                                                                                                                                       24.35
                                                                            160.92
                                                                                                         2 28 26
       90.00
                    1 54 15 2051.16
                                                 -15.30
                                                               31.39
                  2051.16
11 14 29 5347.95
3 10 28 1805.29
12 40 57 5069.06
4 7 3 1628.06
14 0 51 4819.05
                                                                                              83.73
                                                                                                        12 43 37
                                                                                                                          4747.9
                                                                                                                                                       235.32
                                                               243.80
                                                                              167.54
        90.00
                                                 27.67
                                                                12.70
                                                                              160.31
                                                                                             115.24
                                                                                                        3 40 33
                                                                                                                         1205.3
                                                                                                                                        -13.04
                                                                                                                                                        5.70
      100.00
                                                -16.57
                                                                                                                                                       214.54
                                                               223.10
                                                                             167.35
                                                                                              82.69 14 5 26
                                                                                                                         4469.1
                                                                                                                                         27.75
      100.00
                                                29.07
                                                                                            118.35
                                                                                                        4 34 12
                                                                                                                         1028.1
                                                                                                                                       -16.01
                                                                                                                                                       350.56
                                                               357.46
                                                                             158.51
                                                -19.95
       110.00
                                                                                              79.80 15 21 10
                                                                                                                         4219.1
                                                                                                                                        31.05
                                                                                                                                                      194.66
                                                               203.44
                                                                             166.68
      110.00
                                                 32.80
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 323.0 SR 334.0 SS 256.0

CRT -.3286 CRS .7722 CST -.8468

LSA 456.3 MSA 269.7 SSA 20.6

EL1 378.9 EL2 268.9 ALF 132.10
                                                                  SGT 1297.4 SGR 444.5 SG3 399.6
RRT -.6829 RRF -.7276 RTF .8721
    TOE .0540 TRA-1.1324 TC3 -.5992 BAU .3231
    ROE -.3564 RRA .2116 RC3 .1804 FAU .14845
    FOE .5644 FRA-2.1393 FC3-3.3272 BSP 3638
BOE .3604 BRA 1.1520 BC3 .6257 FSP -1278
                                                                   SGB 1371.4 R23 .1292 R13 -.8812
                                                                   SG1 1334.6 SG2 315.6 THA 166.04
```

ARRIVAL DATE MAR 28 1966

LAUNCH DATE DEC 24 1965

DISTANCE 280.852 HELIOCENTRIC CONIC RL 147.14 LAL .00 LOL 91.98 VL 28.902 GAL -11.52 AZL 87.55 HCA 132.05 SMA 137.02 ECC .21236 INC 2.4465 V1 30.278
RP 108.24 LAP 1.82 LOP 224.05 VP 38.517 GAP 1.85 AZP 91.64 TAL 238.55 TAP 10.60 RCA 107.92 APO 166.12 V2 35.010 RC 90.946 GL 11.36 GP 12.84 ZAL 157.76 ZAP 105.72 ETS 1.09 ZAE 156.16 ETE 160.88 ZAC 31.58 ETC 171.06 CLP-106.14 PLANETOCENTRIC CONIC C3 37.662 VML 6.137 CLA -10.54 RAL 291.17 RAC 6568.5 VEL 12.611 PTH 2.29 VMP 3.715 CPA -10.12 RAP 298.35 ECC 1.6198 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 1 58 c 11 14 57 5348.24 3 14 7 1792.58 12 41 33 5068.98 4 10 28 1616.15 1 42 4818.18 161.02 2 32 D 1438.1 -11.52 23.59 -14.93 30.61 114.34 27.57 243.82 167.68 83.74 12 44 6 4748.2 26.52 235.34 90.00 4.96 160.41 115.47 3 44 0 1192.6 -12.64 -16.20 11.94 100.00 82.69 14 6 2 214.54 100.00 29.06 223.09 167.49 4469.0 27.75 118.61 4 37 24 79.76 15 22 0 1016.2 349.88 356.75 158.61 -15.59 -19.56 110.00 110.00 32.79 203.38 166.82 4218.2 31.03 194.60 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 348.2 SR 321.9 SS 248.7 CRT -.3477 CRS .7731 CST -.8564 LSA 462.4 MSA 269.3 SSA 20.5 SGT 1428.2 SGR 447.3 SG3 394.5 RRT -.7164 RRF -.7577 RTF .8830 SGB 1496.6 R23 .1361 R13 -.8907 TOE .0608 TRA-1.2026 TC3 - .6972 BAU .3649 ROE -.3384 RRA .2138 RC3 .1979 FAU .14538 FCE .5302 FRA-2.0475 FC3-3.3419 BSP 4087 EL1 390.4 EL2 269.2 ALF 141.38 BOE .3439 BRA 1.2215 BC3 .7247 FSP -1260 SGI 1465.4 SG2 304.2 THA 166.78 LAUNCH DATE DEC 24 1965 FLIGHT TIME 96.00 ARRIVAL DATE MAR 30 1966 HELIOCENTRIC CONIC DISTANCE 287.054 RL 147.14 LAL .00 LOL 91.98 VL 28.853 CAL -11.36 A7L 87.65 HCA 135.25 SMA 136.62 ECC .21092 INC 2.3491 V1 30.278
RP 108.29 LAP 1.65 LOP 227.25 VP 38.469 GAP 2.24 A7P 91.67 TAL 237.67 TAP 12.92 RCA 107.81 APO 165.44 V2 34.996 11.04 CP 13.36 ZAL 157.44 ZAP 109.69 ETS 2.25 ZAE 153.36 ETE 161.55 ZAC 30.63 ETC 171.94 CLP-110.26 93.279 GL C3 36.679 VHL 6.056 CLA -10.78 RAL 291.76 RAD 6568.4 VEL 12.572 PTH 2.28 VHP 3.762 DPA -9.73 RAP 297.37 ECC 1.6036 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1423.5 22.74 -11.08 114.58 2 36 4 2 2 21 2023.47 -14.52 29.73 161.17 90.00 11 15 21 5349.49 3 18 18 1778.41 12 42 4 5069.78 4 14 20 1602.93 14 2 32 4818.02 235.43 12 44 30 4749.5 26.53 27.68 243.91 167.87 83.78 90.00 100.00 -15.79 11.10 160.55 115.72 3 47 56 1178.4 -12.204.14 223.15 214.59 100.00 29.07 167.69 82.72 14 6 34 4469.8 27.76 -19.13 355.97 158.74 118.88 4 41 3 1002.9 -15.13 349.14 110.00 15 22 50 79.75 203.37 167.02 4218.0 31.03 194.59 110.00 32.79 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 372.8 SR 308.1 SS 239.0 CRT -.3576 CRS .7680 CST -.8654 SGT 1560.2 SGR 450.2 SG3 387.7 RRT -.7474 RRF -.7865 RTF .8911 SGB 1623.9 R23 .1449 R13 -.8977 TDE .D632 TRA-1.2698 TC3 -.7985 BAU .4057 RDE -.3189 RRA .2151 RC3 .2165 FAU .14167 LSA 468.6 MSA 266.6 SSA 20.4 FOE .4839 FRA-1.9472 FC3-3.3459 BSP 4548 BDE .3251 BRA 1.2879 BC3 .8273 FSP -1245 EL1 404.4 EL2 265.2 ALF 149.11 5G1 1597.4 SG2 292.2 THA 167.40 ARRIVAL DATE APR 1 1966 FLIGHT TIME 98.00 LAUNCH DATE OFC 24 1965 **CISTANCE 293.227** HELIOCENTRIC CONIC RL 147.14 LAL .00 LOL 91.98 VL 28.802 GAL -11.19 A7L 87.76 HCA 138.44 SMA 136.21 ECC .20951 INC 2.2401 V1 30.278
RP 108.33 LAP 1.49 LOP 230.44 VP 38.418 GAP 2.61 A7P 91.68 TAL 236.73 TAP 15.17 RCA 107.67 APO 164.74 V2 34.983
RC 95.621 GL 10.65 GP 13.95 7AL 157.09 7AP 113.37 ETS 3.50 7AE 150.75 ETE 161.92 7AC 29.93 ETC 172.98 CLP-114.13 PLANETOCENTRIC CONIC C3 35.675 VHL 5.973 OLA -11.07 RAL 292.40 RAC 6568.4 VEL 12.532 PTH 2.27 VHP 3.821 CPA -9.24 RAP 296.63 ECC 1.5871 LNCH AZMTH LNCH TIME L-I TIME. INJ LAT. INJ LONG INJ RT ASC. INJ AZMTH. INJ TIME. PO CST. TIM. INJ 2. LAT. INJ 2. LONG -10.58 1406.9 21.78 161.35 114.84 2 40 45 90.00 2 7 18 2006.88 -14.05 28.74 12 44 45 4752.1 26.56 235.61 83.87 11 15 33 5352.06 3 23 6 1762.37 27.70 244.10 168.12 90.00 160.73 115.99 3 52 28 1162.4 -11.69 3.22 10.14 100.00 -15.31 4471.8 27.79 214.74 12 42 27 5071.81 4 18 45 1588.05 14 3 17 4818.89 223.30 167.94 82.79 14 6 59 100.00 29.09 355.10 158.92 119.19 4 45 13 988.1 -14.51 348.30 110.00 -18.64 167.28 79.79 15 23 35 4218.9 31.04 194.65 203.43 32.80 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 336.4 SR 293.5 SS 228.6 CRT -.3605 CRS .7652 CST -.8688 LSA 476.0 MSA 261.8 SSA 20.3 SGT 1691.1 SGR 453.4 SG3 378.0 RRT -.7748 RRF -.8141 RTF .8964 TOE .0620 TRA-1.3320 TC3 -.9020 BAU .4447 RCE -.2987 RRA .2149 RC3 .2358 FAU .13697 FOE .4391 FRA-1.8295 FC3-3.3238 BSP 4990 BOE .3050 BRA 1.3492 BC3 .9323 FSP -1211 SGB 1750.8 R23 .1580 R13 -.9024 EL1 420.2 EL2 258.2 ALF 155.13 SG1 1728.2 SG2 280.5 THA 167.94 ARRIVAL DATE APR 3 1966 FLIGHT TIME 100.00 LAUNCH DATE OFC 24 1965 DISTANCE 299.371 HELIOCENTRIC CONIC RL 147.14 LAL .00 LOL 91.98 VL 28.748 GAL -11.02 A7L 87.88 HCA 141.64 SMA 135.78 ECC .20813 INC 2.1165 V1 30.278 RP 108.37 LAP 1.31 LOP 233.64 VP 38.366 GAP 2.97 A7P 91.66 TAL 235.72 TAP 17.36 RCA 107.52 APO 164.03 V2 34.970 10.20 GP 14.63 7AL 156.72 7AP 116.78 ETS 4.89 7AE 148.33 ETE 162.02 7AC 29.47 ETC 174.21 CLP-117.75 RC 97.969 GL PLANETOCENTRIC CONIC C3 34.653 VHL 5.887 DLA -11.42 RAL 293.11 RAD 6568.4 VEL 12.491 PTH 2.26 VHP 3.891 DPA -8.62 RAP 296.13 ECC 1.5703 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCM TIME L-1 TIME
2 13 4 1987.75
11 15 27 5356.51
3 28 38 1743.91
12 42 34 5075.58
4 23 51 1571.04
14 3 51 4821.22 1387.8 20.67 115.13 2 46 11 -10.00 -13.50 27.61 161.58 90.00 235.93 27.73 168.44 84.03 12 44 44 4756.5 26.62 90.00 -14.76 9.05 160.96 116.29 3 57 42 1143.9 -11.11 2.17 100.00 82.94 14 7 9 4475.6 27.84 215.01 29.12 223.57 168.25 100.00 119.52 4 50 2 971.0 -14.00 347.36 -18.07 354.11 159.13 110.00 79.89 15 24 12 31.09 194.82 4221.2 32.83 203.61 167.60 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY MID-COURSE EXECUTION ACCURACY SCT 1822.0 SGR 457.7 SG3 367.5 RRT -.8005 RRF -.8409 RTF .9002 SGB 1878.6 R23 .1737 R13 -.9058 ST 418.9 SR 277.1 SS 216.0 CRT -.3545 CRS .7542 CST -.8733 LSA 483.5 MSA 254.6 SSA 20.2 EL1 436.4 EL2 248.7 ALF 160.09 TDE .0550 TRA-1.3897 TC3-1.0095 BAU .4826 ROE -.2769 RRA .2140 RC3 .2572 FAU .13200 FOE .3840 FRA-1.7100 FC3-3.2976 BSP 5446 BOE .2823 BRA 1.4061 BC3 1.0417 FSP -1183 SG1 1859.2 SG2 268.8 THA 168.38

FLIGHT TIME 94.00

```
ARRIVAL DATE APR 5 1966
LAUNCH DATE DEC 24 1965
                                                                                         FLIGHT TIME 102.00
                                                                                         CISTANCE 305.488
   HELIOCENTRIC CONIC
                              .00 LOL 91.98 VL 28.691 GAL -10.85 AZL 88.03 MCA 144.83 SMA 135.33 ECC .20680 INC 1.9742 V1 30.278 1.14 LOP 236.82 VP 38.312 GAP 3.30 AZP 91.61 TAL 234.66 TAP 19.49 RCA 107.34 APO 163.31 V2 34.957 9.64 GP 15.44 ZAL 156.33 ZAP 119.90 ETS 6.44 ZAE 146.06 ETE 161.87 ZAC 117.15 ETC 273.06 CLP-121.14
     RL 147.14 LAL
           108.41 LAP
     RC 1001.323 GL
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 33.611 VHL 5.797 CLA -11.86 RAL 293.89 RAD 6568.3 VEL 12.449 PTH 2.25 VHP 3.972 OPA -7.84 RAP 295.83 ECC 1.5531
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 19 50 1965.29 -12.84 26.28 161.86 115.45 2 52 35 1365.3 -9.31 19.38
90.00 11 14 52 5363.56 27.78 244.93 168.83 84.28 12 44 15 4763.6 26.70 236.43
100.00 3 35 9 1722.30 -14.10 7.78 161.23 116.63 4 3 51 1122.3 -10.41 .93
100.00 12 42 14 5081.78 29.17 224.03 168.66 83.17 14 6 56 4481.8 27.92 215.45
110.00 4 29 46 1551.24 -17.40 352.96 159.38 119.90 4 55 37 951.2 -13.30 346.26
110.00 14 4 6 4825.60 32.88 203.94 168.02 80.08 15 24 32 4225.6 31.16 195.14
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .0443 TRA-1.4392 TC3-1.1182 BAU .5179
RDE -.2550 RRA .2110 RC3 .2795 FAU .12611
FDE .3354 FRA-1.5734 FC3-3.2483 BSP 5838
BDE .2588 BRA 1.4546 BC3 1.1526 FSP -1128
                                                                                                                                                   ST 433.9 SR 260.2 SS 203.0
CRT -.3432 CRS .7480 CST -.8714
LSA 491.6 MSA 245.6 SSA 20.0
                                                                                    SGT 1948.1 SGR 462.6 SG3 354.3
RRT -.8223 RRF -.8660 RTF .9020
SGB 2002.3 R23 .1950 R13 -.9074
                                                                                                                                                   EL1 452.5 EL2 237.5 ALF 164.01
                                                                                    SG1 1985.5 SG2 258.3 THA 168.76
                                                                                                                                                                  ARRIVAL CATE APR 7 1966
LAUNCH DATE DEC 24 1965
                                                                                         FLIGHT TIME 104.00
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 311.580
                               .00 LOL 91.98 VL 28.633 GAL -10.66 AZL 88.19 HCA 148.02 SMA 134.87 ECC .20551 INC 1.8078 VI 30.278 .96 LOP 240.01 VP 38.257 GAP 3.63 AZP 91.53 TAL 233.54 TAP 21.56 RCA 107.15 APO 162.59 VZ 34.945 8.95 GP 16.41 ZAL 155.91 ZAP 122.73 ETS 8.20 ZAE 143.93 ETE 161.48 ZAC 118.12 ETC 273.11 CLP-124.31
    RL 147.14 LAL
RP 108.44 LAP
   PLANETOCENTRIC CONIC
    C3 32.550 VHL 5.705 DLA -12.42 RAL 294.74 RAD 6568.3 VEL 12.407 PTH 2.24 VHP 4.062 DPA -6.87 RAP 295.72 ECC 1.5357 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 27 56

11 13 31 5374.36

3 42 54 1696.45

12 41 14 5091.47

4 36 46 1527.76

3 52 4832.92
                                                                                                                   115.82
                                                                                                                                     3 0 14
                                                                                                                                                       1338.3
                                                                                               162.20
                                                                                                                                                                           -8.48
                                                                                24.70
         90.00
                                                             -12.05
                                                                                                                                   12 43 6
                                                                                                                                                                             26.82
                                                                                245.71
                                                                                                                      84.67
                                                                                                                                                          4774.4
                                                                                                                                                                                              237.19
                                                                                                 169.32
         90.00
                                                               27.85
                                                                                                 161.56
                                                                                                                     117.02
                                                                                                                                   4 11 10
                                                                                                                                                         1096.5
                                                                                                                                                                              -9.58
                                                                                                                                                                                              359.47
                                                                                 6.27
        100.00
                                                             -13.31
                                                                                224.74
                                                                                                                      83.54
                                                                                                                                   14 6
                                                                                                                                             - 6
                                                                                                                                                          4491.5
                                                                                                                                                                             28.05
                                                                                                                                                                                              216.14
                                                              29.25
                                                                                                 169,16
        100.00
                                                                                                 159.69
                                                                                                                     120.32
                                                                                                                                                          927.8
                                                                                                                                                                            -12.45
                                                                                                                                                                                              344.96
                                                              -16.60
                                                                                351.61
        110.00
                                                                                                                                15 24 25
                                                                                                 168.54
                                                                                                                      80.40
                                                                                                                                                          4232.9
                                                                                                                                                                                             195.67
        110.00
                                                               32.97
                                                                                204.49
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE .0236 TRA-1.4840 TC3-1.2341 BAU .5533

ROE -.2308 RRA .2080 RC3 .3061 FAU .12049

FDE .2698 FRA-1.4450 FC3-3.2046 BSP 6287

BOE .2320 BRA 1.4985 BC3 1.2715 FSP -1093
                                                                                                                                                   ST 460.4 SR 240.7 S5 187.1
CRT -.3186 CRS .7212 CST -.8766
LSA 500.1 MSA 233.2 SSA 20.0
                                                                                    SGT 2076.6 SGR 470.6 SG3 341.8
RRT -.8429 RRF -.8904 RTF .9035
                                                                                    SG6 2129.3 R23 .2188 R13 -.9088
                                                                                    SG1 2114.7 SG2 248.6 THA 169.03
                                                                                                                                                    EL1 468.7 EL2 224.1 ALF 167.68
                                                                                                                                                                 ARRIVAL DATE APR 9 1966
                                                                                         FLIGHT TIME 106.00
LAUNCH DATE DEC 24 1965
                                                                                         DISTANCE 317.647
   HELIOCENTRIC CONIC
                              .00 LOL 91.98 VL 28.573 GAL -10.47 AZL 88.39 HCA 151.21 SMA 134.40 ECC .20427 INC 1.6088 VI 30.278 .77 LOP 243.20 VP 38.201 GAP 3.94 AZP 91.41 TAL 232.37 TAP 23.58 RCA 106.95 APO 161.85 VZ 34.932 8.08 GP 17.62 ZAL 155.47 ZAP 125.26 ETS 10.25 ZAE 141.90 ETE 160.81 ZAC 119.29 ETC 273.22 CLP-127.27
     RL 147.14 LAL
     RP 108.48 LAP
     RC 105.043 GL
    PLANETOCENTRIC CONIC
     C3 31.472 VHL 5.610 CLA -13.14 RAL 295.67 RAC 6568.3 VEL 12.363 PTH 2.23 VHP 4.164 CPA -5.65 RAP 295.77 ECC 1.5180
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       2 37 51 1905.17
11 11 2 5390.56
3 52 21 1664.79
12 39 13 5106.18
4 45 13 1499.23
14 2 50 4844.50
                                                                                                                                                                                             15.95
                                                                                                                  116.23
                                                                                                                                                     1305.2
                                                              -11.06
                                                                                22.77
                                                                                                162.61
                                                                                                                                    3 9 36
         90.00
                                                                                                                                   12 40 52
                                                                                                                                                         4790.6
                                                                                                                                                                            27.00
                                                                                                                                                                                             238.35
                                                                                                                     85.25
                                                               27.95
                                                                                246.89
                                                                                                 169.94
                                                                                                                                                                             -8.55
                                                                                                                    117.45
                                                                                                                                   4 20 6
                                                                                                                                                         1064.8
                                                             -12.32
                                                                                 4.44
                                                                                                 161.96
                                                                               225.82
                                                                                                 169.79
                                                                                                                                                         4506.2
                                                                                                                                                                           28.23
                                                                                                                                                                                             217.20
                                                                                                                      84.09 14 4 19
                                                            29.36
                                                                                                                      120.80 5 10 12
80.90 15 23 35
                                                                                                                    120.80
                                                                                                                                                         899.2
                                                                                                                                                                           -11.41
                                                            -15.61
                                                                               349.99
                                                                                                 160.07
                                                                                                                                                        4244.5
                                                                                                                                                                            31.48
                                                                                                                                                                                             196.52
                                                           33.09
                                                                               205.37
                                                                                                 169.22
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-CONSE EXECUTION ACCORACY

SCT 2201.3 SGR 481.3 SG3 327.8

RRT -.8601 RRF -.9130 RTF ..9039

SGB 2253.3 R23 .2472 R13 -.9092

SG1 2240.3 SG2 241.3 THA 169.22
                                                                                                                                                    ST 490.2 SR 219.7 SS 170.1
CRT -.2846 CRS .6822 CST -.8841
     TOE -. 0050 TRA-1.5194 TC3-1.3536 BAU .5868
     RDE -.2055 RRA .2033 RC3 .3360 FAU .11441
FDE .2021 FRA-1.3095 FC3-3.1472 BSP 6699
BDE .2056 BRA 1.5329 BC3 1.3946 FSP -1046
                                                                                                                                                    LSA 510.0 MSA 217.6 SSA 20.1
                                                                                                                                                   EL1 485.2 EL2 208.5 ALF 170.89
                                                                                                                                                                 ARRIVAL CATE APR 11 1966
                                                                                         FLIGHT TIME 108.00
LAUNCH DATE DEC 24 1965
                                                                                        DISTANCE 323.692
   HELIOCENTRIC CONIC
                              .00 LOL 91.98 VL 28.512 GAL -10.27 AZL 88.63 HCA 154.40 SMA 133.93 ECC .20308 INC 1.3651 V1 30.278 .59 LOP 246.38 VP 38.144 GAP 4.23 AZP 91.23 TAL 231.16 TAP 25.55 RCA 106.73 APO 161.12 V2 34.920 6.97 GP 19.12 ZAL 155.01 ZAP 127.45 ETS 12.68 ZAE 139.93 ETE 159.83 ZAC 120.75 ETC 273.40 CLP-130.06
     RL 147.14 LAL
          108.52 LAP
     RC 107.406 GL
   PLANETOCENTRIC CONIC
     C3 30.379 VHL 5.512 DLA -14.10 RAL 296.70 RAD 6568.2 VEL 12.319 PTH
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ
90.00 2 50 21 1863.16 -9.78 20.34 163.14 11
                                                                                                                        2.22 VHP 4.278 OPA -4.11 RAP 295.95 ECC 1.5000
                                                                            INU LONG INU RT ASC INU AZMTH INU TIME PO CST TIM INU 2 LAT INU 2 LONG
                        2 50 21
                                                                                                                    116.71
                                                                                                                                     3 21 25
                                                                                                                                                         1263.2
                                                                                                                                                                            -6.12
                                                                                                                                                                                               13.57
                                                                                                                                                         4814.8
                       11 6 46 5414.81
4 4 13 1624.85
12 35 35 5128.36
                                          5414.81
                                                               28.07
                                                                                248.65
                                                                                                  170.74
                                                                                                                      86.13
                                                                                                                                   12 37 1
                                                                                                                                                                             27.24
                                                                                                                                                                                             240.08
         90.00
                                                             -11.06
                                                                                 2.15
                                                                                                 162.48
                                                                                                                    117.95
                                                                                                                                     4 31 18
                                                                                                                                                         1024.8
                                                                                                                                                                             -7.23
                                                                                                                                                                                             355.45
        100.00
                                                                                                                      84.94 14 1 4
                                                                                                                                                         4528.4
                                                                                                                                                                            28.49
                                                                                                                                                                                             218.79
                                                                                227.45
                                                                                                 170.61
                                                             29.50
        100.00
                                                                                                                    121.36 5 20 5
81.69 15 21 38
                                                                                                                                                          863.6
                                                                                                                                                                                             341.47
                                                             -14.36
                                                                                347.99
                                                                                                 160.55
                                                                                                                                                                           -10.11
                        4 55 42 1463.60
        110.00
                                                                                206.73
                                                                                                                                                                           31.77
                                                                                                                                                                                             197.83
                                                                                                                                                        4262.4
                                                                                                  170.09
                                                              33.28
        110.00
                        14 0 36
                                         4862.36
                                                                                    MID-COURSE EXECUTION ACCURACY
SGT 2319.2 SGR 494.6 SG3 311.4
RRT -.8725 RRF -.9332 RTF .9028
SGB 2371.3 R23 .2807 R13 -.9083
SGI 2359.4 SG2 237.6 THA 169.35
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                                                   ST 500.2 SR 197.1 SS 152.0
CRT -.2378 CRS .6274 CST -.8927
     TOE -.0431 TRA-1.5420 TC3-1.4753 BAU .6177
     ROE -.1793 RRA .1958 RC3 .3694 FAU .10758
FCE .1349 FRA-1.1604 FC3-3.0659 BSP 7027
BOE .1844 BRA 1.5544 BC3 1.5209 FSP -974
                                                                                                                                                LSA 521.8 MSA 198.9 55A 20.1
                                                                                                                                                   ELI 502.8 EL2 190.5 ALF 173.74
```

ARRIVAL DATE APR 13 1966

LAUNCH DATE DEC 24 1965

```
DISTANCE 329.714
  HELIOCENTRIC CONIC
                        .00 LOL 91.98 VL 28.450 GAL -10.07 AZL 88.94 HCA 157.58 SMA 133.45 ECC .20194 INC 1.0576 V1 30.278 .40 LOP 249.56 VP 38.086 GAP 4.52 AZP 90.98 TAL 229.91 TAP 27.48 RCA 106.50 APO 160.40 V2 34.909
   RL 147.14 LAL
RP 108.56 LAP
                        5.48 GP 21.05 TAL 154.50 TAP 129.25 ETS 15.60 TAE 137.93 ETE 158.49 TAC 30.69 ETC 184.89 CLP-132.69
   RC 109.770 GL
  PLANETOCENTRIC CONIC
   C3 29.283 VML 5.411 DLA -15.39 RAL 297.86 RAD 6568.2 VEL 12.274 PTH 2.21 VMP 4.412 DPA -2.12 RAP 296.20 ECC 1.4819
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 1207.9
                                                                                                    3 36 54
                                                                                                                                -4.36
                                                                                                                                               10.46
                                                                        163.86
                                                                                       117.23
      90.00
                   3 6 46 1807.88
                                               -8.08
                                                            17.17
                                                                                                   12 30 29
                                                                                                                    4851.7
                                                                                                                                  27.56
                                                                                                                                               242.73
                                                                                         87.47
       90.00
                 10 59 38 5451.67
4 19 42 1572.60
                                                28.21
                                                            251.34
                                                                         171.79
                                                                                                                    972.6
                                                                                        118.51
                                                                                                   4 45 54
      100.00
                                                -9.37
                                                            359.18
                                                                         163.17
              12 29 24 5162.18
5 9 11 1417.59
13 56 24 4889.96
                                                                                       86.25 13 55 26
122.00 5 32 48
82.92 15 17 54
                                                                                                                   4562.2
                                                                                                                                  28.84
                                                                         171.70
      100.00
                                               29.68
                                                            229.95
                                                                                                                   817.6
                                                                                                                                   -8.40
      110.00
                                              -12.72
                                                            345.44
                                                                        161.18
                                                                                                                   4290.0
                                                                                                                                   32.19
                                                                                                                                               199.87
                                                            208.85
      110.00
                                               33.53
                                                                         171.27
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 2453.2 SGR 519.7 SG3 299.0
RRT -.8856 RRF -.9523 RTF .9043
                                                                                                               ST 529.9 SR 167.0 SS 136.5
CRT -.1734 CRS .4411 CST -.9457
   TDE -.1086 TRA-1.5621 TC3-1.6169 BAU .6536
   ROE -.1456 RRA .1908 RC3 .4157 FAU .10204
   FOE .0211 FRA-1.0429 FC3-3.0167 BSP 7614
                                                                                                               LSA 546.5 MSA 167.9 SSA 21.1
                                                                SGB 2507.7 R23 .3098 R13 -.9100
                                                               5G1 2496.4 5G2 237.2 THA 169.28
                                                                                                               EL1 530.8 EL2 164.2 ALF 176.54
   BDE .1816 BRA 1.5737 BC3 1.6695 FSP
                                                                                                                          ARRIVAL DATE APR 15 1966
                                                                   FLIGHT TIME 112.00
LAUNCH DATE DEC 24 1965
  HELIOCENTRIC CONIC
                                                                   DISTANCE 335.716
                       .DD LOL 91.98 VL 28.386 GAL -9.86 AZL 89.35 MCA 160.76 SMA 132.97 ECC .20085 INC .6547 V1 30.278 .22 LOP 252.73 VP 38.028 GAP 4.79 AZP 90.62 TAL 228.61 TAP 29.36 RCA 106.26 APO 159.67 V2 34.897
   RL 147.14 LAL
   RP 108.59 LAP
                       3.45 GP 23.59 ZAL 153.92 ZAP 130.55 ETS 19.20 ZAE 135.79 ETE 156.68 ZAC 31.73 ETC 188.58 CLP-135.19
   RC 112.133 GL
  PLANETOCENTRIC CONIC
   C3 28.200 VHL 5.310 OLA -17.21 RAL 299.21 RAD 6568.1 VEL 12.230 PTH 2.20 VHP 4.575 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C
                                                                                                                         .48 RAP 296.47 ECC 1.4641
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       117.79 3 58 26
89.58 12 19 25
119.13 5 6 1
88.30 13 45 46
122.73 5 50 1
84.87 15 11 9
       90.00
                 3 29 35 1731.35
10 47 35 5509.37
                                                -5.67
                                                             12.84
                                                                        164.93
                                                                                                                   1131.4
                                                                                                                                   -1.91
                                                                          173.23
                                                                                                                    4909.4
       90.00
                                                28.31
                                                            255.55
                4 41 0 1500.88
12 18 51 5215.07
5 27 25 1355.46
13 48 55 4933.26
                                                                                                                     900.9
                                                                                                                                   -3.08
                                                                                                                                               348.59
      100.00
                                                -7.02
                                                            355.16
                                                                         164.19
                                                                                                                    4615.1
                                                                                                                                   29.29
                                               29.85
      100.00
                                                            233.87
                                                                          173.20
                                                                                                                     755.5
                                                                                                                                   -6.06
                                                                                                                                               335.71
                                                            342.05
                                                                         162.11
      110.00
                                              -10.45
                                                                                                                    4333.3
                                                                                                                                   32.76
      110.00
                                                33.84
                                                            212.19
                                                                          172.92
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                               SGT 2573.6 SGR 548.8 SG3 281.0
RRT -.8910 RRF -.9674 RTF .9034
SGB 2631.5 R23 .3417 R13 -.9097
                                                                                                                ST 570.6 SR 133.6 SS 130.7
CRT -.1115 CRS .1989 CST -.9801
   TOE -.1930 TRA-1.5592 TC3-1.7561 BAU .6851
   RDE -.1093 RRA .1799 RC3 .4670 FAU .09478
FDE -.0871 FRA -.8945 FC3-2.9096 BSP 8015
BDE .2218 BRA 1.5695 BC3 1.8171 FSP -910
                                                                                                               LSA 585.1 HSA 133.1 SSA 22.5
                                                                SG1 2620.1 SG2 244.8 THA 169.15
                                                                                                               EL1 570.8 EL2 132.7 ALF 178.42
                                                                   FLIGHT TIME 114.00
                                                                                                                          ARRIVAL DATE APR 17 1966
LAUNCH DATE DEC 24 1965
                                                                  DISTANCE 341.698
  HELIOCENTRIC CONIC
                         .00 LOL 91.98 VL 28.322 GAL -9.64 AZL 89.90 HCA 163.93 SMA 132.48 ECC .19982 INC .1023 VI 30.278 .03 LOP 255.91 VP 37.970 GAP 5.05 AZP 90.10 TAL 227.27 TAP 31.21 RCA 106.01 APO 158.96 VZ 34.886
   RL 147.14 LAL
RP 108.63 LAP
                          .53 GP 27.04 ZAL 153.14 ZAP 131.14 ETS 23.69 ZAE 133.32 ETE 154.29 ZAC 33.22 ETC 193.23 CLP-137.61
   RC 114.493 GL
   PLANETOCENTRIC CONIC
   C3 27.191 VHL 5.214 DLA -19.87 RAL 300.85 RAD 6568.1 VEL 12.189 PTH
                                                                                           2.19 VHP 4.787 CPA
                                                                                                                      3.99 RAP 296.65 ECC 1.4475
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                       166.70
175.28
                                                                                                                    1016.8
                                                                                                                                              359.79
                   4 4 10 1616.81
10 26 3 5605.76
                                                                                       118.25
                                                                                                    4 31 7
                                                                                                                                   1.79
                                                -2.00
                                                              6.42
       90.00
                                                                                          93.11 11 59 29
                                                                                                                                               253.94
                                                            262.60
                                                                                                                    5005.8
                                                                                                                                   28.29
                 10 26 3
                                                28.16
       90.00
                                                                                                                    795.1
                                                                                                                                               342.78
                                                            349.31
                                                                         165.88
                                                                                        119.71
                                                                                                    5 36 7
                                                                                                                                    .50
                                                -3.48
      100.00
                   5 12 52
                               1395.12
                                                                                       119.71 5 36 7
91.73 13 28 25
123.52 6 15 4
88.12 14 58 51
                                                                       175.36
                                                                                                                    4702.7
                                                                                                                                   29.77
                                                                                                                                               231.58
                12 0 3
                                                29.85
                                                            240.38
      100.00
                               5302.68
                                                                        163.62
                                                                                                                                               331.03
                   5 53 57
                                                                                                                     666.3
                                                                                                                                   -2.68
                               1266.34
                                                -7.13
                                                            337.28
      110.00
                                                                                                                  4404.2
                                                                                                                                               208.53
                                                            217.71
                                                                                                                                  33.50
                 13 35 26
                                5004.22
                                                34.14
                                                                          175.35
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 2696.4 SGR 589.8 SC3 260.7
RRT -.8918 RRF -.9794 RTF .9032
SGB 2760.1 R23 .3676 R13 -.9102
                                                                                                                ST 645.9 SR 91.0 SS 152.8
CRT -.1363 CRS -.0160 CST -.9734
   TOE -.3208 TRA-1.5348 TC3-1.9011 BAU .7175
   TDE -.3208 TRA-1.5348 103-1.50., 580 108674 1649 RC3 .5305 FAU .08674 FDE -.2260 FRA -.7399 FC3-2.7618 BSP 8466 165 1874 RRA 1.5436 BC3 1.9737 FSP -849
                                                                                                                LSA 662.9 MSA 93.2 SSA 25.0
ELI 646.0 EL2 90.1 ALF 178.88
                                                                SG1 2747.7 SG2 261.9 THA 168.86
                                                                                                                          ARRIVAL DATE APR 19 1966
LAUNCH DATE DEC 24 1965
                                                                    FLIGHT TIME 116.00
  HELIOCENTRIC CONIC
                                                                   DISTANCE 347.659
   RL 147.14 LAL .00 LOL 91.98 VL 28.257 GAL -9.41 AZL 90.72 MCA 167.11 SMA 132.00 ECC .19886 INC .7188 V1 30.278 RP 108.66 LAP -.16 LOP 259.08 VP 37.912 GAP 5.30 AZP 89.30 TAL 225.90 TAP 33.01 RCA 105.75 APO 158.25 V2 34.875 RC 116.852 GL -3.90 GP 31.90 ZAL 151.81 ZAP 130.60 ETS 29.38 ZAE 130.13 ETE 151.18 ZAC 35.41 ETC 199.21 CLP-140.05
   PLANE TOCENTRIC CONIC
   C3 26.423 VHL 5.140 DLA -23.98 RAL 303.00 RAD 6568.1 VEL 12.157 PTH 2.18 VHP 5.097 DPA
                                                                                                                       8.89 RAP 296.54 ECC 1.4349
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 6 42 1415.88 4.47 355.20 170.32 117.99 5 30 18 815.9 8.18 348.49
                   9 40 41
                                5792.47
                                                26.73
                                                            276.06
                                                                          178.14
                                                                                          99.70
                                                                                                    11 17 13
                                                                                                                    5192.5
                                                                                                                                   27.40
                                                                                                                                                267.56
                                                                                        119.79 6 28 35
98.01 12 52 52
                                                                                                                     617.0
                                                                                                                                    6.50
                                                                                                                                                332.97
                    6 8 18 1217.03
                                                 2.55
                                                             339.53
                                                                          169.26
                 11 21 46
                                                                          178.52
                                                                                                                    4866.6
                                                                                                                                   29.70
                                                                                                                                                243.75
                               5466.55
                                                28.90
                                                            252.46
                                                             329.88
                                                                                        124.14 6 56 16
93.97 14 34 33
                   6 37 31
                              1125.42
                                                -1.78
                                                                          166.55
                                                                                                                     525.4
                                                                                                                                    2.71
                                                                                                                                                323.68
      110.00
                 13 9 2
                                5130.93
                                                33.98
                                                            227.60
                                                                          179.15
                                                                                                                    4530.9
                                                                                                                                   34.16
                                                                                                                                                218.36
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                             HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                              ST 795.2 SR 55.0 S9 219.8
CRT -.7332 CRS .5310 C$T -.9493
LSA 823.3 MSA 73.8 SSA 21.5
    TOE -.5215 TRA-1.4727 TC3-2.0338 BAU
                                                   .7495
                                                                SGT 2817.4 SGR 644.6 SG3 234.9
                                                              RRT -.8867 RRF -.9877 RTF .9036
    RDE .0049 RRA .1405 RC3 .6044 FAU .07692
    FOE -.4011 FRA -.5677 FC3-2.5201 BSP 8907
BDE .5216 BRA 1.4794 BC3 2.1217 FSP -769
                                                               SGB 2890.2 R23 .3845 R13 -.9118
                                                                                                              EL1 796.2 EL2 37.3 ALE 177.09
                                                              SG1 2875.4 SG2 292.1 THA 168.41
```

FLIGHT TIME 110.00

ARRIVAL DATE APR 21 1966

```
FLIGHT TIME 118.00
LAUNCH DATE DEC 24 1965
                                                                        DISTANCE 353.600
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 28.192 GAL -9.18 AZL 92.06 HCA 170.27 SMA 131.52 ECC .19794 INC 2.0602 V1 30.278
RP 108.69 LAP -.35 LOP 262.25 VP 37.854 GAP 5.54 AZP 87.97 TAL 224.49 TAP 34.76 RCA 105.49 APO 157.55 VZ 34.865
    RC 119.206 CL -11.21 GP 39.09 TAL 148.88 TAP 128.16 ETS 36.58 TAE 125.48 ETE 147.30 TAC 38.93 ETC 207.02 CLP-142.76
   PLANETOCENTRIC CONIC
    C3 26.486 VHL 5.146 DLA -30.81 RAL 306.27 RAD 6568.1 VEL 12.160 PTH 2.18 VHP 5.630 OPA 16.05 RAP 295.76 ECC 1.4359
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            114.41 6 16 55
                                                                                                                             686.4
                                                                                                                                         22.53
                                                                353.26
                                                                             180.06
       77.33
                     5 55 29 1286.40
                                                   19.40
                                                                                                           9 28 34
                                                                                                                              35.1
                                                                                                                                            22.54
                                                                                                                                                         297.75
                                                                               180.07
                                                                                              114.41
                    9 17 59
                                  635.07
                                                   19.41
                                                                 305.22
       102.67
                                                                                              114.41 6 16 55
                                                                                                                                            22.53
                                                                                                                                                         345.79
                                                                               180.06
                                                                                                                              686.4
        77.33
                    5 55 29
                                 1286.40
                                                   19.40
                                                                 353.26
                   9 17 59 635.07
8 12 15 841.28
                                                                                            114.41 9 28 34
123.12 8 26 16
106.18 13 30 40
                                                                            180.07
174.19
                                                 19.41
                                                                                                                              35.1
                                                                                                                                            22.54
                                                                                                                                                         297.75
                                                                305.22
       102.67
                                                                                                                           241.3
                                                                                                                                            13.30
                                                                                                                                                          308.49
                                                    9.00
                                                                314.96
       110.00
                                                                                                                2.44 240.36

ORBIT DETERMINATION ACCURACY

ST 1107.2 SR 134.7 SS 346.2

CRT -.9731 CRS .9952 CST -.9584

LSA 1163.7 MSA 98.2 SSA

EL1 1114 0 --
                  12 0 23 5416.23
                                                 30.53
                                                                249.06
                                                                               184.59
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2939.5 SGR 712.0 SG3 199.4

RRT -.8730 RRF -.9914 RTF .9061

SGB 3024.5 R23 .3888 R13 -.9158

SGI 3005.4 SG2 339.7 THA 167.90
    TOE -.8754 TRA-1.3410 TC3-2.0995 BAU .7803
    ROE .1150 RRA .0940 RC3 .6701 FAU .06388
    FOE -.6235 FRA -.3669 FC3-2.0881 BSP 9354
BOE .8829 BRA 1.3443 BC3 2.2038 FSP -655
                                                                         FLIGHT TIME 120.00
                                                                                                                                   ARRIVAL DATE APR 23 1966
LAUNCH DATE DEC 24 1965
                                                                        DISTANCE 359.514
  HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 28.127 GAL -8.93 AZL 94.67 MCA 173.43 SMA 131.04 ECC .19707 INC 4.6726 VI 30.278
RP 108.72 LAP -.53 LOP 265.42 VP 37.797 GAP 5.77 AZP 85.36 TAL 223.05 TAP 36.47 RCA 105.22 APO 156.87 VZ 34.856
RC 121.557 GL -24.37 GP 50.28 ZAL 141.23 ZAP 122.30 ETS 45.78 ZAE 117.75 ETE 143.35 ZAC 45.04 ETC 217.44 CLP-146.72
   PLANETOCENTRIC CONIC
    C3 30.095 VHL 5.486 DLA -43.00 RAL 312.89 RAD 6568.2 VEL 12.307 PTH 2.22 VHP 6.799 DPA 26.99 RAP 293.17 ECC 1.4953
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO EST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                         29.52
                                                                                            126.22
                                                                                                            4 52 38
                                                                                                                            1067.5
                                                                                                                                                           20.23
       56.17
                    4 24 50 1667.53
                                                   24.98
                                                                  27.23
                                                                              192.90
                                                                                               126.21 13 14 52
                                                                                                                             5005.7
                                                                                                                                            29.54
                                                                                                                                                          254.33
                  11 41 27
                                                    25.00
                                                                261.33
                                                                               192.91
                                 5605.73
       123.83
                  4 24 50 1667.53
11 41 27 5605.73
                                                                  27.23
                                                                              192.90
                                                                                              126.22
                                                                                                            4 52 38
                                                                                                                             1067.5
                                                                                                                                            29.52
                                                                                                                                                          20.23
                                                   24.98
        56.17
                                                                                           126.21 13 14 52
126.22 4 52 38
126.21 13 14 52
                                                                             192.91
                                                  25.00
                                                               261.33
                                                                                                                             5005.7
                                                                                                                                            29.54
                                                                                                                                                         254.33
       123.63
                                                                             192.90
                                                                                                                            1067.5
                                                                                                                                            29.52
                                                                                                                                                           20.23
                                                   24.98
                                                                  27.23
                    4 24 50 1667.53
11 41 27 5605.73
        56.17
                                                                                                                            5005.7
                                                                                                                                           29.54
                                                                                                                                                         254.33
                                                                261.33
                                                                               192.91
                                                  25.00
                   11 41 27
       123.83
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 3073.5 SGR 773.2 SG3 150.1
                                                                                                                        ST 1769.3 SR 339.3 55 553.2
CRT -.9641 CRS .9972 CST -.9812
    TOE-1.6381 TRA-1.0420 TC3-1.8911 BAU .8024
                                                                    RRT -.8416 RRF -.9844 RTF .9172
SGB 3169.3 R23 .3676 R13 -.9278
    ROE .3242 RRA -.0100 RC3 .6334 FAU .04591
FOE -.8990 FRA -.1337 FC3-1.3207 BSP 9875
BOE 1.6699 BRA 1.0420 BC3 1.9943 FSP -496
                                                                                                                       LSA 1879.9 MSA 131.8 SSA
                                                                                                                                                              3.0
                                                                                                                        ELI 1799.3 EL2 88.6 ALF 169.50
                                                                     5G1 3142.9 5G2 408.3 THA 167.84
                                                                                                                                  ARRIVAL DATE APR 25 1966
                                                                        FLIGHT TIME 122.00
LAUNCH DATE DEC 24 1965
                                                                        01STANCE 365.374
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 28.061 GAL -8.67 AZL 102.00 HCA 176.54 SMA 150.57 ECC .19618 INC11.9993 V1 30.278 RP 108.75 LAP -.7Z LOP 268.59 VP 37.740 GAP 5.99 AZP 78.02 TAL 221.55 TAP 38.09 RCA 104.95 APO 156.18 V2 34.846 RC 123.903 GL -47.97 GP 67.94 ZAL 122.23 ZAP 110.69 ETS 61.70 ZAE 103.25 ETE 146.21 ZAC 55.75 ETC 235.64 CLP-160.21
   PLANETOCENTRIC CONIC
    C3 60.295 VHL 7.765 DLA -62.61 RAL 336.87 RAD 6569.1 VEL 13.478 PTH 2.46 VHP 10.683 DPA 43.72 RAP 283.73 ECC 1.9923
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           149.95 5 17 58
149.95 16 6 39
149.95 16 6 39
149.95 16 6 39
149.95 5 17 58
149.95 16 6 39
                                                                             233.98
                                                                                                                           1414.3
                                                                                                                                            30.13
                                                                  61.96
                                                   23.27
       31.50
                   4 44 24 2014.35
14 33 12 5606.86
                                                                                                                            5006.9
                                                                                                                                            30.14
                                                                                                                                                         255.15
                                                                259.36
                                                                              234.00
                                                   23.28
       148.50
                                                                                                                                            30.13
                                                                                                                                                          57.75
                                                                               233.98
                                                                                                                            1414.3
                                                                  61.96
                   4 44 24 2014.35
14 33 12 5606.86
        31.50
                                                   23.27
                                                                          233.98
234.00
                                                                                                                                                         255.15
                                                                                                                                            30.14
                                                                                                                            5006.9
                                                                259.36
                                                   23.28
                                                                            233.98
       148.50
                                                 23.27
                                                                                                                                            30.13
                                                                                                                           1414.3
                                                                  61.96
                   4 44 24 2014.35
14 33 12 5606.86
        31.50
                                                                                                                                            30.14
                                                                                                                           5006.9
                                                               259.36
                                                                               234.00
                                                  23.28
       148.50
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2935.8 SR 287.3 55 793.9
CRT -.8927 CRS .9311 CST -.9956
LSA 3051.3 MSA 146.4 SSA .8
EL1 2947.0 EL2 129.0 ALF 175.00
                                                                    SGT 3230.8 SGR 595.0 SG3 88.1
RRT -.6089 RRF -.8051 RTF ..9603
SGB 3285.1 R23 ..2620 R13 -.9647
SG1 3251.4 SG2 468.9 THA 173.47
     TOE-3.9783 TRA -.0347 TC3 -.8682 BAU .7200
    ROE .3485 RRA -.2657 RC3 .2098 FAU .02205
FOE-1.1608 FRA .1579 FC3 -.3166 BSP 10149
     BDE 3.9935 BRA .2680 BC3 .8932 FSP -281
                                                                                                                                   ARRIVAL DATE APR 27 1966
                                                                         FLIGHT TIME 124.00
 LAUNCH DATE DEC 24 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 370.633
    RL 147.14 LAL .00 LOL 91.98 VL 27.996 GAL -8.28 AZL 166.39 HCA 179.07 SMA 130.10 ECC .19382 INC76.3924 V1 30.278 RP 108.78 LAP -.90 LOP 271.76 VP 37.683 GAP 6.02 AZP 13.61 TAL 219.72 TAP 38.80 RCA 104.88 APO 155.31 VZ 34.838 RC 126.245 GL -48.19 GP 52.42 ZAL 96.27 ZAP 94.69 ETS 171.53 ZAE 57.18 ETE 245.60 ZAC 70.20 ETC 355.38 CLP 97.70
   PLANETOCENTRIC CONIC
     C31305.077 VHL 36.126 DLA -45.90 RAL 18.19 RAD 6573.1 VEL 37.767 PTH 3.54 VHP 46.518 DPA 45.38 RAP 217.81 ECC22.4783
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             135.90
                                                                                                                            1686.7
                                                                                                                                            4.91
                                                                             288.98
                                                                                                            9 8 13
                                                    -.83
                                                                  59.24
        52.23
                     8 30 6 2286.66
                                                                                                                                              4.92
                                                                                                                              256.7
                                                                               289.00
                                                                                               135.90
                                                                                                          16 31 28
                                                     -.82
                                                                 308.14
                   16 17 11
                                   856.70
       127.77
                                                                                                                                                           54.08
                                                                                               135.90 9 8 13
135.90 16 31 28
                                                                                                                            1686.7
                                                                                                                                             4.91
                                                     -.83
                                                                              288.98
                                 2286.66
                                                                  59.24
        52.23
                     8 30 6
                   16 17 11 856.70
8 30 6 2286.66
                                                                                                                                                          302.98
                                                                                                                              256.7
                                                                              289.00
                                                                                                                                             4.92
                                                     -.82
                                                                 308.14
       127.77
                                                                                                                           1686.7
                                                                                                                                             4.91
                                                                                               135.90 9 8 13
135.90 16 31 28
                                                     -.83
                                                                  59.24
                                                                               288.98
        52.23
                                                                                                                              256.7
                                                                                                                                              4.92
                                                     - .82
                                                                 308.14
                                                                               289.00
                    16 17 11
                                    856.70
       127.77
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCUMANT.

SGT 892.5 SGR 2602.8 SG3 46.6 ST 725.8 SR 1334.8 SS 1071...

RRT -.7674 RRF .9991 RTF -.7400 CRT -.9249 CRS -.9993 CST .9100

SGB 2751.6 R23 -.0980 R13 .9951 LSA 1839.8 MSA 267.7 SSA .6

EL1 1499.3 EL2 245.7 ALF 117.50
    DIFFERENTIAL CORRECTIONS
     TOE 4.5670 TRA -.6457 TC3 -.0692 BAU 3.2618
     RDE-7.5712 RRA 8.5060 RC3 .1737 FAU-.05195
FDE-1.4837 FRA 1.8291 FC3 .0345 8SP 9653
BDE 8.8420 BRA 8.5305 BC3 .1869 FSP -171
                                                                  SG1 2695.5 SG2 552.5 THA 105.41
```

ARRIVAL DATE APR 29 1966

```
LAUNCH DATE DEC 24 1965
                                                                                            DISTANCE 377.434
    RL 147.14 LAL .00 LOL 91.98 VL 27.930 GAL -8.21 AZL 69.85 MCA 183.14 SNA 129.63 ECC .19565 INC20.1488 VI 30.278
RP 108.80 LAP -1.08 LOP 274.92 VP 37.627 GAP 6.49 AZP 110.12 TAL 218.67 TAP 41.81 RCA 104.27 APO 154.99 V2 34.830
RC 128.581 GL 58.55 GP -68.77 ZAL 110.45 ZAP 110.67 ETS 275.14 ZAE 96.35 ETE 195.29 ZAC 84.53 ETC 103.18 CLP-167.12
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 124.595 VHL 11.162 DLA 40.47 RAL 301.67 RAD 6570.3 VEL 15.682 PTH 2.79 VHP 11.661 DPA -84.80 RAP 51.08 ECC 3.0505
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                -14.97
                                                                                                                          50.56 17 10 24
                                                                                                                                                              4004.2
                        15 53 40 4604.23
22 39 10 3339.89
                                                                 -9.96
                                                                                   209.19
                                                                                                    199.81
          59.78
                                                                                                                           50.56 23 34 50
50.56 17 10 24
50.56 23 34 50
50.56 17 10 24
50.56 23 34 50
                                                                                                                                                                                  -14.95
                                                                                                                                                                                                      106.84
                                                                                                                                                               2739.9
                                                                                                      199.80
                                                                                   112.81
                                                                  -9.94
         120.22
                                                                                                                                                                                                      203.22
                                                                                                                                                                4004.2
                                                                                                                                                                                  -14.97
                        15 53 40 4604.23
22 39 10 3339.89
15 53 40 4604.23
22 39 10 3339.89
                                                                                   209.19
                                                                                                      199.81
                                                                  -9.96
          59.78
                                                                                                                                                               2739.9
                                                                                                                                                                                  -14.95
                                                                                                                                                                                                      106.84
                                                                                                      199.80
                                                                                   112.81
                                                                 -9.94
         120.22
                                                                                                                                                                                                      203.22
                                                                                                                                                               4004.2
                                                                                                                                                                                  -14.97
                                                                                                      199.81
                                                                 -9.96
                                                                                   209.19
          59.78
                                                                                                                                                               2739.9
                                                                                                                                                                                  -14.95
                                                                                                                                                                                                      106.84
                                                                                                      199.80
                                                                                   112.81
                                                                 -9.94
         120.22
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 2551.2 SR 556.9 S5 772.1
CRT -.9599 CRS .9353 CST -.9970
                                                                                       SGT 3330.3 SGR 1066.0 SG3 79.0
RRT -.9142 RRF -.8202 RTF ..9814
SGB 3496.7 R23 -.2246 R13 -.9740
      TDE 4.8103 TRA-3.1703 TC3 -.2896 BAU .4836
     ROE -.9314 RRA 1.4103 RC3 .0202 FAU .01656
FDE 1.4696 FRA -.6659 FC3 -.1151 BSP 10531
                                                                                                                                                          LSA 2718.0 MSA 166.6 55A
                                                                                                                                                          EL1 2606.8 EL2 152.7 ALF 168.13
      BOE 4.8996 BRA 3.4699 BC3 .2903 FSP -262
                                                                                        SG1 3472.1 SG2 414.3 THA 163.45
                                                                                                                                                                         ARRIVAL DATE MAY 1 1966
                                                                                              FLIGHT TIME 128.00
LAUNCH DATE DEC 24 1965
                                                                                             DISTANCE 383.244
    HELIOCENTRIC CONIC
     RL 147.14 LAL .00 LOL 91.98 VL 27.865 GAL -7.93 AZL 78.36 HCA 186.24 SMA 129.17 ECC .19498 INC11.6443 V1 30.278 RP 108.8Z LAP -1.26 LOP 278.09 VP 37.571 GAP 6.68 AZP 101.58 TAL 217.09 TAP 43.33 RCA 103.98 APO 154.35 V2 34.822
     RC 130.911 GL 48.30 GP -49.13 ZAL 120.20 ZAP 125.94 ETS 299.44 ZAE 112.37 ETE 209.16 ZAC 72.10 ETC 126.17 CLP-153.76
    PLANETOCENTRIC CONIC
      C3 55.666 VHL 7.461 DLA 29.40 RAL 301.28 RAD 6569.0 VEL 13.305 PTH 2.43 VHP 7.230 DPA -68.37 RAP 331.84 ECC 1.9161
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            63.50 19 13 52
                                                                 -13.23
                                                                                   165.08
                                                                                                     186.65
                         18 7 2 4010.19
          81.74
                                                                                                                                                                                                       125.84
                                                                                                                                         21 22 14
                                                                                                                                                                 2971.9
                                                                                                       186.64
                                                                                                                             63.49
                         20 22 42
                                             3571.92
                                                                 -13.21
                                                                                    132.89
          98.26
                                                                                                                            65.53 22 18 3
61.31 20 52 0
                                                                                                                                                                 2783.1
                                                                                                                                                                                    -20.89
                                                                                                                                                                                                       113.76
                                                                                                       188.88
                                                                 -17.73
                                                                                    121.13
                         21 21 40
                                             3383.09
         100.00
                                                                                                                                                                 3074.3
                                                                                                                                                                                    -12.55
                                                                                                                                                                                                       131.35
                                                                   -8.79
                                                                                    138.12
                                                                                                       184.29
                         19 50 45
                                             3674.25
         100.00
                                                                                                                                                                                    -30.57
                                                                                                                                                                                                        79.88
                                                                                                                                          0 51 52
                                                                                                                                                                2287.7
                                                                                                                             88.18
                                                                                                       193.50
                           0 3 44
                                             2887.65
                                                                 -28.06
         110.00
                                                                                                                                                                                                       131.22
                                                                                                                                                                3142.5
                                                                                                                                                                                    -3.74
                         19 29 6
                                             3742.45
                                                                    . 75
                                                                                    137.43
                                                                                                      178.46
         110.00
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SCT 3562.1 SGR 344.9 SG3 137.3
RRT .1468 RRF .4771 RTF .9377
SGB 3578.8 R23 .3419 R13 .9382
                                                                                                                                                           ST 2207.6 SR 233.8 55 718.0
      TOE 2.7069 TRA-2.8052 TC3-1.0059 BAU .7526
                                                                                                                                                           CRT .8162 CRS -.9041 CST -.9848
      RDE .2931 RRA .2387 RC3 -.1039 FAU .03930
                                                                                                                                                                                                          1.4
      FDE 1.4753 FRA -.7271 FC3 -.6112 BSP 11006
BOE 2.7227 BRA 2.8154 BC3 1.0112 FSP -460
                                                                                                                                                           LSA 2326.4 MSA 177.2 55A
                                                                                         SG1 3562.5 SG2 341.1 THA
                                                                                                                                                           EL1 2215.9 ELZ 134.6 ALF 4.96
                                                                                                                                         .82
                                                                                                                                                                         ARRIVAL DATE MAY 3 1966
                                                                                              FLIGHT TIME 130.00
 LAUNCH DATE DEC 24 1965
                                                                                              DISTANCE 369.088
      RL 147.14 LAL .00 LOL 91.98 VL 27.800 GAL -7.65 AZL 81.20 MCA 189.38 SMA 128.72 ECC .19452 INC 8.7987 VI 30.278
RP 108.85 LAP -1.43 LOP 281.25 VP 37.517 GAP 6.88 AZP 98.68 TAL 215.51 TAP 44.90 RCA 103.68 APO 153.75 V2 34.816
RC 133.236 GL 41.73 GP -36.46 ZAL 124.75 ZAP 135.65 ETS 308.22 ZAE 120.27 ETE 206.37 ZAC 64.98 ETC 134.32 CLP-152.76
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 40.092 VHL 6.332 DLA 22.99 RAL 302.97 RAD 6568.5 VEL 12.707 PTH 2.31 VHP 6.120 DPA -55.65 RAP 325.64 ECC 1.6598 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        78.54 22 46 44
61.69 18 0 9
                        21 53 23 3201.29
16 49 52 4216.64
23 32 12 2882.69
17 53 45 4010.47
1 19 55 2557.99
18 26 27 3907.93
                                                                                                                                                                                    -27.39
                                                                                                  185.77
                                                                  -26.07
                                                                                   110.83
           90.00
                                                                                                                                                                                     -3.21
                                                                                                                                                                                                       166.28
                                                                                                                                                                 3616.6
                                                                                    172.91
                                                                                                       176.00
                                                                      .58
           90.00
                                                                                                                             79.79 24 20 14
60.20 19 0 35
                                                                                                                                                                                                        79.24
                                                                                                                                                                 2282.7
                                                                                                                                                                                    -29.37
                                                                                      87.86
                                                                                                      186.24
                                                                  -28.25
          100.00
                                                                                                                                                                                                       150.16
                                                                                                                                                                3410.5
                                                                                                                                                                                     -1.47
                                                                                    156.68
                                                                                                       174.93
                                                                    2.51
          100.00
                                                                                                                                                                                   -34.14
                                                                                                                                                                                                        54.95
                                                                                                                                        2 2 33
19 31 35
                                                                                                                                                                1958.0
                                                                                                                             82.81
                                                                                      64.14
                                                                                                       187.17
                                                                  -33.51
          110.00
                                                                                                                                                                3307.9
                                                                                                                                                                                       2.58
                                                                                                                                                                                                       139.86
                                                                                                                             56.46
                                                                                                       172.12
                                                                                    146.11
                                                                   7.04
          110.00
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                        HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 1969.3 SR 235.2 S5 688.8
CRT .8556 CRS -.9509 CST -.9738
                                                                                         SGT 3646.3 SGR 308.1 SG3 176.6
RRT .39D1 RRF .7113 RTF .9179
SGB 3659.3 R23 .3812 R13 .9189
       TOE 2.0118 TRA-2.5391 TC3-1.5295 BAU .8227
      ROE .2568 RRA .1223 RC3 -.1285 FAU .05230
FOE 1.4201 FRA -.7058 FC3-1.1295 BSP 11388
BOE 2.0281 BRA 2.5421 BC3 1.5349 FSP -592
                                                                                                                                                                                                          2.6
                                                                                                                                                            LSA 2091.0 MSA 188.4 SSA
                                                                                                                                                            EL1 1979.6 EL2 121.1 ALF 5.86
                                                                                         SG1 3648.3 SG2 283.5 THA 1.90
                                                                                                                                                                          ARRIVAL DATE MAY 5 1966
                                                                                               FLIGHT TIME 132.00
 LAUNCH DATE DEC 24 1965
                                                                                               DISTANCE 394.933
      RL 147.14 LAL .00 LOL 91.98 VL 27.735 GAL -7.36 AZL 82.62 HCA 192.54 SMA 128.27 ECC .19420 INC 7.3753 V1 30.278
RP 108.87 LAP -1.60 LOP 284.41 VP 37.463 GAP 7.08 AZP 97.20 TAL 213.92 TAP 46.46 RCA 103.36 APO 153.18 V2 34.809
RC 135.553 GL 37.62 GP -28.37 ZAL 126.78 ZAP 141.81 ETS 314.34 ZAE 124.35 ETE 202.40 ZAC 61.43 ETC 139.97 CLP-153.30
     HELIOCENTRIC CONIC
       PLANETOCENTRIC CONIC

C3 33.459 VHL 5.784 DLA 19.21 RAL 304.79 RAD 6568.3 VEL 12.443 PTH 2.25 VHP 5.737 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DLA 19.21 RAL 304.79 RAD 6568.3 VEL 12.443 PTH 2.25 VHP 5.737 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DLA 19.21 RAL 304.79 RAD 6568.3 VEL 12.443 PTH 2.25 VHP 5.737 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 324.29 ECC 1.5500 C3 33.459 VHL 5.784 DPA -47.31 RAP 3
     PLANETOCENTRIC CONIC
                         22 47 9 2986.52
16 10 37 4340.04
                                                                                                                              62.02 17 22 57
                                                                                                                                                                  3740.0
                                                                                     179.81
                                                                                                        173.57
                                                                     4.54
            90.00
                          0 24 19 2685.88
17 20 4 4115.91
1 58 16 2391.92
18 2 36 3982.63
                                                                                                                                                                                     -29.84
                                                                                                                                                                                                         64.65
                                                                                                                              87.21
                                                                                                                                             1 9 5
                                                                                                                                                                  2085.9
                                                                                      73.45
                                                                                                        183.08
                                                                   -29.77
          100.00
                                                                                                                              60.67 18 28 40
90.41 2 38 8
57.09 19 8 59
                                                                                                                                                                                       2.10
                                                                                                                                                                                                        155.95
                                                                                                                                                                  3515.9
                                                                      6.05
                                                                                     162.50
                                                                                                        172.74
          100.00
                                                                                                                                                                  1791.9
                                                                                                                                                                                    -33.75
                                                                                                                                                                                                         42.02
                                                                   -34.18
                                                                                       51.23
                                                                                                       183.19
          110.00
                                                                                                                                                                  3382.6
                                                                                                                                                                                       5.43
                                                                                                                                                                                                        143.77
                                                                   9.83
                                                                                     150.10
                                                                                                       170.44
          110.00
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 1831.4 SR 206.7 SS 655.8
CRT .8414 CRS -.9548 CST -.9639
                                                                                          SGT 3742.3 SGR 257.3 SG3 197.0
RRT .3638 RRF .6912 RTF .9074
       TDE 1.6853 TRA-2.3837 TC3-1.9263 BAU .8629
       ROE .2063 RRA .0972 RC3 -.1024 FAU .05829
                                                                                                                                                    LSA 1946.3 MSA 196.1 300
EL1 1839.6 EL2 111.2 ALF 5.44
                                                                                        SGB 3751.1 R23 .3861 R13 .9080
SG1 3743.5 SG2 239.6 THA 1.44
                                                                                                                                                           LSA 1946.3 MSA 196.1 55A 3.9
       FOE 1.3191 FRA -.6384 FC3-1.5082 BSP 11770
       BOE 1.6979 BRA 2.3857 BC3 1.9290 FSP -661
```

FLIGHT TIME 126.00

```
-27.96
                 77.99
        2.71
      -29.31
                 56.27
       3.89
      -32.80
                 34.41
     6.90
ARRIVAL DATE MAY 9 1966
ARRIVAL DATE MAY 11 1966
ARRIVAL DATE MAY 13 1966
```

```
LAUNCH DATE DEC 24 1965
                                                                                  FLIGHT TIME 134.00
                                                                                                                                                    ARRIVAL DATE MAY 7 1966
    MELIOCENTRIC CONIC
                                                                                  DISTANCE 400.770
     RL 147.14 LAL .00 LOL 91.98 VL 27.670 GAL -7.07 AZL 83.48 HCA 195.70 SHA 127.83 ECC .19398 INC 6.5177 V1 30.278
RP 108.88 LAP -1.76 LOP 287.58 VP 37.410 GAP 7.27 AZP 96.28 TAL 212.30 TAP 48.00 RCA 103.03 APO 152.62 VZ 34.804
     RC 137.863 GL 34.90 GP -22.96 ZAL 127.48 ZAP 146.01 ETS 319.02 ZAE 126.57 ETE 198.97 ZAC 59.92 ETC 144.51 CLP-154.22
    PLANETOCENTRIC CONIC
     C3 29.676 VHL 5.448 DLA 16.89 RAL 306.60 RAD 6568.2 VEL 12.290 PTH 2.21 VHP 5.597 DPA -41.54 RAP 324.44 ECC 1.4884
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                      23 18 16 2865.93
                                                         -28.31
                                                                          86.64
                                                                                        181.46
                                                                                                           90.40 24 6 2
                                                                                                                                          2265.9
                     15 53 54 4400.30 6.46 183.20
0 53 11 2572.54 -29.85 65.03
17 5 36 4168.92 7.81 165.46
2 22 41 2292.52 -33.86 43.49
17 52 35 4021.71 11.27 152.21
          90.00
                                                                                          173.03
                                                                                                             62.37
                                                                                                                        17 7 14
                                                                                                                                            3800.3
        100.00
                                                                                          181.43
                                                                                                             91.64
                                                                                                                        1 36 4
                                                                                                                                             1972.5
                                                                                                           61.05 18 15 5 3568.9
94.98 3 0 54 1692.5
57.51 18 59 37 3421.7
        100.00
                                                                                          172.29
                                                                                                                                            3568.9
        110.00
                                                                                          181.15
        110.00
                                                                                         170.21
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
     TOE 1.5068 TRA-2.2685 TC3-2.2475 BAU .8920
                                                                             SGT 3837.4 SGR 220.6 SG3 206.1
RRT .2663 RRF .5955 RTF .9003
                                                                                                                                        ST 1754.1 SR 188.8 S5 628.9
     RDE .1774 RRA .D869 RC3 -.D629 FAU .D6027 FDE 1.2232 FRA -.5524 FC3-1.7581 BSP 12047
                                                                                                                                        CRT .8287 CRS -.9569 CST -.9553
                                                                             SGB 3843.7 R23 .3683 R13 .9007
                                                                                                                                    LSA 1862.0 MSA 202.2 SSA 5.2
     BOE 1.5172 BRA 2.2702 BC3 2.2484 FSP -684
                                                                             SG1 3837.8 SG2 212.6 THA
                                                                                                                                        ELI 1761.1 EL2 105.3 ALF 5.12
                                                                                                                       .88
LAUNCH DATE DEC 24 1965
                                                                                  FLIGHT TIME 136.00
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 406.599
     RL 147.14 LAL .00 LOL 91.98 VL 27.606 GAL -6.77 AZL 84.06 MCA 198.86 SMA 127.39 ECC .19388 INC 5.9419 V1 30.278
RP 108.90 LAP -1.92 LOP 290.74 VP 37.358 GAP 7.46 AZP 95.63 TAL 210.66 TAP 49.52 RCA 102.69 APO 152.09 V2 34.799
                           33.02 GP -19.16 ZAL 127.40 ZAP 149.08 ETS 322.67 ZAE 127.83 ETE 196.21 ZAC 59.58 ETC 147.75 CLP-155.26
     RC 140.164 GL
   PLANETOCENTRIC CONIC
    C3 27.128 VHL 5.208 DLA 15.45 RAL 308.40 RAD 6568.1 VEL 12.186 PTH 2.19 VHP 5.560 DPA -37.30 RAP 325.27 ECC 1.4465 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 39 14 2790.40 -26.15 81.12 180.88 93.16 24 25 44 2190.4 -27.42 72.54 90.00 15 47 19 4431.02 7.42 184.94 173.24 62.60 17 110 3831.0 3.70 178.25 100.00 1 12 58 2500.79 -29.59 59.71 180.77 94.42 1 54 39 1900.8 -28.67 51.03 100.00 17 0 11 4195.86 8.70 166.97 172.56 61.29 18 10 7 3595.9 4.80 160.35 110.00 2 40 3 2228.32 -33.37 38.54 180.29 97.87 3 17 11 1628.3 -31.93 29.61 110.00 17 49 36 4041.10 11.97 153.27 170.60 57.74 18 56 57 3441.1 7.63 146.87
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             SCT 3935.5 5GR 201.5 SC3 209.6
RRT .1475 RRF .4606 RTF .8955
SGB 3940.7 R23 .3318 R13 .8956
     TOE 1.3973 TRA-2.1754 TC3-2.5329 BAU .9187
                                                                                                                                       5T 1709.9 SR 180.8 SS 607.1
CRT .8244 CRS -.9611 CST -.9481
     RDE .1626 RRA .0785 RC3 -.0235 FAU .06041
                                                                                                                                LSA 1811.6 MSA 206.8 SSA 6.5
EL1 1716.4 EL2 102.0 ALF 5.00
     FOE 1.1383 FRA -.4683 FC3-1.9277 BSP 12386
     BDE 1.4067 BRA 2.1768 BC3 2.5331 FSP -695
                                                                             SG1 3935.6 SG2 199.3 THA
                                                                                                                       .43
LAUNCH DATE DEC 24 1965
                                                                                 FLIGHT TIME 138.00
   HELIOCENTRIC CONIC
                                                                                DISTANCE 412.419
    RL 147.14 LAL ...OD LOL 91.98 VL 27.543 GAL -6.46 A7L 84.47 HCA 202.02 SMA 126.97 ECC .19389 INC 5.5264 V1 30.278 RP 108.91 LAP -2.07 LOP 293.90 VP 37.308 GAP 7.65 A7P 95.13 TAL 209.01 TAP 51.03 RCA 102.35 APO 151.58 V2 34.795
    RC 142.456 GL 31.65 GP -16.36 ZAL 126.81 ZAP 151.49 ETS 325.55 ZAE 128.58 ETE 194.03 ZAC 59.97 ETC 150.52 CLP-156.33
   PLANETOCENTRIC CONIC
     C3 25.224 VHL 5.022 DLA 14.37 RAL 310.22 RAD 6568.0 VEL 12.108 PTH 2.17 VHP 5.573 DPA -34.01 RAP 326.49 ECC 1.4151
    C3 25.224 VML 5.022 DLA 14.57 RAL 310.22 RAD 6568.0 VEL 12.108 PTM 2.17 VMP 5.573 DPA -34.01 RAP 326.49 ECC 1.4151 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 54 31 2741.09 -27.92 77.54 180.92 94.94 24 40 12 2141.1 -26.94 69.01 90.00 15 46 34 4444.29 7.84 185.69 173.87 62.70 17 0 38 3844.3 4.12 178.99 100.00 1 27 37 2453.57 -29.29 56.23 180.76 96.23 2 8 30 1853.6 -28.12 47.63 100.00 17 0 5 4207.05 9.06 167.60 173.21 61.39 18 10 12 3607.1 5.17 160.97 110.00 2 53 20 2185.36 -32.92 35.27 180.17 99.76 3 29 45 1585.4 -31.23 26.46 110.00 17 50 52 4048.02 12.22 153.65 171.32 57.83 18 58 20 3448.0 7.89 147.24
                                                                         HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          SGT 4032.2 SGR 196.7 SG3 209.9
RRT .0387 RRF .3197 RTF .8917
SGB 4037.0 R23 .2853 R13 .8918
    TOE 1.3300 TRA-2.0896 TC3-2.7964 BAU .9430
                                                                                                                                      ST 1689.7 SR 179.8 S5 591.2
                                                                                                                                   CRT .8291 CRS -.9676 CST -.9424
LSA 1786.8 MSA 21D.1 SSA 7.8
    ROE .1561 RRA .0699 RC3 .0129 FAU .05952
    FDE 1.0682 FRA -.3871 FC3-2.0427 BSP 12703
                                                                             SG1 4032.2 SG2 196.6 THA
    BOE 1.3391 BRA 2.0908 BC3 2.7964 FSP
                                                                                                                                      EL1 1696.3 EL2 100.1 ALF
LAUNCH DATE DEC 24 1965
                                                                                 FLIGHT TIME 140.00
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 418.228
    RL 147.14 LAL .00 LOL 91.98 VL 27.480 GAL -6.14 AZL 84.79 HCA 205.18 SMA 126.55 ECC .19402 INC 5.2108 V1 30.278
RP 108.92 LAP -2.21 LOP 297.06 VP 37.258 GAP 7.84 AZP 94.72 TAL 207.34 TAP 52.51 RCA 101.99 APO 151.10 V2 34.791
RC 144.737 GL 30.64 GP -14.24 ZAL 125.85 ZAP 153.48 ETS 327.84 ZAE 129.04 ETE 192.29 ZAC 60.82 ETC 152.81 CLP-157.39
   PLANETOCENTRIC CONIC
    C3 23.705 VHL 4.869 DLA 14.09 RAL 312.09 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 5.616 DPA -31.34 RAP 327.94 ECC 1.3901
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       96.10 0 55 22
62.72 17 3 46
97.41 2 19 24
61.40 18 13 40
                                                                                      181.39
                                                                                                                                                                             66.72
        90.00
                      0 10 13 2708.83
                                                        -27.71
                                                                        75.20
                                                                                                                                          2108.8
                                                                                                                                                          -26.57
        90.00
                     15 49 40
                                     4446.04
                                                          7.89
                                                                        185.79
                                                                                        174.75
                                                                                                                                           3846.0
                                                                                                                                                             4.18
                                                                                                                                                                             179.09
                   1 39 2 2422.40
17 3 32 4207.70
3 4 2 2156.46
17 55 2 4046.41
       100.00
                                                       -29.04
                                                                         53.95
                                                                                        181.21
                                                                                                                                           1822.4
                                                                                                                                                            -27.71
                                                                                                                                                                             45.40
       100.00
                                                          9.08
                                                                        167.63
                                                                                        174.11
                                                                                                                                           3607.7
                                                                                                                                                             5.20
                                                                                                                                                                            161.00
                                                                                      180.55
                                                                                                       101.00 3 39 58
57.81 19 2 28
       110.00
                                                       -32.57
                                                                         33.09
                                                                                                                                           1556.5
                                                                                                                                                            -30.71
                                                                                                                                                                             24.37
       110.00
                                                       12.17
                                                                        153.56
                                                                                        172.27
                                                                                                                                           3446.4
                                                                                                                                                              7.83
                                                                                                                                                                             147.15
                                                                       MID-COURSE EXECUTION ACCURACY
SGT 4139.0 SGR 200.4 SG3 209.3
RRT -.0419 RRF .1956 RTF .8902
SGB 4143.9 R23 -.2332 R13 -.8902
SGB 4143.9 R23 -.2332 R13 -.8902
SG1 4139.0 SG2 200.2 THA 179.88
EL1 1686.5 EL2 99.0 ALF 5.23
   DIFFERENTIAL CORRECTIONS
    TOE 1.2818 TRA-2.0138 TC3-3.0613 BAU .9703
    RDE .1542 RRA .0602 RC3 .0448 FAU .05851
    FOE 1.0021 FRA -.3191 FC3-2.1370 BSP 13208
BDE 1.2911 BRA 2.0147 BC3 3.0616 FSP -708
```

LAUNCH DATE DEC 24 1965

ARRIVAL DATE MAY 15 1966

HELIOCENTRIC CONIC DISTANCE 424.033 RL 147.14 LAL .00 LOL 91.98 VL 27.418 GAL -5.82 ATL 85.04 HCA 208.34 SMA 126.13 ECC .19426 INC 4.9616 V1 30.278
RP 108.93 LAP -2.35 LOP 300.22 VP 37.209 GAP 8.03 AZP 94.37 TAL 205.64 TAP 53.98 RCA 101.63 APO 150.64 V2 34.788
RC 147.008 GL 29.87 GP -12.58 ZAL 124.61 ZAP 155.19 ETS 329.68 ZAE 129.34 ETE 190.89 ZAC 62.00 ETC 154.72 CLP-158.44 PLANETOCENTRIC CONIC C3 22.435 VHL 4.737 DLA 13.89 RAL 314.01 RAD 6567.9 VEL 11.992 PTH 2.14 VHP 5.675 DPA -29.09 RAP 329.56 ECC 1.3692 UNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 19 36 2688.71 -27.55 73.75 182.21 96.81 1 4 25 2088.7 -26.32 65.30 96.81 1 4 25 62.66 17 9 38 3839.3 178.71 90.00 15 55 39 4439.32 7.68 185.41 175.84 3.96 98.14 2 28 20 61.33 18 19 39 .101.80 3 48 37 57.71 19 8 44 1 48 17 2402.71 -28.86 52.52 182.02 1802.7 -27.43 44.00 100.00 17 9 39 4200.56 8.85 167.23 175.21 3600.6 4.96 160.61 3 13 0 2137.65 18 1 26 4038.38 1537.7 -30.35 23.02 -32.32 31.68 181.31 3438.4 110.00 11.87 153.12 173.41 7.53 146.72 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4177.0 SGR 215.5 SG3 202.8 RRT -.0954 RRF .1270 RTF .8789 ST 1725.2 SR 192.0 SS 593.1 CRT .8626 CRS -.9844 CST -.9358 TOE 1.2987 TRA-1.8912 TC3-3.2408 BAU .9723 ROE .1578 RRA .0532 RC3 .0789 FAU .05466 FDE .9969 FRA -.2003 FC3-2.1093 BSP 12617 BOE 1.3083 BRA 1.8920 BC3 3.2417 FSP -608 LSA 1821.3 MSA 218.5 SSA 10.0 SGB 4182.5 R23 -.2121 R13 -.8789 SG1 4177.0 SG2 214.5 THA 179.72 EL1 1733.2 EL2 96.7 ALF 5.50 FLIGHT TIME 144.00 ARRIVAL DATE MAY 17 1966 HELIOCENTRIC CONIC DISTANCE 429.821 RL 147.14 LAL .00 LOL 91.98 VL 27.356 GAL -5.49 AZL 85.24 MCA 211.50 SMA 125.73 ECC .19464 INC 4.7586 V1 30.278
RP 108.94 LAP -2.48 LOP 303.39 VP 37.162 GAP 8.21 AZP 94.06 TAL 203.94 TAP 55.43 RCA 101.26 APO 150.20 V2 34.786 RC 149.266 GL 29.27 GP -11.25 ZAL 123.14 ZAP 156.70 ETS 331.17 ZAE 129.54 ETE 189.75 ZAC 63.40 ETC 156.35 CLP-159.46 PLANETOCENTRIC CONIC C3 21.351 VML 4.621 OLA 13.92 RAL 316.00 RAD 6567.9 VEL 11.947 PTH 2.13 VHP 5.746 OPA -27.14 RAP 331.28 ECC 1.3514 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 27 21 2677.54 -27.46 72.94 183.30 97.20 1 11 58 2077.5 -26.18 64.51 90.00 16 3 48 4426.57 1 56 3 2391.48 17 17 47 4187.85 3 20 47 2126.32 16 9 32 4025.78 90.00 7.29 177.11 62.56 17 17 34 3826.6 3.55 178.00 184.69 100.00 -28.75 51.70 183.10 98.56 2 35 54 1791.5 -27.27 43.21 98.56 2 35 54 61.22 18 27 35 102.28 3 56 14 57.56 19 16 37 176.49 3587.9 100.00 8.43 166.52 4.53 159.91 110.00 -32.16 30.84 182.37 1526.3 -30.13 22.21 174.70 110.00 11.42 152.43 3425.8 7.05 146.05 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4299.1 SGR 225.8 SG3 202.1 RRT -.1228 RRF .0515 RTF .8819 SGB 4305.0 R23 -.1613 R13 -.8818 ST 1726.8 SR 198.6 SS 576.3 CRT .8765 CRS -.9891 CST -.9342 TOE 1.2711 TRA-1.8235 TC3-3.5182 BAU 1.0047 ROE .1597 RRA .0415 RC3 .1024 FAU .05397 FOE .9337 FRA -.1570 FC3-2.1882 BSP 13426 LSA 1818.5 MSA 215.3 SSA 11.4 EL1 1735.6 EL2 95.2 ALF 5.77 BOE 1.2811 BRA 1.8240 BC3 3.5197 FSP -650 SG1 4299.1 SG2 224.0 THA 179.63 ARRIVAL DATE MAY 19 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 24 1965 HELIOCENTRIC CONIC DISTANCE 435.602 RL 147.14 LAL .00 LOL 91.98 VL 27.295 GAL -5.15 AZL 85.41 MCA 214.66 SMA 125.33 ECC .19514 INC 4.5893 V1 3D.278
RP 1D8.94 LAP -2.61 LOP 3D6.55 VP 37.115 GAP 8.40 AZP 93.78 TAL 202.21 TAP 56.87 RCA 10D.87 APO 149.79 VZ 34.785
RC 151.511 GL 28.78 GP -1D.16 ZAL 121.47 ZAP 158.07 ETS 332.36 ZAE 129.68 ETE 188.80 ZAC 64.98 ETC 157.74 CLP-160.46 PLANETOCENTRIC CONIC C3 20.407 VHL 4.517 OLA 14.11 RAL 318.08 RAO 6567.8 VEL 11.907 PTH 2.12 VHP 5.825 OPA -25.39 RAP 333.10 ECC 1.3358 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 97.34 1 18 26 62.43 17 27 19 98.72 2 42 29 61.07 18 37 12 102.50 4 3 6 57.37 19 25 58 0 33 52 2673.63 16 13 50 4408.78 184.64 2073.6 -26.12 -27.43 72.66 64.24 90.00 177.00 90.00 6.73 183.68 178.54 3808.8 2.98 2387.13 2 2 42 -28.71 51.38 184.43 1787.1 -27.20 42.90 100.00 17 27 41 4170.51 100.00 7.86 165.55 177.92 3570.5 3.95 158.95 3 27 44 2121.06 18 19 9 4009.35 110.00 -32.08 30.45 183.70 1521.1 -30.03 21.83 151.54 176.15 3409.3 6.44 145.18 110.00 10.81 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4392.7 SGR 239.9 SG3 199.0 RRT -.1345 RRF .0088 RTF .8807 SGB 4399.3 R23 -.1286 R13 -.8807 ST 1754.8 SR 208.0 SS 574.1 CRT .8948 CRS -.9935 CST -.9340 TOE 1.2730 TRA-1.7329 TC3-3.7621 BAU 1.0270 ROE .1637 RRA .0309 RC3 .1254 FAU .05215 LSA 1845.6 MSA 213.9 SSA 12.6 EL1 1764.7 EL2 92.3 ALF 6.07 FOE .8977 FRA -.0946 FC3-2.2124 BSP 13800 SG1 4392.9 SG2 237.7 THA 179.58 BOE 1.2835 BRA 1.7332 BC3 3.7642 FSP -646 ARRIVAL DATE MAY 21 1966 LAUNCH DATE DEC 24 1965 FLIGHT TIME 148.00 HELIOCENTRIC CONIC DISTANCE 441.373 RL 147.14 LAL .00 LOL 91.98 VL 27.234 GAL -4.79 AZL 85.55 MCA 217.82 SMA 124.94 ECC .19579 INC 4.4450 V1 30.278
RP 108.94 LAP -2.72 LOP 309.71 VP 37.070 GAP 8.59 AZP 93.51 TAL 200.48 TAP 58.29 RCA 100.48 APO 149.41 V2 34.784
RC 153.743 GL 28.38 GP -9.26 ZAL 119.61 ZAP 159.32 ETS 333.33 ZAE 129.78 ETE 188.02 ZAC 66.69 ETC 158.96 CLP-161.43 PLANETOCENTRIC CONIC C3 19.578 VHL 4.425 DLA 14.46 RAL 320.25 RAD 6567.8 VEL 11.873 PTH 2.11 VHP 5.911 DPA -23.80 RAP 334.98 ECC 1.3222 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 24 4 -27.44 97.27 -26.15 0 39 28 2675.74 186.20 2075.7 64.38 72.81 90.00 62.28 17 38 40 16 25 33 4386.92 6.04 182.44 180.15 3786.9 2.28 175.78 90.00 2 8 33 2388.47 17 39 9 4149.42 3 34 6 2120.80 18 30 6 3989.86 2 48 21 43.00 1788.5 -27.22 100.00 -28.72 51.48 186.00 98.67 60.90 18 48 19 100.00 7.17 164.37 179.53 3549.4 3.23 157.79 102.51 4 9 27 57.17 19 36 36 185.27 110.00 -32.08 30.43 1520.8 -30.02 21.82 5.70 150.49 177.76 3389.9 144.16 110.00 10.10 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4478.8 SGR 254.9 SG3 195.5 RRT -.1337 RRF -.0159 RTF .8793 ST 1795.2 SR 218.2 SS 576.1 CRT .9137 CRS -.9964 CST -.9351 TOE 1.2881 TRA-1.6331 TC3-3.9965 BAU 1.0467 ROE .1683 RRA .0203 RC3 .1460 FAU .05014 FOE .8698 FRA -.0321 FC3-2.2172 BSP 14087 CRT .9157 CR5 -.9904 CD. LSA 1886.1 MSA 211.5 SSA 13.7 SGB 4486.0 R23 -.1030 R13 -.8793 5G1 4478.9 5G2 252.6 THA 179.56 BDE 1.2991 BRA 1.6332 BC3 3.9992 FSP -634 EL1 1806.3 EL2 88.1 ALF 6.35

FLIGHT TIME 142.00

```
ARRIVAL CATE MAY 23 1966
                                                                      FLIGHT TIME 150.00
LAUNCH DATE DEC 24 1965
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 27.174 GAL -4.43 AZL 85.68 MCA 220.98 SMA 124.56 ECC .19658 INC 4.3199 VI 30.278 RP 108.94 LAP -2.83 LOP 312.87 VP 37.027 GAP 8.78 AZP 93.26 TAL 198.72 TAP 59.70 RCA 100.07 APO 149.05 V2 34.784 RC 155.962 GL 28.04 GP -8.51 ZAL 117.59 ZAP 160.49 ETS 334.09 ZAE 129.87 ETE 187.36 ZAC 68.50 ETC 160.03 CLP-162.37
                                                                     DISTANCE 447.134
  PLANETOCENTRIC CONIC
   C3 18.849 VHL 4.342 DLA 14.92 RAL 322.52 RAD 6567.8 VEL 11.842 PTH 2.10 VMP 6.003 DPA -22.31 RAP 336.91 ECC 1.3102
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          97.01 1 29 0
62.13 17 51 28
2 53 42
                                                                          187.99
                                                                                                        1 29 6
                                                                                                                        2083.1
                                                                                                                                      -26.25
                                                -27.51
                    0 44 22 2683.07
                                                               73.34
       90.00
                                                                                                                        3761.7
                                                                                                                                        1.46
                                                              181.02
                                                                            181.94
                                                                                          98.44 2 55 ~~
60.73 19 0 48
102.34 4 15 27
44.95 19 48 25
       90.00
                  16 38 46
                                4361.68
                                                  5.23
                                                                                                                        1794.7
                                                                                                                                       -21.32
                  2 13 47 2394.74
                                                 -28.78
                                                               51.94
                                                                            187.79
      100.00
                                                                                                                        3525.2
                                                                                                                                        2.42
                 17 52 3 4125.25
3 40 2 2124.87
18 42 17 3967.88
                                                   6.37
                                                              163.02
                                                                            181.32
      100.00
                                                                                                                        1524.9
                                                                                                                                      -30.10
                                                                                                                                                      22.11
                                                                30.73
                                                                            187.08
                                                -32.13
      110.00
                                                                                                                                        4.87
                                                                                                                        3367.9
                                                              149.30
                                                                            179.54
                                                  9.28
      110.00
                                                                 MIO-COURSE EXECUTION ACCURACY

SCT 4562.3 SGR 269.8 SG3 191.9

RRT - .1252 RRF - .0292 RTF .8784

SGB 4570.2 R23 - .0818 R13 - .8784
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1843.7 SR 228.9 SS 579.7
CRT .9315 CRS -.9975 CST -.9372
    TOE 1.3116 TRA-1.5265 TC3-4.2270 BAU 1.0660
   RDE .1734 RRA .0096 RC3 .1640 FAU .04813
FDE .8458 FRA .0274 FC3-2.2106 BSP 14372
                                                                                                                   LSA 1935.0 MSA 207.9 SSA 14.8
                                                                                                                    EL1 1856.0 EL2 82.7 ALF
    BDE 1.3230 BRA 1.5265 BC3 4.2302 FSP -623
                                                                  SG1 4562.4 SGŽ 267.7 THA 179.57
                                                                                                                               ARRIVAL DATE MAY 25 1966
                                                                      FLIGHT TIME 152.00
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 452.885
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 27.115 GAL -4.06 AZL 85.79 HCA 224.14 SMA 124.19 ECC .19753 INC 4.2098 V1 30.278 RP 108.94 LAP -2.93 LOP 316.04 VP 36.984 GAP 8.97 AZP 93.02 TAL 196.96 TAP 61.10 RCA 99.66 APO 148.72 V2 34.785 RC 158.168 GL 27.73 GP -7.87 ZAL 115.41 ZAP 161.58 ETS 334.67 ZAE 129.95 ETE 186.80 ZAC 70.39 ETC 160.97 CLP-163.30
  PLANETOCENTRIC CONTC
   C3 18.213 VML 4.268 DLA 15.48 RAL 324.90 RAD 6567.7 VEL 11.815 PTH 2.09 VMP 6.100 DPA -20.91 RAP 338.89 ECC 1.2997
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            96.58
                                                                                                                        2095.1
                                                                                                                                       -26.40
                                                                                                                                                     65.75
                                                                           190.00
                                                                                                        1 33 38
                    0 48 43 2695.08
                                                -27.60
                                                               74.21
       90.00
                                                                                            61.59 18 5 39
98.04 2 58 38
60.57 19 14 35
102.01 4 21 14
56.74 20 1 22
                                                                                                                                                     172.80
                                                                                                                         3733.5
                                                                                                                                          .56
                  16 53 26 4333.54
                                                  4.34
                                                              179.44
                                                                             183.91
                 2 18 33 2405.39
18 6 17 4098.46
3 45 41 2132.78
18 55 39 3943.84
                                                                                                                                       -27.47
                                                                                                                                                      44.19
                                                                                                                        1805.4
                                                                            189.81
                                                 -28.89
                                                                52.71
      100.00
                                                                           183.29
189.12
                                                                                                                                                     154.99
                                                                                                                        3498.5
                                                                                                                                         1.51
                                                 5.47
                                                              161.54
                                                                                                                                       -30.26
                                                                                                                                                     . 22 . 67
                                                                                                                        1532.8
                                                -32.25
                                                                31.32
      110.00
                                                                                                                        3343.8
                                                                                                                                         3.95
                                                                                                                                                     141.74
                                                 8.39
                                                              148.02
                                                                             181.50
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1903.2 SR 239.9 SS 586.5
CRT .9481 CRS -.9970 CST -.9402
                                                                  SGT 4639.8 SGR 284.6 SG3 188.1
RRT -.1108 RRF -.0322 RTF .8771
    TOE 1.3452 TRA-1.4101 TC3-4.4471 BAU 1.0837
    ROE .1786 RRA -.0008 RC3 .1796 FAU .04604
FOE .8274 FRA .0869 FC3-2.1884 BSP 14592
                                                                                                                    LSA 1995.5 MSA 203.5 SSA 15.9
                                                                  SGB 4648.5 R23 -. 0658 R13 -. 8771
                                                                  SG1 4639.9 SG2 282.9 THA 179.61
                                                                                                                    ELI 1916.7 EL2 75.8 ALF 6.83
    BOE 1.3570 BRA 1.4101 BC3 4.4507 FSP -607
                                                                                                                              ARRIVAL DATE HAY 27 1966
                                                                      FLIGHT TIME 154.00
LAUNCH DATE DEC 24 1965
                                                                     DISTANCE 458.625
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 27.057 GAL -3.68 AZL 85.89 HCA 227.30 SMA 123.82 ECC .19864 INC 4.1114 V1 30.278 RP 108.94 LAP -3.02 LOP 319.20 VP 36.942 GAP 9.17 AZP 92.79 TAL 195.18 TAP 62.48 RCA 99.22 APO 148.42 V2 34.787
    RC 160.359 GL 27.43 GP -7.32 7AL 113.08 7AP 162.62 ETS 335.10 7AE 130.02 ETE 186.33 7AC 72.36 ETC 161.82 CLP-164.19
   PLANETOCENTRIC CONIC
    C3 17.663 VHL 4.203 DLA 16.12 RAL 327.40 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 6.201 DPA -19.58 RAP 340.89 ECC 1.2907
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    2111.4
                                                                                         96.01 1 37 50
61.87 18 21 10
97.50 3 3 18
60.42 19 29 37
101.52 4 26 53
56.54 20 15 24
                                                                                                                                    -26.60
                                                                                                                                                     66.90
                                                                          192.22
                                                               75.38
                                                -27.72
                    0 52 38 2711.38
        90.00
                                                                                                                        3703.0
                                                                                                                                        -.43
                                                                                                                                                     171.10
                                                              177.73
                                                                            186.09
                  17 9 27
                                 4302.96
                                                  3.36
        90.00
                                                                                                                      1820.1
                                                                                                                                      -27.68
                                                                                                                                                      45.23
                                                                           192.05
                                                -29.02
                                                               53.78
      100.00
                    2 22 58
                                2420.06
                                                                                                                        3469.5
                                                                                                                                         .53
                                                                                                                                                     153.40
                                                                            185.46
                  18 21 48 4069.51
      100.00
                                                  4.50
                                                              159.93
                                                                                                                        1544.2
                                                                                                                                      -30.48
                                                                                                                                                     23.48
                                                                            191.39
                    3 51 9 2144.16
                                                 -32.41
                                                                32.17
      110.00
                                                                                                                                                     140.39
                                                                                                                        3318.2
                                                                                                                                      2.9A
                                                                             183.65
                  19 10 6 3918.17
                                                  7.43
                                                              146.65
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1966.8 SR 251.0 55 592.5
                                                                  5GT 4718.8 SGR 298.8 SG3 184.4
    TDE 1.3827 TRA-1.2888 TC3-4.6641 BAU 1.1023
                                                                                                                    CRT .9622 CRS -.9950 CST -.9436
                                                                  RRT -.0935 RRF -.0315 RTF .8771
    RDE .1840 RRA -.0111 RC3 .1923 FAU .04410
FDE .8090 FRA .1412 FC3-2.1613 BSP 14880
                                                                                                                    LSA 2059.9 MSA 197.7 SSA 17.0
EL1 1981.6 EL2 67.8 ALF 7.01
                                                                  SGB 4728.3 R23 -.0511 R13 -.8770
                                                                  SG1 4718.9 SG2 297.5 THA 179.66
    BOE 1.3949 BRA 1.2888 BC3 4.6680 FSP
                                                    -597
                                                                                                                               APRIVAL DATE MAY 29 1956
                                                                      FLIGHT TIME 156.00
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 464.353
   MELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 26.999 CAL -3.29 AZL 85.98 MCA 230.46 SMA 123.46 ECC .19992 INC 4.0226 V1 30.278 RP 108.93 LAP -3.10 LOP 322.37 VP 36.902 CAP 9.37 AZP 92.56 TAL 193.39 TAP 63.85 RCA 98.78 APO 148.14 V2 34.789 RC 162.536 GL 27.13 GP -6.84 ZAL 110.61 ZAP 163.61 ETS 335.39 ZAE 130.09 ETE 185.92 ZAC 74.39 ETC 162.57 CLP-165.07
   PLANETOCENTRIC CONIC
                                                                                               2.08 VHP 6.308 DPA -18.28 RAP 342.93 ECC 1.2830
    C3 17.197 VHL 4.147 DLA 16.83 RAL 330.02 RAD 6567.7 VEL 11.772 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -26.84
                                                                                                                                                       68.34
                                                                                             95.28
                                                                                                         1 41 44
                                                                                                                        2131.7
                                                                76.85
                                                                            194.67
                                                 -27.86
                     0 56 12 2731.69
                                                                                                                                        -1.49
                                                                                                                                                     169.27
                                                                                              61.77 18 37 57
                                                                                                                         3670.3
                                                               175.90
                                                                             188.47
                                                  2.31
        90.00
                   17 26 47
                                4270.28
                                                                                                                                       -27.93
                                                                                                                                                      46.55
                                                                                                        3 7 46
                                                                                                                        1838.5
                                                                             194.51
                                                                                              96.80
                                                                55.13
                    2 27 8 2438.46
                                                 -29.18
                                                                                             60.29 19 45 51
100.90 4 32 31
                                                                                                                                                     151.71
                                                                                                                                         - .52
                                                                                                                        3438.7
                                                                             187.83
                   18 38 33
                                4038.74
                                                   3.47
                                                               158.24
       100.00
                                                                                                                                       -30.75
                                                                                                                                                      24.53
                                                                            193.89
                                                                                             100.90
                                                                                                                        1558.7
                                                                33.26
                    3 56 32 2158.74
19 25 38 3891.22
                                                 -32.60
                                                                                             56.35 20 30 29
                                                                                                                138.99
CHOIL DETERMINATION ACCURACY
ST 2038.2 SR 262.1 SS 599.7
CRT .9740 CRS -.9916 CST -.9476
LSA 2132.1 MSA 191.2 SG4
                                                                                                                                         1.95
                                                                                                                                                     138.99
                                                                                                                        3291.2
                                                                            186.00
                   19 25 38
                                                               145.22
                                                  5.41
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SCT 4794.4 SGR 312.6 SG3 180.8
RRT -.0735 RRF -.0258 RTF .8773
SGB 4804.6 R23 -.0391 R13 -.8773
     TOE 1.4271 TRA-1.1589 TC3-4.8678 BAU 1.1201
    ROE .1896 RRA -. 0211 RC3 .2023 FAU .04216
FDE .7931 FRA .1935 FC3-2.1224 BSP 15142
                                                                                                                   LSA 2132.1 MSA 191.2 SSA 18.0
EL1 2054.2 EL2 58.9 ALF 7.15
                                                                   5G1 4794.4 5G2 311.7 THA 179.72
     BDE 1.4396 BRA 1.1591 BC3 4.8720 FSP -586
```

ARRIVAL DATE MAY 31 1966

LAUNCH DATE DEC 24 1965

```
DISTANCE 470.070
 HELIOCENTRIC CONIC
  RL 147.14 LAL - .00 LOL 91.98 VL 26.942 GAL -2.89 A7L 86.06 HCA 233.62 SMA 123.11 ECC .20138 INC 3.9416 VI 30.278 RP 108.92 LAP -3.17 LOP 325.53 VP 36.863 GAP 9.57 A7P 92.34 TAL 191.59 TAP 65.21 RCA 98.32 APO 147.90 V2 34.792 RC 164.699 GL 26.81 GP -6.43 7AL 107.99 7AP 164.56 ETS 335.54 7AE 130.17 ETE 185.57 7AC 76.46 ETC 163.25 CLP-165.93
  PLANETOCENTRIC CONIC
                                                                                             2.07 VHP 6.420 OPA -17.03 RAP 344.99 ECC 1.2768
   C3 16.817 VHL 4.101 DLA 17.61 RAL 332.77 RAD 6567.7 VEL 11.756 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        197.35
                                                                                                                                                    70.06
                D 59 29 2755.81
17 45 25 4235.86
2 31 6 2460.36
18 56 29 4006.53
                                                                                         94.41
                                                                                                       1 45 25
                                                                                                                     2155.8
                                                                                                                                   -27.09
                                                              78.61
                                               -28.00
     90.00
                                                                                                                                                   167.35
                                                                                            61.71 18 56 1
                                                                                                                       3635.9
                                                                                                                                     -2.60
                                                                          191.08
                                                1.20
                                                              173.98
       90.00
                                                                                                                                                    48.11
                                                                                            95.97
                                                                                                       3 12 7
                                                                                                                       1860.4
                                                                                                                                    -28.21
                                                                          197.21
                                                              56.73
                                               -29.34
                                                                                          60.19 20 3 15
100.15 4 38 10
56.19 20 46 34
                                                                                                                                                   149.95
                                                                                                                       3406.5
                                                                                                                                     -1.61
                                                                           190.42
     100.00
                                                 2.38
                                                              156.47
                                                                       196.63
                                                                                                                                                   25.80
                 4 1 54 2176.31
19 42 11 3863.35
                                                                                                                       1576.3
                                                                                                                                    -31.07
                                                              34.59
                                              -32.82
                                                                                                                      3263.4
                                                                                                                                        . AA
                                                                                                                                                   137.53
                                                             143.76
                                                                           188.57
                                                5.36
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2115.6 SR 273.3 SS 607.0
CRT .9834 CRS -.9870 CST -.9516
                                                                SCT 4866.9 SCR 325.7 SC3 177.1
RRT --0519 RRF --0169 RTF .8779
SCB 4877.8 R23 --0289 R13 --8779
   TDE 1.4771 TRA-1.0204 TC3-5.0552 BAU 1.1375
   ROE .1954 RRA -.0306 RC3 .2095 FAU .04027
FDE .7786 FRA .2442 FC3-2.0729 BSP 15417
                                                                                                                   LSA 2210.2 MSA 184.1 55A 19.0
                                                                 5G1 4866.9 5G2 325.2 THA 179.8D
                                                                                                                   EL1 2132.7 EL2 49.1 ALF 7.25
   BOE 1.4900 BRA 1.0208 BC3 5.0595 FSP -577
                                                                                                                             ARRIVAL DATE JUN 2 1966
                                                                     FLIGHT TIME 160.00
                                                                     DISTANCE 475.774
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 26.885 GAL -2.47 AZL 86.13 MCA 236.78 SMA 122.76 ECC .20304 INC 3.8669 VI 30.278 RP 108.91 LAP -3.23 LOP 328.70 VP 36.826 GAP 9.78 AZP 92.12 TAL 189.78 TAP 66.56 RCA 97.84 APO 147.69 V2 34.796 RC 166.847 GL 26.46 GP -6.06 7AL 105.24 ZAP 165.46 ETS 335.56 ZAE 130.25 ETE 185.27 ZAC 78.58 ETC 163.86 CLP-166.76
  PLANETOCENTRIC CONIC
                                                                                              2.07 VHP 6.537 DPA -15.80 RAP 347.06 ECC 1.2719
   C3 16.523 VHL 4.065 DLA 18.43 RAL 335.65 RAD 6567.7 VEL 11.743 PTH
   ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    -27.36
                                                                                                                                                    72.04
                                                                                                       1 48 57
                                                                                                                      2183.5
                                                                          200.25
                                                                                          93.41
                                                              80.62
      90.00
                   1 2 34 2783.54
                                                -28.13
                                                                                            61.68 19 15 17
95.01 3 16 23
60.13 20 21 47
99.27 4 43 56
56.05 21 3 37
                                                                                                                       3600.0
                                                                                                                                      -3.75
                                                                                                                                                    165.35
                                                                            193.91
       90.00
                18 5 17 4200.04
                                                   .04
                                                              171.98
     100.00 2 34 58 2485.57
100.00 19 15 34 3973.25
110.00 4 7 19 2196.63
110.00 19 59 42 3834.95
                                                                                                                       1885.6
                                                                                                                                     -28.50
                                                                                                                                                     49.93
                                                                           200.14
                                                -29.51
                                                               58.59
                                                                         193.24
199.62
                                                                                                                       3373.2
                                                                                                                                      -2.73
                                                                                                                                                    148.12
                                                 1.25
                                                              154.64
                                                                                                                                                     27.28
                                                                                                                       1596.6
                                                                                                                                    -31.42
                                                              36.13
                                                -33.05
                                                                            191.35
                                                                                                                       3234.9
                                                                                                                                       -.21
                                                                                                                                                    136.05
      110.00
                                                 4.28
                                                              142.26
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2198.0 SR 284.6 SS 614.1
CRT .9903 CRS -.9814 CST -.9557
                                                                 SGT 4935.8 SGR 338.1 SG3 173.4
RRT -.0292 RRF -.0054 RTF .8789
   TOE 1.5321 TRA -.8729 TC3-5.2210 BAU 1.1543
   ROE .2015 RRA -.0395 RC3 .2139 FAU .03839
   FOE .7651 FRA .2930 FC3-2.0114 BSP 15672
BOE 1.5453 BRA .8738 BC3 5.2254 FSP -567
                                                                                                                  LSA 2292.9 MSA 176.8 SSA 20.0
                                                                 SGB 4947.4 R23 -.0204 R13 -.8789
                                                                 SG1 4935.8 SG2 338.0 THA 179.88
                                                                                                                 EL1 2216.0 EL2 39.1 ALF 7.31
                                                                                                                             ARRIVAL DATE JUN 4 1966
                                                                     FLIGHT TIME 162.00
LAUNCH DATE DEC 24 1965
                                                                    DISTANCE 481.465
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.320 VHL 4.040 DLA 19.28 RAL 338.65 RAC 6567.7 VEL 11.735 PTH 2.07 VHP 6.659 OPA -14.59 RAP 349.16 ECC 1.2686
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 5 28 2814.74 -28.23 82.90 203.39 92.27 1 52 23 2214.7 -27.62 74.29
                                                                                        92.27 1 52 23

61.70 19 35 45

93.92 3 20 40

60.11 20 41 24

98.26 4 49 51

55.95 21 21 35
                                                                            196.98
                                                                                                                       3563.2
                                                              169.93
                   18 26 22 4163.17
                                                -1.15
                                                                                                                                                     51.98
                                                                          203.30
                                                                                                                       1913.9
                                                                                                                                     -28.80
                                                              60.68
                   2 38 46 2513.88
                                               -29.66
                                                                                                                                                    146.25
                                                                                                                       3339.3
                                                                                                                                      -3.88
                                                   .10
                                                                            196.29
                                                              152.78
                 19 35 45 3939.27
                                                                                                                                                     28.96
                                                                                                                       1619.5
                                                                                                                                    -31.79
               4 12 51 2219.50
20 18 9 3806.40
                                                                            202.85
                                               -31.29
                                                               37.87
                                                                                                                       3206.4
                                                                                                                                      -1.30
                                                                            194.36
                                                              140.77
                                                3.19
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
  CIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2289.3 SR 296.0 SS 623.3
CRT .9949 CRS -.9750 CST -.9599
                                                                  SGT 4997.7 SGR 350.0 SG3 169.7
    TDE 1.5955 TRA -.7132 TC3-5.3534 BAU 1.1689
                                                                 RRT -.0045 RRF .0107 RTF .8797
    RDE .2081 RRA -.0477 RC3 .2153 FAU .03647
                                                                                                                   LSA 2384.9 MSA 169.8 SSA 20.9
    FDE .7554 FRA .3427 FC3-1.9347 BSP 15852
BDE 1.6090 BRA .7148 BC3 5.3577 FSP -553
                                                                 568 5009.9 R23 -.0146 R13 -.8797
                                                                                                                   EL1 2308.1 EL2 29.6 ALF
                                                                                                                                                       7.33
                                                                 5G1 4997.7 SG2 350.0 THA 179.98
                                                                                                                              ARRIVAL DATE JUN 6 1966
                                                                      FLIGHT TIME 164.00
LAUNCH DATE DEC 24 1965
                                                                     DISTANCE 487.141
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 26.775 GAL -1.60 AZL 86.27 MCA 243.11 SMA 122.09 ECC .20697 INC 3.7321 V1 30.278
RP 108.88 LAP -3.33 LOP 335.04 VP 36.754 GAP 10.22 AZP 91.69 TAL 186.14 TAP 69.25 RCA 96.82 APO 147.36 V2 34.805
RC 171.096 GL 25.64 GP -5.45 ZAL 99.38 ZAP 167.19 ETS 335.19 ZAE 130.42 ETE 184.79 ZAC 82.93 ETC 164.91 CLP-168.39
   PLANETOCENTRIC CONIC
    C3 16.211 VHL 4.026 0LA 20.14 RAL 341.79 RAD 6567.6 VEL 11.730 PTH 2.07 VHP 6.788 DPA -13.40 RAP 351.26 ECC 1.2668 LNCH AZHTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2249.2
                    1 8 15 2849.20
18 48 34 4125.66
                                                 -28.30
                                                                            206.75
                                                                                            91.01
                                                               85.42
       90.00
                                                                                                                                       -6.12
                                                                                                       19 57 20
                                                                                                                        3525.7
                                                                            200.30
                                                                                             61.77
                                                -2.36
                                                              167.83
                   18 48 34
       90.00
                               2545.06
2545.03
3905.03
2244.69
                                                                                                                        1945.1
                                                                                                                                      -29.09
                                                                            206.69
                                                                                             92.71
                                                                                                        3 24 59
                                                -29.78
                                                                62.99
      100.00
                    2 42 34
                                                                                             60.12 21 2 1
97.14 4 56 0
                                                                                                                        3305.0
                                                                                                                                       -5.03
                                                  -1.06
                                                              150.90
                                                                            199.58
       100.00
                  19 56 56
                                                                                                                                     -32.17
                                                                                                                        1644.7
                                                                                             97.14 4 56 0
55.87 21 40 23
                                                -33.52
                                                                39.80
                                                                            206.32
                    4 18 35
       110.00
                                                                                                                                        -2.38
                                                                                                                        3176.2
                                                                           197.59
                   20 37 25
                                                              139.29
                                 3778.17
       110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 5059.4 SGR 361.1 SG3 166.0
RRT .0198 RRF .0263 RTF .8814
SG8 5072.2 R23 .0088 R13 .8814
                                                                                                                    ST 2379.0 SR 307.3 SS 629.9
CRT .9971 CRS -.9679 CST -.9637
    TOE 1.6601 TRA -.5459 TC3-5.4601 BAU 1.1842
    ROE .2192 RRA -.0552 RC3 .2137 FAU .03467
FDE .7437 FRA .3893 FC3-1.8515 BSP 16068
BDE 1.6740 BRA .5487 BC3 5.4643 FSP -541
                                                                                                                 LSA 2474.6 MSA 163.1 SSA 21.7
EL1 2398.7 EL2 23.1 ALF 7.34
                                                                  SG1 5059.4 SG2 361.0 THA .08
```

FLIGHT TIME 158.00

Ī

```
LAUNCH DATE DEC 24 1965
                                                                            FLIGHT TIME 166.00
                                                                                                                                       ARRIVAL DATE JUN 8 1966
    HELIOCENTRIC CONIC
                                                                           DISTANCE 492.801
     RL 147.14 LAL .00 LOL 91.98 VL 26.721 GAL -1.14 A7L 86.33 HCA 246.28 SMA 121.77 ECC .20928 INC 3.6704 V1 3D.278 RP 108.86 LAP -3.36 LOP 338.21 VP 36.720 GAP 1D.46 A7P 91.48 TAL 184.30 TAP 70.58 RCA 96.28 APO 147.25 V2 34.811 RC 173.196 GL 25.14 GP -5.20 ZAL 96.28 ZAP 168.01 ETS 334.78 ZAE 130.51 ETE 184.59 ZAC 85.15 ETC 165.36 CLP-169.18
    PLANETOCENTRIC CONIC
     C3 16.203 VHL 4.025 DLA 21.01 RAL 345.04 RAD 6567.6 VEL 11.730 PTH 2.07 VHP 6.923 DPA -12.22 RAP 353.38 ECC 1.2667 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                89.64 1 59 5
61.89 20 19 57
                      1 10 58 2886.72
                                                                                 210.33
                                                                                                               1 59 5
                                                                                                                                              -28.07
         90.00
                                                     -28.31
                                                                    88.16
                                                                                                                                2286.7
                                                                                                                                                                79.51
         90.00
                    19 11 49 4087.92
                                                     -3.57
                                                                   165.72
                                                                                  203.86
                                                                                                                                3487.9
                                                                                                                                                -7.31
                                                                                                                                                               159.03
                                                                                                   91.39 3 29 26
60.18 21 23 33
95.91 5 2 25
55.83 21 59 55
                      2 46 27
                                   2578.87
                                                     -29.86
                                                                                  210.32
        100.00
                                                                    65.50
                                                                                                                                1978.9
                                                                                                                                              -29.35
                                                                                                                                                                56.73
                    20 19 2 3871.00
       100.00
                                                     -2.22
                                                                  149.03
                                                                                  203.11
                                                                                                                                3271.0
                                                                                                                                                -6.17
                                                                                                                                                               142.47
                    4 24 34 2271.91
20 57 24 3750.72
                                                                                  210.03
       110.00
                                                   -33.73
                                                                    41.90
                                                                                                                                1671.9
                                                                                                                                              - 32 . 54
                                                                                                                                                                32.86
                                                                   137.86
                                                                                  201.06
       110.00
                                                     1.07
                                                                                                                                3150.7
                                                                                                                                                -3.42
                                                                                                                                                               131.65
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 5119.0 SGR 371.5 SG3 162.5
RRT .0445 RRF .0436 RTF .8836
SGB 5132.5 R23 .0040 R13 .8836
SGI 5119.0 SG2 371.1 THA .19
     TOE 1.7279 TRA -.3687 TC3-5.5327 BAU 1.1993
                                                                                                                            57 2468.8 SR 318.8 55 635.9
CRT .9973 CR5 -.9603 CST -.9672
    ROE .2231 RRA -.0618 RC3 .2089 FAU .03295
FOE .7331 FRA .4349 FC3-1.7607 BSP 16315
BOE 1.7422 BRA .3738 BC3 5.5366 FSP -533
                                                                                                                            LSA 2564.3 MSA 157.1 S5A 22.4
EL1 2489.2 EL2 23.0 ALF 7.34
                                                                                                             .19
                                                                           FLIGHT TIME 168.00
LAUNCH DATE DEC 24 1965
                                                                                                                                        ARRIVAL DATE JUN 10 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 498.444
    RL 147.14 LAL .00 LOL 91.98 VL 26.667 GAL -.66 AZL 86.39 HCA 249.44 SMA 121.45 ECC .21185 INC 3.6116 VI 30.278 RP 108.84 LAP -3.38 LOP 341.38 VP 36.687 GAP 10.70 AZP 91.27 TAL 182.47 TAP 71.91 RCA 95.72 APO 147.18 V2 34.817 RC 175.278 GL 24.58 GP -4.97 ZAL 93.11 ZAP 168.81 ETS 334.21 ZAE 130.61 ETE 184.42 ZAC 87.39 ETC 165.77 CLP-169.96
   PLANETOCENTRIC CONIC
    C3 16.304 VHL 4.038 OLA 21.87 RAL 348.41 RAD 6567.7 VEL 11.734 PTH
                                                                                                     2.07 VHP 7.066 OPA -11.05 RAP 355.51 ECC 1.2683
    UNCH AZMTH UNCH TIME L-I TIME
90.00 1 13 40 2927.05
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

-28.26 91.11 214.13 88.16 2 2 27 2327.1 -28.22 82.45
                                                                                                   62.06 20 43 30
89.98 3 34 2
60.28 21 45 52
94.60 5 9 12
55.82 22 20 4
                    19 36 D
                                                                                  207.66
         90.00
                                   4050.41
                                                      -4,77
                                                                   163.62
                                                                                                                                 3450.4
                                                                                                                                                 -8.48
                                                                                                                                                               156.90
                     2 50 27 2615.01
                                                     -29.89
                                                                    68.19
                                                                                 214.16
                                                                                                                                 2015.0
                                                                                                                                                -29.58
                                                                                                                                                                59.40
                   20 41 54 3837.68
4 30 51 2300.89
21 18 0 3724.56
                                                                                                                                                 -7.28
        100.00
                                                      -3.34
                                                                   147.20
                                                                                 206.87
                                                                                                                                3237.7
                                                                                                                                                               140.62
                                                    -33.91
                                                                    44.14
                                                                                 213.97
                                                                                                                                1700.9
                                                                                                                                              -32.90
                                                                                                                                                                35.05
        110.00
                                                       .07
                                                                   136.50
                                                                                  204.75
                                                                                                                                3124.6
                                                                                                                                                               130.28
                                                                                                                                                 -4.42
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    TOE 1.7970 TRA -.1819 TC3-5.5632 BAU 1.2134
                                                                       SGT 5173.3 SGR 381.0 SG3 158.7
RRT .0691 RRF .0617 RTF .8859
SGB 5187.4 R23 .0002 R13 .8859
                                                                                                                            ST 2554.9 SR 330.3 SS 639.4
CRT .9959 CRS -.9524 CST -.9703
    ROE .2317 RRA -.0674 RC3 .2015 FAU .03122
FOE .7212 FRA .4788 FC3-1.6578 BSP 16531
                                                                                                                            LSA 2649.9 MSA 152.1 55A 22.8
EL1 2576.0 EL2 29.8 ALF 7.34
           .7212 FRA .4788 FC3-1.6578 BSP 16531
    BOE 1.8119 BRA .1940 BC3 5.5669 FSP -523
                                                                       SG1 5173.4 SG2 380.1 THA
                                                                                                            .29
                                                                                                                                      ARRIVAL DATE JUN 12 1966
                                                                          FLIGHT TIME 170.00
LAUNCH DATE DEC 24 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 504.068
    RL 147.14 LAL .00 LOL 91.98 VL 26.615 GAL -.17 AZL 86.44 MCA 252.61 SMA 121.14 ECC .21468 INC 3.5552 V1 3D.278
RP 108.82 LAP -3.39 LOP 344.55 VP 36.656 GAP 10.96 AZP 91.06 TAL 180.63 TAP 73.24 RCA 95.13 APO 147.15 VZ 34.824
RC 177.341 GL 23.96 GP -4.77 ZAL 89.86 ZAP 169.58 ETS 333.45 ZAE 130.71 ETE 184.28 ZAC 89.66 ETC 166.14 CLP-170.73
   PLANETOCENTRIC CONIC
    C3 16.322 VHL 4.065 DLA 22.71 RAL 351.88 RAD 6567.7 VEL 11.743 PTH 2.07 VHP 7.216 DPA -9.89 RAP 357.64 ECC 1.2719
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 16 23 2969.91
20 0 58 4013.62
2 54 38 2653.13
                                                                                                                            2369.9
        90.00
                                                   -28.13
                                                                  94.24
                                                                              218.11
                                                                                               86.60 2 5 53
                                                                                                                                           -28.30 85.58
                                                     -5.94
                                                                  161.55
                                                                                 211.70
                                                                                                   62.26 21 7 51
                                                                                                                               3413.6
                                                                                                                                                -9.61
                                                                                                                                                              154.79
        90.00
                                                                                218.20
                                                                                                   88.49
                                                                                                             3 38 51
                                                                                                                               2053.1
                                                                                                                                              -29.75
                                                                                                                                                               62.22
       100.00
                                                   -29.86
                                                                   71.02
                                                                                                            22 8 49
                                                     -4.42
                                                                                 210.86
                                                                                                   60.41
                                                                                                                               3205.6
                                                                                                                                                -8.33
                                                                                                                                                              138.82
       100.00
                   21 5 24
                                   3805.64
                                                                  145.43
                     4 37 31
                                                                                                               5 16 22
                                   2331.28
                                                   -34.05
                                                                    46.50
                                                                                 218.13
                                                                                                   93.21
                                                                                                                               1731.3
                                                                                                                                              -33.23
       110.00
                                                                  135.23
                                                                                 208.65
                                                                                                   55.83
                                                                                                           22 40 41
                                                                                                                               3100.2
                   21 39 1
                                   3700.25
                                                     - .86
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 5223.6 SCR 390.0 SC3 155.2
RRT .D951 RRF .D839 RTF .8884
SCB 5238.1 R23 -.DD11 R13 .8884
    TOE 1.8726 TRA .0194 TC3-5.5446 BAU 1.2254
                                                                                                                           ST 2643.1 SR 342.0 55 644.7
    ROE .2415 RRA -.0719 RC3 .1914 FAU .02948
FDE .7130 FRA .5237 FC3-1.5448 BSP 16673
BDE 1.8881 BRA .0744 BC3 5.5479 FSP -512
                                                                                                                           CRT .9929 CRS -.9445 CST -.9734
                                                                                                                          LSA 2737.9 MSA 148.6 SSA 23.1
EL1 2664.9 EL2 40.3 ALF 7.32
                                                                      SG1 5223.7 SG2 388.2 THA
LAUNCH DATE DEC 24 1965
                                                                          FLIGHT TIME 172.00
                                                                                                                                       ARRIVAL DATE JUN 14 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 509.671
   RL 147.14 LAL .00 LOL 91.98 VL 26.563 GAL .34 A7L 86.50 HCA 255.78 SMA 120.83 ECC .21780 INC 3.5007 V1 30.278
RP 108.79 LAP -3.39 LOP 347.73 VP 36.625 GAP 11.22 AZP 90.86 TAL 178.78 TAP 74.56 RCA 94.52 APO 147.15 V2 34.832
RC 179.385 GL 23.26 GP -4.59 ZAL 86.55 ZAP 170.34 ETS 332.48 ZAE 130.81 ETE 184.15 ZAC 91.94 ETC 166.47 CLP-171.49
   PLANETOCENTRIC CONIC
    C3 16.868 VHL 4.107 DLA 23.50 RAL 355.43 RAD 6567.7 VEL 11.758 PTH
                                                                                                     2.08 VHP 7.375 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 19 12
20 26 31
                                   3014.91
                                                   -27.90
                                                                   97.51
                                                                                                  84.97
                                                                                                               2 9 27
                                                                                                                              2414.9
                                                                                222.28
                                                                                                                                              -28.31
                                                                                                                                3378.2
                                                     -7.06
                                                                                                   62.51 21 32 49
                                                                                                                                              -10.69
                                   3978.15
                                                                  159.54
                                                                                 215.95
                                                                                                                                                              152.74
                                                   -29.75
                                                                                                                                2092.8
                     2 59 7
                                   2692.78
                                                                    73.96
                                                                                 222.43
                                                                                                   86.94
                                                                                                               3 43 59
                                                                                                                                              -29.86
                                                                                                                                                               65.16
                    21 29 17 3775.51
                                                                                 215.06
                                                                                                   60.56 22 32 13
                                                     -5.43
                                                                  143.77
                                                                                                                                3175.5
                                                                                                                                                -9.32
                                                                                                                                                              137.13
                     4 44 37
                                   2362.70
                                                  -34.14
                                                                    48.95
                                                                                 222.49
                                                                                                   91.76
                                                                                                             5 24 0
                                                                                                                               1762.7
                                                                                                                                              -33.52
                                                                                                                                                               39.76
       110.00
                                                                                                   91.76 5 24 0
55.85 23 1 35
                                                                                                                                              -6.17
                   22 0 16 3678.36
                                                                  134.09
                                                                                 212.74
                                                                                                                              3078.4
                                                  -1.70
                                                                                                                                                             127.85
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 5266.D SGR 398.1 SG3 151.5
RRT .1201 RRF .1053 RTF .8901
    TOE 1.9442 TRA .2300 TC3-5.4786 BAU 1.2361
                                                                                                                           ST 2717.7 SR 353.5 55 646.0
    ROE .2522 RRA -.0751 RC3 .1792 FAU .02773
FOE .7020 FRA .5692 FC3-1.4233 BSP 16838
BOE 1.9605 BRA .2420 BC3 5.4815 FSP -498
                                                                                                                          CRT .9889 CRS -.9361 C5T -.9757
                                                                     SGB 5281.0 R23 -.0022 R13 .8901
SGI 5266.2 SG2 395.2 THA .52
                                                                                                                          LSA 2811.8 M5A 146.9 55A 23.1
EL1 2740.1 EL2 52.2 ALF 7.33
```

```
LAUNCH DATE DEC 24 1965
                                                                         FLIGHT TIME 174.00
                                                                                                                                    ARRIVAL CATE JUN 16 1966
    HELIOCENTRIC CONIC
                                                                        DISTANCE 515.249
     RL 147.14 LAL .00 LOL 91.98 VL 26.511 GAL .87 ATL 86.55 MCA 258.95 SMA 120.54 ECC .22123 INC 3.4476 V1 30.278
RP 108.77 LAP -3.38 LOP 350.90 VP 36.596 GAP 11.51 ATP 90.66 TAL 176.94 TAP 75.89 RCA 93.87 APO 147.20 V2 34.840
RC 181.409 GL 22.50 GP -4.42 TAL 83.22 TAP 171.07 ETS 331.25 TAE 130.92 ETE 184.04 TAC 94.24 ETC 166.76 CLP-172.24
    PLANETOCENTRIC CONIC
     C3 17.356 VHL 4.166 DLA 24.24 RAL 359.06 RAD 6567.7 VEL 11.779 PTH 2.08 VHP 7.544 DPA -7.60 RAP
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 22 11 3061.61 -27.58 100.89 226.60 83.31 2 13 12 2461.6 -28.22 92.28
                                                                                                                          2461.6
                                                                                                           21 58 11
                   20 52 26 3944.60
3 3 57 2733.48
         90.00
                                                     -8.11
                                                                  157.64
                                                                                220.40
                                                                                                 62.78
                                                                                                                              3344.6
                                                                                                                                            -11.70
                                                                                                                                                           150.79
                                                   -29.56
                                                                   76.97
                                                                                226.82
                                                                                                 85.37
                                                                                                                             2133.5
                                                                                                            3 49 31
                                                                                                                                            -29.89
                                                                                                                                                            68.19
                   21 53 21 3747.96
4 52 14 2394.73
22 21 34 3659.47
       100.00
                                                                                                 60.73 22 55 49
90.28 5 32 8
55.89 23 22 33
                                                                                                                           3148.0
                                                     -6.35
                                                                 142.24
                                                                                219.45
                                                                                                                                            -10.21
                                                                                                                                                           135.57
                                                  -34.18
                                                                   51.45
                                                                                227.03
                                                                                                                             1794.7
                                                                                                                                            -33.77
                                                                                                                                                            42.23
       110.00
                                                   -2.42
                                                                  133.10
                                                                                217.01
                                                                                                                             3059.5
                                                                                                                                            -6.88
                                                                                                                                                           126.85
    DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 5310.0 SGR 405.3 SG3 148.0
RRT .1451 RRF .1266 RTF .8937
SGB 5325.4 R23 -.0038 R13 .8937
     TDE 2.0148 TRA .4506 TC3-5.3749 BAU 1.2477
                                                                                                                         5T 2781.7 SR 364.8 SS 644.7
CRT .9839 CRS'-.9279 CST -.9779
     ROE .2640 RRA -.0772 RC3 .1648 FAU .02618
    FOE .6901 FRA .6112 FC3-1.3059 BSP 17005
BDE 2.0320 BRA .4571 BC3 5.3774 FSP -487
                                                                                                                        LSA 2874.8 MSA 146.2 SSA 22.8
EL1 2804.8 EL2 64.6 ALF 7.36
                                                                                                          .64
                                                                     SG1 5310.3 SG2 401.0 THA
LAUNCH DATE DEC 24 1965
                                                                         FLIGHT TIME 176.00
                                                                                                                                    ARRIVAL DATE JUN 18 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 520.802
    RL 147.14 LAL. .00 LOL 91.98 VL 26.461 GAL 1.42 AZL 86.60 MCA 262.12' SMA 120.24 ECC .22500 INC 3.3957 V1 30.278
RP 108.74 LAP -3.36 LOP 354.08 VP 36.568 GAP 11.81 AZP 90.47 TAL 175.09 TAP 77.21 RCA 93.19 APO 147.50 V2 34.849
RC 183.413 GL 21.67 GP -4.27 ZAL 79.88 ZAP 171.79 ETS 329.71 ZAE 131.02 ETE 183.95 ZAC 96.55 ETC 167.01 CLP-172.98
   PLANETOCENTRIC CONIC
    C3 17.999 VML 4.243 OLA 24.91 RAL 2.72 RAD 6567.7 VEL 11.806 PTH 2.09 VMP 7.723 DPA -6.46 RAP 4.10 ECC 1.2962 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00 1 25 25 3109.48

90.00 21 18 28 3913.65

100.00 3 9 16 2774.67

100.00 22 17 18 3723.69

110.00 5 0 24 2426.97

110.00 22 42 39 3644.15
                                                  -27.15
                                                                 104.33
                                                                               231.05
                                                                                                81.63
                                                                                                             2 17 14
                                                                                                                           2509.5
                                                                                                                                           -28.03
                                                                                                                                                           95.77
                                                    -9.07
                                                                 155.87
                                                                                225.03
                                                                                                           22 23 41
                                                                                                 63.06
                                                                                                                              3313.6
                                                                                                                                             -12.61
                                                                                                                                                            148.98
                                                  -29.30
                                                                   80.01
                                                                                231.36
                                                                                                 A3.79
                                                                                                             3 55 31
                                                                                                                             2174.7
                                                                                                                                            -29.85
                                                                                                                                                            71.25
                                                   -7.16
                                                                                                 60.90 23 19 21
                                                                 140.89
                                                                                224.00
                                                                                                                                                           134.19
                                                                                                                             3123.7
                                                                                                                                            -10.99
                                                   -34.16
                                                                   53.97
                                                                                231.73
                                                                                                 88.79
                                                                                                             5 40 51
                                                                                                                             1827.0
                                                                                                                                            -33.95
                                                                                                                                                            44.73
                                                                                                 55.93 23 43 23
                                                   -3.01
                                                                 132.30
                                                                                221.44
                                                                                                                             3044.2
                                                                                                                                            -7.46
                                                                                                                                                           126.04
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 3346.5 SGR 411.7 SG3 144.5
RRT .1705 RRF 1497 RTF .8968
SG8 5362.3 R23 -.0042 R13 .8968
    TOE 2.0854 TRA .6862 TC3-5.2187 BAU 1.2563
                                                                                                                         ST 2836.1 SR 375.8 SS 642.1
CRT .9782 CRS -.9196 CST -.9799
    ROE .2771 RRA -.0779 RC3 .1491 FAU .02457
    FOE .6785 FRA .6547 FC3-1.1816 BSP 17121
                                                                                                                         LSA 2928.3 MSA 147.2 SSA 22.3
    BOE 2.1038 BRA .6906 BC3 5.2209 FSP -476
                                                                                                          .76
                                                                     SG1 5346.9 SG2 405.6 THA
                                                                                                                         EL1 2859.9 EL2 77.3 ALF 7.39
LAUNCH DATE DEC 24 1965
                                                                         FLIGHT TIME 178.00
                                                                                                                                   ARRIVAL CATE JUN 20 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 526.323
    RL 147.14 LAL .00 LOL 91.98 VL 26.411 GAL 2.00 AZL 86.66 HCA 265.29 SMA 119.96 ECC .22914 INC 3.3445 V1 30.278
RP 108.71 LAP -3.33 LOP 357.26 VP 36.541 GAP 12.12 AZP 90.27 TAL 173.25 TAP 78.55 RCA 92.47 APO 147.45 V2 34.858
RC 185.395 GL 20.79 GP -4.13 ZAL 76.54 ZAP 172.49 ETS 327.78 ZAE 131.13 ETE 183.86 ZAC 98.88 ETC 167.23 CLP-173.72
   PLANETOCENTRIC CONIC
    C3 18.817 VHL 4.338 DLA "25.51 RAL
                                                      6.41 RAD 6567.8 VEL 11.841 PTH 2.10 VHP 7.913 DPA
                                                                                                                               -5.33 RAP
                                                                                                                                               6.26 ECC 1.3097
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 29 2 3157.85
21 44 16 3886.08
3 15 10 2815.68
22 40 49 3703.49
5 9 11 2458.99
23 3 18 3632.94
                                                                                            79.98
                                                                                                                            2557.9 -27.74
        90.00
                                                  -26.62
                                                                107.77
                                                                              235.60
                                                                                                            2 21 40
                                                                                                                                                           99.28
                                                   -9.92
                                                                154.29
                                                                               229.80
                                                                                                 63.34 22 49 2
                                                                                                                             3286.1
                                                                                                                                           -13.42
                                                                                                                                                          147.36
       100.00
                                                 -28.96
                                                                  83.01
                                                                               236.02
                                                                                                 82.25
                                                                                                             4 2
                                                                                                                             2215.7
                                                                                                                                           -29.73
                                                                                                                                                            74.29
                                                                                                61.06 23 42 32
87.31 5 50 10
55.97 24 3 51
      100.00
                                                   -7.63
                                                                 139.76
                                                                               228.68
                                                                                                                             3103.5
                                                                                                                                           -11.63
                                                                                                                                                          133.03
       110.00
                                                 -34.09
                                                                  56.47
                                                                               236.56
                                                                                                                             1859.0
                                                                                                                                           -34.09
                                                                                                                                                            47.22
                                                                131.71
      110.00
                                                 -3.43
                                                                               225.98
                                                                                                                             3032.9
                                                                                                                                            -7.88
                                                                                                                                                           125.44
   DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SCT 5380.8 SGR 417.1 SG3 140.9

RRT .1951 RRF .1722 RTF .9004

SGB 5396.9 R23 -.0045 R13 .9004
                                                                                                                         ST 2872.7 SR 386.2 SS 636.3
    TOE 2.1504 TRA .9321 TC3-5.0275 BAU 1.2652
    RDE .2913 RRA -.0771 RC3 .1324 FAU .02305
                                                                                                                        CRT .9720 CRS -.9111 CST -.9815
    FOE .6651 FRA .6971 FC3-1.0605 BSP 17294
BOE 2.1701 BRA .9353 BC3 5.0292 FSP -468
                                                                                                                       LSA 2963.7 MSA 149.6 SSA 21.7
                                                                     SG1 5381.4 SG2 409.0 THA
                                                                                                          ..87
                                                                                                                        EL1 2897.2 EL2 90.0 ALF 7.45
LAUNCH DATE DEC 24 1965
                                                                         FLIGHT TIME 180.00
                                                                                                                                    ARRIVAL DATE JUN 22 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 531.811
   RL 147.14 LAL .00 LOL 91.98 VL 26.362 GAL 2.60 AZL 86.71 HCA 268.47 SMA 119.68 ECC .23369 INC 3.2938 VI 30.278
RP 108.68 LAP -3.29 LOP .44 VP 36.515 GAP 12.46 AZP 90.09 TAL 171.42 TAP 79.89 RCA 91.71 APO 147.65 V2 34.868
RC 187.357 GL 19.86 GP -4.01 ZAL 73.24 ZAP 173.16 ETS 325.38 ZAE 131.24 ETE 183.79 ZAC 101.21 ETC 167.42 CLP-174.46
  PLANETOCENTRIC CONIC
    C3 19.829 VHL 4.453 DLA 26.02 RAL 10.10 RAD 6567.8 VEL 11.883 PTH
                                                                                                  2.11 VHP 8.117 DPA -4.20 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 33 13 3205.93
22 9 29 3862.78
       90.00
                                                  -26.01
                                                                111.16
                                                                             240.24
                                                                                                            2 26 39
                                                                                              78.39
                                                                                                                             2605.9
                                                                                                                                          -27.35
                                                                                                                                                       102.75
       90.00
                   22 9 29
                                                  -10.63
                                                                152.94
                                                                               234.68
                                                                                                                                           -14.09
                                                                                                                                                          145.98
                                                                                                 63.60
                                                                                                           23 13 51
                                                                                                                             3262.8
                   3 21 48 2855.85
23 3 34 3688.09
                                                                                                 80.76
      100.00
                                                  -28.56
                                                                               240.76
                                                                                                                                           -29.54
                                                                  85.93
                                                                                                                             2255.9
                                                                                                                                                            77.26
      100.00
                                                   -8.33
                                                                138.89
                                                                               233.46
                                                                                                 61.19 24 5 3
                                                                                                                             3088.1
                                                                                                                                           -12.12
                                                                                                                                                          132.15
                    5 18 36 2490.40
23 23 16 3626.31
                                                                  58.91
                                                                                                            6 0 7
      110.00
                                                 -33.96
                                                                               241.50
                                                                                                85.87
55.99
                                                                                                                             1890.4
                                                                                                                                                            49.67
      110.00
                   23 23 16
                                                  -3.69
                                                                 131.37
                                                                               230.61
                                                                                                           24 23 42
                                                                                                                             3026.3
                                                                                                                                            -8.12
                                                                                                                                                           125.09
  DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 2894.7 SR 396.0 SS 629.4
CRT .9653 CRS -.9027 CST -.9830
    TOE 2.2121 TRA 1.1916 TC3-4.7984 BAU 1.2724
                                                                SGT 5410.5 SGR 421.7 SG3 137.4
RRT .2197 RRF .1959 RTF .9040
SGB 5427.0 R23 -.0040 R13 .9040
   ROE .3067 RRA -.0748 RC3 .1154 FAU .02156
FOE .6520 FRA .7399 FC3 -.9415 BSP 17429
                                                                                                                     LSA 2984.7 MSA 153.3 SSA 20.9
EL1 2919.9 EL2 102.6 ALF 7.53
    BOE 2.2332 BRA 1.1939 BC3 4.7998 FSP -457
```

SG1 5411.3 SG2 411.3 THA .99

Ē

```
ARRIVAL DATE JUN 24 1966
                                                                      FLIGHT TIME 182.00
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 537.260
   RL 147.14 LAL .00 LOL 91.98 VL 26.314 GAL 3.23 AZL 86.76 MCA 271.64 SMA 119.40 ECC .23867 INC 3.2432 VI 30.278 RP 108.65 LAP -3.24 LOP 3.62 VP 36.490 GAP 12.82 AZP 89.91 TAL 169.59 TAP 81.23 RCA 90.91 APO 147.90 V2 34.878 RC 189.297 GL 18.90 GP -3.90 ZAL 69.99 ZAP 173.81 ETS 322.36 ZAE 131.35 ETE 183.73 ZAC 103.56 ETC 167.58 CLP-175.19
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 21.060 VHL 4.589 CLA 26.44 RAL 13.75 RAD 6567.9 VEL 11.935 PTH 2.12 VHP 8.335 CPA -3.09 RAP 10.61 ECC 1.3466
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 38 9 3252.73 -25.33 114.42 244.93 76.90 2 32 22 2652.7 -26.88 106.09
                                                                             239.62
                                                                                              63.81
                                                                                                        23 37 46
                                                                                                                         3244.8
                                                               151.90
                  22 33 41 3844.77
                                                -11.17
                                                                                                                                       -29.28
                                                                                                                                                       80.10
                                                                                                                         2294.5
                                                                                             79.37
                                                                                                        4 17 32
                                                                88.71
                                                                             245.58
      100.00
                    3 29 17
                                2894.46
                                                -28.10
                                                                                                                                                      131.58
                                                                                                                                       -12.42
                                                                                                                         3078.3
                                                               138.34
                                                                             238.30
                                                                                              61.28 24 26 32
                  23 25 14 3678.27
5 28 41 2520.86
                                                 -8.65
      100.00
                                                                                                                                                       52.05
                                                                                                                         1920.9
                                                                                                                                       -34.18
                                                                                              84.48 6 10 42
56.00 24 42 44
                                                                61.28
                                                                             246.52
                                                -33.79
      110.00
                                                                                                                                         -8.19
                                                               131.28
                                                                             235.29
                                                                                                                         3024.6
                                                 -3.75
                  23 42 19 3624.64
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 2900.7 SR 404.7 SS 620.3
CRT .9580 CRS -.8939 CST -.9842
                                                                  SGT 5436.1 SGR 425.3 SG3 134.0
RRT .2442 RRF .2193 RTF .9080
    TOE 2.2687 TRA 1.4651 TC3-4.5390 BAU 1.2783
   ROE .3233 RRA -.0710 RC3 .0985 FAU .02015
FOE .6378 FRA .7830 FC3 -.8283 BSP 17571
                                                                                                                     LSA 2989.5 MSA 158.2 SSA 20.0
EL1 2926.6 EL2 115.0 ALF 7.62
                                                                   SGB 5452.8 R23 -.0038 R13 .9080
                                                                   SG1 5437.1 SG2 412.3 THA 1.10
    BOE 2.2916 BRA 1.4668 BC3 4.5401 FSP -448
                                                                                                                                ARRIVAL DATE JUN 26 1966
                                                                       FLIGHT TIME 184.00
LAUNCH DATE DEC 24 1965
                                                                      DISTANCE 542.664
   RL 147.14 LAL .00 LOL 91.98 VL 26.266 GAL 3.89 A7L 86.81 MCA 274.82 SMA 119.14 ECC .24413 INC 3.1924 V1 30.278
RP 108.62 LAP -3.18 LOP 6.81 VP 36.466 GAP 13.21 A7P 89.73 TAL 167.77 TAP 82.59 RCA 90.05 APO 148.22 V2 34.889
RC 191.216 GL 17.90 GP -3.79 TAL 66.81 ZAP 174.43 ETS 318.54 ZAE 131.45 ETE 183.68 ZAC 105.90 ETC 167.69 CLP-175.92
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 22.539 VHL 4.748 DLA 26.78 RAL 17.35 RAD 6567.9 VEL 11.997 PTH 2.14 VHP 8.569 DPA -1.99 RAP 12.79 ECC 1.3709 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2697.1
                                                                                                                                      -26.36 109.23
                  1 44 9 3297.10
22 56 24 3833.19
                                                                                                          2 39 6
                                                               117.47
                                                                             249.66
                                                                                             75.53
                                                 -24.61
        90.00
                                                                                                                                                      144.21
                                                                                                        24 0 17
                                                                                                                          3233.2
                                                                                                                                        -14.93
                                                                                              63.95
                                                                              244.60
                                                 -11.52
                                                               151.22
        90.00
                                                                                                                                                       82.76
                                                                                                                          2330.8
                                                                                                                                        -28.98
                                                                                                         4 26 36
                  3 37 46 2930.82
23 45 28 3674.70
                                                 -27.62
                                                                 91.30
                                                                             250.45
                                                                                              78.08
       100.00
                                                                                                       24 46 43
                                                                                                                                                       131.38
                                                                                                                          3074.7
                                                                                                                                        -12.54
                                                                                              61.31
                                                   -8.77
                                                               138.14
                                                                              243.15
       100.00
                                                                                                                                      -34.16
                                                                                                                                                        54.34
                                                                                                        6 21 56
                                                                                                                          1950.1
                   5 39 26 2550.12
0 4 13 3628.17
                                                                 63.53
                                                                             251.59
                                                                                              83.16
                                                 -33.57
       110.00
                                                                                                         1 4 41
                                                                                                                                                       125.19
                                                                                                                          3028.2
                                                                                                                                         -8.06
                                                               131.46
                                                                             239.99
                                                                                              55.99
                                                 -3.61
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   RRT .2692 RRF .2445 RTF .9117
SGB 5473.8 R23 -.0024 R13 .9117
SGI 5458.2 SG2 412.2 THA 1.22
                                                                                                                      ST 2896.D SR 412.3 SS 611.7
CRT .9503 CRS -.8851 CST -.9855
    TOE 2.3237 TRA 1.7571 TC3-4.2484 BAU 1.2804
    RDE .3410 RRA -.0653 RC3 .0824 FAU .01869
FDE .6253 FRA .8284 FC3 -.7179 BSP 17610
                                                                                                                      LSA 2983.9 MSA 164.0 SSA 19.0
                                                                                                                      EL1 2922.5 EL2 127.2 ALF 7.72
    BDE 2.3486 BRA 1.7583 BC3 4.2492 FSP -436
                                                                                                                               ARRIVAL DATE JUN 28 1966
                                                                      FLIGHT TIME 186.00
LAUNCH DATE DEC 24 1965
    RL 147.14 LAL .00 LOL 91.98 VL 26.219 GAL 4.58 AZL 86.86 MCA 278.00 SMA 118.87 ECC .25013 INC 3.1411 V1 30.278
RP 108.58 LAP -3.11 LOP 9.99 VP 36.443 GAP 13.62 AZP 89.56 TAL 165.97 TAP 83.97 RCA 89.14 APO 148.61 V2 34.900
RC 193.113 GL 16.89 GP -3.70 ZAL 63.71 ZAP 175.02 ETS 313.67 ZAE 131.55 ETE 183.64 ZAC 108.25 ETC 167.78 CLP-176.66
                                                                      DISTANCE 548.017
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 24.301 VHL 4.930 DLA 27.02 RAL 20.87 RAD 6568.0 VEL 12.070 PTH 2.16 VHP 8.821 DPA
                                                                                                                            -.89 RAP 14.97 ECC 1.3999
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2737.7
                                                                                                        2 47 8
                   1 51 30
23 17 7
                                                                            254.44
                                                                                             74.33
                                                 -23.89
                                                               120.22
                                  3337.70
        90.00
                                                                                                      24 20 56
                                                                                                                          3229.3
                                                                                                                                        -15.03
                                                                                                                                                      143.98
                                                                                              64.00
                                                 -11.63
                                                               151.00
                                                                             249.55
        90.00
                                  3829.35
                                                                                                        4 36 43
                                                                                                                                                       85.20
                                                                                                                         2364.4
                                                                                                                                        -28.65
                                                                                              76.93
                                                                 93.67
                                                                             255.35
                                                 -27.12
                    3 47 19 2964.35
       100.00
                                                                                                       1 9 13
6 33 45
                                                                                                                                                      131.56
                                                                                                                          3077.9
                                                                                                                                        -12.43
                                                                                              61.28
                                                                             247.99
                                                  -8.67
                                                               138.32
                     0 7 55
                                  3677.92
       100.00
                                                                                                                                                        56.51
                                                                                                                          1978.0
                                                                                                                                       -34.09
                                                                                              81.92
                                                                             256.69
                                                 -33.33
                                                                 65.67
                     5 50 47 2578.00
       110.00
                                                                                                         1 21 34
                                                                                                                          3037.0
                                                                                                                                        -7.72
                                                                                                                                                       125.66
                                                                                              55.96
                                                               131.93
                                                                             244.69
                                                  -3.28
                     0 20 57
                                 3637.04
        110.00
                                                                                                                 ST 2872.5 SR 418.5 S5 600.7

CRT .9420 CR5 -.8758 CST -9855

LSA 2959.4 MSA 170.4 SSA 18.1
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   RRT .2933 RRF .2685 RTF .9159
SCB 5490.6 R23 -.0017 R13 .9159
SCI 5475.2 SGZ 410.7 THA 1.33
     TOE 2.3698 TRA 2.0614 TC3-3.9469 BAU 1.2825
    RDE .3595 RRA -.0580 RC3 .0671 FAU .01735
FDE .6109 FRA .8731 FC3 -.6181 BSP 17730
                                                                                                                      EL1 2899.5 EL2 139.1 ALF 7.83
     BOE 2.3970 BRA 2.0622 BC3 3.9475 FSP
                                                                                                                                ARRIVAL DATE JUN 30 1966
                                                                       FLIGHT TIME 188.00
 LAUNCH DATE DEC 24 1965
    RL 147.14 LAL .00 LOL 91.98 VL 26.173 GAL 5.31 A7L 86.91 HCA 281.19 SMA 118.62 ECC .25672 INC 3.0890 V1 30.278
RP 108.55 LAP -3.03 LOP 13.18 VP 36.420 GAP 14.07 AZP 89.40 TAL 164.18 TAP 85.36 RCA 88.17 APO 149.07 V2 34.912
RC 194.989 GL 15.87 GP -3.61 ZAL 60.72 ZAP 175.55 ETS 307.44 ZAE 131.64 ETE 183.60 ZAC 110.60 ETC 167.83 CLP-177.40
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                .19 RAP 17.16 ECC 1.4343
     C3 26.388 VHL 5.137 DLA 27.17 RAL 24.29 RAD 6568.1 VEL 12.156 PTH
                                                                                                 2.18 VHP 9.093 DPA
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     90.00 2 0 33 3373.25
                                                                                                                                       -25.28
                                                                                                                         2773.3
                                                                                                           2 56 46
                                                                             259.24
                                                                                               73.31
                                                  -23.22
                                                                122.61
                                                                                                                                                       144.28
                                                                                               63.94 24 39 16
                                                                                                                                         -14.89
                                                                                                                          3234.4
                                                                              254.44
                                                                151.30
                   23 35 21
                                  3834.43
                                                  -11.48
         90.00
                                                                                                                                                        87.39
                                                                                                                                        -28.31
                                                                                               75.91
                                                                                                          4 47 54
                                                                                                                          2194.7
                                                                              260.28
                                 2994.65
                                                  -26.64
                                                                 95.79
                     3 57 59
        100.00
                                                                                                                                                       132.16
                                                                                                         1 26 O
                                                                                                                          3068.3
                                                                                                                                        -12.11
                                                                                               61.19
                                                   -8.33
                                                                138.90
                                                                              252.78
                     0 24 32
                                  3688.26
        100.00
                                                                                                        6 46 5
1 37 11
                                                                                                                          2004.5
                                                                                                                                        -33.98
                                                                                               80.76
                                                                              261.81
                                 2604.46
                                                  -33.06
                                                                 67.69
        110.00
                      6 2 41
                                                                                                                          3051.2
                                                                                                                                                       126.41
                                                                                                                                          -7.19
                                                                                               55.91
                                                   -2.74
                                                                132.67
                                                                              249.35
                                   3651.22
                     0 36 20
        110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                   SGI 5486.3 SGR 430.5 SG3 124.1
RRT .3174 RRF .2929 RTF .9202
SGB 5503.2 R23 -.0008 R13 .9202
SGI 5488.0 SG2 408.1 THA 1.43
                                                                                                                      ST 2837.2 SR 423.0 SS 589.5
     TOE 2.4113 TRA 2.3833 TC3-3.6339 BAU 1.2821
                                                                                                                     CRT .9332 CRS -.8663 CST -.9875
     RDE .3789 RRA -.0489 RC3 .0531 FAU .01604
                                                                                                                     LSA 2923.0 MSA 177.3 SSA 17.2
EL1 2864.6 EL2 150.6 ALF 7.94
     FOE .5969 FRA .9193 FC3 - .5263 BSP 17829
      BOE 2.4409 BRA 2.3838 BC3 3.6343 FSP
                                                       -418
```

```
LAUNCH DATE DEC 24 1965
                                                                        FLIGHT TIME 190.00
                                                                                                                                  ARRIVAL CATE JUL 2 1966
   MELIOCENTRIC CONIC
                                                                       DISTANCE 558.532
    RL 147.14 LAL .00 LOL 91.98 VL 26.128 GAL 6.09 AZL 86.96 MCA 284.37 SMA 118.37 ECC .26396 INC 3.0356 V1 30.278
RP 108.51 LAP -2.94 LOP 16.37 VP 36.399 GAP 14.56 AZP 89.25 TAL 162.41 TAP 86.78 RCA 87.12 APO 149.61 V2 34.924
RC 196.842 GL 14.84 GP -3.53 ZAL 57.83 ZAP 176.01 ETS 299.48 ZAE 131.72 ETE 183.56 ZAC 112.94 ETC 167.84 CLP-178.15
   PLANETOCENTRIC CONIC
    C3 28.849 VHL 5.371 DLA 27.24 RAL 27.59 RAD 6568.2 VEL 12.257 PTH 2.21 VHP 9.388 DPA
                                                                                                                               1.25 RAP 19.35 ECC 1.4748
                                                                                           72.50 3 8 14
63.76 24 54 55
75.03 5 0 7
41.04 1 40 52
5 58 52
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     2 11 29
                                 3402.85
                                                  -22.62
                                                                124.58
                                                                             264.07
                                                                                                                           2802.8
                                                                                                                                        -24.81
                                3849.23
                   23 50 46
                                                  -11.04
                                                                152.16
                                                                              259.22
                                                                                                                           3249.2
                                                                                                                                          -14.47
                   4 9 46 3021.56
0 39 6 3705.75
6 15 3 2629.52
0 50 19 3670.55
       100.00
                                                  -26.18
                                                                 97.66
                                                                              265.21
                                                                                                                           2421.6
                                                                                                                                          -27.98
                                                                                                                                                         89.32
                                                  -7.75
                                                                139.88
                                                                              257.49
                                                                                                                           3105.7
                                                                                                                                          -11.56
                                                                                                                                                        133.16
                                                                                               79.67 6 58 52
55.87 1 51 29
                                                 -32.77
                                                                 69.59
                                                                              266.91
                                                                                                                           2029.5
                                                                                                                                         -33.84
                                                                                                                                                         60.52
                                                  -2.00
                                                                133.68
                                                                              253.94
                                                                                                                           3070.6
                                                                                                                                           -6.46
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 5494.0 SGR 430.2 SG3 121.0
RRT .3412 RRF .3172 RTF .9246
SGB 5510.8 R23 -.0000 R13 _~.9246
                                                                                                                       ST 2790.6 SR 425.8 SS 578.3
CRT .9236 CRS -.8563 CST -.9885
    TOE 2.4472 TRA 2.7235 TC3-3.3162 BAU 1.2791
    ROE .3989 RRA -.0380 RC3 .0407 FAU .01477
FOE .5831 FRA .9671 FC3 -.4433 BSP 17919
                                                                                                                      LSA 2875.6 MSA 184.4 95A 16.3
    BOE 2.4795 BRA 2.7238 BC3 3.3165 FSP -409
                                                                    SG1 5495.9 SG2 404.3 THA 1.54
                                                                                                                      EL1 2818.3 EL2 161.6 ALF
                                                                                                                                                           8.05
LAUNCH DATE DEC 24 1965
                                                                        FLIGHT TIME 192.00
                                                                                                                                  ARRIVAL DATE JUL 4 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 563.674
   RL 147.14 LAL .00 LOL 91.98 VL 26.084 GAL 6.91 AZL 87.02 MCA 287.56 SMA 118.12 ECC .27193 INC 2.9807 V1 30.278
RP 108.47 LAP -2.84 LOP 19.56 VP 36.379 GAP 15.08 AZP 89.10 TAL 160.66 TAP 88.22 RCA 86.00 APO 150.24 V2 34.936
RC 198.673 GL 13.83 GP -3.46 ZAL 55.07 ZAP 176.37 ETS 289.51 ZAE 131.79 ETE 183.53 ZAC 115.28 ETC 167.82 CLP-178.90
   PLANETOCENTRIC CONIC
    C3 31.744 VHL 5.634 OLA 27.24 RAL 30.76 RAD 6568.3 VEL 12.374 PTH
                                                                                                 2.23 VHP 9.708 DPA
                                                                                                                               2.30 RAP 21.54 ECC 1.5224
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            268.93
       90.00
                 2 24 18 3426.27
                                                 -22.14
                                                                                             71.88 3 21 25
                                                               126.12
                                                                                                                           2826.3
                                                                                                                                        -24.41
                                                                                                                                                      118.19
                    0 7 11
                                 3873.78
       90.00
                                                  -10.29
                                                                153.58
                                                                              263.88
                                                                                                63.47
                                                                                                           1 11 44
                                                                                                                           3273.8
                                                                                                                                          -13.77
                                                                                                                                                         146.63
                   4 22 31 3045.19
0 51 39 3730.09
      100.00
                                                                                                                                          -27.66
                                                  -25.75
                                                                 99.29
                                                                              270.13
                                                                                                74.28
                                                                                                         5 13 16
                                                                                                                           2445.2
                                                                                                                                                          91.00
                                                                                                        1 53 49
7 11 59
      100.00
                                                   -6.95
                                                                                                                                         -10.78
                                                                141.24
                                                                              262.09
                                                                                               60.85
                                                                                                                           3130.1
                                                                                                                                                        134.55
      110.00
                   6 27 45 2653.29
                                                 -32.46
                                                                            271.98
                                                                                               78.65
                                                                                                                           2053.3
                                                                                                                                        -33.69
                                                                                                                                                         62.36
      110.00
                    1 2 54
                                 3694.76
                                                  -1.07
                                                                134.94
                                                                              258.46
                                                                                               55.83
                                                                                                          2 4 29
                                                                                                                           3094.8
                                                                                                                                           -5.55
                                                                                                                                                         128.72
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SCT 5499.0 SGR 429.1 SG3 118.0
RRT .3656 RRF .3424 RTF .9291
SGB 5515.7 R23 .0010 R13 .9291
SGI 5501.3 SG2 399.2 THA 1.64
    TOE 2.4833 TRA 3.0877 TC3-2.9950 BAU 1.2711
                                                                                                                       ST 2740.5 SR 426.9 SS 568.7
   ROE .4197 RRA -.0249 RC3 .0301 FAU .01348
FOE .5712 FRA 1.0184 FC3 -.3675 BSP 17899
BOE 2.5186 BRA 3.0878 BC3 2.9952 FSP -397
                                                                                                                       CRT .9135 CRS -.8462 CST -.9894
                                                                                                                       LSA 2824.7 MSA 191.4 SSA 15.5
F11 2768.2 EL2 171.9 ALF 8.13
                                                                                                                     EL1 2768.2 EL2 171.9 ALF
LAUNCH DATE DEC 24 1965
                                                                       FLIGHT TIME 194.00
                                                                                                                                 ARRIVAL DATE JUL 6 1966
                                                                       DISTANCE 568.719
   RL 147.14 LAL .00 LOL 91.98 VL 26.040 GAL 7.78 AZL 87.08 MCA 290.75 SMA 117.88 ECC .28072 INC 2.9238 V1 30.278 RP 108.43 LAP -2.73 LOP 22.75 VP 36.360 GAP 15.66 AZP 88.96 TAL 158.95 TAP 89.70 RCA 84.79 APO 150.97 VZ 34.948 RC 200.481 GL 12.83 GP -3.40 ZAL 52.43 ZAP 176.59 ETS 277.57 ZAE 131.85 ETE 183.51 ZAC 117.60 ETC 167.75 CLP-179.67
   PLANETOCENTRIC CONIC
   C3 35.148 VHL 5.929 DLA 27.16 RAL 33.79 RAD 6568.4 VEL 12.511 PTH 2.27 VHP 10.057 DPA 3.33 RAP 23.73 ECC 1.5784
   LNCH ATHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          273.79
                                                                                           71.41 3 36 9
63.12 1 22 1
                                                 -21.75
      90.00 2 38 44 3444.14
                                                               127.29
                                                                                                                        2844.1
                                                                                                                                     -24.09 119.40
                    0 16 53
                                 3907.28
                                                   -9.27
                                                                155.50
                                                                             268.38
                                                                                                                           3307.3
                                                                                                                                         -12.80
                                                                                               73.63 5 27 10
60.65 2 4 55
                  4 36 5 3065.89
1 2 14 3760.76
                                                 -25.36
                                                                100.70
                                                                           275.03
                                                                                                                          2465.9
                                                                                                                                         -27.36
      100.00
                                 3760.76
                                                   -5.93
                                                                142.95
                                                                 73.07 277.01 77.70 7 25 17
36.44 262.89 55.82 2 16 10
MID-COURSE EXECUTION ACCURACY
SGT 5447.9 569 400 0 0 0 0 0
                                                                             266.58
                                                                                                                          3160.8
                                                                                                                                          -9.79
                                                                                                                                                       136.29
                                                 -32.15
                                                                                                                                         -33.51
                    6 40 41 2675.94
                                                                 73.07
                                                                                                                          2075.9
                                                                                                                                                         64.10
                    1 14 7
      110.00
                                                   .03
                                                                136.44
                                                                                                                          3123.5
                                                                                                                                         -4.46
  CIFFERENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SCT 5497.9 SCR 426.8 SC3 115.0
RRT .3892 RRF .3666 RTF .9338
SCB 5514.5 R23 .0014 R13 .9338
SCI 5500.5 SC2 393.0 THA 1.74
    TOE 2.5112 TRA 3.4696 TC3-2.6848 BAU 1.2616
                                                                                                                      ST 2679.0 SR 425.9 55 558.6
   ROE .4407 RRA -.0101 RC3 .0210 FAU .01229
FOE .5586 FRA 1.0705 FC3 -.3027 BSP 17974
                                                                                                                     CRT .9025 CRS -.8356 CST -.9904
                                                                                                                      LSA 2762.4 MSA 198.2 SSA 14.7
EL1 2706.6 EL2 181.5 ALF 8.20
    BOE 2.5495 BRA 3.4696 BC3 2.6849 FSP -389
LAUNCH DATE DEC 24 1965
                                                                       FLIGHT TIME 196.00
                                                                                                                                 ARRIVAL DATE JUL 8 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 573.649
   RL 147.14 LAL .00 LOL 91.98 VL 25.997 GAL 8.71 A7L 87.14 HCA 293.94 SMA 117.65 ECC .29042 INC 2.8643 V1 30.278
RP 108.39 LAP -2.62 LOP 25.94 VP 36.341 GAP 16.29 AZP 88.84 TAL 157.28 TAP 91.22 RCA 83.48 APO 151.82 V2 34.961
RC 202.264 GL 11.84 GP -3.34 ZAL 49.93 ZAP 176.63 ETS 264.39 ZAE 131.89 ETE 183.48 ZAC 119.92 ETC 167.64 CLP 179.55
  PLANETOCENTRIC CONIC
   C3 39.150 VHL 6.257 DLA 27.02 RAL 36.66 RAD 6568.5 VEL 12.670 PTH
                                                                                                 2.30 VHP 10.439 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00
                   2 54 21 3457.66
                                                 -21.46
                                                               128.17
                                                                            278.64
                                                                                              71.07
                                                                                                          3 51 58
                                                                                                                          2857.7
                                                                                                                                        -23.84
                                                                                                                                                        120.32
       90.00
                   0 24 13
                                 3948.25
                                                  -8.00
                                                                157.85
                                                                              272.73
                                                                                               62.75
                                                                                                          1 30 1
                                                                                                                           3348.2
                                                                                                                                         -11.59
                                                                                                                                                        151.01
                   4 50 13
                                                                                                                           2484.1
      100.00
                                 3084.14
                                                 -25.01
                                                                101.94
                                                                              279.89
                                                                                               73.07
                                                                                                           5 41 37
                                                                                                                                         -27.09
                                                                                                                                                         93.76
                   1 11 2 3797.00
6 53 43 2697.66
1 24 1 3756.25
                                                                                                        2 14 19
7 38 41
      100.00
                                                  -4.71
                                                                144.95
                                                                              270.94
                                                                                               60.45
                                                                                                                           3197.0
                                                                                                                                          -8.62
                                                                                                                                                        138.34
      110.00
                                                -31.82
                                                                74.68
                                                                              281.98
                                                                                               76.80
                                                                                                                          2097.7
                                                                                                                                         -33.31
                                                                                                                                                         65.76
                                                  1.28
                                                                                                                                         -3.21
     110.00
                                                                138.15
                                                                             267.22
                                                                                              55.84
                                                                                                         2 26 37
                                                                                                                          3156.2
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                 SGT 5493.4 SGR 423.5 SG3 112.1
RRT .4126 RRF .3908 RTF .9387
SGB 5509.7 R23 .0018 R13 .9387
SGI 5496.2 SG2 385.6 THA 1.83
   TOE 2.5364 TRA 3.8765 TC3-2.3845 BAU 1.2481
                                                                                                                     ST 2613.7 SR 423.1 SS 549.8
CRT .8908 CRS -.8247 CST -.9913
   RDE .4620 RRA .0068 RC3 .0136 FAU .01112
FOE .5471 FRA 1.1257 FC3 -.2459 BSP 18043
                                                                                                                    LSA 2696.4 MSA 204.5 SSA 14.0
EL1 2640.9 EL2 190.2 ALF 8.25
```

BDE 2.5781 BRA 3.8765 BC3 2.3846 FSP -380

ARRIVAL CATE JUL 10 1966

```
LAUNCH DATE DEC 24 1965
                                                                        DISTANCE 578.443
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 91.98 VL 25.955 GAL 9.71 A7L, 87.20 HCA 297.13 SMA 117.42 ECC .30116 INC 2.8018 V1 30.278 RP 108.35 LAP -2.49 LOP 29.14 VP 36.324 GAP 16.98 A7P 88.72 TAL 155.64 TAP 92.78 RCA 82.06 APO 152.79 V2 34.974 RC 204.023 GL 10.88 GP -3.28 ZAL 47.57 ZAP 176.49 ETS 251.28 ZAE 131.91 ETE 183.46 ZAC 122.22 ETC 167.49 CLP 178.74
    C3 43.861 VML 6.623 CLA 26.83 RAL 39.37 RAD 6568.7 VEL 12.854 PTH 2.34 VMP 10.858 CPA
                                                                                                                                5.33 RAP 28.10 ECC 1.7218
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 18 13 3837.97
7 6 43 2718.63
1 32 40 3792.62
                                                                               283.45
                                                                                                70.80
                                                                                                            4 8 26
                                                                                                                           2868.2
                                                                                                                                          -23.65
                                                                 128.86
                                                  -21.22
                                                                                                           1 36 10
                                                                                                                            3395.0
                                                                                                                                           -10.1A
                                                                                                                                                          153.72
                                                                                                 62.39
                                                                               276.92
                                                  -6.53
                                                                 160.50
        90.00
                                                                                                         5 56 21
2 22 11
7 52 2
                                                                                                 72.57
                                                                                                                            2500.5
                                                                                                                                           -26.83
                                                                                                                                                            94.90
                                                                               284.59
                                                                 103.04
                                                  -24.68
       100.00
                                                                                                                           3238.0
                                                                                                                                            -7.27
                                                                                                                                                          140.63
                                                                                                 60.28
                                                                               275.17
       100.00
                                                   -3.33
                                                                147.21
                                                                                                                            2118.6
                                                                                                                                           -33.09
                                                                                                                                                           67.36
                                                                               286.87
                                                                                                 75.94
                                                 -31.48
                                                                  76.22
      110.00
                                                                                                          2 35 52
                                                                                                                          3192.6
                                                                                                                                           -1.82
                                                                                                                                                          133.84
                                                                                                 55.91
                                                                               271.44
      110.00
                                                   2.67
                                                                140.05
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RRT .4360 RRF .415.2 SG3 109.4

SGB 5500.0 R23 .0019 R13 .9436

SGI 5487.1 SG2 377.0 THA 1.92
                                                                                                                        ST 2547.0 SR 418.4 SS 542.6
CRT .8786 CRS -.8136 CST -.9922
    TOE 2.5612 TRA 4.3092 TC3-2.0966 BAU 1.2294
    ROE .4835 RRA .0258 RC3 .0078 FAU .0096
FCE .5370 FRA 1.1847 FC3 -.1967 BSP 18080
BCE 2.6064 BRA 4.3093 BC3 2.0966 FSP -372
                                                                                                                         LSA 2629.2 MSA 210.0 SSA 13.3
EL1 2573.6 EL2 197.7 ALF 8.26
                                                                                                                                    ARRIVAL DATE JUL 12 1966
                                                                         FLIGHT TIME 200.00
                                                                         DISTANCE 583.073
   HELIOCENTRIC CONIC
                       .00 LOL 91.98 VL 25.914 GAL 10.79 A7L 87.26 HCA 300.33 SMA 117.20 ECC .31308 INC 2.7356 V1 30.278
-2.36 LOP 32.34 VP 36.307 GAP 17.74 A7P 88.62 TAL 154.07 TAP 94.40 RCA 80.51 APO 153.90 V2 34.987
9.95 GP -3.23 ZAL 45.34 ZAP 176.16 ETS 239.51 ZAE 131.90 ETE 183.43 ZAC 124.49 ETC 167.30 CLP 177.92
    RL 147.14 LAL
RP 108 31 130
   PLANETOCENTRIC CONIC
    LO 43.422 VML (.UDU DLA 26.58 RAL 41.92 RAD 6568.8 VEL 13.068 PTH 2.39 VMP 11.321 DPA 6.29 RAP 30.28 ECC 1.8134
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 27 9 3476.92 -21.03 129.42 288 19 70.70
                   0 33 24 4046.18
5 19 15 3115.50
1 23 59 3882.83
7 19 35 2739.01
1 40 9 3832.09
                                                                                                                                             -8.61
                                                                                280.98
                                                                                                 62.08
                                                                                                             1 40 50
                                                                                                                             3446.2
                                                    -4.91
                                                                 163.38
        90.00
                                                                                                 72.13 6 11 11
60.16 2 28 41
75.12 8 5 14
                                                                                                                             2515.5
                                                                                                                                            -26.58
                                                                                                                                                            95.95
                                                                 104.05
                                                                                289.42
                                                   -24.37
       100.00
                                                                                                                                                           143.13
                                                                                                                                            -5.77
                                                                                                                             3282.8
       100.00
                                                    -1.82
                                                                 149.68
                                                                                279.27
                                                                                                                                                            68.91
                                                                                                                             2139.0
                                                                                                                                           -32.86
                                                   -31.14
                                                                  77.71
                                                                                291.66
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                 142.11
                                                                                                                             3232.1
                                                                                                                                               -.31
                                                    4.17
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2482.5 SR 411.9 SS 538.0
CRT .8659 CRS -.8029 CST -.9932
                                                                     SGT 5472.9 SGR 414.0 SG3 106.8
RRT .4598 RRF .4400 RTF .9485
SGB 5488.6 R23 .0021 R13 .9485
    TDE 2.5889 TRA 4.7763 TC3-1.8208 BAU 1.2031
    ROE .5052 RRA .0469 RC3 .0037 FAU .00877
FOE .5292 FRA 1.2488 FC3 -.1536 BSP 18022
                                                                                                                        LSA 2564.4 MSA 214.5 55A 12.6
                                                                                                                        EL1 2508.2 EL2 204.0 ALF 8.23
    BOE 2.6377 BRA 4.7765 BC3 1.8208 FSP -361
                                                                     SG1 5476.3 SG2 367.4 THA 2.00
                                                                                                                                   ARRIVAL DATE JUL 14 1966
                                                                         FI 16HT TIME 202.00
LAUNCH DATE DEC 24 1965
    RL 147.14 LAL .00 LOL 91.98 VL 25.874 GAL 11.96 A7L 87.34 HCA 303.53 SMA 116.99 ECC .32634 INC 2.6648 VI 30.278 RP 108.27 LAP -2.22 LOP 35.53 VP 36.291 GAP 18.58 A7P 88.53 TAL 152.55 TAP 96.08 RCA 78.81 APO 155.17 V2 35.000 RC 207.465 GL 9.05 GP -3.18 ZAL 43.27 ZAP 175.67 ETS 229.69 ZAE 131.86 ETE 183.41 ZAC 126.73 ETC 167.06 CLP 177.06
                                                                         DISTANCE 587.503
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 56.006 VHL 7.484 DLA 26.29 RAL 44.30 RAD 6569.0 VEL 13.318 PTH 2.43 VHP 11.833 DPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             70.39 4 41 39
61.85 1 44 18
                                                                                                                           2884.7
                                                                                                                                          -23.33
                                                                            292.84
                                                               129.92
                     3 43 35 3484.67
0 35 58 4100.43
5 33 44 3129.52
                                                  -20.85
                                                                                                                             3500.4
                                                                                                                                            -6.91
                                                                                                                                                           159.74
                                                    -3.17
                                                                 166.42
                                                                                284.89
                                                                                                 71.72 6 25 54
60.11 2 34 0
                                                                                                                                                            96.92
                                                                                                                             2529.5
                                                   -24.07
                                                                104.99
                                                                               294.04
       100.00
                                                                                                                                                           145.78
                                                                                                                             3330.8
                                                     -.19 * 152.31
                                                                                283.23
                     1 28 29 3930.81
7 32 11 2758.92
1 46 32 3874.18
                                                                                                           8 18 10
                                                                                                                                                           70.41
                                                                                                                             2158.9
                                                                                296.35
                                                                                                 74.34
                                                   -30.78
                                                                   79.15
       110.00
                                                                                                                                                          138.10
                                                                                                            2 51 6
                                                                                                                             3274.2
                                                                                                                                             1.30
                                                                               279.53
                                                                                                 56.25
                                                    5.77
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5455.5 SGR 4D7.6 SG3 104.2
RRT .4828 RRF .4640 RTF .9536
SGB 5470.7 R23 .0019 R13 .9536
SGI 5459.1 SG2 356.7 THA 2.07
                                                                                                                        ST 2414.9 SR 403.6 SS 534.5
CRT .8525 CRS -.7919 CST -.9941
     TOE 2.6131 TRA 5.2724 TC3-1.5653 BAU 1.1720
     ROE .5267 RRA .0700 RC3 .0007 FAU .00763
FOE .5217 FRA 1.3165 FC3 -.1180 BSP 18053
                                                                                                                        LSA 2496.6 MSA 217.9 SSA 12.0
EL1 2439.5 EL2 208.9 ALF 8.17
     BDE 2.6657 BRA 5.2728 BC3 1.5653 FSP -353
                                                                                                                                    ARRIVAL DATE JUL 16 1966
                                                                          FLIGHT TIME 204.00
 LAUNCH DATE DEC 24 1965
                                                                         DISTANCE 591.690
        HELIOCENTRIC CONIC
     RL 147.14 LAL
     RC 209,146 GL
    PLANE TOCENTRIC CONIC
     C3 63.834 VHL 7.990 DLA 25.97 RAL 46.51 RAD 6569.2 VEL 13.608 PTH 2.49 VHP 12.403 DPA
                                                                                                                                8.13 RAP 34.58 ECC 2.0505
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 59 40 3492.00 -20.68 130.39 297.38 70.22 4 57 52 2892.0 -23.19 122.62
                                                                                                             1 46 47
                                                                                                                              3556.8
                                                                                                                                             -5.13
                     0 37 30 4156.82
                                                                                                  61.71
                                                                  169.57
                                                                                288.66
                                                    -1.36
         90.00
                                                                                                                              2542.9
                                                                                                                                            -26.11
                                                                                                                                                            97.85
                                                                                                  71.34
                                                                                                              6 40 21
                                                    -23.79
                                                                  105.87
                                                                                298.55
                     5 47 58
                                   3142.86
        100.00
                                                                                                            2 38 15
                                                                                                                              3381.2
                                                                                                                                             -2.47
                                                                                                                                                           148.55
                                                                 155.08
                                                                                287.06
                                                                                                  60.14
                                                     1.52
                     1 31 53
                                 3981.20
        100.00
                                                                                                                                                            71.87
                                                                                                  73.59
                                                                                                            8 30 45
                                                                                                                             2178.4
                                                                                                                                           - 32 . 36
                      7 44 27 2778.40
1 51 54 3918.43
                                                   -30.41
                                                                  80.55
                                                                                300.90
                                                                     MID-COURSE EXECUTION ACCURACY
SGT 5434.4 SCR
        110.00
                                                                                                                             3318.4
                                                                                                                                              2.98
                                                                  146.67
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                  ST 2349.5 SR 393.7 SS 533.4
CRT .8389 CRS -.7812 CST -.9949
LSA 2431.3 MSA 240 0 777
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 5434.4 SGR 400.3 SG3 101.7
RRT .5057 RRF .4880 RTF .9586
SGB 5449.1 R23 .0015 R13 .9586
SGI 5438.2 SG2 345.1 THA 2.14
     TDE 2.6405 TRA 5.8064 TC3-1.3270 BAU 1.1325
     ROE .5480 RRA .0953 RC3 -.0011 FAU .00647
FOE .5162 FRA 1.3904 FC3 -.0877 BSP 18064
                                                                                                                         EL1 2372.8 EL2 212.2 ALF 8.07
      BOE 2.6967 BRA 5.8072 BC3 1.3270 FSP
                                                        -345
```

FLIGHT TIME 198.00

```
ARRIVAL CATE JUL 18 1966
                                                                               FI IGHT TIME 206.00
LAUNCH DATE DEC 24 1965
                                                                               DISTANCE 595.577
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 25.797 GAL 14.61 A7L 87.49 MCA 309.93 SMA 116.58 ECC .35770 INC 2.5056 V1 30.278 RP 108.19 LAP -1.92 LOP 41.94 VP 36.262 GAP 20.57 A7P 88.39 TAL 149.77 TAP 99.71 RCA 74.88 APO 158.28 V2 35.027 RC 210.800 GL 7.33 GP -3.10 TAL 39.56 TAP 174.32 ETS 215.58 TAE 131.66 ETE 183.35 TAC 131.11 ETC 166.41 CLP 175.23
   PLANETOCENTRIC CONIC
                                                                                                                                           8.99 RAP 36.59 ECC 2.2045
    C3 73.189 VHL 8.555 DLA 25.60 RAL 48.55 RAD 6569.4 VEL 13.948 PTH
                                                                                                           2.55 VHP 13.041 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                      -23.05
                      4 15 14 3499.18

0 38 9 4214.63

6 1 47 3155.67

1 34 17 4033.37
                                                                                                                                                                       123.10
                                                                      130.86
                                                                                      301.77
                                                                                                        70.04
                                                                                                                      5 13 33
                                                                                                                                       2899.2
        90.00
                                                       -20.51
                                                                                                                                                                         166.16
                                                                                                                     1 48 23
                                                                                                                                        3614.6
                                                                                                                                                         -3.28
                                                                                       292.28
                                                                                                          61.69
                                                                       172.80
         90.00
                                                         . 51
                                                                                                                                                                          98.73
                                                                       106.72
                                                                                       302.92
                                                                                                          70.98
                                                                                                                      6 54 23
                                                                                                                                        2555.7
                                                                                                                                                         -25.88
                                                       -23.50
       100.00
                                                                                                         60.27 2 41 30
72.86 8 42 55
                                                                                                                                        3433.4
2197.4
                                                                                                                                                          - .70
                                                                                                                                                                        151.42
                                                                                      290.74
                                                                      157.94
       100.00
                                                         3.28
                                                                                                                                                                         73.29
                                                                                                                                                        -32.09
                                                                        81.90
                                                                                       305.30
       110.00
                      7 56 17 2797.43
1 56 16 3964.38
                                                      -30.04
                                                                                    287.14
                                                                                                          56.92 3 2 21
                                                                                                                                                           4.73
                                                                                                                                                                         142.82
                                                                                                                                       3364.4
                                                                      149.12
                                                      9.15
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RRT .5284 RRF .5120 RTF .9636
SGB 5423.5 R23 .0010 R13 .9636
SGI 5413.3 SGZ 332.5 THA 2.20
                                                                                                                                  ST 2286.9 SR 382.2 SS 535.0
CRT .8252 CRS -.7710 CST -.9957
    TOE 2.6726 TRA 6.3835 TC3-1.1063 BAU 1.0824
    RDE .5692 RRA .1227 RC3 -.0019 FAU .00525
FDE .5129 FRA 1.4712 FC3 -.0620 BSP 18053
                                                                                                                                  LSA 2369.2 MSA 220.5 SSA 10.8
EL1 2308.7 EL2 213.9 ALF 7.92
    BOE 2.7325 BRA 6.3847 BC3 1.1063 FSP
                                                            -337
                                                                                                                                                ARRIVAL DATE JUL 20 1966
                                                                                FLIGHT TIME 208.00
LAUNCH DATE DEC 24 1965
                                                                               DISTANCE 599.092
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 25.761 GAL 16.13 A7L 87.59 HCA 313.14 SMA 116.39 ECC .37631 INC 2.4143 V1 30.278
RP 108.15 LAP -1.76 LOP 45.14 VP 36.249 GAP 21.75 AZP 88.35 TAL 148.54 TAP 101.68 RCA 72.59 APO 160.19 V2 35.040
RC 212.427 GL 6.51 GP -3.06 ZAL 37.94 ZAP 173.48 ETS 210.62 ZAE 131.48 ETE 183.32 ZAC 133.22 ETC 166.01 CLP 174.24
    C3 84.439 VHL 9.189 DLA 25.21 RAL 50.40 RAO 6569.7 VEL 14.345 PTH 2.61 VHP 13.757 OPA 9.83 RAP 38.77 ECC 2.3897
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 30 10 3506.29 -20.35 131.31 306.00 69.87 5 28 37 2906.3 -22.91 123.57
90.00 0 37 59 4273.26 2.40 176.07 295.76 61.78 1 49 12 3673.3 -1.39 169.44
100.00 6 15 6 3168.00 -23.23 107.53 307.12 70.64 7 7 54 2568.0 -25.66 99.58
100.00 1 35 45 4086.79 5.08 160.89 294.28 60.50 2 43 51 3486.8 1.11 154.35
110.00 8 7 38 2815.94 -29.66 83.21 309.53 72.17 8 54 34 2215.9 -31.81 74.66
110.00 1 59 42 4011.61 10.90 151.66 290.75 57.40 3 6 34 3411.6 6.57 145 30
   PLANETOCENTRIC CONIC
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2229.4 SR 369.4 SS 540.1
CRT .8120 CR5 -.7618 CST -.9965
                                                                            SGT 5382.5 SGR 382.8 SG3 97.2
RRT .5513 RRF .5363 RTF .9684
     TOE 2.7149 TRA 7.0132 TC3 -.9016 BAU 1.0178
     RDE .5903 RRA .1523 RC3 -.0018 FAU .00390
                                                                                                                                  LSA 2313.1 MSA 219.3 SSA 10.2
EL1 2249.7 EL2 213.7 ALF 7.73
                                                                           SGB 5396.1 R23 .0006 R13 .9684
SG1 5386.7 SG2 319.1 THA 2.25
     FDE .5128 FRA 1.5612 FC3 -.0400 BSP 17943
     BOE 2.7783 BRA 7.0148 BC3 .9016 FSP -328
                                                                                                                                               ARRIVAL CATE JUL 22 1966
                                                                               FLIGHT TIME 210.00
LAUNCH DATE OFC 24 1965
                                                                              DISTANCE 602.138
    RL 147.14 LAL .00 LOL 91.98 VL 25.726 GAL 17.82 AZL 87.69 HCA 316.35 SMA 116.21 ECC .39730 INC 2.3130 V1 3D.278 RP 108.11 LAP -1.60 LOP 48.35 VP 36.238 GAP 23.08 AZP 88.33 TAL 147.45 TAP 103.80 RCA 70.04 APO 162.38 V2 35.053 RC 214.027 GL 5.73 GP -3.02 ZAL 36.49 ZAP 172.55 ETS 206.63 ZAE 131.24 ETE 183.29 ZAC 135.27 ETC 165.56 CLP 173.19
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 98.062 VHL 9.903 DLA 24.79 RAL 52.06 RAD 6569.9 VEL 14.812 PTH 2.68 VHP 14.567 CPA 10.62 RAP 40.80 ECC 2.6139
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         -22.77
                                                                                                                                     2913.2
                                                                      131.75
                                                                                   310.04 69.71
                                                                                                                    5 42 56
1 49 15
                      4 44 23 3513.23
0 37 3 4332.27
6 27 49 3179.75
                                                       -20.19
         90.00
                                                                                                                                                            .52
                                                                                                                                         3732.3
                                                          4.30
                                                                       179.37
                                                                                       299.07
                                                                                                          61.98
         90.00
                                                                                                                    7 20 49
2 45 19
                                                                                                                                                         -25.43
                                                                                                                                                                         100.38
                                                                                                                                        2579.7
                                                      -22.96
                                                                       108.30
                                                                                       311.13
                                                                                                          70.32
        100.00
                                                                                                                                         3541.0
                                                                                                                                                          2.95
                                                                                                                                                                        157.32
                                                                                       297.65
                                                                                                          60.84
                      1 36 18 4140.98
8 18 24 2833.77
2 2 12 4059.72
                                                         6.89
                                                                       163.90
        100.00
                                                                                                          71.52 9 5 38
57.98 3 9 52
                                                                                                                                                                           75.97
                                                                                                                                        2233.8
                                                                                                                                                         -31.52
                                                                                       313.56
                                                      -29.28
                                                                         84.46
        110.00
                                                                                                                                        3459.7
                                                                                                                                                            8.33
                                                                                       294.20
                                                                       154.29
                                                       12.65
        110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2172.0 SR 355.3 SS 547.6
CRT .7989 CRS -.7529 CST -.9972
                                                                            SGT 5349.0 SGR 372.4 SG3 95.0
RRT .5734 RRF .5597 RTF .9730
SGB 5361.9 R23 -.0001 R13 .9731
     TOE 2.7610 TRA 7.6935 TC3 -.7172 BAU .9402
     RDE .6110 RRA .1838 RC3 -.0011 FAU .00249
                                                                                                                                   LSA 2257.6 MSA 216.7 SSA 9.6
EL1 2190.7 EL2 211.9 ALF 7.52
     FDE .5144 FRA 1.6598 FC3 -.0220 BSP 17935
     BDE 2.8278 BRA 7.6957 BC3 .7172 FSP -321
                                                                            SG1 5353.2 SG2 304.9 THA 2.29
                                                                                                                                                 ARRIVAL DATE JUL 24 1966
                                                                                FLIGHT TIME 212.00
LAUNCH DATE DEC 24 1965
                                                                               DISTANCE 604.591
    HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 25.694 GAL 19.70 A7L 87.80 HCA 319.56 SHA 116.04 ECC .42107 INC 2.1988 VI 30.278 RP 108.07 LAP -1.43 LOP 51.56 VP 36.227 GAP 24.61 A7P 88.33 TAL 146.52 TAP 106.08 RCA 67.18 APO 164.90 V2 35.067 RC 215.599 GL 4.97 GP -2.99 TAL 35.22 TAP 171.51 ETS 203.36 TAE 130.92 ETE 183.25 TAC 137.23 ETC 165.05 CLP 172.05
    PLANETOCENTRIC CONIC
     C3 114.692 VHL 10.709 OLA 24.34 RAL 53.53 RAD 6570.2 VEL 15.363 PTH 2.75 VHP 15.489 DPA 11.36 RAP 42.77 ECC 2.8875
     LNCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIN INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       124.47
                                                                                                                                       2919.8
                                                                                                                        5 56 29
                                                                                                                                                         -22.63
                      4 57 49 3519.79
0 35 19 4391.26
                                                         -20.03
                                                                        132.17
                                                                                       313.A5
                                                                                                           69.56
         90.00
                                                                                                                                                                          176.02
                                                                                                                        1 48 30
                                                                                                                                         3791.3
                                                                                                                                                            2.42
                                                                                                           62.31
                                                           6.17
                                                                        182.69
                                                                                        302.21
                                                                                                                                                                          101.13
                      6 39 52 3190.74
1 35 57 4195.55
8 28 33 2850.71
2 3 45 4108.34
                                                                                                                        7 33 3
                                                                                                                                         2590.7
                                                        -22.71
                                                                        109.02
                                                                                        314.91
                                                                                                           70.02
        100.00
                                                                                                                     2 45 52
9 16 4
                                                                                                                                                                          160.33
                                                                                                                                         3595.5
                                                                                                                                                            4.79
                                                                                                           61.29
                                                          8.69
                                                                        166.95
                                                                                        300.85
        100.00
                                                                                                                                                                           77.21
                                                                                                                                         2250.7
                                                                                                                                                         -31.24
                                                      -28.91
                                                                         85.64
                                                                                        317.35
                                                                                                           70.91
        110.00
                                                                                                                       3 12 13
                                                                                                                                          3508.3
                                                                                                                                                         10.13
                                                                                                                                                                          150.47
                                                                                                           58.65
                                                       14.39
                                                                        156.98
                                                                                       297.49
        110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 5311.7 SGR 361.1 SG3 93.0 ST 2118.3 SR 340.0 SS 558.9 RRT .5951 RRF .5827 RTF .9774 CRT .7867 CRS -.7450 CST -.9978 SGB 5324.0 R23 -.0008 R13 .9774 LSA 2206.8 MSA 212.4 SSA 9.0 SGI 5316.1 SGZ 290.0 THA 2.32 ELI 2135.2 ELZ 208.2 ALF 7.27
     TOE 2.8199 TRA 8.4384 TC3 -.5496 BAU .8427
     ROE .6315 RRA .2172 RC3 .0001 FAU .00088
FOE .5193 FRA 1.7701 FC3 -.0066 BSP 17895
      BDE 2.8898 BRA 8.4412 BC3 .5496 FSP -314
```

Ī

```
LAUNCH DATE DEC 24 1965
                                                                            FLIGHT TIME 214.00
                                                                                                                                        ARRIVAL DATE JUL 26 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 606.284
    RL 147.14 LAL .00 LOL 91.98 VL 25.663 GAL 21.81 A7L 87.93 HCA 322.77 SMA 115.88 ECC .44807 INC 2.0685 VI 30.278
RP 108.03 LAP -1.25 LOP 54.77 VP 36.218 GAP 26.36 A7P 88.35 TAL 145.80 TAP 108.57 RCA 63.96 APO 167.80 V2 35.080
RC 217.144 GL 4.24 GP -2.96 ZAL 34.13 ZAP 170.35 ETS 200.63 ZAE 130.49 ETE 183.20 ZAC 139.10 ETC 164.49 CLP 170.82
   PLANETOCENTRIC CONIC
    C3 135.177 VHL 11.627 DLA 23.87 RAL 54.78 RAD 6570.5 VEL 16.016 PTH 2.82 VHP 16.543 DPA 12.06 RAP 44.66 ECC 3.2247 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   69.42 6 9 10
62.75 1 46 54
                  5 10 24 3525.63
0 32 44 4449.94
                                                                   132.54
                                                                                  317.40
                                                                                                                                 2925.6
                                                                                                                                               -22.51
                                                     -19.89
         90.00
                                   3525.63
                                                                   186.02
                                                                                  305.13
                                                                                                                                 3849.9
                                                      8.02
         90.00
                    6 51 11 3200.68
1 34 39 4250.11
                                                                                  318.43
                                                                                                    69.75
                                                                                                                7 44 32
                                                                                                                                 2600.7
                                                                                                                                                 -25.03
                                                                                                                                                                101.60
                                                     -22.47
                                                                   109.67
                                                                                                              7 44 32
2 45 29
        100.00
                                                                   170.03
                                                                                  303.83
                                                                                                    61.84
                                                                                                                                 3650.1
                                                                                                                                                   6.61
                                                     10.46
       100.00
                                                                                                               9 25 47
                                                                                                                                                -30.96
                     8 38 1 2866.45
2 4 18 4157.12
                                                     -28.56
                                                                     86.73
                                                                                  320.88
                                                                                                    70.36
                                                                                                                                 2266.5
       110.00
                                                                                                                                               11.92
                                                                   159.73
                                                                                  300.58
                                                                                                                                 3557.1
                                                                                                    59.43
                                                                                                                3 13 35
       110.00
                                                     16.10
                                                                      MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SGT 5270.1 SGR 348.8 SG3 91.0
RRT .6162 RRF .6053 RTF .9814
SGB 5281.7 R23 -.0015 R13 .9814
SGI 5274.5 SG2 274.5 THA 2.34
                                                                                                                            ST 2067.5 SR 323.8 SS 574.4
CRT .7756 CRS -.7384 CST -.9983
     TOE 2.8943 TRA 9.2564 TC3 -.3985 BAU .7202
    ROE .6518 RRA .2523 RC3 .0016 FAU-.00100
FOE .5281 FRA 1.8942 FC3 .0064 BSP 17846
                                                                                                                            LSA 2160.2 MSA 206.4 SSA 8.4
                                                                                                                            EL1 2082.8 EL2 202.9 ALF
                                                                                                                                                                    6.99
    BOE 2.9668 BRA 9.2598 BC3 .3985 FSP
                                                         - 308
                                                                           FLIGHT TIME 216.00
                                                                                                                                        ARRIVAL CATE JUL 28 1966
LAUNCH DATE DEC 24 1965
                                                                           DISTANCE 606.995
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 91.98 VL 25.635 GAL 24.20 AZL 88.08 MCA 325.99 SMA 115.73 ECC .47888 INC 1.9173 V1 30.278
RP 107.99 LAP -1.07 LOP 57.98 VP 36.210 GAP 28.38 AZP 88.41 TAL 145.33 TAP 111.32 RCA 60.31 APO 171.15 V2 35.092
RC 218.662 GL 3.54 GP -2.93 ZAL 33.27 ZAP 169.06 ETS 198.32 ZAE 129.94 ETE 183.14 ZAC 140.85 ETC 163.90 CLP 169.46
   PLANETOCENTRIC CONIC
    C3 160.660 VHL 12.675 DLA 23.36 RAL 55.81 RAD 6570.7 VEL 16.792 PTH
                                                                                                      2.90 VHP 17.759 DPA 12.70 RAP 46.45 ECC 3.6441
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                  5 22 5 3530.34
                                                    -19.78
                                                                                 320.65
                                                                                                                6 20 56
                                                                                                                                 2930.3
                                                                  132.84
                                                                                                  69.31
                                                                                                                                               -22.42
                                                                                                                                                               125.17
                                                                   189.34
                                                                                   307.82
                                                                                                    63.30
                                                                                                                1 44 21
                                                                                                                                 3908.1
                     0 29 13
                                    4508.05
                                                       9.81
                                                                                                                                                   6.15
                                                                                                                                                                182.58
                                                                                                              7 55 10
2 44 3
9 34 43
3 13 52
                     7 1 41
1 32 19
                                                                   110.22
                                                                                                                                 2609.2
                                   3209.22
                                                     -22.27
                                                                                   321.66
                                                                                                    69.53
                                                                                                                                                 -24.86
                                                                                                                                                                102.38
                                                                                                                                                  8.40
                                                                                  306.58
                                                                                                    62.49
                                                                                                                                 3704.4
                                                                                                                                                                166.39
       100.00
                                   4304.40
                                                      12.18
                                                                   173.14
                     8 46 42 2880.65
2 3 47 4205.74
                                                    -28.23
                                                                     87.70
                                                                                  324.09
                                                                                                    69.87
                                                                                                                                 2280.7
                                                                                                                                                -30.70
                                                                                                                                                                79.38
       110.00
                                                     17.76
                                                                   162.52
                                                                                  303.44
                                                                                                    60.30
                                                                                                                                 3605.7
                                                                                                                                                13.67
                                                                                                                                                                155.79
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       SGT 5226.0 SGR 335.6 SG3 89.2
RRT .6369 RRF .6273 RTF .9851
SGB 5236.8 R23 -.0021 R13 .9851
                                                                                                                            ST 2021.0 SR 306.9 SS 595.3
CRT .7662 CRS -.7336 CST -.9987
     TOE 2.9931 TRAID.1621 TC3 -.2624 BAU .5637
    ROE .6723 RRA .2888 RC3 .0034 FAU-.00330
FOE .5424 FRA 2.0356 FC3 .0178 BSP 17679
                                                                                                                            LSA 2119.8 MSA 198.9 SSA 7.9
     BOE 3.0677 BRAID.1662 BC3 .2624 FSP -300
                                                                       SG1 5230.4 SG2 258.5 THA 2.35
                                                                                                                            EL1 2034.8 EL2 195.9 ALF 6.70
                                                                                                                                       ARRIVAL DATE JUL 30 1966
                                                                          FLIGHT TIME 218.00
LAUNCH DATE DEC 24 1965
   HELIOCENTRIC CONIC
                                                                          DISTANCE 606.422
    RL 147.14 LAL .00 LOL 91.98 VL 25.610 GAL 26.93 AZL 88.26 HCA 329.20 SHA 115.60 ECC .51411 INC 1.7385 VI 30.278
RP 107.95 LAP -.89 LOP 61.19 VP 36.205 GAP 30.73 AZP 88.51 TAL 145.17 TAP 114.37 RCA 56.17 APO 175.03 V2 35.105
RC 220.152 GL 2.86 GP -2.89 ZAL 32.64 ZAP 167.61 ETS 196.33 ZAE 129.24 ETE 183.07 ZAC 142.45 ETC 163.27 CLP 167.95
   PLANETOCENTRIC CONIC
    C3 192.703 VHL 13.882 CMA 22.83 RAL 56.57 RAD 6571.0 VEL 17.721 PTH 2.98 VHP 19.169 CPA 13.28 RAP 48.09 ECC 4.1714
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 32 49 3533.42 -19.70 133.04 323.55 69.24 6 31 42 2933.4 -22.35 125.37 90.00 0 24 36 4565.40 11.55 192.66 310.22 63.96 1 40 42 3965.4 7.95 185.83 100.00 7 11 17 3215.90 -22.11 110.65 324.52 69.36 8 4 53 2615.9 -24.72 102.83
                                                                                               69.24 6 31 42
63.96 1 40 42
69.36 8 4 53
63.24 2 41 27
                                                                                  309.05
                                                                                                                                3758.2
                                                                                                                                                10.15
                                                                                                                                                               169.42
       100.00
                    1 28 49
                                  4358.16
                                                     13.85
                                                                  176.26
                                                                                                              9 42 45
                    8 54 32 2892.88
                                                                                  326.94
                                                                                                                                2292.9
                                                                                                                                               - 30 . 47
                                                                                                                                                                80.26
       110.00
                                                    -27.94
                                                                    88.53
                                                                                                    69.45
                                                                  165.34
                                                                                  306.03
                                                                                                    61.26
                                                                                                               3 12 57
                                                                                                                                3654.0
                                                                                                                                                15.38
                                                                                                                                                               158.49
       110.00
                                   4253.96
                                                     19.36
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5173.9 SGR 321.3 SG3 87.5
RRT .6560 RRF .6476 RTF .9883
SGB 5183.9 R23 -.0028 R13 .9883
                                                                                                                           51 1974.2 SR 289.2 55 621.2
CRT .7582 CRS -.7297 CST -.9990
    TOE 3.1128 TRAIL.1566 TC3 -.1431 BAU .3689
    RDE .6926 RRA .3257 RC3 .0051 FAU-.00608
FDE .5614 FRA 2.1952 FC3 .0273 BSP 17613
                                                                                                                           LSA 2081.0 MSA 190.0 SSA 7.3
                                                                                                                            EL1 1986.4 EL2 187.4 ALF 6.39
    BDE 3.1889 BRA11.1614 BC3 .1432 FSP -295
                                                                       SG1 5178.2 SG2 242.3 THA 2.34
                                                                           FLIGHT TIME 220.00
                                                                                                                                        ARRIVAL DATE AUG 1 1966
LAUNCH DATE DEC 24 1965
                                                                           DISTANCE 604.163
   HELIOCENTRIC CONIC
    RL 147.14 LAL
RP 107.91 LAP
                        .00 LOL 91.98 VL 25.589 GAL 30.08 AZL 88.48 HCA 332.42 SMA 115.49 ECC .55447 INC 1.5223 V1 30.278
-.70 LOP 64.41 VP 36.202 GAP 33.49 AZP 88.65 TAL 145.40 TAP 117.82 RCA 51.46 APO 179.53 V2 35.117
2.21 GP -2.86 ZAL 32.30 ZAP 165.96 ETS 194.59 ZAE 128.35 ETE 182.99 ZAC 143.86 ETC 162.65 CLP 166.25
    RC 221.615 GL
   PLANETOCENTRIC CONIC
    C3 233.452 VHL 15.279 OLA 22.25 RAL 57.04 RAD 6571.4 VEL 18.835 PTH 3.07 VHP 20.815 OPA 13.79 RAP 49.57 ECC 4.8420
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      5 42 29
                                   3534.27
                                                    -19.68
                                                                  133.09
                                                                                 326.03
                                                                                                  69.22
                                                                                                               6 41 23
                                                                                                                              2934.3
                                                                                                                                               -22.34
                                                                                                                                                             125.42
        90.00
                    0 18 42 4621.89
7 19 54 3220.17
1 23 58 4411.23
                                                                                                               1 35 43
                                                                                                                                 4021.9
                                                                                                                                                  9.70
                                                                                                                                                               189.06
                                                    13.21
                                                                   195.97
                                                                                  312.29
                                                                                                    64.72
        90.00
                                                                                                              8 13 34
2 37 29
9 49 47
                                                                                                                                                               103.12
                                                    -22.01
                                                                   110.93
                                                                                  326.98
                                                                                                    69.25
                                                                                                                                 2620.2
                                                                                                                                                -24.64
                                                     15.46
                                                                   179.38
                                                                                  311.18
                                                                                                    64.09
                                                                                                                                 3811.2
                                                                                                                                               11.85
                                                                                                                                                               172.45
       100.00
                    9 1 24 2902.63
1 58 57 4301.53
                                                                                                                                               -30.28
                                                   -27.70
                                                                    89.20
                                                                                  329.36
                                                                                                    69.12
                                                                                                                                 2302.6
                                                                                                                                                                80.95
       110.00
                                                                                                                                                17.02
                                                                                                               3 10 39
                                                  20.89
                                                                                                                                 3701.5
                                                                   168.18
                                                                                  308.29
                                                                                                    62.31
                                                                                                                                                               161.19
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SG1 5116.2 SGR 305.8 SG3 85.9

RRT .6737 RRF .6664 RTF .9911

SGB 5125.3 R23 -.0034 R13 .9911

SG1 5120.3 SG2 225.8 THA 2.31
                                                                                                                           ST 1928.7 SR 271.1 SS 653.8
CRT .7521 CRS -.7275 CST -.9993
    TOE 3.2665 TRA12.2564 TC3 -.0383 BAU .1213
    ROE .7133 RRA .3623 RC3 .0068 FAU-.00962
FOE .5879 FRA 2.3780 FC3 .0357 BSP 17507
                                                                                                                     CRT .7321 End . _
LSA 2046.6 MSA 179.9 SSA 6.7
EL1 1939.5 EL2 177.6 ALF 6.09
    BOE 3.3434 BRA12.2618 BC3 .0389 FSP -290
```

```
ARRIVAL DATE MAR 5 1966
                                                                      FLIGHT TIME 70.00
LAUNCH DATE DEC 25 1965
                                                                     DISTANCE 204.685
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 29.178 GAL -13.37 AZL 86.82 MCA 94.05 SMA 139.32 ECC .23765 INC 3.1839 V1 30.280 RP 107.80 LAP 3.18 LOP 187.06 VP 38.855 GAP -4.28 AZP 90.23 TAL 243.34 TAP 337.40 RCA 106.21 APO 172.42 V2 35.155 RC 65.219 GL 12.79 GP 7.90 ZAL 159.47 ZAP 49.64 ETS 351.60 ZAE 165.46 ETE 358.01 ZAC 51.77 ETC 166.45 CLP -49.17
   PLANETOCENTRIC CONIC
    C3 50.693 VHL 7.120 DLA -9.40 RAL 288.96 RAD 6568.9 VEL 13.117 PTH 2.39 VMP 4.785 CPA -10.75 RAP 318.94 ECC 1.8343
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         112.27 2 11 55

85.07 12 41 11

113.28 3 24 31

84.18 14 2 31

116.12 4 19 16

81.67 15 17 8
                 1 36 4 2150.17

11 11 25 5385.59

2 52 49 1902.61

12 37 22 5108.38

3 50 34 1721.74

13 56 6 4862.01
                                                                                                                    1550.2
                                                                                                                                    -14.78
                                                                                                                                                      30.21
                                                              37.44
                                                 -17.96
                                                                          163.81
       90.00
                                                                                                                         4785.6
                                                                                                                                       26.94
                                                                                                                                                     237.99
                                                 27.92
                                                              246.52
                                                                             170.54
        90.00
                                                                                                                       1302.6
                                                                18.65
                                                                            163.22
                                                                                                                                      -15.98
                                                                                                                                                      11.42
                                                -19.30
      100.00
                                                              225.98
                                                                            170.49
                                                                                                                         4508.4
                                                                                                                                      28.26
                                                                                                                                                     217.35
                                                 29.37
      100.00
                                                                                                                         1121.7
                                                                                                                                      -19.17
                                                                                                                                                     355.98
                                                                            161.46
                                                -22.87
                                                                 3.16
      110.00
                                                                                                                                      31.77
                                                                                                                         4262.0
                                                                                                                                                     197.80
                                                 33.27
                                                               206.71
                                                                             169.92
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE -.1034 TRA -.4957 TC3 .1127 BAU .0772
RDE -.4785 RRA .1327 RC3 .0166 FAU .09521
FDE .4388 FRA-1.4957 FC3-1.6260 BSP 453
BDE .4896 BRA .5131 BC3 .1139 FSP -657
                                                                                                                    ST 147.2 SR 386.5 SS 212.2
CRT .4941 CRS .7457 CST -.1945
                                                                  SGT 442.9 SGR 400.7 SG3 228.2
                                                                   RRT -.0447 RRF -.3051 RTF .0789
                                                                  SGB 597.2 R23 .2817 R13 -.1342
                                                                                                                     LSA 425.3 MSA 186.2 SSA 20.9
                                                                  SG1 444.8 SG2 398.6 THA 167.97
                                                                                                                     EL1 394.0 EL2 125.5 ALF 78.12
                                                                                                                                ARRIVAL CATE MAR 7 1966
                                                                       FLIGHT TIME 72.00
LAUNCH DATE DEC 25 1965
                                                                      OISTANCE 211.328
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 29.201 CAL -13.24 AZL 86.87 HCA 97.28 SMA 139.51 ECC .23513 INC 3.1287 V1 30.280 RP 107.83 LAP 3.10 LOP 190.29 VP 38.862 GAP -3.59 AZP 90.40 TAL 243.69 TAP 340.97 RCA 106.71 APO 172.32 V2 35.143
                       12.72 GP 8.38 7AL 159.65 7AP 54.50 ETS 352.26 7AE 168.24 ETE 1.74 7AC 50.06 ETC 166.71 CLP -54.06
    RC 67.327 GL
  PLANETOCENTRIC CONIC
    C3 49.662 VHL 7.047 OLA -9.49 RAL 288.79 RAD 6568.8 VEL 13.078 PTH
                                                                                                2.39 VHP 4.541 OPA -10.73 RAP 317.20 ECC 1.8173
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           112.44 2 11 54

85.00 12 39 43

113.46 3 24 28

84.10 14 1 6

116.32 4 19 6

81.56 15 15 50
                  1 36 12 2141.86
11 9 59 5383.66
                                                                                                                                      -14.54
                                                 -17.74
                                                                            163.30
                                                                                                                      1541.9
                                                                                                                                                       29.71
                                                                36.93
       90.00
                                                                                                                         4783.7
                                                                                                                                       26.92
                                                                                                                                                      237.86
                                                 27.91
                                                               246.38
                                                                             170.13
        90.00
                   2 52 53 1894.47
12 35 59 5106.28
                                                                                                                         1294.5
                                                                                                                                       -15.74
                                                                                                                                                       10.94
                                                 -19.08
                                                                18.14
                                                                             162.70
      100.00
                                                                                                                                      28.23
                                                                          169.98
                                                                                                                         4506.3
                                                                                                                                                      217.20
                                                 29.36
                                                               225.83
      100.00
                    3 50 32 1713.98
13 54 50 4859.54
                                                                                                                        1114.0
                                                                                                                                      -18.92
                                                                                                                                                      355.52
                                                -22.64
                                                                 2.68
                                                                            160.93
      110.00
                                                                                                                       4259.5
                                             33.25
                                                                           169.40
                                                                                                                                      31.73
                                                                                                                                                      197.62
                   13 54 50
                                                               206.52
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 459.4 SGR 404.7 SG3 252.9

RRT -.1012 RRF -.3470 RTF .2098

SGB 612.2 R23 .2542 R13 -.2943

SG1 466.5 SG2 396.5 THA 160.75
    TDE -.0900 TRA -.5332 TC3 .0793 BAU .0560
RDE -.4738 RRA .1422 RC3 .0287 FAU .10436
                                                                                                                    ST 150.9 SR 386.8 SS 221.9
CRT .4037 CRS .7433 CST -.2966
    FOE .4732 FRA-1.6475 FC3-1.8194 BSP 450
BDE .4823 BRA .5519 BC3 .0844 FSP -742
                                                                                                                    LSA 427.1 MSA 196.9 55A 20.9
                                                                                                                     EL1 392.3 EL2 136.1 ALF 79.81
                                                                                                                               ARRIVAL DATE MAR 9 1966
                                                                      FLIGHT TIME 74.00
LAUNCH DATE DEC 25 1965
                                                                      DISTANCE 217.927
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 29.214 GAL -13.11 AZL 86.93 MCA 100.51 SMA 139.62 ECC .23282 INC 3.0728 V1 30.280 RP 107.87 LAP 3.02 LOP 193.52 VP 38.861 GAP -2.93 AZP 90.56 TAL 243.88 TAP 344.39 RCA 107.12 APO 172.13 V2 35.132 RC 69.470 GL 12.63 GP 8.87 ZAL 159.78 ZAP 59.53 ETS 352.92 ZAE 171.19 ETE 8.03 ZAC 48.18 ETC 167.00 CLP -59.12
   PLANETOCENTRIC CONIC
    C3 48.669 VHL 6.976 DLA -9.59 RAL 288.72 RAD 6568.8 VEL 13.040 PTH 2.38 VHP 4.332 DPA -10.72 RAP 315.28 ECC 1.8010
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         112.61 2 12 16
84.94 12 38 34
113.63 3 24 46
84.03 14 0 0
                                                                                                                      1533.5
                                                                                                                                    -14.31
                   1 36 42 2133.53
11 8 52 5381.91
                                                                           162.87
                                                                                                         2 12 16
                                                                                                                                                      29.21
                                                 -17.52
                                                                36.41
        90.00
                                                              246.26
                                                                             169.72
                                                                                                                         4781.9
                                                                                                                                       26,90
                                                                                                                                                     237.73
                                                 27.90
        90.00
                   2 53 20 1886.32
12 34 56 5104.35
                                                                                                                         1286.3
                                                                                                                                      -15.50
                                                                                                                                                      10.45
                                                 -18.86
                                                                17.64
                                                                             162.27
       100.00
                                                 29.34
                                                              225.68
                                                                             169.56
                                                                                                                         4504.3
                                                                                                                                      28.21
                                                                                                                                                     217.06
      100.00
                                                                           160.50
                                                                                            116.52 4 19 17
81.46 15 14 51
                                                                                                                                     -18.66
31.69
                    3 50 51 1706.22
13 53 54 4857.22
                                                                 2.20
                                                                                                                         1106.2
                                                                                                                                                     355.06
                                                 -22.40
       110.00
                                                                                                                         4257.2
                                                                                                                                                     197.45
                                                33.23
                                                               206.34
                                                                             168.98
                   13 53 54
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 157.6 SR 386.4 SS 231.1
CRT .3043 CRS .7446 CST -.3953
LSA 428.9 MSA 207.7 SSA 20.9
    TOE -.0761 TRA -.5790 TC3 .0375 BAU .0366 RDE -.4682 RRA .1521 RC3 .0419 FAU .11323
                                                                   SGT 489.1 SGR 409.1 SG3 277.2
                                                                  RRT -.1700 RRF -.3912 RTF .3476
SGB 637.6 R23 .2188 R13 -.4319
SG1 502.8 SG2 392.2 THA 158.29
    FOE .5082 FRA-1.7890 FC3-2.0142 BSP 547
BCE .4744 BRA .5987 BC3 .0562 FSP -822
                                                                                                                    EL1 389.9 EL2 148.8 ALF 81.71
                                                                       FLIGHT TIME 76.00
                                                                                                                                ARRIVAL DATE MAR 11 1966
LAUNCH DATE DEC 25 1965
                                                                      DISTANCE 224.483
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 29.218 GAL -12.98 A7L 86.98 MCA 103.73 SMA 139.65 ECC .23068 INC 3.0156 VI 30.280 RP 107.90 LAP 2.93 LOP 196.74 VP 38.853 GAP -2.30 A7P 90.72 TAL 243.93 TAP 347.66 RCA 107.44 APO 171.87 V2 35.120 RC 71.643 GL 12.52 GP 9.36 ZAL 159.85 ZAP 64.68 ETS 353.62 ZAE 174.13 ETE 21.00 ZAC 46.18 ETC 167.32 CLP -64.31
   PLANETOCENTRIC CONIC
    C3 47.702 VHL 6.907 OLA -9.70 RAL 288.72 RAD 6568.8 VEL 13.003 PTH 2.37 VMP 4.157 DPA -10.73 RAP 313.24 ECC 1.7851
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          112.77 2 12 58
84.68 12 37 43
113.81 3 25 25
83.96 13 59 12
116.72 4 19 48
81.36 15 14 10
                                                                                                                      1525.1
                                                                                                                                     -14.07
                                                                          162.53
                    1 37 33 2125.12
                                                                                                                                                       28.71
                                                 -17.30
                                                                35.90
                                                                                                                                                      237.62
                   11 8 2
                                 5380.28
                                                  27.89
                                                               246.14
                                                                             169.39
                                                                                                                         4780.3
                                                                                                                                        26.89
                   2 54 7 1878.09
                                                                            161.93
                                                                                                                         1278.1
                                                                                                                                       -15.26
                                                                                                                                                        9.96
       100.00
                                                 -18.63
                                                                17.13
                                                  29.33
                                                               225.55
                                                                             169.23
                                                                                                                         4502.5
                                                                                                                                       28.18
                                                                                                                                                      216.94
       100.00
                   12 34 9
                                  5102.54
                                                 -22.16
                                                                             160.15
                                                                                                                         1098.4
                                                                                                                                      -18.40
                                                                                                                                                      354.61
       110.00
                    3 51 30 1698.39
                                                                 1.72
                                                                                                                         4255.0
                                                                                                                                                      197.29
                                 4855.01
                                                  33.20
                                                               206.17
                                                                             168.64
                                                                                                                                        31.65
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 533.8 SGR 413.8 SG3 301.0
RRT -.2477 RRF -.4359 RTF .4757
                                                                                                                   ST 167.D SR 384.9 SS 238.4
CRT .196D CRS .7437 CST -.4971
LSA 429.7 MSA 218.7 SSA 20.9
    TOE -.0603 TRA -.6312 TC3 -.0114 BAU .0366
    ROE -.4613 RRA .1625 RC3 .0563 FAU .12179
    FOE .5352 FRA-1.9208 FC3-2.2104 BSP 745
                                                                  SGB 675.4 R23 .1874 R13 -.5467
                                                                 SG1 554.0 SG2 386.2 THA 158.05
                                                                                                                   EL1 386.6 EL2 163.1 ALF 84.08
    BDE .4653 BRA .6517 BC3 .0574 FSP -908
```

ARRIVAL DATE MAR 13 1966

```
LAUNCH DATE DEC 25 1965
   HELIOCENTRIC CONIC
                                                                          DISTANCE 230.997
    RL 147.14 LAL .00 LOL 93.00 VL 29.212 GAL -12.86 A7L 87.04 HCA 106.95 SMA 139.61 ECC .22866 INC 2.9570 VI 30.280 RP 107.94 LAP 2.83 LOP 199.97 VP 38.838 GAP -1.71 A7P 90.86 TAL 243.85 TAP 350.80 RCA 107.68 APO 171.53 V2 35.108 RC 73.845 GL 12.41 GP 9.85 ZAL 159.87 ZAP 69.90 ETS 354.35 ZAE 176.39 ETE 55.02 ZAC 44.10 ETC 167.66 CLP -69.59
   PLANETOCENTRIC CONIC
    C3 46.748 VHL 6.837 CLA -9.81 RAL 288.79 RAD 6568.7 VEL 12.966 PTH 2.36 VMP 4.015 DPA -10.73 RAP 311.12 ECC 1.7694 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               162.26
                                                                                                                                1516.5
                                                                                               112.94 2 13 59
84.83 12 37 7
                                                                                                                                                                28.20
                     1 38 43 2116.54
                                                    -17.07
                                                                    35.37
                                                                                                                                                -13.82
                                                                   246.03
                                                                                  169.13
                                                                                                                                4776.7
                                                                                                                                                26.87
                                                                                                                                                               237.51
        90.00
                    11 7 29
                                   5378.74
                                                     27.88
                                                                                                 113.98 3 26 23
83.89 13 58 40
116.91 4 20 39
81.27 15 13 46
                                                                                                                                                -15.01
                                                                                                                                                                 9.47
                     2 55 13 1869.71
                                                   -18.40
                                                                    16.62
                                                                                  161.65
                                                                                                                                1269.7
       100.00
                   12 33 39
                                   5100.80
                                                     29.32
                                                                   225.42
                                                                                  168.97
                                                                                                                                4500.8
                                                                                                                                               28.16
                                                                                                                                                               216.81
       100.00
                   3 52 29 1690.42
13 52 53 4852.86
                                                                               159.87
                                                                                                                                1090 4
                                                                                                                                               -1A.13
                                                                                                                                                               354.14
                                                 -21.92
       110.00
                                                                                  168.38
                                                                                                                                4252.9
                                                                                                                                                31.62
                                                                                                                                                               197.13
       110.00
                                                   33.18
                                                                   206.01
                                                                     MIC-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 595.8 SGR 418.8 SG3 322.5
RRT -.3253 RRF -.4805 RTF .5854
                                                                                                                           ST 180.1 SR 382.5 SS 244.6
CRT .0920 CRS .7458 CST -.5833
LSA 430.7 MSA 229.4 SSA 20.9
    TOE -.0443 TRA -.6906 TC3 -.0683 BAU .0618
    ROE -.4534 RRA .1725 RC3 .0714 FAU .12938
                                                                       SGB 728.3 R23 .1646 R13 -.6401
SG1 621.5 SG2 379.7 THA 158.94
    FOE .5594 FRA-2.0288 FC3-2.3960 BSP 1023
BOE .4555 BRA .7118 BC3 .0988 FSP -980
                                                                                                                            EL1 382.9 EL2 179.1 ALF 86.83
                                                                           FLIGHT TIME 80.00
                                                                                                                                        ARRIVAL DATE MAR 15 1966
LAUNCH DATE DEC 25 1965
                                                                           DISTANCE 237.468
  HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 29.199 GAL -12.73 AZL 87.10 HCA 110.17 SMA 139.49 ECC .22674 INC 2.8963 VI 30.280 RP 107.98 LAP 2.72 LOP 203.19 VP 38.816 GAP -1.14 AZP 91.00 TAL 243.64 TAP 353.81 RCA 107.86 APO 171.12 VZ 35.095 RC 76.070 GL 12.28 GP 10.33 ZAL 159.85 ZAP 75.15 ETS 355.12 ZAE 175.95 ETE 110.85 ZAC 41.99 ETC 168.04 CLP -74.90
   PLANETOCENTRIC CONIC
    C3 45.800 VHL 6.768 DLA -9.92 RAL 288.94 RAD 6568.7 VEL 12.929 PTH
                                                                                                      2.36 VHP 3.904 DPA -10.73 RAP 308.97 ECC 1.7538
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 13 2107.72 -16.84 34.83 162.06 113.11 2 15 20 1507.7 -13.57 27.68
                                                                                                   84.77 12 36 47
                                                                                                                                 4777.3
                                                                                                                                                                237.40
                   11 7 10 5377.28
                                                    27.87
                                                                   245.92
                                                                                  168.94
                                                                                                                                                 26.85
                                                                                                                3 27 40
                                                                                                                                 1261.1
                                                                                                                                                -14.75
                                                                                                                                                                 8.96
                     2 56 39
                                   1861.09
                                                    -18.16
                                                                    16.09
                                                                                  161.45
                                                                                                  114.16
                                                                                                 83.83 13 58 23
117.11 4 21 49
81.18 15 13 37
                  12 33 24 5099.14
3 53 46 1682.24
13 52 46 4850.76
                                                                                  168.77
                                                                                                                                 4499.1
                                                                                                                                                 28.14
                                                                                                                                                                216.69
                                                    29.31
                                                                   225.30
       100.00
                                                                                                                                1082.2
                                                                                                                                               -17.86
                                                                                                                                                                353.67
                                                    -21.67
                                                                      .73
                                                                                 159.66
                                                                                                                                 4250.8
                                                                                                                                                 31.59
                                                                                                                                                                196.98
                                                   33.16
                                                                   205.85
                                                                                 168.18
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 673.5 SGR 424.0 SG3 341.7

RRT -.3995 RRF -.5238 RTF .6722

SGB 795.8 R23 .1470 R13 -.7125

SGI 703.5 SG2 372.1 THA 160.10
                                                                                                                            ST 196.1 SR 378.7 SS 248.7
CRT -.0059 CRS .7456 CST -.6605
    TOE -.0274 TRA -.7551 TC3 -.1320 BAU .0969
    RDE -.4439 RRA .1823 RC3 .0873 FAU .13596
                                                                                                                             LSA 431.0 MSA - 239.9 SSA
                                                                                                                                                                   20.9
    FDE .5726 FRA-2.1161 FC3-2.5699 BSP 1345
BDE .4447 BRA .7768 BC3 .1583 FSP -1052
                                                                                                                             EL1 378.8 EL2 196.1 ALF 90.24
                                                                                                                                       ARRIVAL DATE MAR 17 1966
                                                                          FLIGHT TIME 82.00
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 243.898
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 29.179 GAL -12.60 AZL 87.17 HCA 113.38 SMA 139.32 ECC .22490 INC 2.8331 V1 30.280 RP 108.02 LAP 2.60 LOP 206.40 VP 38.790 GAP -.61 AZP 91.13 TAL 243.31 TAP 356.70 RCA 107.99 APO 170.66 V2 35.082 RC 78.316 GL 12.13 GP 10.79 ZAL 159.78 ZAP 80.36 ETS 355.93 ZAE 173.22 ETE 137.55 ZAC 39.91 ETC 168.46 CLP -80.18
   PLANETOCENTRIC CONIC
    C3 44.850 VHL 6.697 CLA -10.04 RAL 289.16 RAD 6568.7 VEL 12.892 PTH 2.35 VHP 3.822 DPA -10.70 RAP 306.85 ECC 1.7381
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              113.28 2 17 0
84.72 12 36 39
114.34 3 29 16
83.77 13 58 19
117.31 4 23 16
81.09 15 13 42
                                                                              161.91
                                                                                                                            1498.6
                                                                                                                                                               27.14
                     1 42 1 2098.57
                                                                   34.27
                                                   -16.59
                                                                                                                                4775.9
                                                                                                                                                26.84
                                                                                                                                                               237.30
                                                                                 168.80
                  11 7 4 5375.89
                                                    27.86
                                                                  245.82
                                                                                                                               1252.2
                                                                                                                                              -14.48
                                                   -17.91
                                                                   15.54
                                                                                 161.30
                     2 58 24
                                   1852.16
                                                                                                                                4497.5
                                                                                                                                               28.12
                                                   29.29
                  12 33 22 5097.54
                                                                  225.18
                                                                                 168.64
                                                                                                                                1073.8
                                                                                                                                               -17.57
                  3 55 22 1673,76
13 52 53 4848.69
                                                    -21.40
                                                                      .21
                                                                                 159.51
       110.00
                                                                                                                                4248.7
                                                                                                                                                31.55
                                                                   205.69
                                                    33.14
                                                                                 168.04
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 766.1 SGR 429.1 SG3 357.1
RRT -.4654 RRF -.5661 RTF .7375
SGB 878.1 R23 .1359 R13 -.7670
SGI 799.0 SG2 364.1 THA 161.39
                                                                                                                           ST 215.3 SR 373.9 SS 251.3
CRT -.0891 CRS .7480 CST -.7184
LSA 431.9 MSA 249.6 SSA 20.8
    TOE -.0113 TRA -.8245 TC3 -.2026 BAU .1364
    RDE - .4332 RRA .1911 RC3 .1034 FAU .14094
    FOE .5810 FRA-2.1706 FC3-2.7206 BSP 1714
BCE .4333 BRA .8464 BC3 .2275 FSP -1104
                                                                                                                           EL1 374.7 EL2 214.0 ALF 94.36
                                                                                                                                        ARRIVAL DATE MAR 19 1966
                                                                           FLIGHT TIME 84.00
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 250.289
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 29.152 GAL -12.47 AZL 87.23 HCA 116.60 SMA 139.10 ECC .22313 INC 2.7668 V1 30.280 RP 108.06 LAP 2.47 LOP 209.62 VP 38.758 GAP -.09 AZP 91.24 TAL 242.88 TAP 359.48 RCA 108.06 APO 170.13 V2 35.069 RC 80.581 GL 11.97 GP 11.23 ZAL 159.66 ZAP 85.48 ETS 356.79 ZAE 169.94 ETE 148.11 ZAC 37.91 ETC 168.91 CLP -85.39
   PLANETOCENTRIC CONIC
    C3 43.892 VHL 6.625 DLA -10.16 RAL 289.43 RAD 6568.7 VEL 12.855 PTH 2.34 VHP 3.767 OPA -10.65 RAP 304.81 ECC 1.7224
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                161.82
                                                                                                113.46
                                                                                                               2 18 58
                                                                                                                                1489.0
                                                                                                                                                -13.03
                                                                                                                                                                26.57
                                                                    33.68
        90.00
                     1 44 9 2088.99
                                                   -16.34
                                                                                                   84.68 12 36 43
                                                                                                                                 4774.6
                                                                                                                                                26.82
                                                                                  168.73
                                                                                                                                                               237.21
                    11 7 9
                                                                   245.73
                                   5374.61
                                                    27.85
                                                                                                  114.52
                                                                                                                3 31 10
                                                                                                                                1242.8
                                                                                                                                                -14.19
                                                                                                                                                                 7.88
                                                                                  161.21
                     3 0 28
                                  1842.80
                                                   -17.65
                                                                    14.97
                                                                                                   83.71 13 58 27
                                                                                                                                 4496.0
                                                                                                                                                28.10
                                                                                                                                                               216.47
                    12 33 31
                                   5096.03
                                                    29.28
                                                                   225.07
                                                                                  168.56
       100.00
                                                                                                                                                -17.27
                                                                                                                                                               352.67
                                                                                                  117.52
                                                                                                               4 25 1
                                                                                                                                1064.9
                                                                   359.67
                                                                                  159.41
                     3 57 16 1664.90
                                                   -21.13
                                                                                                  117.52 4 25 1
81.00 15 13 59
       110.00
                                                                                                                               4246.7
                                                                                                                                               31.52
                    13 53 12
                                                                   205.54
                                                                                  167.96
                                                                                                                                                              196.68
       110.00
                                   4846.70
                                                    33.12
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 870.3 SGR 433.8 SG3 368.8

RRT -.5236 RRF -.6039 RTF .7852

SGB 972.4 R23 .1287 R13 -.8069

SG1 905.1 SG2 355.4 THA 162.61
                                                                                                                         ST 236.7 SR 367.8 SS 251.9
CRT -.1586 CRS .7493 CST -.7641
LSA 433.1 MSA 258.4 55A 20.7
    TOE .0043 TRA -.8968 TC3 -.2788 BAU .1780
    RDE - 4209 RRA .1990 RC3 .1197 FAU .14439
FDE .5793 FRA-2.1962 FC3-2.8480 BSP 2108
BDE .4209 BRA .9186 BC3 .3034 FSP -1146
                                                                                                                          EL1 371.0 EL2 231.7 ALF 99.60
```

FLIGHT TIME 78.00

ARRIVAL DATE MAR 21 1966

```
LAUNCH DATE DEC 25 1965
    RL 147.14 LAL .00 LOL 93.00 VL 29.120 GAL -12.33 A7L 87.30 HCA 119.81 SHA 138.82 ECC .22140 INC 2.6967 VI 30.280 RP 108.10 LAP 2.34 LOP 212.83 VP 38.722 GAP .39 A7P 91.34 TAL 242.35 TAP 2.16 RCA 108.09 APO 169.56 V2 35.056 RC 82.862 GL 11.79 GP 11.67 ZAL 159.51 ZAP 90.45 ETS 357.70 ZAE 166.57 ETE 153.43 ZAC 36.04 ETC 169.41 CLP -90.46
                                                                                      DISTANCE 256.640
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 42.924 VHL 6.552 DLA -10.30 RAL 289.77 RAD 6568.6 VEL 12.818 PTH 2.33 VMP 3.736 DPA -10.56 RAP 302.91 ECC 1.7064
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                2 21 16
                                                                                                                                                   1478.9
                                                                                                              113.64 2 21 16
84.64 12 36 56
                                                                             33.07 161.78
                        1 46 37 2078.86
                                                            -16.06
         90.00
                                                                                                                                                                                        237.13
                                                                                                                                                     4773.5
                                                                                                                                                                       26.81
                        11 7 23 5373.51
3 2 51 1832.92
                                                                                               168.70
                                                            27.85
                                                                             245.65
          90.00
                                                                                                                                 3 33 24
                                                                                                                                                    1232.9
                                                                                                                                                                       -13.89
                                                                                                                                                                                          7.31
                                                           -17.37
                                                                              14.37
                                                                                               161.17
                                                                                                                 114.72
        100.00
                                                                                                                  83.66 13 58 45
                                                                                                                                                                                        216.37
                                                                                                                                                     4494.7
                                                                                                                                                                       28.09
                                                                             224.97
                                                                                               168.53
                                                             29.27
                      12 33 50
                                       5094.68
        100.00
                                                                                                                 117.74 4 27 5
80.92 15 14 26
                                                                                                                                                                       -16.95
                                                                                                                                                                                        352.13
                      3 59 29 1655.56
13 53 41 4844.80
                                                                                                                                                    1055.6
                                                                                               159.36
                                                                             359.11
                                                            -20.83
        110.00
                                                                                                                                                                                       196.54
                                                                                                                                                     4244.8
                                                                                                                                                                      31.49
                                                                                               167.93
                                                             33.10
                                                                             205.40
        110.00
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                ST 259.8 SR 360.2 SS 250.2
CRT -.2144 CRS .7487 CST -.7999
                                                                                  SGT 983.4 SGR 438.1 SG3 376.6
RRT -.5747 RRF -.6401 RTF .8196
SGB 1076.6 R23 .1248 R13 -.8359
     TDE .0186 TRA -.9709 TC3 -.3597 BAU .2207
     ROE -.4070 RRA .2057 RC3 .1361 FAU .14632
FDE .5665 FRA-2.1931 FC3-2.9511 BSP 2521
BDE .4075 BRA .9924 BC3 .3846 FSP -1179
                                                                                                                                                LSA 434.5 MSA 265.8 SSA 20.7
                                                                                  SG1 1019.5 SG2 345.8 THA 163.71
                                                                                                                                                EL1 368.3 EL2 248.2 ALF 106.40
                                                                                                                                                             ARRIVAL DATE MAR 23 1966
                                                                                        FLIGHT TIME 88.00
LAUNCH DATE DEC 25 1965
                                                                                       DISTANCE 262.954
    RL 147.14 LAL .00 LOL 93.00 VL 29.083 GAL -12.19 AZL 87.38 MCA 123.02 SMA 138.51 ECC .21972 INC 2.6221 V1 30.280 RP 108.14 LAP 2.20 LOP 216.04 VP 38.682 GAP .85 AZP 91.43 TAL 241.73 TAP 4.74 RCA 108.08 APO 168.94 V2 35.043 RC 85.157 GL 11.58 GP 12.10 ZAL 159.32 ZAP 95.23 ETS 358.66 ZAE 163.26 ETE 156.56 ZAC 34.35 ETC 169.96 CLP -95.35
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 41.943 VHL 6.476 DLA -10.45 RAL 290.17 RAD 6568.6 VEL 12.779 PTH 2.32 VHP 3.726 DPA -10.42 RAP 301.18 ECC 1.6903
     C3 43.943 VML 0.470 ULA -10.43 RAL 290.17 RAU 0300.0 VEL 12.75 TM 200.00 TM 10.00 TM
                        1 49 26 2068.04
11 7 44 5372.67
                                                                                                                                                                                          237.07
                                                                                                                                12 37 16
                                                                                                                                                      4772.7
                                                                                                                                                                        26.80
                                                                                                168.72
                                                                                                                    84.61
                                                             27.84
                                                                              245.59
          90.00
                        11 7 44
                                                                                                                                                                                           6.69
                                                                                                                                3 35 57
                                                                                                                                                      1222.4
                                                                                                                                                                        -13.57
                                                                               13.73
                                                                                                161.17
                                                                                                                  114.92
                                          1822.38
                                                            -17.07
                         3 5 35
         100.00
                                                                                                                                                                        28.07
                                                                                                                                                                                         216.29
                                                                                                                   83.62 13 59 10
                                                                                                                                                      4493.6
                        12 34 16
                                                                              224.89
                                                                                                168.56
                                                             29.26
                                          5093.56
        100.00
                                                                                                                               4 29 27
15 15 2
                                                                                                                                                                                         351.56
                                                                                                                  117.96
                                                                                                                                                     1045.6
                                                                                                                                                                       -16.61
                                                                               358.51
                                                                                                159.36
                                        1645.62
                                                            -20.51
         110.00
                         4 2 1
                                                                                                                                                                       31.46
                                                                                                                                                      4243.1
                                                                                                                                                                                         196.41
                       13 54 19 4843.09
                                                                              205.26
                                                                                               167.95
                                                                                                                   80.84
                                                             33.08
         110.00
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFFRENTIAL CORRECTIONS
                                                                                                                                                ST 284.0 SR 351.2 SS 246.6
CRT -.2563 CRS .7466 CST -.8267
                                                                                   SGT 1103.4 SGR 441.8 SG3 380.6
RRT -.6194 RRF -.6739 RTF .8444
     TDE .0306 TRA-1.0455 TC3 -.4450 BAU .2638
      RDE -.3916 RRA .2111 RC3 .1526 FAU .14673
                                                                                  SGB 1188.6 R23 .1240 R13 -.8571
SG1 1140.2 SG2 335.7 THA 164.72
                                                                                                                                                 LSA 436.6 MSA 271.5 SSA 20.6
     FOE .5443 FRA-2.1634 FC3-3.0287 BSP 2955
BDE .3928 BRA 1.0666 BC3 .4704 FSP -1202
                                                                                                                                                EL1 367.8 EL2 262.1 ALF 115.07
                                                                                                                                                             ARRIVAL CATE MAR 25 1966
                                                                                        FLIGHT TIME 90.00
 LAUNCH DATE DEC 25 1965
     DISTANCE 269.233
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 40.945 VHL 6.399 DLA -10.62 RAL 290.62 RAD 6568.6 VEL 12.740 PTH 2.32 VHP 3.736 CPA -10.22 RAP 299.67 ECC 1.6739
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                    -12.07
                                                                                                                114.03 2 26 54
84.59 12 37 41
115.13 3 38 51
                                                                                                                                                 1456.4
                        1 52 38 2056.35
11 8 9 5372.21
                                                                               31.70
                                                                                               161.83
                                                              -15.44
           90.00
                                                                                                                                                                                         237.04
                                                                                                                                                      4772.2
                                                                                                                                                                        26.80
                                                             27.84
                                                                               245.55
                                                                                                168.79
           90.00
                                                                                                                                                                                           6.03
                                                                                                                                                    1211.0
                                                                                                                                                                       -13.22
                        3 8 40 1811.01
12 34 47 5092.79
4 4 54 1634.92
13 55 3 4841.64
                                                                               13.05
                                                                                                161.21
                                                             -16.74
         100.00
                                                                                                                              13 59 40
4 32 9
15 15 44
                                                                                                                                                      4492.8
                                                                                                                                                                       28.06
                                                                                                                                                                                          216.24
                                                                                                                    83.59
                                                             29.26
                                                                               224.84
                                                                                               168.63
         100.00
                                                                                                                                                                                         350.95
                                                                                                                                                     1034.9
                                                                                                                                                                       -16.24
                                                                                                                   118.20
                                                              -20.17
                                                                               357.87
                                                                                               159.40
         110.00
                                                                                                                                                                       31.44
                                                                                                                                                                                         196.31
                                                                                                                                                      4241.6
                                                                               205.15
                                                                                               168.02
                                                                                                                    80.78
                                                             33.D6
         110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 308.7 SR 340.8 SS 241.3
CRT - 2868 CRS .7431 CST - .8466
LSA 440.0 MSA 275.0 SSA 20.6
                                                                                   SGT 1228.0 SGR 444.9 SG3 381.2
RRT -.6588 RRF -.7058 RTF .8623
      TOE .0400 TRA-1.1193 TC3 -.5338 BAU .3065
      RCE -.3748 RRA .2153 RC3 .1691 FAU .14575
FOE .5144 FRA-2.1098 FC3-3.0818 BSP 3399
                                                                                   SGB 1306.1 R23 .1259 R13 -.8724
SG1 1265.0 SG2 324.9 THA 165.61
                                                                                                                                                ELI 371.0 ELZ 271.7 ALF 125.48
      BDE .3769 BRA 1.1399 BC3 .5600 FSP -1213
                                                                                                                                                               ARRIVAL DATE MAR 27 1966
                                                                                         FLIGHT TIME 92.00
 LAUNCH DATE DEC 25 1965
      RL 147.14 LAL .00 LOL 93.00 VL 28.995 GAL -11.89 A7L 87.55 HCA 129.43 SMA 137.78 ECC .21647 INC 2.4548 V1 30.280 RP 108.22 LAP 1.90 LOP 222.45 VP 38.592 GAP 1.71 A7P 91.56 TAL 240.23 TAP 9.66 RCA 107.95 APO 167.60 V2 35.016 RC 89.783 GL 11.09 GP 12.99 ZAL 158.82 ZAP 104.10 ETS .74 ZAE 157.05 ETE 159.93 ZAC 31.61 ETC 171.30 CLP-104.48
                                                                                        DISTANCE 275.477
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C3 39.931 VHL 6.319 DLA -10.82 RAL 291.13 RAD 6568.5 VEL 12.700 PTH 2.31 VHP 3.763 DPA -9.96 RAP 298.38 ECC 1.6572
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                       -11.69
                                                                                              161.92
                                                                                                                  114.25 2 30 19
84.60 12 38 7
                           1 56 15
                                           2043.58
                                                              -15.09
                                                                                30.94
           90.00
                                                                                                                                                       4772.3
                                                                                                                                                                         26.80
                                                                                                                                                                                           237.05
                                                                                                 168.91
                         11 8 35
                                           5372.31
                                                               27.84
                                                                               245.56
            90.00
                                                                                                                                                                         -12.83
                                                                                                                                                                                              5.31
                                                                                                                                   3 42 10
                                                                                                                                                       1198.6
                                                                                                                    115.36
                                                                                                 161.30
                                                              -16.38
                                                                                12.30
                         3 12 11
                                           1798.60
                                                                                                                   83.58 14 0 12
118.45 4 35 13
80.73 15 16 31
          100.00
                                                                                                                                                                                           216.22
                                                                                                                                                                        28.06
                                                                                                                                                       4492.5
                                                               29.26
                                                                               224.82
                                                                                                 168.74
                         12 35 20
                                           5092.53
          100.00
                                                                                                                                                                       -15.84
                                                                                                                                                                                           350.29
                                                                                                                                                      1023.3
                                                                                                159.47
                                                             -19.80
                                                                               357.18
                           4 8 10
                                          1623.29
          110.00
                                                                                                                                                     4240.6
                                                                                                                                                                          31.42
                                                                                                 158.13
                                        4840.60
                         13 55 50
                                                               33.05
                                                                               205.08
          110.00
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
ST 333.4 SR 329.0 55 234.4
CRT -.3072 CRS .7387 CST -.8609
LSA 444.7 MSA 276.0 SSA 20.5
EL1 378.8 EL2 275.7 ALF 136.24
     DIFFERENTIAL CORRECTIONS
                                                                                     SGT 1355.2 SGR 447.5 SG3 378.4
       TOE .0464 TRA-1.1913 TC3 -.6257 BAU .3485
                                                                                   RRT -.6938 RRF -.7359 RTF .8751
       ROE -.3566 RRA .2181 RC3 .1859 FAU .14352
       FOE .4788 FRA-2.0351 FC3-3.1116 BSP 3849
BOE .3596 BRA 1.2111 BC3 .6528 FSP -1212
                                                                                   SGB 1427.2 R23 .1308 R13 -.8835
                                                                                    SG1 1392.3 SG2 313.7 THA 166.39
```

FI 16HT TIME 86.00

MANA

```
LAUNCH DATE DEC 25 1965
                                                                      FLIGHT TIME 94.00
                                                                                                                             ARRIVAL DATE MAR 29 1966
   MELIOCENTRIC CONIC
                                                                    DISTANCE 281.689
    PLANETOCENTRIC CONIC
     C3 38.899 VML 6.237 OLA -11.04 RAL 291.70 RAC 6568.5 VEL 12.660 PTH 2.30 VMP 3.804 DPA -9.62 RAP 297.33 ECC 1.6402
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        114.48 2 34 11
84.63 12 38 32
115.60 3 45 55
83.59 14 0 44
118.73 4 38 42
80.71 15 17 19
                  2 0 22 2029.46
11 8 58 5373.20
3 16 10 1784.90
        90.00
                                                                                                                   1429.5
                                                -14.69
                                                              30.09
                                                                         162.04
                                                 27.84
        90.00
                                                              245.63
                                                                            169.08
                                                                                                                      4773.2
                                                                                                                                    26.81
                                                                                                                                                  237.11
       100.00
                                              -15.98
                                                               11.48
                                                                           161.42
                                                                                                                    1184.9
                                                                                                                                                    4.52
                                                                                                                                    -12.40
       100.00
                  12 35 51 5092.99
4 11 51 1610.52
13 56 39 4840.16
                                                29.26
                                                              224.85
                                                                           168.91
                                                                                                                      4493.D
                                                                                                                                    28.06
                                                                                                                                                  216.25
                                             -19.38
       110.00
                                                              356.42
                                                                           159.59
                                                                                                                     1010.5
                                                                                                                                    -15.40
                                                                                                                                                  349.57
       110.00
                                               33.05
                                                              205.04
                                                                            168.30
                                                                                                                      4240.2
                                                                                                                                                  196.20
                                                                                                                                     31.41
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 1483.1 SGR 449.7 SG3 372.4

RRT -.7246 RRF -.7645 RTF .8840

SGB 1549.8 R23 .1394 R13 -.8913
                                                                                                                 ST 357.8 SR 316.3 SS 226.8
CRT -.3195 CRS .7370 CST -.8683
    TOE .0497 TRA-1.2600 TC3 -.7200 BAU .3890
    ROE -.3376 RRA .2193 RC3 .2027 FAU .14004
    FOE .4438 FRA-1.9385 FC3-3.1167 BSP 4286
BDE .3413 BRA 1.2789 BC3 .7480 FSP -1190
                                                                                                                  LSA 451.3 MSA 274.6 SSA 20.4
                                                                 5G1 1520.0 SG2 302.4 THA 167.09
                                                                                                                  EL1 390.9 EL2 274.4 ALF 145.56
LAUNCH DATE DEC 25 1965
                                                                     FLIGHT TIME 96.00
                                                                                                                             ARRIVAL DATE HAR 31 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 287.870
    RL 147.14 LAL .00 LOL 93.00 VL 28.893 GAL -11.57 AZL 87.75 HCA 135.83 SMA 136.94 ECC .21337 INC 2.2538 VI 30.280 RP 108.31 LAP 1.57 LOP 228.85 VP 38.491 GAP 2.49 AZP 91.62 TAL 238.44 TAP 14.26 RCA 107.72 APO 166.15 VZ 34.990
    RC 94.449 GL 10.42 GP 14.02 ZAL 158.20 ZAP 111.92 ETS 3.10 ZAE 151.56 ETE 161.38 ZAC 29.83 ETC 173.11 CLP-112.63
   PLANETOCENTRIC CONIC
    C3 37.849 VHL 6.152 DLA -11.31 RAL 292.32 RAD 6568.5 VEL 12.618 PTH
                                                                                              2.29 VHP 3.857 DPA
                                                                                                                         -9.18 RAP 296.53 ECC 1.6229
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 2 5 3 2013.62
11 9 14 5375.21
3 20 42 1769.57
12 36 16 5094.49
4 16 3 1596.25
13 57 25 4840.57
        90.00
                                                -14.24
                                                              29.14
                                                                           162.21
                                                                                         114.74
                                                                                                       2 38 37
                                                                                                                    1413.6
                                                                                          84.70 12 38 49
115.87 3 50 12
        90.00
                                                27.86
                                                             245.77
                                                                           169.30
                                                                                                                      4775.2
      100.00
                                               -15.53
                                                              10.57
                                                                            161.58
                                                                                          115.87
                                                                                                                      1169.6
                                                                                                                                    -11.92
                                                                                                                                                     3.64
                                                                                           83.65 14 1 11
119.02 4 42 39
80.73 15 18 6
      100.00
                                                29.27
                                                             224.96
                                                                           169.13
                                                                                                                      4494.5
      110.00
                                               -18.91
                                                             355.58
                                                                           159.74
                                                                                          119.02
                                                                                                                                   -14.90
31.42
                                                                                                                       996.3
                                                                                                                                                  348.76
      110.00
                                               33.05
                                                             205.07
                                                                           168.53
                                                                                                                    4240.6
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
    TOE .0485 TRA-1.3252 TC3 -.8175 BAU .4285
ROE -.STTI RRA .2197 RC3 .2208 FAU .13606
                                                                 SGT 1611.8 SGR 452.2 SG3 364.9
RRT -.7534 RRF -.7923 RTF .8905
SGB 1674.0 R23 .1502 R13 -.8970
                                                                                                                  ST 381.5 SR 302.0 55 217.1
CRT -.3231 CRS .7281 CST -.8760
    FDE .3983 FRA-1.8352 FC3-3.1121 BSP 4734
BDE .3208 BRA 1.3432 BC3 .8468 FSP -1173
                                                                                                                 LSA 458.5 MSA 270.4 SSA 20.4
                                                                 SG1 1648.6 SG2 290.7 THA 167.68
                                                                                                                  ELI 405.5 EL2 268.8 ALF 153.06
LAUNCH DATE DEC 25 1965
                                                                    FLIGHT TIME 98.00
                                                                                                                           ARRIVAL DATE APR 2 1966
                                                                 DISTANCE 294.022
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 28.838 GAL -11.40 AZL 87.86 MCA 139.02 SMA 136.49 ECC .21187 INC 2.1354 V1 30.280 RP 108.35 LAP 1.40 LOP 232.04 VP 38.438 GAP 2.86 AZP 91.61 TAL 237.44 TAP 16.47 RCA 107.57 APO 165.40 V2 34.977 RC 96.794 GL 10.00 GP 14.64 ZAL 157.85 ZAP 115.41 ETS 4.44 ZAE 149.08 ETE 161.64 ZAC 29.30 ETC 174.24 CLP-116.33
   PLANETOCENTRIC CONIC
    C3 36.780 VHL 6.065 DLA -11.63 RAL 292.99 RAD 6568.4 VEL 12.576 PTH 2.28 VHP 3.922 DPA -8.63 RAP 295.95 ECC 1.6053
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                      115.01
                                                                         162.41
       90.00
                   2 10 27 1995.58
                                               -13.72
                                                             28.07
                                                                                                     2 43 43
                                                                                                                  1395.6 -10.24
                                                                                                                                                  21.12
                 11 9 15 5378.77
3 25 54 1752.16
                                                                                          84.83 12 38 54
                                                                          169.57
       90.00
                                               27.88
                                                            246.03
                                                                                                                     4778.8
                                                                                                                                   26.87
                                                                                                                                                 237.51
      100.00
                                              -15.01
                                                              9.54
                                                                          161.78
                                                                                          116.16
                                                                                                    3 55 6
                                                                                                                    1152.2
                                                                                                                                  -11.37
                                                                                                                                                  2.64
                                                                                         83.76 14 1 27
119.34 4 47 9
80.80 15 18 46
                12 36 29 5097.43
      100.00
                                              29.29
                                                            225.18
                                                                          169.41
                                                                                                                     4497.4
                                                                                                                                   28.12
                                                                                                                                                 216.57
                 4 20 49 1580.17
13 58 3 4842.18
      110.00
                                              -18.38
                                                             354.64
                                                                          159.93
                                                                                                                      980.2
                                                                                                                                  -14.33
                                                                                                                                                 347.86
                                                                                                                                 31.44
      110.00
                                             33.07
                                                            205.20
                                                                          168.82
                                                                                                                     4242.2
                                                                                                                                                 196.35
                                                                HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                RGT 1739.3 SGR 454.9 SG3 355.2
RRT -.7790 RRF -.8190 RTF ..8948
SGB 1797.8 R23 .1650 R13 -.9007
SG1 1775.9 SG2 279.3 THA 168.19
                                                                                                                ST 404.3 SR 286.6 SS 206.6

CRT -.3196 CRS .7201 CST -.8793

LSA 467.1 MSA 264.0 SSA 20.3

EL1 421.6 EL2 260.4 ALF 158.83
    TDE .0432 TRA-1.3852 TC3 -.9174 BAU .4662
   RDE -.2957 RRA .2185 RC3 .2396 FAU .13125
FDE .3538 FRA-1.7181 FC3-3.0893 8SP 5163
BDE .2989 BRA 1.4023 BC3 .9481 FSP -1139
LAUNCH DATE DEC 25 1965
                                                                    FLIGHT TIME 100.00
                                                                                                                           ARRIVAL DATE APR 4 1966
  HELIOCENTRIC CONIC
                                                                   DISTANCE 300.145
                       .00 LOL 93.00 VL 28.780 GAL -11.22 AZL 88.00 MCA 142.22 SMA 136.02 ECC .21042 INC 2.0008 VI 30.280 1.23 LOP 235.23 VP 38.383 GAP 3.20 AZP 91.58 TAL 236.39 TAP 18.61 RCA 107.40 APO 164.64 V2 34.964 9.50 GP 15.36 ZAL 157.47 ZAP 118.63 ETS 5.92 ZAE 146.78 ETE 161.66 ZAC 29.01 ETC 175.57 CLP-119.79
   RL 147.14 LAL
RP 108.39 LAP
   RC 99.145 GL
  PLANETOCENTRIC CONIC
   C3 35.695 VHL 5.974 DLA -12.03 RAL 293.73 RAD 6568.4 VEL 12.533 PTH 2.27 VMP 3.998 DPA -7.94 RAP 295.60 ECC 1.5874
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       115.32
                                                                                                                   1374.7
                  2 16 44 1974.71
11 8 53 5384.51
                                               -13.12
                                                                         162.66
                                                                                                     2 49 38
       90.00
                                                             26.83
                                                                                                                                    -9.60
                                                                                                                                                  19.92
                                                                                          85.03 12 38 37
                                                             246.45
                                                                                                                                    26.93
       90.00
                                               27.91
                                                                          169.92
                                                                                                                     4784.5
                                                                                                                                                 237.92
                  3 31 56 1732.06
12 36 21 5102.39
      100.00
                                              -14.40
                                                              8.36
                                                                          162.02
                                                                                        115.48
                                                                                                     4 0 48
                                                                                                                     1132.1
                                                                                                                                  -10.73
                                                                                                                                                   1.49
                                                                                          83.95 14 1 24
      100.00
                                              29.33
                                                             225.54
                                                                          169.77
                                                                                                                     4502.4
                                                                                                                                   28.18
                                                                                                                                                 216.92
                   4 26 20 1561.72
13 58 27 4845.49
                                                                                                     4 52 21
      110.00
                                              -17.76
                                                             353.57
                                                                          160.16
                                                                                        119.70 4 52 21
80.95 15 19 13
                                                                                                                      961.7
                                                                                                                                   -13.67
                                                                                                                                                 346.84
                                                            205.45
                                                                                                                     4245.5
                  13 58 27
                                               33.10
                                                                          169.18
                                                                                                                                    31.50
      110.00
                                                                                                                                                 196.59
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                               ST 426.4 SR 269.5 SS 194.3 CRT -.3076 CRS .7016 CST -.8848 LSA 476.4 MSA 254.7 SSA 2D.3 EL1 438.5 EL2 249.4 ALF 163.54
                                                                $67 1866.7 $6R 459.0 $63 344.9

RRT -.8032 RRF -.8452 RTF .8978

$6B 1922.3 R23 .1827 R13 -.9034
   TOE .0319 TRA-1.4404 TC3-1.0212 BAU .5029
   ROE -.2729 RRA .2167 RC3 .2606 FAU .12625
FOE .3003 FRA-1.6003 FC3-3.0621 BSP 5604
BOE .2748 BRA 1.4566 BC3 1.0539 FSP -1110
                                                                SG1 1903.5 SG2 268.1 THA 168.60
```

ARRIVAL DATE APR 6 1966

DISTANCE 306.243 HELIOCENTRIC CONIC .00 LOL 93.00 VL 28.721 GAL -11.04 AZL 88.15 MCA 145.41 SMA 135.54 ECC .20900 INC 1.8454 VI 30.280 1.05 LOP 238.42 VP 38.327 GAP 3.54 AZP 91.52 TAL 235.29 TAP 20.70 RCA 107.22 APO 163.87 VZ 34.951 RL 147.14 LAL RP 108.43 LAP 8.88 CP 16.23 TAL 157.06 TAP 121.56 ETS 7.58 TAE 144.63 ETE 161.43 TAC 28.95 ETC 177.13 CLP-123.03 RC 101.502 GL PLANETOCENTRIC CONIC C3 34.591 VHL 5.881 OLA -12.52 RAL 294.54 RAD 6568.4 VEL 12.488 PTH 2.26 VHP 4.082 OPA -7.09 RAP 295.44 ECC 1.5693 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG -8.84 1350.1 1950.08 -12.40 25.39 162.97 115.66 2 56 38 18.51 90.00 2 24 8 85.35 12 37 49 4793.3 27.03 11 7 55 5393.27 27.96 247.08 170.35 238.54 90.00 3 39 2 1708.42 12 35 42 5110.16 116.84 4 7 30 84.25 14 0 52 120.10 4 58 25 81.20 15 19 20 4 7 30 -13.68 6.97 162.32 1108.4 -9.97 100.00 217.48 170.21 4510.2 28.28 29.38 226.11 100.00 -12.90 31.59 345.65 4 32 45 1540.18 13 58 28 4851.17 -17.03 352.32 160.43 940.2 110.00 4251.2 169.64 197.01 110.00 33.16 205.88 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1991.5 SGR 464.3 SG3 333.0 RRT -.8244 RRF -.8701 RTF .8994 SGB 2044.9 R23 .2049 R13 -.9048 SGI 2028.6 SG2 258.0 THA 168.94 ST 447.6 SR 251.3 SS 181.2 CRT -. 2881 CRS .6790 CST -. 8887 TOE .0150 TRA-1.4883 TC3-1.1278 BAU .5378 ROE -.2493 RRA .2134 RC3 .2835 FAU .12072 FOE .2469 FRA-1.4737 FC3-3.0213 BSP 6019 LSA 486.7 MSA 242.9 55A 20.2 EL1 455.6 EL2 236.4 ALF 167.36 BOE .2497 BRA 1.5035 BC3 1.1629 FSP -1070 FLIGHT TIME 104.00 ARRIVAL DATE APR 8 1966 LAUNCH DATE DEC 25 1965 DISTANCE 312.315 HELIOCENTRIC CONIC .00 LoL 93.00 VL 28.659 GAL -10.84 A7L 88.34 MCA 148.60 SMA 135.06 ECC .20763 INC 1.6628 V1 30.280 .87 LOP 241.60 VP 38.269 GAP 3.85 A7P 91.42 TAL 234.13 TAP 22.73 RCA 107.02 APO 163.10 V2 34.939 8.12 GP 17.28 7AL 156.64 7AP 124.21 ETS 9.48 7AE 142.59 ETE 160.95 7AC 29.12 ETC 178.97 CLP-126.07 RL 147.14 LAL 108.46 LAP RC 103.862 GL PLANETOCENTRIC CONIC C3 33.472 VHL 5.786 DLA -13.15 RAL 295.42 RAD 6568.3 VEL 12.444 PTH 2.25 VMP 4.178 DPA -6.03 RAP 295.45 ECC 1.5509 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -7.92 2 33 1 1920.40 116.05 3 5 2 1320.4 -11.52 23.65 163.34 85.82 12 36 10 117.25 4 15 31 84.70 13 59 37 120.55 5 5 37 81.60 15 18 54 11 6 4 4806.4 90.00 5406.36 28.03 248.03 170.89 27.16 239.48 3 47 31 1680.04 12 34 15 5121.96 4 40 22 1514.51 13 57 53 4860.25 1080.0 -12.80 5.32 162.68 -9.05 358.54 100.00 170.76 4522.0 28.41 218.33 100.00 29.46 226.98 914.5 -11.97 -16.14 350.86 344.24 110.00 33.26 206.57 170.23 4260.2 31.74 197.67 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 2116.8 SGR 472.4 SG3 320.9 RRT -.8437 RRF -.8942 RTF ..9004 SGB 2168.8 R23 .2305 R13 -.9057 SGI 2154.5 SG2 249.1 THA 169.19 ST 468.9 SR 230.9 SS 166.6 CRT -.2573 CRS .6344 CST -.8992 TOE -.0110 TRA-1.5299 TC3-1.2403 BAU .5721 ROE - .2238 RRA .2093 RC3 .3101 FAU .11519 FOE .1832 FRA-1.3491 FC3-2.9792 BSP 6455 BOE .2241 BRA 1.5442 BC3 1.2785 FSP -1036 LSA 498.8 MSA 227.5 SSA 20.3 EL1 473.7 EL2 220.9 ALF 170.75 ARRIVAL DATE APR 10 1966 LAUNCH DATE DEC 25 1965 FLIGHT TIME 106.00 **CISTANCE 318.363** RL 147.14 LAL .00 LOL 93.00 VL 28.596 GAL -10.65 AZL 88.56 HCA 151.78 SMA 134.57 ECC .20631 INC 1.4436 VI 30.280 RP 108.50 LAP .68 LOP 244.79 VP 38.211 GAP 4.16 AZP 91.27 TAL 232.93 TAP 24.72 RCA 106.80 APO 162.33 V2 34.926 RC 106.225 GL 7.15 GP 18.58 ZAL 156.18 ZAP 126.54 ETS 11.69 ZAE 140.64 ETE 160.20 ZAC 29.51 ETC 181.14 CLP-128.91 PLANETOCENTRIC CONIC C3 32.340 VHL 5.687 DLA -13.96 RAL 296.40 RAD 6568.3 VEL 12.398 PTH 2.24 VHP 4.285 DPA -4.70 RAP 295.60 ECC 1.5322 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1283.7 2 44 0 1883.68 11 2 50 5425.74 3 57 57 1645.07 12 31 34 5139.59 163.80 116.48 3 15 23 86.52 12 33 16 -6.77 -10.41 21.52 14.73 27.34 240.86 28.12 249.44 171.58 4825.7 117.70 4 25 22 85.37 13 57 14 121.06 5 14 21 82.21 15 17 37 356.58 100.00 -11.70 3.31 163.13 1045.1 -7.90 29.57 228.28 171.46 4539.6 28.61 219.61 100.00 4 49 38 1483.19 13 56 23 4874.22 -10.83 31.95 -15.05 349.09 161.19 883.2 342.53 198.71 207.64 170.97 4274.2 110.00 33.39 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2240.5 SGR 484.0 SG3 308.1 RRT -.8602 RRF -.9166 RTF ..9008 SGB 2292.2 R23 .2597 R13 -.9062 SG1 2279.3 SG2 242.6 THA 169.35 ST 491.2 SR 208.3 SS 151.6 CRT -.2157 CRS .5600 CST -.9173 LSA 513.8 MSA 207.9 SSA 20.5 TDE -.0471 TRA-1.5628 TC3-1.3579 BAU .6053 ROE -.1965 RRA .2041 RC3 .3407 FAU .10941 FDE .1124 FRA-1.2225 FC3-2.9288 BSP 6885 BDE .2021 BRA 1.5760 BC3 1.4000 FSP -999 Fi 1 493.7 Ft 2 202.4 ALF 173.71 FLIGHT TIME 108.00 ARRIVAL DATE APR 12 1966 LAUNCH DATE DEC 25 1965 DISTANCE 324.390 HELIOCENTRIC CONIC .00 LOL 93.00 VL 28.532 GAL -10.44 A7L 88.83 HCA 154.97 SHA 134.07 ECC .20505 INC 1.1743 V1 30.280 .50 LOP 247.97 VP 38.152 GAP 4.44 A7P 91.06 TAL 231.68 TAP 26.65 RCA 106.58 APO 161.56 V2 34.914 5.91 GP 20.21 ZAL 155.69 ZAP 128.53 ETS 14.31 ZAE 138.70 ETE 159.13 ZAC 30.13 ETC 183.73 CLP-131.59 RL 147.14 LAL RP 108.54 LAP RC 108.588 GL PLANETOCENTRIC CONIC C3 31.200 VHL 5.586 DLA -15.03 RAL 297.48 RAD 6568.2 VEL 12.352 PTH 2.23 VHP 4.406 DPA -3.02 RAP 295.86 ECC 1.5135 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 28 34 1236.8 -5.29 12.09 90.00 2 57 57 1835.82 -8.97 1A.A1 164.41 116.97 12 28 25 4 37 49 27.59 172.46 87.57 4854.5 242.94 90.00 10 57 30 5454.55 28.22 251.55 118.22 1000.7 -6.43 354.10 100.00 4 11 9 1600.66 -10.28 .77 163.72 86.39 13 53 6 121.64 5 25 16 83.17 15 15 1 12 27 0 5165.93 5 1 12 1443.86 13 53 26 4895.50 4565.9 28.88 221.52 230.23 172.37 100.00 29.69 843.9 -9.37 110.00 -13.66 346.89 161.73 121.64 4295.5 32.27 200.29 209.28 171.96 110.00 31.57 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 516.7 SR 183.1 SS 137.7
CRT -.1620 CRS .4427 CST -.9423
LSA 534.0 MSA 184.0 SSA 20.9
EL1 517.7 EL2 180.3 ALF 176.26 SGT 2361.5 SGR 499.6 SG3 293.9 RRT -.8725 RRF -.9368 RTF .9004 TOE -.0961 TRA-1.5842 TC3-1.4807 BAU .6372 ROE -.1673 RRA .1966 RC3 .3762 FAU .10318 FOE .0363 FRA-1.0882 FC3-2.8632 BSP 7287 BOE .1929 BRA 1.5963 BC3 1.5277 FSP -949 SGB 2413.8 R23 .2926 R13 -.9060 SG1 2401.8 SG2 240.0 THA 169.43

FLIGHT TIME 102.00

ARRIVAL DATE APR 14 1966

LAUNCH DATE DEC 25 1965

```
CISTANCE 330.394
  HELIOCENTRIC CONIC
                         .00 LOL 93.00 VL 28.467 GAL -10.23.AZL 89.17 HCA 158.15 SHA 133.57 ECC .20383 INC .8321 V1 30.280 .31 LOP 251.15 VP 38.092 GAP 4.72 AZP 90.77 TAL 230.40 TAP 28.54 RCA 106.34 APO 160.79 V2 34.903 4.26 GP 22.31 ZAL 155.15 ZAP 130.09 ETS 17.47 ZAE 136.71 ETE 157.68 ZAC 31.03 ETC 186.86 CLP-134.12
    RL 147.14 LAL
RP 108.58 LAP
    RC 110.951 GL
   PLANETOCENTRIC CONIC
                                                                                                                               -.86 RAP 296.17 ECC 1.4948
    C3 30.067 VHL 5.483 CLA -16.49 RAL 298.70 RAD 6568.2 VEL 12.306 PTH 2.22 VHP 4.550 CPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 16 32 1774.52
10 48 43 5498.26
                                                                                                                                                            8.59
                                                   -7.03
                                                                15.28
                                                                             165.26
                                                                                            117,50 3 46 7
                                                                                                                           1174.5
                                                                                                                                           -3.29
        90.00
                                                                                                                            4898.3
                                                                                                                                            27.89
                                                                                                                                                         245.10
                                                                254.74
                                                                               173.64
                                                                                               89.17 12 20 21
                                                   28.31
        90.00
                                                                                                                            942.0
                                                                                                                                            -4.47
                                                                                                                                                         350.85
                                 1542.04
                                                   -8.38
                                                                357.46
                                                                               164.54
                                                                                               118.80
                                                                                                          4 54 17
                    4 28 35
      100.00
                                                                                              87.95 13 46 7
122.31 5 39 29
84.64 15 10 17
                                                                                                                            4606.0
                 12 19 21 5205.97
                                                                                                                                            29.23
                                                                                                                                                         224.44
                                                                233.20
                                                                               173.59
                                                  29.83
      100.00
                                                                                                                                                         337.68
                    5 16 16 1392.66
                                                                                                                                            -7.46
                                                                              162.48
                                                                                                                            792.7
                                                 -11.81
                                                                344.07
      110.00
                                                                                                                                            32.70
                                                                                                                                                         202.73
                                                                                                                           4328.1
                                                                211.79
                                                                             173.29
                  13 48 9
                                                 33.81
                                  4928.12
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 2483.2 SGR 522.1 SG3 278.9

RRT -.8814 RRF -.9546 RTF ..9000

SGB 2537.5 R23 .3252 R13 -.9060

SGI 2525.9 SG2 242.4 THA 169.40
                                                                                                                       ST 551.6 SR 153.0 SS 130.0
CRT -.0999 CRS .2557 CST -.9750
LSA 566.2 MSA 153.1 SSA 21.9
ELI 551.8 EL2 152.1 ALF 178.28
    TOE -.1661 TRA-1.5932 TC3-1.6112 BAU .6692
    ROE -.1335 RRA .1874 RC3 .4193 FAU .09676
    FOE -.0580 FRA -.9543 FC3-2.7860 BSP 7717
RNF .2131 BRA 1.6042 BC3 1.6648 FSP -905
    BOE .2131 BRA 1.6042 BC3 1.6648 FSP
                                                                                                                                   ARRIVAL CATE APR 16 1966
                                                                        FLIGHT TIME 112.00
LAUNCH DATE DEC 25 1965
                                                                        DISTANCE 336.379
  HELIOCENTRIC CONIC
                         .DD LOL 93.00 VL 28.401 GAL -10.01 AZL 89.62 HCA 161.33 SHA 133.06 ECC .20268 INC .3796 V1 30.280 .12 LOP 254.32 VP 38.033 GAP 4.99 AZP 90.36 TAL 229.07 TAP 30.39 RCA 106.09 APO 160.03 V2 34.89Z
    RL 147.14 LAL
RP 108.61 LAP
                          1.98 GP 25.08 7AL 154.48 7AP 131.11 ETS 21.34 7AE 134.53 ETE 155.76 7AC 32.26 ETC 190.72 CLP-136.55
    RC 113.313 GL
   PLANE TOCENTRIC CONIC
    C3 28.971 VHL 5.382 DLA -18.54 RAL 300.14 RAD 6568.2 VEL 12.262 PTH 2.21 VHP 4.728 DPA 1.98 RAP 296.47 ECC 1.4768 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 42 53 1686.82 -4.25 10.34 166.56 118.02 4 11 0 1086.8 -.47 3.70
                                                                                                          12 6 37
                                                                                                                             4967.4
                                                                                                                                             28.21
                                                                                                91.71
                                 5567.37
                                                   28.27
                                                                 259.80
                                                                               175.25
        90.00
                   10 33 50
                                                                                              119.40 5 17 24
90.41 13 34 10
                    4 53 3 1460.40
12 6 21 5269.02
                                                                                                                             860.4
                                                                                                                                             -1.71
                                                                                                                                                          346.36
                                                   -5.67
                                                                352.91
                                                                               165.78
                                                                                                                            4669.0
                                                                                                                                            29.63
                   12 6 21
                                                   29.89
                                                                237.88
                                                                              175.28
                                                                             163.60
                                                                                             123.06 5 59 1
86.98 15 1 55
                   5 36 58 1322.81
13 38 56 4979.38
                                                                                                                             722.8
                                                                                                                                            -4.83
                                                                                                                                                          333.99
                                                   -9.24
                                                                340.30
                                                                                                                             4379.4
                                                                                                                                             33.27
                                                   34.07
                                                                 215.77
                                                                              175.17
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 605.5 9R 116.7 55 137.7
CRT - .0572 CRS - .0120 CST - .9821
                                                                    SGT 2601.3 SGR 551.8 SG3 261.3
RRT -.8851 RRF -.9692 RTF ..8992
SGB 2659.1 R23 .3562 R13 -.9058
SGI 2647.1 SG2 252.4 THA 169.27
    TOE -.2644 TRA-1.5829 TC3-1.7450 BAU .7000
    RDE -.0937 RRA .1741 RC3 .4703 FAU .08950
    FDE -.1674 FRA -.8096 FC3-2.6744 BSP 8112
BDE .2805 BRA 1.5925 BC3 1.8073 FSP -846
                                                                                                                       LSA 620.5 MSA 116.9 55A 23.5
                                                                                                                        EL1 605.6 EL2 116.5 ALF 179.34
                                                                        FLIGHT TIME 114.00
                                                                                                                                  ARRIVAL DATE APR 18 1966
LAUNCH DATE DEC 25 1965
                                                                        DISTANCE 342.343
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 28.334 GAL -9.79 AZL 90.25 HCA 164.50 SMA 132.56 ECC .20158 INC .2470 V1 30.280 RP 108.64 LAP -.07 LOP 257.50 VP 37.973 GAP 5.24 AZP 89.76 TAL 227.70 TAP 32.20 RCA 105.84 APO 159.28 V2 34.881
    RC 115.673 GL -1.31 GP 28.85 ZAL 153.50 ZAP 131.32 ETS 26.16 ZAE 131.92 ETE 153.25 ZAC 33.98 ETC 195.57 CLP-138.92
   PLANETOCENTRIC CONIC
    C3 28.000 VHL 5.292 DLA -21.55 RAL 301.92 RAD 6568.1 VEL 12.222 PTH 2.20 VHP 4.966 DPA 5.82 RAP 296.62 ECC 1.4608 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             168.83
                                                                                             118.32
                                                                                                                                             3.90
                                                                                                                                                        356.12
                                                    .12
                                                                                                            4 50 18
                                                                                                                             951.2
                     4 24 27 1551.16
10 6 27 5686.01
                                                                  2.76
                                                                                                96.00 11 41 13
                                                                                                                                            28.27
                                                                                                                                                         259.80
                                                                                                                            5086.0
                                                                              177.51
        90.00
                    10 6 27
                                                   27.73
                                                                268.43
                                                                                              119.86 5 53 9
94.56 13 12 18
123.80 6 28 12
90.90 14 46 38
                                                                                                                                             2.48
                                                                                                                                                          339.58
                                                                              167.93
                                                                                                                             736.8
                   5 30 52 1336.78
11 42 42 5375.63
                                                                346.10
                                                   -1.51
                                                                                                                                            29.89
                                                                                                                                                         237.00
                                                                                                                            4775.6
                                                  29.57
                                                                245.79
                                                                              177.71
       100.00
                                                                            165.50
                                                                                                                                            -.94
                                                                                                                                                          328.66
                                                                                                                            620.9
                     6 7 51 1220.87
13 22 13 5064.29
                                                   -5.42
                                                                334.88
                                                                                                                         4464.3
                                                                                                                                            33.92
                                                                               177.97
                                                                                                                                                         213.17
                   13 22 13
                                                   34.17
                                                                222.40
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 703.8 SR 72.3 SS 176.9
CRT -.2041 CRS -.0353 CST -.9570
                                                                    SCT 2721.4 SGR 593.1 SG3 240.9
RRT -.8838 RRF -.9806 RTF .8991
SGB 2785.3 R23 .3802 R13 -.9065
     TOE -.4127 TRA-1.5476 TC3-1.8805 BAU .7316
    ROE -.0413 RRA .1554 RC3 .5321 FAU .08131
                                                                                                                       LSA 724.1 MSA 83.1 SSA 24.8
EL1 704.0 EL2 70.8 ALF 178.79
    FOE -.3075 FRA -.6577 FC3-2.5142 BSP 8545
                                                                     SG1 2772.0 SG2 272.4 THA 168.99
    BOE .4147 BRA 1.5554 BC3 1.9543 FSP -785
                                                                                                                                   ARRIVAL DATE APR 20 1966
                                                                         FLIGHT TIME 116.00
                                                                        DISTANCE 348,288
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 28.267 GAL -9.55 AZL 91.19 HCA 167.67 SMA 132.06 ECC .20055 INC 1.1905 VI 30.280
RP 108.68 LAP -.25 LOP 260.67 VP 37.914 GAP 5.49 AZP 88.84 TAL 226.30 TAP 33.97 RCA 105.58 APO 158.55 V2 34.870
RC 118.029 GL -6.36 GP 34.18 ZAL 151.74 ZAP 130.26 ETS 32.19 ZAE 128.47 ETE 150.04 ZAC 36.52 ETC 201.77 CLP-141.37
   PLANETOCENTRIC CONIC
                                                                                                  2.19 VHP 5.328 OPA 11.18 RAP 296.40 ECC 1.4510
    C3 27.404 VHL 5.235 OLA -26.23 RAL 304.32 RAD 6568.1 VEL 12.198 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                347.64
                                                                              173.96
                                                                                              117.06
                                                                                                           6 11 6
                                                                                                                              682.2
                                                                                                                                            12.24
                                                                                                                                                          340.77
                                                    8.68
        90.00
                     5 49 43 1282.19
                                                                                                                               56.2
                                                                                                                                             26.32
                                                                                                                                                          300.50
                                                                 308.73
                                                                               180.23
                                                                                               104.56
                                                                                                            9 11 18
                                                   24.55
        90.00
                     9 0 22
                                   656.23
                                                                                                           7 1 10
                                                                                                                              511.3
                                                                                                                                             9.97
                                                                                                                                                          327.03
                                 1111.27
                                                                 333.69
                                                                               172.57
                                                                                               119.32
                      6 42 39
                                                     6.11
       100.00
                   10 50 7 5590.42
7 1 6 1053.36
12 48 10 5221.10
                                                                                                                            4990.4
                                                                                                                                            28.83
                                                                                                                                                          252.85
                                                                 261.36
                                                                               180.99
                                                                                               102.46
                                                                                                          12 23 18
                                                   27.39
       100.00
                                                                               169.39
                                                                                               124.17
                                                                                                            7 18 39
                                                                                                                             453.4
                                                                                                                                             5.45
                                                                                                                                                          319.90
                                                                 326.12
                                                     .97
       110.00
                                                                 234.56
                                                                               182.24
                                                                                                 98.04 14 15 11
                                                                                                                            4621.1
                                                                                                                                            34.09
                                                                                                                                                          225.39
                                                    33.34
       110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 893.9 SR 62.7 SS 259.6

CRT - .9488 CRS .8464 CST -.9475

LSA 929.2 MSA 80.9 SSA 16.7

EL1 895.8 EL2 19.7 ALF 176.19
     TOE -.6500 TRA-1.4687 TC3-1.9935 BAU .7627
                                                                    SCT 2841.4 SGR 647.0 SG3 214.7
RRT -.8760 RRF -.9879 RTF .9002
SGB 2914.1 R23 .3940 R13 -.9088
     ROE .0352 RRA .1249 RC3 .5995 FAU .07117
FDE -.4845 FRA -.4878 FC3-2.2482 BSP 8981
BOE .6509 BRA 1.4740 BC3 2.0817 FSP -703
                                                                     SG1 2898.0 SG2 306.0 THA 168.59
     BOE .6509 BRA 1.4740 BC3 2.0817 FSP
```

FLIGHT TIME 110.00

į

EL1 2555.1 EL2 157.8 ALF 80.82

FLIGHT TIME 118.00 ARRIVAL DATE APR 22 1966 LAUNCH DATE DEC 25 1965 DISTANCE 354.211 HELIOCENTRIC CONTC RL 147.14 LAL .00 LOL 93.00 VL 28.200 GAL -9.31 AZL 92.77 MCA 170.83 SMA 131.56 ECC .19957 INC 2.7716 V1 30.280 RP 108.71 LAP -.44 LOP 263.84 VP 37.854 GAP 5.72 AZP 87.26 TAL 224.87 TAP 35.70 RCA 105.31 APO 157.82 VZ 34.860 RC 120.382 GL -14.71 GP 42.06 ZAL 147.78 ZAP 127.05 ETS 39.72 ZAE 123.29 ETE 146.23 ZAC 40.56 ETC 209.84 CLP-144.24 PLANETOCENTRIC CONIC C3 28.070 VHL 5.298 DLA -34.01 RAL 308.18 RAD 6568.1 VEL 12.225 PTH 2.20 VMP 5.976 DPA 19.00 RAP 295.33 ECC 1.4620 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 12 41 1445.56 10 8 9 5792.86 24.33 70.32 20.82 6.14 183.87 117.53 5 36 46 845.6 358.78 20.83 273.92 183.88 117.52 11 44 42 5192.9 24.35 266.55 5 12 41 1445.56 10 8 9 5792.86 9 44 11 5865.97 10 35 49 5708.49 70.32 20.82 6.14 183.87 117.53 5 36 46 845.6 24.33 358.78 117.52 11 44 42 119.35 11 21 57 115.72 12 10 58 273.92 183.88 5192.9 24.35 266.55 20.83 110.00 18.36 182.46 5266.0 22.13 271.09 278.20 185.23 5108.5 26.59 261.04 110.00 268.69 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 2964.3 SCR 709.0 SC3 178.6 RRT -.8574 RRF -.9895 RTF .9046 SCB 3047.9 R23 .3933 R13 -.9145 ST 1275.4 SR 178.6 SS 399.7 CRT -.9630 CRS .9991 CST -.9650 TOE-1.0791 TRA-1.3043 TC3-2.0085 BAU .7914 ROE .1624 RRA .0661 RC3 .6431 FAU .05764 FDE -.7061 FRA -.2899 FC3-1.7778 BSP 9436 LSA 1344.0 MSA 109.3 SSA 6.7 SG1 3026.9 SG2 357.3 THA 168.25 EL1 1286.9 EL2 47.7 ALF 172.31 BDE 1.0913 BRA 1.3059 BC3 2.1090 FSP -587 FLIGHT TIME 120.00 ARRIVAL DATE APR 24 1966 LAUNCH DATE DEC 25 1965 HELIOCENTRIC CONIC DISTANCE 360.104 RL 147.14 LAL .00 LOL 93.00 VL 28.133 GAL -9.06 AZL 95.99 MCA 173.98 SMA 131.07 ECC .19863 INC 5.9876 V1 30.280 RP 108.74 LAP -.63 LOP 267.01 VP 37.796 GAP 5.94 AZP 84.04 TAL 223.40 TAP 37.37 RCA 105.04 APO 157.10 V2 34.851 RC 122.731 GL -29.64 GP 54.23 ZAL 137.92 ZAP 120.08 ETS 49.42 ZAE 114.60 ETE 143.03 ZAC 47.41 ETC 220.73 CLP-149.05 PLANETOCENTRIC CONIC C3 34.338 VML 5.860 DLA -47.67 RAL 316.73 RAD 6568.4 VEL 12.478 PTH 2.26 VMP 7.480 DPA 30.81 RAP 291.89 ECC 1.5651 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 12 43 1761.64 12 16 20 5578.01 1161.6 200.64 131.61 30.90 49.90 25.76 36.63 4 42 4 30.08 130.10 25.77 259.46 200.65 131.60 13 49 18 4978.0 30.91 252.91 4 12 43 1761.64 12 16 20 5578.01 4 12 43 1761.64 12 16 20 5578.01 49.90 25.76 36.63 200.64 1161.6 30.90 30 06 130.10 25.77 259.46 200.65 4978.0 30.91 252.91 49.90 25.76 36.63 200.64 1161.6 30.90 30.08 130.10 25.77 259.46 200.65 4978.0 30.91 252.91 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3088.6 SGR 742.1 SG3 129.4 RRT -.8091 RRF -.9718 RTF ..9208 SGB 3176.5 R23 .3611 R13 -.9308 ST 2042.0 SR 381.8 SS 612.3 CRT -.9627 CRS .9944 CST -.9858 TDE-2.0476 TRA -.9126 TC3-1.6579 BAU .8001 RDE .3889 RRA -.0677 RC3 .5372 FAU .03916 FDE -.9679 FRA -.0599 FC3 -.9874 BSP 9815 BDE 2.0842 BRA .9151 BC3 1.7428 FSP -424 LSA 2161.4 MSA 138.1 SSA 2.2 SG1 3147.5 SG2 427.9 THA 168.79 EL1 2074.9 EL2 101.7 ALF 169.77 FLIGHT TIME 122.00 ARRIVAL DATE APR 26 1966 LAUNCH DATE OFC 25 1965 HELIOCENTRIC CONIC DISTANCE 365.923 RL 147.14 LAL .00 LOL 93.00 VL 28.065 GAL -8.79 AZL 106.04 HCA 177.07 SHA 130.58 ECC .19760 INC16.0382 V1 30.280 RP 108.76 LAP -.81 LOP 270.18 VP 37.737 GAP 6.14 AZP 73.98 TAL 221.86 TAP 38.93 RCA 104.78 APO 156.38 VZ 34.842 RC 125.075 GL -54.07 GP 72.45 ZAL 116.40 ZAP 107.35 ETS 71.63 ZAE 98.06 ETE 153.42 ZAC 58.74 ETC 245.44 CLP-171.69 PLANETOCENTRIC CONIC C3 89.558 VHL 9.464 DLA -65.73 RAL 350.64 RAD 6569.8 VEL 14.523 PTH 2.64 VHP 13.016 DPA 48.00 RAP 278.53 ECC 2.4739 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1520.4 5 26 51 2120.41 15 32 47 5685.46 27.84 18.29 67.96 252.06 154.35 6 2 11 154.34 17 7 32 25.46 64.55 257.78 152.16 18.30 261.19 252.08 5085.5 25.47 154.35 6 2 11 154.34 17 7 32 27.84 5 26 51 2120.41 18.29 67.96 252.06 1520.4 25.46 64.55 152.16 15 32 47 5685.46 18.30 261.19 252.08 5085.5 25.47 257.78 154.35 6 2 11 154.34 17 7 32 5 26 51 15 32 47 64.55 2120.41 18.29 67.96 252.06 1520.4 25.46 27.84 257.78 5685.46 18.30 261.19 252.08 5085.5 25.47 152.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2995.7 SR 267.7 SS 799.4 SGT 3249.4 SGR 459.2 SG3 73.2 RRT .1975 RRF -.0104 RTF .9779 SGB 3281.7 R23 -.2115 R13 .9771 TDE-4.9300 TRA .5731 TC3 -.5115 BAU .6176 CRT .8725 CR5 -.8335 CST -.9972 RDE -.4027 RRA -.2499 RC3 ..0668 FAU ..D1583 FDE-1.1590 FRA .2555 FC3 -.1530 BSP 9810 BDE 4.9464 BRA .6252 BC3 .5158 FSP -227 LSA 3108.7 MSA 143.7 SSA . 8 SG1 3250.7 SG2 450.0 THA 1.63 FL1 3004.8 EL2 130.4 ALF 4.47 LAUNCH DATE DEC 25 1965 FLIGHT TIME 124.00 ARRIVAL DATE APR 28 1966 HELIOCENTRIC CONIC DISTANCE 372.638 RL 147.14 LAL .00 LOL 93.00 VL 27.998 GAL -8.70 AZL 19.21 HCA 181.05 SMA 130.10 ECC .19913 INCTO.7857 V1 30.280 RP 108.79 LAP -.99 LOP 273.34 VP 37.679 GAP 6.59 AZP 160.79 TAL 220.75 TAP 41.80 RCA 104.19 APO 156.00 V2 34.834 RC 127.413 GL 50.46 GP -58.80 ZAL 97.04 ZAP 95.93 ETS 187.00 ZAE 58.99 ETE 113.88 ZAC 92.45 ETC 20.96 CLP 101.51 PLANETOCENTRIC CONIC 3.52 VHP 40.442 DPA -53.79 RAP 158.38 ECC19.9012 C31148.487 VHL 33.889 DIA 42.20 RAL 328.30 RAD 6573.0 VEL 35.634 PTH LNCH AZMTH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.29 17 25 11 4872.88 .54 223.24 238.92 47.80 18 46 24 4272.9 -4.82 217.72 17 25 11 4872.88 0 36 13 3548.82 17 25 11 4872.88 0 36 13 3548.82 17 25 11 4872.88 0 36 13 3548.82 0 36 13 3548.82 238.91 47.80 1 35 22 2948.8 -4.81 116.18 122.71 .56 121.70 18 46 24 57.29 .54 223.24 238.92 47.80 4272.9 -4.82 121.70 238.91 47.80 1 35 22 2948.8 -4.81 116.18 122.71 .56 47.80 1 35 22 47.80 18 46 24 4272.9 -4.82 223.24 238.92 57.29 .54 121.70 47.80 1 35 22 2948.8 -4.81 238.91 122.71 .56 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 870.3 SGR 2849.5 SG3 47.2 RRT .7602 RRF -.9989 RTF -.7294 ST 436.5 SR 2522.4 SS 1716.3 CRT .9305 CRS .9999 CST .9253 LSA 3077.8 MSA 161.5 SSA .4 TOE-2.3445 TRA 2.6615 TC3 -.0710 BAU 3.0277 RO-14.8945 RRA 2.0722 RC3 -.1840 FAU-.04474 FOE 2.9024 FRA -.3030 FC3 .0337 BSP 7787 B0E15.0779 BRA 3.3731 BC3 .1972 FSP -133 SGB 2979.5 R23 -.0912 R13 -.9958 SG1 2928.2 SG2 550.3 THA 76.44

ARRIVAL CATE APR 30 1966

```
FLIGHT TIME 126.00
LAUNCH DATE OFC 25 1965
                                                                              DISTANCE 377.993
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 27.931 GAL -8.33 AZL 71.56 MCA 183.70 SMA 129.62 ECC .19708 INC18.4355 V1 30.280 RP 108.81 LAP -1.17 LOP 276.51 VP 37.622 GAP 6.65 AZP 108.40 TAL 218.96 TAP 42.66 RCA 104.07 APO 155.17 V2 34.826 RC 129.747 GL 57.00 GP -65.83 ZAL 112.35 ZAP 113.14 ETS 280.54 ZAE 99.05 ETE 200.02 ZAC 82.64 ETC 109.55 CLP-163.72
   PLANETOCENTRIC CONIC
    C3 108.585 VHL 10.420 DLA 38.79 RAL 301.66 RAD 6570.1 VEL 15.163 PTH 2.72 VMP 10.748 DPA -83.62 RAP 17.62 ECC 2.7870
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                 198.00
                                                                                                   52.50 17 17 10
52.50 23 19 13
52.50 17 17 10
52.50 23 19 13
52.50 17 17 10
52.50 23 19 13
52.50 23 19 13
                                                                                                                                                    -15.55
                   16 1 26 4543.16
22 23 28 3345.43
                                                      -10.76
                                                                     204.70
                                                                                                                                      3943.2
                                                                                                                                                                    198.53
        62.30
                                                                                     197.99
                                                                                                                                      2745.4
                                                                                                                                                      -15.54
                                                                                                                                                                       107.76
                                                      -10.74
                                                                      113.92
       117.70
                  16 1 26 4543.16
22 23 28 3345.43
                                                     -10.76
                                                                      204.70
                                                                                     198.00
                                                                                                                                      3943.2
                                                                                                                                                     -15.55
                                                                                                                                                                       198.53
        62.30
                                                                     113.92 197.99
204.70 198.00
113.92 197.99
                                                                                                                                      2745.4 -15.54
                                                                                                                                                                       107.76
                                                     -10.74
       117.70
                                                                                                                                      3943.2
                                                                                                                                                     -15.55
                                                                                                                                                                       198.53
                   16 1 26 4543.16
22 23 28 3345.43
                                                     -10.76
        62.30
                                                                                                                                                     -15.54
                                                                                                                                                                       107.76
                                                     -10.74
                                                                                                                                      2745.4
       117.70
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2495.8 SR 343.6 SS 742.6

CRT -.8981 CRS .8509 CST -.9952

LSA 2621.1 MSA 167.5 SSA .9

EL1 2514.9 EL2 149.9 ALF 172.93
                                                                        SGT 3411.5 SGR 808.6 SG3 84.6
RRT -.8640 RRF -.7264 RTF .9733
SGB 3506.1 R23 -.2504 R13 -.9676
    TOE 4.3637 TRA-3.2445 TC3 -.3848 BAU .5588
    ROE - .4640 RRA 1.0874 RC3 .0094 FAU .01995
    FOE 1.4305 FRA -.6801 FC3 -.1591 BSP 10866
    BOE 4.3883 BRA 3.4219 BC3 .3849 FSP -287
                                                                          SG1 3483.3 SG2 398.7 THA 168.27
                                                                                                                                              ARRIVAL DATE HAY 2 1966
                                                                               FLIGHT TIME 128.00
LAUNCH DATE DEC 25 1965
                                                                              DISTANCE 383.800
  HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 27.864 GAL -8.04 A7L 78.59 HCA 186.81 SMA 129.15 ECC .19639 INC11.4083 V1 30.280 RP 108.84 LAP -1.34 LOP 279.67 VP 37.566 GAP 6.84 AZP 101.33 TAL 217.36 TAP 44.17 RCA 103.78 APO 154.51 V2 34.819 RC 132.074 GL 47.49 GP -47.81 ZAL 121.02 ZAP 127.22 ETS 299.57 ZAE 113.13 ETE 208.83 ZAC 71.57 ETC 127.63 CLP-154.26
  PLANETOCENTRIC CONIC
    C3 54.803 VHL 7.403 DLA 28.73 RAL 301.89 RAD 6569.0 VEL 13.273 PTH 2.43 VHP 7.191 DPA -66.87 RAP 331.73 ECC 1.9019
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 84.94 18 31 19 3923.39 -13.06 158.60 186.88 64.18 19 36 42 3323.4 -16.43 151.51
                                                                                                       64.18 19 36 42
64.17 20 56 18
                                                                                                                                       3051.0
                                                                                                                                                                       131.55
                                                                      138.64
                                                                                      186.87 .
                                                                                                                                                       -16.41
        95.06
                    19 55 27
                                    3651.02
                                                       -13.04
                                                                                                        67.31 22 39 41
60.72 20 27 15
70.83 0 58 49
55.86 20 21 25
                  21 44 41 3299.73
19 24 45 3749.91
0 11 16 2853.13
19 18 36 3769.27
                                                                                                                                                                       108.39
                                                                                                                                      2699.7
                                                                                                                                                      -22.90
                                                      -20.00
                                                                      115.99
                                                                                     190.14
       100.00
                                                                                                                                                      -10.15
                                                                                                                                                                       135.68
                                                                     142.35
                                                                                                                                       3149.9
                                                      -6.29
                                                                                     183.30
       100.00
                                                                                    193.85
                                                                                                                                                      -31.20
                                                                                                                                                                        77.39
                                                      -28.86
                                                                      85.81
                                                                                                                                      2253.1
                                                                                                                                                         -2.72
                                                                                                                                       3169.3
       110.00
                                                        1.78
                                                                      138.83
                                                                                     178.32
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 2158.6 SR 227.1 SS 699.1
CRT .8009 CRS -.8977 CST -.9828
                                                                          SGT 3571.2 SGR 338.5 SG3 136.9
RRT .1084 RRF .4534 RTF .9331
SGB 3587.2 R23 .3534 R13 .9334
     TOE 2.6138 TRA-2.8388 TC3-1.0427 BAU .7674
    ROE .2814 RRA .2422 RC3 -.0990 FAU .04005
                                                                                                                                 LSA 2273.2 MSA 180.7 SSA 1.6
    FOE 1.4325 FRA -.7185 FC3 -.6327 BSP 11134
                                                                           5G1 3571.4 SG2 336.5 THA
                                                                                                                                 EL1 2166.3 EL2 135.5 ALF
     BOE 2.6289 BRA 2.8491 BC3 1.0473 FSP -460
                                                                                                                  .59
                                                                                                                                             ARRIVAL DATE MAY 4 1966
                                                                              FLIGHT TIME 130.00
LAUNCH DATE DEC 25 1965
                                                                              OISTANCE 389.633
    RL 147.14 LAL .00 LOL 93.00 VL 27.797 GAL -7.75 A7L 81.21 HCA 189.95 SMA 128.68 ECC .19590 INC 8.7911 VI 30.280 PP 108.86 LAP -1.51 LOP 282.83 VP 37.511 GAP 7.03 A7P 98.66 TAL 215.76 TAP 45.71 RCA 103.48 APO 153.89 V2 34.812 RC 134.395 GL 41.39 GP -36.07 7AL 125.18 7AP 136.32 ETS 307.69 7AE 120.36 ETE 205.99 7AC 65.24 ETC 135.26 CLP-153.47
   PLANETOCENTRIC CONIC
                                                                                                          2.31 VHP 6.195 OPA -55.02 RAP 326.52 ECC 1.6672
    C3 40.542 VHL 6.367 OLA 22.81 RAL 303.60 RAD 6568.6 VEL 12.724 PTH
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  186.57
                                                                                                       78.76 22 47 47

78.76 22 47 47

61.70 17 56 17

79.98 24 20 56

60.23 18 57 4

82.96 2 2 40

56.53 19 28 38
                                                                                                                                                   -27.45
      90.00 21 54 32 3194.85
90.00 16 45 48 4228.71
100.00 23 32 59 2877.44
100.00 17 50 3 4021.35
                                                                                                                                   2594.8
                                                                     110.38
                                                     -26.16
                                                                                                                                                                      166.95
                                                                                     176.69
                                                                                                                                      3628.7
                                                                                                                                                       -2.82
                                                                     173.58
                                                        .97
                                                                                                                                      2277.4
                                                                                                                                                     -29.40
                                                                                                                                                                        78.85
                                                    -28.31
                                                                                     187.02
                                                                      87.48
                                                                                  175.63
                                                                                                                                      3421.4
                                                                                                                                                      -1.11
                                                                                                                                                                      150.76
                                                                     157.28
                                                      2.88
                                                                                   187.93
                                                                                                                                      1954.6
                                                                                                                                                     -34.15
                                                                                                                                                                       54.69
                   1 20 6 2554.61 -33.54
18 23 21 3916.95 7.38
                                                                      63.88
                                                                                                                                    3316.9
                                                                                                                                                      2.93
                                                                                                                                                                      140.33
                                                      7.38
                                                                                     172.85
                                                                     146.59
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCI 3655.0 SGR 298.2 SG3 171.2

RRT .3256 RRF .6668 RTF .9138

SCB 3667.1 R23 .3887 R13 .9146

SCI 3656.3 SG2 281.8 THA 1.53
                                                                                                                               ST 1944.8 SR 226.6 SS 669.7

CRT .8391 CRS -.9439 CST -.9716

LSA 2060.5 MSA 191.0 SSA 2.8

EL1 1954.1 EL2 122.7 ALF 5.61
     TOE 1.9897 TRA-2.5850 TC3-1.5279 BAU .8305
     RDE .2479 RRA .1348 RC3 -.1160 FAU .05144
    FOE 1.3717 FRA -.6850 FC3-1.0984 BSP 11394
BDE 2.0051 BRA 2.5885 BC3 1.5323 FSP -572
                                                                                                                                              ARRIVAL DATE MAY 6 1966
                                                                              FLIGHT TIME 132.00
LAUNCH DATE DEC 25 1965
                                                                              DISTANCE 395.466
    TELIOCENINIC CONIC

RL 147.14 LAL .00 LOL 93.00 VL 27.731 GAL -7.46 A7L 82.58 HCA 193.11 SMA 128.23 ECC .19554 INC 7.4240 VI 30.280 RP 108.87 LAP -1.68 LOP 286.00 VP 37.456 GAP 7.22 A7P 97.23 TAL 214.15 TAP 47.25 RCA 103.15 APO 153.30 V2 34.806 RC 136.709 GL 37.48 GP -28.41 7AL 127.07 7AP 142.23 ETS 313.48 7AE 124.20 ETE 202.25 7AC 62.07 ETC 140.68 CLP-154.00
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                          2.26 VHP 5.831 OPA -47.08 RAP 325.38 ECC 1.5611
     C3 34.094 VHL 5.839 OLA 19.24 RAL 305.40 RAD 6568.3 VEL 12.469 PTH
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       85.78 23 35 15
62.04 17 21 47
86.99 1 7 26
60.70 18 27 29
                                                                                    183.95
                                                                                                                                      2392.3
                                                                                                                                                       -28.32
                                                                                                                                                                       87.22
                                                      -28.03
                                                                      95.87
                     22 45 23 2992.29
        90.00
                                                                                                                                                                       173.37
                                                                                                                                       3743.A
                                                                                                                                                          .89
                                                                      180.01
                                                                                      174.48
                   16 9 23
                                    4343.76
                                                        4.66
         90.00
                   0 22 34 2691.56
17 18 49 4119.72
1 56 35 2397.43
18 1 18 3986.61
                                                                                                                                                                        65.07
                                                                                                                                      2091.6 -29.85
3519.7 2.23
                                                      -29.75
                                                                        73.87
                                                                                     184.08
        100.00
                                                                                                                                                                       156.16
                                                        6.18
                                                                      162.71
                                                                                     173.64
        100.00
                                                                                                        90.16 2 36 32
57.13 19 7 44
                                                                                                                                      1797.4 -33.78
                                                                                                                                                                        42.44
                                                                        51.66
                                                                                   184.21
                                                      -34.18
        110.00
                                                      9.98
                                                                     150.31
                                                                                      171.33
                                                                                                                                       3386.6
                                                                                                                                                         5.58
                                                                                                                                                                       143.98

    9U.31
    17.13
    57.13
    19
    7
    44
    3386.6
    5.58
    143.98

    MID-COURSE EXECUTION ACCURACY
    ORBIT DETERMINATION ACCURACY
    ST 1816.0
    ST 203.1
    55
    638.0

    RRT .3022 RRF .6471 RTF .9033
    CRT .8275 CRS -.9498 CST -.9614

    SGB 3760.0 R23 .3913 R13 .9039
    LSA 1925.3 MSA 198.5 SSA 4.1

    SGI 3752.3 SG2 240.7 THA 1.17
    ELI 1823.8 EL2 113.6 ALF 5.31

       110.00
                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE 1.6800 TRA-2.4333 TC3-1.9072 BAU .8703
     ROE .2042 RRA .1069 RC3 -.0911 FAU .05681
     FOE 1.2745 FRA -.6167 FC3-1.4426 BSP 11781
```

BOE 1.6924 BRA 2.4357 BC3 1.9094 FSP -633

```
ARRIVAL CATE MAY 8 1966
                                                                       FLIGHT TIME 134.00
LAUNCH DATE DEC 25 1965
                                                                       DISTANCE 401.292
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 27.665 GAL -7.16 AZL 83.42 MCA 196.26 SMA 127.78 ECC .19529 INC 6.5807 V1 30.280 RP 108.89 LAP -1.84 LOP 289.16 VP 37.403 GAP 7.41 AZP 96.32 TAL 212.51 TAP 48.78 RCA 102.82 APO 152.73 V2 34.801
    RC 139.015 GL 34.85 GP -23.20 TAL 127.72 TAP 146.33 ETS 317.95 TAE 126.35 ETE 198.97 TAC 60.75 ETC 144.87 CLP-154.89
   PLANETOCENTRIC CONIC
    C3 30.307 VHL 5.505 DLA 17.01 RAL 307.20 RAD 6568.2 VEL 12.316 PTH 2.22 VHP 5.693 CPA -41.48 RAP 325.60 ECC 1.4988
   LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 15 35 2875.71 -28.32 87.36 182.52 90.04 24 3 31 2275.7 -28.01 78.71
                                                                                              90.04 24 3 31
62.38 17 6 54
                  23 15 35 2875.71
15 53 33 4401.07
                                                                                                                           3801.1
                                                   6.48
                                                                183.24
                                                                              173.97
                  0 50 36 2581.99
17 5 9 4170.02
                                                                                                          1 33 38
                                                                                                                           1982.0
                                                                                                                                          -29.37
                                                                                               91.27
                                                 -29.87
                                                                 65.73
                                                                              182.50
                                                                                               61.06 18 14 39
                                                                                                                           3570.0
                                                                                                                                            3.93
      100.00
                                                   7.85
                                                               165.52
                                                                              173.23
                  2 20 18 2301.30
17 51 56 4023.47
                                                                                               94.58 2 58 40
57.53 18 59 0
                                                                                                                       1701.3 -32.91
3423.5 6.97
                                                -33.91
                                                                44.17
                                                                              182.26
      110.00
                                                 11.33
                                                               152.31
                                                                              171.14
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1741.4 SR 188.6 55 612.3
CRT .8171 CRS -.9536 CST -.9525
                                                                   SGT 3848.0 SGR 220.6 SG3 198.1
RRT .2115 RRF .5537 RTF .8962
SGB 3854.3 R23 .3720 R13 .8964
    TOE 1.5050 TRA-2.3194 TC3-2.2211 BAU .9002
    ROE .1788 RRA .0940 RC3 -.0543 FAU .05864
                                                                                                                       LSA 1844.2 MSA 204.6 SSA 5.4
    FOE 1.1832 FRA -.5337 FC3-1.6752 BSP 12095
                                                                                                        .70
                                                                                                                    ELI 1748.2 EL2 108.3 ALF 5.08
    BOE 1.5156 BRA 2.3213 BC3 2.2218 FSP -657
                                                                   SG1 3848.3 SG2 215.6 THA
                                                                                                                                  ARRIVAL DATE MAY 10 1966
LAUNCH DATE DEC 25 1965
                                                                        FLIGHT TIME 136.00
  HELIOCENTRIC CONIC
                                                                       DISTANCE 407.110
   RL 147.14 LAL .00 LOL 93.00 VL 27.600 GAL -6.86 AZL 83.99 MCA 199.42 SMA 127.34 ECC .19515 INC 6.0057 V1 30.280 RP 108.90 LAP -1.99 LOP 292.32 VP 37.350 GAP 7.60 AZP 95.67 TAL 210.86 TAP 50.28 RCA 102.49 APO 152.19 V2 34.797 RC 141.312 GL 33.00 GP -19.48 ZAL 127.62 ZAP 149.38 ETS 321.48 ZAE 127.61 ETE 196.32 ZAC 60.52 ETC 148.21 CLP-155.89
   PLANETOCENTRIC CONIC
   C3 27.715 VHL 5.264 OLA 15.61 RAL 309.01 RAD 6568.1 VEL 12.210 PTH 2.19 VHP 5.653 OPA -37.31 RAP 326.47 ECC 1.4561 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 36 12 2801.63 -28.19 81.94 181.97 92.75 24 22 54 2201.6 -27.51 73.34 90.00 15 47 19 4430.43 7.41 184.91 174.20 62.59 17 1 10 3830.4 3.68 178.21 100.00 1 10 4 2511.61 -29.65 60.51 181.87 94.01 1 51 55 1911.6 -28.78 51.82
                  15 47 19 4430.43
1 10 4 2511.61
                                                                                                        18 10 0
3 14 43
18 56 35
                  17 0 4 4195.68 8.69
2 37 24 2238.32 -33.46
17 49 13 4041.74 12.00
                                                                                                                                            4.79
                                                                                                                                                         160.34
                                                                                               61.29
                                                                                                                           3595.7
      100.00
                                                               166.96
                                                                              173.51
                                                                                                                                          -32.08
                                                                                                                                                          30.35
                                                                                                                          1638.3
                                                                 39.31
                                                                              181.42
                                                                                               97.42
       110.00
                                                                                                                           3441.7
                                                                153.30
                                                                              171.53
                                                                                               57.75
                                                                                                                                            7.65
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 3943.6 SGR 204.4 SG3 201.4
RRT .1052 RRF .4273 RTF .8912
                                                                                                                       ST 1700.0 SR 182.5 SS 592.0 CRT .8154 CRS -.9593 CST -.9452
    TOE 1.3982 TRA-2.2230 TC3-2.4995 BAU .9261
    RDE .1656 RRA .0838 RC3 -.0174 FAU .05874
                                                                   SGB 3948.9 R23 .3351 R13 .8913
SG1 3943.7 SG2 203.3 THA .31
                                                                                                                       LSA 1797.2 MSA 209.0 SSA
                                                                                                                                                             6.7
    FDE 1.1034 FRA -.4513 FC3-1.8350 BSP 12395
                                                                                                                       EL1 1706.5 EL2 105.2 ALF 5.02
    BOE 1.4080 BRA 2.2246 BC3 2.4995 FSP -666
                                                                                                                                 ARRIVAL DATE MAY 12 1966
                                                                       FLIGHT TIME 138.00
LAUNCH DATE DEC 25 1965
                                                                       DISTANCE 412.920
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 27.535 GAL -6.54 AZL 84.41 MCA 202.58 SMA 126.90 ECC .19513 INC 5.5865 VI 30.280 RP 108.92 LAP -2.14 LOP 295.48 VP 37.299 GAP 7.79 AZP 95.16 TAL 209.19 TAP 51.77 RCA 102.14 APO 151.66 V2 34.793 RC 143.598 GL 31.65 GP -16.72 ZAL 127.03 ZAP 151.78 ETS 324.29 ZAE 128.38 ETE 194.20 ZAC 60.97 ETC 150.92 CLP-156.93
   PLANETOCENTRIC CONIC
    C3 25.760 VHL 5.075 DLA 14.75 RAL 310.83 RAD 6568.0 VEL 12.130 PTH 2.17 VHP 5.664 DPA -34.04 RAP 327.70 ECC 1.4239
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2152.7
                                                                                                                                         -27.06
                                                                                                                                                        69.84
                                                                             182.01
                                                                                               94.52 24 37 15
                   23 51 23 2752.75
                                                 -27.98
                                                                78.38
        90.00
                                                                                                                                                        178.92
                                                                                                                                           4.08
                                                                                                         17 D 46
                                                                                                                           3843.0
                                                                              174.81
                                                                                               62.69
        90.00
                  15 46 43 4443.D1
                                                    7.80
                                                               185.62
                                                                                               95.80
                                                                                                        2 5 41
                                                                                                                           1864.8
                                                                                                                                         -28.26
                                                                                                                                                         48.43
                                                                              181.87
                    1 24 36 2464.79
                                                 -29.37
                                                                57.06
                                                                                                                                                        160.92
                                                                             174.15
                                                                                               61.38 18 10 13
                                                                                                                           3606.2
                                                                                                                                          5.14
                  17 0 7 4206.19
                                                   9.03
                                                               167.55
       100.00
                                                                                               99.31 3 27 11
57.83 18 58 5
                                                                                                                                         -31.40
                  2 50 36 2195.72 -33.04
17 50 37 4048.03 12.22
                                                                                                                           1595.7
                                                                                                                                                         27.22
                                                                             181.30
                                                                 36.06
      110.00
                                                                                                                                                        147.24
                                                                                                                           3448.0
                                                                                                                                           7.89
                                                                              172.25
                                                               153.65
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 4040.3 SGR 201.1 SG3 201.9
RRT .0098 RRF .2977 RTF .8873
SGB 4045.3 R23 .2890 R13 .8873
                                                                                                                       ST 1679.6 SR 182.6 SS 577.0
    TOE 1.3301 TRA-2.1356 TC3-2.7609 BAU .9508
                                                                                                                       CRT .8217 CRS -.9667 CST -.9392
    RCE .1601 RRA .0739 RC3 .0170 FAU .05792
                                                                                                                       LSA 1772.6 MSA 212.5 SSA 8.0
    FDE 1.0367 FRA -.3727 FC3-1.9466 BSP 12727
                                                                                                        .03
                                                                                                                       ELI 1686.3 ELZ 103.7 ALF 5.13
                                                                   SG1 4040.3 SG2 201.0 THA
    BOF 1.3397 BRA 2.1369 BC3 2.7609 FSP -667
                                                                                                                                  ARRIVAL CATE MAY 14 1966
                                                                        FLIGHT TIME 140.00
LAUNCH DATE DEC 25 1965
                                                                       DISTANCE 418.719
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 27.471 GAL -6.22 AZL 84.73 HCA 205.74 5MA 126.47 ECC .19524 INC 5.2656 V1 30.280 RP 108.93 LAP -2.28 LOP 298.64 VP 37.248 GAP 7.97 AZP 94.75 TAL 207.50 TAP 53.24 RCA 101.78 APO 151.17 V2 34.790
                        30.63 GP -14.60 ZAL 126.08 ZAP 153.76 ETS 326.54 ZAE 128.87 ETE 192.50 ZAC 61.87 ETC 153.16 CLP-157.96
    RC 145.874 GL
   PLANETOCENTRIC CONIC
    C3 24.191 VHL 4.918 DLA 14.28 RAL 312.70 RAD 6568.0 VEL 12.065 PTH 2.16 VHP 5.703 OPA -31.36 RAP 329.16 ECC 1.3981 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   15 49 54 4444.33
1 36 0 2433.61
17 3 38 4206.42
3 1 17 2166.79
17 54 51 4046.01
                                                                                                                         2120.5
                                                  -27.79
                                                                                               95.68
                                                                                                           0 52 24
                                                                                                                                         -26.71
                                                                                                                                                          67.54
                                                                 76.04
                                                                              182.48
        90.00
                                                                                                                                                         178.99
                                                                185.70
                                                                               175.69
                                                                                                62.70
                                                                                                        17 3 58
                                                                                                                            3844.3
                                                                                                                                            4.12
                                                    7.84
        90.00
                                                                 54.77
                                                                              182.31
                                                                                                96.99
                                                                                                          2 16 34
                                                                                                                           1833.6
                                                                                                                                          -27.A7
                                                                                                                                                          46.20
                                                  -29.14
       100.00
                                                                                                        18 13 44
                                                                                                                           3606.4
                                                                                                                                            5.15
                                                                                                                                                         160.93
                                                                167.56
                                                                              175.05
                                                                                                61.39
                                                    9.04
       100.00
                                                                                                           3 37 24
                                                                                                                           1566.8
                                                                                                                                          -30.90
                                                                                                                                                          25.11
                                                  -32.70
                                                                  33.87
                                                                              181.67
                                                                                             100.56
       110.00
                                                                                               100.56 3 37 24
57.80 19 2 17
                                                                                                                           3446.0
                                                                                                                                            7.81
                                                                                                                                                         147.13
                   17 54 51
                                                                153.54
                                                 12.15
       110.00
                                  4046.01
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                   SCT 4145.8 SGR 205.2 SG3 201.6

RRT -.0590 RRF .1848 RTF .8858

SGB 4150.8 R23 -.2376 R13 -.8857

SG1 4145.8 SG2 204.8 THA 179.83
                                                                                                                       ST 1669.7 SR 186.3 SS 562.5
CRT .8328 CRS -.9742 CST -.9346
    TOE 1.2818 TRA-2.0570 TC3-3.0232 BAU .9778
    RDE .1587 RRA .D632 RC3 .D473 FAU .D5696
FDE .9741 FRA -.3063 FC3-2.0386 BSP 13218
                                                                                                                      LSA 1758.7 MSA 213.9 55A
                                                                                                                                                             9.3
                                                                                                                      LSA 1758.7 MSA 213.9 SSA 9.3
ELI 1676.9 EL2 102.7 ALF 5.33
```

BOE 1.2915 BRA 2.0580 BC3 3.0236 FSP -679

```
ARRIVAL DATE MAY 15 1966
LAUNCH DATE DEC 25 1965
                                                                 FLIGHT TIME 142.00
                                                                 DISTANCE 424.515
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 27.407 GAL -5.89 AZL 84.99 HCA 208.90 SMA 126.06 ECC .19545 INC 5.0106 V1 30.280 RP 108.93 LAP -2.42 LOP 301.80 VP 37.199 GAP 8.16 AZP 94.39 TAL 205.79 TAP 54.69 RCA 101.42 APO 150.69 V2 34.787
    RC 148.138 CL 29.86 GP -12.94 7AL 124.84 7AP 155.47 ETS 328.36 7AE 129.20 ETE 191.13 7AC 63.08 ETC 155.04 CLP-158.98
   PLANETOCENTRIC CONIC
    C3 22.874 VHL 4.783 DLA 14.09 RAL 314.64 RAD 6567.9 VEL 12.011 PTH 2.14 VHP 5.759 DPA -29.10 RAP 330.79 ECC 1.3765
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                NCH TIME L-1 TIME
0 16 27 2700.16
15 55 55 4437.30
1 45 16 2413.73
17 9 48 4198.97
3 10 16 2147.79
18 1 17 4037.68
                                                                                                             2100.2
                                                                                    96.41 1 1 28
62.65 17 9 53
                                                                                                                             -26.47
                                             -27.64
                                                           74.57
                                                                      183.28
                                                                                                                                           66.10
                                                          185.30
                                                                        176.77
                                                                                                                3837.3
                                                                                                                               3.90
                                                                                                                                           178.60
        90.00
                                               7.62
                                                                                       97.73 2 25 30
61.32 18 19 47
                                                                                                                                           44.78
                                                                       183.10
                                                                                                                1813.7
                                                                                                                              -27.59
      100.00
                                              -28.96
                                                            53.32
      100.00
                                               8.80
                                                          167.14
                                                                       176.14
                                                                                                                3599.0
                                                                                                                               4.90
                                                                                                                                           160.52
                                                                                      101.37 3 46 4
57.70 19 8 35
                                                                                                              1547.8
                                                                                                                             -30.55
                                                                                                                                           23.74
      110.00
                                              -32.46
                                                            32.44
                                                                       182.41
                                                                                     101.37
                                                                                                                                           146.69
      110.00
                                              11.85
                                                          153.08
                                                                       174.31
                                                                                                                3437.7
                                                                                                                              7.50
   DIFFERENTIAL CORRECTIONS
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                             SCT 4170.3 SGR 221.3 SG3 194.7
RRT -.1032 RRF .1307 RTF .8720
                                                                                                            ST 1722.0 SR 196.5 SS 585.0 CRT .8593 CRS -.9849 CST -.9325
    TDE 1.3064 TRA-1.9232 TC3-3.1880 BAU .9752
    RDE .1631 RRA .0560 RC3 .0811 FAU .05281
                                                             SGB 4176.1 R23 -.2221 R13 -.8720
SGI 4170.3 SGZ 220.1 THA 179.69
                                                                                                            LSA 1815.7 MSA 222.0 SSA 10.0
         .9786 FRA -.1811 FC3-1.9988 BSP 12420
    BDE 1.3165 BRA 1.9241 BC3 3.1890 FSP -564
                                                                                                           EL1 1730.3 EL2 100.0 ALF 5.62
LAUNCH DATE DEC 25 1965
                                                                 FLIGHT TIME 144.00
                                                                                                                      ARRIVAL DATE MAY 18 1966
  HELIOCENTRIC CONIC
                                                                DISTANCE 430.293
   RL 147.14 LAL .00 LOL 93.00 VL 27.345 GAL -5.55 AZL 85.20 HCA 212.06 SMA 125.65 ECC .19581 INC 4.8021 V1 30.280 RP 108.94 LAP -2.55 LOP 304.97 VP 37.152 GAP 8.34 AZP 94.07 TAL 204.07 TAP 56.13 RCA 101.04 APO 150.25 V2 34.786
    RC 150.390 GL 29.24 GP -11.60 ZAL 123.37 ZAP 156.98 ETS 329.83 ZAE 129.42 ETE 189.99 ZAC 64.50 ETC 156.65 CLP-159.98
   PLANETOCENTRIC CONIC
    C3 21.750 VHL 4.664 DLA 14.11 RAL 316.64 RAD 6567.9 VEL 11.964 PTH 2.13 VHP 5.827 DPA -27.12 RAP 332.52 ECC 1.3580
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             2088.7
                                                                                                                             -26.32
       90.00
                  0 24 15 2688.68
                                             -27.55
                                                           73.75
                                                                      184.36
                                                                                      96.81
                                                                                                  1 9 4
                                                                                                                                            65.29
                                                                                      62.54 17 17 50
98.16 2 33 7
61.20 18 27 43
101.86 3 53 43
57.55 19 16 29
               16 4 6 4424.35
1 53 5 2402.20
17 17 57 4186.06
3 18 6 2136.16
18 9 25 4024.86
       90.00
                                               7.22
                                                          184.56
                                                                        178.03
                                                                                                                1824.3
                                                                                                                               3.48
                                                                                                                                           177.87
      100.00
                                             -28.86
                                                            52.48
                                                                       184.16
                                                                                                                1802.2
                                                                                                                              -27.43
                                                                                                                                            43.97
      100.00
                                               8.38
                                                          166.42
                                                                       177.40
                                                                                                                3586.1
                                                                                                                               4.47
                                                                                                                                           159.81
      110.00
                                             -32.30
                                                            31.57
                                                                       183.46
                                                                                     101.86
                                                                                                               1535.2
                                                                                                                             - 30 . 33
                                                                                                                                            22.91
      110.00
                                            11.38
                                                          152.38
                                                                       175.60
                                                                                                                3424.9
                                                                                                                               7.02
                                                                                                                                           146.01
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                             SGT 4305.3 SGR 230.1 SG3 195.2
RRT -.1251 RRF .0543 RTF .8775
SGB 4311.5 R23 -.1657 R13 -.8774
                                                                                                            ST 1714.2 SR 202.8 SS 563.1 CRT .8718 CR5 -.9891 CST -.9306
    TOE 1.2684 TRA-1.8625 TC3-3.4809 BAU 1.0126
    ROE .1645 RRA .0430 RC3 .1025 FAU .05266
                                                                                                           LSA 1802.6 MSA 217.5 SSA 11.6
EL1 1723.4 EL2 98.8 ALF 5.91
   FOE .9079 FRA -.1498 FC3-2.0962 BSP 13450
BDE 1.2790 BRA 1.8630 BC3 3.4824 FSP -626
                                                             SG1 4305.4 SG2 228.3 THA 179.62
                                                                 FLIGHT TIME 146.00
                                                                                                                     ARRIVAL CATE MAY 20 1966
LAUNCH DATE DEC 25 1965
                                                                 DISTANCE 436.065
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 27.283 GAL -5.21 AZL 85.37 HCA 215.22 SMA 125.24 ECC .19631 INC 4.6273 VI 30.280 RP 108.94 LAP -2.67 LOP 308.13 VP 37.105 GAP 8.52 AZP 93.78 TAL 202.33 TAP 57.55 RCA 100.66 APO 149.83 VZ 34.785
   RC 152.629 GL 28.75 GP -10.51 TAL 121.70 TAP 158.34 ETS 331.01 TAE 129.59 ETE 189.06 TAC 66.10 ETC 158.03 CLP-160.95
   PLANETOCENTRIC CONTC
    C3 20,768 VHL 4.557 OLA 14.30 RAL 318.73 RAD 6567.8 VEL 11.923 PTH 2.12 VHP 5.904 DPA -25.35 RAP 334.34 ECC 1.3418
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                           -26.27
                                                                      185.69
                                                                                    96.96 1 15 34
                                                                                                            2084.5
                                                                                                                                          65.00
       90.00
                  0 30 49 2684.48
                                             -27.52
                                                          73.44
                 16 14 10 4406.33
1 59 47 2397.55
                                                                                      62.41
                                                                                               17 27 37
                                                                                                                3806.3
                                                                                                                               2.90
                                                          183.54
                                                                       179.46
       90.00
                                               6.65
                                                                                      98.33
                                                                                              2 39 45
                                                                                                                1797.6
                                                                                                                                           `43.64
                                                           52.14
                                                                       185.49
      100.00
                                             -28.81
                                                                                    61.05 18 37 22
102.10 4 0 37
57.36 19 25 52
                 17 27 53 4168.48
3 25 6 2130.59
                                                          165.43
                                                                      178.84
                                                                                                               3568.5
                                                                                                                               3.88
                                                                                                                                          158.84
      100.00
                                               7.80
                                                                     184.78
                                                                                                               1530.6
                                            -32.22
                                                           31.16
      110.00
                                                                       177.04
                                                                                                                3408.2
                                                          151.48
      110.00
                 18 19 4
                              4008.20 10.77
                                                                                                           ORBIT DETERMINATION ACCURACY
                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                             SGT 4397.0 SGR 244.0 SG3 192.4
RRT -.1325 RRF .0156 RTF .8763
SGB 4403.8 R23 -.1331 R13 -.8762
    TOE 1.2704 TRA-1.7687 TC3-3.7233 BAU 1.0344
                                                                                                            ST 1742.3 SR 212.3 SS 561.6
   RDE .1686 RRA .0319 RC3 .1246 FAU .05089
FDE .8740 FRA -.0885 FC3-2.1215 BSP 13802
                                                                                                            CRT .8910 CRS -.9936 CST -.9305
                                                                                                            LSA 1830.1 MSA 216.0 55A 12.7
                                                              SG1 4397.2 SG2 241.8 THA 179.58
                                               -622
                                                                                                          ELI 1752.6 ELZ 95.8 ALF 6.22
    BOE 1.2816 BRA 1.7690 BC3 3.7254 FSP
                                                                 FLIGHT TIME 148.00
                                                                                                                      ARRIVAL DATE MAY 22 1966
LAUNCH DATE DEC 25 1965
                                                                DISTANCE 441.828
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 27.221 GAL -4.85 AZL 85.52 HCA 218.38 SMA 124.85 ECC .19694 INC 4.4779 V1 30.280 RP 108.94 LAP -2.78 LOP 311.29 VP 37.060 GAP 8.71 AZP 93.51 TAL 200.58 TAP 58.96 RCA 100.26 APO 149.44 V2 34.784
                     28.34 GP -9.60 ZAL 119.85 ZAP 159.59 ETS 331.95 ZAE 129.72 ETE 188.28 ZAC 67.83 ETC 159.23 CLP-161.90
   RC 154.855 GL
  PLANETOCENTRIC CONIC
   C3 19.905 VHL 4.462 DLA 14.64 RAL 320.91 RAD 6567.8 VEL 11.886 PTH 2.11 VHP 5.988 DPA -23.72 RAP 336.23 ECC 1.3276 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 36 28 2686.31 -27.53 73.57 187.24 96.89 1 21 15 2086.3 -26.29 65.13 90.00 16 25 56 4384.23 5.95 182.29 181.07 62.26 17 39 0 3784.2 2.19 175.63
                2 5 41 2398.61
17 39 24 4147.17
3 31 31 2130.05
18 30 4 3988.49
                                             -28.82
                                                           52.22
                                                                       187.05
                                                                                       98.29
                                                                                                2 45 40
                                                                                                                1798.6
                                                                                                                             -27.37
                                                                                                                                           43.71
      100.00
                                                                                       60.89 18 48 31
                                                                                                                3547.2
                                                                                                                                          157.66
                                               7.09
                                                          164.24
                                                                       180.45
                                                                                                                               3.16
      100.00
                                                                                                4 7 1
                                                                                                                1530.0
                                                                                                                           -30.21
5.65
                                             -32.21
                                                           31.12
                                                                       186.34
                                                                                     102.12
                                                                                                                                           22.47
      110.00
                                                                                       57.15 19 36 32
                                                                                                                3388.5
                                             10.05
                                                          150.41
                                                                       178.65
                                                                                                                                          144.08
      110.00
   DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                             SGT 4483.4 SGR 258.6 SG3 189.3
                                                                                                            ST 1781.1 SR 222.6 S5 563.4
    TOE 1.2843 TRA-1.6668 TC3-3.9600 BAU 1.0545
   RDE .1732 RRA .0209 RC3 .1444 FAU .04899
FDE .8468 FRA -.0280 FC3-2.1309 BSP 14102
```

BOE 1.2960 BRA 1.6669 BC3 3.9626 FSP -613

ARRIVAL DATE HAY 24 1966

FLIGHT TIME 150.00 LAUNCH DATE DEC 25 1965 DISTANCE 447.581 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.10 VHP 6.078 CPA -22.21 RAP 338.16 ECC 1.3151 C3 19.146 VML 4.376 CLA 15.10 RAL 323.19 RAD 6567.8 VEL 11.854 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 41 25 2693.40 16 39 13 4358.72 2 10 58 2404.62 17 52 21 4122.73 96.64 1 26 18 2093.4 -26.38 -27.59 74.09 189.02 90.00 17 51 52 2 51 2 174.21 3758.7 1.37 180.86 182.86 62.12 5.14 90.00 44.14 1804.6 -27.46 -28.88 52.65 188.83 98.07 100.00 60.72 19 1 4 101.96 4 13 4 56.94 19 48 24 3522.7 2.33 156.32 162.88 182.23 6.28 100.00 22.74 1533.8 3 37 30 2133.85 31.40 188.14 -32.26 110.00 3366.3 4.81 142.91 180.43 149.22 18 42 18 110.00 3966.27 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 4566.7 SGR 273.2 SG3 186.0 RRT -.1192 RRF -.0196 RTF .8742 SGB 4574.9 R23 -.0856 R13 -.8741 ST 1827.9 SR 233.4 SS 567.1 CRT .9286 CRS -.9975 CST -.9339 TOE 1.3067 TRA-1.5580 TC3-4.1927 BAU 1.0740 ROE .1782 RRA .0100 RC3 .1618 FAU .04707 FOE .8235 FRA .0299 FC3-2.1283 BSP 14395 LSA 1916.6 MSA 209.8 SSA 15.0 EL1 1840.8 EL2 86.0 ALF 6.78 SG1 4566.8 SG2 271.3 THA 179.59 BOE 1.3188 BRA 1.5580 BC3 4.1958 FSP -603 ARRIVAL DATE MAY 26 1965 FLIGHT TIME 152.00 LAUNCH DATE DEC 25 1965 **DISTANCE 453.323** HELIOCENTRIC CONIC RL 147.14 LAL .00 LOL 93.00 VL 27.100 GAL -4.11 AZL 85.77 HCA 224.70 SHA 124.08 ECC .19866 INC 4.2333 VI 30.280 RP 108.94 LAP -2.98 LOP 317.62 VP 36.973 GAP 9.09 AZP 93.01 TAL 197.03 TAP 61.73 RCA 99.43 APO 148.74 V2 34.786 RC 159.265 GL 27.65 GP -8.18 ZAL 115.65 ZAP 161.84 ETS 333.26 ZAE 129.92 ETE 187.06 ZAC 71.57 ETC 161.22 CLP-163.73 PLANETOCENTRIC CONIC

C3 18.482 VHL 4.299 DLA 15.66 RAL 325.59 RAD 6567.7 VEL 11.826 PTH 2.09 VHP 6.173 DPA -20.79 RAP 340.14 ECC 1.3042
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 45 48 2705.21 -27.68 74.94 191.02 96.23 1 30 53 2105.2 -26.53 66.46
90.00 16 53 57 4330.30 4.23 179.26 184.83 61.98 18 6 7 3730.3 .45 172.62
100.00 2 15 46 2415.06 -28.98 53.42 190.84 97.68 2 56 1 1815.1 -27.61 44.88
100.00 18 6 40 4095.68 5.38 161.38 184.20 60.55 19 14 55 3495.7 1.42 154.84
110.00 3 43 12 2141.51 -32.37 31.97 190.17 101.64 4 18 53 1541.5 -30.43 23.29
110.00 18 55 43 3941.99 8.32 147.92 182.40 56.72 20 1 25 3342.0 3.88 141.64

DIEFERENTIAL CORRECTIONS PLANETOCENTRIC CONIC MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4647.4 SGR 281.7 SG3 182.6 RRT -.1042 RRF -.0239 RTF .8737 SGB 4656.3 R23 -.0678 R13 -.8736 ST 1883.3 SR 244.4 SS 572.3 TOE 1.3371 TRA-1.4416 TC3-4.4198 BAU 1.0929 CRT .9454 CRS -.9970 CST -.9370 RDE .1833 RRA -.0008 RC3 .1766 FAU .04516 LSA 1972.8 MSA 204.9 SSA 16.1 EL1 1897.4 EL2 79.1 ALF 7.01 FDE .8036 FRA .0857 FC3-2.1152 BSP 14682 5G1 4647.5 SG2 286.1 THA 179.63 BDE 1.3496 BRA 1.4416 BC3 4.4233 FSP -593 ARRIVAL DATE MAY 28 1966 FLIGHT TIME 154.00 LAUNCH DATE DEC 25 1965 DISTANCE 459.055 RL 147.14 LAL .00 LOL 93.00 VL 27.041 GAL -3.72 A7L 85.87 HCA 227.86 5MA 123.71 ECC .19977 INC 4.1307 VI 30.280 RP 108.93 LAP -3.06 LOP 320.78 VP 36.931 GAP 9.28 A7P 92.77 TAL 195.24 TAP 63.10 RCA 99.00 APO 148.43 V2 34.788 RC 161.449 GL 27.34 GP -7.62 TAL 113.31 TAP 162.87 ETS 333.67 TAE 130.01 ETE 186.58 TAC 73.55 ETC 162.05 CLP-164.61 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 17.907 VHL 4.232 DLA 16.30 RAL 328.10 RAD 6567.7 VEL 11.802 PTH 2.09 VMP 6.274 DPA -19.43 RAP 342.15 ECC 1.2947 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2121.4 95.65 1 35 6 61.85 18 21 44 97.14 3 0 43 60.40 19 30 3 101.16 4 24 36 56.52 20 15 32 -26.72 193.25 0 49 44 2721.38 17 10 4 4299.36 -27.79 76.11 90.00 3699.4 -,55 170.90 3.24 177.53 187.01 90.00 45.91 1829.6 -27.81 -29.10 54.48 193.08 2 20 13 2429.58 100.00 153.23 3466.4 .42 159.76 186.38 4.40 18 22 16 4066.39 100.00 -30.64 24.10 1552.7 3 48 43 2152.70 32.81 192.44 -32.52 110.00 2.89 140.28 3316.0 146.54 184.56 19 10 16 3916.03 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1949.7 SR 255.6 SS 580.4 CRT .9604 CR5 -.9949 CST -.9409 SGT 4720.4 SGR 301.9 SG3 179.1 RRT -.0851 RRF -.0203 RTF .8729 SGB 4730.1 R23 -.0545 R13 -.8729 TDE 1.3774 TRA-1.3145 TC3-4.6316 BAU 1.1098 RDE .1887 RRA -. 0112 RC3 .1890 FAU .04314 LSA 2040.5 MSA 199.2 SSA 17.1 EL1 1965.1 EL2 70.7 ALF 7.18 FDE .7886 FRA .1416 FC3-2.0854 BSP 14881 BDE 1.3903 BRA 1.3145 BC3 4.6355 FSP -578 5G1 4720.5 5G2 300.8 THA 179.69 ARRIVAL DATE MAY 30 1966 FLIGHT TIME 156.00 LAUNCH DATE DEC 25 1965 DISTANCE 464.776 RL 147.14 LAL .00 LOL 93.00 VL 26.983 GAL -3.32 AZL 85.96 MCA 231.02 SMA 123.35 ECC .20105 INC 4.0379 VI 30.280 RP 108.92 LAP -3.14 LOP 323.95 VP 36.891 GAP 9.48 AZP 92.54 TÅL 193.44 TAP 64.46 RCA 98.55 APO 148.15 V2 34.791 RC 163.619 GL 27.03 GP -7.13 ZAL 110.82 ZAP 163.85 ETS 333.93 ZAE 130.10 ETE 186.17 ZAC 75.59 ETC 162.80 CLP-165.47 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.08 VHP 6.379 OPA -18.11 RAP 344.19 ECC 1.2867 C3 17.420 VHL 4.174 DLA 17.02 RAL 330.74 RAD 6567.7 VEL 11.781 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 53 19 2741.62 -27.92 77.57 195.70 94.93 1 39 1 2141.6 -26.94 69.04 90.00 17 27 32 4266.31 2.18 175.68 189.41 61.76 18 38 39 3666.3 -1.61 169.05 -28.05 47.22 2447.87 4035.28 96.45 3 5 13 1847.9 -29.25 55.82 195.55 100.00 2 24 25 60.28 19 46 23 100.54 4 30 16 56.34 20 30 43 3435.3 -.63 151.52 3.35 158.05 188.76 100.00 18 39 8 1567.1 -30.91 25.14 3 54 8 2167.14 19 25 54 3888.78 -32.71 33.89 194.95 110.00 3288.8 1.85 138.86 6.32 186.92 145.10 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4796.1 SGR 315.3 SG3 175.7 RRT -.0645 RRF -.0150 RTF .8735 ST 2020.0 SR 266.7 55 587.2 CRT .9727 CRS -.9915 CST -.9451 TOE 1.4212 TRA-1.1821 TC3-4.8389 BAU 1.1279 CRT .9727 CRS -.9915 L3. LSA 2111.6 MSA 192.3 SSA 18.2 EL1 2036.6 EL2 61.4 ALF 7.33 RDE .1941 RRA -.0213 RC3 .1985 FAU .04129 FDE .7728 FRA .1926 FC3-2.0522 BSP 15160 SGB 4806.4 R23 -. 0417 R13 -. 8734 SG1 4796.1 SG2 314.7 THA 179.76 BOE 1.4344 BRA 1.1823 BC3 4.8430 FSP -570

```
ARRIVAL DATE JUN 9 1966
LAUNCH DATE DEC 25 1965
                                                                           FLIGHT TIME 166.00
                                                                           DISTANCE 493.187
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.702 GAL -1.14 AZL 86.33 MCA 246.84 SMA 121.64 ECC .21046 INC 3.6678 VI 30.280 RP 108.85 LAP -3.37 LOP 339.79 VP 36.708 GAP 10.56 AZP 91.44 TAL 184.30 TAP 71.14 RCA .96.04 APO 147.25 VZ 34.814 RC 174.239 GL 24.98 GP -5.45 ZAL 96.42 ZAP 168.20 ETS 333.05 ZAE 130.58 ETE 184.83 ZAC 86.41 ETC 165.56 CLP-169.52
   PLANETOCENTRIC CONIC
    C3 16.354 VML 4.044 CLA 21.21 RAL 345.89 RAC 6567.7 VEL 11.736 PTH 2.07 VMP 6.991 CPA -11.95 RAP 354.64 ECC 1.2691
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                2297.4
                    1 8 5 2897.42
19 13 38 4081.45
                                                     -28.31
                                                                     88.95
                                                                                  211.42
                                                                                                   89.24
                                                                                                                1 56 22
                                                                                                                                                 -28.11
                                                                                                                                                                 80.29
        90.00
                                                                                                               20 21 40
                                                                                                                                  3481.4
                                                                                                                                                  -7.51
                                                                                                                                                                 158.66
                                                                                   204.91
                                                                                                     61.92
                                                     -3.78
                                                                    165.36
        90.00
                    2 43 50 2588.68
20 20 35 3865.42
                                                                     66.23
                                                                                   211.42
                                                                                                     91.01
                                                                                                                 3 26 58
                                                                                                                                  1988.7
                                                                                                                                                  -29.42
                                                                                                                                                                  57.46
                                                     -29.88
       100.00
                                                                                   204.15
                                                                                                     60.20 21 25 0
                                                                                                                                  3265.4
                                                                                                                                                  -6.36
                                                                                                                                                                 142.15
                                                                    148.72
       100.00
                                                      -2.41
                                                                                                               5 0 26
                                                                                                                                  1680.2
                                                                                                                                                  -32.65
                                                                                                                                                                  33.48
                                                    -33.79
                                                                     42.54
                                                                                   211.15
                                                                                                     95.54
       110.00
                     4 22 26 2280.18
                                                                                                     95.54 5 U 26
55.83 22 U 54
                                                                                                                                3146.7
                                                                                                                                                 -3.58
                                                                                                                                                                 131.44
                                                                                   202.08
                                                                   137.65
       110.00
                   20 58 27
                                   3746.69
                                                       . 91
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5115.0 SGR 373.6 SG3 158.5
RRT .0546 RRF .0542 RTF .8803
                                                                                                                              ST 2448.0 SR 323.2 SS 623.7
CRT .9974 CRS -.9600 CST -.9659
    TOE 1.7210 TRA -.3778 TC3-5.5139 BAU 1.2064
    ROE .2272 RRA - .0618 RC3 .2036 FAU .03228
FDE .7149 FRA .4302 FC3-1.7088 BSP 16297
                                                                        568 5128.6 R23 .0059 R13 .8803
                                                                                                                             LSA 2541.9 MSA 157.1 SSA 22.6
                                                                                                                              ELI 2469.2 ELZ 23.0 ALF
    BOE 1.7359 BRA .3828 BC3 5.5176 FSP -518
                                                                        SG1 5115.0 SG2 373.1 THA
                                                                                                                                                                     7.50
                                                                                                                                          ARRIVAL DATE JUN 11 1966
                                                                            FLIGHT TIME 168.00
LAUNCH DATE DEC 25 1965
                                                                           DISTANCE 498.822
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.648 GAL -.66 A7L 86.39 MCA 250.01 SMA 121.32 ECC .21304 INC 3.6057 V1 30.280 RP 108.83 LAP -3.39 LOP 342.97 VP 36.675 GAP 10.81 A7P 91.23 TAL 182.45 TAP 72.46 RCA 95.48 APO 147.17 V2 34.821 RC 176.312 GL 24.41 GP -5.22 TAL 93.21 TAP 168.99 ETS 332.39 TAE 130.69 ETE 184.66 TAC 88.66 ETC 165.96 CLP-170.29
   PLANETOCENTRIC CONIC
   C3 16.448 VHL 4.056 DLA 22.07 RAL 349.29 RAD 6567.7 VEL 11.74D PTH 2.07 VHP 7.133 DPA -10.77 RAP 356.77 ECC 1.2707 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 10 45 2938.15 -28.24 91.92 215.24 87.75 1 59 43 2338.2 -28.25 83.26 90.00 19 38 7 4043.33 -5.00 163.22 208.75 62.09 20 45 31 3443.3 -8.69 156.49 100.00 2 47 50 2625.08 -29.89 68.94 215.28 89.58 3 31 36 2025.1 -29.63 60.14 100.00 20 43 43 3831.64 -3.55 146.86 207.95 60.30 21 47 34 3231.6 -7.48 140.28 110.00 42 84 88 2309.23 -33.95 44.79 215.12 94.22 5 7 17 1709.2 -33.00 35.68 110.00 21 19 15 3720.26 -.10 136.27 205.80 55.82 22 21 15 3120 3 -4.50 130.00
    C3 16.448 VHL 4.056 DLA 22.07 RAL 349.29 RAD 6567.7 VEL 11.740 PTH 2.07 VHP 7.133 DPA -10.77 RAP 356.77 ECC 1.2707
                                                                                                     94.22 5 7 17
55.82 22 21 15
                    21 19 15
                                    3720.26
                                                                                                                                   3120.3
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SGT 5165.5 SGR 383.2 SG3 155.0
RRT .0806 RRF .0745 RTF .8827
                                                                                                                              ST 2539.9 SR 334.8 SS 629.8
CRT .9960 CRS -.9522 CST -.9694
    TOE 1.7943 TRA -.1849 TC3-5.5378 BAU 1.2185
    RDE .2359 RRA -.0672 RC3 .1961 FAU .03052
    FDE .7062 FRA .4748 FC3-1.6066 BSP 16459
BDE 1.8098 BRA .1968 BC3 5.5413 FSP -508
                                                                        SGB 5179.6 R23 .0030 R13 .8827
                                                                                                                              LSA 2633.7 MSA 151.9 55A 23.1
                                                                        SG1 5165.5 SG2 382.0 THA
                                                                                                                              EL1 2561.7 EL2 29.6 ALF 7.48
                                                                                                                                        ARRIVAL DATE JUN 13 1966
                                                                           FLIGHT TIME 170.00
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 504.438
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.595 GAL -.16 A7L 86.45 MCA 253.18 SMA 121.01 ECC .21590 INC 3.5461 V1 30.280
RP 108.81 LAP -3.39 LOP 346.14 VP 36.643 GAP 11.06 A7P 91.03 TAL 180.60 TAP 73.78 RCA 94.89 APO 147.14 V2 34.828
RC 178.366 GL 23.76 GP -5.01 ZAL 89.94 ZAP 169.75 ETS 331.53 ZAE 130.80 ETE 184.51 ZAC 90.94 EYC 166.32 CLP-171.05
   PLANETOCENTRIC CONIC
    C3 16.663 VHL 4.082 DLA 22.90 RAL 352.80 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 7.284 CPA -9.59 RAP 358.91 ECC 1.2742
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2381.5
                                                                                                 86.18 2 3 7
                                                                                                                                                 -28.31
                                                                                                                                                                 86.42
                    1 13 26 2981.46
20 3 24 4005.97
2 52 4 2663.46
                                                                                219.25
                                                     -28.OA
                                                                    95.08
        90.00
                                                                                                              21 10 10
                                                                                                                                                  -9.84
                                                                                   212.83
                                                                                                     62.31
                                                                                                                                  3406.0
                                                                                                                                                                 154.35
                                                                    161.12
                                                      -6.18
        90.00
                                                                                   219.35
                                                                                                     88.08
                                                                                                               3 36 27
                                                                                                                                  2063.5
                                                                                                                                                  -29.78
                                                                                                                                                                  62.98
                                                     -29.84
                                                                     71.79
       100.00
                   21 7 28 3799.20
4 35 33 2339.68
21 40 28 3695.74
                                                                                                               22 10 47
                                                                                                                                  3199.2
                                                                                                                                                  -8.54
                                                                                                                                                                 138.46
                                                                                                     60.44
                                                      -4.64
                                                                   145.08
                                                                                   211.98
       100.00
                                                                                                     92.82 5 14 33
55.83 22 42 4
                                                                                                                                  1739.7
                                                                                                                                                  -33.31
                                                                                                                                                                  38.00
                                                     -34.08
                                                                                   219.31
                                                                     47.16
       110 00
                                                                                                                                  3095.7
                                                                                                                                                 -5.51
                                                                                                                                                                 128 77
                                                                                   209.74
       110.00
                                                     -1.04
                                                                    134.99
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5223.1 SGR 391.6 SG3 151.8
RRT .1044 RRF .0893 RTF .8879
SGB 5237.7 R23 -.0040 R13 .8879
                                                                                                                             ST 2612.4 SR 346.0 SS 628.2
CRT .9932 CRS -.9441 CST -.9723
    TOE 1.8587 TRA .0092 TC3-5.5425 BAU 1.2353
    ROE .2454 RRA -.0716 RC3 .1850 FAU .02922
FDE .6907 FRA .5129 FC3-1.5181 BSP 16750
BDE 1.8748 BRA .0722 BC3 5.5456 FSP -504
                                                                                                                             LSA 2704.9 MSA 147.5 SSA 23.3
                                                                        SG1 5223.3 SG2 389.4 THA .45
                                                                                                                              EL1 2634.9 EL2 39.8 ALF 7.50
                                                                                                                                          ARRIVAL DATE JUN 15 1966
                                                                            FLIGHT TIME 172.00
LAUNCH DATE DEC 25 1965
                                                                           DISTANCE 510.033
   HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.542 GAL .35 A7L 86.51 MCA 256.35 SMA 120.70 ECC .21905 INC 3.4884 V1 30.280 RP 108.78 LAP -3.39 LOP 349.32 VP 36.613 GAP 11.33 A7P 90.82 TAL 178.75 TAP 75.09 RCA 94.26 APO 147.15 V2 34.836 RC 180.400 GL 23.05 GP -4.82 TAL 86.61 TAP 170.50 ETS 330.43 TAE 130.91 ETE 184.38 TAC 93.23 ETC 166.64 CLP-171.80
   PLANETOCENTRIC CONIC
    C3 17.009 VHL 4.124 DLA 23.69 RAL 356.39 RAD 6567.7 VEL 11.764 PTH 2.08 VHP 7.443 DPA -8.43 RAP
                                                                                                                                                      1.05 FCC 1.2799
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                  223.44
                                                                                                     84.54
                                                                                                                 2 6 39
                                                                                                                                 2427.0
                                                                                                                                                 -28.29
                                                                                                                                                                  89.76
        90.00
                                    3027.01
                                                     -27.83
                                                                     98.39
                      1 16 12
                                    3969.86
                                                      -7.32
                                                                                   217.13
                                                                                                     62.57 21 35 29
                                                                                                                                   3369.9
                                                                                                                                                  -10.94
                                                                                                                                                                  152.26
                    20 29 19
                                                                    159.07
        90.00
                                                                                   223.61
                                                                                                     86.53
                                                                                                                3 41 37
                                                                                                                                   2103.4
                                                                                                                                                  -29.87
                                                                                                                                                                   65.95
       100.00
                      2 56 34
                                    2703.43
                                                     -29.71
                                                                     74.75
                                                                                                     60.60 22 34 27
                                                                                                                                   3168.7
                                                                                                                                                  -9.54
                                                                                                                                                                  136.74
       100.00
                    21 31 38
                                    3768.68
                                                      -5.66
                                                                    143.39
                                                                                   216.23
                                                                                   223.71
                                                                                                     91.37
                                                                                                                5 22 17
                                                                                                                                   1771.2
                                                                                                                                                 -33.59
                                                                                                                                                                  40.42
       110.00
                      4 42 45
                                    2371.18
                                                    -34.16
                                                                     49.61
                                                                                                     55.86 23 3 10
                                                                                                                                                                  127.60
                                                                                   213.88
                                                                                                                                  3073.7
                                                                                                                                                   -6.34
       110.00
                    22 1 56
                                    3673.69
                                                                    133.84
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ST 2697.6 SR 357.7 SS 634.8
CRT .9891 CRS -.9356 CST -.9749
                                                                      SGT 5260.2 SGR 400.0 SG3 148.2
RRT .1304 RRF .1157 RTF .8874
SGB 5275.4 R23 -.0007 R13 .8874
    TOE 1.9378 TRA .2310 TC3-5.4623 BAU 1.2427
    ROE .2563 RRA -.0743 RC3 .1735 FAU .02718
FDE .6856 FRA .5639 FC3-1.3835 BSP 16758
BDE 1.9547 BRA .2427 BC3 5.4651 FSP -480
                                                                                                                             LSA 2790.3 MSA 146.7 SSA 23.3
EL1 2720.7 EL2 52.1 ALF 7.47
```

SG1 5260.5 SG2 396.5 THA

.57

ARRIVAL DATE JUN 17 1966

```
FLIGHT TIME 174.00
LAUNCH DATE DEC 25 1965
                                                                      DISTANCE 515.603
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.491 GAL .89 A7L 86.57 HCA 259.52 SMA 120.40 ECC .22252 INC 3.4323 VI 30.280
RP 108.76 LAP -3.37 LOP 352.49 VP 36.584 GAP 11.61 A7P 90.63 TAL 176.89 TAP 76.41 RCA 93.61 APO 147.20 VZ 34.845
RC 182.414 GL 22.28 GP -4.65 ZAL 83.25 ZAP 171.22 ETS 329.06 ZAE 131.02 ETE 184.27 ZAC 95.54 ETC 166.93 CLP-172.54
   PLANETOCENTRIC CONIC
                                                        .06 RAD 6567.7 VEL 11.785 PTH 2.08 VHP 7.612 CPA
                                                                                                                            -7.27 RAP
    C3 17.499 VHL 4.183 DLA 24.43 RAL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 19 8 3074.30
20 55 36 3935.72
3 1 27 2744.43
21 55 58 3740.82
4 50 29 2403.27
22 23 25 3654.74
                                                                                                          2 10 22
                                                                                                                         2474.3
                                                                                                                                         -28.18
                                                                                               82.86
                                                                              227.79
                                                 -27.47
                                                               101.81
                                                                                                                           3335.7
                                                                                                        22 1 12
                                                                                                                                          -11.96
                                                  -8.39
                                                                157.13
                                                                              221.64
                                                                                               62.86
        90.00
                                                                                                           3 47 11
                                                                                                                           2144.4
                                                                                                                                          -29.89
                                                                                                                                                          69.00
                                                                                               84.95
                                                                              228.04
      100.00
                                                -29.50
                                                                 77.78
                                                                                                                                                        135.16
                                                                                               60.78 22 58 19
                                                                                                                           3140.8
                                                                                                                                          -10.44
      100.00
                                                  -6.59
                                                                141.84
                                                                              220.66
                                                                                                                                         -33.82
                                                                                               89.89 5 30 33
55.90 23 24 20
                                                                                                                          1803.3
                                                                                                                                                          42.89
                                                -34.18
                                                                 52.12
                                                                              228.28
      110.00
                                                                                                                                          -7.06
                                                                                                                           3054.7
                                                  -2.60
                                                               132.85
                                                                              218.20
      110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2757.0 SR 368.8 SS 631.9
CRT .9842 CRS -.9272 CST -.9772
                                                                   SGT 5302.1 SGR 407.0 SG3 144.7
RRT .1547 RRF .1358 RTF .8914
SGB 5317.7 R23 -.0029 R13 .8914
SGL 5302 5 SG2 402 0 TH
    TOE 2.0049 TRA .4530 TC3-5.3596 BAU 1.2544
                                                                                                                             .9842 CRS -.9272 CST -.9772
   RDE .2681 RRA -.0762 RC3 .1590 FAU .02568
FDE .6722 FRA .6042 FC3-1.2703 BSP 17009
BDE 2.0228 BRA .4594 BC3 5.3620 FSP -477
                                                                                                                      LSA 2848.6 MSA 145.8 SSA 23.1
                                                                                                                      EL1 2780.8 EL2 64.7 ALF 7.50
                                                                    SG1 5302.5 SG2 402.0 THA
                                                                                                         .68
                                                                                                                                  ARRIVAL DATE JUN 19 1966
LAUNCH DATE DEC 25 1965
                                                                        FI 16HT TIME 176.00
                                                                       DISTANCE 521.147
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.440 GAL 1.45 A7L 86.62 MCA 262.69 SMA 120.11 ECC .22633 INC 3.3772 V1 30.280 RP 108.73 LAP -3.35 LOP 355.67 VP 36.555 GAP 11.92 A7P 90.43 TAL 175.04 TAP 77.73 RCA 92.93 APO 147.30 V2 34.854 RC 184.407 GL 21.44 GP -4.49 7AL 79.88 7AP 171.92 ETS 327.35 7AE 131.14 ETE 184.17 7AC 97.86 ETC 167.18 CLP-173.28
  PLANETOCENTRIC CONIC
    C3 18.149 VHL 4.260 DLA 25.10 RAL 3.76 RAD 6567.7 VEL 11.812 PTH 2.09 VHP 7.792 DPA -6.13 RAP 5.37 ECC 1.2987 LNCH AZMTH LNCH TIME L-1 TIME INJLAT INJ LONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 2.09 VHP 7.792 OPA
                                                                                                                              -6.13 RAP
                 1 22 19 3122.81
21 22 0 3904.19
3 6 49 2785.89
22 20 10 3716.35
4 58 48 2435.35
                                                                                                                        2522.8
                                                                             232.27
                                                                                                         2 14 22
                                                                                                                                                          96.74
                                                 -27.02
                                                               105.28
                                                                                             81.17
       90.00
                                                                                                63.15
                                                                155.33
                                                                              226.32
                                                                                                         22 27 4
                                                                                                                           3304.2
       90.00
                                                  -9.36
                                                                                                         3 53 15
                                                                                                                           2185.9
                                                                              232.60
                                                                                                83.37
                                                                                                                                          -29.82
                                                                                                                                                          72.08
                                                  -29.21
                                                                 80.83
      100.00
                                                                                               60.96 23 22 7
88.39 5 39 24
55.95 23 45 20
                                                  -7.40
                                                               140.48
                                                                              225.27
                                                                                                                           3116.3
                                                                                                                                          -11.22
                                                                                                                                                         133.77
      100.00
                                                -34.15
                                                                              233.02
                                                                                                                           1835.5
                                                                                                                                          -34.00
                                                                                                                                                         45.40
                                                                 54.64
      110.00
                                                                                                                           3039.5
                                                                                                                                          -7.63
                                                                                                                                                         125.79
      110.00
                                                               132.05
                                                                              222.67
                  22 44 41
                                 3639.46
                                                  -3.18
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
   TOE 2.0756 TRA .6932 TC3-5.2019 BAU 1.2627

ROE .2811 RRA -.0764 RC3 .1434 FAU .02409

FOE .6612 FRA .6485 FC3-1.1490 BSP 17107

BDE 2.0945 BRA .6974 BC3 5.2038 FSP -466
                                                                                                                       ST 2811.6 SR 379.7 S5 629.8
CRT .9785 CRS -.9187 CST -.9792
                                                                    SGT 5338.2 SGR 413.3 SG3 141.4
RRT .1800 RRF .1587 RTF .8946
                                                                    SGB 5354.2 R23 -.0033 R13 .8946
                                                                                                                       LSA 2902.4 MSA 147.1 55A 22.5
                                                                                                                    EL1 2836.1 EL2 77.7 ALF 7.53
                                                                                                        .80
                                                                    SG1 5338.7 SG2 406.5 THA
                                                                                                                                 ARRIVAL DATE JUN 21 1966
                                                                       FI 16HT TIME 178.00
LAUNCH DATE DEC 25 1965
                                                                       CISTANCE 526.659
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.389 GAL 2.03 AZL 86.68 HCA 265.86 SHA 119.82 ECC .23052 INC 3.3229 V1 30.280 RP 108.70 LAP -3.31 LOP 358.85 VP 36.528 GAP 12.23 AZP 90.24 TAL 173.19 TAP 79.05 RCA 92.20 APO 147.45 V2 34.863
    RC 186.379 GL 20.54 GP -4.35 TAL 76.52 TAP 172.60 ETS 325.22 TAE 131.25 ETE 184.09 TAC 100.19 ETC 167.39 CLP-174.01
   PLANETOCENTRIC CONIC
    C3 18.978 VML 4.356 DLA 25.69 RAL 7.49 RAC 6567.8 VEL 11.847 PTH 2.10 VMP 7.983 DPA -4.99 RAP
                                                                                                                                            7.53 ECC 1.3123
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2571.8
                                                                                                                                       -27.63
                                                                          236.85
                                                                                           79.52
                                                                                                          2 18 46
                                                                                                                                                       100.29
                  1 25 54 3171.82
21 48 9 3876.13
3 12 49 2827.12
                                                 -26.46
                                                              108.76
       90.00
                                                                                               63.45
                                                                                                                                                        146.77
                                                               153.71
                                                                              231.14
                                                                                                        22 52 45
                                                                                                                          3276.1
                                                                                                                                         -13.71
                                                 -10.22
        90.00
                                                                                                                                                         75.14
                                                -28.85
                                                                 83.84
                                                                              237.29
                                                                                               81.82
                                                                                                          3 59 56
                                                                                                                          2227.1
                                                                                                                                         -29.68
      100.00
                                                                              230.00
                                                                                               61.12 23 45 31
                                                                                                                          3096.1
                                                                                                                                         -11.86
                                                                                                                                                       132.61
                  22 43 55 3696.06
5 7 45 2467.52
23 5 28 3628.43
                                                  -8.07
                                                               139.34
      100.00
                                                -34.06
                                                                                               86.92
                                                                                                         5 48 52
                                                                                                                          1867.5
                                                                                                                                        -34.11
                                                                                                                                                         47.89
                                                                 57.13
                                                                              237.89
      110.00
                                                                                                                                          -8.05
                                                                                                                                                        125.20
                                                                                               55.98
                                                                                                         24 5 57
                                                                                                                          3028.4
                                                               131.48
                                                                              227.25
                                                  -3.60
      110.00
                                                                                                                      ORBIT CETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE 2.1394 TRA .9424 TC3-5.0092 BAU 1.2713
ROE .2954 RRA -.0753 RC3 .1268 FAU .02260
                                                                                                                      ST 2846.9 SR 389.9 55 624.5
                                                                   SGT 5371.9 SGR 418.6 SG3 138.0
RRT .2045 RRF .1815 RTF .8982
                                                                                                                      CRT .9721 CRS -.9101 CST -.9809
                                                                                                                      LSA 2936.7 MSA 149.7 SSA 21.8
    FOE .6486 FRA .6910 FC3-1.0308 BSP 17263
BDE 2.1597 BRA .9454 BC3 5.0108 FSP -457
                                                                    SGB 5388.2 R23 -.0033 R13 .8982
                                                                                                       .92
                                                                                                                      EL1 2872.1 EL2 90.6 ALF 7.59
                                                                    561 5372.6 SG2 409.7 THA
                                                                                                                                  ARRIVAL DATE JUN 23 1966
                                                                        FLIGHT TIME 180.00
LAUNCH DATE DEC 25 1965
                                                                       DISTANCE 532.137
  HELIOCENTRIC CONIC
   RL 147.14 LAL .00 LOL 93.00 VL 26.340 GAL 2.64 A7L 86.73 HCA 269.04 SMA 119.54 ECC .23512 INC 3.2690 V1 30.280 RP 108.67 LAP -3.27 LOP 2.03 VP 36.502 GAP 12.57 AZP 90.05 TAL 171.35 TAP 80.39 RCA 91.44 APO 147.65 V2 34.873 RC 188.330 GL 19.60 GP -4.22 ZAL 73.19 ZAP 173.26 ETS 322.57 ZAE 131.36 ETE 184.02 ZAC 102.53 ETC 167.57 CLP-174.74
   PLANETOCENTRIC CONIC
                                                                                                                              -3.86 RAP
    C3 20.006 VHL 4.473 DLA 26.19 RAL 11.21 RAD 6567.8 VEL 11.891 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 2.11 VHP 8.188 DPA
                                                                                                          2 23 43
                                                                                                                         2620.5
                                                                112.18
                                                                              241.51
                    1 30 3
                                 3220.50
                                                  -25.81
       90.00
                   22 13 42 3852.43
3 19 34 2867.39
23 6 51 3680.77
                                                                                                                                                        145.36
                                                                                                         23 17 54
                                                                                                                           3252.4
                                                                                                                                          -14.38
                                                               152.34
                                                                              236.08
                                                                                               63.72
                                                  -10.94
        90.00
                                                                                                                                          -29.47
                                                                                                                                                          78.11
                                                                              242.07
                                                                                               80.34
                                                                                                          4 7 22
                                                                                                                           2267.4
                                                  -28.43
                                                                 86.76
      100.00
                                                                                                61.25 24 8 12
                                                                                                                           3080.8
                                                                                                                                         -12.35
                                                                                                                                                        131.73
                                                                              234.83
                                                  -8.57
                                                                138.48
      100.00
                    5 17 22 2498.83
23 25 33 3622.10
                                                                                                         5 59 1
                                                                                                                                                          50.33
                                                                 59.57
                                                                              242.87
                                                                                               85.49
                                                                                                                           1898.8
                                                                                                                                         -34.17
                                                 -33.92
      110.00
                                                                                                56.01 24 25 55
                                                                                                                           3022.1
                                                                                                                                           -8.28
                                                                                                                                                        124.87
                                                                              231.93
                   23 25 33
                                                               131.14
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5401.1 SGR 423.0 SG3 134.7 ST 2866.4 SR 399.4 S5 617.1 RRT .2288 RRF .2044 RTF .9024 CRT .9653 CRS -.9014 CST -.9824 SGB 5417.6 R23 -.0034 R13 .9024 LSA 2955.1 MSA 153.6 SSA 21.0 SGI 5401.9 SG2 411.7 THA 1.03 ELI 2892.3 EL2 103.4 ALF 7.67
    TOE 2.1988 TRA 1.2050 TC3-4.7794 BAU 1.2786
    ROE .3108 RRA -.0726 RC3 .1099 FAU .02117
FDE .6350 FRA .7333 FC3 -.9163 B5P 17406
```

BOE 2.2207 BRA 1.2071 BC3 4.7806 FSP -448

```
LAUNCH DATE DEC 25 1965
                                                                           FLIGHT TIME 182.00
                                                                                                                                       ARRIVAL DATE JUN 25 1966
    HELIOCENTRIC CONIC
                                                                           DISTANCE 537.575
     RL 147.14 LAL .00 LOL 93.00 VL 26.291 GAL 3.28 AZL 86.78 MCA 272.22 SMA 119.27 ECC .24017 INC 3.2151 VI 30.280 RP 108.63 LAP -3.21 LOP 5.22 VP 36.477 GAP 12.94 AZP 89.88 TAL 169.51 TAP 81.73 RCA 90.62 APO 147.91 VZ 34.884 RC 190.259 GL 18.62 GP -4.11 ZAL 69.91 ZAP 173.89 ETS 319.27 ZAE 131.48 ETE 183.95 ZAC 104.88 ETC 167.71 CLP-175.47
    PLANETOCENTRIC CONIC
     C3 21.258 VHL 4.611 DLA 26.60 RAL 14.90 RAD 6567.9 VEL 11.943 PTH 2.13 VHP 8.408 DPA -2.74 RAP 11.89 ECC 1.3499
     UNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 35 0 3267.79 -25.09 115.46 246.22 76.43 2 29 28 2667.8 -26.71 107.16
                                                     -25.09
                                                                                 246.22
                                                                                                                                             -26.71
                                                                                                                                                           107.16
                                                                                                                                2667.8
         90.00
                     22 38 10 3834.21
                                                     -11.49
                                                                   151.28
                                                                                  241.08
                                                                                                    63.94 23 42 5
                                                                                                                                3234.2
                                                                                                                                               -14.90
                                                                                                                                                               144.27
                     3 27 14 2905.97
23 28 37 3671.26
        100.00
                                                    -27.95
                                                                     89.53
                                                                                  246.92
                                                                                                                                               -29.19
                                                                                                    78.96
                                                                                                              4 15 40
                                                                                                                                2306.0
                                                                                                                                                                80.95
                                                                                                   78.90 4 15 45
61.34 24 29 49
84.11 6 9 49
56.01 24 45 1
        100.00
                                                      -8.88
                                                                                  239.71
                                                                   137.95
                                                                                                                                3071.3
                                                                                                                                               -12.64
                                                                                                                                                               131.18
                    5 27 40 2529.12
23 44 40 3620.88
        110.00
                                                    -33.73
                                                                     61.91
                                                                                  247.92
                                                                                                                                1929.1
                                                                                                                                               -34.18
                                                                                                                                                                52.70
        110.00
                                                     -3.89
                                                                   131.08
                                                                                                                                               -8.33
                                                                                  236.65
                                                                                                                                3020.9
    DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 5425.5 SGR 426.5 SG3 131.4

RRT .2530 RRF .2280 RTF .9063

SGB 5442.2 R23 -.0027 R13 .9063

SGI 5426.5 SG2 412.6 THA 1.15
     TDE 2.2536 TRA 1.4822 TC3-4.5170 BAU 1.2840
                                                                                                                            ST 2870.7 SR 407.8 SS 608.4
CRT .9579 CRS -.8925 CST -.9837
     ROE .3274 RRA -.0683 RC3 .0933 FAU .01975
FOE .6214 FRA .7765 FC3 -.8045 BSP 17539
                                                                                                                           LSA 2958.3 MSA 158.7 SSA 20.0
EL1 2897.2 EL2 116.1 ALF 7.76
     BOE 2.2773 BRA 1.4837 BC3 4.5180 FSP -439
 LAUNCH DATE DEC 25 1965
                                                                           FLIGHT TIME 184.00
                                                                                                                                       ARRIVAL DATE JUN 27 1966
   MELIOCENTRIC CONIC
                                                                           DISTANCE 542.968
    RL 147.14 LAL .00 LOL 93.00 VL 26.244 GAL 3.94 AZL 86.84 HCA 275.40 SMA 119.00 ECC .24571 INC 3.1610 V1 30.280 RP 108.60 LAP -3.15 LOP 8.40 VP 36.453 GAP 13.33 AZP 89.70 TAL 167.69 TAP 83.08 RCA 89.76 APO 148.24 VZ 34.895 RC 192.167 GL 17.61 GP -4.00 ZAL 66.71 ZAP 174.48 ETS 315.12 ZAE 131.58 ETE 183.90 ZAC 107.23 ETC 167.82 CLP-176.20
   PLANETOCENTRIC CONIC
     C3 22.765 VHL 4.771 DLA 26.92 RAL 18.53 RAD 6567.9 VEL 12.006 PTH 2.14 VHP 8.644 DPA -1.63 RAP 14.07 ECC 1.3747
    C3 22.765 VML 4.771 ULA 20.92 RAL 10.93 RAU 0301.9 VEL 12.000 FIN 2.14 VIII CHAPATH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 41 4 3312.41 -24.34 118.51 250.99 75.07 2 36 17 2712.4 -26.16 110.31
         90.00
                    23 1 4
                                   3822.72
                                                    -11.83
                                                                   150.61
                                                                                  246.10
                                                                                                   64.08 24 4 47
                                                                                                                                3222.7
                                                                                                                                               -15.22
       100 00
                    3 35 56 2942.12
                                                    -27:46
                                                                    92.10
                                                                                  251.83
                                                                                                   77.69
                                                                                                              4 24 58
                                                                                                                                2342.1
                                                                                                                                               -28.88
                                                                                                                                                                83.59
       100.00
                    23 48 53
                                   3668.25
                                                      -8.98
                                                                   137.78
                                                                                244.61
                                                                                                   61.37 24 50 2
82.81 6 21 17
                                                                                                                                3066.2
                                                                                                                                               -12.74
       110.00
                   5 38 39 2558.13
                                                    -33.51
                                                                    64.15
                                                                                 253.03
                                                                                                                                1958.1
                                                                                                                                               -34.14
                                                                     HID-COURSE EXECUTION ACCURACY
       110.00
                     0 6 36
                                   3624.99
                                                                   131.30
                                                                                                                                3025.0
                                                                                                                                               -8.17
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      RRT .2776 RRF .2526 RTF .9103
SGB 5462.3 R23 -.0016 R13 .9103
SGI 5446.8 SG2 412.2 THA 1.26
    TDE 2.3063 TRA 1.7781 TC3-4.2241 BAU 1.2858
                                                                                                                            ST 2863.7 SR 415.1 SS 599.7
    ROE .3450 RRA -.0622 RC3 .0775 FAU .01832
FOE .6086 FRA .8222 FC3 -.6969 BSP 17580
                                                                                                                          CRT .9499 CRS -.8832 CST -.9850
                                                                                                                         LSA 2950.5 MSA 164.8 SSA 19.1
Fil 2890.8 EL2 128.5 ALF 7.86
    BOE 2.3319 BRA 1.7792 BC3 4.2249 FSP -427
LAUNCH DATE DEC 25 1965
                                                                          FLIGHT TIME 186.00
                                                                                                                                      ARRIVAL CATE JUN 29 1966
   HELIOCENTRIC CONIC
                                                                         015TANCE 548.307
    RL 147.14 LAL .00 LOL 93.00 VL 26.196 GAL 4.65 A7L 86.89 HCA 278.58 SMA 118.74 ECC .25179 INC 3.1063 V1 30.280 RP 108.57 LAP -3.07 LOP 11.59 VP 36.430 GAP 13.75 A7P 89.54 TAL 165.87 TAP 84.45 RCA 88.84 APO 148.63 V2 34.906 RC 194.054 GL 16.59 GP -3.90 ZAL 63.60 ZAP 175.03 ETS 309.88 ZAE 131.69 ETE 183.85 ZAC 109.58 ETC 167.90 CLP-176.93
   PLANETOCENTRIC CONIC
    C3 24.562 VHL 4.956 OLA 27.15 RAL 22.08 RAD 6568.0 VEL 12.081 PTH 2.16 VHP 8.898 DPA
                                                                                                                                   -.54 RAP 16.26 ECC 1.4042
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 48 38 3352.88
23 21 49 3819.41
3 45 47 2975.23
                                                                                                73.89 2 44 31
64.13 24 25 29
76.56 4 35 22
61.33 1 12 30
81.58 6 33 21
        90.00
                                                                             255.79
                                                   -23.61
                                                                 121.25
                                                                                                                                                           113.14
                                                                                                                                           -25.59
                                                                                                                            2752.9
        90.00
                                                   -11.93
                                                                                 251.09
                                                                  150.42
                                                                                                                               3219.4
                                                                                                                                              -15.31
                                                                                                                                                             143.38
      100.00
                                                                              256.76
                                                   -26.95
                                                                   94.43
                                                                                                                               2375.2
                                                                                                                                             -28.53
                                                                                                                                                             85.99
      100.00
                     0 11 17
                                  3672.29
                                                    -8.85
                                                                  138.01
                                                                                 249.48
                                                                                                                               3072.3
                                                                                                                                              -12.61
                                                                                                                                                             131.24
                     5 50 16 2585.71
0 23 18 3634.58
      110.00
                                                   -33.25
                                                                   66.26
                                                                                258.17
                                                                                                                               1985 7
                                                                                                                                             -34.06
                                                                                                                                                              57.11
      110.00
                                                     -3.37
                                                                  131.80
                                                                                 246.13
                                                                                                   55.96
                                                                                                             1 23 53
                                                                                                                               3034.6
                                                                                                                                              -7.82
                                                                                                                                                             125.53
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SCT 5461.6 SCR 430.7 SC3 125.0
RRT .3013 RRF .2762 RTF .9147
SCB 5478.6 R23 -.0010 R13 .9147
SCI 5463.2 SC2 410.5 THA 1.37
    TDE 2.3493 TRA 2.0862 TC3-3.9212 BAU 1.2878
                                                                                                                          5T 2837.5 SR 420.8 SS 588.7
CRT .9413 CRS -.8736 CST -.9861
   ROE .3635 RRA -.0544 RC3 .0626 FAU .01702
FOE .5942 FRA .8671 FC3 -.5998 BSP 17704
BOE 2.3773 BRA 2.0869 BC3 3.9217 FSP -419
                                                                                                                          LSA 2923.3 MSA 171.5 SSA 18.1
EL1 2865.1 EL2 140.7 ALF 7.97
LAUNCH DATE DEC 25 1965
                                                                          FLIGHT TIME 188.00
                                                                                                                                      ARRIVAL DATE JUL 1 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 553.585
   RL 147.14 LAL .00 LOL 93.00 VL 26.150 GAL 5.39 AZL 86.95 HCA 281.76 SHA 118.48 ECC .25848 INC 3.0507 V1 30.280 RP 108.53 LAP -2.99 LOP 14.77 VP 36.408 GAP 14.20 AZP 89.38 TAL 164.08 TAP 85.84 RCA 87.85 APO 149.10 V2 34.918 RC 195.918 GL 15.56 GP -3.81 ZAL 60.59 ZAP 175.53 ETS 303.27 ZAE 131.78 ETE 183.81 ZAC 111.93 ETC 167.94 CLP-177.66
  PLANETOCENTRIC CONIC
   C3 26.692 VHL 5.166 DLA 27.28 RAL 25.53 RAD 6568.1 VEL 12.168 PTH
                                                                                                    2.18 VHP 9.173 DPA
                                                                                                                                     .54 RAP 18.45 FCC 1.4393
   LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    1 58 2 3387.79
                                                   -22.93
                                                                               260.63
                                                                                                                                                         115.55
                                                                  123.58
                                                                                                  72.91
                                                                                                              2 54 30
                                                                                                                              2787.8
                                                                                                                                           -25.05
                  23 39 55 3825.59
3 56 48 3004.90
       90.00
                                                   -11.74
                                                                  150.78
                                                                                256.01
                                                                                                  64.05 24 43 40
                                                                                                                               3225.6
                                                                                                                                              -15.14
                                                                                                                                                             143.75
      100.00
                                                   -26.47
                                                                   96.50
                                                                                 261.72
                                                                                                   75.57
                                                                                                              4 46 53
                                                                                                                               2404.9
                                                                                                                                              -28.19
                                                                                                                                                              88.13
      100.00
                    0 27 45
                                                   -8.48
                                 3683.70
                                                                  138.65
                                                                                254.30
                                                                                                  61.23
                                                                                                            1 29 9
                                                                                                                               3083.7
                                                                                                                                              -12.25
                                                                                                                                                             131.90
                                                                                                            6 45 58
1 39 27
      110.00
                    6 2 26
                                 2611.79
                                                  -32.98
                                                                   68.25
                                                                                263.32
                                                                                                  80.44
                                                                                                                               2011.8
                                                                                                                                              -33.94
                                                                                                                                                              59.14
      110.00
                    0 38 37
                                 3649.58
                                                                  132.58
                                                                                250.81
                                                                                                  55.92
                                                                                                                               3049.6
                                                                                                                                               -7.25
                                                                                                                                                             126.33
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 5472.9 SGR 431.2 SG3 121.9

RRT .3249 RRF .3000 RTF .9191

SGB 5489.9 R23 -.0003 R13 .9191

SGI 5474.7 SG2 407.7 THA 1.47
   TDE 2.3872 TRA 2.4118 TC3-3.6064 BAU 1.2871
                                                                                                                          ST 2799.4 SR 424.9 SS 577.4
CRT .9321 CRS -.8634 CST -.9871
   ROE .3828 RRA -.0448 RC3 .0490 FAU .01573
FDE .5799 FRA .9135 FC3 -.5102 BSP 17798
                                                                                                                          LSA 2884.1 MSA 178.7 SSA 17.2
   BDE 2.4177 BRA 2.4123 BC3 3.6067 FSP -410
                                                                                                                          EL1 2827.3 EL2 152.4 ALF 8.08
```

ARRIVAL CATE JUL 3 1966

```
FLIGHT TIME 190.00
LAUNCH DATE DEC 25 1965
                                                                        DISTANCE 558.792
   RE 147.14 LAL .00 LOL 93.00 VL 26.105 GAL 6.17 A7L 87.01 MCA 284.95 SMA 118.23 ECC .26583 INC 2.9936 V1 30.280 RP 108.49 LAP -2.89 LOP 17.96 VP 36.387 GAP 14.69 A7P 89.23 TAL 162.31 TAP 87.26 RCA 86.80 APO 149.66 V2 34.930 RC 197.761 GL 14.52 GP -3.73 ZAL 57.69 ZAP 175.94 ETS 295.00 ZAE 131.87 ETE 183.78 ZAC 114.28 ETC 167.94 CLP-178.41
   HELIOCENTRIC CONIC
    C3 29.207 VML 5.404 DLA 27.34 RAL 28.85 RAD 6568.2 VEL 12.271 PTH 2.21 VMP 9.470 DPA 1.61 RAP 20.65 ECC 1.4807 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   PLANETOCENTRIC CONIC
                                                                               265.50
                                                                125.46
                    2 9 30 3416.17
                                                  -22.35
        90.00
                                                                                                                                                           144.74
                                                                                                          24 59 0
                                                                                                                             3242.1
                                                                                                                                            -14.68
                                                                                                 63.84
                                                                 151.74
                                                                               260.82
                   23 54 58 3842.09
4 8 58 3031.02
                                                  -11.25
        90.00
                                                                                                                                                            90.00
                                                                                                          4 59 29
1 43 49
                                                                                                 74.73
                                                                                                                             2431.0
                                                                                                                                            -27.85
                                                  -26.01
                                                                  98.31
                                                                               266.69
       100.00
                                                                                                                                                           132.97
                                                                                                                             3102.5
                                                                                                                                            -11.66
                                                                                                 61.07
                                                    -7.86
                                                                 139.70
                                                                               259.03
                                  3702.47
                    0 42 7
       100.00
                                                                                                          6 59 D
1 53 40
                                                                                                                                                            61.05
                                                                                                                             2036.4
                                                                                                                                           -33.80
                                                                                                 79.37
                                                                               268.45
                                                   -32.68
                                                                  70.11
       110.00
                    6 15 4 2636.44
                                                                                                                                                           127.40
                                                                                                                            3069.8
                                                                                                                                            -6.49
                                                                                                55.87
                                                                               255.44
                                                   -2.03
                                                                 133.64
                    0 52 30 3669.82
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5479.8 SGR 430.7 SG3 118.9
RRT .3484 RRF .3240 RTF .9238
SGB 5496.7 R23 .0005 R13 .9238
SG1 5481.9 SG2 403.6 THA 1.58
                                                                                                                         ST 2751.0 SR 427.2 S5 566.3
CRT .9221 CRS -.8529 CST -.9881
    TOE 2.4200 TRA 2.7565 TC3-3.2871 BAU 1.2836
    RDE .4028 RRA -.0334 RC3 .0371 FAU .01449
FDE .5661 FRA .9616 FC3 -.4294 BSP 17890
BDE 2.4533 BRA 2.7567 BC3 3.2873 FSP -402
                                                                                                                        LSA 2834.8 MSA 186.0 SSA 16.3
                                                                                                                         EL1 2779.1 EL2 163.6 ALF 8.18
                                                                                                                                    ARRIVAL DATE JUL 5 1966
                                                                         FLIGHT TIME 192.00
LAUNCH DATE DEC 25 1965
    RL 147.14 LAL .00 LOL 93.00 VL 26.060 GAL 7.01 AZL 87.07 HCA 288.14 SMA 117.98 ECC .27392 INC 2.9348 V1 30.280 RP 108.45 LAP -2.79 LOP 21.15 VP 36.367 GAP 15.22 AZP 89.09 TAL 160.56 TAP 88.70 RCA 85.66 APO 150.30 V2 34.942 RC 199.580 GL 13.50 GP -3.66 ZAL 54.91 ZAP 176.25 ETS 284.93 ZAE 131.94 ETE 183.74 ZAC 116.62 ETC 167.90 CLP-179.16
                                                                         DISTANCE 563.915
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 32.170 VML 5.672 DLA 27.32 RAL 32.04 RAD 6568.3 VEL 12.391 PTH 2.24 VMP 9.794 DPA 2.66 RAP 22.84 ECC 1.5294
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 22 57
                                                                                                           3 20 15
                                                                                               71.57
                                                                               270.39
                                                   -21.89
                                                                 126.89
                                   3437.96
        en nn
                                                                                                                                                            146.33
                                                                                                                              3268.8
                                                                                                                                             -13.92
                                                                                                  63.53
                                                                                                             1 15 21
                                                   -10.44
                                                                  153.29
                                                                                265.48
                                   3868.80
        90.00
                                                                                                                                                             91.61
                                                                                                           5 13 2
1 56 31
7 12 22
                                                                                                                              2453.8
                                                                                                                                            -27.54
                                                                                                  74.01
                                                                                271.65
                                                   -25.59
                                                                   99.87
                                   3053.76
       100.00
                     4 22 8
                                                                                                                                                           134.45
                                                                                                                                            -10.64
                                                                                                                              3128.2
                                                                                263.65
                                                                                                  60.87
                     0 54 22
                                                    -7.01
                                                                  141.14
                                   3728.24
       100.00
                                                                                                                                                             62.86
                                                                                                                                           -33.64
                                                                                                                             2059.8
                                                                                273.55
                                                                                                  78.38
                                                   -32.37
                                                                   71.86
                                                                    MID-COURSE EXECUTION ACCURACY
SGT 5483.9 SGR 100
                                   2659.78
       110.00
                     6 28 2
                                                                                                                                              -5.54
                                                                                                                             3095.0
                     1 4 58
                                 3694.98
                                                    -1.06
                                                                  134.95
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2698.9 SR 427.8 SS 556.8
                                                                     SGT 5483.9 SGR 429.4 SG3 116.0
RRT .3723 RRF .3488 RTF .9284
SGB 5500.7 R23 .0013 R13 .9284
     TOE 2.4524 TRA 3.1253 TC3-2.9646 BAU 1.2751
                                                                                                                          CRT .9115 CRS -.8423 CST -.9891
    RDE .4234 RRA -.0198 RC3 .0269 FAU .01322
FDE .5542 FRA 1.0134 FC3 -.3557 BSP 17875
                                                                                                                          LSA 2781.9 MSA 193.3 SSA 15.4
                                                                                                                          ELI 2727.0 EL2 174.1 ALF
                                                                     SG1 5486.2 SG2 398.3 THA 1.68
     BDE 2.4887 BRA 3.1254 BC3 2.9647 FSP -391
                                                                                                                                    ARRIVAL DATE JUL 7 1966
                                                                          FLIGHT TIME 194.00
 LAUNCH DATE DEC 25 1965
     RELIGIONNE TOD LOU 93.00 VE 26.016 GAE 7.89 AZE 87.13 MCA 291.33 SMA 117.74 ECC .28285 INC 2.8738 VI 30.280 RP 108.41 LAP -2.68 LOP 24.35 VP 36.347 GAP 15.81 AZP 88.95 TAE 158.85 TAP 90.17 RCA 84.44 APO 151.05 V2 34.955 RC 201.376 GE 12.50 GP -3.59 ZAE 52.27 ZAP 176.41 ETS 273.30 ZAE 132.00 ETE 183.71 ZAC 118.95 ETC 167.82 CLP-179.93
                                                                         DISTANCE 568.938
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 35.656 VHL 5.971 DLA 27.22 RAL 35.08 RAD 6568.4 VEL 12.531 PTH 2.27 VHP 10.148 DPA
                                                                                                                                  3.68 RAP 25.04 ECC 1.5868
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             71.16 3 35 38
63.15 1 25 5
                                                                              275.30
                                                                 127.94
                                   3454.02
                                                   -21.54
                      2 38 4
         90.00
                                                                                                                              3304.6
                                                                                                                                            -12.88
                                                                                                                                                            148.45
                                                                                 269.98
                                                                  155.35
                      0 20 0 3904.64
                                                    -9.35
                                                                                                  73.39 5 27 20
60.65 2 7 20
         90.00
                                                                                                                                             -27.25
                                                                                                                                                             93.01
                                                                                                                              2473.5
                                                                                 276.58
                     4 36 6 3073.52
1 4 39 3760.38
                                                                 101.22
                                                    -25.22
        100.00
                                                                                                                                                            136.27
                                                                                                                              3160.4
                                                                                                                                              -9.81
                                                                     77.44 7 25 55
77.44 7 25 55
80 264.42 55.82 2 18 6
MID-COURSE EXECUTION ACCURACY
SGT 5482.5 SGR 426.9 563
RRT . 5956
                                                                                 268.15
                                                    -5.94
                                                                  142.93
        100.00
                                                                                                                                                             64.56
                                                                                                                              2082.0
                                                                                                                                            -33.45
                     6 41 13 2682.00
1 16 2 3724.66
                                                    -32.06
                                                                    73.52
        110.00
                                                                                                                                                            130.29
                                                                                                                              3124.7
                                                                                                                                             -4.41
                                                      .07
                                                                  136.50
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2636.7 SR 426.3 SS 547.0
CRT .9000 CRS -.8309 CST -.9900
      TOE 2.4774 TRA 3.5116 TC3-2.6543 BAU 1.2653
                                                                      RRT .3956 RRF .3725 RTF .9333
SCB 5499.1 R23 .0016 R13 .9333
SCI 5485.1 SC2 391.9 THA 1.77
      ROE .4443 RRA -.0045 RC3 .0183 FAU .01204
FDE .5415 FRA 1.0662 FC3 -.2924 BSP 17928
                                                                                                                         LSA 2719.0 MSA 200.3 SSA 14.7
                                                                                                                          ELI 2664.6 ELZ 183.8 ALF
                                                                                                                                                                8.32
      BOE 2.5170 BRA 3.5116 BC3 2.6543 FSP -382
                                                                                                                                     ARRIVAL DATE JUL 9 1966
                                                                           FLIGHT TIME 196.00
  LAUNCH DATE DEC 25 1965
                                                                           DISTANCE 573.843
     RE 147.14 LAL .00 LOL 93.00 VL 25.973 GAL 8.84 AZL 87.19 MCA 294.52 SMA 117.51 ECC .29272 INC 2.8101 VI 30.280 RP 108.37 LAP -2.56 LOP 27.54 VP 36.329 GAP 16.44 AZP 88.83 TAL 157.17 TAP 91.69 RCA 83.11 APO 151.91 V2 34.968 RC 203.147 GL 11.51 GP -3.53 ZAL 49.76 ZAP 176.40 ETS 260.87 ZAE 132.04 ETE 183.69 ZAC 121.27 ETC 167.70 CLP 179.29
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                   4.69 RAP 27.23 ECC 1.6543
      C3 39.759 VML 6.305 DLA 27.07 RAL 37.96 RAD 6568.5 VEL 12.694 PTH 2.31 VMP 10.535 DPA
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -23.69
                                                                                                  70.86
                                                                   128.70
                                                                                 280.18
                      2 54 19 3465.82
                                                    -21.27
          90.00
                                                                                                                                                             150.99
                                                                                                                               3347.9
                                                                                                                                              -11.60
                                                                                                               1 32 33
                                                                                                   62.75
                                                                   157.82
                                                                                  274.33
                      0 26 45
                                    3947.89
                                                     -8.01
          90.00
                                                                                                                                              -26.98
                                                                                                                                                              94.23
                                                                                                               5 42 9
                                                                                                                               2490.9
                                                                                                   72.86
                                                                   102.39
                                                                                  281.47
                     4 50 38 3090.86
                                                    -24.87
         100.00
                                                                                                                                                             138.40
                                                                                                               2 16 26
                                                                                                                               3198.1
                                                                                                                                               -8.58
                                                                                                   60.44
                                                                   145.01
                                                                                  272.51
                       1 13 8
                                    3798.08
                                                     -4.68
         100.00
                                                                                                                               2103.3
                                                                                                                                              -33.25
                                                                                                                                                              66.19
                                                                                                              7 39 32
                                                                                                   76.56
                                                                    75.09
                                                                                 283.59
                                  2703.30
                                                    -31,73
                      6 54 29
         110.00
                                                                                                                               3158.4
                                                                                                                                              -3.13
                                                                                                                                                             132.06
                                                                                                              2 28 24
                                                                                 268.76
                                                                                                  55.84
                                                                   138.26
                       1 25 46
                                  3758.40
                                                     1.36
         110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                       SGT 5476.4 SGR 423.3 SG3 110.4
RRT .4184 RRF .3963 RTF .9384
                                                                                                                           ST 2569.9 SR 422.9 55 538.5
CRT .8876 CR5 -.8193 CST -.9910
       TOE 2.4982 TRA 3.9242 TC3-2.3527 BAU 1.2506
      RDE .4653 RRA .0129 RC3 .0114 FAU .01089
FOE .5299 FRA 1.1221 FC3 -.2372 BSP 17995
                                                                                                                           LSA 2651.4 HSA 206.8 SSA 13.9
                                                                     SCB 5492.8 RZ3 .0019 R13 .9384
SG1 5479.3 SG2 384.2 THA 1.86
                                                                                                                          EL1 2597.3 EL2 192.7 ALF 8.36
```

BOE 2.5412 BRA 3.9243 BC3 2.3527 FSP -374

```
LAUNCH CATE DEC 25 1965
                                                                                       FLIGHT TIME 198.00
                                                                                                                                                            ARRIVAL CATE JUL 11 1966
    HELIOCENTRIC CONIC
                                                                                      CISTANCE 578.608
     RL 147.14 LAL ... .00 LOL 93.00[VL 25.931 GAL 9.86 A7L 87.26 MCA 297.71 SMA 117.28 ECC .30365 INC 2.7429 VI 30.280
RP 108.33 LAP -2.43 LOP 30.74 VP 36.311 GAP 17.14 A7P 88.72 TAL 155.54 TAP 93.25 RCA 81.67 APO 152.89 V2 34.981
RC 204.893 GL 10.55 GP -3.47 ZAL 47.40 ZAP 176.22 ETS 248.80 ZAE 132.06 ETE 183.66 ZAC 123.56 ETC 167.53 CLP 178.49
     PLANETOCENTRIC CONIC
      C3 44.594 VHL 6.678 CLA 26.85 RAL 40.68 RAC 6568.7 VEL 12.883 PTH 2.35 VMP 10.961 CPA
                                                                                                                                                        5.67 RAP 29.42 FCC 1.7339
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       3 11 9 3474.85

0 31 36 3996.74

5 5 27 3106.39

1 20 0 3840.43

7 7 42 2723.88

1 34 14 3795.71
                                                                              4 9 4
62.37 1 38 13
286.29 72.40 5 57 13
147.35 276.75 60.27 2 24 0
76.60 288.50 75.73 7 55 5
140.21 272.99 55.92 2 37 30
MIC-COURSE EXECUTION ACCURACY
3GT 5466.8 3GR 418.7 3G3 107
RRT .4413 RRF .4207
3G8 5482
          90.00
                                                            -21.07
                                                                            129.29
                                                                                                                                                 2874.9
                                                                                                                                                                    -23.52
                                                                                                                                                                                    121.47
          90.00
                                                             -6.48
                                                                             160.60
                                                                                                                                                    3396.7
                                                                                                                                                                      -10.13
                                                                                                                                                                                       153.42
         100.00
                                                           -24.56
                                                                             103.44
                                                                                                                                                  2506.4
                                                                                                                                                                     -26.73
                                                                                                                                                                                        95.32
         100.00
                                                              -3.25
                                                                             147.35
                                                                                                                                                    3240.4
                                                                                                                                                                      -7.14
                                                                                                                                                                                      140.77
        110.00
                                                           -31.40
                                                                                                                                                    2123.9
                                                                                                                                                                      -33.04
                                                                                                                                                                                        67.76
        110.00
                                                                             140.21
                                                                                                                                                    3195.7
                                                                                                                                                                     -1.71
                                                                                                                                                                                       134 00
    DIFFERENTIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5466.8 SGR 418.7 SG3 107.7 ST 2502.1 SR 417.6 SS 531.6 RRT .4413 RRF .4202 RTF .9434 CRT .8745 CRS -.8076 CST -.9920 SGB 5482.8 R23 .0021 R13 .9434 LSA 2583.1 MSA 212.4 SSA 13.2 SG1 5469.9 SG2 375.5 THA 1.95 EL1 2528.8 EL2 200.4 ALF 8.36
     TOE 2.5184 TRA 4.3636 TC3-2.0650 BAU 1.2311
     ROE .4866 RRA .0323 RC3 .0060 FAU .00975
FOE .5196 FRA 1.1819 FC3 -.1894 B3P 18032
B0E 2.5649 BRA 4.3637 BC3 2.0650 FSP -366
                                                                                       FLIGHT TIME 200.00
LAUNCH DATE DEC 25 1965
                                                                                                                                                            ARRIVAL CATE JUL 13 1966
    HELIOCENTRIC CONIC
                                                                                      DISTANCE 583.203
                            .00 LOL 93.00 VL 25.890 GAL 10.95 AZL 87.33 HCA 300.91 SMA 117.06 ECC .31578 INC 2.6717 V1 30.280 -2.29 LOP 33.93 VP 36.295 GAP 17.92 AZP 88.63 TAL 153.96 TAP 94.87 RCA 80.10 APO 154.03 V2 34.994 9.82 GP -3.42 ZAL 45.18 ZAP 175.86 ETS 238.03 ZAE 132.05 ETE 183.63 ZAC 125.84 ETC 167.32 CLP 177.66
     RL 147.14 LAL
     RP 108.29 LAP
     RC 206.614 GL
    PLANETOCENTRIC CONIC
     C3 50.308 VHL 7.093 OLA 26.59 RAL 43.23 RAO 6568.9 VEL 13.102 PTH
                                                                                                                    2.39 VHP 11.431 OPA
                                                                                                                                                        6.63 RAP 31.60 ECC 1.8279
     C3 50.308 VPL 7.093 OLA 26.59 RAL 43.23 RAD 6568.9 VEL 13.102 PTM 2.39 VPP 11.431 OPA 6.63 RAP 31.60 ECC 1.8279 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 28 8 3482.33 -20.90 129.77 289.80 70.45 4 26 10 2882.3 -23.38 121.97 90.00 0 34 58 4049.63 -4.80 163.58 282.56 62.06 1 42 28 3449.6 -8.50 156.85 100.00 5 20 20 3120.64 -24.26 104.39 291.03 71.98 6 12 20 2520.6 -26.50 96.31 100.00 1 25 28 3886.56 -1.69 149.88 280.85 60.15 2 30 14 3286.6 -5.65 143.33 110.00 7 20 44 2743.90 -31.05 78.06 293.31 74.93 8 6 28 2143.9 -32.80 69.28 110.00 1 41 33 3836.06 4.32 142.32 277.11 56.06 2 45 29 3236.1 -.16 136.11
                                                                                74.93 8 6 28

-2.32 277.11 56.06 2 45 29

MID-COURSE EXECUTION ACCURACY

SGT 5454.6 SGR 413.2 227
   DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                SGT 5454.6 SGR 413.2 SG3 105.2

RRT .4645 RRF .4445 RTF .9486

SGB 5470.2 R23 .0022 R13 .9486

SGI 5458.0 SG2 365.7 THA 2.02
     TOE 2.5416 TRA 4.8365 TC3-1.7900 BAU 1.2039
                                                                                                                                             ST 2437.1 SR 410.6 SS 527.4
CRT .8610 CRS -.7961 CST -.9930
     ROE .5080 RRA .0539 RC3 .0022 FAU .00858
FDE .5117 FRA 1.2471 FC3 -.1477 BSP 17975
                                                                                                                                            LSA 2517.7 MSA 216.9 SSA 12.5
EL1 2462.8 EL2 206.6 ALF 8.31
     BDE 2.5919 BRA 4.8368 BC3 1.7900 FSP -356
LAUNCH DATE DEC 25 1965
                                                                                      FLIGHT TIME 202.00
                                                                                                                                                           ARRIVAL DATE JUL 15 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 587.591
     RL 147.14 LAL .00 LOL 93.00 VL 25.849 GAL .12.14 AZL 87.40 HCA 304.11 SMA 116.85 ECC .32929 INC 2.5954 VI 30.280 RP 108.25 LAP -2.15 LOP 37.13 VP 36.279 GAP 18.77 AZP 88.54 TAL 152.45 TAP 96.56 RCA 78.37 APO 155.32 V2 35.007
     RC 208.309 GL
                               8.71 CP -3.37 ZAL 43.10 ZAP 175.36 ETS 228.99 ZAE 132.01 ETE 183.60 ZAC 128.08 ETC 167.05 CLP 176.81
   PLANETOCENTRIC CONIC
     C3 57.081 VHL 7.555 OLA 26.29 RAL 45.61 RAO 6569.0 VEL 13.358 PTH 2.44 VHP 11.952 OPA
                                                                                                                                                       7.55 RAP 33.76 ECC 1.9394
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                                                                                                                70.29
                                                                                                                              4 43 4
1 45 35
                        3 44 55 3489.10
                                                           -20.75
                                                                            130.21
                                                                                          294.47
                                                                                                                                                  2889.1
                                                                                                                                                                   -23.25
                                                                                                                                                                                     122.43
                       0 37 10 4105.35
5 35 3 3134.01
         90.00
                                                            -3.01
                                                                             166.70
                                                                                              286.47
                                                                                                                  61.83
                                                                                                                                                   3505.3
                                                                                                                                                                                      160.02
                                                                                                                  71.59 6 27 17
60.11 2 35 18
        100.00
                                                           -23.98
                                                                            105.29
                                                                                              295.68
                                                                                                                                                  2534.0
                                                                                                                                                                    -26.27
                                                                                                                                                                                       97.24
                        1 29 42 3935.67
7 33 29 2763.47
1 47 46 3878.97
        100.00
                                                             -.03
                                                                            152.58
                                                                                             284.81
                                                                                                                                                   3335.7
                                                                                                                                                                     -4.00
                                                                                                                                                                                      146.05
        110.00
                                                                                                                  74.16 8 19.32
56.28 2 52 25
                                                           -30.70
                                                                             79.48
                                                                                              298.00
                                                                                                                                                   2163.5
                                                                                                                                                                                       70.75
                                                                                                                                                                   - 32 . 56
        110.00
                                                           5.95
                                                                            144.58
                                                                                              281.10
                                                                                                                                                                       1.48
                                                                                                                                                                                      138.35
   DIFFERENTIAL CORRECTIONS
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                               SCT 5436.3 SCR 406.6 SC3 102.8

RRT .4870 RRF .4681 RTF .9537

SCB 5451.5 R23 .0019 R13 .9537

SCI 5440.0 SC2 354.9 THA 2.09
     TOE 2.5616 TRA 5.3395 TC3-1.5353 BAU 1.1716
                                                                                                                                              ST 2359.5 SR 401.7 SS 524.3
    RCE .5291 RRA .0773 RC3 -.0004 FAU .00745
FOE .5041 FRA 1.3161 FC3 -.1130 BSP 18008
BOE 2.6157 BRA 5.3400 BC3 1.5353 FSP -348
                                                                                                                                             CRT .8468 CRS -.7843 CST -.9939
                                                                                                                                           LSA 2449.9 MSA 220.3 SSA 11.9
EL1 2394.0 EL2 211.5 ALF 8.23
LAUNCH DATE DEC 25 1965
                                                                                      FLIGHT TIME 204.00
                                                                                                                                                           ARRIVAL DATE JUL 17 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 591.727
    RL 147.14 LAL
RP 108.21 LAP
          147.14 LAL .00 LOL 93.00 VL 25.810 GAL 13.43 AZL 87.49 HCA 307.31 SMA 116.64 ECC .34438 INC 2.5131 VI 30.280 108.21 LAP -2.00 LOP 40.34 VP 36.264 GAP 19.73 AZP 88.48 TAL 151.02 TAP 98.34 RCA 76.47 APO 156.81 V2 35.020 209.976 GL 7.84 GP -3.32 ZAL 41.18 ZAP 174.73 ETS 221.64 ZAE 131.93 ETE 183.58 ZAC 130.28 ETC 166.73 CLP 175.91
    RC 209.976 GL
   PLANETOCENTRIC CONIC
    C3 65.145 VHL 8.071 DLA 25.95 RAL 47.81 RAD 6569.2 VEL 13.656 PTH 2.50 VHP 12.533 DPA 8.45 RAP 35.91 ECC 2.0721 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        4 1 16
                                      3495.65
4162.95
                                                                                        299.02
                                                                                                             70.13
                                                           -20.60
                                                                                                                              4 59 32
                                                                            130.63
                                                                                                                                                                -23.12
                                                                                                                                               2895.7
                       0 38 22
                                                           -1.16
                                                                            169.91
                                                                                             290.23
                                                                                                                  61.70
                                                                                                                               1 47 45
                                                                                                                                                   3563.0
                                                                                                                                                                      -4.93
       100.00
                       5 49 28
                                       3146.80
                                                          -23.70
                                                                            106.13
                                                                                             300.19
                                                                                                                 71.23
                                                                                                                               6 41 55
                                                                                                                                                   2546.8
                                                                                                                                                                                       98.12
                       1 32 51
                                       3987.04
                                                             1.72
                                                                            155.40
                                                                                             288.63
                                                                                                                  60.15
                                                                                                                              2 39 18
                                                                                                                                                   3387.0
                                                                                                                                                                      -2.27
                                                                                                                                                                                      148.87
                       7 45 52
                                      2782.64
                                                          -30.33
                                                                                                                            8 32 14
                                                                             80.85
                                                                                             302.56
                                                                                                                 73.42
                                                                                                                                                   2182.6
                                                                                                                                                                    -32.30
                                                                                                                                                                                       72.19
                                                                              MID-COURSE EXECUTION ACCURACY
SGT 5414.4 SGR TOTAL
                       1 52 57
                                       3923.96
                                                           7.64
                                                                            146.96
                                                                                                                                                   3324.0
                                                                                                                                                                                      140.70
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ORBIT DETERMINATION ACCURACY
    TOE 2.5848 TRA 5.8815 TC3-1.2978 BAU 1.1303
                                                                               SGT 5414.4 SGR 398.9 SG3 100.4
RRT .5094 RRF .4916 RTF .9589
SGB 5429.1 R23 .0014 R13 .9589
                                                                                                                                             ST 2304.6 SR 391.3 SS 523.7
    ROE .5501 RRA .1029 RC3 -.0019 FAU .00629
FOE .4986 FRA 1.3914 FC3 -.0836 BSP 18009
BOE 2.6427 BRA 5.8824 BC3 1.2978 FSP -341
                                                                                                                                          CRT .8323 CRS -.7729 CST -.9948
LSA 2385.1 MSA 222.3 SSA 11.3
EL1 2327.7 EL2 214.7 ALF '8.11
```

SG1 5418.2 SG2 343.0 THA 2.16

ARRIVAL DATE JUL 19 1966

```
FLIGHT TIME 206.00
LAUNCH DATE DEC 25 1965
                                                                              CISTANCE 595.551
    RL 147.14 LAL .00 LOL 93.00 VL 25.773 GAL 14.84 A7L 87.58 MCA 310.52 SMA 116.44 ECC .36128 INC 2.4233 VI 30.280 RP 108.17 LAP -1.84 LOP 43.54 VP 36.250 GAP 20.80 A7P 88.42 TAL 149.69 TAP 100.21 RCA 74.37 APO 158.51 V2 35.034 RC 211.617 GL 7.00 GP -3.28 ZAL 39.41 ZAP 174.00 ETS 215.73 ZAE 131.80 ETE 183.54 ZAC 132.44 ETC 166.36 CLP 174.97
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 74.796 VML 8.648 DLA 25.57 RAL 49.83 RAD 6569.5 VEL 14.005 PTH 2.56 VMP 13.183 DPA 9.31 RAP 38.02 ECC 2.2310

LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJRT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 17 2 3502.22 -20.44 131.05 303.42 69.97 5 15 24 2902.2 -22.99 123.30

90.00 0 38 45 4221.73 .74 173.19 293.84 61.69 1 49 6 3621.7 -3.05 166.56 100.00 6 3 27 3159.14 -23.43 106.95 304.56 70.88 6 56 6 2559.1 -25.82 98.97 100.00 1 35 1 4040.04 3.51 158.31 292.31 60.30 2 42 21 3440.0 -.47 151.78 110.00 7 57 47 2801.39 -29.96 82.18 306.96 72.71 8 44 29 2201.4 -32.03 73.58 110.00 1 57 10 3970.56 9.38 149.45 288.71 56.98 3 5 20 3370.6 4.97 143.14 DIFFERENTIAL CORRECTIONS

MID-COURSE EXECUTION ACCURACY
   PLANETOCENTRIC CONIC
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2242.7 SR 379.3 SS 525.8
CRT .8177 CRS -.7619 CST -.9956
                                                                           SGT 5388.9 SGR 390.2 SG3 98.1
RRT .5316 RRF .5152 RTF .9639
SGB 5403.0 R23 .0010 R13 .9639
    TOE 2.6126 TRA 6.4678 TC3-1.0785 BAU 1.0784
    ROE .5709 RRA .1306 RC3 -.0024 FAU .00507
                                                                                                                                  LSA 2323.9 MSA 222.7 SSA 10.7
Fil 2264.3 EL2 216.3 ALF 7.95
            .4952 FRA 1.4740 FC3 -.0587 BSP 17994
                                                                                                                                    EL1 2264.3 EL2 216.3 ALF
                                                                           SG1 5392.9 SG2 330.3 THA 2.21
    BOE 2.6742 BRA 6.4691 BC3 1.0785 FSP -333
                                                                                                                                                ARRIVAL DATE JUL 21 1966
                                                                                FI 1CHT TIME 208.00
LAUNCH DATE DEC 25 1965
                                                                                DISTANCE 598.987
    RL 147.14 LAL .00 LOL 93.00 VL 25.736 GAL 16.39 AZL 87.68 MCA 313.72 SMA 116.25 ECC .38029 INC 2.3245 V1 30.280 RP 108.13 LAP -1.68 LOP 46.74 VP 36.237 GAP 22.01 AZP 88.39 TAL 148.48 TAP 102.20 RCA 72.04 APO 160.46 V2 35.047 RC 213.230 GL 6.18 GP -3.24 ZAL 37.81 ZAP 173.16 ETS 210.95 ZAE 131.62 ETE 183.51 ZAC 134.55 ETC 165.93 CLP 173.97
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 86.419 VHL 9.296 DLA 25.17 RAL 51.67 RAD 6569.7 VEL 14.414 PTH 2.62 VHP 13.915 DPA 10.13 RAP 40.10 ECC 2.4222 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       5 30 34
                                                                                       307.64
                                                                                                         69.81
         90.00 4 32 5 3508.84
90.00 0 38 21 4281.14
                                                        -20.29
                                                                       131.47
                                                                                                                                                                          169.88
                                                                                                                       1 49 42
                                                                                                                                         3681.1
                                                                                       297.31
                                                                                                          61.80
                                                                       176.51
                                                          2.66
                                                                                                                    1 49 42
7 9 43
2 44 30
8 56 11
                                                                                                                                                                           99.78
                                                                                                                                         2571.1
                                                                                                                                                          -25.60
                                                                                       308.76
                                                                                                          70.55
                                                                        107.73
                                                        -23.16
                      6 16 52 3171.06
                                                                                                                                                                         154.75
                                                                                                                                         3494.1
                                                                                                                                                           1.36
                                                                       161.30
                                                                                       295.83
                                                                                                          60.54
                                                          5.33
                      1 36 16
                                      4094.15
                                                                                                                                                                          74.93
                                                                                                                                         2219.6
                                                                                                                                                        -31.75
                                                                                       311.18
                                                                                                          72.04
                                                       -29.58
                                                                         83.47
                      8 9 11
2 D 26
                                      2819.63
        110.00
                                                                                                                                                                          145.66
                                                                                                                      3 7 24
                                                                                                                                         3418.3
                                                                                                                                                           6,77
                                                                       152.03
                                                                                       292.31
                                                                                                         57.47
                                                        11.14
                                     4018.34
        110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SCI 5360.1 SCZ 316.7 THA 2.26
                                                                                                                                    ST 2185.8 SR 366.1 SS 531.4
CRT .8036 CRS -.7520 CST -.9964
      TOE 2.6499 TRA 7.1067 TC3 -.8756 BAU 1.0117
     RDE .5916 RRA .1603 RC3 -.0020 FAU .00373
                                                                                                                                    LSA 2268.2 MSA 221.4 55A 10.1
            .4949 FRA 1.5658 FC3 -.0373 BSP 17890
                                                                                                                                    EL1 2205.7 EL2 215.9 ALF 7.74
     BOE 2.7151 BRA 7.1085 BC3 .8756 FSP -324
                                                                                                                                               ARRIVAL DATE JUL 23 1966
                                                                                FLIGHT TIME 210.00
LAUNCH DATE DEC 25 1965
                                                                               DISTANCE 601.935
     RL 147.14 LAL .00 LOL 93.00 VL 25.702 GAL 18.12 A7L 87.79 HCA 316.93 SMA 116.07 ECC .40174 INC 2.2144 V1 30.280 RP 108.09 LAP -1.51 LOP 49.95 VP 36.225 GAP 23.38 A7P 88.38 TAL 147.40 TAP 104.34 RCA 69.44 APO 162.70 V2 35.060 RC 214.816 GL 5.40 GP -3.21 7AL 36.37 7AP 172.22 ETS 207.04 7AE 131.37 ETE 183.47 7AC 136.59 ETC 165.45 CLP 172.91
    HELIOCENTRIC CONIC
     C3 100.518 VHL 10.026 DLA 24.74 RAL 53.31 RAD 6569.9 VEL 14.895 PTH 2.69 VHP 14.743 DPA 10.91 RAP 42.13 ECC 2.6543
    PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     2915.4
                                                                                                       69.66 5 44 58
62.02 1 49 32
70.24 7 22 40
60.90 2 45 46
                                                                                      311.67
                       4 46 22 3515.37
0 37 12 4340.73
                                                        -20.14
                                                                       131.89
          90.00
                                                                                                                                         3740.7
                                                                                                                                                            .79
                                                                                       300.61
                                                          4.57
                                                                       179.84
          90.00
                                                                                                                                                                         100.56
                                                                                                                                      2582.4
                                                                                                                                                         -25.38
                       6 29 38 3182.44
1 36 37 4148.89
                                                                       108.48
                                                                                        312.75
                                                         -22.90
         100.00
                                                                                                                                                                         157.76
                                                                                                                                         3548.9
                                                                                                                                                           3.22
                                                          7.15
                                                                       164.34
                                                                                       299.19
         100.00
                                                                                                                     9 7 16
3 10 32
                                                                                                                                                                           76.22
                                                                                                                                         2237.2
                                                                                                                                                        -31.47
                                                                                                          71.40
                       8 19 59 2837.19
2 2 45 4066.90
                                                        -29.21
                                                                         84.70
                                                                                        315.19
         110.00
                                                                                                                                                                          148.24
                                                                                                                                         3466.9
                                                                                                                                                          8.59
                                                                                                          58.07
                                                                        154.68
                                                                                       295.75
                                                         12.91
         110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                    ST 2129.7 SR 351.5 55 539.6
                                                                            SGT 5326.8 SGR 369.9 SG3 93.9
RRT .5752 RRF .5616 RTF .9735
      TOE 2.6920 TRA 7.7987 TC3 -.6927 BAU .9309
                                                                                                                                    CRT .7897 CRS -.7425 CST -.9971
      RDE .6118 RRA .1918 RC3 -.0012 FAU .00229
FDE .4963 FRA 1.6668 FC3 -.0197 BSP 17871
                                                                                                                                    LSA 2214.1 MSA 218.5 SSA 9.5
                                                                            SGB 5339.7 R23 -.0002 R13 .9735
SG1 5331.1 SG2 302.3 THA 2.29
             .4963 FRA 1.6668 FC3 -.0197 8SP 17871
                                                                                                                                    EL1 2147.9 EL2 213.8 ALF 7.50
      BDE 2.7606 BRA 7.8010 BC3 .6927 FSP
                                                                                                                                                 ARRIVAL DATE JUL 25 1966
                                                                                 FLIGHT TIME 212.00
 LAUNCH DATE DEC 25 1965
                                                                                DISTANCE 604.263
      RL 147.14 LAL .00 LOL 93.00 VL 25.669 GAL 20.04 AZL 87.91 HCA 320.15 SMA 115.90 ECC .42604 INC 2.0902 V1 30.280 RP 108.05 LAP -1.34 LOP 53.16 VP 36.215 GAP 24.94 AZP 88.39 TAL 146.50 TAP 106.65 RCA 66.52 APO 165.28 V2 35.073 RC 216.375 GL 4.65 GP -3.17 ZAL 35.12 ZAP 171.17 ETS 203.81 ZAE 131.03 ETE 183.42 ZAC 138.54 ETC 164.90 CLP 171.76
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                             2.76 VHP 15.686 DPA 11.64 RAP 44.10 ECC 2.9380
      C3 117.761 VHL 10.852 DLA 24.28 RAL 54.76 RAD 6570.2 VEL 15.463 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 59 49 3521.57 -19.99 132.29 315.46 69.51 5 58 30 2921.6 -22.60 124.59
                                                                                                                                                            2.70
                                                                                                                       1 48 36
                                                                                         303.72
                                                                                                           62.37
                                       4400.15
                                                          6.45
                                                                        183.19
                        0 35 16
          90.00
                                                                                                                                                          -25.18
                                                                                                                        7 34 55
                                                                                                                                          2593.1
                                                                                                           69.96
                                                         -22.65
                                                                        109.17
                                                                                         316.51
                                      3193.09
         100.00
                        6 41 42
                                                                                                                                                            5.07
                                                                                                                     2 46 B
9 17 41
                                                                                                                                          3603.9
                                                                                                           61.36
                                                           8.96
                                                                        167.42
                                                                                         302.37
                                       4203.86
                        1 36 4
         100.00
                                                                                                                                                          -31.18
                                                                                                                                          2253.9
                                                                                        318.96
                                                                                                           70.80
                        8 30 7
                                      2853.85
                                                         -28.84
                                                                          85.86
         110.00
                                                                                                                                                           10.41
                                                                                                                                          3515.9
                                                                                                           58.77
                                                                                                                      3 12 44
                                                                        157.40
                                                                                        299.02
                         2 4 8
                                       4115.86
                                                         14.65
         110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MIO-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2077.0 SR 335.9 SS 551.6
CRT .7767 CRS -.7341 CST -.9977
                                                                            SGT 5288.7 SGR 358.2 SG3 92.0
RRT .5962 RRF .5840 RTF .9779
       TOE 2.7463 TRA 8.5559 TC3 -.5270 BAU .8296
       RDE .6318 RRA .2251 RC3 .0002 FAU .00066
                                                                                                                                    LSA 2164.5 MSA 213.9 SSA 8.9
                                                                           SGB 5300.8 R23 -.0009 R13 .9779
SG1 5293.0 SG2 287.3 THA 2.32
       FDE .5011 FRA 1.7798 FC3 -.0048 BSP 17835
BOE 2.8180 BRA 8.5589 BC3 .5270 FSP -311
                                                                                                                                     EL1 2093.5 EL2 209.9 ALF 7.23
```

ARRIVAL CATE JUL 27 1966

```
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 605.796
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 25.639 GAL 22.20 A7L 88.05 MCA 323.36 SMA 115.74 ECC .45369 INC 1.9479 V1 30.280 RP 108.01 LAP -1.16 LOP 56.37 VP 36.206 GAP 26.73 A7P 88.44 TAL 145.81 TAP 109.17 RCA 63.23 APO 168.25 V2 35.086 RC 217.906 GL 3.92 GP -3.14 ZAL 34.06 ZAP 170.01 ETS 201.08 ZAE 130.59 ETE 183.37 ZAC 140.39 ETC 164.31 CLP 170.51
   PLANETOCENTRIC CONIC
    C3 139.041 VHL 11.792 DLA 23.80 RAL 55.98 RAD 6570.5 VEL 16.136 PTH 2.84 VHP 16.767 DPA 12.32 RAP 45.98 ECC 3.2883
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    5 12 22 3527.08
0 32 30 4459.10
                                                                                 318.98
                                                                                                  69.39
                                                                                                             6 11 9
                                                                                                                               2927.1
                                                                                                                                            -22.48
                                                                                                                                                            124.95
                                                   -19.86
                                                                  132.64
        90.00
                                                                                                                                                             179.82
                                                                                                  62.83
                                                                                                             1 46 49
                                                                                                                               3859.1
                                                                                                                                               4.59
                                                                                 306.62
        90.00
                                                    8.30
                                                                  186.54
                    6 52 58 3202.71
1 34 35 4258.71
                                                                                 320.01
                                                                                                  69.70
                                                                                                             7 46 21
                                                                                                                               2602.7
                                                                                                                                              -24.99
                                                                                                                                                             101.94
                                                                  109.80
                                                   -22.43
       100.00
                                                                                                            2 45 34
                                                                                                                               3658.7
                                                                                                  61.93
                                                                                                                                                6.90
                                                                                                                                                             163.84
                                                                                 305.33
      100.00
                                                   10.73
                                                                  170.52
                                                                   86.92
                                                                                 322.45
                                                                                                  70.26
                                                                                                             9 27 21
                                                                                                                               2269.3
                                                                                                                                              -30.91
                                                                                                                                                              78.56
      110.00
                    8 39 32 2869.31
2 4 30 4164.87
                                                  -28.49
                                                                                                            3 13 55
                                                                                 302.09
                                                                                                  59.56
                                                                                                                               3564.9
                                                                                                                                             12.20
                                                                  160.17
      110.00
                                                   16.36
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     SGT 5246.3 SGR 345.4 SG3 90.1
RRT .6166 RRF .6058 RTF .9819
SGB 5257.6 R23 -.0016 R13 .9819
SGI 5250.6 SG2 271.7 THA 2.33
                                                                                                                           ST 2027.5 SR 319.3 SS 567.8
    TOE 2.8166 TRA 9.3883 TC3 -.3778 BAU .7023
    RDE .6517 RRA .2598 RC3 .0018 FAU-.00126
FDE .5097 FRA 1.9070 FC3 .0079 BSP 17777
                                                                                                                           CRT .7649 CRS -.7270 CST -.9983
                                                                                                                           LSA 2119.4 MSA 207.7 SSA 8.3
    BDE 2.8910 BRA 9.3919 BC3 .3778 FSP -305
                                                                                                                           EL1 2042.3 EL2 204.2 ALF
                                                                                                                                                                 6.94
                                                                                                                                      ARRIVAL DATE JUL 29 1966
                                                                          FLIGHT TIME 216.00
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 606.300
  HELIOCENTRIC CONIC
                         .00 LOL 93.00 VL 25.611 GAL 24.65 AZL 88.22 HCA 326.58 SMA 115.60 ECC .48524 INC 1.7823 V1 30.280 -.98 LOP 59.58 VP 36.198 GAP 28.80 AZP 88.51 TAL 145.38 TAP 111.96 RCA 59.51 APO 171.69 V2 35.099 3.23 GP -3.10 ZAL 33.23 ZAP 168.70 ETS 198.75 ZAE 130.02 ETE 183.30 ZAC 142.11 ETC 163.68 CLP 169.13
    RL 147.14 LAL
RP 107.97 LAP
    RC 219.410 GL
   PLANETOCENTRIC CONIC
                                                                                                     2.92 VHP 18.014 DPA 12.94 RAP 47.75 ECC 3.7249
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 25 58 3531.47 -19.75 132.92 322.18 69.29 6 22 49 2931.5 -22.39 125.24
    C3 165.571 VML 12.867 DLA 23.28 RAL 56.97 RAD 6570.8 VEL 16.938 PTH
                     0 28 47
                                  4517.33
                                                    10.09
                                                                  189.88
                                                                                 309.27
                                                                                                   63.40
                                                                                                               1 44 5
                                                                                                                                3917.3
        90.00
                    7 3 23 3210.91
1 32 3 4313.13
6 48 6 2863.19
                                                                                                             7 56 54
                                                                  110.33
                                                                                                  69.49
                                                                                                                               2610.9
      100.00
                                                   -22.23
                                                                                 323.18
                                                                                                             2 43 56
      100.00
                                                    12.46
                                                                  173.64
                                                                                 308.04
                                                                                                  62.61
                                                                                                                               3713.1
                                                                                                                                                8.69
                                                                                                                                                              166.88
                                                                                                                               2283.2
                                                                                                             9 36 11
      110.00
                                                   -28.17
                                                                   87.87
                                                                                 325.62
                                                                                                  69.78
                                                                                                                                              -30.65
                                                                                                                                                               79.56
                     2 3 47
                                                    18.02
                                                                  162.98
                                                                                                  60.45
                                                                                                              3 14 1
                                                                                                                               3613.6
                                                                                                                                              13.95
                                  4213.61
                                                                                 304.91
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     SGT 5201.0 SGR 331.7 SG3 88.4
RRT .6364 RRF .6269 RTF .9855
                                                                                                                          ST 1982.0 SR 302.1 SS 569.5
CRT .7549 CRS -.7217 CST -.9987
    TOE 2.9110 TRAID.3097 TC3 -.2438 BAU .5398
    ROE .6716 RRA .2956 RC3 .0036 FAU-.00363
FOE .5239 FRA 2.0519 FC3 .0190 BSP 17614
BDE 2.9875 BRA10.3139 BC3 .2439 FSP -297
                                                                     SGB 5211.6 R23 -.0022 R13 .9855
SG1 5205.3 SG2 255.7 THA 2.33
                                                                                                                          LSA 2080.2 MSA 199.8 55A
                                                                                                                          EL1 1995.2 EL2 196.8 ALF
                                                                                                                                     ARRIVAL DATE JUL 31 1966
                                                                          FLIGHT TIME 218.00
LAUNCH DATE DEC 25 1965
                                                                         DISTANCE 605.455
   HELIOCENTRIC CONIC
    RL 147.14 LAL .00 LOL 93.00 VL 25.586 GAL 27.46 AZL 88.41 MCA 329.79 SMA 115.47 ECC .52134 INC 1.5855 V1 30.280 RP 107.93 LAP -.80 LOP 62.80 VP 36.193 GAP 31.22 AZP 88.63 TAL 145.28 TAP 115.07 RCA 55.27 APO 175.67 VZ 35.111 RC 220.887 GL 2.55 GP -3.07 ZAL 32.65 ZAP 167.22 ETS 196.73 ZAE 129.29 ETE 183.23 ZAC 143.68 ETC 163.02 CLP 167.59
   PLANETOCENTRIC CONIC
    C3 199.003 VHL 14.107 OLA 22.74 RAL 57.70 RAC 6571.1 VEL 17.898 PTH 3.00 VHP 19.463 OPA 13.50 RAP 49.37 ECC 4.2751
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              69.22 6 33 27
64.08 1 40 13
                                                                              325.02
                    5 34 33 3534.22

D 23 58 4574.67

7 12 52 3217.23
                                                   -19.68
                                                                 133.09
                                                                                                                           2934.2 -22.34
       90.00
                                                                                 311.63
                                                                                                  64.08
                                                                                                                               3974.7
                                                                                                                                                8.24
                                                                                                                                                             186.35
                                                                  193.20
                                                   11.82
        90.00
                                                                  110.74
                                                                                 326.00
                                                                                                  69.32
                                                                                                            8 6 29
                                                                                                                               2617.2
                                                                                                                                              -24.69
                                                                                                                                                             102.92
                                                   -22.08
      100.00
                                                                                                  63.38
                                                                                                             2 41 8
                                                                                                                                               10.43
                                                                  176.77
                                                                                 310.46
                                                                                                                               3766.9
                                                                                                                                                             169.92
      100.00
                                                   14.12
                    1 28 21
                                 4366.89
                                2895.06
                                                                                                             9 44 6
                                                                                 328.41
                                                                                                  69.38
                                                                                                                               2295.1
                                                                                                                                              -30.43
                                                                                                                                                              80.41
                    8 55 50
                                                  -27.89
                                                                   88.68
      110.00
                                                                                                  61.43
                                                                                                              3 12 53
                                                                                                                               3661.8
                                                                                                                                              15.65
                                                                                                                                                              158.93
                                                                  165.81
                                                                                 307.46
      110.00
                     2 1 51
                                  4261.83
                                                 19.62
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5148.3 SGR 316.8 SG3 86.7

RRT .6546 RRF .6464 RTF .9887

SGB 5158.1 R23 -.0029 R13 .9887

SGI 5152.5 SG2 239.3 THA 2.31
                                                                                                                          ST 1936.6 SR 284.2 SS 616.4
CRT .7464 CRS -.7175 CST -.9990
    TOE 3.0279 TRA11.3230 TC3 -.1264 BAU .3365
    ROE .6914 RRA .3314 RC3 .0053 FAU-.00652
FOE .5430 FRA 2.2160 FC3 .0284 BSP 17532
BOE 3.1058 BRA11.3278 BC3 .1265 FSP -292
                                                                                                                          LSA 2043.2 MSA 190.6 SSA 7.2
                                                                                                                          EL1 1948.3 EL2 188.0 ALF 6.31
                                                                          FLIGHT TIME 220.00
                                                                                                                                      ARRIVAL DATE AUG 2 1966
LAUNCH DATE DEC 25 1965
                                                                          DISTANCE 602.838
  HELIOCENTRIC CONIC
                           .00 LOL 93.00 VL 25.566 GAL 30.69 A7L 88.65 MCA 333.01 SMA 115.37 ECC .56271 INC 1.3467 VI 30.280 -.61 LOP 66.02 VP 36.191 GAP 34.07 A7P 88.80 TAL 145.58 TAP 118.59 RCA 50.45 APO 180.29 V2 35.124 1.91 GP -3.03 ZAL 32.35 ZAP 165.54 ETS 194.95 ZAE 128.36 ETE 183.14 ZAC 145.06 ETC 162.37 CLP 165.85
    RL 147.14 LAL
         107.89 LAP
    RC 222.336 GL
                          1.91 GP
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 44 3 3554.72 -19.67 133.12 327.44 69.21 6 42 57 2934.7 -22.33 125.45 90.00 0 17 50 4631.03 13.48 196.51 313.63 64.86 1 35 1 4031.0 9.98 189.58
                    7 21 18 3221.12
1 23 15 4419.85
9 2 32 2904.43
1 58 31 4309.32
                                                                                                             8 .14 59
                                                                                                                               2621.1
                                                                                                                                              -24.62
                                                                                                                                                              103.18
       100.00
                                                   -21.99
                                                                  110.99
                                                                                 328.38
                                                                                                  69.22
                                                                                                               2 36 55
                                                                                                                               3819.9
                                                                                                                                               12.12
                                                                                                                                                              172.95
      100.00
                                                   15.71
                                                                  179.90
                                                                                 312.53
                                                                                                  64.24
                                                                                                  69.06
                                                                                                               9 50 56
                                                                                                                               2304.4
                                                                                                                                              -30.25
                                                                                                                                                              81.08
                                                   -27.66
                                                                    89.32
                                                                                 330.76
                                                                                                                                              17.29
                                                                                                                                                             161.64
                                                                                 309.67
                                                                                                  62.49
                                                                                                             3 10 20
                                                                                                                               3709.3
      110.00
                                                                  168.65
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     SCT 5089.1 SGR 300.8 SG3 85.2
RRT .6710 RRF .6639 RTF .9914
SGB 5098.0 R23 -.0035 R13 .9914
SGI 5093.1 SG2 222.9 THA 2.28
                                                                                                                        ST 1891.9 5R 265.9 S5 650.0

CRT .7399 CRS -.7150 CST -.9993

LSA 2010.0 MSA 180.2 SSA 6.6

EL1 1902.2 EL2 177.9 ALF 5.99
    TOE 3.1782 TRA12.4415 TC3 -.0236 BAU .0796
    ROE .7116 RRA .3661 RC3 .0070 FAU-.01021
    FDE .5694 FRA 2.4036 FC3 .0366 BSP 17426
```

FLIGHT TIME 214.00

BDE 3.2569 BRAIZ.4469 BC3 .0246 FSP -287

```
FLIGHT TIME 70.00
                                                                                                                            ARRIVAL CATE MAR 6 1966
LAUNCH DATE DEC 26 1965
                                                                    DISTANCE 205.792
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 29.296 CAL -13.66 AZL 86.85 HCA 94.65 SMA 140.32 ECC .24091 INC 5.1513 VI 30.281 RP 107.81 LAP 3.14 LOP 188.67 VP 38.937 CAP -3.90 AZP 90.26 TAL 245.04 TAP 339.69 RCA 106.51 APO 174.12 VZ 35.149
   RC 66.268 GL 12.44 GP 8.52 TAL 160.47 TAP 52.82 ETS 351.77 TAE 167.54 ETE 1.56 TAC 50.14 ETC 166.84 CLP -52.34
  PLANETOCENTRIC CONIC
   C3 52.804 VHL 7.267 DLA -9.75 RAL 289.01 RAD 6568.9 VEL 13.197 PTH 2.41 VHP 4.716 DPA -10.56 RAP 317.26 ECC 1.8690 LNCH A7NTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  -14.74
                                                                                                     2 10 59
                                                                                                                    1548.7
                                                                                                                                                   30.12
                  1 35 10 2148.75
11 4 50 5407.28
                                                             37.36
                                                                          164.48
                                                                                         112.30
                                               -17.92
                                                                                                    12 34 58
                                                                                                                     4807.3
                                                                                                                                    27.17
                                                28.04
                                                             248.10
                                                                          171.64
                                                                                          85.86
                                                                                                      3 23 25
                                                                                                                     1301.8
                                                                                                                                                   11.37
                                                                                          113.30
                  2 51 43 1901.82
      100.00
                                               -19.28
                                                              18.60
                                                                          163.88
                                                                                                   13 56 29
                                                                                                                     4529.4
      100.00
                 12 30 59 5129.44
3 49 2 1722.31
13 50 9 4881.71
                                                29.51
                                                             227.53
                                                                          171.51
                                                                                           84.98
                                                                                                                                   -19.19
32.07
                                                                                                     4 17 45
                                                                                                                     1122.3
                                                                                                                                                  356.01
                                               -22.89
                                                               3.20
                                                                          162.10
                                                                                         116.11
      110.00
                                                                                                   15 11 31
                                                                                                                    4281.7
                                                                                          82.55
                                               33.46
                                                             208.22
                                                                          171.00
      110.00
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 449.5 SGR 403.4 SG3 231.1

RRT -.0852 RRF -.3301 RTF .1796

SGB 604.0 R23 .2506 R13 -.2632

SG1 455.4 SG2 396.7 THA 160.89
                                                                                                                  ST 148.3 SR 386.5 SS 204.5
CRT .4277 CRS .7208 CST -.3022
   TDE -.0952 TRA -.5324 TC3 .0841 BAU .0621
    RDE -.4883 RRA .1435 RC3 .0255 FAU .09852
                                                                                                                 LSA 419.9 MSA 191.0 55A 20.6
   FDE .4181 FRA-1.5484 FC3-1.6152 8SP 433
                                                                                                                  EL1 392.4 EL2 132.0 ALF 79.48
   BDE .4975 BRA .5514 BC3 .0879 FSP -670
                                                                                                                            ARRIVAL DATE MAR 8 1966
                                                                     FLIGHT TIME 72.00
  HELIOCENTRIC CONIC
                                                                     DISTANCE 212.415
   RL 147.13 LAL .00 LOL 94.01 VL 29.311 GAL -13.53 A7L 86.91 HCA 97.88 SMA 140.45 ECC .23843 INC 3.0927 V1 30.281 RP 107.85 LAP 3.06 LOP 191.90 VP 38.938 GAP -3.22 A7P 90.42 TAL 245.29 TAP 343.16 RCA 106.96 APO 173.93 V2 35.138 RC 68.394 GL 12.35 GP 9.02 TAL 160.62 ZAP 57.79 ETS 352.46 TAE 170.39 ETE 7.28 TAC 48.32 ETC 167.14 CLP -57.33
  PLANETOCENTRIC CONIC
                                                                                             2.40 VHP 4.490 OPA -10.54 RAP 315.42 ECC 1.8510
   C3 51.709 VHL 7.191 DLA -9.85 RAL 288.90 RAD 6568.9 VEL 13.156 PTH
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 1 35 36 2140.13
11 3 35 5405.51
2 52 5 1893.38
12 29 47 5127.48
3 49 17 1714.28
13 49 5 4879.35
                                                                                                                    1540.1
                                                                                                                                                   29.61
                                                                          164.02
                                                                                         112.47
                                                                                                      2 11 16
                                                                                                                                   -14.50
                                               -17.69
                                                              36.82
       90.00
                                                                                                                                                   239.42
                                                                                                    12 33 41
                                                                                                                      4805.5
                                                                           171.19
                                                                                           85.79
                                                                                                                                    27.15
                                               28.03
                                                             247.97
       90.00
                                                                                                                                                   10.87
                                                                                          113.48
                                                                                                    3 23 39
                                                                                                                      1293.4
                                                                                                                                    -15.71
                                                              18.07
                                                                           163.41
                                               -19.05
      100.00
                                                                                           84.91 13 55 15
116.32 4 17 51
82.44 15 10 24
                                                                                                                      4527.5
                                                                                                                                                  218.73
                                                             227.39
                                                                           171.06
                                                                                                                                    28.48
                                               29.50
      100.00
                                                                                          116.32
                                                                                                                                   -18.93
                                                                                                                                                  355 54
                                                                           161.63
                                               -22.65
                                                               2.70
      110.00
                                                                                                                      4279.4
                                                                                                                                     32.03
                                                                                                                                                  199.09
                                                             208.03
                                                33.44
                                                                           170.55
      110.00
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 154.4 SR 386.8 SS 213.3
CRT ,3369 CRS .7212 CST -.3945
                                                                 SGT 475.1 SGR 408.1 SG3 254.3
RRT -.1480 RRF -.3728 RTF .3112
        -.0825 TRA -.5757 TC3 .0476 BAU .0420
    RDE -.4832 RRA .1533 RC3 .0378 FAU .10725
                                                                 SGB 626.3 R23 .2171 R13 -.3985
                                                                                                                  LSA 421.5 MSA 202.0 SSA 20.6
   FDE .4498 FRA-1.6881 FC3-1.7956 85P 504
RDF .4902 RRA .5957 RC3 .0608 FSP -746
                                                                 SG1 487.2 SG2 393.6 THA 157.94
                                                                                                                 ELI 390.8 ELZ 143.8 ALF 81.13
    BOE .4902 BRA .5957 BC3 .0608 FSP
                                                                                                                            ARRIVAL CATE MAR 10 1966
                                                                  - FLIGHT TIME 74.00
LAUNCH DATE DEC 26 1965
                                                                    DISTANCE 218.993
  HELTOCENTRIC CONTC
   RL 147.13 LAL .00 LOL 94.01 VL 29.316 CAL -13.39 AZL 86.97 HCA 101.10 SMA 140.49 ECC .23613 INC 3.0333 V1 30.281 RP 107.89 LAP 2.98 LOP 195.13 VP 38.931 CAP -2.57 AZP 90.58 TAL 245.38 TAP 346.48 RCA 107.31 APO 173.66 V2 35.126 RC 70.553 GL 12.24 CP 9.52 ZAL 160.71 ZAP 62.88 ETS 353.18 ZAE 173.28 ETE 18.20 ZAC 46.37 ETC 167.47 CLP -62.47
   PLANETOCENTRIC CONIC
    C3 50.651 VHL 7.117 DLA -9.96 RAL 288.88 RAD 6568.9 VEL 13.115 PTH 2.39 VHP 4.299 DPA -10.53 RAP 313.43 ECC 1.8336
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  1531.5
                                                                                                                                  -14.25
                                                                                        112.65 2 11 55
85.73 12 32 41
                                                                                                                                                   29.09
                  1 36 23 2131.45
11 2 38 5403.90
2 52 48 1884.90
                                               -17.47
                                                             36.29
                                                                        163.64
       90.00
                                                                                                                                    27.13
                                                                           170.83
                                                                                                                      4803.9
                                                             247.85
                                               28.02
        90.00
                                                                                          113.66 3 24 13

84.84 13 54 19

116.52 4 18 18

82.34 15 9 36
                                                                          163.03
                                                                                                                    1284.9
                                                                                                                                   -15.46
                                                                                                                                                   10.37
                                                              17.55
                                               -18.82
      100.00
                                                                                                                     4525.7
                                                                                                                                    28.45
                                                                                                                                                  218.60
                                                                          170.69
                                                             227.25
      100.00
                 12 28 53
                                5125.68
                                               29.48
                                                                                                                                   -18.66
32.00
                                                                                                                                                  355.07
                                                                          161.24
                                                                                                                     1106.2
                 3 49 52 1706.22
13 48 19 4877.13
                                                               2.20
                                               -22.40
      110.00
                                                                                                                                                  198.92
                                                                                                                      4277.1
                                                                           170.17
                                                             207.86
                                                33.42
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 182.8 SR 386.0 SS 220.5
CRT .2360 CRS .7193 CST -.4918
LSA 422.1 MSA 213.3 SSA 20.7
                                                                 SGT 514.0 SGR 413.0 SG3 277.2
RRT - .2211 RRF - .4161 RTF .4377
    TDE -.0679 TRA -.6252 TC3 .0044 BAU .0349
    RDE -.4768 RRA .1637 RC3 .0513 FAU .11578
                                                                 SGB 659.4 R23 .1865 R13 -.5138
    FDE .4748 FRA-1.8204 FC3-1.9788 BSP 673
BDE .4816 BRA .6463 BC3 .0515 FSP -827
                                                                                                                  EL1 388.3 EL2 157.2 ALF 83.19
                                                                 SG1 532.6 SG2 388.7 THA 157.46
                                                                                                                             ARRIVAL DATE MAR 12 1966
                                                                     FLIGHT TIME 76.00
LAUNCH DATE DEC 26 1965
                                                                     DISTANCE 225.527
   RL 147.13 LAL .00 LOL 94.01 VL 29.311 GAL -13.26 A7L 87.03 HCA 104.32 SMA 140.45 ECC .23397 INC 2.9725 V1 30.281 RP 107.92 LAP 2.88 LOP 198.35 VP 38.917 GAP -1.96 A7P 90.74 TAL 245.34 TAP 349.66 RCA 107.59 APO 173.31 V2 35.114 RC 72.741 GL 12.12 GP 10.01 7AL 160.76 ZAP 68.07 ETS 353.93 ZAE 175.75 ETE 44.22 ZAC 44.33 ETC 167.84 CLP -67.71
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                             2.39 VHP 4.142 DPA -10.52 RAP 311.34 ECC 1.8165
    C3 49.615 VHL 7.044 DLA -10.07 RAL 288.93 RAD 6568.8 VEL 13.076 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    28.56
                  1 37 30 2122.66
11 1 56 5402.40
                                                                          163.34
                                                                                         112.82
                                                                                                      2 12 53
                                                                                                                     1522.7
                                                                                                                                   -14.00
                                                -17.24
                                                               35.74
        90.00
                                                                                                                                    27.12
                                                                                                                                                   239.19
                                                                                           85.68 12 31 59
                                                                                                                      4802.4
                                                              247.75
                                                                           170.54
                                                28.01
        90.00
                                                                                                                                                    9.86
                                                                                                      3 25 8
                                                                                                                      1276.3
                                                                                                                                    -15.20
                                                               17.02
                                                                           162.73
                                                                                          113.84
                   2 53 52
                                1876.31
                                                -18.58
       100.00
                                                                                          84.78 13 53 40
116.72 4 19 5
82.25 15 9 5
                                                                                                                                                   218.48
                                                                                                                      4524.0
                                                                                                                                    28.44
                                                                           170.40
                   12 28 16
                                5123.98
                                                29.47
                                                              227.13
       100.00
                                                                                          116.72
                                                                                                                      1098.1
                                                                                                                                    -18.39
                                                                                                                                                  354.59
                                                -22.15
                                                                1.70
                                                                           160.93
                    3 50 47
                                1698.06
       110.00
                  13 47 50
                                                                                                                     4275.0
                                                                                                                                                  198.76
                                                                                                                                     31.97
                                                              201.70
                                                                           169.88
                                                33,40
       110.00
                                4874.99
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 174.3 SR 384.1 SS 226.4
CRT .1346 CRS .7176 CST -.5813
                                                                SGT 568.5 SGR 418.2 SG3 298.8
RRT -.2973 RRF -.4596 RTF .5499
SGB 705.7 R23 .1625 R13 -.6100
     TOE -.0525 TRA -.6816 TC3 -.0461 BAU .0532
     RDE -.4692 RRA .1741 RC3 .0657 FAU .12365
                                                                                                                LSA 422.2 MSA 224.7 SSA 20.7
ELI 385.0 EL2 172.3 ALF 85.63
    FDE .4941 FRA-1.9362 FC3-2.1575 BSP 915
                                                                 5G1 592.8 5G2 382.9 THA 158.18
    BOE .4721 BRA .7035 BC3 .0802 FSP -907
```

```
ARRIVAL CATE MAR 14 1966
                                                                        FLIGHT TIME 78.00
LAUNCH DATE DEC 26 1965
                                                                        DISTANCE 232.017
   RL 147.13 LAL ... .00 LOL 94.01 VL 29.299 GAL -13.13 A7L 87.09 MCA 107.54 SMA 140.34 ECC .23191 INC 2.9100 V1 30.281 RP 107.96 LAP 2.77 LOP 201.58 VP 38.896 GAP -1.37 A7P 90.88 TAL 245.16 TAP 352.70 RCA 107.80 APO 172.89 V2 35.101 RC 74.954 GL 11.99 GP 10.49 7AL 160.75 ZAP 73.29 ETS 354.71 ZAE 176.17 ETE 96.15 7AC 42.24 ETC 168.23 CLP -73.00
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 48.591 VHL 6.971 CLA -10.19 RAL 289.06 RAD 6568.8 VEL 13.037 PTH 2.38 VHP 4.017 DPA -10.51 RAP 309.22 ECC 1.7997
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1513.7
                                                                                             112.99 2 14 10
                                                                              163.11
        90.00
                    1 38 56 2113.66
                                                  -17.00
                                                                 35.19
                                                                                                                                                          239.09
                                                                                                          12 31 31
                                                                                                                             4801.0
                                                                                                                                            27.10
                                                                                                85.63
                                                                               170.32
                   11 | 31 | 5400.97
                                                  28.00
                                                                247.64
        90.00
                                                                                                                                                             9.34
                                                                                                                             1267.5
                                                                                                                                           -14.94
                  2 55 14 1867.52
12 27 54 5122.34
3 52 0 1689.72
13 47 37 4872.91
                                                                                               114.03 3 26 21
                                                                               162.50
                                                  -18.34
                                                                 16.48
       100.00
                                                                                                84.71 13 53 16
116.93 4 20 10
82.16 15 8 50
                                                                                                                                                          218.36
                                                                                                                             4522.3
                                                                                                                                           28.42
                                                                               170.18
                                                  29.46
                                                                227.01
      100.00
                                                                                                                             1089.7
                                                                                                                                                          354.10
                                                                                                                                           -18.11
                                                                                               116.93
                                                                               160.69
                                                 -21.90
                                                                  1.19
      110.00
                                                                                                                             4272.9
                                                                                                                                            31.93
                                                                                                                                                          198.61
                                                                               169.66
                                                 33.38
                                                                207.54
      110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                         5T 189.1 SR 381.2 SS 231.2
CRT .0419 CRS .7198 CST -.6524
LSA 422.5 MSA 235.9 SSA 20.6
                                                                    SGT 639.3 SGR 423.5 SG3 317.6
RRT -.3698 RRF -.5023 RTF .6419
    TOE -.0374 TRA -.7446 TC3 -.1041 BAU .0855
    ROE - .4604 RRA .1838 RC3 .0805 FAU .13031
                                                                    SCB 766.8 R23 .1461 R13 -.6870
SC1 668.0 SC2 376.6 THA 159.43
    FCE .5114 FRA-2.0253 FC3-2.3217 BSP 1219
BCE .4619 BRA .7669 BC3 .1316 FSP -969
                                                                                                                        EL1 381.3 EL2 188.9 ALF 88.42
                                                                                                                                    ARRIVAL CATE MAR 16 1966
                                                                         FLIGHT TIME 80.00
LAUNCH DATE DEC 26 1965
                                                                        DISTANCE 238.465
   RL 147.13 LAL .00 LOL 94.01 VL 29.279 GAL -12.99 A7L 87.15 MCA 110.76 SMA 140.17 ECC .22994 INC 2.8453 V1 30.281 RP 108.00 LAP 2.66 LOP 204.80 VP 38.870 GAP -.82 A7P 91.01 TAL 244.87 TAP 355.63 RCA 107.94 APO 172.40 V2 35.089 RC 77.191 GL 11.85 GP 10.95 TAL 160.70 TAP 78.50 ETS 355.54 TAE 173.94 ETE 130.51 TAC 40.16 ETC 168.66 CLP -78.28
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                   2.37 VHP 3.923 CPA -10.48 RAP 307.10 ECC 1.7829
    C3 47.571 VHL 6.897 DLA -10.31 RAL 289.25 RAD 6568.8 VEL 12.997 PTH
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                   1 40 41 2104.38

11 1 18 5399.64

2 56 55 1858.46

12 27 45 5120.79

3 53 32 1681.14

13 47 37 4870.88
                                                                                                                          1504.4
                                                                                                                                           -13.47
                                                                                                                                                            27.48
                                                                                                             2 15 45
                                                   -16.75
                                                                  34.62
                                                                               162.94
                                                                                               113.17
                                                                                                                                                           239.00
                                                                                                                             4799.6
                                                                                                                                             27.09
                                                                                                85.58
                                                                                                          12 31 17
                                                                 247.54
                                                                                170.17
                                                   28.00
        90.00
                                                                                                114.21
                                                                                                             3 27 53
                                                                                                                             1258.5
                                                                                                                                           -14.67
                                                                                                                                                            8.81
                                                                                162.33
                                                  -18.09
                                                                  15.93
                                                                                               114.21 3 27 53
84.65 13 53 6
117.14 4 21 33
82.07 15 8 48
                                                                                                                                                           218.25
                                                                                                                             4520.8
                                                                                                                                            28.40
                                                                               170.03
                                                   29.45
                                                                 226.89
       100.00
                                                                                                                                           -17.82
                                                                                                                             1081.1
                                                                                                                                                           353.60
                                                                               160.52
                                                   -21.63
                                                                     .66
                                                                                                                             4270.9
                                                                                                                                            31.90
                                                                                                                                                           198.46
                                                                 207.38
       110.00
                                                   33.36
                                                                                169.49
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 206.6 SR 377.0 S5 233.7
CRT -.0425 CRS .7181 CST -.7157
                                                                     SGT 723.9 SGR 428.7 SG3 334.0
RRT -.4372 RRF -.5431 RTF .7126
    TOE -.0218 TRA -.8119 TC3 -.1680 BAU .1230
    RDE -.4499 RRA .1931 RC3 .0960 FAU .13590
FDE .5164 FRA-2.0927 FC3-2.4732 BSP 1558
BDE .4505 BRA .8346 BC3 .1935 FSP -1032
                                                                     SGB 841.3 R23 .1337 R13 -.7458
                                                                                                                         LSA 422.0 MSA 246.8 SSA 20.6
                                                                                                                        EL1 377.1 EL2 206.3 ALF 91.90
                                                                     5G1 756.0 SG2 369.2 THA 160.71
                                                                                                                                    ARRIVAL DATE MAR 18 1966
                                                                         FLIGHT TIME 82.00
LAUNCH DATE DEC 26 1965
                                                                         DISTANCE 244.872
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 29.253 GAL -12.85 A7L 87.22 HCA 113.97 SHA 139.94 ECC .22803 INC 2.7778 VI 30.281 RP 108.04 LAP 2.54 LOP 208.01 VP 38.838 GAP -.29 A7P 91.13 TAL 244.47 TAP 358.44 RCA 108.03 APO 171.86 V2 35.076 RC 79.446 GL 11.69 GP 11.40 ZAL 160.61 ZAP 83.63 ETS 356.42 ZAE 170.82 ETE 144.32 ZAC 38.15 ETC 169.13 CLP -83.50
   PLANE TOCENTRIC CONIC
    C3 46.548 VHL 6.823 DLA -10.44 RAL 289.51 RAD 6568.7 VEL 12.958 PTH 2.36 VHP 3.856 OPA -10.43 RAP 305.05 ECC 1.7661
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          -13.19
                                                                                                                          1494.7
                                                                                             113.35
                                                                                                            2 17 40
                   1 42 45 2094.72
11 1 17 5398.39
                                                                               162.83
                                                                  34.03
                                                   -16.49
                                                                                                                                            27.08
                                                                                                85.53 12 31 15
                                                                                                                             4798.4
                                                                                170.07
                                                                 247.45
                                                   27.99
                                                                                                                            1249.0
                                                                                                                                            -14.38
                                                                                                114.40
                                                                                                            3 29 43
                                                                  15.35
                                                                                162.21
                   2 58 54 1849.04
12 27 49 5119.31
                                                  -17.82
                                                                                                 84.60 13 53 8
                                                                                                                                           28.38
                                                                                                                             4519.3
                                                                                169.93
                                                   29.44
                                                                 226.79
       100.00
                                                                                                117.35 4 23 14
81.98 15 8 59
                                                                                                                                           -17.52
                    3 55 22 1672.22
13 47 50 4868.90
                                                                                               117.35
                                                                                                                            1072.2
                                                                               160.39
                                                  -21.35
                                                                    .12
                                                                                                                                             31.87
                                                                                                                             4268.9
                                                                 207.23
                                                                                169.39
                                                   53.34
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 226.6 SR 371.6 SS 235.0
CRT -.1122 CRS .7199 CST -.7612
                                                                     SGT 821.2 SGR 433.6 SG3 346.4
RRT -.4961 RRF -.5817 RTF .7652
SGB 928.7 R23 .1265 R13 -.7897
     TOE -.0073 TRA -.8833 TC3 -.2379 BAU .1635
    ROE -.4382 RRA .2012 RC3 .1113 FAU .13978
FOE .5182 FRA-2.1269 FC3-2.5997 BSP 1933
                                                                                                                         LSA 422.2 MSA 256.9 SSA 20.6
                                                                                                                         EL1 373.0 EL2 224.3 ALF 96.14
     BOE .4383 BRA .9059 BC3 .2627 FSP -1074
                                                                     SG1 855.4 SG2 361.4 THA 162.00
                                                                                                                                    ARRIVAL DATE MAR 20 1966
                                                                         FLIGHT TIME 84.00
 LAUNCH DATE DEC 26 1965
    RL 147.13 LAL .0D LOL 94.01 VL 29.221 GAL -12.71 A7L 87.29 HCA 117.19 SMA 139.67 ECC .22617 INC 2.7069 VI 30.281 RP 108.08 LAP 2.41 LOP 211.23 VP 38.802 GAP .21 A7P 91.24 TAL 243.96 TAP 1.15 RCA 108.08 APO 171.25 V2 35.063 RC 81.719 GL 11.51 GP 11.84 7AL 160.48 7AP 88.64 ETS 357.33 7AE 167.50 ETE 151.01 7AC 36.26 ETC 169.64 CLP -88.61
                                                                         DISTANCE 251.238
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 45.517 VHL 6.747 DLA -10.58 RAL 289.83 RAD 6568.7 VEL 12.918 PTH 2.35 VHP 3.814 OPA -10.35 RAP 303.12 ECC 1.7491
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             2 19 53
                                                                                                                              1484.6
                                                                                                                                             -12.90
                                                                               162.77
                                                                                               113.54
                                                    -16.22
                                                                  33.41
         90.00
                     1 45 8 2084.58
                                                                                                85.49 12 31 23
114.60 3 31 52
84.55 13 53 20
117.57 4 25 13
81.89 15 9 21
                                                                                                                              4797.3
                                                                                                                                              27.07
                                                                                                                                                            238.83
                                                                  247.38
                                                                                 170.02
                                   5397.31
                                                    27.99
         90.00
                    11 1 26
                                                                                                                              1239.1
                                                                                                                                             -14.08
                                                                                                                                                             7.67
                                                                                 162.15
                                   1839.15
                                                    -17.55
                                                                   14.75
        100.00
                     3 1 12
                                                                                                                                                            218.05
                                                                                                                              4518.0
                                                                                                                                             28.37
                    12 28 2 5117.97
3 57 30 1662.87
                                                                                 169.88
                                                    29.44
                                                                  226.69
        100.00
                                                                                                                                                            352.55
                                                                                                                              1062.9
                                                                                                                                             -17.20
                                                    -21.06
                                                                  359.55
                                                                                 160.32
        110.00
                                                                                                                                                            198.17
                                                                                                                              4267.0
                                                                                                                                             31.84
                    13 48 14
                                   4867.01
                                                    33.32
                                                                  201.09
                                                                                 169.34
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    SGT 927.9 SGR 438.0 SG3 355.7 ST 248.3 SR 364.7 S5 233.9 RRT -.5487 RRF -.6178 RTF .8036 CRT -.1696 CRS .7169 CST -.7999 SGB 1026.1 R23 .1218 R13 -.8220 LSA 422.1 MSA 266.1 SSA 20.6 SG1 963.6 SG2 352.6 THA 163.16 EL1 369.0 EL2 241.9 ALF 101.65
                                                                                                                          ST 248.3 SR 364.7 55 233.9
CRT -.1696 CRS .7169 CST -.7999
     TOE .0062 TRA -.9567 TC3 -.3126 BAU .2053
     ROE - .4247 RRA .2084 RC3 .1270 FAU .14237
FOE .5064 FRA-2.1371 FC3-2.7079 BSP 2329
BOE .4247 BRA .9791 BC3 .3374 FSP -1115
```

```
FLIGHT TIME 86.00
                                                                                                                                     ARRIVAL DATE MAR 22 1966
LAUNCH DATE DEC 26 1965
                                                                          DISTANCE 257.567
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 29.183 GAL -12.57 AZL 87.37 MCA 120.40 SMA 139.34 ECC .22436 INC 2.6519 V1 30.281 RP 108.12 LAP 2.27 LOP 214.44 VP 38.762 GAP .69 AZP 91.33 TAL 243.36 TAP 3.76 RCA 108.08 APO 170.61 V2 35.050
    RC 84.008 GL 11.31 GP 12.26 7AL 160.31 7AP 93.47 ETS 358.30 7AE 164.20 ETE 154.86 7AC 34.52 ETC 170.20 CLP -93.55
   PLANETOCENTRIC CONIC
    C3 44.476 VHL 6.669 DLA -10.73 RAL 290.20 RAD 6568.7 VEL 12.878 PTH
                                                                                                    2.35 VMP 3.796 DPA -10.23 RAP 301.35 ECC 1.7320
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG IN RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              113.73 2 22 25
                     1 47 51 2073.82
                                                                  32.76
                                                                              162.75
                                                                                                                             1473.8
                                                   -15.92
        90.00
                   11 1 42 5396.43

3 3 51 1828.66

12 28 24 5116.82

3 59 57 1652.98

13 48 47 4865.27
                                                                  247.31
                                                                                 170.02
                                                                                                 85.46
                                                                                                            12 31 38
                                                                                                                              4796.4
                                                                                                                                             27.06
                                                                                                                                                            238.77
        90.00
                                                   27.98
                                                                                                 114.80
                                                                                                           3 34 19
                                                                                                                                                               7.06
                                                                                 162.13
                                                                                                                              1228.7
                                                                                                                                             -13.76
       100.00
                                                   -17.25
                                                                   14.11
                                                                                               84.50 13 53 41
117.80 4 27 30
81.82 15 9 52
                                                                                                                              4516.8
                                                                                                                                             28.36
       100.00
                                                                  226.60
                                                                                169.88
                                                                                                                                                            217.96
                                                   29.43
                                                                                                                             1053.0
                                                   -20.75
                                                                                160.30
                                                                                                                                             -16.87
                                                                                                                                                            351.98
                                                                  358.95
       110.00
                                                                  206.96
                                                                                169.33
                                                                                                                              4265.3
                                                                                                                                              31.82
                                                                                                                                                            198.04
       110.00
                                                    33.31
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1042.2 SGR 441.7 SG3 361.2
RRT -.5944 RRF -.6515 RTF .8315
                                                                                                                          ST 271.4 SR 356.4 S5 231.2
CRT -.2136 CRS .7135 CST -.8286
    TOE .0178 TRA-1.0312 TC3 -.3916 BAU .2478
    RDE -.4096 RRA .2142 RC3 .1427 FAU .14341
    FOE .4875 FRA-2.1194 FC3-2.7915 BSP 2746
BOE .4100 BRA 1.0533 BC3 .4168 FSP -1143
                                                                      SGB 1131.9 R23 .1203 R13 -.8456
                                                                                                                          LSA 422.9 MSA 273.6 SSA 20.5
                                                                      SG1 1078.6 SG2 343.2 THA 164.22
                                                                                                                          EL1 366.2 EL2 258.1 ALF 108.87
                                                                                                                                     ARRIVAL DATE MAR 24 1966
LAUNCH DATE DEC 26 1965
                                                                          FLIGHT TIME 88.00
                                                                         OISTANCE 263.858
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 29.140 GAL -12.42 ATL 87.45 MCA 123.60 SMA 138.98 ECC .22259 INC 2.5518 V1 30.281
RP 108.16 LAP 2.13 LOP 217.64 VP 38.718 GAP 1.14 ATP 91.41 TAL 242.67 TAP 6.28 RCA 108.04 APO 169.92 V2 35.036
                         11.09 CP 12.68 7AL 160.10 7AP 98.09 ETS 359.31 7AE 161.00 ETE 157.31 7AC 32.98 ETC 170.81 CLP -98.29
    RC 86.309 GL
   PLANETOCENTRIC CONIC
    C3 43.421 VHL 6.589 DLA -10.89 RAL 290.63 RAD 6568.6 VEL 12.837 PTH
                                                                                                    2.34 VHP 3.797 OPA -10.06 RAP 299.78 ECC 1.7146
   C3 43.421 VHL 6.589 DLA -10.89 RAL 290.63 RAD 6568.6 VEL 12.837 PTH 2.34 VHP 3.797 DPA -10.06 RAP 299.78 ECC 1.7146
LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 50 56 2062.29 -15.61 32.06 162.78 113.93 2 25 19 1462.3 -12.24 25.00
90.00 11 2 4 5395.88 27.98 247.27 170.07 85.44 12 32 0 4795.9 27.05 238.73
100.00 3 6 50 1817.44 -16.93 13.44 162.15 115.01 3 37 7 1217.4 -13.42 6.40
100.00 12 28 51 5115.96 29.42 226.54 169.93 84.47 13 54 7 4516.0 28.35 217.90
110.00 4 2 43 1642.43 -20.41 358.32 160.32 118.03 4 30 5 1042.4 -16.50 351.38
110.00 13 49 27 4863.74 33.29 206.84 169.38 81.75 15 10 31 4263.7 31.79 197.93
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 1161.6 SGR 444.7 SG3 362.5
RRT -.6338 RRF -.6831 RTF .8514
SGB 1243.8 R23 .1225 R13 -.8627
                                                                                                                          ST 295.2 SR 347.0 SS 227.3
CRT -.2460 CR5 .7129 CST -.8470
    TOE .0271 TRA-1.1055 TC3 -.4741 BAU .2901
    ROE -.3934 RRA .2183 RC3 .1580 FAU .14277
    FOE .4667 FRA-2.0715 FC3-2.8465 BSP 3168
                                                                                                                          LSA 425.5 MSA 278.9 SSA 20.5
    BOE .3943 BRA 1.1269 BC3 .4998 FSP -1147
                                                                      SG1 1198.3 SG2 333.4 THA 165.19
                                                                                                                          EL1 366.0 EL2 271.3 ALF 118.29
                                                                         FLIGHT TIME 90.00
                                                                                                                                    ARRIVAL DATE MAR 26 1966
LAUNCH DATE DEC 26 1965
                                                                         DISTANCE 270.113
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 29.094 GAL -12.27 AZL 87.53 HCA 126.81 SMA 138.59 ECC .22086 INC 2.4656 VI 30.281 RP 108.20 LAP 1.97 LOP 220.85 VP 38.671 GAP 1.57 AZP 91.48 TAL 241.90 TAP 8.71 RCA 107.98 APO 169.19 VZ 35.023
    RC 88. 423 GL 10.83 GP 13.12 ZAL 159.86 ZAP 102.47 ETS .37 ZAE 157.94 ETE 158.96 ZAC 31.67 ETC 171.51 CLP-102.81
   PLANETOCENTRIC CONIC
    C3 42.352 VHL 6.508 OLA -11.08 RAL 291.12 RAD 6568.6 VEL 12.795 PTH
                                                                                                   2.33 VHP 3.816 DPA -9.82 RAP 298.43 ECC 1.6970
    ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            INJ AZELI...
114.15 2 28 35
85.44 12 32 24
17 24 3 40 17
                    1 54 25 2049.80
11 2 28 5395.80
                                                                                                            2 28 35
                                                                                                                          1449.8
                                                                                                                                           -11.87
                                                                                                                                                            24.27
                                                   -15.26
                                                                  31.31
                                                                              162.84
        90.00
                                                                                                                                                           238.72
                  11 2 28
                                                 27.98
                                                                 247.27
                                                                                170.17
                                                                                                                             4795.8
                                                                                                                                            27.05
        90.00
                 3 10 12 1805.31
12 29 22 5115.53
                                                                                                                             1205.3
                                                                                                                                            -13.04
                                                                                                                                                             5.70
                                                 -16.57
                                                                   12.71
                                                                                162.21
       100.00
                                                                                              84.45 13 54 37
118.29 4 33 2
81.70 15 11 15
                                                                                                                             4515.5
                                                                                                                                            28.34
                                                                                                                                                           217.87
                                                 29.42
                                                                 226.51
                                                                               170.02
       100.00
                                                                             160.37
169.47
                                                 -20.05
                                                                                                                                                            350.73
                    4 5 51 1631.04
13 50 13 4862.56
                                                                 357.64
                                                                                                                             1031.0
                                                                                                                                           -16.11
       110.00
                                                 33.28
                                                                 206.75
                                                                                                                           4262.6
                                                                                                                                            31.77
                   13 50 13
                                                                                                                                                           197.84
      110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 1284.3 SGR 447.1 SG3 361.3
RRT -.6696 RRF -.7131 RTF .8660
SGB 1359.9 R23 .1265 R13 -.8753
SG1 1321.1 SG2 322.8 THA 166.03
                                                                                                                      ST 319.3 SR 336.0 SS 221.6
CRT -.2684 CRS .7073 CST -.8628
LSA 429.1 MSA 281.8 SSA 20.4
    TOE .0335 TRA-1.1785 TC3 -.5598 BAU .3318
    ROE -.3755 RRA .2214 RC3 .1737 FAU .14111
FOE .4355 FRA-2.0076 FC3-2.8844 BSP 3602
    BOE .3770 BRA 1.1991 BC3 .5861 FSP -1151
                                                                                                                         EL1 369.8 EL2 279.5 ALF 129.61
                                                                         FLIGHT TIME 92.00
                                                                                                                                     ARRIVAL DATE HAR 28 1966
LAUNCH DATE DEC 26 1965
  HELIOCENTRIC CONIC
                                                                         DISTANCE 276.335
    RL 147.13 LAL .00 LOL 94.01 VL 29.043 GAL -12.11 AZL 87.63 MCA 130.01 SMA 138.16 ECC .21916 INC 2.3719 V1 30.281
RP 108.24 LAP 1.82 LOP 224.05 VP 38.621 GAP 1.98 AZP 91.53 TAL 241.06 TAP 11.07 RCA 107.88 APO 168.44 V2 35.010
RC 90.946 GL 10.54 GP 13.58 ZAL 159.58 ZAP 106.59 ETS 1.50 ZAE 155.06 ETE 160.08 ZAC 30.59 ETC 172.30 CLP-107.08
   PLANETOCENTRIC CONIC
    C3 41.266 VHL 6.424 DLA -11.29 RAL 291.66 RAD 6568.6 VEL 12.753 PTH 2.32 VHP 3.851 DPA -9.52 RAP 297.31 ECC 1.6791
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 58 21 2036.11 -14.88 30.49 162.95 114.37 2 32 17 1436.1 -11.46 23.47
                                                                                                           12 32 47
                                  5396.39
                                                   27.98
                                                                 247.31
                                                                                170.31
                                                                                                 85.46
                                                                                                                              4796.4
                                                                                                                                             27.06
                                                                                                                                                            238.76
        90.00
                   11 2 51
                                                                                                115.48 3 43 52
84.46 13 55 8
                                                                                162.32
                                                                                                                              1192.0
                                                                                                                                            -12.63
                                                                                                                                                             4.93
       100.00
                     3 14 0
                                1792.03
                                                  -16.19
                                                                  11.91
                                 5115.71
                                                                 226.52
                                                                                170.16
                                                                                                                              4515.7
                                                                                                                                             28.34
                                                                                                                                                            217.88
       100.00
                   12 29 53
                                                   29.42
                                1618.63
4861.86
                                                                                             118.55 4 36 21
81.67 15 12 2
                                                                                                                             1018.6
                     4 9 22
                                                  -19.64
                                                                 356.90
                                                                                160.46
                                                                                                                                            -15.68
                                                                                                                                                            350.03
       110.00
                   13 51 0
                                                  33.27
                                                                 206.70
                                                                                169.61
                                                                                                                             4261.9
                                                                                                                                             31.76
                                                                                                                                                            197.79
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
    TOE .0370 TRA-1.2486 TC3 -.6478 BAU .3723
                                                                     SGT 1408.4 SGR 448.8 SG3 356.7 ST 343.2 SR 324.0 SS 214.9 RRT -.7009 RRF -.7416 RTF .8762 CRT -.2824 CRS .7046 CST -.8716 SGB 1478.1 R23 .1341 R13 -.8841 LSA 434.9 MSA 281.8 SSA 20.4
    RDE -.3567 RRA .2228 RC3 .1892 FAU .13814
FDE .4045 FRA-1.9203 FC3-2.8982 BSP 4025
BDE .3587 BRA 1.2683 BC3 .6749 FSP -11,34
```

SG1 1444.8 SG2 312.0 THA 166.78

EL1 378.7 EL2 281.7 ALF 140.76

```
FLIGHT TIME 94.00
                                                                                                                                    ARRIVAL CATE MAR 3D 1966
LAUNCH DATE DEC 26 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 282.525
    RL 147.13 LAL .00 LOL 94.01 VL 28.989 GAL -11.94 AZL 87.73 HCA 133.21 SMA 137.71 ECC .21750 INC 2.2691 VI 30.281 RP 108.29 LAP 1.65 LOP 227.25 VP 38.568 GAP 2.37 AZP 91.55 TAL 240.15 TAP 13.36 RCA 107.76 APO 167.67 V2 34.996 RC 93.279 GL 10.21 GP 14.08 ZAL 159.27 ZAP 110.45 ETS 2.70 ZAE 152.37 ETE 160.82 ZAC 29.75 ETC 173.22 CLP-111.11
   PLANETOCENTRIC CONIC
    C3 40.164 VHL 6.338 DLA -11.54 RAL 292.26 RAD 6568.5 VEL 12.709 PTH 2.31 VHP 3.899 DPA -9.13 RAP 296.44 ECC 1.6610 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1420.9
                                                                                                                                          -11.01
        90.00
                    2 2 48 2020.92
11 3 9 5397.91
                                                  -14.45
                                                                  29.58
                                                                               163.09
                                                                                             114.62
                                                                                                           2 36 29
                                                                                                                                                            22.59
        90.00
                                                   27.99
                                                                  247.42
                                                                                170.50
                                                                                                 85.52
                                                                                                           12 33 6
                                                                                                                             4797.9
                                                                                                                                             27.07
                                                                                                                                                           238.87
                   3 18 18 1777.32
12 30 19 5116.75
4 13 21 1604.94
13 51 46 4861.88
       100.00
                                                  -15.75
                                                                  11.03
                                                                                162.46
                                                                                                115.74
                                                                                                            3 47 56
                                                                                                                             1177.3
                                                                                                                                            -12.16
                                                                                                                                                             4.08
                                                                                                84.50 13 55 36
118.84 4 40 6
81.67 15 12 48
       100.00
                                                   29.43
                                                                  226.60
                                                                                170.36
                                                                                                                             4516.8
                                                                                                                                            28.35
                                                                                                                                                           217.96
       110.00
                                                  -19.20
                                                                  356.09
                                                                                160.60
                                                                                                                             1004.9
                                                                                                                                            -15.20
                                                                                                                                                           349.25
                                                                                                                                            31.76
       110.00
                                                   33.27
                                                                  206.70
                                                                                169.81
                                                                                                                             4261.9
                                                                                                                                                           197.79
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 1533.8 SGR 450.6 SG3 350.7
RRT -.7302 RRF -.7693 RTF .8837
                                                                                                                         ST 366.8 SR 310.4 SS 206.6
CRT -.2876 CRS .6945 CST -.8805
    TOE .0364 TRA-1.3159 TC3 -.7390 BAU .4119
    ROE -.3363 RRA .2234 RC3 .2058 FAU .13463
    FOE .3640 FRA-1.8262 FC3-2.9019 BSP 4463
                                                                     SGB 1598.6 R23 .1436 R13 -.8907
                                                                                                                         LSA 442.0 MSA 278.9 SSA 20.3
    BOE .3385 BRA 1.3347 BC3 .7671 FSP -1121
                                                                     SGI 1570.1 SG2 300.7 THA 167.42
                                                                                                                         EL1 391.6 EL2 278.5 ALF 150.13
LAUNCH DATE DEC 26 1965
                                                                         FLIGHT TIME 96.00
                                                                                                                                     ARRIVAL DATE APR 1 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 288.684
                          .00 LOL 94.01 VL 28.933 GAL -11.77 AZL 87.84 HCA 136.41 SMA 137.25 ECC .21587 INC 2.1550 VI 30.281 1.49 LOP 230.44 VP 38.514 GAP 2.75 AZP 91.56 TAL 239.17 TAP 15.58 RCA 107.62 APO 166.87 VZ 34.983 9.81 GP 14.65 ZAL 158.94 ZAP 114.03 ETS 3.99 ZAE 149.85 ETE 161.25 ZAC 29.15 ETC 174.27 CLP-114.89
    RL 147.13 LAL
    RP 108.33 LAP
    RC 95.621 GL
   PLANETOCENTRIC CONIC
                                                                                                   2.30 VHP 3.958 DPA
    C3 39.046 VHL 6.249 DLA -11.84 RAL 292.91 RAD 6568.5 VEL 12.665 PTH
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 7 53 2003.83 -13.96 28.56 163.28 114.89 2 41 17 1403.8 -10.49 21.60
                    2 7 53 2003.83
                                                                                               114.89
        90.00
                   11 3 15
                                  5400.74
                                                   28.00
                                                                 247.62
                                                                                170.74
                                                                                                 85.62
                                                                                                           12 33 16
                                                                                                                              4800 7
                                                                                                                                             27.10
                                                                                                                                                           239.07
                   11 3 15 5400.74
3 23 12 1760.80
12 30 37 5119.00
4 17 51 1589.66
       100.00
                                                   -15.26
                                                                  10.05
                                                                                162.63
                                                                                                116.02
                                                                                                             3 52 33
                                                                                                                              1160.8
                                                                                                                                            -11.64
                                                                                                                                                             3.13
       100.00
                                                   29.44
                                                                 226.76
                                                                                170.60
                                                                                                 84.58 13 55 56
                                                                                                                              4519.0
                                                                                                                                            28.38
                                                                                                                                                           218.12
       110.00
                                                  -18.69
                                                                 355.19
                                                                               160.76
                                                                                               119.15
                                                                                                           4 44 21
                                                                                                                              989.7
                                                                                                                                            -14.66
                                                                                                                                                           348.39
                   13 52 27
                                                                                                 81.71 15 13 30
       110.00
                                  4862.90
                                                   33.28
                                                                 206.77
                                                                               170.06
                                                                                                                             4262.9
                                                                                                                                            31.78
                                                                                                                                                           197.87
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SCT 1659.4 SCR 452.5 SC3 343.0
RRT -.7573 RRF -.7963 RTF .8891
SCB 1720.0 R23 .1561 R13 -.8953
SCF 1695.5 SC2 289.3 THA 167.98
    TOE .0313 TRA-1.3792 TC3 -.8329 BAU .4501
                                                                                                                         ST 389.9 SR 295.4 SS 197.0
CRT -.2851 CRS .6797 CST -.8881
    ROE -.3147 RRA .2229 RC3 .2234 FAU .13047
FOE .3191 FRA-1.7231 FC3-2.8929 BSP 4900
BOE .3162 BRA 1.3971 BC3 .8623 FSP -1103
                                                                                                                         LSA 450.8 MSA 273.0 SSA 20.3
                                                                                                                         EL1 407.2 EL2 271.2 ALF 157.31
LAUNCH DATE DEC 26 1965
                                                                         FLIGHT TIME 98.00
                                                                                                                                    ARRIVAL DATE APR 3 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 294.814
    RL 147.13 LAL .00 LOL 94.01 VL 28.873 GAL -11.60 AZL 87.97 MCA 139.60 SMA 136.76 ECC .21428 INC 2.0268 V1 30.281 RP 108.37 LAP 1.31 LOP 233.64 VP 38.458 GAP 3.10 AZP 91.54 TAL 238.13 TAP 17.74 RCA 107.46 APO 166.07 V2 34.970 RC 97.969 GL 9.35 GP 15.30 ZAL 158.57 ZAP 117.34 ETS 5.41 ZAE 147.51 ETE 161.42 ZAC 28.79 ETC 175.50 CLP-118.43
   PLANETOCENTRIC CONIC
    C3 37.910 VHL 6.157 DLA -12.20 RAL 293.62 RAD 6568.5 VEL 12.621 PTH 2.29 VHP 4.028 DPA -8.04 RAP 295.38 ECC 1.6239
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 13 43 1984.30
11 3 4 5405.35
                                                                             163.50
                                                                                            115.18
                                                                                                           2 46 48
        90.00
                                                  -13.40
                                                                  27.40
                                                                                                                          1384.3 -0.90
                                                                                                                                                           20.47
                                                                                               85.79 12 33 9
116.32 3 57 52
                                                  28.03
                                                                 247.96
                                                                               171.05
        90.00
                   11 3 4
                                                                                                                             4805.4
                                                                                                                                            27.15
                                                                                                                                                          239.40
                    3 28 50 1741.98
12 30 39 5122.90
       100.00
                                                  -14.70
                                                                  8.94
                                                                              162.85
                                                                                                                            1142.0
                                                                                                                                        -11.04
                                                                                                                                                           2.05
       100.00
                   12 30 39
                                                  29.47
                                                                 227.05
                                                                                                84.73 13 56 2
                                                                               170.92
                                                                                                                             4522.9
                                                                                                                                           28.43
                                                                                                                                                          218.40
                                1572.35
4865.30
       110.00
                     4 23 0
                                                  -18.11
                                                                              160.97
                                                                                                           4 49 12
                                                                 354.18
                                                                                               119.50
                                                                                                                             972.3
                                                                                                                                           -14.05
                                                                                                                                                           347.43
                                                                                                81.82 15 14 3
       110.00
                   13 52 58
                                                                               170.39
                                                   33.31
                                                                 206.96
                                                                                                                            4265.3
                                                                                                                                            31.82
                                                                                                                                                           198.05
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 412.3 SR 279.5 SS 186.8

CRT -.2760 CRS .6659 CST -.8916

LSA 461.1 MSA 264.6 SSA 20.3

EL1 424.2 EL2 261.1 ALF 162.66
                                                                     SGT 1783.5 SGR 454.8 SG3 333.3
RRT -.7814 RRF -.8225 RTF .8924
    TOE .0222 TRA-1.4368 TC3 -.9291 BAU .4866
    RDE -.2924 RRA .2208 RC3 .2418 FAU .12561
FDE .2764 FRA-1.6075 FC3-2.8684 BSP 5316
BDE .2932 BRA 1.4537 BC3 .9601 FSP -1068
                                                                     SGB 1840.6 R23 .1728 R13 -.8982
SG1 1819.4 SG2 278.2 THA 168.46
LAUNCH DATE DEC 26 1965
                                                                         FLIGHT TIME 100.00
                                                                                                                                    ARRIVAL DATE APR 5 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 300.917
                         .00 LOL 94.01 VL 28.812 GAL -11.41 AZL 88.12 HCA 142.80 SMA 136.27 ECC .21274 INC 1.8806 V1 30.281
1.14 LOP 236.82 VP 38.400 GAP 3.44 AZP 91.50 TAL 237.04 TAP 19.84 RCA 107.28 APO 165.26 V2 34.957
8.79 GP 16.07 ZAL 158.18 ZAP 120.37 ETS 6.99 ZAE 145.33 ETE 161.35 ZAC 28.66 ETC 176.92 CLP-121.74
    RL 147.13 LAL
    RP 108.41 LAP
  PLANETOCENTRIC CONIC
    C3 36.760 VML 6.063 DLA -12.64 RAL 294.39 RAD 6568.4 VEL 12.575 PTH
                                                                                                  2.28 VHP 4.108 OPA -7.29 RAP 295.16 ECC 1.6050
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 20 32 1961.61 -12.74 26.06 163.78 115.51 2 53 14 1361.6 -9.20 19.17
                                                                                             115.51
                                                                                                             2 53 14
                                                                              163.78
                                                                                                                            1361.6
       90.00
                  11 2 24 5412.47
                                                                                                86.04 12 32 37
                                                                                                                                             27.22
                                                   28.06
                                                                 248.48
                                                                               171.43
                                                                                                                                                           239.91
                                                                                                                             4812.5
                 3 35 22 1720.18
12 30 16 5129.13
4 28 56 1552.42
13 53 11 4869.66
      100.00
                                                  -14.04
                                                                   7.66
                                                                               163.12
                                                                                               116.66
                                                                                                             4 4 2
                                                                                                                             1120.2
                                                                                                                                            -10.35
                                                                                                                                                              .81
                                                                 227.51
                                                                                                84.97 13 55 45
      100.00
                                                                                                                             4529.1
                                                  29.51
                                                                               171.30
                                                                                                                                            28.50
                                                                                                                                                           218.85
      110.00
                                                  -17.44
                                                                 353.03
                                                                               161.22
                                                                                              119.87
                                                                                                           4 54 48
                                                                                                                              952.4
                                                                                                                                            -13.34
                                                                                                                                                           346.32
                                                                                                82.01 15 14 21
                                                                             170.79
      110.00
                                                                 207.29
                                                                                                                            4269.7
                                                                                                                                             31.88
                                                                                                                                                           198.37
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   SGT 1907.8 SGR 458.6 SG3 323.4
RRT -.8043 RRF -.8483 RTF .8948
SGB 1962.1 R23 .1921 R13 -.9003
    TOE .0064 TRA-1.4895 TC3-1.0296 BAU .5222
                                                                                                                        ST 434.4 SR 261.7 SS 175.2
CRT -.2579 CRS .6364 CST -.8994
    ROE -.2685 RRA .2181 RC3 .2626 FAU .12066
   FOE .2241 FRA-1.4931 FC3-2.8416 BSP 5746
BDE .2685 BRA 1.5054 BC3 1.0625 FSP -1041
                                                                                                                       LSA 472.7 MSA 253.0 SSA 20.3
```

SG1 1943.8 SG2 267.5 THA 168.84

EL1 442.1 EL2 248.4 ALF 167.00

```
ARRIVAL DATE APR 7 1966
                                                                       FLIGHT TIME 102.00
LAUNCH DATE DEC 26 1965
   RL 147.13 LAL .00 LOL 94.01 VL 28.749 GAL -11.22 A7L 88.29 HCA 145.99 SHA 135.76 ECC .21124 INC 1.7114 V1 30.281 RP 108.44 LAP .96 LOP 240.01 VP 38.341 GAP 3.77 A7P 91.42 TAL 235.90 TAP 21.88 RCA 107.08 APO 164.44 V2 34.945 RC 102.682 GL 8.12 GP 17.00 7AL 157.77 7AP 123.12 ETS 8.76 7AE 143.28 ETE 161.04 7AC 28.75 ETC 178.57 CLP-124.84
                                                                       DISTANCE 306.994
  HELLOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 28 36 1934.75 -11.94 24.49 164.11 115.87 3 0 51 1334.7 -8.37 17.63
                                                                                                         12 31 25
                                                               249.25
                                                                              171.91
                                                  28.11
                   11 1 2 5423.07
3 43 5 1694.44
        90.00
                                                                                                                           1094.4
                                                                                                                                           -9.51
                                                                                                                                                         359.35
                                                                                                           4 11 19
                                                                 6.16
                                                                              163.45
                                                                                              117.04
                                                 -13.25
      100.00
                                                                                             85.34 13 54 53
120.30 5 1 22
82.33 15 14 13
                                                                                                                           4538.6
                                                                                                                                                         219.53
                                                                                                                                           28.60
                  12 29 15 5138.60
4 35 53 1529.07
13 52 56 4876.73
                                                                228.21
                                                                              171.79
                                                  29.56
      100.00
                                                                                                                                                         345.04
                                                                                                                            929.1
                                                                                                                                          -12.50
                                                                              161.52
                                                                351.69
                                                 -16.65
       110.00
                                                                                                                                                        198.89
                                                                                                                          4276.7
                                                                                                                                         31.99
                                                                              171.30
                                                  33.41
                                                                207.83
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 456.1 SR 242.7 SS 163.0
CRT -.2322 CRS .6000 CST -.9064
                                                                    SGT 2029.6 SGR 463.8 SG3 312.0
RRT -.8243 RRF -.8730 RTF .8958
SGB 2081.9 R23 .2163 R13 -.9012
    TOE -.0153 TRA-1.5346 TC3-1.1330 BAU .5560
    ROE -.2437 RRA .2138 RC3 .2852 FAU .11522
FOE .1724 FRA-1.3705 FC3-2.8025 BSP 6149
BOE .2442 BRA 1.5494 BC3 1.1683 FSP -1002
                                                                                                                       LSA 485.9 MSA 238.8 SSA 20.3
                                                                                                                       EL1 460.8 EL2 233.6 ALF 170.49
                                                                    5G1 2065.8 SG2 258.0 THA 169.16
                                                                                                                                  ARRIVAL DATE APR 9 1966
                                                                        FLIGHT TIME 104.00
LAUNCH DATE DEC 26 1965
                                                                        DISTANCE 313.047
   HELIOCENTRIC CONIC
                        .00 LOL 94.01 VL 28.684 GAL -11.03 A7L 88.49 MCA 149.17 SMA 135.25 ECC .20978 INC 1.5119 V1 30.281 .77 LOP 243.20 VP 38.281 GAP 4.08 A7P 91.30 TAL 234.70 TAP 23.88 RCA 106.87 APO 163.62 V2 34.932 7.27 GP 18.12 TAL 157.33 TAP 125.58 ETS 10.80 TAE 141.32 ETE 160.48 TAC 29.07 ETC 180.50 CLP-127.75
    RL 147.13 LAL
        IGA.4A LAP
    RC 105.043 GL
   PLANETOCENTRIC CONIC
    C3 34.418 VHL 5.867 DLA -13.88 RAL 296.14 RAD 6568.4 VEL 12.482 PTH 2.26 VHP 4.297 DPA -5.21 RAP 295.26 ECC 1.5664
    LNCH AFMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 38 21
37
                                                                                                                         1302.2
                                                                                                            3 10, 3
                                                                                              116.27
                                                   -10.97
                                                                 22.59
                                                                              164.52
                                  1902.16
        90.00
                                                                                                         12 29 16
4 20 5
                                                                                                                                            27.46
                                                                                                                                                         241.79
                                                                                                86.99
                                                                                                                            4838.7
                                                                 250.39
                                                                               172.50
                                  5438.65
                                                  28.17
                   10 58 37
        90.00
                                                                                                                                            -8.50
                                                                                                                                                         357.60
                                                                                                                            1063.4
                    3 52 22 1663.37
12 27 17 5152.68
                                                                                               117.47
                                                                  4.36
                                                                               163.85
                                                   -12.28
       100.00
                                                                                                85.88 13 53 10
120.77 5 9 11
82.81 15 13 26
                                                                                                                            4552.7
                                                                                                                                           28.75
                                                                                                                                                         220.56
                                                                               172.40
                                                                 229.25
                                                   29.63
                   12 27 17
       100.00
                                                                                                                            901.1
                                                                                                                                          -11.48
                                                                                                                                                         343.51
                                                                                              120.77
                                                                               161.89
                                                  -15.68
                                                                 350.10
                     4 44 10
                                  1501.13
       110.00
                                                                                                                           4287.7
                                                                                                                                          32.15
                                                                                                                                                         199.71
                                 4887.68
                                                                 208.67
                                                                               171.95
                   13 51 59
                                                   33.51
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 478.9 SR 221.3 SS 150.1
CRT -.1956 CRS .5319 CST -.9221
LSA 501.8 MSA 220.5 SSA 20.5
                                                                   SGT 2151.7 SGR 472.0 SG3 300.5
RRT -.8426 RRF -.8969 RTF .8965
    TOE -.0467 TRA-1.5729 TC3-1.2421 BAU .5892
    ROE - .2170 RRA .2088 RC3 .3117 FAU .10982
                                                                    SGB 2202.9 R23 .2435 R13 -.9019
SG1 2188.6 SG2 249.9 THA 169.39
    FOE .1099 FRA-1.2508 FC3-2.7623 89P 6573
BDF .2219 BRA 1.5867 BC3 1.2806 FSP -969
                                                                                                                        EL1 481.3 EL2 216.0 ALF 173.53
    BDE .2219 BRA 1.5867 BC3 1.2806 FSP
                                                                                                                                  ARRIVAL DATE APR 11 1966
                                                                        FLIGHT TIME 106.00
LAUNCH DATE DEC 26 1965
                                                                        DISTANCE 319.077
                         .00 LOL 94.01 VL 28.618 GAL -10.82 AZL 88.73 HCA 152.36 SHA 134.73 ECC .20838 INC 1.2716 VI 30.281 .59 LOP 246.38 VP 38.221 GAP 4.37 AZP 91.13 TAL 233.47 TAP 25.82 RCA 106.65 APO 162.80 V2 34.920 6.21 GP 19.52 ZAL 156.85 ZAP 127.72 ETS 13.17 ZAE 139.43 ETE 159.64 ZAC 29.61 ETC 182.78 CLP-130.48
   HELIOCENTRIC CONIC
    RL 147.13 LAL
RP 108.52 LAP
    RC 107.406 GL
   PLANETOCENTRIC CONIC
    C3 33.233 VML 5.765 DLA -14.78 RAL 297.16 RAD 6568.3 VEL 12.434 PTH 2.25 VMP 4.410 DPA -3.76 RAP 295.50 ECC 1.5469
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1261.6
                                                                                           116.72
                                                                                                           3 21 30
                                                                            165.05
                   2 50 28 1861.63
10 54 35 5461.51
4 3 50 1624.89
                                                   -9.74
                                                                 20.25
                                                                                               116.72 3 21 3D
67.83 12 25 37
         90.00
                                                                                                                                           27.64
                                                                                                                                                         243.44
                                                                                                                            4861.5
                                                                 252.05
                                                                               173.25
                                                   28.24
         90.00
                                                                                                                                            -7.23
                                                                                                                                                         355.45
                                                                                                                           1024.9
                                                                              164.35
                                                                                               117.95
                                                                                                          4 30 55
                                                                  2.15
                                                   -11.06
       100.00
                                                                                                         13 50 7
                                                                                                                                          28.95
                                                                                                                                                         222.07
                                                                                                86.68
                                                                                                                           4573.5
                                                                               173.17
                   12 23 54 5173.48
4 54 17 1466.87
13 49 56 4904.27
                                                                 230.79
       100.00
                                                  29.72
                                                                                                121.31 5 18 44
83.56 15 11 40
                                                                                                                                          -10.23
                                                                                               121.31
                                                                                                                            866.9
                                                                              162.36
                                                                 348.17
                                                   -14.48
       110.00
                                                                                                                                          32.39
                                                                                                                           4304.3
                                                                               172.78
                                                  33.64
                                                                 209.95
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 504.2 SR 197.5 SS 138.2
CRT -.1476 CRS .4225 CST -.9450
                                                                    SCT 2273.3 SCR 483.9 SC3 288.4

RRT -.8578 RRF -.9191 RTF .8966

SCB 2324.2 R23 .2743 R13 -.9021
     TOE -. 0897 TRA-1.6022 TC3-1.3570 BAU .6218
     ROE -. 1881 RRA . 2023 RC3 . 3425 FAU . 10420
                                                                                                                       LSA 522.2 MSA 198.0 SSA 20.8
     FOE .0400 FRA-1.1288 FC3-2.7144 BSP 7001
BDE .2084 BRA 1.6149 BC3 1.3995 FSP -935
                                                                                                                        EL1 505.2 EL2 194.9 ALF 176.11
                                                                     SG1 2311.3 SG2 244.6 THA 169.53
                                                                                                                                   ARRIVAL DATE APR 13 1966
                                                                         FLIGHT TIME 108.00
 LAUNCH DATE DEC 26 1965
                                                                         DISTANCE 325.084
    RL 147.13 LAL .00 LOL 94.01 VL 28.551 GAL -10.61 A7L 89.03 HCA 155.54 SHA 134.20 ECC .20703 INC .9741 VI 30.281 RP 108.56 LAP .40 LOP 249.56 VP 38.160 GAP 4.65 A7P 90.89 TAL 232.18 TAP 27.72 RCA 106.42 APO 161.99 V2 34.909 RC 109.770 GL 4.84 GP 21.29 TAL 156.33 TAP 129.50 ETS 15.99 TAE 137.53 ETE 158.47 TAC 30.39 ETC 185.48 CLP-133.05
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 32.048 VHL 5.661 DLA -15.98 RAL 298.29 RAD 6568.3 VEL 12.386 PTH 2.24 VHP 4.539 DPA -1.94 RAP 295.83 ECC 1.5274
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1209.5
                    3 6 3 1809.48
10 48 2 5495.38
                                                                               165.75
                                                                                              117.22
                                                    -8.13
                                                                  17.27
                                   1809.48
                                                                                                                                                          245.69
                                                                                                                             4895.4
                                                                                                                                            27.87
                                                                                                89.07 12 19 38
118.48 4 44 46
                                                                                174.23
                                                                 254.53
                                                    28.30
                                                                                                                                                          352.71
                                                                                                                             975.7
                                                                                                                                            -5.60
                                                                               165.03
                                                                                                118.48
                                                     -9.47
                                                                 359.36
                     4 18 31 1575.65
                                                                                                87.89 13 45 D
121.92 5 30 47
84.69 15 8 21
                                                                                                                                                          224.33
                                                                                                                            4604.4
                                                                               174.18
                                                    29.82
                                                                 233.08
                    12 18 16
                                  5204.44
        100.00
                                                                                                                                                          339.33
                                                                                                                             823.6
                                                                               162.98
                                                                                               121.92
                                                   -12.93
                                                                  345.77
                      5 7 4 1423.58
        110.00
                                                                                                                             4329.3
                                                                                                                                            32.71
                                                                                                                                                          202.82
                                                                 211.88
                                                                               173.88
                                                    33.82
        110.00
                    13 46 12
                                   4929.28
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 2391.2 SGR 499.7 SG3 274.6
RRT -.8688 RRF -.9390 RTF .8959
                                                                                                                       ST 534.6 SR 170.7 55 129.4
CRT -.0906 CRS .2610 CST -.9698
      TOE -.1466 TRA-1.6186 TC3-1.4759 BAU .6527
     ROE -.1570 RRA .1933 RC3 .3778 FAU .09806
FOE -.0355 FRA -.9991 FC3-2.6490 BSP 7385
                                                                                                                      LSA 549.5 MSA 171.2 55A 21.4
EL1 534.9 EL2 170.0 ALF 178.16
                                                                    SGB 2442.8 R23 .3080 R13 -.9017
SG1 2430.7 SG2 243.4 THA 169.61
     BDE .2148 BRA 1.6301 BC3 1.5234 FSP -887
```

ARRIVAL DATE APR' 15 1966

LAUNCH DATE DEC 26 1965

```
DISTANCE 331.071
  HELIOCENTRIC CONIC
                         .00 LOL 94.01 VL 28.483 GAL -10.39 A7L 89.41 HCA 158.72 SMA 133.68 ECC .20575 INC .5947 V1 30.281 .22 LOP 252.73 VP 38.099 GAP 4.92 A7P 90.55 TAL 230.87 TAP 29.58 RCA 106.18 APO 161.19 V2 34.897
   RL 147.13 LAL
    RP 108.59 LAP
                          3.00 GP 23.57 TAL 155.72 TAP 130.83 ETS 19.38 TAE 135.53 ETE 156.92 TAC 31.45 ETC 188.74 CLP-135.50
   RC 112.133 GL
  PLANETOCENTRIC CONIC
    C3 30.886 VHL 5.558 OLA -17.60 RAL 299.59 RAD 6568.2 VEL 12.339 PTH 2.23 VMP 4.693 OPA
                                                                                                                                          .41 RAP 296.19 ECC 1.5083
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 27 6 1739.31
10 37 20 5546.96
4 38 10 1509.97
12 8 56 5251.54
                                                                                166.76
                                                                                                  117.74
                                                                                                                  3 56 5
                                                                                                                                   1139.3
                                                     -5.92
                                                                    13.29
       90.00
                                                                                                                                    4947.0
                                                                                                      90.96 12 9 47
                                                                                                                                                     28.14
                                                      28.30
                                                                    258.30
                                                                                   175.53
        90.00
                                                                                                    119.06 5 3 20
89.73 13 36 28
                                                                                                                                     910.0
                                                                                                                                                     -3.39
                                                                                   156.00
      100.00
                                                      -7.32
                                                                    355.67
                                                                                                                                                     29.53
                                                    29.89
                                                                                                                                    4651.5
      100.00
                                                                    236.58
                                                                                   175.54
                                                                                                    122.61 5 46 39
86.44 15 2 31
                    5 23 53 1366.77
13 39 43 4967.50
                                                                                                                                     766.8
                                                                                                                                                     -6.49
                                                                                                                                                                   336.31
                                                    -10.87
                                                                    342.67
                                                                                   163.85
                                                   34.02
                                                                                                                                                   33.15
                                                                                                                                    4367.5
                                                                    214.85
                                                                                   175.38
      110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCT 2511.5 SGR 522.6 SG3 260.2
RRT -.8762 RRF -.9565 RTF .8955
SGB 2565.3 R23 .3405 R13 -.9018
                                                                                                                               ST 578.9 SR 138.4 S5 131.4
CRT -.0333 CRS .0264 CST -.9844
    TOE -.2279 TRA-1.6222 TC3-1.6028 BAU .6843
    RDE -.1206 RRA .1823 RC3 .4208 FAU .09172
                                                                                                                               LSA 593.2 MSA 138.4 55A 22.6
   FOE -.13D3 FRA -.8699 FC3-2.57D9 BSP 7818
BDE .2578 BRA 1.6324 BC3 1.6571 FSP -845
                                                                        SG1 2553.3 SG2 247.8 THA 169.57
                                                                                                                               EL1 578.9 EL2 138.4 ALF 179.52
                                                                                                                                           ARRIVAL DATE APR 17 1966
                                                                             FLIGHT TIME 112.00
                                                                            DISTANCE 337.038
  HELIOCENTRIC CONIC
                             .00 LOL 94.01 VL 28.415 GAL -10.17 A7L 89.91 MCA 161.89 SMA 133.16 ECC .20452 INC .0885 V1 30.281 .03 LOP 255.91 VP 38.037 GAP 5.18 A7P 90.08 TAL 229.51 TAP 31.40 RCA 105.93 APO 160.39 V2 34.886 .46 GP 26.58 ZAL 154.93 ZAP 131.54 ETS 23.53 ZAE 133.28 ETE 154.88 ZAC 32.87 ETC 192.75 CLP-137.86
    RL 147.13 LAL
RP 108.63 LAP
    RC 114.493 GL
  PLANETOCENTRIC CONIC
    C3 29.792 VHL 5.458 DLA -19.90 RAL 301.12 RAD 6568.2 VEL 12.295 PTH
                                                                                                        2.21 VHP 4.888 OPA
                                                                                                                                        3.50 RAP 296.49 ECC 1.4903
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 57 42 1638.52
10 18 59 5629.66
5 6 22 1416.93
11 53 1 5326.48
5 47 24 1288.34
13 28 28 5027.83
                                                                                                                                  1038.5
                                                                                                                                                                       1.00
                                                                                                                 4 25 0
                                                                                                                                                      1.09
                                                      -2.70
                                                                      7.63
                                                                                   168.35
                                                                                                    118.20
       90.00
                                                                                                                 11 52 49
                                                                                                                                     5029.7
                                                                                                                                                                    255.68
        90.00
                                                      28.06
                                                                    264.34
                                                                                    177.32
                                                                                                      93.98
                                                                                                                                                     28.32
                                                                                                                 5 29 59
                                                                                                                                     816.9
                                                                                                                                                       - .24
                                                                                                                                                                    343.98
      100.00
                                                      -4.21
                                                                    350.51
                                                                                    167.52
                                                                                                     119.62
                                                                                                      92.66 13 21 47
                                                                                                                                   4726.5
                                                                                                                                                     29.84
                                                                                                                                                                    233.35
      100.00
                                                      29.78
                                                                    242.15
                                                                                    177.43
                                                                                                                 6 8 52
                                                                                                                                    688.3
                                                                                                                                                     -3.52
                                                                                                                                                                    332.18
      110.00
                                                      -7.96
                                                                    338.45
                                                                                    165.21
                                                                                                     123.35
                                                                                                      89.22 14 52 16
                                                                                                                                   4427.8
                                                      34.18
                                                                    219.55
                                                                                    177.52
                                                                                                                                                     33.69
                                                                                                                                                                    210.34
      110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 2627.9 SGR 552.7 SG3 242.9

RRT -.8780 RRF -.9707 RTF .8948

SGB 2685.4 R23 .3704 R13 -.9017

SGI 2672.7 SG2 260.1 THA 169.44
                                                                                                                               ST 648.3 SR 99.5 SS 152.3
CRT -.0275 CRS -.1568 CST -.9684
    TOE -.3414 TRA-1.6041 TC3-1.7309 BAU .7145
    ROE -.0772 RRA .1664 RC3 .4710 FAU .08445
                                                                                                                               LSA 664.9 M5A 103.4 S5A 24.1
EL1 648.3 EL2 99.5 ALF 179.75
    FOE -.2408 FRA -.7294 FC3-2.4542 BSP 8206
BOE .3500 BRA 1.6127 BC3 1.7938 FSP -787
                                                                                                                                           ARRIVAL DATE APR 19 1966
                                                                             FLIGHT TIME 114.00
LAUNCH DATE DEC 26 1965
                                                                            DISTANCE 342.985
   HELIOCENTRIC CONTC
   RL 147.13 LAL .00 LOL 94.01 VL 28.346 GAL -9.94 AZL 90.62 MCA 165.07 SHA 132.64 ECC .20335 INC .6222 V1 30.281 RP 108.66 LAP -.16 LOP 259.08 VP 37.976 GAP 5.43 AZP 89.40 TAL 228.11 TAP 33.18 RCA 105.67 APO 159.61 V2 34.875 RC 116.852 GL -3.24 GP 30.68 ZAL 153.70 ZAP 131.36 ETS 28.65 ZAE 130.53 ETE 152.27 ZAC 34.84 ETC 197.78 CLP-140.21
   PLANETOCENTRIC CONIC
   C3 28.891 VHL 5.375 DLA -23.29 RAL 303.06 RAD 6568.2 VEL 12.258 PTH 2.21 VHP 5.158 CPA 7.67 RAP 296.60 ECC 1.4755 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 48 33 1475.08 2.57 358.51 171.30 118.21 5 13 8 875.1 6.32 351.84 90.00 9 43 36 5777.75 26.90 275.01 179.74 99.20 11 19 53 5177.7 27.90 266.49 100.00 5 51 48 1270.90 .73 342.49 170.28 119.88 6 12 59 670.9 4.70 335.95 100.00 11 23 2 5457.13 28.98 251.77 180.09 97.66 12 53 59 4857.1 29.74 243.05 110.00 6 23 32 1171.44 -3.54 332.29 167.61 124.02 6 43 3 571.4 .95 326.08 110.00 13 7 48 5129.36 33.99 227.47 180.68 93.90 14 33 17 4529.4 34.15 218.23
    C3 28.891 VHL 5.375 DLA -23.29 RAL 303.06 RAD 6568.2 VEL 12.258 PTH 2.21 VHP 5.158 CPA
                                                                                                                                       7.67 RAP 296.60 ECC 1.4755
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SCI 2746.2 SGR 593.9 SG3 222.5
RRI -.8744 RRF -.9813 RTF .8950
SGB 2809.7 R23 .3922 R13 -.9028
SGI 2795.4 SG2 283.1 THA 169.18
                                                                                                                                ST 772.5 SR 56.5 SS 205.2
    TOE -.5134 TRA-1.5568 TC3-1.8553 BAU .7453
                                                                                                                                CRX -.3905 CRS .1201 CST -.9465
    ROE -.0189 RRA .1435 RC3 .5300 FAU .07612
                                                                                                                               USA 797.0 MSA 79.7 SSA 22.7
EL1 772.9 EL2 52.0 ALF 178.36
    FOE -.3820 FRA -.5801 FC3-2.2809 BSP 8628
BOE .5137 BRA 1.5634 BC3 1.9295 FSP -725
                                                                                                                                           ARRIVAL DATE APR 21 1966
LAUNCH DATE DEC 26 1965
                                                                             FLIGHT TIME 116.00
                                                                            DISTANCE 348.912
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 28.277 GAL -9.70 AZL 91.71 MCA 168.23 SMA 132.12 ECC .2025 INC 1.7067 V1 30.281 RP 108.69 LAP -.35 LOP 262.25 VP 37.915 GAP 5.67 AZP 88.33 TAL 226.69 TAP 34.92 RCA 105.40 APO 158.84 V2 34.865 RC 119.206 GL -8.94 GP 36.50 ZAL 151.38 ZAP 129.75 ETS 34.99 ZAE 126.76 ETE 149.01 ZAC 37.73 ETC 204.19 CLP-142.70
   PLANETOCENTRIC CONIC
    C3 28.547 VHL 5.343 DLA -28.58 RAL 305.77 RAD 6568.1 VEL 12.244 PTH 2.20 VHP 5.580 DPA 13.51 RAP 296.24 ECC 1.4698
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 7 11 23
8 15 3
                                                                                                     112.90
                                                                                                                                      488.4
                                                                                                                                                                   330.31
                                                                                    180.19
                                                      17.58
                                                                    337.76
        85.99
                      6 53 15 1088.38
                                                                                                                                      270.4
                                                                                                                                                     20.54
                                                       17.59
                                                                     321.80
                                                                                    180.19
                                                                                                     112.89
        94.01
                     8 0 33
                                     870.40
                                                                                                                   7 49 49
                                                                                                                                      356.5
                                                                                                                                                     14.81
                                                                                                                                                                    318.09
                                                                                    177.05
                                                                                                     117.91
       100.00
                     7 33 52
                                      956.49
                                                       11.17
                                                                     324.98
                                                                                                     108.05 11 38 42
                                                                                                                                     5165.6
                                                                                                                                                     26.48
       100.00
                    10 2 36
                                   5765.56
                                                      24.24
                                                                     273.41
                                                                                    182.85
                                                                                                     123.95 7 46 18
102.58 13 51 35
                                                                                                                                      368.1
                                                                                                                                                       8.65
                     7 30 10
                                                                                    172.85
       110.00
                                     968.14
                                                        4.22
                                                                     321.67
                                                                                                                                     4726.7
                                                                     242.52
                                                                                    185.27
       110.00
                    12 22 48
                                     5326.68
                                                       32.05
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                        56T 2866.2 5GR 646.2 5G3 196.0
RRT -.8633 RRF -.9875 RTF .8972
SGB 2938.2 R23 .4024 R13 -.9061
                                                                                                                                ST 1006.6 SR 84.4 SS 300.4
CRT -.9843 CRS .9637 CST -.9506
    TOE -.7934 TRA-1.4586 TC3-1.9449 BAU .7755
    ROE .0676 RRA .1058 RC3 .5887 FAU .06568
FOE -.5605 FRA -.4133 FC3-1.9919 BSP 9073
                                                                                                                             LSA 1050.0 MSA 89.9 SSA 12.7
EL1 1010.0 EL2 14.9 ALF 175.28
                                                                         SG1 2920.7 SG2 320.0 THA 168.85
    BDE .7963 BRA 1.4624 BC3 2.0320 FSP -643
```

FLIGHT TIME 110.00

ARRIVAL CATE APR 23 1966

LAUNCH DATE DEC 26 1965

```
DISTANCE 354.817
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 28.207 GAL -9.45 AZL 93.57 HCA 171.39 SHA 131.61 ECC .20120 INC 3.5721 V1 30.281 RP 108.72 LAP -.53 LOP 265.42 VP 37.854 GAP 5.90 AZP 86.47 TAL 225.23 TAP 36.62 RCA 105.13 APO 158.09 V2 34.856
    RC 121.557 GL -18.43 GP 45.10 TAL 146.21 TAP 125.73 ETS 42.84 TAE 121.02 ETE 145.35 TAC 42.29 ETC 212.50 CLP-145.81
   PLANETOCENTRIC CONIC
    C3 30.084 VHL 5.485 DLA -37.38 RAL 310.37 RAD 6568.2 VEL 12.307 PTH 2.22 VHP 6.372 DPA 21.99 RAP 294.80 ECC 1.4951 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 45 6 1559.88
10 45 23 5713.19
4 45 6 1559.88
10 45 23 5713.19
4 45 6 1559.88
10 45 23 5713.19
                                                                                                            5 11
                                                                              188.28
                                                                                              120.96
                                                                 16.00
                                                   22.08
                                                                                                         12 20 36
                                                                                                                            5113.2
                                                                                               120.95
                                                   22.10
                                                                 268.34
                                                                               188.28
                                                                                                                                            26.02
                                                                               188.28
                                                                                                            5 11 5
                                                                                                                             959.9
                                                                                               120.96
        64.51
                                                   22.08
                                                                 16.00
                                                                                              120.95 12 20 36
                                                                                                                            5113.2
                                                                                                                                            26.03
       115.49
                                                   22.10
                                                                268.34
                                                                               188.28
                                                                                                        5 11 5
12 20 36
                                                                                                                                            26.02
                                                   22.08
                                                                  16.00
                                                                               188.28
                                                                                               120.96
                                                                                                                             959.9
        64.51
                                                                                                                         5113.2
                                                                                               120.95
                                                                                                                                           26.03
                                                   22.10
                                                                 268.34
                                                                               188.28
       115.49
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RRT -.8377 RRF -.9657 RTF ..9038

SGB 3064.6 R23 .3962 R13 -.9138

SGB 3041.6 SGZ 374.5 THA 168.73
                                                                                                                        ST 1458.2 SR 222.0 SS 450.8
CRT -.9578 CRS .9984 CST -.9712
    TOE-1.3122 TRA-1.2518 TC3-1.8939 BAU
                                                      .7994
    ROE .2113 RRA .0321 RC3 .6033 FAU .05165
                                                                                                                       LSA 1537.8 MSA 118.4 SSA 5.1
    FDE -.7781 FRA -.2182 FC3-1.4862 BSP 9464
BDE 1.3291 BRA 1.2522 BC3 1.9877 FSP -523
                                                                                                                        EL1 1473.7 EL2 63.2 ALF 171.69
                                                                                                                                   ARRIVAL DATE APR 25 1966
LAUNCH DATE DEC 26 1965
                                                                         FLIGHT TIME 120.00
                                                                        DISTANCE 360.687
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 28.138 GAL -9.19 AZL 97.56 MCA 174.53 SMA 131.10 ECC .20018 INC 7.5633 VI 30.281 RP 108.75 LAP -.72 LOP 268.59 VP 37.794 GAP 6.11 AZP 82.47 TAL 223.73 TAP 38.26 RCA 104.85 APO 157.34 VZ 34.846 RC 123.903 GL -35.09 GP 58.23 ZAL 134.04 ZAP 117.68 ETS 53.27 ZAE 111.29 ETE 143.31 ZAC 49.83 ETC 224.16 CLP-151.92
   PLANETOCENTRIC CONIC
    C3 40.452 VHL 6.360 DLA -52.30 RAL 321.61 RAD 6568.6 VEL 12.721 PTH 2.31 VHP 8.319 DPA 34.63 RAP 290.26 ECC 1.6657 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              137.28
                                                                                                           4 39 59
                                                                                                                          1248.3
                     4 9 11 1848.26
                                                   25.66
                                                                 45.33
                                                                              209.80
        44.00
                                                                                               137.27
                                                                                                          14 23 52
                                                                                                                            4974.2
                                                                                                                                            31.41
                                                                                                                                                          253.03
                   12 50 58
                                  5574.19
                                                   25.67
                                                                 25A.97
                                                                               209.81
       136.00
                                                                                                           4 39 59
                                                                                                                            1248.3
                                                                                                                                            31.40
                                                                               209.80
                                                                                               137.28
                     4 9 11
                                 1848.26
                                                   25.66
                                                                  45.33
        44.00
                  12 50 58 5574.19
4 9 11 1848.26
12 50 58 5574.19
                                                                                               137.27 14 23 52
                                                                 258.97
                                                                               209.81
                                                                                                                            4974.2
                                                                                                                                            31.41
                                                                                                                                                          253.03
       136.00
                                                   25.67
                                                                               209.80
                                                                                               137.28
                                                                                                          4 39 59
                                                                                                                            1248.3
                                                                                                                                                           39.39
                                                   25.66
                                                                  45.33
        44.00
                                                                                               137.27 14 23 52
                                                                                                                            4974.2
                                                                                                                                            31.41
                                                                                                                                                          253.03
       136.00
                                                   25.67
                                                                 258.97
                                                                               209.81
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2332.5 SR 392.1 55 666.8
CRT -.9571 CRS .9889 CST -.9895
                                                                    SGT 3120.7 SGR 694.9 SG3 111.7
RRT -.7592 RRF -.9452 RTF .9276
    TDE-2.5624 TRA -.7480 TC3-1.4054 BAU .7943
    RDE .4300 RRA -.1338 RC3 .4263 FAU .03310
FDE-1.0294 FRA .0051 FC3 -.7083 BSP 9933
BDE 2.5982 BRA .7599 BC3 1.4687 FSP -366
                                                                                                                        LSA 2453.3 MSA 142.5 SSA 1.7
                                                                    SGB 3197.1 R23 .3475 R13 -.9364
                                                                    SGI 3165.9 SGZ 445.8 THA 170.21
                                                                                                                        EL1 2362.6 EL2 112.2 ALF 170.84
                                                                                                                                  ARRIVAL DATE APR 27 1966
                                                                        FLIGHT TIME 122.00
LAUNCH DATE DEC 26 1965
                                                                        DISTANCE 366.448
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 28.069 CAL -8.90 A7L 111.78 HCA 177.57 SHA 130.60 ECC .19898 INC21.7784 V1 30.281
RP 108.78 LAP -.90 LOP 271.76 VP 37.735 CAP 6.29 A7P 68.24 TAL 222.15 TAP 39.72 RCA 104.61 APO 156.58 V2 34.838
RC 126.245 GL -58.82 GP 75.60 7AL 110.80 ZAP 104.08 ETS 89.25 ZAE 92.18 ETE 168.77 ZAC 61.45 ETC 263.07 CLP 167.91
   PLANETOCENTRIC CONIC
    C3 144.630 VHL 12.026 DLA -66.26 RAL 5.63 RAD 6570.6 VEL 16.308 PTH 2.86 VHP 16.387 DPA 51.58 RAP 271.03 ECC 3.3802
    LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  6 21 18 2219.99
16 30 4 5780.79
6 21 18 2219.99
16 30 4 5780.79
6 21 18 2219.99
16 30 4 5780.79
                                                                                                                                        19.61
                                                                                                                        1620.0
                                                                                            155.67 6 58 18
                                                                                                                                                          67.88
                                                                             270.10
                                                                 70.95
                                                  12.34
        27.21
                                                                                              155.66
                                                                                                         18 6 25
                                                                                                                            5180.8
                                                                                                                                           19.61
                                                                                                                                                         260.41
                                                                               270.12
                                                   12.35
                                                                263.49
                                                                                              155.67
                                                                                                          6 58 18
                                                                                                                           1620.0
                                                                                                                                          19.61
                                                                                                                                                          67.88
                                                                               270.10
                                                                 70.95
                                                   12.34
        27.21
                                                                                                                                           19.61
                                                                                                                                                         260.41
                                                                                              155.66
                                                                                                         18 6 25
                                                                                                                            5180.8
                                                                               270.12
       152.79
                                                   12.35
                                                                263.49
                                                                                                          6 58 18
                                                                                                                           1620.0
                                                                                                                                                          67.88
                                                                                              155.67
                                                                                                                                            19.61
                                                                               270.10
        27.21
                                                   12.34
                                                                  70.95
                                                                                                                            5180.8
                                                                                                                                           19.61
                                                                                                                                                         260.41
                                                                                              155.66 18 6 25
                                                   12.35
                                                                263.49
                                                                               270.12
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 3070.3 SCR 1151.2 SC3 61.8
RRT .9088 RRF .8544 RTF .9932
SCB 3279.1 R23 -.1636 R13 .9864
                                                                                                                       ST 2552.7 SR 1131.4 SS 775.4
    TOE-5.2498 TRA 1.4373 TC3 -.2190 BAU .4238
                                                                                                                       CRT .9899 CRS -.9809 CST -.9986
LSA 2893.6 MSA 157.7 SSA .5
    ROE-2.3706 RRA .1877 RC3 -.0074 FAU .00959
FDE-1.1125 FRA .3881 FC3 -.0574 BSP 9358
BDE 5.7602 BRA 1.4495 BC3 .2192 FSP -185
                                                                    SG1 3247.4 SG2 454.2 THA 19.21
                                                                                                                        EL1 2788.3 EL2 147.1 ALF 23.76
    BOE 5.7602 BRA 1.4495 BC3 .2192 FSP
                                                                                                                                   ARRIVAL DATE APR 29 1966
                                                                        FLIGHT TIME 124.00
LAUNCH DATE DEC 26 1965
                                                                       DISTANCE 373.005
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 27.999 GAL -8.78 AZL 40.06 HCA 181.41 SMA 130.10 ECC .20008 INC49.9383 VI 30.281

RP 108.80 LAP -1.08 LOP 274.92 VP 37.676 GAP 6.70 AZP 139.93 TAL 220.94 TAP 42.35 RCA 104.07 APO 156.13 VZ 34.830

RC 128.581 GL 58.14 GP -69.64 ZAL 99.70 ZAP 98.42 ETS 197.50 ZAE 71.38 ETE 122.94 ZAC 92.27 ETC 30.86 CLP 114.88
   PLANETOCENTRIC CONIC
    C3 621.736 VHL 24.935 DLA 46.58 RAL 317.99 RAD 6572.6 VEL 27.259 PTH 3.40 VHP 29.055 DPA -65.31 RAP 148.31 ECC11.2322
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               43.43 17 38 42
                                                                                                                           4301.0
                                                                                                                                           -6.83
                                                                                                                                                         222.23
                                                                 227.35
                                                                               227.03
                                                   -1.03
        51.33 16 17 1
128.67 0 14 15
                                  4901.04
                                                                                                          1 11 50
                                                                                                                            2855.2
                                                                                                                                            -6.81
                                                                                                                                                          109.61
                                                                               227.01
                                                                                                43.43
                                                   -1.01
                                                                 114.72
       128.67
                                  5455.21
                                                                                                        17 38 42
                                                                                                                            4301.0
                                                                                                                                            -6.83
                                                                                                                                                         222.23
                                                                 227.35
                                                                               227.03
                                                                                                43.43
        51.33
                  16 17 1
                                  4901.04
                                                   -1.03
                                                                                                        1 11 50
17 38 42
                                                                                                                            2855.2
                                                                                                                                            -6.81
                                                                                                                                                         109.61
                                                                               227.01
                                                                                                43.43
                     0 14 15
                                  3455.21
                                                   -1.01
                                                                 114.72
       128.67
                                                                                                43.43
                                                                                                                            4301.0
                                                                                                                                           -6.83
                                                                                                                                                         222.23
                                                                 227.35
                                                                               227.03
                                                   -1.03
        51.33
                   16 17 1
                                  4901.04
                     0 14 15 3455.21
                                                                                                                           2855.2
                                                                                                                                           -6.81
                                                                                                                                                         109.61
                                                                114.72
                                                                               227.01
                                                                                                43.43
                                                                                                           1 11 50
       128.67
                                                   -1.01
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 605.0 SGR 3179.4 SG3 49.3
RRT .0649 RRF -.9957 RTF .0264
                                                                                                                       ST 291.3 SR 2823.7 SS 1324.5
CRT -.7607 CRS .9996 CST -.7796
     TOE 1.0667 TRA 1.5679 TC3 -.0354 BAU 1.3884
     RO-12.1754 RRA 3.8057 RC3 -.1632 FAU-.01790
FOE 2.2832 FRA -.5565 FC3 .0249 BSP 8044
BDE12.2220 BRA 4.1160 BC3 .1670 FSP -134
                                                                    SGB 3236.4 R23 -. 0937 R13 -. 9955
                                                                                                                      LSA 3126.7 MSA 190.7 SSA
                                                                    5G1 3179.6 SG2 6D3.7 THA 89.27
                                                                                                                        EL1 2832.4 EL2 188.5 ALF 94.51
```

FLIGHT TIME 118.00

ARRIVAL DATE MAY 1 1966

LAUNCH DATE DEC 26 1965

HELIOCENTRIC CONIC DISTANCE 378.551 RL 147.13 LAL .00 LOL 94.01 VL 27.930 GAL -8.44 A7L 72.84 MCA 184.26 SMA 129.61 ECC .19854 INC17.1640 V1 30.281 RP 108.82 LAP -1.26 LOP 278.09 VP 37.618 GAP 6.81 A7P 107.12 TAL 219.23 TAP 43.49 RCA 103.88 APO 155.34 V2 34.822 RC 130.911 GL 55.54 GP -63.17 ZAL 114.03 ZAP 115.39 ETS 284.04 ZAE 101.30 ETE 202.85 ZAC 81.03 ETC 114.09 CLP-161.78 PLANETOCENTRIC CONIC 2.68 VHP 10.103 OPA -81.46 RAP C3 97.776 VHL 9.888 DLA 37.29 RAL 301.89 RAD 6569.9 VEL 14.803 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
64.66 16 10 9 4486.95 -11.29 200.47 196.71 54.22 17 24 56 3887.0 -15.88 194.15 108.97 115.34 22 8 42 3357.28 -11.27 115.30 196.70 54.22 23 4 40 54.22 17 24 56 2757.3 -15.87 64.66 16 10 9 4486.95 -11.29 200.47 196.71 3887.0 -15.88 194.15 54.22 23 4 40 54.22 17 24 56 54.22 23 4 40 22 8 42 3357.28 16 10 9 4486.95 2757.3 -15.87 108.97 115.34 -11.27 115.30 196.70 -11.29 200.47 196.71 3887.0 -15.88 194.15 64.66 22 8 42 3357.28 -15.87 115.34 -11.27 115.30 196.70 2757.3 108.97 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 3447.2 SGR 656.8 SG3 89.1 RRT -.8005 RRF -.6192 RTF .9658 ST 2433.6 SR 229.5 SS 720.4 CRT -.7607 CRS .6814 CST -.9934 TDE 4.0160 TRA-3.2584 TC3 -.4624 BAU .6045 RDE -.2129 RRA .8857 RC3 -.0031 FAU .02259 SGB 3509.2 R23 -.2734 R13 -.9612 FOE 1.4005 FRA -.6848 FC3 -.2000 BSP 10727 LSA 2542.7 MSA 169.7 SSA 1.0 BOE 4.0216 BRA 3.3766 BC3 .4624 FSP -298 SG1 3487.5 SG2 389.1 THA 171.22 EL1 2439.9 EL2 148.6 ALF 175.88 LAUNCH DATE DEC 26 1965 FLIGHT TIME 128.00 ARRIVAL DATE MAY 3 1966 HELIOCENTRIC CONIC DISTANCE 384.352 RL 147.13 LAL .00 LOL 94.01 VL 27.862 GAL -8.15 A7L 78.80 HCA 187.38 SMA 129.13 ECC .19782 INC11.2019 V1 30.281 RP 108.85 LAP -1.43 LOP 281.25 VP 37.561 GAP 6.99 A7P 101.11 TAL 217.62 TAP 44.99 RCA 103.58 APO 154.67 V2 34.816 RC 133.236 GL 46.73 GP -46.60 7AL 121.79 7AP 128.43 ETS 299.64 7AE 113.82 ETE 208.47 7AC 71.15 ETC 129.03 CLP-154.77 PLANETOCENTRIC CONIC C3 54.142 VHL 7.358 OLA 28.11 RAL 302.52 RAD 6569.0 VEL 13.248 PTH 2.42 VHP 7.170 DPA -65.46 RAP 331.83 ECC 1.8910 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 19 41 53 3687.05 188.53 66.14 20 43 20 3087.1 90.00 -15.72 142.55 -18.A2 135.24 90.00 18 42 1 3881.36 -10.06 154.01 185.79 63.39 19 46 43 3281.4 -13.56 147.08 68.68 22 53 48 60.43 20 10 12 71.90 1 4 39 55.91 20 12 38 21 59 45 3242.58 19 6 51 3801.07 100.00 -21.46 112.37 191.05 2642.6 -24.17 104.62 100.00 -4.58 145.18 182.84 3201.1 -8.48 138.57 0 17 36 2823.45 19 9 25 3792.96 -29.50 110.00 83.74 194.23 2223.5 -31.69 75.21 110.00 2.68 140.06 178.34 3193.0 -1.81 133.86 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 3578.0 SGR 332.7 SG3 135.8 RRT .0653 RRF .4248 RTF .9283 SGB 3593.4 R23 .3645 R13 .9285 ST 2114.4 SR 220.2 SS 680.9 CRT .7839 CRS -.8901 CST -.9807 TOE 2.5331 TRA-2.8700 TC3-1.0727 BAU .7794 ROE .2700 RRA .2474 RC3 -.0932 FAU .04056 FOE 1.3905 FRA -.7065 FC3 -.6485 BSP 11170 BOE 2.5474 BRA 2.8806 BC3 1.0767 FSP -456 LSA 2224.6 MSA 183.9 SSA 1.8 .35 SG1 3578.0 SG2 332.0 THA EL1 2121.4 EL2 136.3 ALF 4.69 FLIGHT TIME 130.00 ARRIVAL DATE MAY 5 1966 LAUNCH DATE DEC 26 1965 DISTANCE 390.174 HELIOCENTRIC CONIC RL 147.13 LAL .00 LOL 94.01 VL 27.794 GAL -7.86 AZL 81.22 HCA 190.52 SMA 128.65 ECC .19729 INC 8.7794 V1 30.281 RP 108.87 LAP -1.60 LOP 284.41 VP 37.504 GAP 7.18 AZP 98.63 TAL 216.00 TAP 46.52 RCA 103.27 APO 154.03 V2 34.809 RC 135.553 GL 41.03 GP -35.67 ZAL 125.60 ZAP 136.98 ETS 307.17 ZAE 120.45 ETE 205.63 ZAC 65.52 ETC 136.21 CLP-154.15 PLANETOCENTRIC CONIC C3 40.977 VHL 6.401 OLA 22.62 RAL 304.23 RAD 6568.6 VEL 12.741 PTH 2.32 VHP 6.269 DPA -54.37 RAP 327.42 ECC 1.6744 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.97 22 48 54 61.71 17 52 28 80.17 24 21 42 60.27 18 53 36 83.12 2 2 53 56.60 19 25 44 90.00 187.36 -27.50 2588.2 21 55 46 3188.22 16 41 47 4240.73 -26.25 109.92 3640.7 -2.44 177.39 174.25 90.00 1.35 187.80 2272.0 -29.44 23 33 50 2871.98 17 46 24 4032.19 87.09 100.00 -28.37 176.34 3432.2 151.35 100.00 3.24 157.88 188.69 1951.0 54.41 1 20 22 2551.01 18 20 18 3925.93 -33.57 63.60 -34.15 110.00 147.06 173.58 3325.9 3.27 140.80 110.00 18 20 18 7.72 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1916.1 SR 219.1 SS 650.4 CRT .8210 CRS -.9364 CST -.9691 SGT 3667.9 SGR 290.2 SG3 166.3 RRT .2592 RRF .6192 RTF .9097 SGB 3679.4 R23 .3956 R13 .9104 TOE 1.9609 TRA-2.6350 TC3-1.5316 BAU .8410 ROE .2400 RRA .1466 RC3 -.1044 FAU .05072 FOE 1.3232 FRA -.6670 FC3-1.0716 89P 11521 BOE 1.9755 BRA 2.6391 BC3 1.5352 FSP -557 LSA 2026.0 MSA 194.0 SSA 3.0 EL1 1924.5 EL2 124.5 ALF 561 3668.7 5G2 280.2 THA 1.18 5.38 FLIGHT TIME 132.00 ARRIVAL DATE MAY 7 1966 LAUNCH DATE DEC 26 1965 HELIOCENTRIC CONIC DISTANCE 395.996 RL 147.13 LAL .00 LOL 94.01 VL 27.726 GAL -7.56 AZL 82.54 MCA 193.67 SMA 128.19 ECC .19688 INC 7.4644 V1 30.281 RP 108.88 LAP -1.76 LOP 287.58 VP 37.449 GAP 7.37 AZP 97.26 TAL 214.36 TAP 48.04 RCA 102.95 APO 153.42 V2 34.804 RC 137.863 GL 37.31 GP -28.41 ZAL 127.36 ZAP 142.66 ETS 312.66 ZAE 124.09 ETE 202.08 ZAC 62.70 ETC 141.41 CLP-154.68 PLANETOCENTRIC CONIC C3 34.702 VHL 5.891 OLA 19.24 RAL 306.03 RAD 6568.4 VEL 12.493 PTH 2.26 VHP 5.924 OPA -46.80 RAP 326.47 ECC 1.5711 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 43 54 2996.92 -28.00 96.21 184.92 85.62 23 33 51 2306 0 -24 30 -24 90.00 16 8 O 4348.04 4.80 180.26 175.37 62.06 3748.0 1.02 173.61 0 21 6 2696.18 17 17 26 4124.02 1 55 7 2402.02 100.00 -29.74 74.21 185.05 86.81 2096.2 -29.86 65.41 60.72 18 26 10 100.00 6.33 162.95 174.54 3524.0 2.38 156.39 -34.18 52.02 89.94 2 35 9 1802.0 42.80 57.18 19 6 25 110.00 3990.94 10.14 150.55 172.22 3390.9 5.74 144.21 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1799.2 SR 200.4 SS 621.6 CRT .8127 CR5 -.9448 CST -.9586 SGT 3759.8 SGR 249.3 SG3 182.4 RRT .2370 RRF .5997 RTF .8987 TOE 1.6720 TRA-2.4811 TC3-1.8900 BAU .8776 ROE .2026 RRA .1168 RC3 -.0797 FAU .05535 LSA 1903.4 HSA 201.5 SSA 4.3 FOE 1.2332 FRA -.5933 FC3-1.3808 BSP 11787 SGB 3768.0 R23 .3971 R13 .8991 SG1 3760.2 SG2 242.2 THA .90 EL1 1806.6 EL2 116.3 ALF 5.19 BOE 1.6842 BRA 2.4839 BC3 1.8916 FSP -604

FLIGHT TIME 126.00

```
ARRIVAL DATE MAY 9 1966
                                                                    FLIGHT TIME 134.00
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 401.811
   HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.659 GAL -7.25 A7L 83.36 HCA 196.83 SMA 127.73 ECC .19660 INC 6.6354 VI 30.281 RP 108.90 LAP -1.92 LOP 290.74 VP 37.395 GAP 7.56 A7P 96.35 TAL 212.71 TAP 49.54 RCA 102.62 APO 152.84 VZ 34.799 RC 140.164 GL 34.76 GP -23.38 ZAL 127.97 ZAP 146.67 ETS 316.95 ZAE 126.17 ETE 198.96 ZAC 61.57 ETC 145.46 CLP-155.54
   PLANETOCENTRIC CONIC
    C3 30.916 VHL 5.560 DLA 17.11 RAE 307.83 RAD 6568.2 VEL 12.341 PTH 2.23 VHP 5.788 DPA -41.36 RAP 326.76 ECC 1.5088
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       89.72 24 1 16
62.38 17 6 25
                                                                                                                 2284.3
                                                                                                                                                79.33
                                                                        183.58
                                                                                                                                 -28.05
                                                             87.99
       90.00
                 23 13 12 2884.30
                                               -28.32
                15 53 3 4402.47
0 48 17 2590.31
17 4 34 4171.69
2 18 10 2309.09
17 51 11 4025.67
                                                                                                                    3802.5
                                                                                                                                   2.78
                                                                                                                                                176.65
                                                                          174.92
                                                             183.32
                                                 6.53
       90.00
                                                                                                    1 31 28
                                                                                                                    1990.3
                                                                                                                                  -29.43
                                                                                                                                                 57.57
                                                                          183.57
                                                                                          90.94
                                                              66.35
       100.00
                                               -29.88
                                                                          174.17
                                                                                          61.08
                                                                                                   18 14 6
                                                                                                                    3571.7
                                                                                                                                    3.99
                                                                                                                                                159.01
                                                7.90
                                                            165.61
      100:00
                                                                                                 2 56 39
18 58 16
                                                                                                                    1709.1
                                                                                                                                  -33.00
                                                                                                                                                 35.67
                                                                          183.35
                                                                                          94.22
                                                              44.78
                                               -33.95
      110.00
                                                                          172.06
                                                                                          57.56
                                                                                                                    3425.7
                                                                                                                                    7.05
                                                                                                                                                146.05
                                                            152.43
                                               11.41
      110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1728.2 SR 188.4 SS 596.4
CRT .8054 CRS -.9504 CST -.9495
                                                                SGT 3855.8 SGR 221.1 SG3 190.5
RRT .1568 RRF .5113 RTF .8918
SGB 3862.2 R23 .3757 R13 .8920
    TOE 1.5019 TRA-2.3671 TC3-2.1952 BAU .9075
   ROE .1800 RRA .1011 RC3 -.0459 FAU .05709
FOE 1.1449 FRA -.5140 FC3-1.5986 BSP 12101
                                                                                                                LSA 1826.2 MSA 207.0 SSA 5.6
                                                                                                                EL1 1734.9 EL2 111.2 ALF 5.04
                                                                SG1 3856.0 SG2 218.4 THA .52
    BOE 1.5126 BRA 2.3692 BC3 2.1957 FSP -629
                                                                    FLIGHT TIME 136.00
                                                                                                                           ARRIVAL DATE MAY 11 1966
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 407.618
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.593 GAL -6.94 AZL 83.94 HCA 199.99 SMA 127.28 ECC .19643 INC 6.0624 VI 30.281 RP 108.91 LAP -2.07 LOP 293.90 VP 37.342 GAP 7.74 AZP 95.70 TAL 211.04 TAP 51.03 RCA 102.28 APO 152.28 V2 34.795
   RC 142.456 GL 32.95 GP -19.75 ZAL 127.85 ZAP 149.67 ETS 320.36 ZAE 127.42 ETE 196.41 ZAC 61.44 ETC 148.70 CLP-156.51
   PLANETOCENTRIC CONIC
   C3 28.284 VHL 5.318 DLA 15.75 RAL 309.63 RAD 6568.1 VEL 12.234 PTH 2.20 VHP 5.746 DPA -37.26 RAP 327.66 ECC 1.4655 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         92.38 24 20 19
62.59 17 1 2
93.63 1 49 27
                                                                         183.05
                                                                                                                   2211.8
                                                                                                                                 -27.60
                                                                                                                                                 74.07
                 23 33 27 2811.77
                                               -28.22
                                                             82.68
       90.00
                                                                                                                                                178.21
                                                                                                                     3830.4
                                                                                                                                    3.68
                 15 47 11
                                                 7.41
                                                             184.91
                                                                          175.15
       90.00
                                4430.43
                                                                                                                                                 52.53
                 1 7 25 2521.40
16 59 50 4196.03
2 35 0 2247.40
17 48 45 4042.80
                                                              61.24
                                                                          182.96
                                                                                          93.63
                                                                                                     1 49 27
                                                                                                                    1921.4
                                                                                                                                   -28.87
                                               -29.69
      100.00
                                                                                          93.63 1 49 27
61.29 18 9 46
97.02 3 12 27
57.76 18 56 8
                                                                                                                                    4.80
                                                                                                                                                160.36
                                                 8.70
                                                             166.98
                                                                         174.45
                                                                                                                    3596.0
      100.00
                                                                         182.54
                                                                                                                    1647.4
                                                                                                                                  -32.21
                                                                                                                                                 31.03
                                               -33.54
                                                              40.01
      110.00
                                                             153.36
                                                                                                                    3442.8
                                                                                                                                    7.69
                                                                                                                                                146.96
                                                                          172.46
                                               12.03
      110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                5T 1686.7 SR 184.0 5S 576.7
CRT .8056 CRS -.9574 CST -.9417
                                                                SGT 3953.6 SGR 207.5 SG3 193.8
RRT .0625 RRF .3931 RTF .8868
SGB 3959.1 R23 .3381 R13 .8868
    TOE 1.3945 TRA-2.2712 TC3-2.4716 BAU .9346
    RDE .1686 RRA .0890 RC3 -.0113 FAU .05723
FDE 1.0685 FRA -.4353 FC3-1.7516 BSP 12451
                                                                                                                LSA 1779.5 MSA 211.5 SSA 6.9
EL1 1693.2 EL2 108.6 ALF 5.04
                                                                                                   .19
                                                                 561 3953.7 562 207.1 THA
    BDE 1.4046 BRA 2.2729 BC3 2.4716 FSP -640
                                                                                                                          ARRIVAL DATE HAY 13 1966
                                                                   FLIGHT TIME 138.00
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 413.417
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 26.281 VHL 5.127 DLA 14.91 RAL 311.46 RAD 6568.1 VEL 12.151 PTH 2.18 VMP 5.753 DPA -34.01 RAP 328.91 ECC 1.4325 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      94.14 24 34 33 62.69 17 0 48 95.41 2 3 5 61.38 18 10 8 98.89 3 24 49 57.83 18 57 46
                                                                                                                                 -27.17
                                                                                                                    2163.4
                                                                         183.09
                                               -28.04
                                                             79.16
        90.00 23 48 29
                               2763.45
                                                                                                                                    4.05
                                                7.78
                                                                                                                    3842.2
                                                             185.58
                                                                          175.76
                  15 46 46
                               4442.24
        90.00
                                                                                                                    1875.1
                                                                                                                                  -28.38
                                                                          182.96
                   1 21 49 2475.12
                                               -29.44
                                                              57.82
       100.00
                                                                                                                    3605.8
                                                                                                                                    5.13
                                                                          175.10
                  17 0 3 4205.80
2 48 4 2205.26
17 50 17 4048.42
                                                 9.02
                                                             167.53
       100.00
                                                                                                                                  -31.56
                                                                                                                    1605.3
                                                                         182.42
                                               -33.14
                                                              36.78
       110.00
                                                                                                                                    7.90
                                                                                                                    3448.4
                                                             153.67
                                                                         173.18
                                               12.24
       110.00
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                               ST 1667.5 SR 185.3 SS 562.9
CRT .8138 CRS -.9659 CST -.9355
                                                               SCT 4049.0 SGR 203.4 SG3 194.5
RRT -.0193 RRF .2751 RTF .8828
SGB 4054.2 R23 -.2922 R13 -.8828
    TOE 1.3273 TRA-2.1812 TC3-2.7290 BAU .9589
    ROE .1640 RRA .0778 RC3 .0212 FAU .05642
FOE 1.0057 FRA -.3588 FC3-1.8587 BSP 12767
                                                                                                                LSA 1756.5 MSA 215.0 SSA
                                                                                                                EL1 1674.3 EL2 107.2 ALF 5.19
                                                                 SG1 4049.0 SG2 205.3 THA 179.94
    BOE 1.3374 BRA 2.1826 BC3 2.7291 FSP -641
                                                                                                                           ARRIVAL DATE MAY 15 1966
                                                                    FLIGHT TIME 140.00
LAUNCH DATE DEC 26 1965
                                                                    DISTANCE 419.207
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 27.461 GAL -6.30 AZL 84.69 MCA 206.31 SMA 126.40 ECC .19647 INC 5.3148 VI 30.281
RP 108.93 LAP -2.35 LOP 300.22 VP 37.239 GAP 8.10 AZP 94.77 TAL 207.65 TAP 53.96 RCA 101.57 APO 151.24 V2 34.788
RC 147.008 GL 30.60 GP -14.93 ZAL 126.31 ZAP 154.04 ETS 325.30 ZAE 128.72 ETE 192.69 ZAC 62.90 ETC 153.54 CLP-158.52
   PLANE TOCENTRIC CONIC
    C3 24.665 VHL 4.966 DLA 14.45 RAL 313.34 RAD 6568.0 VEL 12.085 PTH 2.16 VMP 5.789 OPA -31.34 RAP 330.39 ECC 1.4059
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                         183.56
                                                                                          95.30
                                                                                                     0 49 38
                                                                                                                    2131.3
                                                                                                                                                 68.31
                                                -27.86
                                                             76.82
                   0 4 7
                               2731.27
       90.00
                                                                                                  17 4 5
                                                                                                                     3843.1
                                                                                                                                                 178.92
                                                                                           62.69
                                                             185.63
                                                                          176.63
                  15 50 2
                                4443.08
                                                 7.80
                                                                                          96.59 2 15 ...
61.38 18 13 45
77 15 3 35 0
        90.00
                                                                                                                     1844.0
                                                                                                                                   -28.00
                                                                                                                                                 46.94
                                                              55.53
                                                                          183.39
                    1 33 11 2444.03
                                                -29.22
       100.00
                  17 3 39 4205.56
2 58 43 2176.40
                                                                                                                    3605.6
                                                                                                                                                160.89
                                                                                                                                    5.12
                                                             167.51
                                                                          175.98
                                                 9.01
       100.00
                                                                                                                                 -31.07
                                                                                                                    1576.4
                                                -32.82
                                                              34.59
                                                                          182.78
                                                                                         100.15
                                                                                                  19 2 2
       110.00
                                                                                                                    3446.0
                                                                                                                                     7.81
                   17 54 36
                                 4045.95
                                                12.15
                                                             153.53
                                                                          174.11
                                                                                          57.80
       110.00
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 4151.9 SGR 209.8 SG3 194.3
RRT -.0764 RRF .1730 RTF .8812
SGB 4157.2 R23 -.2412 R13 -.8812
                                                                                                                 ST 1658.2 SR 189.5 55 549.2
    TOE 1.2795 TRA-2.0991 TC3-2.9875 BAU .9853
                                                                                                                CRT .8264 CRS -.9739 CST -.9310
                                                                                                          ROE .1630 RRA .0661 RC3 .0500 FAU .05550
    FOE .9460 FRA -.2938 FC3-1.9481 BSP 13228
                                                               SG1 4152.0 SG2 209.2 THA 179.78
                                                                                                              ELI 1665,6 EL2 106.2 ALF 5.42
```

BOE 1.2898 BRA 2.1002 BC3 2.9880 FSP -653

ARRIVAL CATE MAY 17 1966

```
LAUNCH DATE DEC 26 1965
                                                                     DISTANCE 424.992
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.397 GAL -5.96 AZL 84.95 HCA 209.47 SMA 125.98 ECC .19666 INC 5.0548 V1 30.281 RP 108.94 LAP -2.48 LOP 303.39 VP 37.190 GAP 8.28 AZP 94.40 TAL 205.92 TAP 55.39 RCA 101.20 APO 150.75 V2 34.786 RC 149.266 GL 29.82 GP -13.28 ZAL 125.07 ZAP 155.74 ETS 327.08 ZAE 129.07 ETE 191.34 ZAC 64.15 ETC 155.39 CLP-159.51
   PLANETOCENTRIC CONIC
    C3 23.307 VHL 4.828 DLA 14.26 RAL 315.28 RAD 6567.9 VEL 12.029 PTH 2.15 VHP 5.843 DPA -29.06 RAP 332.02 ECC 1.3836
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           96.03 0 58 43
                                                                                                                      2110.8
                  0 13 32 2710.82
15 56 6 4435.77
                                                -27.72
                                                               75.34
                                                                           184.35
       90.00
                                                                                                                                        3.85
                                                                                                                                                    178.51
                                                                                                                        3835.8
                                                                            177.71
                                                                                             62.63
                                                                                                      17 10 2
                                                  7.57
                                                              185.21
       90.00
                                                                                                                                       -27.74
                  1 42 28 2424.00
17 9 51 4197.83
                                                                                                                        1824.0
                                                -29.06
                                                               54.07
                                                                            184.17
                                                                                             97.35
                                                                                                      2 22 52
      100.00
                                                                                            61.31 18 19 49
100.97 3 43 41
57.70 19 8 22
                                                                                                                                        4.86
                                                                                                                                                    160.46
                                                                                                                        3597.8
                                                                            177.07
                                                  8.76
                                                              167.08
      100.00
                                                                                                                       1557.2
                                                                                                                                      -30.73
                                                                                                                                                     24.42
                                                               33.15
                                                                            183.51
                                                                                           100.97
                   3 7 44 2157.25
                                                -32.58
      110.00
                                                                                                                                        7.49
                                                                                                                                                     146.57
                                                                                                                       3437.3
                   18 1 5
                                                              153.06
                                                                            175.23
                                                11.84
      110.00
                                4037.35
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1692.6 SR 199.0 SS 560.6
CRT .8503 CRS -.9838 CST -.9284
                                                                 SGT 4202.5 SGR 223.7 SG3 189.7
RRT -.1125 RRF .1153 RTF .8718
SGB 4208.5 R23 -.2150 R13 -.8717
    TOE 1.2852 TRA-1.9810 TC3-3.1838 BAU .9924
   RDE .1667 RRA .0569 RC3 .0804 FAU .05244
FDE .9326 FRA -.1925 FC3-1.9481 BSP 12862
                                                                                                                    LSA 1780.3 MSA 221.7 SSA 10.4
EL1 1701.0 EL2 104.2 ALF 5.73
                                                                  SG1 4202.6 SG2 222.2 THA 179.66
    BOE 1.2960 BRA 1.9818 BC3 3.1849 FSP -582
                                                                                                                               ARRIVAL DATE MAY 19 1966
                                                                      FLIGHT TIME 144.00
LAUNCH DATE DEC 26 1965
                                                                      DISTANCE 430.763
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.333 GAL -5.62 AZL 85.16 HCA 212.63 SMA 125.56 ECC .19700 INC 4.8410 V1 30.281 RP 108.94 LAP -2.61 LOP 306.55 VP 37.141 GAP 8.46 AZP 94.08 TAL 204.19 TAP 56.81 RCA 100.83 APO 150.30 V2 34.785
                       29.20 GP -11.94 TAL 123.61 ZAP 157.24 ETS 328.52 TAE 129.32 ETE 190.22 TAC 65.61 ETC 156.96 CLP-160.48
   RC 151.511 GL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 21 21 2699.19 -27.63 74.50 185.42 96.44 1 6 20 2099.2 -26.45 66.03
   PLANETOCENTRIC CONIC
                                                                                             97.79 2 30 30
61.19 18 27 49
                  1 50 18 2412.31
17 18 4 4184.57
3 15 35 2145.44
18 9 16 4024.20
                                                                                                                                                      44.68
                                                                                                                        1812.3
                                                                                                                                       -27.57
                                                                            185.23
                                                 -28.95
                                                                53.22
       100.00
                                                                                                                                                     159.73
                                                                                                                                        4.42
                                                                                                                        3584.6
                                                               166.33
                                                                            178.33
      100.00
                                                  8.33
                                                                                            101.47 3 51 21
57.54 19 16 20
                                                                                                                                       -30.50
                                                                                                                                                      23.57
                                                                                                                        1545.4
                                                                            184.55
      110.00
                                                 -32.42
                                                                32.26
                                                                                                                        3424.2
                                                                                                                                        6.99
                                                 11.36
                                                              152.35
                                                                             176.51
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1701.6 SR 206.9 SS 550.8
CRT .8674 CRS -.9893 CST -.9268
                                                                  SGT 4309.3 SGR 234.6 SG3 188.5
RRT -.1284 RRF .0566 RTF .8726
SGB 4315.7 R23 -.1704 R13 -.8725
    TOE 1.2653 TRA-1.8991 TC3-3.4437 BAU 1.0198
    RDE .1693 RRA .0446 RC3 .1029 FAU .05136
    FOE .8838 FRA -.1409 FC3-2.0082 BSP 13447
BDE 1.2766 BRA 1.8996 BC3 3.4452 FSP -602
                                                                                                                    LSA 1787.0 MSA 220.0 SSA 11.7
                                                                                                                   FL1 1711.1 EL2 102.4 ALF 6.04
                                                                  SG1 4309.4 SG2 232.6 THA 179.60
                                                                                                                              ARRIVAL DATE MAY 21 1966
                                                                      FLIGHT TIME 146.00
LAUNCH DATE DEC 26 1965
                                                                     DISTANCE 436.526
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 27.270 GAL -5.27 AZL 85.34 MCA 215.79 5MA 125.15 ECC .19748 INC 4.6612 V1 30.281 RP 108.94 LAP -2.72 LOP 309.71 VP 37.094 GAP 8.65 AZP 93.78 TAL 202.44 TAP 58.22 RCA 100.44 APO 149.87 V2 34.784
    RC 153.743 GL 28.70 GP -10.83 TAL 121.94 TAP 158.60 ETS 329.69 TAE 129.51 ETE 189.30 TAC 67.23 ETC 158.32 CLP-161.43
   PLANETOCENTRIC CONIC
    C3 Z1.123 VHL 4.596 DLA 14.48 RAL 319.39 RAD 6567.9 VEL 11.937 PTH 2.12 VMP 5.984 DPA -25.27 RAP 335.59 ECC 1.3476
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          186.73
                                                                                                        1 12 51
                                                                                                                       2094.7
                                                                                                                                      -26.40
                                                                                                                                                      65.72
                    0 27 57 2694.75
16 14 28 4404.18
                                                                                             96.60
                                                 -27.60
                                                              74.18
        90.00
                                                                                             62.40 17 27 52
                                                                                                                        3804.2
                                                                                                                                                     176.74
                  16 14 28
                                                  6.58
                                                              183.42
                                                                            180.39
        90.00
                                                                                                                                                      44.34
                  1 57 2 2407.42
17 28 3 4166.73
                                                                                                       2 37 10
                                                                                                                        1807.4
                                                                                                                                       -27.50
                                                                                             97.97
                                                 -28.91
                                                                52.86
                                                                            186.54
       100.00
                                                                                                     2 37 10
18 37 30
                                                                                                                                                     158.74
                                                                                                                        3566.7
                                                   7.74
                                                              165.33
                                                                            179.76
                                                                                             61.04
                                 4166.73
       100.00
                                                                                           101.72 3 58 17
57.35 19 25 45
                                                                                                                                                      23.16
                                                                                                                        1539.6
                    3 22 37 2139.64
18 18 58 4007.29
                                                -32.34
                                                                31.83
                                                                            185.85
       110.00
                                                                                                                        3407.3
                                                 10.74
                                                               151.43
                                                                            177.95
                  18 18 58
       110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1728.2 SR 216.5 SS 549.1
CRT .8870 CRS -.9937 CST -.9267
                                                                  56T 4401.2 5GR 248.0 563 186.1

RRT -.1318 RRF .0207 RTF .8717

SGB 4408.2 R23 -.1371 R13 -.8716
     TOE 1.2660 TRA-1.8034 TC3-3.6874 BAU 1.0419
    ROE .1734 RRA .0329 RC3 .1241 FAU .04970
FOE .8504 FRA -.0821 FC3-2.0370 BSP 13811
BOE 1.2779 BRA 1.8037 BC3 3.6894 FSP -600
                                                                                                                   LSA 1813.1 MSA 218.3 SSA 12.9
                                                                                                                    ELI 1738.9 ELZ 99.4 ALF 6.36
                                                                  SG1 4401.3 SG2 245.9 THA 179.57
                                                                                                                               ARRIVAL DATE MAY 23 1966
                                                                      FLIGHT TIME 148.00
                                                                      DISTANCE 442.280
    RL 147.13 LAL .00 LOL 94.01 VL 27.208 GAL -4.91 A7L 85.49 MCA 218.95 SMA 124.75 ECC .19810 INC 4.5071 V1 30.281
RP 108.94 LAP -2.83 LOP 312.87 VP 37.049 GAP 8.83 A7P 93.51 TAL 200.67 TAP 59.62 RCA 100.04 APO 149.47 V2 34.784
RC 155.962 GL 28.27 GP -9.92 TAL 120.09 TAP 159.84 ETS 330.61 TAE 129.66 ETE 188.52 TAC 68.97 ETC 159.51 CLP-162.36
   PLANETOCENTRIC CONIC
                                                                                               2.11 VHP 6.066 DPA -23.62 RAP 337.48 ECC 1.3329
    C3 20.227 VHL 4.497 DLA 14.82 RAL 321.58 RAD 6567.8 VEL 11.900 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         1 18 34
                                                                                                                        2096.4
                                                                                                                                       -26.42
                                                                                                                                                      65.84
                                                                            188.28
                                                                                             96.54
                     0 33 38 2696.36
                                                 -27.61
                                                                74.30
        90.00
                                                                                             62.25 17 39 18
97.94 2 43 6
60.87 18 48 43
101.75 4 4 43
57.14 19 36 28
                                                                                                                         3781.8
                                                                                                                                        2.11
                                                                                                                                                      175.49
                                                                             181.99
                   16 26 17
                                                   5.87
                                                               182.16
        90.00
                                 4381.81
                                                                                                                         1808.2
                                                                                                                                       -27.51
                                                                                                                                                      44.40
                     2 2 58
                                                                52.92
                                                                             188.09
       100.00
                                 2408.25
                                                  -28.91
                                                                                                                         3545.2
                                                                                                                                         3.09
                                                                                                                                                     157.55
                   17 39 37 4145.15
3 29 4 2138.85
                                                                             181.37
                                                   7.03
                                                               164.13
       100.00
                                                                             187.41
                                                                                            101.75
                                                                                                                         1538.8
                                                                                                                                      - 30 . 3A
                                                                                                                                                      23.10
                                                                31.77
       110.00
                                                 -32.33
                                                               150.35
                                                                             179.56
                                                                                                                         3387.3
                                                                                                                                        5.60
                                                                                                                                                     144.02
                   18 30 1
                                                 10.00
       110.00
                                 3987.32
                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                              ST 1765.8 SR 227.0 SS 551.1
CRT .9069 CRS -.9965 CST -.9280
LSA 1851.1 MSA 214 5 777
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 4486.5 SGR 262.3 SG3 183.3
RRT -.1260 RRF -.0001 RTF .8705
     TOE 1.2792 TRA-1.6988 TC3-3.9245 BAU 1.0619
    RDE .1780 RRA .0215 RC3 .1431 FAU .04787
FDE .8242 FRA -.0230 FC3-2.0489 BSP 14109
BOE 1.2915 BRA 1.6990 BC3 3.9271 FSP -592
                                                                   SGB 4494.2 R23 -.1109 R13 -.8705
                                                                  SG1 4486.6 SG2 260.2 THA 179.58
                                                                                                                  ELI 1777.8 ELZ 95.0 ALF 6.67
```

FLIGHT TIME 142.00

```
LAUNCH DATE DEC 26 1965
                                                                       FLIGHT TIME 150.00
                                                                                                                                ARRIVAL DATE HAY 25 1966
                                                                       DISTANCE 448.024
   HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.146 GAL -4.53 AZL 85.63 MCA 222.11 SMA 124.36 ECC .19887 INC 4.3726 V1 30.281 RP 108.94 LAP -2.93 LOP 316.04 VP 37.004 GAP 9.01 AZP 93.25 TAL 198.89 TAP 61.00 RCA 99.63 APO 149.10 V2 34.785 RC 158.168 GL 27.90 GP -9.14 ZAL 118.06 ZAP 161.00 ETS 331.33 ZAE 129.79 ETE 187.86 ZAC 70.82 ETC 160.55 CLP-163.27
   PLANETOCENTRIC CONIC
    C3 19.438 WHL 4.409 DLA 15.28 RAL 323.88 RAD 6567.8 VEL 11.867 PTH 2.11 VMP 6.154 DPA -22.09 RAP 339.42 ECC 1.3199 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 74.80
                                                                             190.06
                                                                                              96.30
                                                                                                          1 23 40
                                                                                                                        2103.3
                                                                                                                                        -26.50
                   0 38 36 2703.26
16 39 38 4356.01
                                                  -27.66
        90.00
                                                                             183.78
                                                                                                       17 52 14
                                                                                                                          3756.D
                                                               180.70
                                                                                              62.10
                                                                                                                                          1.28
        90.00
                                                   5.05
                                                                                                         2 48 31
                                                                                                                          1814.1
                                                                                                                                        -27.60
                                                                                                                                                        44.81
                                                                              189.87
                                                                                              97.72
                                                 -28.97
                                                                 53.34
       100.00
                    2 8 17 2414.05
                                                                                                       19 1 19
                                                                                              60.70
                                                                                                                         3520.4
                                                                                                                                                       156.20
                                                                             183.15
                                                                                                                                          2.25
      100.00
                   17 52 38
                               4120.44
                                                   6.21
                                                               162.75
                    3 35 6
                                                                 32.04
                                                                                             101.60
                                                                                                         4 10 48
                                                                                                                         1542.4
                                                                                                                                        -30.45
                                                                                                                                                       23.36
       110.00
                                 2142.42
                                                 -32.38
                                                                             189.20
                                                                                                       19 48 24
                                                                149.14
                                                                             181.34
                                                                                              56.92
                                                                                                                         3364.8
      110.00
                  18 42 19
                                 3964.84
                                                   9.17
                                                                   MID-COURSE EXECUTION ACCURACY
SCT 4569.1 5CR 276.7 SC3 180.3
RRT -.1139 RRF -.0108 RTF .8697
SCB 4577.5 R23 -.0892 R13 -.8697
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1812.1 SR 237.8 SS 555.0 CRT .9258 CR5 -.9976 CST -.9305
    TOE 1.3014 TRA-1.5873 TC3-4.1583 BAU 1.0814
   ROE .1829 RRA .0102 RC3 .1598 FAU .04602
FDE .8021 FRA .0336 FC3-2.0495 BSP 14396
                                                                                                                     LSA 1898.3 MSA 211.7 SSA 15.2
                                                                   SG1 4569.2 SG2 274.9 THA 179.60
                                                                                                                      EL1 1825.5 EL2 89.3 ALF 6.94
    BDE 1.3142 BRA 1.5873 BC3 4.1614 FSP -583
                                                                       FLIGHT TIME 152.00
LAUNCH DATE DEC 26 1965
                                                                      DISTANCE 453.759
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 27.085 GAL -4.15 A7L 85.75 MCA 225.27 SMA 123.98 ECC .19980 INC 4.2536 VI 30.281
RP 108.94 LAP -3.02 LOP 319.20 VP 36.961 GAP 9.20 A7P 93.00 TAL 197.10 TAP 62.37 RCA 99.21 APO 148.75 V2 34.787
RC 160.359 GL 27.57 GP -8.48 ZAL 115.87 ZAP 162.08 ETS 331.88 ZAE 129.91 ETE 187.30 ZAC 72.75 ETC 161.48 CLP-164.15
  PLANETOCENTRIC CONIC
   C3 18.746 VHL 4.330 DLA 15.84 RAL 326.29 RAD 6567.8 VEL 11.838 PTH
                                                                                                 2.10 VHP 6.247 DPA -20.64 RAP 341.39 ECC 1.3085
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 43 1 2714.92
                                                 -27.75
                                                                             192.05
                                                                                                                         2114.9
       90.00
                                                                75.64
                                                                                              95.88
                                                                                                          1 28 16
                  16 54 27
                                 4327.25
                                                   4.14
                                                               179.09
                                                                              185.76
                                                                                               61.96
                                                                                                        18 6 35
                                                                                                                          3727.2
        90.00
                                                                                              97.34 2 53 32
60.54 19 15 15
101.28 4 16 40
56.71 20 1 29
                                                                                                                          1824.3
                                2424.33
                                                 -29.06
                                                                 54.09
                                                                             191.88
      100.00
                  2 13 7
18 7 2
                                                                                                                          3493.1
      100.00
                                 4093.07
                                                   5.29
                                                               161.24
                                                                             185.13
                   3 40 50
                                                                                                                          1549.9
      110.00
                               2149.89
                                                  -32.48
                                                                 32.60
                                                                             191.23
                                                                                             101.28
                  18 55 49
                                 3940.27
                                                   8.25
                                                               147.83
                                                                              183.31
                                                                                                                          3340.3
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 4644.6 SGR 291.1 SG3 177.0
RRT -.0968 RRF -.0119 RTF .8686
                                                                                                                      ST 1869.9 SR 249.0 SS 562.2
CRT .9434 CRS -.9969 CST -.9340
    TOE 1.3343 TRA-1.4655 TC3-4.3808 BAU 1.0988
    RDE .1881 RRA -. 0007 RC3 .1742 FAU .04405
    FOE .7855 FRA .0905 FC3-2.0342 BSP 14607
                                                                   5GB 4653.7 R23 -. 0728 R13 -. 8686
                                                                                                                      LSA 1957.4 MSA 206.9 SSA 16.2
    BDE 1.3475 BRA 1.4655 BC3 4.3843 FSP
                                                                                                                      ELI 1884.6 ELZ 81.9 ALF 7.17
                                                                   SG1 4644.6 SG2 289.7 THA 179.65
                                                                                                                               ARRIVAL CATE MAY 29 1966
                                                                      FLIGHT TIME 154.00
LAUNCH DATE DEC 26 1965
```

HELIOCENTRIC CONIC		210	STANCE 459.	483					
RL 147.13 LAL .00 LOL 94.01						D6002· 333			
RP 108.93 LAP -3.10 LOP 322.37						RCA 98.77			
RC 162.536 GL 27.24 GP -7.91	ZAL 113.53	ZAP 163.10	ETS 332.25	ZAE 130.01	ETE 186.83	ZAC 74.75	ETC 162.30	CLP-165.02	
PLANETOCENTRIC CONIC									
C3 18.148 VHL 4.260 DLA 16.48	RAL 328.82	RAD 6567.7	VEL 117812	PTH 2.09	VHP 6.346	DPA -19.25	RAP 343.41	ECC 1.2987	
ENCH AZMTH ENCH TIME L-I TIME	INJ LAT	INJ LONG	INJ RY ASC		INJ TIME	PO CST TIM	INJ Z LAT	INT & FONG	
90.00 0 46 59 2730.99	-27.86	76.80	194.28	95.31	1 32 30	2131.0	-26.83	68.29	
90.00 17 10 41 4295.96	3.13	177.34	187.95	61.84	18 22 17	3696.0	6 6	170.71	
100.00 2 17 36 2438.72	-29.18	55.15	194.12	96.79	2 58 15	1838.7	-27.93	46.56	
100.00 18 22 45 4063.46	4.30	159.60	187.31	60.39	19 30 28	3463.5	. 32	153.07	
110.00 3 46 24 2160.92	-32.63	33.43	193.50	100.81	4 22 25	1560.9	-30.79	24.69	
110.00 19 10 27 3914.03	7.27	146.43	185.47	56.51	20 15 41	3314.0	2.82	140.18	
DIFFERENTIAL CORRECTIONS	HID-C	HID-COURSE EXECUTION ACCURACY				ORBIT DETERMINATION ACCURACY			
TOE 1.3714 TRA-1.3385 TC3-4.6006	BAU 1.1171	SGT 4	721.3 SGR	304.8 563	173.9	ST 1932.2	SR 260.1	SS 568.3	
RDE .1933 RRA0114 RC3 .1859		RRT -	.0773 RRF -	.0103 RTF	.8687	CRT .9586	CRS9948	CST9380	
FOE .7684 FRA .1426 FC3-2.0142		SGB 4	731.1 R23 -	.0573 R13 -	.8687	LSA 2020.7	MSA 200.6	SSA 17.3	
BOE 1.3850 BRA 1.3385 BC3 4.6044		SG1 4	721.4 562	303.9 THA 1	79.71	EL1 1948.2	EL2 73.5	ALF 7.36	

AUNCH DATE	DEC 26 1965			FL	IGHT TIME 1	56.00		ARR	TIVAL DATE	MAY 31 1966
HELIOCENTRI	CCONIC				STANCE 465.					
RL 147.13	LAL .00	LOL 94.01	VL 26.966	GAL -3.36	AZL 85.95	HCA 231.59	SMA 123.24	ECC .20218	INC 4.0501	V1 30.281
RP 108.92	LAP -3.17	LOP 325.53	VP 36.879			TAL 193.48			APO 148.16	
RC 164.699	GL 26.92	GP -7.41	ZAL 111.03	ZAP 164.07	ETS 332.48	ZAE 130.12	ETE 186.42	7AC 76.80	ETC 163.04	CLP-165.86
PLANE TOCENT	RIC CONIC									
C3 17.639	VHL 4.200	OLA 17.20	RAL 331.48	RAD 6567.7	VEL 11.791	PTH 2.08	VHP 6.451	DPA -17.92	RAP 345.44	ECC 1.2903
LNCH AZMTH			INJ LAT	INJ LONG	INJ RT ASC		INJ TIME	PO CST TIM	INJ 2 LAT	INJ Z LONG
90.00	0 50 35	2751.19	-27.97	78.27	196.73	94.58	1 36 26	2151.2	-27.05	69.73
90.00	17 28 18	4262.51	2.06	175.47	190.35	61.75	18 39 20	3662.5	-1.74	168.84
100.00	2 21 49	2456.95	-29.32	56.48	196.59	96.10	3 2 46	1856.9	-28.16	47.87
100.00	18 39 44	4031.99	3.24	157.87	189.70	60.27	19 46 56	3432.0	74	151.34
110.00	3 51 52	2175.22	-32.80	34.50	196.00	100.20	4 28 7	1575.2	-31.05	25.72
110.00	19 26 11	3886.48	6.23	144.97	187.84	56.32	20 30 57	3286.5	1.77	138.74
DIFFERENTIA			0,20	******			ORBIT DETERMINATION ACCURACY			
		TC3-4.8098	BAU 1.1351	SGT 4	796.1 SGR	318.1 563 1	70.8	ST 2001.5	SR 271.2	55 575.3
		RC3 .1950		RRT -	.0561 RRF -	.0046 RTF .	8694	CRT .9713	CR59913	CST9425
FOE .7533		FC3-1.9840		SCB 4	806.7 R23 -	.0444 R13	8694	LSA 2091.1	MSA 193.5	55A 18.4
		BC3 4.8137				317.6 THA 17	9.79	EL1 2018.8	EL2 63.9	ALF 7.51

ARRIVAL DATE JUN 2 1966

LAUNCH DATE DEC 26 1965

```
DISTANCE 470.898
 HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 17.220 VML 4.150 OLA 17.97 RAL 334.27 RAD 6567.7 VEL 11.773 PTH 2.08 VMP 6.560 OPA -16.62 RAP 347.50 ECC 1.2834
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       -27.28
                                                                  199.42
                                                                                   93.71
                                                                                             1 40 9
                                                                                                           2175.3
                0 53 53 2775.34
17 47 14 4227.23
                                                        80.03
                                           -28.09
                                                                                                                                      166.87
                                                                                                                          -2.87
                                                                                    61.70 18 57 41
                                                                                                            3627.2
                                                                    192.99
                                            . 92
                                                        173.50
                                                                                   95.27 3 7 10
60.18 20 4 37
99.44 4 33 52
56.16 20 47 17
                                                                                                                                      49.44
                                                                                                                         -28.42
                                                                    199.29
                                                                                                            1878.8
                                                         58.09
                                          -29.47
                 2 25 51 2478.79
                                                                 192.32
                                                                                                                                     149.53
                                                                                                                          -1.86
                                                                                                            3399.D
                18 57 58 3999.01
3 57 19 2192.59
19 42 59 3857.98
                                                        156.05
                                             2.12
                                                                                                                                      26.99
                                                                                                                        -31.35
                                                                                                            1592.6
                                                         35.82
                                                                    198.76
                                          -33.01
                                                                                                                                      137.25
                                                                                                            3258.0
                                                                                                                            .68
                                                                    190.43
                                                        143.47
                                           5.15
                                                                                                        ORBIT DETERMINATION ACCURACY
                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                        ST 2078.3 SR 282.4 55 583.2
CRT .9815 CRS -.9866 CST -.9471
                                                          SGT 4866.4 SGR 331.0 SG3 167.6
RRT -.0333 RRF .0049 RTF .8701
SG8 4877.6 R23 -.0340 R13 -.8701
   TOE 1.4649 TRA-1.0592 TC3-5.0010 BAU 1.1522
   ROE .2043 RRA -.0312 RC3 .2014 FAU .03862
                                                                                                       LSA 2168.9 MSA 186.0 SSA 19.4
EL1 2096.7 EL2 53.5 ALF 7.60
        .7405 FRA .2418 FC3-1.9416 BSP 15410
                                                           SG1 4866.4 SGZ 330.8 THA 179.87
   BOE 1.4791 BRA 1.0597 BC3 5.0050 FSP -543
                                                                                                                  ARRIVAL DATE JUN 4 1966
                                                               FLIGHT TIME 160.00
                                                              DISTANCE 476.587
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 26.850 GAL -2.52 AZL 86.12 HCA 237.91 SMA 122.53 ECC .20532 INC 3.8795 V1 30.281 RP 108.89 LAP -3.29 LOP 331.87 VP 36.802 GAP 10.00 AZP 92.06 TAL 189.83 TAP 67.74 RCA 97.37 APO 147.69 V2 34.800
   RC 168.980 GL 26.20 GP -6.60 TAL 105.61 TAP 165.89 ETS 332.48 TAE 130.33 ETE 185.76 TAC 81.05 ETC 164.30 CLP-167.50
  PLANETOCENTRIC CONIC
                                                                                     2.08 VHP 6.675 DPA -15.35 RAP 349.58 ECC 1.2780
   C3 16.893 VHL 4.110 DLA 18.79 RAL 337.19 RAD 6567.7 VEL 11.759 PTH
   LNCH AZETH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           2203.2
                                                                    202.34
                                                                                    92.69
                                                                                             1 43 41
                                                        82.06
                  0 56 58 2803.24
                                           -28.20
      90.00
                                                                                                                                      164.81
                                                                                             19 17 19
                                                                                                            3590.5
                                                                                                                          -4.05
                                                        171.45
                                                                     195.86
                                                                                    61.68
                 18 7 29
                            4190.48
                                             - .27
       90.00
                                                                                                                          -28.70
                                                                                                                                       51.27
                                                                                              3 11 29
                                                                                                            1904.1
                                                                     202.24
                                                                                    94.30
                                                         59.95
                  2 29 45
                              2504.05
                                            -29.61
      100.00
                                                                                                                                      147.66
                                                                                                                          -3.02
                                                                                    60.12 20 23 28
                                                                                                            3364.9
                19 17 23 3964.91
4 2 50 2212.80
                                                        154.18
                                                                     195.17
     100.00
                                              .97
                                                                                    98.56 4 39 43
56.03 21 4 36
                                                                                                                                       28.47
                                                                                                            1612.8
                                                                                                                         -31.68
                                           -33.22
                                                         37.36
                                                                     201.77
     110.00
                                                                                                                                      135.74
                                                                     193.25
                                                                                                            3228.9
                                                                                                                           - .44
                                                       141.95
                20 0 47 3828.92
                                              4.05
     110.00
                                                                                                         ORBIT DETERMINATION ACCURACY
                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                         ST 2160.1 SR 293.6 55 590.7
CRT .9891 CRS -.9809 CST -.9518
                                                           SCT 4933.9 SCR 343.1 SC3 164.4
RRT -.0097 RRF .0165 RTF .8715
   TOE 1.5199 TRA -.9062 TC3-5.1717 BAU 1.1689
   ROE .2102 RRA -.0401 RC3 .2050 FAU .03685
                                                                                                      LSA 2251.4 MSA 178.1 SSA 20.4
ELI 2179.5 EL2 42.8 ALF 7.66
                                                            568 4945.8 R23 -. 0250 R13 -. 8715
   FOE .7282 FRA .2889 FC3-1.8887 BSP 15659
                                                           5G1 4933.9 SG2 343.1 THA 179.96
   BDE 1.5344 BRA .9071 BC3 5.1758 FSP -535
                                                                                                                 ARRIVAL DATE JUN 6 1966
                                                               FLIGHT TIME 162.00
LAUNCH DATE DEC 26 1965
                                                              DISTANCE 482.263
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 16.661 VHL 4.082 DLA 19.65 RAL 340.25 RAC 6567.7 VEL 11.749 PTH 2.07 VMP 6.797 DPA -14.10 RAP 351.68 ECC 1.2742
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                  205.50
                                                                               91.54
61.72
                                                                                                         2234.8 -27.77
                                                                                             1 47 7
                 0 59 52 2834.76
18 28 59 4152.61
2 33 35 2532.54
                                                        84.36
                                           -28.28
                                                                                                                                      162.69
                                                                                            19 38 12
                                                                                                                          -5.26
                                                                     198.98
                                                                                                            3552.6
                                                        169.34
                                            -1.49
                                                                                    93.20 3 15 48
60.11 20 43 27
97.54 4 45 45
55.93 21 22 52
                                                                                                                                       53.34
                                                                     205.43
                                                                                                            1932.5
                                                                                                                         -28.98
                                                         62.06
                                           -29.74
     100.00
                                                                                                                                      145.74
                                                                                                            3330.1
                                                                                                                          -4.19
                                                                     198.27
              19 37 57 3930.06
4 8 29 2235.65
20 19 32 3799.72
                                                        152.27
                                             - . 22
                                                                                                                                       30.16
                                                                     205.02
                                                                                                            1635.6
                                                                                                                        -32.04
     110.00
                                           -33.44
                                                         39.11
                                                                                                                         -1.55
                                                                                                                                      134.21
                                                                                                            3199.7
                                                                     196.30
                                             2.94
                                                        140.42
                                                                                                         ORBIT DETERMINATION ACCURACY
                                                          MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                         ST 2249.8 SR 304.9 SS 599.5
                                                            SGT 4994.1 SGR 354.8 SG3 161.1
   TOE 1.5826 TRA -.7410 TC3-5.3094 BAU 1.1835
                                                                                                         CRT .9943 CRS -.9743 CST -.9565
                                                           RRT .0152 RRF .0318 RTF .8727
SGB 5006.7 R23 .0185 R13 .8727
   ROE .2166 RRA -. D482 RC3 .2058 FAU .03503
FOE .7186 FRA .3366 FC3-1.8205 BSP 15844
BOE 1.5973 BRA .7426 BC3 5.3134 FSP -523
                                                                                                         LSA 2341.9 MSA 170.5 SSA 21.3
                                                                                                                                        7.68
                                                                                                         EL1 2270.2 EL2 32.3 ALF
                                                            5G1 4994.1 5G2 354.7 THA
                                                                                           .06
                                                                                                                   ARRIVAL DATE JUN 8 1966
                                                               FLIGHT TIME 164.00
LAUNCH DATE DEC 26 1965
                                                               DISTANCE 487.924
   RL 147.13 LAL .00 LOL 94.01 VL 26.738 GAL -1.62 A7L 86.27 HCA 244.24 SHA 121.85 ECC .20930 INC 3.7310 V1 30.281 RP 108.86 LAP -3.36 LOP 338.21 VP 36.730 GAP 10.44 A7P 91.62 TAL 186.14 TAP 70.38 RCA 96.35 APO 147.35 V2 34.811 RC 173.196 GL 25.33 GP -5.96 TAL 99.67 TAP 167.58 ETS 331.87 ZAE 130.54 ETE 185.26 TAC 85.44 ETC 165.32 CLP-169.08
   PLANE TOCENTRIC CONIC
   C3 16.528 VHL 4.066 DLA 20.52 RAL 343.44 RAD 6567.7 VEL 11.744 PTH 2.07 VHP 6.924 DPA -12.88 RAP 353.78 ECC 1.2720 LNCH AZWITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZWITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          -27.98
                                                                                   90.26
                                                                                              1 50 27
                 1 2 36 2869.70
18 51 41 4114.02
                                            -28.32
                                                         86.92
                                                                     208.89
       90.00
                                                                                             20 0 15
                                                                                                                           -6.48
                                                                                                                                       160.51
                                                                                                             3514.0
                                                                      202.35
                                                                                    61.80
                                             -2.73
                                                         167.18
       90 00
                 2 37 26 2564.02
19 59 34 3894.93
                                                                                                             1964.0
                                                                                                                          -29.24
                                                                                    91.97
                                                                                              3 20 10
                                            -29.83
                                                          64.40
                                                                     208.86
      100.00
                                                                                            21 4 29
4 52 0
                                                                                                                           -5.37
                                                                                                                                       143.80
                                                                                                             3294.9
                                                                                    60.14
                                                         150.34
                                                                     201.62
      100.00
                                             -1.41
                                                                                                                          -32.40
                                                                                    96.41
                                                                                                             1660.9
                                           -33.65
                                                          41.04
                                                                     208.53
                              2260.87
      110.00
                  4 14 19
                                                                                    55.86 21 42 0
                                                                                                                           -2.66
                                                                                                             3170.8
                                                        138.91
                                                                     199.59
                                             1.84
      110.00
                 20 39 10
                              3770.85
                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                           MID-COURSE EXECUTION ACCURACY
                                                           SGT 5055.5 SGR 365.6 SG3 157.9 ST 2337.6 SR 316.2 SS 605.7 RRT .0396 RRF .0467 RTF .8749 CRT .9969 CRS -.9672 CST -.9607 SGB 5068.7 R23 .0119 R13 .8750 LSA 2429.8 MSA 163.2 SSA 22.2 SG1 5055.5 SG2 365.3 THA .16 EL1 2358.8 EL2 24.6 ALF 7.68
                                                                                                        ST 2337.6 SR 316.2 S5 605.7
CRT .9969 CRS -.9672 CST -.9607
    TOE 1.6460 TRA -.5689 TC3-5.4231 BAU 1.1992
   ROE .2236 RRA -.0555 RC3 .2034 FAU .03335
FOE .7073 FRA .3814 FC3-1.7470 BSP 16084
BOE 1.6611 BRA .5716 BC3 5.4269 FSP -515
```

FLIGHT TIME 158.00

```
FLIGHT TIME 166.00
 LAUNCH DATE DEC 26 1965
                                                                                                                                                              ARRIVAL DATE JUN 10 1966
                                                                                       DISTANCE 493.570
    HELIOCENTRIC CONIC
     RL 147.13 LAL .00 LOL 94.01 VL 26.682 GAL -1.15 A7L 86.34 MCA 247.41 SMA 121.52 ECC .21165 INC 3.6627 V1 30.281
RP 108.84 LAP -3.38 LOP 341.38 VP 36.696 GAP 10.67 A7P 91.41 TAL 184.29 TAP 71.69 RCA 95.80 APO 147.24 VZ 34.817
RC 175.278 GL 24.80 GP -5.69 ZAL 96.54 ZAP 168.38 ETS 331.31 ZAE 130.66 ETE 185.06 ZAC 87.68 ETC 165.76 CLP-169.85
    PLANETOCENTRIC CONTC.
     C3 16.302 VHL 4.062 DLA 21.39 RAL 346.76 RAD 6567.7 VEL 11.742 PTH 2.07 VHP 7.059 DPA -11.67 RAP 355.90 ECC 1.2716 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       1 5 18 2907.86
19 15 29 4075.14
2 41 20 2598.24
20 22 8 3859.99
                                                                                                                                                  2307.9
          90.00
                                                                                                                88.86 1 53 46
                                                                                                                                                                     -28.15
                                                             -28.30
                                                                               89.71
                                                                                               212.52
                                                                                                                                                                                          81.05
          90.00
                                                             -3.98
                                                                              165.D1
                                                                                                205.98
                                                                                                                    61.94
                                                                                                                                20 23 24
                                                                                                                                                      3475.1
                                                                                                                                                                         -7.71
                                                                                                                                                                                         -158.31
                                                                                                                                3 24 38
        100.00
                                                           -29.89
                                                                               66.94
                                                                                                212.52
                                                                                                                    90.63
                                                                                                                                                      1998.2
                                                                                                                                                                        -29.48
                                                                                                                                                                                          56.16
                                                                                                                    60.21 21 26 28
95.18 4 58 34
55.82 22 1 55
        100.00
                                                              -2.59
                                                                              148.42
                                                                                                205.21
                                                                                                                                                      3260.0
                                                                                                                                                                         -6.54
                                                                                                                                                                                          141.86
                       4 20 26 2288.20
20 59 32 3742.79
                                                        -33.84
         110.00
                                                                               43.16
                                                                                                212.29
                                                                                                                                                      1688.2
                                                                                                                                                                        -32.75
                                                                                                                                                                                           34.09
                                                               .76
        110.00
                                                                              137.45
                                                                                                203.12
                                                                                                                                                      3142.8
                                                                                                                                                                        -3.72
                                                                                                                                                                                          131.24
                                                                               MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                   SCT, 5111.1 SCR 375.7 SC3 154.7
RRT .0645 RRF .0641 RTF .8771
SCB 5124.9 R23 .0072 R13 .8771
                                                                                                                                                 ST 2427.5 SR 327.5 55 612.0 CRT .9975 CRS -.9595 CST -.9646
     TOE 1.7140 TRA -.3851 TC3-5.4961 BAU 1.2133
     ROE .2313 RRA -.0618 RC3 .1983 FAU .03166
FOE .6975 FRA .4264 FC3-1.6610 BSP 16283
BOE 1.7296 BRA .3900 BC3 5.4997 FSP -505
                                                                                                                                                 LSA 2519.8 MSA 157.0 S5A 22.9
EL1 2449.4 EL2 23.1 ALF 7.67
                                                                                   SG1 5111.2 SG2 375.0 THA .27
LAUNCH DATE DEC 26 1965
                                                                                        FLIGHT TIME 168.00
                                                                                                                                                               ARRIVAL DATE JUN 12 1966
   HELIOCENTRIC CONIC
                                                                                      DISTANCE 499.197
     RL 147.13 LAL .00 LOL 94.01 VL 26.628 GAL -.66 AZL 86.40 MCA 250.58 SMA 121.20 ECC .21425 INC 3.5975 VI 30.281
RP 108.82 LAP -3.39 LOP 344.55 VP 36.663 GAP 10.91 AZP 91.20 TAL 182.43 TAP 73.00 RCA 95.23 APO 147.16 VZ 34.824
RC 177.341 GL 24.22 GP -5.45 ZAL 93.31 ZAP 169.16 ETS 330.56 ZAE 130.77 ETE 184.89 ZAC 89.94 ETC 166.15 CLP-170.61
   PLANETOCENTRIC CONIC
     C3 16.390 VHL 4.073 DLA 22.26 RAL 350.20 RAD 6567.7 VEL 11.746 PTH 2.07 VHP 7.201 DPA -10.47 RAP 358.03 ECC 1.2730 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         1 7 57 2948.98
                                                                                                                                                    2349.0
         90.00
                                                            -28.20
                                                                               92.71
                                                                                               216.35
                                                                                                                   87.36
                                                                                                                                1 57 6
                                                                                                                                                                       -28.27
                                                                                                                                                                                           84.05
                      19 40 16 4036.45
2 45 22 2634.87
20 45 32 3825.79
4 26 52 2317.32
21 20 31 3716.11
                                                                                                                                20 47 32
         90.00
                                                              -5.22
                                                                              162.83
                                                                                                209.86
                                                                                                                    62.13
                                                                                                                                                      3436.4
                                                                                                                                                                         -A.91
                                                                                                                                                                                          156.10
        100.00
                                                                                                                                 3 29 17
                                                                                                                                                                        -29.67
                                                            -29.88
                                                                               69.66
                                                                                                216.41
                                                                                                                    89.20
                                                                                                                                                      2034.9
                                                                                                                                                                                            60.86
        100.00
                                                                              146.54
                                                                                                209.05
                                                                                                                    60.32 21 49 17
93.85 5 5 29
55.82 22 22 27
                                                                                                                                                      3225.8
                                                             -3.75
                                                                                                                                                                        -7.67
                                                                                                                                                                                          139.95
        110.00
                                                            -33.99
                                                                               45.42
                                                                                                                                                                        -33.09
                                                                                               216.28
                                                                                                                                                      1717.3
                                                                                                                                                                                           36.29
                      21 20 31
        110.00
                                         3716.11
                                                               -.26
                                                                             136.05
                                                                                               206.87
                                                                                                                                                      3116.1
                                                                                                                                                                         -4.74
                                                                                                                                                                                          129.84
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE 1.7821 TRA -.1934 TC3-5.5326 BAU 1.2278 ROE .2399 RRA -.0670 RC3 .1902 FAU .03009
                                                                                   SGT 5165.6 SGR 385.0 SG3 151.5
RRT .0892 RRF .0813 RTF .8804
                                                                                                                                                 ST 2512.1 SR 338.8 SS 615.4
CRT .9962 CRS -.9515 CST -.9681
    FOE .6860 FRA .4686 FC3-1.5700 BSP 16536
BDE 1.7982 BRA .2046 BC3 5.5358 FSP -500
                                                                                   SG8 5179.9 R23 .0023 R13 .8804
SG1 5165.7 SG2 383.5 THA .38
                                                                                                                                               LSA 2603.9 MSA 151.6 SSA 23.4
EL1 2534.7 EL2 29.3 ALF 7.65
                                                                                       FLIGHT TIME 170.00
                                                                                                                                                             ARRIVAL DATE JUN 14 1966
LAUNCH DATE DEC 26 1965
                                                                                      DISTANCE 504.806
     RL 147.13 LAL .00 LOL 94.01 VL 26.574 GAL -.16 AZL 86.47 MCA 253.74 SMA 120.88 ECC .21713 INC 3.5347 V1 30.281 RP 108.79 LAP -3.39 LOP 347.73 VP 36.631 GAP 11.17 AZP 90.99 TAL 180.57 TAP 74.31 RCA 94.63 APO 147.13 VZ 34.832 RC 179.385 GL 23.56 GP -5.24 ZAL 90.01 ZAP 169.91 ETS 329.59 ZAE 130.89 ETE 184.74 ZAC 92.22 ETC 166.51 CLP-171.36
   PLANETOCENTRIC CONIC
     C3 16.802 VHL 4.099 DLA 23.09 RAL 353.74 RAD 6567.7 VEL 11.755 PTH 2.07 VHP 7.351 DPA -9.28 RAP
    C3 16.802 VHL 4.099 OLA 23.09 RAL 353.74 RAO 6567.7 VEL 11.755 PTH 2.07 VHP 7.351 OPA -9.28 RAP .17 ECC 1.2765
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG
90.00 1 10 36 2992.80 -28.02 95.91 220.39 85.77 2 0 28 2592.8 -28.32 87.25
90.00 20 5 53 3998.44 -6.42 160.69 213.98 62.36 21 12 32 3398.4 -10.07 153.92
100.00 2 49 36 2673.56 -29.81 72.54 220.51 87.69 3 34 10 2073.6 -29.81 63.73
100.00 21 9 34 3792.91 -4.85 144.73 213.12 60.47 22 12 47 3192.9 -8.75 138.11
110.00 4 33 42 2347.88 -34.11 47.80 220.51 92.44 5 12 50 1747.9 -33.39 38.63
110.00 21 41 57 3691.36 -1.20 134.76 210.85 55.84 22 43 28 3091.4 -5.68 128.54
                                                                                                                    60.47 22 12 47
92.44 5 12 50
55.84 22 43 28
                                                                             134.76
                      21 41 57
                                                            -1.20
                                                                                               210.85
                                        3691.36
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 5210.5 SGR 393.8 SG3 147.9
RRT .1143 RRF .1024 RTF .8829
SG8 5225.3 R23 .0009 R13 .8829
SG1 5210.7 SG2 391.2 THA .50
                                                                                                                                                ST 2596.3 SR 350.3 SS 618.9
     TOE 1.8549 TRA .0131 TC3-5.5130 BAU 1.2390
    ROE .2495 RRA -.0711 RC3 .1802 FAU .02832
FOE .6763 FRA .5116 FC3-1.4594 BSP 16660
BOE 1.8716 BRA .0723 BC3 5.5160 FSP -485
                                                                                                                                                CRT .9934 CRS -.9434 CST -.9714
                                                                                                                                               LSA 2687.7 MSA 147.7 55A 23.6
EL1 2619.5 EL2 39.8 ALF 7.64
LAUNCH DATE DEC 26 1965
                                                                                       FLIGHT TIME 172.00
                                                                                                                                                              ARRIVAL DATE JUN 16 1966
                                                                                     DISTANCE 510.392
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 26.521 GAL .37 AZL 86.53 MCA 256.91 SMA 120.57 ECC .22032 INC 3.4739 V1 30.281
RP 108.77 LAP -3.38 LOP 350.91 VP 36.801 GAP 11.44 AZP 90.79 TAL 178.70 TAP 75.62 RCA 94.01 APO 147.14 VZ 34.840
RC 181.409 GL 22.84 GP -5.04 ZAL 86.66 ZAP 170.64 ETS 328.37 ZAE 131.01 ETE 184.61 ZAC 94.52 ETC 166.82 CLP-172.10
   PLANETOCENTRIC CONIC
    C3 17.148 VHL 4.141 DLA 23.88 RAL 357.37 RAD 6567.7 VEL 11.770 PTH 2.08 VHP 7.511 DPA
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                       3038.87
                                                            -27.75
                                                                              99.25
                                                                                              224.61
                                                                                                                 84.11
                                                                                                                                 2 3 58
                                                                                                                                                    2438.9
                                                                                                                                                                       -28.27
                         1 13 19
                                                                                                                                                                                          90.62
                       20 32 8
                                      3961.76
                                                             -7.58
                                                                                                                    62.63
                                                                                                                                21 38 10
                                                                                                                                                     3361.8
                                                                                                                                                                       -11.18
                                                                             158.61
                                                                                               218.33
                                                                                                                                                                                          151.79
                                                                                                                                  3 39 22
                                                                                                                                                     2113.8
        100.00
                        2 54 8
                                       2713.82
                                                           -29.66
                                                                               75.52
                                                                                               224.80
                                                                                                                    86.12
                                                                                                                                                                       -29.88
                                                                                                                                                                                           66.72
                      21 34 0 3762.05
4 41 1 2379.43
22 3 37 3669.19
                                                                                                                    60.64 22 36 42
                                                                                                                                                     3162.0
                                                             -5.88
                                                                              143.02
                                                                                               217.41
                                                                                                                                                                        -9.75
                                                                                                                                                                                         136.37
                                                                                                                   90.99 5 20 40
55.87 23 4 46
                                                           -34.17
                                                                                              224.93
                                                                                                                                                     1779.4
                                                                                                                                                                      -33.66
                                                                               50.26
                                                                                                                                                                                          41.05
                                                                                                                                                                      -6.51
                                                                                             215.03
                                                                                                                                                     3069.2
                                                             -2.05
                                                                             133.61
                                                                                                                                                                                        127.37
   DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                                            ST 2672.0 6R 361.7 55 622.4

CRT .9894 CRS -.9349 CST -.9740

LSA 2763.3 MSA 146.4 SSA 23.6

EL1 2695.8 EL2 52.1 ALF 7.63
     TOE 1.9272 TRA .2314 TC3-5.4496 BAU 1.2499
                                                                                  SGT 5253.9 SGR 401.8 SG3 144.9
    RDE .2603 RRA -.0736 RC3 .1677 FAU .02667
FDE .6681 FRA .5581 FC3-1.3467 8SP 16814
BDE 1.9447 BRA .2428 BC3 5.4522 FSP -474
                                                                                 RRT .1394 RRF .1246 RTF .8848
SCB 5269.2 R23 .0005 R13 .8848
SCI 5254.2 SC2 397.8 THA .61
```

ARRIVAL CATE JUN 18 1966

```
FLIGHT TIME 174.00
LAUNCH DATE DEC 26 1965
                                                                    DISTANCE 515.954
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 26.469 GAL .91 A7L 86.59 HCA 260.09 SMA 120.27 ECC .22382 INC 3.4146 VI 30.281
RP 108.74 LAP -3.36 LOP 354.08 VP 36.571 GAP 11.72 A7P 90.59 TAL 176.84 TAP 76.93 RCA 93.35 APO 147.19 V2 34.849
RC 183.413 GL 22.04 GP -4.87 TAL 83.27 TAP 171.35 ETS 326.84 TAE 131.13 ETE 184.50 TAC 96.83 ETC 167.10 CLP-172.84
   PLANETOCENTRIC CONIC
                                                    1.07 RAD 6567.7 VEL 11.791 PTH 2.08 VHP 7.680 DPA -6.94 RAP
    C3 17.642 VHL 4.200 DLA 24.61 RAL
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     2 7 39
22 4 14
                                                                            228.99
                                                                                            82.42
                                                                                                                       2486.8
                                                                                                                                     -28.13
                                                                                                                                                      94.12
       90.00
                                                -27.37
                                                              102.70
                  1 16 12 3086.77
20 58 47 3927.02
                                                                                                                                                     149.77
                                                                                             62.93
                                                                                                                        3327.0
                                                                                                                                      -12.22
                                                                            222.89
        90.00
                                                -8.66
                                                              156.63
                                                                                             84.54
                                                                                                        3 44 59
                                                                                                                        2155.1
                                                                                                                                      -29.88
                                                                                                                                                     69.79
                                                                            229.26
                  2 59 4 2755.12
21 58 36 3733.89
                                                               78.57
      100.00
                                               -29.43
                                                                                                                                                     134.77
                                                                                             60.83 23 0 50
                                                                                                                       3133.9
                                                                                                                                      -10.66
      100.00
                                                 -6.82
                                                              141.45
                                                                            221.90
                  4 48 52 2411.58
22 25 17 3650.20
                                                                                                                        1811.6
                                                                                                                                                     43.54
                                                               52.77
                                                                            229.55
                                                                                             89.50
                                                                                                        5 29 4
                                                                                                                                      -33.87
      110.00
                                               -34.18
                                                                                             55.92 23 26 7
                                                                                                                        3050.2
                                                                                                                                      -7.23
                                                              132.62
                                                                            219.40
      110.00
                                                -2.77
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 5295.7 SGR 408.7 SG3 141.7
RRT .1644 RRF .1452 RTF .8890
SGB 5311.4 R23 -.0018 R13 .8890
                                                                                                                    ST 2734.6 SR 372.7 SS 620.8
CRT .9844 CRS -.9264 CST -.9765
    TOE 1.9965 TRA .4587 TC3-5.3440 BAU 1.2609
   RDE .2721 RRA -.0751 RC3 .1532 FAU .02520
FDE .6562 FRA .5993 FC3-1.2364 BSP 16976
                                                                                                                   LSA 2825.0 MSA 145.7 SSA 23.3
EL1 2759.2 EL2 65.0 ALF 7.65
                                                                                                      .73
                                                                  SG1 5296.1 SG2 403.1 THA
    BDE 2.0150 BRA .4648 BC3 5.3462 FSP -465
                                                                                                                               ARRIVAL CATE JUN 20 1966
LAUNCH DATE DEC 26 1965
                                                                      FLIGHT TIME 176.00
  HELIOCENTRIC CONIC
                                                                     DISTANCE 521.489
   RL 147.13 LAL .00 LOL 94.01 VL 26.418 GAL 1.48 A7L 86.64 MCA 263.26 SMA 119.98 ECC .22768 INC 3.3565 V1 30.281
RP 108.71 LAP -3.33 LOP 357.26 VP 36.543 GAP 12.03 A7P 90.39 TAL 174.98 TAP 78.24 RCA 92.66 APO 147.29 V2 34.858
RC 185.395 GL 21.19 GP -4.71 7AL 79.87 7AP 172.04 ETS 324.96 7AE 131.25 ETE 184.40 7AC 99.16 ETC 167.34 CLP-173.57
  PLANETOCENTRIC CONIC
                                                                                              2.09 VHP 7.861 CPA
                                                                                                                           -5.79 RAP
                                                    4.82 RAD 6567.7 VEL 11.819 PTH
    C3 18.300 VHL 4.278 DLA 25.27 RAL
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 19 20 3135.91 -26.87 106.22 233.49 80.73 2 11 36 2535.9 -27.88 97.69
                   1 19 20 3135.91
                  21 25 33 3894.94
3 4 31 2796.84
                                                               154.80
                                                                             227.62
                                                                                             63.25
                                                                                                      22 30 27
                                                                                                                        3294.9
                                                                                                                                                     147.88
       90.00
                                                 -9.65
                                                                                                       3 51 7
                                                                                                                        2196.8
                                                                                                                                       -29.79
                                                                                                                                                      72.89
                                                                            233.86
                                                                                             82.95
      100.00
                                                -29.12
                                                                81.63
                  22 23 3 3709.24
4 57 20 2443.84
                                                              140.08
                                                                            226.55
                                                                                             61.01
                                                                                                      23 24 53
                                                                                                                        3109.2
                                                                                                                                       -11.45
                                                                                                                                                     133.36
      100.00
                                                 -7.64
                                               -34.13
                                                                                             88.01
                                                                                                      5 38 4
                                                                                                                        1843.8
                                                                                                                                       -34.03
                                                                                                                                                      46.04
                                                                55.29
                                                                            234.32
      110.00
                                                                                             55.96 23 47 18
                                                                                                                        3035.0
                                                                                                                                       -7.80
      110.00
                  22 46 43
                                 3635.00
                                                 -3.35
                                                              131.62
                                                                            223.91
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2787.7 SR 383.5 SS 618.9

CRT .9786 CRS -.9179 CST -.9786
                                                                  SGT 5330.6 SGR 414.9 SG3 138.5
RRT .1894 RRF .1683 RTF .8923
   TDE 2.0659 TRA .7018 TC3-5.1849 BAU 1.2689
ROE .2852 RRA -.0750 RC3 .1377 FAU .02362
   FOE .6457 FRA .6431 FC3-1.1174 BSP 17074
BDE 2.0855 BRA .7058 BC3 5.1868 FSP -455
                                                                  SGB 5346.7 R23 -. 0017 R13 .8923
                                                                                                                    LSA 2877.4 MSA 147.1 55A 22.7
                                                                                                                    EL1 2812.9 EL2 78.2 ALF 7.67
                                                                  SG1 5331.2 SG2 407.4 THA
                                                                                                      .85
                                                                                                                              ARRIVAL DATE JUN 22 1966
                                                                      FLIGHT TIME 178.00
LAUNCH DATE DEC 26 1965
                                                                     DISTANCE 526.992
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 26.367 GAL 2.07 AZL 86.70 MCA 266.43 SMA 119.69 ECC .23192 INC 3.2990 VI 30.281
RP 108.68 LAP -3.29 LOP .44 VP 36.516 GAP 12.35 AZP 90.21 TAL 173.12 TAP 79.56 RCA 91.93 APO 147.45 VZ 34.868
RC 187.357 GL 20.28 GP -4.56 ZAL 76.48 ZAP 172.70 ETS 322.62 ZAE 131.37 ETE 184.31 ZAC 101.50 ETC 167.55 CLP-174.29
  PLANFTOCENTRIC CONIC
    C3 19.140 VHL 4.375 DLA 25.85 RAL 8.59 RAD 6567.8 VEL 11.854 PTH 2.10 VHP 8.053 DPA -4.64 RAP
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         238.10
                                                                                         79.06 2 15 58
                                                                                                                    2585.6
                                                                                                                                   -27.53
                                                                                                                                                    101.28
                  1 22 53 3185.57
21 52 3 3866.39
3 10 36 2838.26
                                                -26.28
                                                              109.73
       90.00
                                                              153.15
                                                                            232.50
                                                                                             63.56
                                                                                                      22 56 30
                                                                                                                        3266.4
                                                                                                                                      -13.99
                                                                                                                                                     145.19
                                                -10.52
        90.00
                                                                            238.58
                                                                                             81.41
                                                                                                       3 57 54
                                                                                                                        2238.3
                                                                                                                                      -29.63
                                                                                                                                                      75.96
                                               -28.74
                                                                84.65
      100.00
                                                                                                                        3088.9
                                                                                                                                      -12.09
                                                                                                                                                     132.20
                  22 47 1 3688.92
5 6 27 2475.78
23 7 39 3624.17
                                                                            231.33
                                                                                             61.18 23 48 30
                                                -8.31
                                                              138.94
      100.00
                                                                                                        5 47 43
                                                                                                                                                      48.53
                                               -34.03
                                                                            239.23
                                                                                             86.54
                                                                                                                        1875.8
                                                                                                                                      -34.13
                                                                57.78
      110 00
                                                                                             56.00 24 8 3
                                                                                                                        3024.2
                                                                                                                                      -8.20
                                                                                                                                                     124.98
                                                              131.25
                                                                            228.54
      110.00
                                                -3.77
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TDE 2.1277 TRA .9538 TC3-4.9900 BAU 1.2772
                                                                  SGT 5362.4 SGR 420.1 SG3 135.1
                                                                                                                   ST 2820.6 SR 393.5 S5 612.5
                                                                  RRT .2135 RRF .1901 RTF .8964
SGB 5378.8 R23 -.0024 R13 .8964
                                                                                                                   CRT .9722 CRS -.9090 CST -.9803
   RDE .2994 RRA -.0735 RC3 .1213 FAU .02216
FDE .6320 FRA .6845 FC3-1.0023 BSP 17228
BDE 2.1487 BRA .9566 BC3 4.9915 FSP -447
                                                                                                                   LSA 2909.1 MSA 149.8 SSA 21.9
                                                                                                                    EL1 2846.4 EL2 91.3 ALF 7.73
                                                                  SG1 5363.1 SG2 410.4 THA
                                                                                                     . 96
                                                                      FLIGHT TIME 180.00
                                                                                                                               ARRIVAL DATE JUN 24 1966
LAUNCH DATE OFC 26 1965
                                                                      DISTANCE 532.460
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 26.318 GAL 2.68 A7L 86.76 HCA 269.61 SMA 119.41 ECC .23658 INC 3.2419 V1 30.281 RP 108.65 LAP -3.24 LOP 3.62 VP 36.490 GAP 12.69 A7P 90.02 TAL 171.27 TAP 80.88 RCA 91.16 APO 147.66 V2 34.878 RC 189.297 GL 19.32 GP -4.43 ZAL 73.13 ZAP 173.34 ETS 319.74 ZAE 131.49 ETE 184.24 ZAC 103.85 ETC 167.72 CLP-175.02
  PLANETOCENTRIC CONIC
   C3 20.184 VHL 4.493 OLA 26.35 RAL 12.35 RAD 6567.8 VEL 11.898 PTH 2.11 VMP 8.259 OPA -3.51 RAP 10.99 ECC 1.3322 ENCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 27 D
                                                                            242.79
                                                                                             77.46
                                                                                                        2 20 55
                                                                                                                       2634.8
                                                                                                                                      -27.07
                                                                                                                                                    104.82
                                 3234.84
                                                -25.60
                                                              113.18
       90.00
                                                                                                      23 21 58
                                                                                                                        3242.3
                                                                                                                                       -14.67
                                                                                                                                                     144.75
                  22 17 55
                                 3842.33
                                                 -11.24
                                                              151.76
                                                                            237.49
                                                                                             63.84
        90.00
                                                                                                       4 5 28
                                                                                                                        2278.6
                                                                                                                                       -29.39
                                                                                                                                                      78.94
                                                -28.30
                                                                87.57
                                                                            243.39
                                                                                             79.93
                    3 17 30 2878.62
      100.00
                                                                                                      24 11 20
                                                                                                                        3073.8
                                                                                                                                       -12.56
                                                                                                                                                     131.32
                                 3673.78
                                                -8.80
                                                               138.09
                                                                            236.21
                                                                                             61.32
      100.00
                  23 10 7
                                              -33.87
                                                                                                       5 58 4
                                                                                                                        1907.0
                                                                                                                                       -34.18
                                                                                                                                                      50.97
      110.00
                    5 16 17
                                 2506.97
                                                                60.20
                                                                            244.25
                                                                                             85.12
                                                                                             56.02 24 28 8
                  23 27 49
                                                                                                                        3018.2
                                                                                                                                      -8.43
                                                                                                                                                    124.56
      110.00
                                 3618.19
                                                 -3.99
                                                              130.94
                                                                            233.26
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 2838.3 SR 402.7 SS 605.3
CRT .9652 CRS -.9000 CST -.9819
    TOE 2.1854 TRA 1.2202 TC3-4.7585 BAU 1.2843
                                                                  SGT 5391.2 SGR 424.4 SG3 132.0
   ROE .3148 RRA -.0704 RC3 .1046 FAU .02076
FOE .6186 FRA .7273 FC3 -.8904 BSP 17370
                                                                  RRT .2375 RRF .2128 RTF .9006
                                                                  SGB 5407.8 R23 -.0025 R13 .9006
5G1 5392.1 SG2 412.2 THA 1.08
                                                                                                                   LSA 2925.8 MSA 154.0 SSA 21.0
ELT 2864.8 ELZ 104.3 ALF 7.81
```

BOE 2.2080 BRA 1.2223 BC3 4.7596 FSP -438

ARRIVAL DATE JUN 26 1966

LAUNCH DATE DEC 26 1965

```
DISTANCE 537.887
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 26.269 GAL 3.33 A7L 86.82 MCA 272.79 SMA 119.13 ECC .24169 INC 3.1849 V1 3D.281 RP 108.62 LAP -3.18 LOP 6.81 VP 36.465 GAP 13.06 A7P 89.84 TAL 169.43 TAP 82.22 RCA 90.34 APO 147.92 V2 34.889 RC 191.216 GL 18.33 GP -4.31 7AL 69.83 ZAP 173.94 ETS 316.15 ZAE 131.61 ETE 184.17 ZAC 106.20 ETC 167.85 CLP-175.74
   PLANETOCENTRIC CONIC
    C3 21.459 VHL 4.632 DLA 26.75 RAL 16.07 RAD 6567.9 VEL 11.952 PTH 2.13 VHP 8.481 DPA -2.38 RAP 13.17 ECC 1.3532 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     2682.6
                                                                                                                                                                      108.21
                     1 31 59 3282.59
22 42 40 3823.93
                                                      -24.85
                                                                      116.47
                                                                                     247.53
                                                                                                       75.97
                                                                                                                     2 26 41
                                                                                                                                                      -26.54
        90.00
                                                                      150.68
                                                                                      242.55
                                                                                                         64.07
                                                                                                                   23 46 24
                                                                                                                                       3223.9
                                                                                                                                                        -15.19
                                                                                                                                                                        143.65
                                                      -11.79
        90.00
                    3 25 21 2917.11
23 31 58 3664.65
5 26 48 2537.07
23 47 0 3617.45
                                                                                                                                                                         81.76
                                                                        90.33
                                                                                      248.28
                                                                                                         78.56
                                                                                                                    4 13 58
                                                                                                                                       2317.1
                                                                                                                                                        -29.10
                                                      -27.81
       100.00
                                                                                                         61.40 24 33 3
83.75 6 9 5
                                                                                                                                                                       130.79
                                                                                                                                       3064.6
                                                                                                                                                       -12.85
                                                                       137.58
                                                                                      241.13
                                                       -9.10
       100.00
                                                                                                         83.75 6 9 5
56.03 24 47 18
                                                                                                                                       1937.1
                                                                                                                                                       -34.17
                                                                                                                                                                         53.32
                                                     -33.68
                                                                        62.53
                                                                                      249.34
       110.00
                                                                                                                                       3017.5
                                                                                                                                                        -R.46
                                                                                                                                                                        124.52
                                                                      130.90
                                                                                      238.03
                                                      -4.02
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5414.3 SGR 427.7 SG3 128.8

RRT .2614 RRF .2360 RTF .9048

SGB 5431.2 R23 -.0019 R13 .9048

SGI 5415.5 SG2 412.8 THA 1.19
                                                                                                                                   ST 2840.1 SR 410.8 55 596.5
CRT .9576 CRS -.8907 CST -.9832
    TOE 2.2379 TRA 1.5010 TC3-4.4935 BAU 1.2894
    ROE .3314 RRA -.0656 RC3 .0882 FAU .01937
FDE .6049 FRA .7705 FC3 -.7814 BSP 17500
                                                                                                                                 LSA 2926.6 MSA 159.3 SSA 20.1
EL1 2867.2 EL2 117.2 ALF 7.90
    BDE 2.2623 BRA 1.5024 BC3 4.4944 FSP -430
                                                                                                                                               ARRIVAL DATE JUN 28 1966
                                                                               FLIGHT TIME 184.00
LAUNCH DATE DEC 26 1965
                                                                               DISTANCE 543.267
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 26.221 GAL 4.01 AZL 86.87 MCA 275.97 SMA 118.86 ECC .24731 INC 3.1274 VI 30.281 RP 108.58 LAP -3.11 LOP 9.99 VP 36.441 GAP 13.45 AZP 89.67 TAL 167.60 TAP 83.57 RCA 89.47 APO 148.26 VZ 34.900 RC 193.113 GL 17.31 GP -4.20 ZAL 66.61 ZAP 174.51 ETS 311.69 ZAE 131.72 ETE 184.12 ZAC 108.56 ETC 167.95 CLP-176.46
   PLANETOCENTRIC CONIC
    C3 22.994 VHL 4.795 DLA 27.05 RAL 19.73 RAD 6567.9 VEL 12.016 PTH 2.14 VHP 8.718 DPA -1.27 RAP 15.36 ECC 1.3784 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 38 9 3327.41 -24.08 119.53 252.32 74.63 2 33 36 2727.4 -25.96 111.36 100.00 23 5 43 3612.60 -12.13 150.02 247.61 64.22 24 9 15 3212.6 -15.50 142.97 100.00 3 34 18 2952.99 -27.30 92.87 253.22 77.32 4 23 31 2353.0 -28.77 84.38 100.00 23 52 15 3662.26 -9.18 137.44 246.07 61.43 24 53 17 3062.3 -12.92 130.66 110.00 5 38 2 2565.82 -33.44 64.74 254.48 82.46 6 20 47 1965.6 -34.12 55.56 110.00 0 8 57 3622.20 -3.84 131.15 242.81 56.01 1 9 19 3022.2 -8.28 124.87
    C3 22.994 VHL 4.795 DLA 27.05 RAL 19.73 RAD 6567.9 VEL 12.016 PTH 2.14 VHP 8.718 DPA -1.27 RAP 15.36 ECC 1.3784
                                                                         64.74 254.48 82.46 6 20 47
31.15 242.81 56.01 1 9 19
MID-COURSE EXECUTION ACCURACY
                       0 8 57
                                     3622.20
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 2830.4 SR 417.7 55 587.7
CRT .9494 CRS -.8811 CST -.9845
                                                                           SGT 5433.7 SGR 430.2 SG3 125.8
RRT .2856 RRF .2602 RTF .9089
SGB 5450.7 R23 -.0009 R13 .9089
    TDE 2.2876 TRA 1.8005 TC3-4.1992 BAU 1.2911
    RDE .3490 RRA -.0590 RC3 .0727 FAU .01797
    FOE .5920 FRA .8161 FC3 -.6766 BSP 17541
BDE 2.3141 BRA 1.8015 BC3 4.1999 FSP -419
                                                                                                                                   LSA 2916.0 MSA 165.7 SSA 19.1
                                                                                                                                   EL1 2858.1 EL2 130.0 ALF 7.99
                                                                           SG1 5435.1 SG2 412.2 THA 1.30
                                                                                                                                               ARRIVAL DATE JUN 30 1966
                                                                              FLIGHT TIME 186.00
LAUNCH DATE DEC 26 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 548.594
    PLANETOCENTRIC CONIC
    C3 24.828 VHL 4.983 DLA 27.26 RAL 23.31 RAD 6568.0 VEL 12.092 PTH 2.16 VHP 8.975 DPA
                                                                                                                                             -.18 RAP 17.55 ECC 1.4086
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 45 57 3367.65 -23.32 122.24 257.15 73.47 2 42 4 2767.7 -25.37 114.16
                                                                                                                   24 29 58
                                                                                                                                                        -15.57
                     23 26 28 3809.94
3 44 27 2985.61
                                                                                                                                        3209.9
                                                                                                         64.25
                                                      -12.21
                                                                      149.87
                                                                                      252.65
         90.00
                                                                                                                                                       -28.42
                                                                                                                    4 34 13
                                                                                                                                       2385.6
                                                     -26.79
                                                                        95.16
                                                                                      258.19
                                                                                                         76.21
       100.00
                                                                                                                                        3067.2
                                                                                                                                                       -12.77
                                                                                                                                                                       130.94
                                                                      137.72
                                                                                      250.98
                                                                                                         61.38
                                                        -9.02
                     D 14 34
                                    3667.21
       100.00
                      5 49 54 2593.05
0 25 37 3632.53
                                                                                                                                                       -34.03
                                                                                                                                                                         57.69
                                                                                                                    6 33 7
                                                                                                                                       1993.1
                                                                                      259.66
                                                                                                         81.26
                                                      -33.18
                                                                        66.82
       110.00
                                                                                                                     1 26 9
                                                                                                                                       3032.5
                                                                                                                                                        -7.89
                                                                                      247.57
                                                                                                         55.97
                                                                      131.69
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 2801.5 SR 423.0 SS 576.5
CRT .9405 CRS -.8710 CST -.9856
                                                                           SCT 5448.6 SCR 431.5 SC3 122.7
RRT .3089 RRF .2834 RTF .9136
SCB 5465.6 R23 -.0005 R13 .9136
     TOE 2.3276 TRA 2.1122 TC3-3.8939 BAU 1.2927
    ROE .3675 RRA -.0508 RC3 .0582 FAU .01669
FOE .5773 FRA .8611 FC3 -.5819 BSP 17663
                                                                                                                                  LSA 2886.1 MSA 172.7 SSA 18.1
FL1 2829.7 EL2 142.3 ALF 8.10
                                                                           SG1 5450.2 SG2 410.3 THA 1.41
    BOE 2.3564 BRA 2.1128 BC3 3.8943 FSP -411
                                                                                                                                               ARRIVAL DATE JUL 2 1966
                                                                               FLIGHT TIME 188.00
LAUNCH DATE DEC 26 1965
                                                                              DISTANCE 553.857
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 26.126 GAL 5.47 AZL 86.99 MCA 282.34 SMA 118.34 ECC .26026 INC 3.0101 VI 30.281 RP 108.51 LAP -2.94 LOP 16.37 VP 36.396 GAP 14.33 AZP 89.36 TAL 163.98 TAP 86.32 RCA 87.54 APO 149.14 V2 34.924 RC 196.842 GL 15.24 GP -4.01 ZAL 60.45 ZAP 175.48 ETS 299.20 ZAE 131.93 ETE 184.02 ZAC 113.27 ETC 168.04 CLP-177.92
   PLANETOCENTRIC CONIC
                                                                                                                                              .91 RAP 19.75 ECC 1.4444
    C3 27.004 VHL 5.197 DLA 27.38 RAL 26.78 RAD 6568.1 VEL 12.181 PTH 2.19 VHP 9.253 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        2801.8
                                                                                                                    2 52 27
                                                       -22.65
                                                                       124.51
                                                                                     262.02
                                                                                                         72.53
                       1 55 45
                                      3401.76
         90.00
                                                                                                                    24 47 58
                                                                                                                                        3217.4
                                                                                                                                                        -15.37
                                                                                                                                                                         143.26
                     23 44 20 3817.39
                                                                      150.30
                                                                                                         64.15
                                                       -11.99
                                                                                       257.60
         90.00
                                                                                                                    4 46 5
                     3 55 51 3014.60
0 30 51 3679.78
                                                                                                                                        2414.6
                                                                                                                                                        -28.07
                                                                                                                                                                          88.82
                                                       -26.30
                                                                        97.18
                                                                                       263.18
                                                                                                         75.26
       100.00
                                                                                                                    1 32 11
6 45 59
                                                                                                                                        3079.8
                                                                                                                                                        -12.38
                                                                                                                                                                         131.67
                                                                                                         61.26
                                                                       138.43
                                                                                       255.82
                                                        -8.61
       100.00
                                                                                                                                        2018.8
                                                                                                                                                        -33.91
                                                                                                                                                                          59.68
                                   2618.75
                                                      -32.90
                                                                        68.77
                                                                                       264.84
                                                                                                         80.13
                      6 2 20
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                      -2.84
                                                                                                                                        3048.4
                                                                                                                                                        -7.30
                                                                                                                                                                         126.26
                       0 40 51
                                                                      132.52
                                     3648.39
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5459.4 SGR 431.9 SG3 119.7 ST 2761.6 SR 426.6 SS 565.4

RRT .3322 RRF .3069 RTF .9182 CRT .9309 CRS -.8604 CST -.9866

SGB 5476.5 R23 .0002 R13 .9182 LSA 2845.2 MSA 180.2 SSA 17.1

SGI 5461.3 SG2 407.2 THA 1.51 ELI 2790.1 EL2 154.3 ALF 8.21
     TOE 2.3627 TRA 2.4423 TC3-3.5772 BAU 1.2915
     RDE .3867 RRA -.0407 RC3 .0451 FAU .01543
FDE .5632 FRA .9079 FC3 -.4945 BSP 17756
```

FI IGHT TIME 182.00

BOE 2.3941 BRA 2.4427 BC3 3.5774 FSP -403

ARRIVAL CATE JUL 4 1966

```
FLIGHT TIME 190.00
LAUNCH DATE DEC 26 1965
                                                                DISTANCE 559.047
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 29.576 VHL 5.438 DLA 27.42 RAL 30.13 RAD 6568.2 VEL 12.286 PTH 2.21 VHP 9.554 DPA
                                                                                                                  1.97 RAP 21.95 ECC 1.4867
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               3 4 56
                                                                                                             2828.7
                                                                                                                           -24.36
                                                                                                                                       118.36
                  2 7 47 3428.74
0 2 55 3835.79
                              3428.74
                                             -22.08
                                                          126.29
                                                                      266.93
                                                                                     71.81
       90.00
                                                                                                                                          144.36
                                                                                                               3235.8
                                                                                                                             -14.85
                                                                                                1 6 51
                                                                       262.42
                                                                                      63.92
                                             -11.44
                                                          151.38
       90.00
                                                                                               4 59 5
                                                                                                                                           90.63
                                                                                                                             -27.74
                                                                                                               2439.9
                                             -25.85
                                                           98.92
                                                                       268.18
                                                                                      74.44
                  4 8 25 3039.87
0 44 58 3699.90
      100.00
                                                                                               1 46 38
6 59 18
1 55 47
                                                                                                               3099.9
                                                                                                                             -11.74
                                                                                                                                          132.83
                                                                       260.57
                                                                                      61.09
                                              -7.95
                                                          139.56
      100.00
                                                                                                               2043.0
                                                                                                                             -33.76
                                                                                                                                           61.56
                                                           70.60
                                                                       270.00
                                                                                      79.09
                              2642.97
                                            -32.60
      110.00
                   6 15 15
                                                                                                               3069.6
                                                                                                                              -6.50
                                                                                                                                           127.39
                                                                       256.94
                                                                                      55.87
                                             -2.04
                                                          133.63
                   0 54 38
      110.00
                              3669.56
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 5465.6 SGR 431.2 SG3 116.8
RRT .3552 RRF .3305 RTF .9230
                                                                                                           ST 2711.3 SR 428.4 SS 554.5
CRT .9204 CRS -.8493 CST -.9877
   TOE 2.3922 TRA 2.7917 TC3-3.2559 BAU 1.2875
   ROE .4065 RRA -.0287 RC3 .0336 FAU .01420
FDE .5494 FRA .9567 FC3 -.4156 BSP 17834
                                                             SGB 5482.6 R23 .0009 R13 .9230
SGI 5467.7 SGZ 402.9 THA 1.61
                                                                                                            LSA 2794.0 MSA 187.8 SSA 16.2
                                                                                                            EL1 2739.9 EL2 165.7 ALF 8.31
   BOE 2.4265 BRA 2.7919 BC3 3.2561 FSP -394
                                                                                                                      ARRIVAL DATE JUL 6 1966
                                                                 FLIGHT TIME 192.00
LAUNCH DATE OFC 26 1965
                                                                 DISTANCE 564.151
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 26.036 GAL 7.11 AZL 87.11 MCA 288.71 SMA 117.84 ECC .27595 INC 2.8867 VI 30.281 RP 108.43 LAP -2.73 LOP 22.75 VP 36.354 GAP 15.37 AZP 89.07 TAL 160.45 TAP 89.17 RCA 85.32 APO 150.36 V2 34.948 RC 200.481 GL 13.17 GP -3.85 ZAL 54.75 ZAP 176.10 ETS 280.70 ZAE 132.09 ETE 183.95 ZAC 117.96 ETC 167.98 CLP-179.41
  PLANETOCENTRIC CONIC
   C3 32.608 VHL 5.710 DLA 27.38 RAL 33.33 RAD 6568.3 VEL 12.409 PTH 2.24 VHP 9.882 OPA 3.01 RAP 24.15 ECC 1.5366 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               3 19 25
                                                                                      71.29
                                                                                                                2848.7
                                             -21.65
                                                         127.59
                                                                      271.87
                               3448.73
                  2 21 56
       90.00
                                                                                                                3264.8
                                                                                                                              -14.03
                                                                                                                                           146.10
                                                          153.06
                                                                       267.08
                                                                                       63.57
                                                                                                 1 18 44
       90.00
                  0 14 19
                               3864.84
                                              -10.56
                                                                                               5 13 2
1 59 3
7 12 55
2 8 33
                                                                                                                             -27.43
                                                                                                                                            92.17
                                                                                                                2461.7
                                                          100.41
                                                                       273.17
                                                                                       73.76
                               3061.66
                                              -25.44
      100.00
                   4 22 1
                                                                                                                3127.1
                                                                                                                                           134.38
                                              -7.05
                                                          141.08
                                                                       265.21
                                                                                       60.87
      100.00
                  0 56 56
                               3727.14
                                                                                                                             -33.59
                                                                                                                                            63.33
                                                                                                                2065.9
                  6 28 29 2665.88
                                                                       275.13
                                                                                       78.12
                                             -32.29
                                                           72.32
      110.00
                                                                                                                3095.7
                   1 6 57
                               3695.69
                                              -1.04
                                                          134.99
                                                                       261.50
                                                                                       55.83
      110.00
                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                            SGT 5468.5 SGR 429.6 SG3 114.1
RRT .3787 RRF .3547 RTF .9279
SGB 5485.3 R23 .0016 R13 .9279
SGI 5470.9 SG2 397.4 THA 1.71
                                                                                                            ST 2656.7 SR 428.4 SS 545.0
CRT .9092 CR5 -.8379 CST -.9887
    TOE 2.4202 TRA 3.1647 TC3-2.9328 BAU 1.2786
    ROE .4270 RRA -.0147 RC3 .0239 FAU .01296
FOE .5371 FRA 1.0087 FC3 -.3440 BSP 17826
BOE 2.4576 BRA 3.1647 BC3 2.9329 FSP -384
                                                                                                           LSA 2738.7 MSA 195.3 SSA 15.4
EL1 2685.2 EL2 176.5 ALF 8.38
                                                                                                                      APRIVAL CATE JUL 8 1966
                                                                 FLIGHT TIME 194.00
LAUNCH DATE DEC 26 1965
                                                                DISTANCE 569.152
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 36.179 VHL 6.015 OLA 27.27 RAL 36.38 RAD 6568.4 VEL 12.552 PTH 2.27 VHP 10.240 CPA
                                                                                                                   4.04 RAP 26.35 ECC 1.5954
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               3 35 29
1 27 53
                                                                                                                2862.9
                                                                                                                            -23.75
                                                                     276.82
                                                                                       70.93
                  2 37 46
0 22 50
                                             -21.34
                                                         128.51
                               3462.89
       on no
                                                                                                                3303.1
                                                                                                                             -12.92
                                                                                                                                           148.36
                                               -9.39
                                                          155.27
                                                                       271.59
                                                                                       63.16
                               3903.13
       90.00
                                                                                               5 27 44
2 9 34
                                                                                                                                            93.50
                                                                                                                2480.5
                                                                                                                             -27.14
                                             -25.08
                                                         101.69
                                                                       278.14
                                                                                       73.16
                               3080.47
                  4 36 24
      100.00
                                                                                                                                           136.30
                                                                                                                3160.8
                                                                                                                              -9.79
                                                         142.95
                                                                       269.72
                                                                                       60.65
                               3760.79
                                               -5.93
                  1 6 53
      100.00
                                                                                                                                           65.00
                                                                                                 7 26 43
                                                                                                                2087.7
                                                                                                                             -33.40
                                                                                               7 20
2 19 58
                                                            73.94
                                                                       280.21
                                                                                       77.21
                               2687.66
                                              -31.97
                  6 41 55
      110.00
                                                                                                                3126.4
                                                                                                                                          130.38
                                                                                                                              -4.35
                                                          136.59
                                                                       265.96
                                                                                       55.82
                               3726.37
      110.00
                   1 17 51
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                            ST 2592.5 SR 426.4 S5 535.5
CRT .8971 CRS -.8259 CST -.9897
                                                              SGT 5466.0 SGR 426.8 SG3 111.3
RRT .4013 RRF .3781 RTF .9329
SGB 5482.6 R23 .0019 R13 .9329
SGI 5468.7 SGZ 390.7 THA 1.80
    TDE 2.4406 TRA 3.5562 TC3-2.6218 BAU 1.2681
    RDE .4476 RRA .0011 RC3 .0157 FAU .01180
FDE .5245 FRA 1.0622 FC3 -.2825 BSP 17898
                                                                                                            LSA 2673.6 MSA 202.5 SSA 14.6
EL1 2620.7 EL2 186.4 ALF 8.44
    BDE 2.4813 BRA 3.5562 BC3 2.6218 FSP -376
                                                                                                                      ARRIVAL DATE JUL 10 1966
                                                                  FLIGHT TIME 196.00
LAUNCH DATE DEC 26 1965
                                                                 DISTANCE 574.031
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 25.948 GAL 8.97 A7L 87.25 HCA 295.10 SHA 117.37 ECC .29506 INC 2.7534 V1 30.281 RP 108.35 LAP -2.49 LOP 29.14 VP 36.317 GAP 16.60 A7P 88.83 TAL 157.06 TAP 92.16 RCA 82.74 APO 152.00 V2 34.974 RC 204.023 GL 11.17 GP -3.72 TAL 49.59 TAP 176.16 ETS 257.79 TAE 132.19 ETE 183.89 TAC 122.61 ETC 167.75 CLP 179.04
   PLANETOCENTRIC CONIC
                                                                                                                    5.04 RAP 28.55 ECC 1.6647
    C3 40.387 VHL 6.355 OLA 27.10 RAL 39.27 RAD 6568.6 VEL 12.718 PTH 2.31 VHP 10.633 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            -23.56
                                                                                                                                         121.35
                                                                                                                2873.0
                                                                                                 3 52 32
                                                                                       70.68
                                              -21.11
                                                          129.17
                                                                       281.75
                   2 54 39
                               3472.95
        90.00
                                                                                                                 3348.7
                                                                                                                              -11.58
                                                                                                                                           151.03
                                                                                                  1 34 49
                                                                                        62.74
                  0 29 0 3948.68
                                               -7.98
                                                           157.87
                                                                        275.92
        90.00
                                                                                                                 2496.9
                                                                                                                              -26.89
                                                                                                                                             94.65
                                                                                        72.68
                                              -24.75
                                                           102.80
                                                                        283.05
                   4 51 18
                                3096.91
       100.00
                                                                                                                 3200.0
                                                                                                                               -8.52
                                                                                                                                           138.50
                                                                                        60.43
                                                                                                 2 18 22
                                                          145.12
                                                                        274.09
                                               -4.61
       100.00
                   1 15 2 3799.95
                                                                                                 7 40 33
                                                                                        76.35
                                                                                                                 2108.5
                                                                                                                             -33.20
                                                                                                                                             66.59
                              2708.54
                                              -31.65
                                                            75.48
                                                                        285.22
       110.00
                   6 55 25
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                 3161.1
                                                                                                                              -3.03
                                                                                                                                           132.20
                   1 27 25 3761.08
                                              1.46
                                                          138.40
       110.00
                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                             SGT 5459.7 SGR 423.0 SG3 108.7 ST 2525.4 SR 422.4 S5 527.4 SR 422.4 S5 527.4 SR 4239 RRF .4015 RTF .9381 CRT .8840 CRS -.8136 CST -.9907 SG8 5476.0 R23 .0022 R13 .9381 LSA 2605.8 MSA 209.2 SSA 13.8 SG1 5462.6 SG2 382.9 THA 1.89 EL1 2553.0 EL2 195.3 ALF 8.46
    TOE 2.4582 TRA 3.9741 TC3-2.3202 BAU 1.2528
    ROE .4685 RRA .0190 RC3 .0092 FAU .01067
FDE .5129 FRA 1.1191 FC3 -.2286 BSP 17939
```

-368

BOE 2.5024 BRA 3.9742 BC3 2.3202 FSP

Ē

```
LAUNCH DATE DEC 26 1965
                                                                          FLIGHT TIME 198.00
                                                                                                                                     ARRIVAL DATE JUL 12 1966
                                                                          DISTANCE 578.766
   HELIOCENTRIC CONIC
         147.13 LAL .00 LOL 94.01 VL 25.906 GAL 10.01 ATL 87.32 MCA 298.29 SMA 117.14 ECC .30618 INC 2.6815 V1 30.281 108.31 LAP -2.36 LOP 32.34 VP 36.299 GAP 17.31 ATP 88.73 TAL 155.43 TAP 93.72 RCA 81.28 APO 153.01 V2 34.987
    RL 147.13 LAL
RP 108.31 LAP
    RC 205.757 CL 10.21 GP -3.66 7AL 47.22 7AP 175.94 ETS 246.64 7AE 132.21 ETE 183.86 7AC 124.91 ETC 167.56 CLP 178.24
   PLANETOCENTRIC CONIC
    C3 45.352 VHL 6.734 DLA 26.87 RAL 41.99 RAD 6568.7 VEL 12.912 PTH 2.35 VHP 11.065 DPA 6.02 RAP 30.74 ECC 1.7464 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 12 1
                                   3480.53
                                                   -20.94
                                                                 129.66
                                                                                286.62
                                                                                                 70.49
                                                                                                             4 10 2
                                                                                                                             2880.5
                                                                                                                                            -23.41
        90.00
                    0 33 21
5 6 28 3111.62
1 21 36 3843.67
7 8 49 2728.73
1 44 3 3799.32
                     0 33 21
                                                                                                             1 40 0
                                                   -6.39
                                                                  160.75
                                                                                 280.11
                                                                                                  62.35
                                                                                                                              3399.5
                                                                                                                                             -10.04
        90.00
                                                                  103.79
                                                                                 287.90
                                                                                                  72.25
                                                                                                              5 58 19
                                                                                                                              2511.6
                                                   -24.45
       100.00
                                                                                                            2 25 39
7 54 18
                                                    -3.14
                                                                  147.53
                                                                                 278.33
                                                                                                  60.26
                                                                                                                              3243.7
                                                                                                                                               -7.08
                                                                                                                                                            140.95
       100.00
                                                                                                                                                              68.13
       110.00
                                                  -31.31
                                                                   76.96
                                                                                290.14
                                                                                                  75.53
                                                                                                                              2128.7
                                                                                                                                             -32.98
                                                                                                  55.93 2 39 3 3199.3
                                                                 140.40
                                                                                 274.55
                                                                                                                                             -1.57
       110.00
                                                    2.92
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5451.1 SGR 418.3 SG3 106.2
RRT .4469 RRF .4257 RTF .9433
SGB 5467.1 R23 .0024 R13 .9433
SGI 5454.3 SG2 374.0 THA 1.97
                                                                                                                          ST 2460.8 SR 416.7 SS 521.8
CRT .8704 CRS -.8015 CST -.9917
    TOE 2.4785 TRA 4.4235 TC3-2.0289 BAU 1.2301
    RDE .4897 RRA .0390 RC3 .0044 FAU .00949
FDE .5037 FRA 1.1810 FC3 -.1811 BSP 17872
                                                                                                                         LSA 2540.7 MSA 214.8 55A 13.1
                                                                                                                          EL1 2487.5 EL2 203.0 ALF
    BDE 2.5264 BRA 4.4237 BC3 2.0289 FSP -358
                                                                          FLIGHT TIME 200.00
                                                                                                                                      ARRIVAL DATE JUL 14 1966
LAUNCH DATE DEC 26 1965
   HELIOCENTRIC CONIC
                                                                          DISTANCE 583.324
        147.13 LAL .00 LOL 94.01 VL 25.865 GAL 11.12 AZL 87.39 MCA 301.49 SMA 116.92 ECC .31853 INC 2.6051 V1 30.281 108.27 LAP -2.22 LOP 35.53 VP 36.282 GAP 18.10 AZP 88.64 TAL 153.86 TAP 95.35 RCA 79.68 APO 154.16 V2 35.000 207.465 GL 9.28 GP -3.60 ZAL 45.00 ZAP 175.56 ETS 236.74 ZAE 132.20 ETE 183.83 ZAC 127.18 ETC 167.33 CLP 177.41
    RL 147.13 LAL
    RC 207.465 GL
   PLANETOCENTRIC CONIC
    C3 51.224 VHL 7.197 OLA 26.59 RAL 44.54 RAO 6568.9 VEL 13.137 PTH 2.40 VHP 11.543 DPA 6.96 RAP 32.92 ECC 1.8430 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 29 26 3486.84 -20.80 130.06 291.42 70.34 4 27 32 2886.8 -23.29 122.28
                                                                                                                               3454.1
        90.00
                     0 36 17
                                  4054.11
                                                     -4.65
                                                                  163.83
                                                                                 284.15
                                                                                                  62.04
                                                                                                             1 43 51
                                                                                                                                               -8.36
                                                                                                                                                             H47.11
                                                                                                            6 13 43
2 31 37
8 7 50
2 46 52
                                                                                 292.66
                     5 21 37 3125.14
                                                   -24.17
                                                                                                  71.85
                                                                                                                               2525.1
                                                                                                                                              -26.42
                                                                                                                                                              96.62
                                                    -1.54
                                                                 150.13
                                                                                 282.42
                                                                                                  60.14
                                                                                                                              3291.0
                                                                                                                                              -5.50
                                                                                                                                                             143.58
       100.00
                     1 26 46
                                  3891.04
                    7 22 2 2748.40
1 42 51 3840.55
                                                   -30.97
                                                                   78.39
                                                                                294.97
                                                                                                  74.75
                                                                                                                              2148.4
                                                                                                                                             -32.75
                                                                                                                                                             69.62
                                                                                                                                                 .01
                                                     4.49
                                                                  142.56
                                                                                 278.67
                                                                                                  56.08
                                                                                                             2 46 52
                                                                                                                              3240_6
                                                                                                                                                             136.34
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 5436.3 SGR 412.3 SG3 103.8
RRT .4689 RRF .4488 RTF .9486
SGB 5451.9 R23 .0022 R13 .9486
                                                                                                                          ST 2391.6 SR 409.1 SS 516.9
CRT .8558 CRS -.7887 CST -.9927
    TOE 2.4930 TRA 4.8989 TC3-1.7583 BAU 1.2041
    RDE .5106 RRA .D608 RC3 .D009 FAU .D0839
FDE .4944 FRA 1.2459 FC3 -.1417 BSP 17917
                                                                                                                          LSA 2471.0 MSA 219.5 SSA 12.5
    BDE 2.5447 BRA 4.8993 BC3 1.7583 FSP -350
                                                                      SG1 5439.7 SG2 364.0 THA 2.05
                                                                                                                          EL1 2417.3 EL2 209.4 ALF 8.39
                                                                                                                                     ARRIVAL DATE JUL 16 1966
                                                                         FLIGHT TIME 202.00
LAUNCH DATE DEC 26 1965
                                                                         CISTANCE 587.668
   HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 25.825 GAL 12.33 A7L 87.48 HCA 304.69 SMA 116.71 ECC .33230 INC 2.5232 VI 30.281
RP 108.23 LAP -2.07 LOP 38.73 VP 36.266 GAP 18.97 A7P 88.56 TAL 152.35 TAP 97.05 RCA 77.93 APO 155.49 VZ 35.014
RC 209.146 GL 8.37 GP -3.55 ZAL 42.93 ZAP 175.05 ETS 228.36 ZAE 132.16 ETE 183.80 ZAC 129.42 ETC 167.04 CLP 176.55
   PLANETOCENTRIC CONIC
    C3 58.195 VHL 7.629 DLA 26.28 RAL 46.91 RAD 6569.1 VEL 13.400 PTH 2.45 VHP 12.074 OPA
                                                                                                                                 7.88 RAP 35.09 ECC 1.9577
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             296.11
                                                                                                 70.20 4 44 45
61.81 1 46 37
                                                                                                                                           -23.18
                                                                                                             4 44 45
                                                                                                                              2892.7
                                                                                                                                                           122.67
        90.00
                   3 46 32 3492.70
0 38 6 4111.21
                                                  -20.66
                                                                 130.44
                                                                                                                              3511.2
                                                                                                                                              -6.57
                                                                                288.04
                                                                 167.03
        90.00
                                                   -2.82
                                                                                                 71.48 6 28 53
60.11 2 36 25
                                                                                297.32
                                                                                                                              2537.9
                                                                                                                                             -26.20
                                                                                                                                                             97.50
       100.00
                    5 36 35 3137.90
                                                  -23.89
                                                                 105.54
                                                                                                                              3341.2
                                                                                                                                              -3.81
                                                                                                                                                            146.36
       100.00
                    1 30 44
                                  3941.24
                                                      .16
                                                                 152.88
                                                                               286.38
                                                                                                           8 21 3
2 53 38
                                                                                                                                                             71.07
       110.00
                                                  -30.62
                                                                               299.67
                                                                                                 74.00
                                                                                                                              2167.6
                                                                                                                                            -32.50
                    7 34 55 2767.65
                                                                   79.78
                                                                                282.67
                                                                                                                              3264.3
                                                                                                                                              1.68
                                                                                                                                                            138.62
                    1 48 53
                                  3884.26
                                                    6.15
                                                                 144.86
                                                                                                 56.31
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2324.3 SR 399.7 SS 514.3
CRT .8406 CRS -.7761 CST -.9937
                                                                    SGT 5417.3 SGR 405.4 SG3 101.4
RRT .4909 RRF .4719 RTF .9539
SGB 5432.4 R23 .0018 R13 .9539
    TOE 2.5087 TRA 5.4091 TC3-1.5045 BAU 1.1705
    ROE .5314 RRA .D846 RC3 -.0014 FAU .D0727
FOE .4867 FRA 1.3163 FC3 -.1081 BSP 17944
BOE 2.5644 BRA 5.4098 BC3 1.5045 FSP -343
                                                                                                                        LSA 2403.5 MSA 222.9 S5A 11.8
EL1 2348.7 EL2 214.2 ALF 8.29
                                                                     SG1 5421.0 SG2 352.9 THA 2.11
                                                                                                                                     ARRIVAL DATE JUL 18 1966
LAUNCH DATE DEC 26 1965
                                                                         FLIGHT TIME 204.00
                                                                         DISTANCE 591.751
   HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 25.786 GAL 13.64 AZL 87.57 MCA 307.90 SMA 116.50 ECC .34768 INC 2.4347 V1 30.281 RP 108.19 LAP -1.92 LOP 41.94 VP 36.251 GAP 19.95 AZP 88.50 TAL 150.93 TAP 98.83 RCA 75.99 APO 157.01 VZ 35.027 RC 210.800 GL 7.50 GP -3.51 ZAL 41.02 ZAP.174.42 ETS 221.47 ZAE 132.07 ETE 183.77 ZAC 131.62 ETC 166.70 CLP 175.65
   PLANETOCENTRIC CONIC
                                                                                                                                  8.77 RAP 37.24 ECC 2.0945
    C3 66.504 VHL 8.155 OLA 25.92 RAL 49.11 RAO 6569.3 VEL 13.706 PTH 2.50 VHP 12.665 CPA
    LNCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    4 3 7
0 39 1
                                                                                                                              2898.6
                                                                                                                                            -23.06
                                                                 130.82
                                                                               300.67
                                                                                                 70.06
                                                                                                             5 1 26
                                                                                                                                                         123.06
       90.00
                                  3498.56
                                                  -20.53
                                                                                                             1 48 31
                                                                                                                              3569.9
                                                                                                                                               -4.71
                                                     -.93
                                                                 170.30
                                                                                291.79
                                                                                                  61.70
                                                                                                                                                            163.66
        90.00
                                 4169.94
                                                                                                                              2550.2
                                                   -23.63
                                                                 106.36
                                                                                301.84
                                                                                                  71.13
                                                                                                              6 43 41
                                                                                                                                             -25.98
                                                                                                                                                             98.35
      100.00
                    5 51 11
                                  3150.18
                    1 33 39 3993.55
7 47 24 2786.52
                                                                 155.75
                                                                                290.20
                                                                                                  60.16
                                                                                                            2 40 12
                                                                                                                              3393.5
                                                                                                                                              -2.05
                                                                                                                                                           149.23
                                                     1.94
      100.00
                                                                                                            8 33 51
                                                                                                                                            -32.25
                                                                  81.13
                                                                                304.23
                                                                                                  73.27
                                                                                                                              2186.5
      110.00
                                                   -30.26
                                                                   #10-COURSE EXECUTION ACCURACY
SCT 5394.6 SCP 107
                                                                                                                              3330.0
                                                                                                                                               3.42
                                                                                                                                                            141.01
                                                    7.87
                                                                 147.28
                    1 53 54
      110.00
                                  3929.97
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2259.8 SR 388.7 SS 514.2

CRT .8252 CRS -.7639 CST -.9947

LSA 2339.2 MSA 224.8 SSA 11.2

ELI 2282.7 ELZ 217.4 ALF 8.15
                                                                SCT 5394.6 SCR 397.4 SC3 99.1

RRT .5127 RRF .4949 RTF .9592

SCB 5409.2 R23 .0014 R13 .9592

SCI 5398.4 SC2 340.9 THA 2.17
    TOE 2.5273 TRA 5.9590 TC3-1.2685 BAU 1.1278
    RDE .5520 RRA .1105 RC3 -.0025 FAU .00611
    FDE .4810 FRA 1.3930 FC3 -.0796 BSP 17946
```

-336

BDE 2.5869 BRA 5.9600 BC3 1.2685 FSP

```
ARRIVAL DATE JUL 20 1966
                                                                     FLIGHT TIME 206.00
LAUNCH DATE DEC 26 1965
                                                                    DISTANCE 595.510
  HELIOCENTRIC CONIC
    RL 147.13 LAL .00 LOL 94.01 VL 25.748 GAL 15.08 AZL 87.66 HCA 311.10 SMA 116.30 ECC .36493 INC 2.3379 V1 30.281 RP 108.15 LAP -1.76 LOP 45.14 VP 36.237 GAP 21.04 AZP 88.46 TAL 149.61 TAP 100.71 RCA 73.86 APO 158.74 V2 35.040
    RC 212.427 GL 6.66 GP -3.46 TAL 39.26 TAP 173.68 ETS 215.84 TAE 131.94 ETE 183.73 TAC 133.78 ETC 166.30 CLP 174.71
    C3 76.464 VHL 8.744 DLA 25.53 RAL 51.12 RAD 6569.5 VEL 14.065 PTH 2.56 VHP 13.328 CPA
                                                                                                                         9.61 RAP 39.36 ECC 2.2584
    ENCH AZMTH ENCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 19 2 3504.59
0 39 8 4229.61
                                                                                                                    2904.6
                                                -20.39
                                                             131.20
                                                                          305.07
                                                                                          69.91
                                                                                                     5 17 27
                                                                                                                                   -22.94
                                                                                                                                                 123.46
                                                                                                     1 49 38
                                                                                                                                                  167.00
                                                                           295.40
                                                                                           61.70
                                                                                                                      3629.6
                                                                                                                                     -2.80
                                                             173.63
                  6 5 17 3162.09
1 35 35 4047.34
7 59 24 2805.00
1 57 57 3977.19
                                                                                                                                                   99.17
      100.00
                                               -23.36
                                                             107.14
                                                                           306.21
                                                                                           70.80
                                                                                                      6 57 59
                                                                                                                      2562.1
                                                                                                                                    -25.77
                                                                                                    2 43 3
8 46 9
                                                                           293.87
                                                                                           60.32
                                                                                                                      3447.3
                                                                                                                                      - .22
                                                                                                                                                  152.18
      100.00
                                                 3.76
                                                            158.71
      110.00
                                                                           308.63
                                                                                           72.58
                                                                                                                      2205.0
                                                                                                                                    -31.98
                                                                                                                                                   73.85
                                               -29.89
                                                               82.44
                                                               290.28 57.04 3 4 14

MID-COURSE EXECUTION ACCURACY
SGT 5368.1 SGR ***
                                                             149.80
                                                                                                                      3377.2
                                                                                                                                      5.22
                                                                                                                                                  143.49
      110.00
                                                9.63
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5368.1 SGR 388.3 SG3 96.9
RRT .5343 RRF .5179 RTF .9643
    TOE 2.5503 TRA 6.5539 TC3-1.0505 BAU 1.0739
                                                                                                                  ST 2198.6 SR 376.3 55 516.8 CRT .8096 CRS -.7522 CST -.9956
    RDE .5724 RRA .1383 RC3 -.0028 FAU .00489
                                                                                                                  LSA 2278.6 MSA 225.1 SSA 10.6
EL1 2219.8 EL2 218.7 ALF 7.97
         .4774 FRA 1.4773 FC3 -.0554 BSP 17932
                                                                5G8 5382.1 R23 .0009 R13 .9643
                                                                 SG1 5372.1 SG2 328.0 THA 2.22
    BOE 2.6138 BRA 6.5553 BC3 1.0505 FSP -328
                                                                     FLIGHT TIME 208.00
                                                                                                                            ARRIVAL DATE JUL 22 1966
LAUNCH DATE DEC 26 1965
                                                                     DISTANCE 598.865
  HELIOCENTRIC CONIC
                      .00 LOL 94.01 VL 25.712 GAL 16.66 A7L 87.77 MCA 314.31 SMA 116.11 ECC .38434 INC 2.2312 VI 30.281 -1.60 LOP 48.35 VP 36.224 GAP 22.27 AZP 88.44 TAL 148.41 TAP 102.72 RCA 71.48 APO 160.74 VZ 35.053 5.85 GP -3.42 ZAL 37.67 ZAP 172.84 ETS 211.22 ZAE 131.75 ETE 183.69 ZAC 135.88 ETC 165.84 CLP 173.70
   RL 147.13 LAL
        108.11 LAP
   RC 214.027 GL
  PLANETOCENTRIC CONIC
   C3 88.478 VML 9.406 OLA 25.12 RAL 52.94 RAD 6569.7 VEL 14.485 PTH 2.63 VMP 14.075 CPA 10.42 RAP 41.43 ECC 2.4561 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   2910.8
                 4 34 12 3510.78
0 38 31 4289.70
                                                                                                    5 32 42
                                                                                                                                    -22.82
                                                                                                                                                  123.87
                                                -20.24
                                                            131.60
                                                                           309.29
                                                                                           69.77
       90.00
                                                              176.99
                                                                           298.85
                                                                                            61.82
                                                                                                       1 50 1
                                                                                                                      3689.7
                                                                                                                                       - .86
                                                                                                                                                  170.36
                                                  2.93
                  6 18 46 3173.63
1 36 38 4102.09
                                                                                                     7 11 40
2 45 0
                                                                           310.40
                                                                                            70.48
                                                                                                                      2573.6
                                                                                                                                    -25.55
                                                                                                                                                    99.96
                                                -23.10
                                                              107.90
                                                             161.74
                                                                           297.39
                                                                                            60.59
                                                                                                                      3502.1
                                                                                                                                      1.63
                                                                                                                                                  155.19
                                                 5.59
                   8 10 51 2822.98
2 1 3 4025.50
                                                -29.51
                                                               83.71
                                                                           312.83
                                                                                           71.91
                                                                                                    8 57 54
                                                                                                                      2223.0
                                                                                                                                    -31.70
                                                                                                                                                   75.18
      110.00
                                                11.40
                                                             152.42
                                                                           293.87
                                                                                            57.56
                                                                                                      3 8 8
                                                                                                                      3425.5
                                                                                                                                      7.04
                                                                                                                                                  146.04
                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                                                 ST 2142.6 SR 362.6 55 523.0
CRT .7946 CRS -.7416 CST -.9964
                                                                 SGT 5339.4 SGR 378.4 SG3 94.9
RRT .5559 RRF .5410 RTF .9693
SGB 5352.8 R23 .0004 R13 .9693
    TOE 2.5830 TRA 7.2028 TC3 -.8494 BAU 1.0048
    RDE .5927 RRA .1682 RC3 -.0022 FAU .00354
                                                                                                                  LSA 2223.9 MSA 223.6 SSA 10.0
         .4770 FRA 1.5711 FC3 -.0347 BSP 17825
                                                                 SG1 5343.5 SG2 314.3 THA 2.26
                                                                                                                  EL1 2162.1 EL2 218.2 ALF 7.74
    BDE 2.6501 BRA 7.2048 BC3 .8494 FSP -320
                                                                                                                            ARRIVAL DATE JUL 24 1966
                                                                     FLIGHT TIME 210.00
LAUNCH DATE OFC 26 1965
                                                                     DISTANCE 601.710
   HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 25.677 GAL 18.42 A7L 87.89 HCA 317.52 SMA 115.93 ECC .40627 INC 2.1121 VI 30.281 RP 108.07 LAP -1.43 LOP 51.56 VP 36.213 GAP 23.67 A7P 88.44 TAL 147.36 TAP 104.88 RCA 68.83 APO 163.03 V2 35.067 RC 215.599 GL 5.07 GP -3.38 7AL 36.25 7AP 171.89 ETS 207.41 7AE 131.49 ETE 183.65 7AC 137.90 ETC 165.32 CLP 172.63
   PLANETOCENTRIC CONIC
    C3 103.075 VHL 10.153 DLA 24.67 RAL 54.57 RAD 6570.0 VEL 14.981 PTH 2.70 VHP 14.922 DPA 11.19 RAP 43.46 ECC 2.6964
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    5 47 8
1 49 40
                                                                                                                    2917.0
                                                                                                                                    -22.69
                    4 48 31 3516.96
0 37 10 4349.81
                                                                                           69.62
                                                -20.10
                                                             131.99
                                                                           313.30
        90.00
                                                                                                                      3749.8
                                                                                                                                      1.08
                                                                                           62.07
        90.00
                                                 4.86
                                                             180.35
                                                                           302.13
                                                                                                    7 24 39
2 46 5
                   6 31 35 3184.68
1 36 48 4157.32
                                                                                                                      2584.7
                                                                                                                                    -25.34
                                                                                                                                                   100.71
                                                                                           70.18
      100.00
                                                -22.85
                                                             108.63
                                                                           314.38
                                                                                                                      3557.3
                                                                                                                                      3.50
                                                                                                                                                  158.22
                                                 7.43
                                                             164.81
                                                                           300.73
                                                                                           60.96
      100.00-
                                                                                                       9 8 59
                                                                                                                      2240.3
                                                                                                                                    -31.41
      110.00
                    8 21 39 2840.29
2 3 12 4074.48
                                                                           316.63
                                                                                           71.29
                                              -29.14
                                                               84.92
                                                             155.10
                                                                           297.30
                                                                                           58.17
                                                                                                       3 11 7
                                                                                                                      3474.5
                                                                                                                                      8.88
      110.00
                                                13.18
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2087.7 SR 347.6 SS 531.8
CRT .7798 CRS -.7314 CST -.9971
                                                                SGT 5304.5 SGR 367.2 SG3 92.9
RRT .5767 RRF .5632 RTF .9740
SGB 5317.2 R23 -.0003 R13 .9740
    TOE 2.6205 TRA 7.9060 TC3 -.6683 BAU .9210
    ROE .6125 RRA .1997 RC3 -.0012 FAU .00210
                                                                                                                 LSA 2171.1 MSA 220.4 SSA 9.4
    FOE .4782 FRA 1.6744 FC3 -.0176 BSP 17809
                                                                 SG1 5308.7 SG2 299.8 THA 2.29
                                                                                                                  EL1 2105.4 ELZ 215.8 ALF
    BOE 2.6911 BRA 7.9086 BC3 .6683 FSP -314
                                                                                                                             ARRIVAL DATE JUL 26 1966
LAUNCH DATE DEC 26 1965
                                                                     FLIGHT TIME 212.00
   HELIOCENTRIC CONIC
                                                                     DISTANCE 603,908
   RL 147.13 LAL .00 LOL 94.01 VL 25.644 GAL 20.39 AZL 88.02 HCA 320.73 SMA 115.76 ECC .43114 INC 1.9773 V1 30.281
RP 108.03 LAP -1.25 LOP 54.77 VP 36.202 GAP 25.27 AZP 88.47 TAL 146.48 TAP 107.21 RCA 65.85 APO 165.67 V2 35.080
RC 217.144 GL 4.33 GP -3.35 ZAL 35.02 ZAP 170.84 ETS 204.21 ZAE 131.14 ETE 183.59 ZAC 139.84 ETC 164.74 CLP 171.46
   PLANETOCENTRIC CONIC
                                                                                             2.77 VHP 15.888 OPA 11.91 RAP 45.42 ECC 2.9907
    C3 120.960 VHL 10.998 DLA 24.21 RAL 55.98 RAD 6570.3 VEL 15.566 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     6 0 40
                                                                                                                    2922.9
                                                             132.37
                                                                           317.07
                                                                                            69.49
                                                                                                                                   -22.57
                                                                                                                                                 124.67
       90.00
                    5 1 57 3522.85
                                                -19.96
                                                                                                                                                   177.05
                                                                            305.22
                                                                                            62.43
                                                                                                      1 48 33
                                                                                                                      3809.6
                                                                                                                                      3.01
                    0 35 4
                                4409.58
                                                 6.75
                                                              183.72
       90.00
                    6 43 37 3195.02
                                                                                                     7 36 53
                                                -22.61
                                                              109.30
                                                                            318.12
                                                                                            69.90
                                                                                                                      2595.0
                                                                                                                                     -25.14
                                                                                                                                                   101.42
      100.00
                                                                                                     2 46 17
9 19 23
                   1 36 4 4212.64
8 31 46 2856.69
                                                                            303.88
                                                                                            61.45
                                                                                                                      3612.6
                                                                                                                                      5.36
                                                                                                                                                   161.28
                                                 9.24
                                                              157.91
      100.00
                                                -28.78
                                                               86.05
                                                                           320.57
                                                                                            70.70
                                                                                                                      2256.7
                                                                                                                                                   77.64
      110.00
                                                                           300.55
                                                                                            58.89
                                                                                                      3 13 8
                                                                                                                      3523.7
                                                                                                                                     10.70
                                                                                                                                                   151.30
                    2 4 25
                                                 14.93
                                                              157.85
      110.00
                                4123.74
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 5265.7 SGR 355.1 SG3 91.0 ST 2036.5 SR 331.6 SS 544.5 RRT .5969 RRF .5849 RTF .9784 CRT .7660 CRS -.7224 CST -.9977 SGB 5277.6 R23 -.0010 R13 .9784 LSA 2123.0 MSA 215.5 SSA 8.8 SGI 5270.0 SG2 284.6 THA 2.31 EL1 2052.4 EL2 211.5 ALF 7.19
    TOE 2.6706 TRA 8.6766 TC3 -.5044 BAU .8157
    ROE .6320 RRA .2327 RC3 .0003 FAU .00043
FDE .4828 FRA 1.7902 FC3 -.0031 BSP 17764
BDE 2.7444 BRA 8.6797 BC3 .5044 FSP -307
```

```
ARRIVAL DATE JUL 28 1966
                                                                   FLIGHT TIME 214.00
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 605.274
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 25.614 GAL 22.60 AZL 88.18 HCA 323.95 SHA 115.61 ECC .45944 INC 1.8224 V1 30.281 RP 107.99 LAP -1.07 LOP 57.98 VP 36.193 GAP 27.11 AZP 88.53 TAL 145.83 TAP 109.77 RCA 62.49 APO 168.72 V2 35.092
   RC 218.662 GL 3.60 GP -3.31 ZAL 34.00 ZAP 169.66 ETS 201.49 ZAE 130.68 ETE 183.53 ZAC 141.67 ETC 164.11 CLP 170.20
  PLANETOCENTRIC CONIC
   C3 143.078 VML 11.962 DLA 23.72 RAL 57.18 RAD 6570.6 VEL 16.261 PTH
                                                                                           2.85 VHP 16.996 DPA 12.57 RAP 47.29 ECC 3.3547
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   6 13 14
                                                                                                                   2928.1
                                                                                                                                            125.02
                                                                        320.55
                                                                                        69.36
       90.00
                   5 14 26 3528.08
                                              -19.83
                                                           132.70
                                                                                                    1 46 36
                                                                                                                    3868.7
                                                                                                                                   4.90
                                                                                                                                               180.36
                                                                                          62.92
                   0 32 7 4468.73
                                                8.60
                                                            187.09
                                                                          308.10
                  6 54 51 3204.34
1 34 23 4267.70
                                                                                                   7 48 15
                                                                                                                    2604.3
                                                                                                                                  -24.95
                                                                                          69.66
                                              -22.39
                                                            109.91
                                                                          321.58
                                                                                                  2 45 31
9 28 50
                                                                                                                    3667.7
                                                                                                                                    7.19
                                                                                          62.04
                                              11.02
                                                           171.04
                                                                          306.82
                   8 41 7 2871.86
2 4 36 4172.94
                                                                                          70.17
                                                                                                                    2271.9
                                                                         324.02
                                              -28.43
                                                            87.10
                                                                                          59.70
                                                                                                     3 14 9
                                                                                                                    3572.9
                                                                                                                                   12.49
                                                                         303.59
                                             16.64
                                                           160.63
                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 5222.5 SGR 541.8 SG3 89.2
RRT .6165 RRF .6060 RTF .9824
                                                                                                                ST 1988.3 SR 314.8 55 561.6
CRT .7535 CRS -.7148 CST -.9983
   TOE 2.7367 TRA 9.5236 TC3 -.3572 BAU .6832
   ROE .6513 RRA .2669 RC3 .0020 FAU-.00154
                                                               SGB 5233.7 R23 -.0017 R13 .9824
SG1 5226.8 SG2 268.9 THA 2.32
                                                                                                               LSA 2079.5 MSA 208.9 55A
   FOE .4913 FRA 1.9206 FC3 .0093 BSP 17700
                                                                                                               EL1 2002.6 EL2 205.5 ALF 6.88
   BOE 2.8132 BRA 9.5274 BC3 .3572 FSP -301
                                                                                                                          ARRIVAL DATE JUL 30 1966
                                                                   FLIGHT TIME 216.00
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 605.559
  HELIOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 25.587 GAL 25.12 AZL 88.36 HCA 327.17 SMA 115.46 ECC .49175 INC 1.6415 V1 30.281 RP 107.95 LAP -.89 LOP 61.19 VP 36.186 GAP 29.24 AZP 88.62 TAL 145.44 TAP 112.61 RCA 58.68 APO 172.25 V2 35.105 RC 220.152 GL 2.91 GP -3.28 ZAL 33.20 ZAP 168.33 ETS 199.14 ZAE 130.09 ETE 183.46 ZAC 143.37 ETC 163.44 CLP 168.79
  PLANETOCENTRIC CONIC
   C3 170.708 VHL 13.066 DLA 23.20 RAL 58.13 RAD 6570.8 VEL 17.089 PTH 2.93 VHP 18.277 DPA 13.18 RAP 49.04 ECC 3.8094 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 25 56 3532.19
0 28 13 4527.02
                                                                                                    6 24 48
                                              -19.73
                                                            132.96
                                                                          323.71
                                                                                         69.27
                                                                                                                   2932.2
                                                                                                                                  -22.38
       90.00
                                                                          310.71
                                                                                          63.51
                                                                                                    1 43 40
                                                                                                                                                183.65
       90.00
                                               10.39
                                                            190.44
                                                                          324.71
                                                                                          69.45
                                                                                                    7 58 42
                                                                                                                    2612.2
                                                                                                                                  -24.80
                                                                                                                                                102.58
                  7 5 10 3212.24
1 31 40 4322.21
                                              -22.20
                                                            110.42
     100.00
                                                                          309.49
                                                                                          62.73
                                                                                                   2 43 42
                                                                                                                    3722.2
                                                                                                                                   8.99
                                                                                                                                                167.39
                                              12.74
                                                            174.17
     100.00
                                                                                                                               -30.61
14.24
                                                                                                   9 37 43
                                                                                                                    2285.4
3621.8
                                                                                                                                                 79.72
                                                             88.03
                                                                          327.14
                                                                                          69.70
                  8 49 37 2885.44
2 3 42 4221.77
                                              -28.11
     110.00
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                156.68
                                                            163.45
                                              18.30
      110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SCT 5176.2 SGR 327.6 SG3 87.5
RRT .6354 RRF .6262 RTF .9860
SGB 5186.6 R23 -.0023 R13 .9860
SGI 5180.4 SG2 252.8 THA 2.31
   TOE 2.8271 TRAID.4611 TC3 -.2253 BAU .5143
                                                                                                                ST 1944.0 SR 297.3 55 584.1
   ROE .6707 RRA .3018 RC3 .0038 FAU-.00398
FDE .5053 FRA 2.0693 FC3 .0202 BSP 17537
BDE 2.9056 BRA10.4655 BC3 .2253 FSP -294
                                                                                                                CRT .7429 CRS -.7091 CST -.9987
                                                                                                                LSA 2041.7 MSA 200.6 SSA 7.7
                                                                                                                EL1 1956.6 EL2 197.7 ALF
                                                                                                                          ARRIVAL DATE AUG 1 1966
LAUNCH DATE DEC 26 1965
                                                                   FLIGHT TIME 218.00
                                                                   DISTANCE 604.430
  HELIOCENTRIC CONIC
                       .00 LOL 94.01 VL 25.563 GAL 28.00 AZL 88.57 HCA 330.38 SHA 115.34 ECC .52875 INC 1.4259 V1 30.281 -.70 LOP 64.41 VP 36.181 GAP 31.73 AZP 88.76 TAL 145.40 TAP 115.78 RCA 54.35 APO 176.33 V2 35.117
   RL 147.13 LAL
RP 107.91 LAP
                       2.25 GP -3.24 ZAL 32.66 ZAP 166.83 ETS 197.09 ZAE 129.33 ETE 183.38 ZAC 144.91 ETC 162.75 CLP 167.23
   RC 221.615 GL
   PLANETOCENTRIC CONIC
                                                                                           3.01 VHP 19.766 OPA 13.72 RAP 50.64 ECC 4.3838
   C3 205.606 VHL 14.339 DLA 22.65 RAL 58.81 RAD 6571.2 VEL 18.081 PTH
   LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                  5 36 22 3534.64
0 23 12 4584.29
7 14 30 3218.23
1 27 45 4375.93
                                                                         326.49
                                                                                         69.21
                                                                                                    6 35 17
                                                                                                                   2934.6
                                                                                                                                -22.33
                                                                                                                                              125.45
                                              -19.67
                                                            133.12
       90.00
                                                                                          64.21
                                                                                                                    3984.3
                                                                                                                                               186.90
                                                            193.76
                                                                          313.02
                                                                                                   1 39 36
                                                                                                                                   8.54
                                              12.11
       90.00
                                                                                                                                               102.99
                                                                          327.46
                                                                                          69.30
                                                                                                     8 8 8
                                                                                                                   3775.9
                                                                                                                    2618.2
                                                                                                                                 -24.67
                                              -22.06
                                                            110.60
      100.00
                                                                                          63.52 2 40 41
                                                                         311.87
                                                                                                                                               170.43
                                                                                                                                  10.72
                                              14.39
                                                            177.30
      100.00
                                                                                                                                -30.39
                                                                                                                                                80.55
                                              -27.84
                                                                         329.87
                                                                                          69.31
                                                                                                     9 45 28
                                                                                                                   2297.0
                   8 57 11 2896.97
2 1 33 4269.95
                                                             88.81
      110.00
                                                                                                                                 15.93
                                                                        308.89
                                                                                         61.60
                                                                                                    3 12 43
                                                                                                                    3670.0
                                                                                                                                               159.39
                                              19.88
      110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                              HID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                               SCT 5122.4 SCR 312.2 SC3 86.0
RRT .6525 RRF .6446 RTF .9891
SCB 5131.9 R23 -.0030 R13 .9891
SCI 5126.5 SC2 236.4 THA 2.28
                                                                                                               ST 1899.7 SR 279.2 SS 611.9
CRT .7338 CRS -.7045 CST -.9990
   TOE 2.9403 TRA11.4924 TC3 -.1099 BAU .3024
   RDE .6900 RRA .3364 RC3 .0055 FAU-.00698 FDE .5243 FRA 2.2377 FC3 .0294 BSP 17453
                                                                                                               LSA 2006.1 MSA 191.0 SSA 7.1
EL1 1910.8 EL2 188.5 ALF 6.22
    BDE 3.0202 BRA11.4974 BC3 .1100 FSP
                                                                                                                          ARRIVAL DATE AUG 3 1966
                                                                    FLIGHT TIME 220.00
LAUNCH DATE DEC 26 1965
                                                                   DISTANCE 601.436
  HELTOCENTRIC CONIC
   RL 147.13 LAL .00 LOL 94.01 VL 25.543 GAL 31.33 AZL 88.84 MCA 353.60 SMA 115.24 ECC .57114 INC 1.1630 V1 30.281
RP 107.87 LAP -.52 LOP 67.62 VP 36.179 GAP 34.66 AZP 88.96 TAL 145.77 TAP 119.38 RCA 49.42 APO 181.06 V2 35.130
RC 223.050 GL 1.60 GP -3.20 ZAL 32.41 ZAP 165.11 ETS 195.27 ZAE 128.36 ETE 183.28 ZAC 146.25 ETC 162.07 CLP 165.45
   PLANETOCENTRIC CONIC
   C3 250.184 VHL 15.817 OLA 22.06 RAL 59.18 RAD 6571.5 VEL 19.274 PTH 3.10 VHP 21.510 CPA 14.20 RAP 52.05 ECC 5.1174
   10.26
                                                                                                    1 34 10
                                                                                                                    4040.4
                                4640.44
                                                13.75
                                                            197.07
                                                                          314.97
                                                                                          65.00
                   0 16 50
       90.00
                  7 22 44 3221.76
1 22 26 4428.73
9 3 41 2905.96
1 57 59 4317 70
                                                                                                                    2621.8
                                                                                                                                  -24.60
                                                                                                                                                103.22
                                                                                                     8 16 26
                                              -21.97
                                                            111.03
                                                                          329.77
                                                                                          69.21
      100.00
                                                                                                                                  12.40
                                                            180.42
                                                                          313.88
                                                                                          64.39
                                                                                                    2 36 15
                                                                                                                    3828.7
                                                                                                                                               173.46
                                                15.97
      100.00
                                                                                                   9 52 7
                                                                                                                    2306.0
                                                                                                                                -30.22
                                                                                                                                                81.19
                                              -27.62
                                                             89.42
                                                                          332.14
                                                                                          69.01
      110.00
                                               21.39
                                                            169.14
                                                                          311.04
                                                                                          62.68
                                                                                                     3 9 56
                                                                                                                    3717.3
                                                                                                                                  17.56
                                                                                                                                                162.10
      110.00
                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 5061.9 SGR 295.7 SG3 84.5

RRT .6677 RRF .6608 RTF .9918

SGB 5070.5 R23 -.0036 R13 .9918

SG1 5065.7 SG2 219.9 TMA 2.24
                                                                                                                ST 1855.9 SR 260.7 SS 646.5
CRT .7268 CRS -.7016 CST -.9993
    TOE 3.0875 TRA12.6302 TC3 -.0093 BAU .0391
    ROE .7096 RRA .3692 RC3 .0072 FAU-.01082
FOE .5507 FRA 2.4303 FC3 .0374 BSP 17342
BOE 3.1680 BRA12.6356 BC3 .0117 FSP -285
                                                                                                                LSA 1974.2 MSA 180.3 SSA 6.5
```

SG1 5065.7 SG2 219.9 THA 2.24

EL1 1865.6 EL2 178.1 ALF 5.88

```
LAUNCH DATE DEC 27 -1965
                                                                         FLIGHT TIME 70.00
                                                                                                                                    ARRIVAL CATE MAR 7 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 206.908
    RL 147.12 LAL .00 LOL 95.03 VL 29.413 GAL -13.96 A7L 86.88 MCA 95.25 SMA 141.33 ECC .24442 INC 3.1165 V1 30.282 RP 107.83 LAP 3.10 LOP 190.29 VP 39.019 GAP -3.52 A7P 90.29 TAL 246.68 TAP 341.93 RCA 106.79 APO 175.87 V2 35.143 RC 67.327 GL 12.08 GP 9.14 ZAL 161.43 ZAP 56.08 ETS 351.99 ZAE 169.66 ETE 6.57 ZAC 48.43 ETC 167.26 CLP -55.58
   PLANETOCENTRIC CONIC
    C3 54.994 VHL 7.416 OLA -10.10 RAL 289.11 RAC 6569.0 VEL 13.280 PTM 2.43 VMP 4.660 CPA -10.38 RAP 315.51 ECC 1.9051
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 34 26 2147.44
10 58 31 5428.69
                                                                  37.27
                                                                                165.19
                                                                                              112.33
                                                                                                            2 10 14
                                                                                                                            1547.4
                                                                                                                                            -14.70
                                                   -17.88
        90.00
                                                                                                           12 28 59
                                                                                                                             4828.7
                                                                                                                                            27.37
                                                                                172.69
                                                                                                                                                           241.08
        90.00
                                                   28.13
                                                                 249.66
                                                                                                 86.63
                   2 50 47 1901.13
12 24 51 5150.23
                                                                                                                             1301.1
                                                                                                                                                            11.33
                                                                                164.58
                                                                                               113.31
                                                                                                            3 22 28
                                                                                                                                            -15.94
       100.00
                                                  -19.26
                                                                  18.55
                                                                                                          13 50 41
                                                                                                 85.78
                                                                                172.58
                                                                                                                             4550.2
                                                                                                                                            28.72
      100.00
                                                   29.62
                                                                 229.07
                                1722.97
                                                                                                116.09 4 16 24
83.42 15 6 8
                                                                                162.78
                                                                                               116.09
                                                                                                                             1123.0
                                                                                                                                            -19.21
                                                                                                                                                           356.05
       110.00
                    3 47 41
                                                 -22.91
                                                                   3.24
                   13 44 27
                                                                 209.71
                                                                                172.13
                                                                                                                             4301.2
                                                                                                                                             32.34
      110.00
                                  4901.15
                                                   33.62
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 462.0 SGR 406.3 SG3 233.0
RRT -.1293 RRF -.3536 RTF .2764
SGB 615.2 R23 .2126 R13 -.3660
SG1 472.8 SG2 393.7 THA 157.43
                                                                                                                         ST 150.9 SR 386.3 SS 196.2
CRT .3623 CRS .6933 CST -.4048
    TOE -.0876 TRA -.5727 TC3 .0558 BAU .0480 ROE -.4977 RRA .1544 RC3 .0340 FAU .10156
    FDE .3932 FRA-1.5907 FC3-1.5987 BSP 468
                                                                                                                         LSA 414.4 MSA 195.7 SSA 20.3
                                                                                                                         EL1 390.7 EL2 139.0 ALF 80.77
    BDE .5054 BRA .5931 BC3 .D653 FSP
                                                      -68 i
                                                                         FLIGHT TIME 72.00
                                                                                                                                    ARRIVAL DATE MAR 9 1966
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                         DISTANCE 213.509
    RL 147.12 LAL .00 LOL 95.03 VL 29.419 GAL -13.81 AZL 86.95 MCA 98.47 SMA 141.39 ECC .24195 INC 3.0545 V1 30.282
RP 107.87 LAP 3.02 LOP 193.52 VP 39.013 GAP -2.85 AZP 90.45 TAL 246.82 TAP 345.29 RCA 107.18 APO 175.60 V2 35.132
RC 69.470 GL 11.98 GP 9.64 ZAL 161.54 ZAP 61.12 ETS 352.73 ZAE 172.49 ETE 15.98 ZAC 46.54 ETC 167.60 CLP -60.67
   PLANETOCENTRIC CONIC
    C3 53.830 VHL 7.337 DLA -10.21 RAL 289.06 RAD 6568.9 VEL 13.236 PTH
                                                                                                    2.42 VHP 4.453 DPA -10.36 RAP 313.58 ECC 1.8859
    LNCH AZMTH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJAZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 35 9 2138.51 -17.65 36.72 164.78 112.51 2 10 48 1538.5 -14.45 29.51
                                                                                                           12 27 53
        90.00
                   10 57 26
2 51 26
                                  5427.05
                                                    28.13
                                                                 249.54
                                                                                172.29
                                                                                                 86.57
                                                                                                                              4827.1
                                                                                                                                            27.35
                                                                                                                                                           240.96
      100.00
                                  1892.40
                                                                                                             3 22 59
                                                                                                                                             -15.68
                                                   -19.02
                                                                  18.01
                                                                                164.17
                                                                                                113.50
                                                                                                                             1292.4
                                                                                                                                                             10.81
                                                                                                          13 49 38
      100.00
                   12 23 50
                                  5148.39
                                                   29.61
                                                                 228.93
                                                                                172.18
                                                                                                 85.71
                                                                                                                             4548.4
                                                                                                                                            28.70
                                                                                                                                                           220.24
                    3 48 12 1714.68
      110.00
                                                   -22.66
                                                                   2.72
                                                                                162.36
                                                                                               116.31
                                                                                                            4 16 46
                                                                                                                             1114.7
                                                                                                                                                           355.56
                                                                                                                                            -18.94
      110.00
                   13 43 34
                                                                                                          15 5 13
                                                                                                                                                           200.54
                                  4898.88
                                                   33.60
                                                                 209.54
                                                                                171.73
                                                                                                 83.32
                                                                                                                             4298.9
                                                                                                                                             32.31
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 496.4 SGR 411.5 SG3 254.7

RRT -.1963 RRF -.3960 RTF .4013

SGB 644.8 R23 .1842 R13 -.4814

SG1 513.3 SG2 390.2 THA 156.93
                                                                                                                         ST 158.8 SR 386.3 SS 203.8
CRT .2718 CRS .6938 CST -.4901
    TDE -.0749 TRA -.6205 TC3 .0171 BAU .0356 RDE -.4921 RRA .1645 RC3 .0464 FAU .10985
    FOE .4192 FRA-1.7190 FC3-1.7666 BSP
                                                                                                                         LSA 415.5 MSA 207.1 SSA 20.4
                                                     610
-752
                                                                                                                         ELI 389.1 EL2 151.7 ALF 82.47
    BDE .4977 BRA .6419 BC3 .0495 FSP
                                                                                                                                   ARRIVAL CATE MAR 11 1966
                                                                        FLIGHT TIME J4.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 220.064
    RL 147.12 LAL .00 LOL 95.03 VL 29.416 GAL -13.67 AZL 87.01 HCA 101.69 SMA 141.36 ECC .23963 INC 2.9915 VI 30.282
RP 107.90 LAP 2.93 LOP 196.74 VP 39.000 GAP -2.21 AZP 90.61 TAL 246.82 TAP 348.51 RCA 107.49 APO 175.24 V2 35.120
RC 71.643 GL 11.86 GP 10.14 ZAL 161.61 ZAP 66.26 ETS 353.50 ZAE 175.06 ETE 36.53 ZAC 44.54 ETC 167.98 CLP -65.86
   PLANETOCENTRIC CONIC
    C3 52.700 VHL 7.259 DLA -10.32 RAL 289.09 RAD 6568.9 VEL 13.193 PTH 2.41 VHP 4.280 DPA -10.34 RAP 311.54 ECC 1.8673
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 36 13 2129.49 -17.42 36.17 164.45 112.69 2 11 42 1529.5 -14.19 28.97 90.00 10 56 37 5425.56 28.12 249.43 171.98 86.52 12 27 3 4825.6 27.34 240.85
      100.00
                    2 52 26 1883.60
                                                  -18.78
                                                                  17.47
                                                                               163.84
                                                                                               113.69
                                                                                                           3 23 49
                                                                                                                             1283.6
                                                                                                                                            -15.42
                                                                                                                                                            10.29
                                                                                171.86
                                                                                                           13 48 52
                                                                                                                             4546.7
                                                                                                                                            28.69
                                                                                                                                                           220.12
      100.00
                   12 23 5
                                  5146.69
                                                   29.60
                                                                 228.80
                                                                                                 85.65
                    3 49 2 1706.32
                                                                                                          4 17 29
                                                                                                                             1106.3
                                                                                                                                                           355.07
                                                  -22.41
                                                                   2.21
                                                                                162.02
                                                                                               116.52
                                                                                                                                            -18.56
                                                                                                 83.22
                                                                                                           15 4 35
                                                                                                                             4296.7
                                                                                                                                            32.28
                                                                                                                                                           200.34
       110.00
                   13 42 58
                                  4896.73
                                                   33.58
                                                                 209.37
                                                                                171.41
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 159.2 SR 385.1 SS 209.7

CRT .1763 CRS .6911 CST -.5765

LSA 415.4 MSA 218.9 SSA 20.4
    TOE -. 0607 TRA -. 6744 TC3 -. 0279 BAU . 0465
                                                                     5GT 544.6 SGR 416.9 SG3 275.7
                                                                     RRT -.2692 RRF -.4383 RTF .5147
SGB 685.9 R23 .1608 R13 -.5796
    ROE -.4850 RRA .1749 RC3 .0599 FAU .11776
    FOE .4373 FRA-1.8368 FC3-1.9344 BSP
BOE .4888 BRA .6967 BC3 .0660 FSP
                                                     827
                                                                     SG1 567.3 SG2 385.4 THA 157.57
                                                                                                                         EL1 386.5 EL2 166.0 ALF 84.57
                                                                         FLIGHT TIME 76.00
                                                                                                                                    ARRIVAL DATE HAR 13 1966
                                                                        DISTANCE 226.575
    RL 147.12 LAL .00 LOL 95.03 VL 29.405 GAL -13.53 AZL 87.07 MCA 104.91 SMA 141.26 ECC .23742 INC 2.9271 V1 30.282 RP 107.94 LAP 2.83 LOP 199.97 VP 38.980 GAP -1.61 AZP 90.75 TAL 246.68 TAP 351.60 RCA 107.72 APO 174.80 VZ 35.108 RC 73.845 GL 11.73 GP 10.63 ZAL 161.62 ZAP 71.46 ETS 354.30 ZAE 176.16 ETE 81.31 ZAC 42.48 ETC 168.39 CLP -71.12
   PLANETOCENTRIC CONIC
    C3 51.589 VHL 7.183 OLA -10.44 RAL 289.20 RAD 6568.9 VEL 13.151 PTH 2.40 VMP 4.141 OPA -10.32 RAP 309.45 ECC 1.8490
    LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 35 2120.32 -17.18 35.60 164.20 112.86 2 12 55 1520.3 -13.93 28.43
                   10 56 5 5424.16
2 53 44 1874.64
        90.00
                                                   28.11
                                                                 249.33
                                                                                171.73
                                                                                                86.47
                                                                                                           12 26 29
                                                                                                                             4A24.2
                                                                                                                                            27.33
                                                                                                                                                           240.75
      100.00
                                                  -18.54
                                                                  16.92
                                                                                163.58
                                                                                                113.88
                                                                                                            3 24 59
                                                                                                                             1274.6
                                                                                                                                            -15.15
                                                                                                                                                             9.76
      100.00
                   12 22 37
                                  5145.07
                                                  29.59
                                                                 228.69
                                                                                171.62
                                                                                                85.59
                                                                                                           13 48 22
                                                                                                                             4545.1
                                                                                                                                            28.67
                                                                                                                                                           220.00
      110.00
                  3 50 12 1697.83
13 42 38 4894.65
                                                  -22.15
                                                                   1.68
                                                                                161.76
                                                                                               116.73
                                                                                                           4 18 30
                                                                                                                             1097.8
                                                                                                                                            -18.38
                                                                                                                                                           354.57
                                                                                                83.13 15 4 13
      110.00
                                                   33.57
                                                                 209.21
                                                                                171.15
                                                                                                                             4294.6
                                                                                                                                            32.25
                                                                                                                                                           200.22
                                                                   HIO-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
    TDE -.0466 TRA -.7350 TC3 -.0799 BAU .0751
                                                                    SCT 608.3 SGR 422.3 SG3 294.4
RRT -.3404 RRF -.4803 RTF .6105
SGB 740.5 R23 .1444 R13 -.6602
                                                                                                                        ST 182.7 SR 383.0 SS 214.7 CRT .0867 CRS .6925 CST -.6468
    RDE - .4768 RRA .1849 RC3 .0738 FAU .12463
    FDE .4540 FRA-1.9312 FC3-2.0914 BSP 1104
BDE .4790 BRA .7579 BC3 .1088 FSP -891
                                                                                                                        LSA 415.4 MSA 230.7 SSA 20.4
EL1 383.4 EL2 181.8 ALF 86.94
```

SG1 635.6 SG2 380.1 THA 158.81

```
ARRIVAL DATE MAR 15 1966
                                                                         FLIGHT TIME 78.00
LAUNCH DATE DEC 27 1965
                                                                         DISTANCE 233.041
        147.12 LAL .00 LOL 95.03 VL 29.385 GAL -13.39 AZL 87.14 MCA 108.13 SMA 141.09 ECC .23531 INC 2.8608 V1 30.282 107.98 LAP 2.72 LOP 203.19 VP 38.955 GAP -1.04 AZP 90.89 TAL 246.42 TAP 354.56 RCA 107.89 APO 174.29 V2 35.095 76.070 GL 11.58 GP 11.09 ZAL 161.59 ZAP 76.66 ETS 355.15 ZAE 174.56 ETE 122.19 ZAC 40.41 ETC 168.84 CLP -76.40
   HELIOCENTRIC CONIC
    RL 147.12 LAL
    RC 76.070 GL
   PLANETOCENTRIC CONIC
                                                                                                   2.39 VHP 4.033 DPA -10.29 RAP 307.34 ECC 1.8309
    C3 50.490 VHL 7.106 DLA -10.56 RAL 289.37 RAD 6568.9 YEL 13.109 PTH
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.05
                                                                                                            2 14 27
                                                                                                                            1510.9
                    1 39 16 2110.91
10 55 46 5422.85
                                                   -16.93
                                                                  35.02
                                                                               164.00
        90.00
                                                                                                                              4822.8
                                                                                                                                             27.32
                                                                                                                                                           240.66
                                                                                                           12 26 9
                                                                                171.55
                                                                                                85.42
                                                   28.11
                                                                  249.23
        90.00
                   2 55 21 1865.46
12 22 22 5143.53
                                                                                                            3 26 27
                                                                                                                              1265.5
                                                                                                                                             -14.88
                                                   -18.28
                                                                   16.35
                                                                                163.38
                                                                                                114.07
       100.08
                                                                                                                                             28.65
                                                                                                           13 48 5
                                                                                                                              4543.5
                                                                 228.57
                                                                                171.43
                                                                                                85.53
                                                   29.59
       100.00
                                                                                                           4 19 49
                                                                                                                             1089.1
                                                                                                                                             -18.09
                                                                                161.55
                                                                                                116.94
                   3 51 40 1689.13
13 42 33 4892.62
                                                   -21.88
                                                                    1.15
       110.00
                                                                                                           15 4 6
                                                                                                                                              32.22
                                                                                                                              4292.6
                                                                                170.97
                                                                                                83.04
                                                                 209.05
       110.00
                                                   33.55
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 685.6 SGR 427.7 SG3 311.1
RRT -.4079 RRF -.5205 RTF .6861
SGB 808.1 R23 .1318 R13 -.7231
SG1 716.5 SG2 373.7 THA 160.11
                                                                                                                         ST 198.7 SR 379.4 SS 217.6
CRT .0035 CRS .6896 CST -.7109
LSA 414.2 MSA 242.5 SSA 20.4
    TDE -.0320 TRA -.8004 TC3 -.1378 BAU .1105
RDE -.4668 RRA .1944 RC3 .0884 FAU .13057
    FDE .4594 FRA-2.0057 FC3-2.2388 BSP 1419
BDE .4679 BRA .8237 BC3 .1638 FSP -954
                                                                                                                          EL1 379.4 EL2 198.7 ALF 89.86
    BDE .4679 BRA .8237 BC3 .1638 FSP
                                                                                                                                     ARRIVAL DATE MAR 17 1966
                                                                         FLIGHT TIME 80.00
LAUNCH DATE DEC 27 1965
                                                                         DISTANCE 239.465
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 29.359 GAL -13.25 AZL 87.21 HCA 111.35 SHA 140.86 ECC .23326 INC 2.7920 V1 30.282 RP 108.02 LAP 2.60 LOP 206.41 VP 38.923 GAP -.49 AZP 91.02 TAL 246.05 TAP 357.40 RCA 108.00 APO 173.71 V2 35.082 RC 78.316 GL 11.42 GP 11.55 ZAL 161.52 ZAP 81.80 ETS 356.03 ZAE 171.64 ETE 140.02 ZAC 38.39 ETC 169.32 CLP -81.63
    C3 49.392 VHL 7.028 DLA -10.69 RAL 289.60 RAD 6568.8 VEL 13.067 PTH 2.38 VHP 3.954 DPA -10.24 RAP 305.28 ECC 1.8129
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 41 16 2101.18 -16.66 34.43 163.86 113.23 2 16 17 1501.2 -13.38 27.29
   PLANETOCENTRIC CONIC
                                                                                                           12 26 1
                                                                  249.14
                                                                                 171.43
                                                                                                  86.37
                   10 55 39
                                   5421.63
                                                    28.10
        90.00
                    2 57 17 1855.96
12 22 20 5142.07
3 53 25 1680.15
                                                                                                              3 28 13
                                                                                                                              1256.0
                                                                                                                                                             8.66
                                                                                                114.26
                                                   -18.02
                                                                   15.77
                                                                                163.24
       100.00
                                                                                                           13 48 2
                                                                                                                             4542.1
                                                                                                                                             28.64
                                                                                                                                                            219.79
                                                                                                 85.47
                                                    29.58
                                                                  228.46
                                                                                171.31
       100.00
                   12 22 20
                                                                                                                                                            353.55
                                                                                                              4 21 25
                                                                                                                             1080.1
                                                                                                                                             -17.79
                                                                                                117.16
                                                                                                          15 4 11
                                                   -21.60
                                                                      . 60
                                                                                161.41
       110.00
                                                                                                                                             32.20
                                                                                                                              4290.7
                                                                                                                                                            199.93
                                                                                                 82.95
                    13 42 41
                                   4890.65
                                                   33.53
                                                                  208.90
                                                                                170.84
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 775.9 SGR 432.7 SG3 324.3
RRT -.4676 RRF -.5589 RTF .7434
SGB 888.4 R23 .1244 R13 -.7709
                                                                                                                          ST 217.3 SR 374.9 SS 219.3
CRT -.0666 CRS .6907 CST -.7575
     TOE -. 0183 TRA -. 8703 TC3 -. 2017 BAU .1496
     RDE -.4556 RRA .2027 RC3 .1030 FAU .13494
                                                                                                                         LSA 413.6 MSA 253.7 SSA 20.4
     FDE .4626 FRA-2.0492 FC3-2.3651 BSP 1772
BDE .4560 BRA .8936 BC3 .2265 FSP -999
                                                                      SG1 809.1 SG2 366.8 THA 161.44
                                                                                                                         EL1 375.3 EL2 216.6 ALF 93.32
                                                                                                                                    ARRIVAL DATE MAR 19 1966
                                                                         FLIGHT TIME 82.00
LAUNCH DATE DEC 27 1965
                                                                         DISTANCE 245.848
    HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 29.326 GAL -13.11 A7L 87.28 HCA 114.56 SHA 140.57 ECC .23127 INC 2.7201 V1 30.282
RP 108.06 LAP 2.47 LOP 209.62 VP 38.887 GAP .03 A7P 91.13 TAL 245.57 TAP .13 RCA 108.06 APO 173.08 V2 35.069
RC 80.581 GL 11.25 GP 11.98 7AL 161.41 7AP 86.83 ETS 356.96 7AE 168.40 ETE 148.38 7AC 36.47 ETC 169.83 CLP -86.76
    PLANETOCENTRIC CONIC
                                                                                                                3.901 CPA -10.17 RAP 303.33 ECC 1.7948
     C3 48.293 VHL 6.949 DLA -10.83 RAL 289.90 RAD 6568.8 VEL 13.025 PTH 2.38 VMP
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             1491.0
                                                                                                            2 18 26
                                                                                                                                           -13.08
                    1 43 35 2091.01
10 55 43 5420.55
2 59 30 1846.05
                                                                                163.78
                                                                                               113.42
                                                   -16.39
                                                                  33.81
                                                                                                                                                           240.49
                                                                                                                              4820.5
                                                                                                                                             27.29
                                                                                171.36
                                                                                                  86.34
                                                                                                           12 26 3
                                                    28.10
                                                                  249.07
         90.00
                                                                                                                                                             8.08
                                                                                                             3 30 16
                                                                                                                              1246.1
                                                                                                                                             -14.29
                                                                                                114.46
                                                                                163.15
                                                   -17.74
                                                                   15.17
       100.00
                                                                                                                                                           219.69
                                                                                                           13 48 9
                                                                                                                              4540.7
                                                                                                                                             28.62
                                                                                                 85.42
                                  5140.74
                                                    29.57
                                                                  228.37
                                                                                171.24
                    12 22 28
        100.00
                                                                                                 117.38 4 23 19
82.86 15 4 28
                                                                                                                              1070.8
                                                                                                                                             -17.47
                                                                                                                                                            353.01
                                                                                                117.38
                                 1670.79
                                                                                161.31
                                                   -21.31
                                                                      .03
       110.00
                      3 55 28
                                                                                                                                             32.17
                                                                                                                              4288.8
                                                                                                                                                            199.79
                                                                                170.77
                                                    33.52
                                                                  208.76
                    13 42 59
                                  4888.77
        110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 237.5 SR 368.4 SS 219.7

CRT -.1271 CRS .6783 CST -.8059

LSA 412.0 MSA 265.1 SSA 20.3

EL1 370.5 EL2 234.3 ALF 97.83
                                                                      SCT 875.3 SCR 437.6 SC3 335.9
RRT -.5241 RRF -.5958 RTF .7888
SCB 978.6 R23 .1157 R13 -.8091
     TDE -.0053 TRA -.9419 TC3 -.2702 BAU .1904
     ROE -.4421 RRA .2119 RC3 .1182 FAU .13835
     FDE .4466 FRA-2.0962 FC3-2.4801 BSP 2148
BDE .4421 BRA .9654 BC3 .2949 FSP -1057
                                                                      SG1 910.7 SG2 358.2 THA 162.53
                                                                                                                                     ARRIVAL DATE MAR 21 1966
                                                                          FLIGHT TIME 84.00
 LAUNCH DATE DEC 27 1965
                                                                         DISTANCE 252.190
    RL 147.12 LAL .00 LOL 95.03 VL 29.288 GAL -12.96 A7L 87.36 MCA 117.77 SMA 140.24 ECC .22932 INC 2.6446 V1 30.282 RP 108.10 LAP 2.34 LOP 212.83 VP 38.846 GAP .52 A7P 91.23 TAL 245.00 TAP 2.77 RCA 108.08 APO 172.40 V2 35.056 RC 82.862 GL 11.05 GP 12.40 7AL 161.26 ZAP 91.70 ETS 357.92 ZAE 165.12 ETE 153.05 ZAC 34.70 ETC 170.39 CLP -91.74
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 47.185 VHL 6.869 DLA -10.98 RAL 290.26 RAD 6568.8 VEL 12.983 PTH 2.37 VHP 3.872 OPA -10.06 RAP 301.52 ECC 1.7765
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            -12.77
                                                                               163.74
                                                                                                113.61
                                                                                                              2 20 53
                    1 46 13
10 55 55
                                                                   33.15
                                   2080.30
                                                    -16.10
                                                                                                                                                            240.43
                                                                                                            12 26 14
                                                                                                                               4819.6
                                                                                                                                              27.29
                                                                                 171.34
                                                                                                  86.30
                                                    28.09
                                                                  249.00
                                   5419.64
                                                                                                  114.66 3 32 39
85.37 13 48 25
                                                                                                                                                              7.46
                                                                                                                              1235.6
                                                                                                                                             -13.97
                      3 2 3
                                                                   14.54
                                                                                 163.11
                                                                                                 114.66
                                   1835.62
                                                    -17.45
                                                                                                                                                            219.60
                                                                                                                              4539.5
                                                                                                                                             28.61
                                                     29.56
                                                                  228.28
                                                                                 171.22
                   12 22 45 5139.55
3 57 50 1660.95
                                                                                                  117.61 4 25 31
82.78 15 4 55
                                                                                                                                            -17.14
                                                                                                                                                             352.44
                                                                                                                              1061.0
                                                                                                 117.61
                                                   -21.00
                                                                   359.44
                                                                                                                                                             199.65
                                                                  208.62
                                                                                 170.74
                                                                                                                              4287.0
                                                                                                                                              32.14
                    13 43 28 4886.98
                                                    33.50
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SCT 984.4 SGR 440.9 SG3 341.1 ST 259.6 SR 361.2 SS 217.0

RRT -.5679 RRF -.6283 RTF .8171 CRT -.1714 CRS .6823 CST -.8283
     TOE _.0057 TRA-1.0169 TC3 -.3433 BAU .2322
      ROE - 4279 RRA .2163 RC3 .1327 FAU .13962
                                                                    SGB 1078.6 R23 .1173 R13 -.8329
SG1 1020.2 SG2 350.2 THA 163.76
                                                                                                                          LSA 411.8 MSA 273.8 55A
                                                                                                                                                               20.4
     FOE .4377 FRA-2.0625 FC3-2.5616 BSP 2544
BOE .4280 BRA 1.0397 BC3 .3681 FSP -1073
                                                                                                                        EL1 366.5 EL2 252.1 ALF 103.50
```

```
ARRIVAL DATE MAR 23 1966
                                                                         FLIGHT TIME 86.00
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 258.494
    RL 147.12 LAL .00 LOL 95.03 VL 29.245 GAL -12.81 AZL 87.44 MCA 120.98 SMA 139.86 ECC .22741 INC 2.5645 VI 30.282 RP 108.14 LAP 2.20 LOP 216.04 VP 38.802 GAP .98 AZP 91.32 TAL 244.33 TAP 5.31 RCA 108.06 APO 171.67 VZ 35.043 RC 85.157 GL 10.84 GP 12.81 ZAL 161.07 ZAP 96.38 ETS 358.94 ZAE 161.92 ETE 155.99 ZAC 33.11 ETC 171.01 CLP -96.54
   PLANETOCENTRIC CONIC
    C3 46.067 VHL 6.787 OLA -11.14 RAL 290.67 RAO 6568.7 VEL 12.939 PTH 2.36 VHP 3.865 OPA -9.91 RAP 299.90 ECC 1.7581
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 49 11 2068.91
10 56 13 5419.00
3 4 56 1624.54
12 23 9 5138.61
4 0 30 1650.52
13 44 5 4865.39
                                                                                                                            1468.9
        90.00
                                                   -15.79
                                                                  32.46
                                                                                163.75
                                                                                               113.82
                                                                                                           2 23 40
                                                                                                                                            -12.44
                                                                                                                                                             24.39
        90.00
                                                   28.09
                                                                  248.95
                                                                                171.37
                                                                                                 86.28
                                                                                                           12 26 32
                                                                                                                              4619.0
                                                                                                                                             27.28
                                                                                                                                                            240.38
       100.00
                                                   -17.13
                                                                   13.86
                                                                                 163.12
                                                                                                 114.88
                                                                                                            3 35 20
                                                                                                                              1224.5
                                                                                                                                             -13.63
                                                                                                                                                              6.82
                                                                                                85.34 13 46 48
117.85 4 28 0
82.71 15 5 30
                                                                  228.21
                                                                                171.25
                                                                                                                              4538.6
                                                                                                                                             28.60
                                                                                                                                                             219.54
       100.00
                                                    29.56
                                                   -20.67
                                                                  358.81
                                                                                161.26
                                                                                                                              1050.5
                                                                                                                                             -16.78
                                                                                                                                                            351.84
       110.00
                                                                  208.50
                                                                                170.76
                                                                                                                              4285.4
                                                                                                                                             32.12
                                                                                                                                                            199.53
      110.00
                                                  33.49
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 1098.5 SGR 443.9 SG3 343.8

RRT -.6081 RRF -.6598 RTF .8395

SGB 1184.8 R23 .1190 R13 -.8520

SGI 1134.6 SG2 341.2 THA 164.79
                                                                                                                          ST 282.5 SR 352.6 SS 214.1
CRT -.2057 CRS .6815 CST -.8478
LSA 412.9 MSA 281.2 SSA 20.3
    TOE .0148 TRA-1.0913 TC3 -.4199 BAU .2740
    ROE -.4122 RRA .2208 RC3 .1471 FAU .13954
    FOE .4209 FRA-2.0253 FC3-2.6225 85P 2950
80E .4124 BRA 1.1134 BC3 .4449 FSP -1082
                                                                                                                          ELI 363.8 EL2 268.0 ALF 111.30
LAUNCH DATE DEC 27 1965
                                                                         FLIGHT TIME 88.00
                                                                                                                                      ARRIVAL DATE HAR 25 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 264.761
   RL 147.12 LAL .00 LOL 95.03 VL 29.197 GAL -12.65 AZL 87.52 MCA 124.19 SMA 139.45 ECC .22554 INC 2.4789 VI 30.282 RP 108.18 LAP 2.05 LOP 219.25 VP 38.754 GAP 1.45 AZP 91.39 TAL 243.58 TAP 7.77 RCA 108.00 APO 170.90 VZ 35.030 RC 87.465 GL 10.59 GP 13.23 ZAL 160.85 ZAP 100.82 ETS 360.00 ZAE 158.84 ETE 157.96 ZAC 31.73 ETC 171.69 CLP-101.12
  PLANETOCENTRIC CONIC
   C3 44.936 VHL 6.703 DLA -11.32 RAL 291.13 RAD 6568.7 VEL 12.896 PTH 2.35 VHP 3.876 DPA -9.70 RAP 298.49 ECC 1.7395 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   1 52 32 2056.67
10 56 35 5418.76
                                                                                              114.03 2 26 49
                                                                                                                            1456.7
                                                   -15.45
                                                                  31.72
                                                                              163.80
                                                                                                                                             -12.07
                                                                                                                                                             24.67
        90.00
                                                    28.09
                                                                  248.94
                                                                                 171.44
                                                                                                 86.27
                                                                                                            12 26 54
                                                                                                                               4818.8
                                                                                                                                              27.28
                                                                                                                                                             240.36
                  3 8 10 1812.64
12 23 38 5138.02
4 3 30 1639.35
13 44 47 4884.07
                                                                                                115.10 3 38 23
85.31 13 49 16
      100.00
                                                  -16.79
                                                                  13.15
                                                                                163.16
                                                                                                                              1212.6
                                                                                                                                             -13.27
                                                                                                                                                              6.12
      100.00
                                                    29.56
                                                                 228.16
                                                                                171.32
                                                                                                                              4538.0
                                                                                                                                             28.59
                                                                                                                                                             219.49
                                                                                                118.10 4 30 50
82.65 15 6 11
      110.00
                                                  -20.31
                                                                  358.14
                                                                                161.30
                                                                                                                             1039.4
                                                                                                                                             -16.40
                                                                                                                                                             351.20
      110.00
                                                   33.48
                                                                 208.40
                                                                                170.84
                                                                                                                              4284.1
                                                                                                                                             32.10
                                                                                                                                                             199.44
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SCT 1216.6 SGR 446.1 SG3 344.0

RRT -.6445 RRF -.6896 RTF .8560

SGB 1295.8 R23 .1223 R13 -.8662

SG1 1252.8 SG2 331.2 THA 165.68
                                                                                                                          ST 305.8 SR 342.4 SS 209.2
CRT -.2299 CRS .6744 CST -.8652
    TOE .0211 TRA-1.1649 TC3 -.4997 BAU .3155
    ROE -.3946 RRA .2241 RC3 .1618 FAU .13844
   FOE .3931 FRA-1.9718 FC3-2.6672 BSP 3368
BOE .3952 BRA 1.1863 BC3 .5252 FSP -1090
                                                                                                                          LSA 415.0 MSA 286.2 SSA 20.3
                                                                                                                          EL1 363.6 EL2 280.3 ALF 121.89
                                                                                                                                     ARRIVAL DATE MAR 27 1966
LAUNCH DATE DEC 27 1965
                                                                         FLIGHT TIME 90.00
   HELIOCENTRIC CONIC
                                                                         DISTANCE 270.993
    RL 147.12 LAL .00 LOL 95.03 VL 29.145 GAL -12.49 A7L 87.61 HCA 127.39 SMA 139.01 ECC .22371 INC 2.3865 VI 30.282 RP 108.22 LAP 1.90 LOP 222.45 VP 38.703 GAP 1.85 A7P 91.45 TAL 242.76 TAP 10.15 RCA 107.91 APO 170.11 VZ 35.016 RC 89.783 GL 10.31 GP 13.66 ZAL 160.60 ZAP 105.02 ETS 1.11 ZAE 155.92 ETE 159.32 ZAC 30.59 ETC 172.45 CLP-105.47
   PLANETOCENTRIC CONIC
    C3 43.792 VHL 6.618 DLA -11.52 RAL 291.65 RAD 6568.7 VEL 12.851 PTH 2.34 VHP 3.904 DPA -9.43 RAP 297.31 ECC 1.7207
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 56 18 2043.37
10 56 57 5419.08
3 11 49 1799.73
12 24 7 5137.96
                                                                             163.89
                                                                                             114.25 2 30 21
86.28 12 27 16
                                                                                                                          1443.4
        90.00
                                                  -15.08
                                                                  30.92
                                                                                                                                          -11.68
                                                                                                                                                             23.90
        90.00
                                                    28.09
                                                                 248.96
                                                                                171.56
                                                                                                                              4819.1
                                                                                                                                              27.28
                                                                                                                                                            240.39
       100.00
                                                  -16.41
                                                                   12.37
                                                                                163.25
                                                                                                115.34
                                                                                                           3 41 48
                                                                                                                              1199.7
                                                                                                                                             -12.87
                                                                                                                                                              5.38
      100.00
                                                    29.56
                                                                 228.16
                                                                                171.44
                                                                                                 85.31
                                                                                                           13 49 45
                                                                                                                              4538.0
                                                                                                                                                            219.49
                                                                                                                                              28.59
                   4 6 53 1627.28
13 45 33 4883.17
                                                                                                118.37 4 34 0
82.61 15 6 56
       110.00
                                                 -19.92
                                                                                161.38
                                                                                                                              1027.3
                                                                 357.42
                                                                                                                                             -15.98
                                                                                                                                                            350.52
      110.00
                                                   33.47
                                                                 208.33
                                                                                170.95
                                                                                                                              4283.2
                                                                                                                                             32.09
                                                                                                                                                            199.37
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ST 329.3 SR 330.9 SS 203.2

CRT -.2452 CRS .6655 CST -.8783

LSA 419.3 MSA 288.1 SSA 20.3

EL1 368.4 EL2 286.8 ALF 134.46
    TOE .0245 TRA-1.2367 TC3 -.5821 BAU .3562
                                                                      SGT 1337.2 SGR 447.7 SG3 341.6
                                                                     RRT -.6773 RRF -.7181 RTF .8680
5G8 1410.2 R23 .1280 R13 -.8765
    RDE -.3757 RRA .2262 RC3 .1767 FAU .13626
    FOE .3611 FRA-1.9005 FC3-2.6938 BSP 3792
    BOE .3765 BRA 1.2572 BC3 .6084 FSP -1090
                                                                     SG1 1373.2 SG2 320.8 THA 166.47
LAUNCH DATE DEC 27 1965
                                                                         FLIGHT TIME 92.00
                                                                                                                                     ARRIVAL DATE MAR 29 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 277.192
   RL 147.12 LAL .00 LOL 95.03 VL 29.090 GAL -12.33 AZL 87.71 MCA 130.59 SMA 138.55 ECC .22191 INC 2.2861 V1 30.282 RP 108.26 LAP 1.74 LOP 225.65 VP 38.649 GAP 2.25 AZP 91.49 TAL 241.86 TAP 12.45 RCA 107.80 APO 169.29 V2 35.003 RC 92.112 GL 10.00 GP 14.13 ZAL 160.31 ZAP 108.96 ETS 2.29 ZAE 153.19 ETE 160.24 ZAC 29.68 ETC 173.31 CLP-109.57
  PLANETOCENTRIC CONIC
    C3 42.632 VML 6.529 DLA -11.76 RAL 292.22 RAD 6568.6 VEL 12.806 PTH 2.33 VMP 3.946 DPA -9.09 RAP 296.37 ECC 1.7016
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            1428.7
       90.00
                    2 0 32 2028.75
                                                  -14.67
                                                                  30.04
                                                                               164.01
                                                                                                114.49
                                                                                                            2 34 21
                                                                                                                                            -11.24
                                                                                                                                                             23.04
                   10 57 16 5420.18
3 15 54 1785.56
        90.00
                                                                                171.73
                                                                                                           12 27 37
                                                   28.10
                                                                 249.04
                                                                                                 86.32
                                                                                                                              4820.2
                                                                                                                                             27.29
                                                                                                                                                            240.47
      100.00
                                                  -16,00
                                                                  11.52
                                                                                163.37
                                                                                                115.59
                                                                                                            3 45 40
                                                                                                                              1185.6
                                                                                                                                             -12.42
                                                                                                                                                              4.56
                   12 24 35 5138.60
      100.00
                                                                                                           13 50 14
                                                  29.56
                                                                 228.21
                                                                                171.60
                                                                                                 85.34
                                                                                                                              4538.6
                                                                                                                                             28.60
                                                                                                                                                            219.54
                    4 10 40 1614.09
                                                                                                           4 37 34
      110.00
                                                  -19.50
                                                                 356.63
                                                                                161.49
                                                                                                118.65
                                                                                                                              1014.1
                                                                                                                                             -15.52
                                                                                                                                                            349.77
                  13 46 19 4882.84
                                                                                                           15 7 42
                                                                                                                                             32.08
      110.00
                                                   33.47
                                                                 208.30
                                                                                171.12
                                                                                                 82.60
                                                                                                                              4282.A
                                                                                                                                                            199.35
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    SGT 1458.7 SGR 448.8 SG3 336.3

RRT -.7063 RRF -.7455 RTF .8763

SGB 1526.2 R23 .1372 R13 -.8838

SG1 1494.3 SG2 310.1 THA 167.18
                                                                                                                       ST 352.6 SR 318.3 SS 196.4

CRT -.2526 CRS .6588 CST -.8856

LSA 426.1 MSA 286.7 SSA 20.3

EL1 378.7 EL2 286.7 ALF 146.06
    TOE .0247 TRA-1.3053 TC3 -.6669 BAU .3955
   ROE - 3559 RRA .2266 RC3 .1916 FAU .13297
FDE .3296 FRA-1.8103 FC3-2.7003 BSP 4206
BOE .3567 BRA 1.3249 BC3 .6939 FSP -1070
```

```
FLIGHT TIME 94.00
                                                                                                                                                              ARRIVAL DATE MAR 31 1966
. LAUNCH DATE DEC 27 1965
                                                                                        DISTANCE 283.359
      HELIOCENTRIC CONIC
       RL 147.12 LAL .00 LOL 95.03 VL 29.032 GAL -12.16 AZL 87.82 HCA 133.79 SMA 138.06 ECC .22014 INC 2.1756 V1 30.282
RP 108.31 LAP 1.57 LOP 228.85 VP 38.594 GAP 2.63 AZP 91.51 TAL 240.90 TAP 14.69 RCA 107.67 APO 168.45 V2 34.990
RC 94.449 GL 9.63 GP 14.65 ZAL 159.99 ZAP 112.63 ETS 3.54 ZAE 180.63 ETE 180.64 ZAC 20.01 ETC 174.30 CERTIFICATION CONTRACTOR C
                                  9.63 GP 14.65 TAL 159.99 TAP 112.63 ETS 3.55 TAE 150.63 ETE 160.84 TAC 29.01 ETC 174.50 CLP-113.43
      PLANETOCENTRIC CONIC
        C3 41.458 VHL 6.439 OLA -12.03 RAL 292.85 RAD 6568.6 VEL 12.760 PTH
                                                                                                                       2.32 VHP 4.000 DPA
                                                                                                                                                        -8.66 RAP 295.66 ECC 1.6823
                                                           INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        LNCH AZHTH LNCH TIME L-I TIME
                          2 5 20 2012.47
10 57 28 5422.38
3 20 32 1769.82
12 24 56 5140.26
                                                                                                                  114.75
                                                                                                                                   2 38 52
                                                                                                                                                    1412.5
                                                                                                                                                                       -10.75
                                                                                                                                                                                          22.10
                                                                                                164.17
                                                                                29.07
                                                               -14.21
                                                                                                                               12 27 50
                                                                                                                                                      4822.4
                                                                                                                                                                        27.31
                                                                                                171.94
                                                               28.11
                                                                               249.20
                                                                                                                    86.40
            90.00
                         10 57 28
                                                                                                                                   3 50 2
                                                                                                                                                      1169.8
                                                                                                                                                                        -11.93
                                                                                                                   115.86
                                                                                                163.52
                                                              -15.53
                                                                                 10.59
                                                                                                                               13 50 36
                                                                                                                                                     4540.3
                                                                                                                                                                       28.62
           100.00
                         12 24 56
                                                               29.57
                                                                               228.33
                                                                                                171.82
                                                                                                                   85.40
                                                                                                                                                                                         348.95
                         4 14 56 1599.49
13 47 2 4683.35
                                                                                                                                                       999.5
                                                                                                                                                                       -15.01
                                                              -19.02
                                                                               355.77
                                                                                                161.63
                                                                                                                                                      4283.4
                                                                                                                                                                       32.09
                                                               33.47
                                                                               208.34
                                                                                                171.34
           110.00
                                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                    SGT 1581.2 SGR 449.9 SG3 329.9
RRT -.7337 RRF -.7725 RTF .8825
SGB 1644.0 R23 .1484 R13 -.8891
                                                                                                                                                 ST 375.7 SR 304.1 55 188.1
CRT -.2517 CRS .6431 CST -.8939
        TOE .0204 TRA-1.3708 TC3 -.7546 BAU .4338
       ROE -.3344 RRA .2263 RC3 .2076 FAU .12925
FOE .2896 FRA-1.7150 FC3-2.6990 BSP 4631
BOE .3351 BRA 1.3894 BC3 .7827 FSP -1055
                                                                                                                                                 LSA 434.8 MSA 282.0 35A 20.3
                                                                                    SG1 1616.6 SG2 299.0 THA 167.78
                                                                                                                                                 EL1 393.1 EL2 281.3 ALF 155.14
                                                                                                                                                               ARRIVAL DATE APR 2 1966
                                                                                         FLIGHT TIME 96.00
                                                                                         DISTANCE 289.496
      HELIOCENTRIC CONIC
                                 .00 LOL 95.03 VL 28.971 GAL -11.98 AZL 87.95 MCA 136.99 SMA 137.56 ECC .21842 INC 2.0527 VI 30.282 1.40 LOP 232.04 VP 38.536 GAP 3.00 AZP 91.50 TAL 239.87 TAP 16.86 RCA 107.51 APO 167.60 VZ 34.977 9.20 GP 15.24 ZAL 159.65 ZAP 116.02 ETS 4.92 ZAE 148.25 ETE 161.16 ZAC 28.58 ETC 175.43 CLP-117.05
       RL 147.12 LAL
RP 108.35 LAP
        RC 96.794 GL
      PLANETOCENTRIC CONIC
                                                                                                                        2.31 VHP 4.064 DPA
                                                                                                                                                          -8.12 RAP 295.18 ECC 1.6627
        C3 40.269 VHL 6.346 OLA -12.36 RAL 293.53 RAD 6568.5 VEL 12.714 PTH
        LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                                                                                                                                          21.04
                                                                                                164.38
                                                                                                                   115.04
                                                                                                                                   2 44 2
                                                                                                                                                   1394.1
                                                                                                                                                                      -10.19
                                                                                27.98
                           2 10 48 1994.09
                                                               -13.68
            90.00
                                                                                                 172.21
                                                                                                                     86.54
                                                                                                                                 12 27 51
                                                                                                                                                       4826.1
                                                                                                                                                                          27.34
                                                                                                                                                                                          240.89
            90.00
                         10 57 25
                                            5426.06
                                                               24.12
                                                                               249.47
                                                                                                                                 3 55 1
                                                                                                                                                       1152.1
                                                                                                                                                                        -11.37
                                                                                                                                                                                           2.63
                                                                                  9.54
                                                                                                 163.72
                                                                                                                    116.16
           100.00
                           3 25 49
                                            1752.10
                                                               -15.00
                                                                                                                     85.52 13 50 49
119.28 4 46 9
82.70 15 9 3
                                                                                                                                                       4543.3
                                                                                                                                                                                          219.87
                         12 25 5 5143.29
4 19 45 1583.14
                                                               29.59
                                                                                228.55
                                                                                                 172.10
                                                                                                                                                                        28.65
           100.00
                                                                                                                                                        983.1
                                                                                                                                                                       -14.43
                                                                                                                                                                                          344.03
                                                                                                 161.82
                                                                                                                   119.28
                                                               -18.48
                                                                                354.81
           110.00
                                                                                                 171.63
                                                                                                                                                      4285.0
                                                                                                                                                                        32.11
                                                                                                                                                                                          199.51
                         13 47 38
                                                                                208.47
           110.00
                                          4885.00
                                                                33.49
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                    SGT 1702.7 SGR 451.1 SG3 521.6
RRT -.7585 RRF -.7987 RTF .8865
                                                                                                                                                 ST 398.4 SR 288.9 55 179.3
CRT -.2445 CRS .6277 CST -.8987
        TOE .0124 TRA-1.4313 TC3 -.8445 BAU .4704
       ROE -.3123 RRA .2245 RC3 .2242 FAU .12479
FOE .2512 FRA-1.6076 FC3-2.6828 BSP 5040
BDE .3125 BRA 1.4488 BC3 .6738 FSP -1027
                                                                                     SGB 1761.5 R23 .1634 R13 -.8926
                                                                                                                                                  LSA 445.7 MSA 274.3 SSA 20.2
                                                                                    SG1 1737.8 SG2 288.1 THA 168.31
                                                                                                                                                 EL1 409.9 EL2 272.2 ALF 161.61
                                                                                                                                                             ARRIVAL DATE APR 4 1966
                                                                                        FLIGHT TIME 98.00
  LAUNCH DATE DEC 27 1965
      HELIOCENTRIC CONIC
                                                                                        DISTANCE 295.605
       RL 147.12 LAL .00 LOL 95.03 VL 28.908 GAL -11.80 AZL 88.09 HCA 140.18 SHA 137.04 ECC .21673 INC 1.9142 VI 30.282 RP 108.39 LAP 1.23 LOP 235.23 VP 38.477 GAP 3.35 AZP 91.47 TAL 238.79 TAP 18.97 RCA 107.34 APO 166.74 VZ 34.964 RC 99.145 GL 8.70 GP 15.93 7AL 159.27 ZAP 119.15 ETS 6.42 ZAE 146.04 ETE 161.23 ZAC 28.38 ETC 176.73 CLP-120.43
      PLANETOCENTRIC CONIC
       C3 39.066 VML 6.250 DLA -12.75 RAL 294.26 RAD 6568.5 VEL 12.666 PTH 2.30 VHP 4.139 DPA
        LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                115.34
                                                                                                                                                   1373.0
                                                                                                                                                                                         19.83
                                                                                                                                  2 50 0
                         2 17 7 1973.02
10 57 0 5431.81
3 31 52 1731.83
                                                                                                164.62
                                                              -13.07
                                                                               26.74
            90.00
                                                                                                                                12 27 31
                                                                                                                                                                       27.40
                                                                                                                                                                                         241.30
                                                                                                                                                      4831.8
                                                                                                                    86.74
                                                               28.14
                                                                               249.89
                                                                                                172.55
            90.00
                                                                                                                                                                                           1.48
                                                                                                                                 4 0 44
                                                                                                                                                     1131.8
                                                                                                                                                                        -10.72
                                                                                                                   116.49
                                                              -14.39
                                                                                 8.34
                                                                                                163.96
           100.00
                                                                                                                    85.71 13 50 44
                                                                                                                                                                                         220.23
                                                                                                                                                     4548.2
                                                                                                                                                                       28.70
                                                                               228.92
                                                                                                172.44
                                                               29.61
                         12 24 55
                                          5148.23
           100.00
                                                                                                                                                                                         347.00
                                                                                                                                                       964.6
                                                                                                                                                                       -13.77
                                                                                                                              15 9 29
                                                                                                                                 4 51 21
                                                                               353.73
                                                                                                162.04
                                                                                                                   119.65
                           4 25 16
                                         1564.57
                                                              -17.85
           110.00
                                                                                                                                                     4288.3
                                                                                                                                                                       32.16
                                                                                                                                                                                         199.75
                                                                               208.72
                                                                                                171.98
                                                                                                                    82.84
                                                               33.51
                                           4888.25
           110.00
                         13 48 0
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                  HID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                   RRT -.7821 RRF -.8248 RTF ..8893
SGB 1879.9 R23 .1810 R13 -.8951
SGI 1859.4 SGZ 277.1 THA 168.75
                                                                                                                                                ST 420.8 SR 272.0 SS 169.3
CRT -.2290 CRS .5987 CST -.9065
        TOE -. 0014 TRA-1.4872 TC3 -. 9380 BAU .5060
        RDE -. 2886 RRA . 2219 RC3 . 2427 FAU . 12015
                                                                                                                                                LSA 458.2 MSA 263.4 SSA 20.3
       FOE .2050 FRA-1.4996 FC3-2.6626 BSP 5459
BDE .2886 BRA 1.5036 BC3 .9689 FSP -1002
                                                                                                                                                 EL1 428.2 EL2 260.2 ALF 166.52
                                                                                                                                                              ARRIVAL DATE APR 6 1966
                                                                                         FLIGHT TIME 100.00
   LAUNCH DATE DEC 27 1965
                                                                                        DISTANCE 301.686
      HELIOCENTRIC CONIC
                               .00 LOL 95.03 VL 28.843 GAL -11.60 AZL 88.24 MCA 143.37 SMA 136.51 ECC .21509 INC 1.7560 VI 30.282 1.05 LOP 238.42 VP 38.417 GAP 3.68 AZP 91.41 TAL 237.66 TAP 21.03 RCA 107.15 APO 165.87 V2 34.951 8.09 GP 16.75 ZAL 158.87 ZAP 122.00 ETS 8.09 ZAE 143.96 ETE 161.07 ZAC 28.41 ETC 178.23 CLP-123.60
       RL 147.12 LAL
RP 108.43 LAP
        RC 101.502 GL
      PLANETOCENTRIC CONIC
        C3 37.850 VHL 6.152 DLA -13.24 RAL 295.07 RAD 6568.5 VEL 12.618 PTH 2.29 VHP 4.223 DPA -6.64 RAP 294.83 ECC 1.6229
        LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    1348.4
                                                                                                                                   2 56 58
                                                                                                                   115.69
                            2 24 29 1948.44
                                                               -12.35
                                                                                25.29
                                                                                               164.92
            90.00
                         10 56 1 5440.41
3 38 56 1708.26
12 24 15 5155.82
4 31 39 1543.13
13 48 1 4893.72
                                                                                                                               12 26 41
                                                                                                                                                       4840.4
                                                                                                                                                                         27.47
                                                                                                                                                                                         241.92
                                                                                                                     87.06
                                                                                                 172.97
                                                               28.18
                                                                               250.51
             90.00
                                                                                                                                                                                              . 14
                                                                                                                                                      1108.3
                                                                                                                                                                         -9.96
                                                                                                 164.25
                                                                                                                   116.84
                                                                                                                                 4 7 24
                                                               -13.67
                                                                                  6.96
           100.00
                                                                                                                     86.00 13 50 11
                                                                                                                                                      4555.8
                                                                                                                                                                         28.78
                                                                                                                                                                                         220.78
                                                                                                 172.87
                                                               29.65
                                                                               229.48
           100.00
                                                                                                                                4 57 23
                                                                                                                                                        943.1
                                                                                                                   120.04
                                                                                                                                                                       -13.01
                                                                                                                                                                                         345.81
                                                              -17.13
                                                                                352.49
                                                                                                 162.31
           110.00
                                                                                                                               15 9 35
                                                                                                                     83.09
                                                                                                                                                      4293.7
                                                                                                                                                                        32.24
                                                                                                                                                                                         200.15
                                                                                                 172.43
                                                            33.56
                                                                               209.14
           110.00
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
       DIFFERENTIAL CORRECTIONS
                                                                                   SCT 1945.9 SGR 456.9 SG3 303.2
RRT -.8040 RRF -.8505 RTF .8911
                                                                                                                                                 ST 443.4 SR 253.5 SS 158.7
CRT -.2053 CRS .5552 CST -.9168
        TDE -.0216 TRA-1.5374 TC3-1.0353 BAU .5406
        RDE -. 2635 RRA . 2183 RC3 . 2632 FAU . 11529
                                                                                                                                                 LSA 472.7 MSA 249.3 55A 20.4
                                                                                   SCB 1998.9 R23 .2022 R13 -.8967
        FDE .1543 FRA-1.3893 FC3-2.6369 BSP 5682
BDE .2644 BRA 1.5528 BC3 1.0683 FSP -977
                                                                                   5G1 1981.0 5G2 266.8 THA 169.11
                                                                                                                                               EL1 447.8 EL2 245.7 ALF 170.39
        BDE .2644 BRA 1.5528 BC3 1.0683 FSP
```

ARRIVAL DATE APR 8 1966

JPL TM 33-99

LAUNCH DATE DEC 27 1965

```
DISTANCE 307.743
  HELIOCENTRIC CONIC
                         .00 LOL 95.03 VL 28.777 GAL -11.41 ATL 88.43 HCA 146.56 SMA 135.97 ECC .21350 INC 1.5722 V1 30.282 .87 LOP 241.60 VP 38.355 GAP 3.99 ATP 91.31 TAL 236.48 TAP 23.04 RCA 106.94 APO 165.00 V2 34.939
    RL 147.12 LAL
                         7.35 CP 17.74 ZAL 158.44 ZAP 124.57 ETS 9.98 ZAE 142.00 ETE 160.68 ZAC 28.65 ETC 179.96 CLP-126.57
    RC 103.862 GL
   PLANETOCENTRIC CONIC
    C3 36.623 VHL 6.052 DLA -13.84 RAL 295.94 RAD 6568.4 VEL 12.569 PTH
                                                                                               2.28 VHP 4.316 DPA -5.64 RAP 294.91 ECC 1.6027
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 33 16 1919.20
10 54 12 5452.99
                                                 -11.48
                                                               23.58
                                                                            165.29
                                                                                          116.06
                                                                                                        3 5 15
                                                                                                                       1319.2
                                                                                                                                       -7.88
                                                                                                                                                      16.75
                                                                                             87.52 12 25 5
                                                                                                                         4853.0
                                                                                                                                        27.57
                                                                                                                                                     242.83
                  3 47 18 1680.32
12 22 51 5167.10
4 39 9 1517.90
13 47 29 4407
                                                 28.22
                                                               251.43
                                                                             173.49
      100.00
                                                 -12.81
                                                                 5.34
                                                                             164.61
                                                                                            117.24
                                                                                                         4 15 18
                                                                                                                         1080.3
                                                                                                                                        -9.06
                                                                                                                                                     358.56
                                                                                           86.44 13 48 58
120.49 5 4 27
83.47 15 9 12
      100.00
                                                29.70
                                                               230.31
                                                                             173.40
                                                                                                                         4567.1
                                                                                                                                        28.89
                                                                                                                                                     221.60
                                                                            162.64
                                                                                                                         917.9
                                                                                                                                       -12.09
      110.00
                                                -16.26
                                                               351.05
                                                                                                                                                     344.42
                                                                          172.99
                                                                                                                                      32.36
      110.00
                                               33.63
                                                              209.80
                                                                                                                       4302.3
                                                                                                                                                     200.79
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 2065.0 SGR 462.0 SG3 292.4
RRT -.8230 RRF -.8752 RTF .8917
SGB 2116.0 R23 .2281 R13 -.8972
                                                                                                                    ST 466.1 SR 233.7 55 147.7
CRT -.1739 CRS .5001 CST -.9274
    TOE -.0483 TRA-1.5796 TC3-1.1358 BAU .5734
    ROE -.2377 RRA .2130 RC3 .2858 FAU .11000
    FDE .1039 FRA-1.2714 FC3-2.6002 BSP 6275
                                                                                                                   LSA 489.1 MSA 232.6 SSA 20.4
    BOE .2425 BRA 1.5939 BC3 1.1712 FSP -939
                                                                  SG1 2100.2 SG2 258.0 THA 169.41
                                                                                                                     EL1 468.5 EL2 229.0 ALF 173.44
                                                                      FLIGHT TIME 104.00
                                                                                                                               ARRIVAL DATE APR 10 1966
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                      DISTANCE 313.776
                        .00 LOL 95.03 VL 28.709 GAL -11.20 AZL 88.65 HCA 149.75 SMA 135.43 ECC .21196 INC 1.3549 VI 30.282 .68 LOP 244.79 VP 38.293 GAP 4.30 AZP 91.17 TAL 235.25 TAP 24.99 RCA 106.73 APO 164.14 V2 34.926 6.43 GP 18.95 ZAL 157.98 ZAP 126.85 ETS 12.16 ZAE 140.12 ETE 160.04 ZAC 29.12 ETC 181.98 CLP-129.35
   RL 147.12 LAL
    RP 108.50 LAP
   RC 106.225 GL
  PLANETOCENTRIC CONIC
    C3 35.388 VHL 5.949 OLA -14.61 RAL 296.89 RAD 6568.4 VEL 12.520 PTH
                                                                                               2.27 VHP 4.421 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          116.48
                                                                          165.75
                                                                                                        3 15 20
                                                                                                                      1283.6
                    2 43 56 1883.58
                                                 -10.41
                                                               21.52
                                                                                                                                      -6.77
                                                                                                                                                      14.73
       90.00
                  10 51 10
                                5471.28
                                                  28.26
                                                              252.77
                                                                             174.14
                                                                                             88.18
                                                                                                       12 22 21
                                                                                                                         4871.3
                                                                                                                                        27.71
                                                                                                                                                      244.15
                              1646.43
5183.66
1487.59
      100.00
                    3 57 26
                                                 -11.74
                                                                 3.39
                                                                             165.06
                                                                                            117.69
                                                                                                                         1046.4
                                                                                                                                        -7.94
                                                                                                                                                     356.65
                                                                                                                         4583.7
                                                                                                                                        29.04
      100.00
                  12 20 21
                                                 29.76
                                                              231.54
                                                                             174.07
                                                                                             87.08 13 46 44
                                                                                                                                                     222.81
                                                                                            120.99 5 12 56
84.06 15 8 3
                   4 48 8
                                                -15.21
                                                               349.33
                                                                           163.06
                                                                                                                         887.6
                                                                                                                                       -10.99
                  13 46 7
                                4915.26
                                                              210.80
                                                                             173.70
                                                                                                                         4315.3
                                                                                                                                       32.53
                                                                                                                                                     201.77
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 2184.5 SGR 470.2 SG3 281.5
RRT -.8402 RRF -.8990 RTF .8921
                                                                                                                    ST 491.1 SR 211.5 SS 137.3
CRT -.1317 CRS .4044 CST -.9462
    TOE -.0854 TRA-1.6145 TC3-1.2419 BAU .6058
   ROE -.2096 RRA .2069 RC3 .3121 FAU .10471
FOE .0432 FRA-1.1563 FC3-2.5616 BSP 6690
BOE .2264 BRA 1.6277 BC3 1.2805 FSP -908
                                                                  SGB 2234.6 R23 .2571 R13 -.8976
                                                                                                                     LSA 509.3 MSA 211.9 SSA 20.7
                                                                  SG1 2220.4 SG2 250.8 THA 169.62
                                                                                                                     EL1 492.0 EL2 209.2 ALF 176.04
                                                                                                                               ARRIVAL DATE APR 12 1966
                                                                      FLIGHT TIME 106.00
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                      DISTANCE 319.786
   RL 147.12 LAL .00 LOL 95.03 VL 28.640 GAL -10.99 AZL 88.91 HCA 152.93 SMA 134.89 ECC .21047 INC 1.0919 V1 30.282 RP 108.54 LAP .50 LOP 247.97 VP 38.231 GAP 4.59 AZP 90.97 TAL 233.98 TAP 26.91 RCA 106.50 APO 163.28 V2 34.914 RC 108.588 GL 5.26 GP 20.45 ZAL 157.48 ZAP 128.80 ETS 14.70 ZAE 138.28 ETE 159.11 ZAC 29.80 ETC 184.34 CLP-131.98
  PLANETOCENTRIC CONIC
   C3 34.152 VHL 5.844 DLA -15.61 RAL 297.95 RAD 6568.3 YEL 12.471 PTH 2.26 VMP 4.539 DPA -2.83 RAP 295.47 ECC 1.5621
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 57 18 1838.95 -9.04 18.95 166.35 116.95 3 27 57 1238.9 -5.35 12.21
                                                                                         116.95 3 27 57
89.16 12 17 52
                    10 46 14 5497.96
4 10 3 1604.18
       90.00
                  10 46 14
                                                 28.31
                                                              254.72
                                                                            174.96
                                                                                                                        4898.0
                                                                                                                                        27.89
                                                                                                                                                     246.08
                                                                                           118.18 4 36 47
88.03 13 42 57
121.55 5 23 22
84.94 15 5 45
      100.00
                                               -10.40
                                                                  .97
                                                                          165.63
                                                                                                                        1004.2
                                                                                                                                        -6.55
                                                                                                                                                     354.30
      100.00
                                                                            174.92
                                                                                                                        4607.9
                                                                                                                                        29.24
                                                                                                                                                     224.59
                  12 16 9
                                5207.95
                                                29.83
                                                              233.34
                                                                                                                         850.2
                                                                                                                                        -9.61
                                                                                                                                                     340.75
      110.00
                    4 59 12 1450.23
                                                -13.89
                                                              347.24
                                                                          163.58
                                                              212.30
                                                                                                                        4334.7
                                                                                                                                        32.78
                                                                                                                                                     203.23
                  13 43 30
                               4934.68
                                                33.85
                                                                            174.63
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 520.2 SR 186.4 SS 129.6

CRT -.0798 CRS .2582 CST -.9687

LSA 535.5 MSA 186.9 SSA 21.2
                                                                  SGT 2303.8 SGR 482.2 5G3 270.0
    TDE -.1353 TRA-1.6399 TC3-1.3537 BAU .6376
                                                                  RRT -.8543 RRF -.9212 RTF .8920
SGB 2353.8 R23 .2890 R13 -.8977
SG1 2340.8 SG2 246.7 THA 169.75
    RDE -.1793 RRA .1992 RC3 .3428 FAU .D9923
   FDE -.0219 FRA-1.0395 FC3-2.5153 BSP 7110
BDE .2246 BRA 1.6520 BC3 1.3964 FSP -875
                                                                                                                    EL1 520.5 EL2 185.7 ALF 178.12
                                                                      FLIGHT TIME 108.00
                                                                                                                               ARRIVAL DATE APR 14 1966
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                      DISTANCE 325.775
                        .00 LOL 95.03 VL 28.570 GAL -10.78 AZL 89.24 HCA 156.11 SMA 134.34 ECC .20905 INC .7643 V1 30.282 .31 LOP 251.15 VP 38.168 GAP 4.86 AZP 90.70 TAL 232.67 TAP 28.78 RCA 106.26 APO 162.42 V2 34.903 3.74 GP 22.36 ZAL 156.92 ZAP 130.37 ETS 17.71 ZAE 136.40 ETE 157.85 ZAC 30.73 ETC 187.14 CLP-134.46
   RL 147.12 LAL
RP 108.58 LAP
    RC 110.951 GL
  PLANETOCENTRIC CONIC
                                                                                               2.24 VHP 4.676 DPA
                                                                                                                            -.85 RAP 295.86 ECC 1.5419
   C3 32.928 VHL 5.738 DLA -16.93 RAL 299.14 RAD 6568.3 VEL 12.422 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 14 41 1780.98 -7.24 15.65 167.16 117.45 3 44 22 1181.0 -3.50 8.96
                   10 38 19
                              5537.51
                                                  28.31
                                                              257.61
                                                                             176.04
                                                                                             90.61
                                                                                                       12 10 37
                                                                                                                         4937.5
                                                                                                                                        28.10
                                                                                                                                                     248.95
       90.00
                    4 26 21
                                                              357.89
                                                                             166.41
                                                                                            118.73
                                                                                                        4 52 11
                                                                                                                         949.7
                                                                                                                                        -4.73
                                                                                                                                                     351.28
      100.00
                                1549.71
                                                  -8.63
                                                                                           89.44 13 36 44
122.19 5 36 40
86.26 15 1 38
                   12 9 20 5244.02
                                                 29.89
                                                              236.02
                                                                            176.04
                                                                                                                         4544.0
                                                                                                                                        29.49
                                                                                                                                                     227.24
      100.00
                 5 13 17 1402.71
13 38 54 4963.79
                                                -12.18
                                                              344.62
                                                                            164.29
                                                                                                                         802.7
                                                                                                                                       -7.84
                                                                                                                                                     338.21
      110.00
                                                34.00
                                                              214.56
                                                                                                                        4363.8
                                                                                                                                        33.11
                                                                                                                                                     205.43
      110.00
                                                                            175.86
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 2419.1 SGR 498.2 SG3 256.7

RRT -.8639 RRF -.9409 RTF .8912

SGB 2469.9 R23 .3234 R13 -.8971

SGI 2457.5 SG2 247.0 THA 169.81
                                                                                                                 ST 556.8 SR 158.0 SS 127.3

CRT -.0221 CRS .0653 CST -.9834

LSA 570.7 MSA 158.1 SSA 21.9

EL1 556.8 EL2 158.0 ALF 179.61
    TOE -.2006 TRA-1.6513 TC3-1.4688 BAU .6677
    ROE -.1462 RRA .1886 RC3 .3779 FAU .09320
   FOE -.1012 FRA -.9146 FC3-2.4503 BSP 7479
BOE .2483 BRA 1.6620 BC3 1.5167 FSP -828
```

FLIGHT TIME 102.00

ARRIVAL DATE APR 16 1966

```
FLIGHT TIME 110.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 331.744
   HELIOCENTRIC CONIC
                        .00 LOL 95.03 VL 28.500 GAL -10.55 AZL 89.66 HCA 159.29 SMA 133.80 ECC .20768 INC .3434 V1 30.282 .12 LOP 254.32 VP 38.105 GAP 5.13 AZP 90.32 TAL 231.32 TAP 30.60 RCA 106.01 APO 161.58 V2 34.892
    RL 147.12 LAL
    RP 108.61 LAP
                         1.71 GP 24.82 7AL 156.23 7AP 131.45 ETS 21.34 7AE 134.38 ETE 156.20 7AC 31.95 ETC 190.53 CLP-136.83
    RC 113.313 GL
   PLANETOCENTRIC CONIC
                                                                                                                               1.69 RAP 296.25 ECC 1.5224
    C3 31.745 VHL 5.634 DLA -18.74 RAL 300.51 RAD 6568.3 YEL 12.374 PTH
                                                                                                  2.23 VHP 4.842 DPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 36 35 1701.91
10 25 21 5598.16
                                                                                                                                                            4.54
                                                   -4.73
                                                                 11.18
                                                                              168.36
                                                                                             117.95
                                                                                                          4 6 57
                                                                                                                         1101.9
                                                                                                                                             -.96
        90.00
                                                                                                        11 58 39
                                                                                                                                                          253.38
                                                                                               92.63
                                                                                                                            4998.2
                                                                                                                                            28.28
                                                                262.04
                                                                               177.47
                                                   28.19
        90.00
                  4 48 33 1476.14
11 58 4 5299.16
5 32 4 1339.79
13 31 3 5008.27
                                                                                                                                                          347.23
                                                                353.79
                                                                               167.56
                                                                                               119.30
                                                                                                          5 13 9
                                                                                                                             876.1
                                                                                                                                            -2.25
                                                    -6.20
       100.00
                                                                                               91.59 13 26 24
122.89 5 54 24
88.31 14 54 31
                                                                                                                         4699.2
                                                                                                                                                          231.32
                                                                                                                                            29.76
                                                                240.12
                                                                              177.55
                                                   29.85
       100.00
                                                                                            122.89
                                                                                                                            739.8
                                                                                                                                            -5.47
                                                                                                                                                          334.88
                                                    -9.87
                                                                341.21
                                                                              165.32
       110.00
                                                                             177.54
                                                                                                                                            33.54
                                                                                                                                                          208.84
                                                                218.03
                                                                                                                           4408.3
                                                   34.15
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 611.5 SR 123.6 SS 139.3
CRT .0228 CRS -.1508 CST -.9767
                                                                    $61 2537.4 $6R $21.4 $63 242.7

RRT -.8698 RRF -.9581 RTF .8908

$68 2590.4 R23 .3557 R13 -.8972
    TOE -.2933 TRA-1.6486 TC3-1.5913 BAU .6985
    ROE -.1072 RRA .1755 RC3 .4205 FAU .08691
FOE -.1960 FRA -.7897 FC3-2.3701 BSP 7902
BOE .3123 BRA 1.6579 BC3 1.6459 FSP -788
                                                                                                                       LSA 626.5 MSA 124.9 SSA 23.1
EL1 611.5 EL2 123.6 ALF .28
                                                                    SG1 2578.0 SG2 253.3 THA 169.77
                                                                                                                                   ARRIVAL DATE APR 18 1966
                                                                         FLIGHT TIME 112.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 337.693
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 28.429 GAL -10.32 A7L 90.22 HCA 162.46 SMA 133.25 ECC .20638 INC .2178 V1 30.282 RP 108.64 LAP -.07 LOP 257.50 VP 38.042 GAP 5.38 A7P 89.79 TAL 229.93 TAP 32.39 RCA 105.75 APO 160.75 V2 34.881 RC 115.673 GL -1.11 GP 28.08 TAL 155.27 TAP 131.86 ETS 25.76 TAE 132.05 ETE 154.06 TAC 33.57 ETC 194.68 CLP-139.14
   PLANETOCENTRIC CONIC
    C3 30.670 VHL 5.538 DLA -21.30 RAL 302.16 RAD 6568.2 VEL 12.331 PTH 2.22 VHP 5.057 DPA 5.03 RAP 296.54 ECC 1.5047 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             170.33
                                                                                                           4 40 49
                     4 14 24 1585.33
                                                                                             116.30
                                                    -.99
                                                                  4.66
        90.00
                                                                                                                                                          260.64
                                                                                                                             5097.4
                                                                                                                                             28.24
                                                                269.25
                                                                               179.41
                                                                                                96.40 11 37 39
                   10 2 41
                                  5697.42
                                                   27.64
        90.00
                                                                                              119.79 5 44 2
95.05 13 8 22
123.62 6 19 43
91.58 14 42 4
                                                                                                                             769.7
                                                                                                                                              1.36
                                                                                                                                                          341.39
                                                                               169.43
                     5 21 12
                                  1369.72
                                                    -2.62
                                                                347.91
       100.00
                  11 38 34 5388.26
5 58 51 1251.73
                                                                                                                            4788.3
                                                                                                                                             29.89
                                                   29.50
                                                                246.72
                                                                               179.63
       100.00
                                                                                                                                                          330.27
                                                                             166.97
                                                                                                                             651.7
                                                                                                                                             -2.12
                                                   -6.58
                                                                 336.51
       110.00
                                                                                                                            4479.0
                                                                                                                                             33.99
                   13 17 25
                                  5079.02
                                                   34.15
                                                                223.55
                                                                               179.94
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 697.8 SR 82.5 SS 171.4
                                                                   SGT 2651.3 SGR 551.5 SG3 225.6
RRT -.8694 RRF -.9718 RTF .8901
SGB 2708.1 R23 .3843 R13 -.8973
    TOE -.4235 TRA-1.6213 TC3-1.7122 BAU .7279
                                                                                                                       CRT -.0325 CRS -.2230 CST -.9533
    RDE -. 0599 RRA .1565 RC3 .4692 FAU .07961
                                                                                                                      LSA 716.7 MSA 93.6 SSA 24.0
EL1 697.8 EL2 82.5 ALF 179.78
    FDE -.3072 FRA -.6524 FC3-2.2471 BSP 8279
BDE .4277 BRA 1.6288 BC3 1.7753 FSP -731
                                                                    SG1 2694.8 SG2 268.1 THA 169.65
                                                                                                                                  ARRIVAL DATE APR 20 1966
                                                                        FLIGHT TIME 114.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 343.623
   HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 28.357 GAL -10.08 A7L 91.02 MCA 165.63 SMA 132.71 ECC .20514 INC 1.0245 VI 30.282 RP 108.68 LAP -.25 LOP 260.67 VP 37.979 GAP 5.62 A7P 89.01 TAL 228.51 TAP 34.14 RCA 105.49 APO 159.94 V2 34.870 RC 118.029 GL -5.24 GP 32.54 ZAL 153.73 ZAP 131.26 ETS 31.17 ZAE 129.12 ETE 151.35 ZAC 35.79 ETC 199.87 CLP-141.47
   PLANETOCENTRIC CONIC
    C3 29.878 VML 5.466 OLA -25.09 RAL 304.28 RAD 6568.2 VEL 12.298 PTH 2.22 VMP 5.363 OPA
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  5 18 45 1381.77
9 15 18 5887.86
6 16 56 1193.87
10 59 47 5551.00
6 41 28 1116.92
12 51 45 5200.71
                                                                            174.23
                                                                                                            5 41 46
                                                                                                                             781.8
                                                                                                                                             9.24
                                                                                               117.81
                                                    5.56
                                                                353.28
        90.00
                                                                                               102.82 10 53 26
                                                                                                                                                          274.41
                                                                                                                            5287.9
                                                                                                                                            26.98
                                                   25.46
                                                                282.75
                                                                               181.83
        90.00
                                                                                               119.72 6 36 50°
101.08 12 32 18
                                                                                                                                             7.27
                                                                                                                                                          331.67
                                                                                                            6 36 50'
                                                                                                                             593.9
                                                    3.34
                                                                338.26
                                                                              173.01
       100.00
                                                                                                                                                          249.97
                                                                                                                            4951.0
                                                                                                                                            29.19
                                                   27.94
                                                                258.56
                                                                              182.42
       100.00
                                                                                                                                                          323.23
                                                                              170.02
                                                                                                            7 0 5
                                                                                                                             516.9
                                                                                                                                             3.03
                                                                                               124.15
                                                   -1.45
                                                                 329.44
       110.00
                                                                                                        14 18 25
                                                                232.99
                                                                                               97.13
                                                                                                                            4600.7
                                                                                                                                           34.14
                                                                                                                                                         223.80
                                                   33.52
                                                                               143.46
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 850.8 SR 48.2 SS 235.5
CRT -.6943 CRS .4627 CST -.9428
                                                                    SGT 2769.2 SGR 592.2 SG3 205.2
RRT -.8653 RRF -.9817 RTF .8910
SGB 2831.8 R23 .4035 R13 -.8991
     TOE -.6229 TRA-1.5613 TC3-1.8240 BAU
                                                       .7581
    ROE .0046 RRA .1291 RC3 .5242 FAU .07112
FOE -.4502 FRA -.5071 FC3-2.0609 BSP 8706
                                                                                                                        LSA 880.1 MSA 81.5 SSA 19.4
EL1 851.4 EL2 34.7 ALF 177.74
                                                                    SG1 2816.5 SG2 293.8 THA 169.42
     BOE .6229 BRA 1.5666 BC3 1.8979 FSP -669
                                                                                                                                   ARRIVAL DATE APR 22 1966
                                                                         ELICHT TIME 116.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 349.533
    RL 147.12 LAL .00 LOL 95.03 VL 28.286 GAL -9.84 AZL 92.27 MCA 168.80 SMA 132.18 ECC .20397 INC 2.2725 V1 30.282 RP 108.71 LAP -.44 LOP 263.84 VP 37.916 GAP 5.85 AZP 87.77 TAL 227.06 TAP 35.85 RCA 105.22 APO 159.14 V2 34.860 RC 120.382 GL -11.66 GP 38.87 TAL 150.73 ZAP 129.06 ETS 37.79 ZAE 125.01 ETE 148.07 ZAC 39.03 ETC 206.48 CLP-144.04
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                  2.22 VHP 5.859 OPA 15.87 RAP 296.04 ECC 1.4919
     C3 29.892 VHL 5.467 DLA -31.04 RAL 307.37 RAD 6568.2 VEL 12.299 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          21.91
                                                                                                                              730.0
                                                                              183.20
                                                                                              115.26 6 5 59
                     5 43 49
                                  1330.02
                                                   18.66
                                                                 356.18
        76.73
                                                                                                                                                          298.74
                                                                                                            9 25 42
                                                                                                                               51.8
                                                                                                                                             21.93
                                                                                                115.24
                                                                 306.12
                                                                               183.20
                    9 14 50
                                   651.80
                                                    18.68
       103.27
                                                                                               115.26 6 5 59
                                                                                                                              730.0
                                                                                                                                             21.91
                                                                                                                                                          348.80
                                                                               183.20
                     5 43 49
                                  1330.02
                                                    18.66
                                                                 356.18
        76.73
                                                                                               115.24 9 25 42
123.27 8 23 0
107.79 13 20 8
                                                                                                                              51.8
                                                                                                                                             21.93
                                                                                                                                                          298.74
                                  651.80
                                                                               183.20
                                                                                               115.24
                    9 14 50
                                                  18.68
                                                                 306.12
       103.27
                                                                                                                                             12.67
                                                                                                                             258.9
                                                                                                                                                          309.46
                                    858.86
                                                    8.35
                                                                 315.90
                                                                              177.26
       110.00
                                                                                187.95
                                                                                                                           4859.0
                                                                                                                                             31.82
                                                                                                                                                          243.54
                   11 49 9 5459.00
                                                                 252.10
                                                  29.68
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
SGT 2892.2 SGR 642.0 SG3 178.6
RRT -.8485 RRF -.9862 RTF .8947
SGB 2962.6 R23 .4096 R13 -.9038
SG1 2943.7 SG2 333.9 THA 169.20

SG1 2943.7 SG2 333.9 THA 169.20
                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
     TOE -.9543 TRA-1.4419 TC3-1.8864 BAU .7877
     RDE .1019 RRA .0833 RC3 .5714 FAU .06043
     FDE -.6296 FRA -.3445 FC3-1.7501 BSP 9185
BDF .9597 BRA 1.4443 BC3 1.9710 FSP -588
     BOE .9597 BRA 1.4443 BC3 1.9710 FSP
```

ARRIVAL DATE APR 24 1966

LAUNCH DATE DEC 27 1965

```
DISTANCE 355.418
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 28.214 GAL -9.58 AZL 94.48 HCA 171.95 SMA 131.65 ECC .20284 INC 4.4798 V1 30.282 RP 108.74 LAP -.63 LOP 267.01 VP 37.854 GAP 6.07 AZP 85.56 TAL 225.57 TAP 37.52 RCA 104.94 APO 158.35 V2 34.851 RC 122.731 GL -22.35 GP 48.19 ZAL 144.15 ZAP 124.21 ETS 45.94 ZAE 118.65 ETE 144.69 ZAC 44.10 ETC 215.07 CLP-147.51
   PLANETOCENTRIC CONTC
                                                                                                  2.24 VHP 6.830 DPA 25.03 RAP 294.13 ECC 1.5378
    C3 32.677 VHL 3.716 DLA -40.88 RAL 312.93 RAD 6568.3 VEL 12.412 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           124.71 4 53 31
124.70 12 51 23
                   4 25 58 1653.24
11 17 2 5661.40
                                                                 24.52
                                                                             193.57
                                                                                                           4 53 31
                                                                                                                           1053.2
                                                                                                                                          27.49
                                                                                                                                                          17.53
                                                   23.11
       59.18
                                                                                                                            5061.4
                                                                                                                                            27.50
                                                                                                                                                         257.74
                                                                              193.38
                                                                264.74
       120.82
                                                   23.13
                   4 25 58 1653.24
11 17 2 5661.40
4 25 58 1653.24
11 17 2 5661.40
                                                                                                                                                          17.53
                                                                 24.52
                                                                               193.37
                                                                                               124.71
                                                                                                           4 53 31
                                                                                                                            1053.2
                                                                                                                                            27.49
        59.18
                                                   23.11
                                                                                            124.71 4 53 51
124.70 12 51 23
124.71 4 53 31
124.70 12 51 23
                                                                                                                            5061.4
                                                                                                                                            27.50
                                                                                                                                                         257.74
                                                                              193.38
                                                                264.74
      120.82
                                                  23.13
                                                                                                                            1053.2
                                                                                                                                            27.49
                                                                                                                                                          17.53
                                                                  24.52
                                                                              193.37
        59.18
                                                  23.11
                                                                                                                          5061.4
                                                                                                                                           27.50
                                                                                                                                                         257.74
                                                                              193.38
                                                                264.74
                                                  23.13
       120.82
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 2998.5 SGR 681.4 SG3 141.6

RRT -.8117 RRF -.9787 RTF .9041

SGB 3074.9 R23 .3972 R13 -.9139

SGI 3049.9 SG2 391.2 THA 169.37
                                                                                                                        ST 1654.7 SR 260.7 SS 499.0
CRT -.9546 CRS .9962 CST -.9766
    TDE-1.5819 TRA-1.1804 TC3-1.7555 BAU .8037
    ROE .2594 RRA -.0085 RC3 .5508 FAU .04592
FDE -.8406 FRA -.1517 FC3-1.2165 BSP 9432
BOE 1.6030 BRA 1.1805 BC3 1.8398 FSP -462
                                                                                                                       LSA 1743.3 MSA 125.8 SSA 3.9
                                                                                                                        EL1 1673.3 EL2 76.8 ALF 171.43
                                                                                                                                   ARRIVAL DATE APR 26 1966
                                                                        FLIGHT TIME 120.00
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 361.262
   RL 147.12 LAL .00 LOL 95.03 VL 28.143 GAL -9.31 AZL 99.48 MCA 175.07 SMA 131.12 ECC .20173 INC 9.4804 VI 30.282 RP 108.78 LAP -.81 LOP 270.18 VP 37.793 GAP 6.28 AZP 80.55 TAL 224.04 TAP 39.12 RCA 104.67 APO 157.58 V2 34.842 RC 125.075 GL -40.58 GP 62.21 ZAL 129.70 ZAP 115.13 ETS 57.58 ZAE 107.78 ETE 144.45 ZAC 52.26 ETC 228.01 CLP-155.67
  PLANETOCENTRIC CONIC
    C3 49.455 VHL 7.032 OLA -56.68 RAL 327.91 RAD 6568.8 VEL 13.070 PTH
                                                                                                  2.39 VMP 9.366 DPA 38.39 RAP 288.14 ECC 1.8139
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          1331.6
                                                                                             142.87
                                                                                                           4 47 9
                                                                                                                                             30.77
                     4 14 57 1931.75
                                                   24.50
                                                                 53.21
                                                                              220.47
       38.61
                                                                                                          15 0 46
                                                                                                                             4991.7
                                                                                                                                             30.78
                                                                                                                                                          254.21
                                                    24.51
                                                                259.40
                                                                               220.48
                                                                                               142.86
      141.39
                   13 27 34
                                 5591.68
                  4 14 57 1931.75
13 27 34 5591.68
4 14 57 1931.75
                                                                                                          4 47 9
                                                                                                                            1331.8
                                                                                                                                             30.77
                                                                                                                                                           48.02
                                                                  53.21
                                                                               220.47
                                                                                               142.87
                                                    24.50
       38.61
                                                                                               142.86 15 0 46
                                                                                                                            4991.7
                                                                                                                                             30.78
                                                                                                                                                          254.21
                                                    24.51
                                                                259.40
                                                                               220.48
      141.39
                                                                                                          4 47 9
                                                                                                                            1331.8
                                                                                                                                             30.77
                                                                                                                                                           48.02
                                                   24.50
                                                                  53.21
                                                                               220.47
                                                                                               142.87
       38.61
                                                                259.40
                                                                               220.48
                                                                                               142.86 15 0 46
                                                                                                                            4991.7
                                                                                                                                            30.78
                                                                                                                                                          254.21
                                                   24.51
      141.39
                   13 27 34
                                  5591.68
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                    SGT 3132.9 SGR 623.2 SG3 96.1
RRT -.6689 RRF -.8837 RTF .9376
                                                                                                                        ST 2605.1 SR 343.1 SS 711.4
CRT -.9361 CRS .9723 CST -.9924
    TDE-3.1847 TRA -.5122 TC3-1.1254 BAU .7711
    RDE .4054 RRA -.2066 RC3 .3062 FAU .02742
FDE-1.0780 FRA .0703 FC3 -.4800 BSP 9764
BDE 3.2104 BRA .5522 BC3 1.1663 FSP -308
                                                                                                                        LSA 2718.4 MSA 144.3 55A 1.3
                                                                    5GB 3194.3 R23 .3265 R13 -.9442
                                                                    SG1 3161.1 SG2 459.1 THA 172.26
                                                                                                                      EL1 2624.9 EL2 119.8 ALF 172.96
                                                                                                                                  ARRIVAL DATE APR 28 1966
                                                                        FLIGHT TIME 122.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 366.933
   HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 28.072 GAL -9.01 A7L 120.36 MCA 178.04 SMA 130.61 ECC .20026 INC30.3611 V1 30.282 RP 108.79 LAP -.99 LOP 273.34 VP 37.732 GAP 6.43 A7P 59.65 TAL 222.41 TAP 40.45 RCA 104.45 APO 156.76 V2 34.834 RC 127.413 GL -61.23 GP 75.30 ZAL 105.72 ZAP 100.97 ETS 119.16 ZAE 85.13 ETE 196.74 ZAC 63.71 ETC 293.37 CLP 138.58
   PLANETOCENTRIC CONIC
    C3 255.594 VHL 15.987 DLA -63.86 RAL 17.59 RAD 6571.5 VEL 19.414 PTH 3.10 VHP 21.448 DPA 53.77 RAP 260.20 ECC 5.2064
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1700.0 13.76
                                                                            284.32 153.67
                                                                                                            7 49 55
                                                                                                                                                           68.02
                                                                  71.25
                                                   6.61
       30.03
                     7 11 35 2300.01
                                                                                                                                                          263.73
                   17 7 21 5880.98
7 11 35 2300.01
                                                                               284.34
                                                                                               153.67
                                                                                                          18 45 22
                                                                                                                            5281.0
                                                                                                                                            13.77
                                                                266.96
                                                     6.62
       149.97
                                                                  71.25
                                                                               264.32
                                                                                              153.67
                                                                                                            7 49 55
                                                                                                                            1700.0
                                                                                                                                            13.76
                                                                                                                                                           68.02
                                                     6.61
        30.03
                    17 7 21 5880.98
7 11 35 2300.01
                                                                                                          18 45 22
                                                                                                                            5281.0
                                                                                                                                            13.77
                                                                                                                                                          263.73
                                                                266.96
                                                                               284.34
                                                                                               153.67
                                                     6.62
       149.97
                   17 7 21
                                                                                                                                                           68.02
                                                                                                           7 49 55
                                                                                                                            1700.0
                                                                                                                                            13.76
                                                     6.61
                                                                  71.25
                                                                               284.32
                                                                                               153.67
        30.03
                                                                                               153.67 18 45 22
                                                                                                                                                          263.73
                                                                                                                            5281.0
                                                                                                                                            13.77
                                                                266.96
                                                                               284.34
       149.97
                   17 7 21
                                  5880.98
                                                     6.62
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2088.7 SGR 2478.6 SG3 53.7
RRT .9408 RRF .9636 RTF .9971
SGB 3241.3 R23 -.1276 R13 .9918
SGI 3194.4 SG2 549.5 THA 50.18
                                                                                                                        ST 1301.1 SR 2051.6 SS 773.4
    TOE-3.3371 TRA 2.0999 TC3 -.0383 BAU .1656
                                                                                                                        CRT .9819 CRS -.9903 CST -.9987
    RDE-5.5935 RRA 1.7884 RC3 .0298 FAU .00199
                                                                                                                        L5A 2540.2 MSA 218.0 SSA
    FOE-1.0925 FRA .5921 FC3 -.0067 BSP 9316
BDE 6.5133 BRA 2.7583 BC3 .0485 FSP -162
                                                                                                                        EL1 2420.4 EL2 208.8 ALF 57.82
                                                                                                                                   ARRIVAL DATE APR 30 1966
                                                                         FLIGHT TIME 124.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 373.477
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 28.001 GAL -8.88 AZL 51.53 MCA 181.88 SMA 130.10 ECC .20133 INC38.4666 V1 30.282

RP 108.81 LAP -1.17 LOP 276.51 VP 37.672 GAP 6.83 AZP 128.45 TAL 221.17 TAP 43.05 RCA 103.90 APO 156.29 V2 34.826

RC 129.747 GL 60.81 GP -74.22 ZAL 102.47 ZAP 101.17 ETS 213.95 ZAE 79.31 ETE 138.81 ZAC 90.95 ETC 47.34 CLP 135.41
   PLANETOCENTRIC CONIC
    C3 388.626 VHL 19.714 DLA 46.94 RAL 311.74 RAD 6572.1 VEL 22.582 PTH 3.26 VHP 22.442 DPA -72.76 RAP 138.76 ECC 7.3958 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          220.99
                                                                               218.97
                                                                                                43.14
                                                                                                           17 7 34
                                                                                                                          4266.1
                                                                                                                                           -8.80
                                  4866.15
                                                    -2.98
                                                                 226.10
                    15 46 28
        50.86
                                                                                                                                                           107.56
                                                                                                 43.14 24 40 0
                                                                                                                                             -8.78
                                3411.87
                                                                               218.95
                                                                                                                             2811.9
                    23 43 8
                                                    -2.97
                                                                 112.67
       129.14
                    15 46 28 4866.15
23 43 8 3411.87
15 46 28 4866.15
23 43 8 3411.87
                                                                                                                                                          220.99
                                                                                218.97
                                                                                                 43.14
                                                                                                           17 7 34
                                                                                                                             4266.1
                                                                                                                                             -8.80
                                                    -2.98
                                                                 226.10
        50.86
                                                                                                43.14 24 40 0
43.14 17 7 34
43.14 24 40 0
                                                                                                                                                          107.56
                                                                                218.95
                                                                                                                             2811.9
                                                                                                                                             -8.78
                                                    -2.97
                                                                 112.67
       129.14
                                                                                                                                                          220.99
                                                    -2.98
                                                                               218.97
                                                                                                                             4266.1
                                                                                                                                             -8.80
                                                                 226.10
        50.86
                                                                                                                                                          107.56
                                                                                                                            2811.9
                                                                                                                                             -8.78
                                                                 112.67
                                                                               218.95
       129.14
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1062.5 SR 2599.2 SS 1061.4

CRT -.9768 CRS ..9980 CST -.9884

LSA 2994.2 MSA 213.7 SSA ...9

EL1 2800.0 EL2 211.2 ALF 111.90
                                                                     SGT 1063.4 SGR 3156.0 SG3 52.4
RRT -.7931 RRF -.9853 RTF .8844
    TOE 3.6556 TRA .0264 TC3 -.0106 BAU .5392
    RDE-8.7416 RRA 4.2935 RC3 -.1032 FAU-.00447
                                                                    SGB 3330.3 R23 -.1164 R13 -.9929
    FOE 1.8625 FRA -.6363 FC3 .0100 85P 9674
BOE 9.4751 BRA 4.2936 BC3 .1038 FSP -165
                                                                     SG1 3271.2 SG2 624.8 THA 105.54
```

FLIGHT TIME 118.00

```
LAUNCH DATE DEC 27 1965
                                                                       FLIGHT TIME 126.00
                                                                                                                               ARRIVAL DATE MAY 2 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 379.108
    RL 147.12 LAL .00 LOL 95.03 VL 27.930 GAL -8.55 AZL 73.82 MCA 184.83 SMA 129.60 ECC .20000 INC16.1810 V1 30.282
RP 108.84 LAP -1.34 LOP 279.67 VP 37.613 GAP 6.97 AZP 106.13 TAL 219.48 TAP 44.31 RCA 103.68 APO 155.52 VZ 34.819
RC 132.074 GL 54.19 GP -60.76 ZAL 115.53 ZAP 117.45 ETS 286.42 ZAE 103.21 ETE 204.59 ZAC 79.65 ETC 117.60 CLP-160.66
   PLANETOCENTRIC CONIC
    C3 90.085 VHL 9.491 DLA 35.95 RAL 302.26 RAD 6569.8 VEL 14.541 PTH 2.64 VHP 9.632 DPA -79.15 RAP 352.01 ECC 2.4826
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           55.74 17 33 25
55.74 22 50 41
55.74 17 33 25
55.74 22 50 41
55.74 17 33 25
55.74 22 50 41
                  16 19 31 4434.14
21 54 27 3374.33
                                                 -11.62
                                                               196.45
                                                                            195.80
                                                                                                                        3834.1
                                                                                                                                      -16.04
        66.87
                                                               116.91
                                                                             195.79
                                                                                                                         2774.3
                                                                                                                                        -16.02
                                                 -11.60
       113.13
                  16 19 31 4434.14
21 54 27 3374.33
                                                                             195.80
                                                                                                                         3834.1
                                                                                                                                       -16.04
                                                                                                                                                      190.00
                                                               196.45
                                                 -11.62
        66.87
                                                                             195.79
                                                                                                                         2774.3
                                                                                                                                       -16.02
                                                               116.91
                                                                                                                                                      110.45
       113.13
                                                -11.60
                                                                                                                                       -16.04
                                                                                                                                                      190.00
                   16 19 31
                                 4434.14
                                                -11.62
                                                               196.45
                                                                             195.80
                                                                                                                         3834.1
        66.87
                                                               116.91
                                                                             195.79
                                                                                                                         2774.3
                                                                                                                                      -16.02
                                                                                                                                                      110.45
      113.13
                   21 54 27
                                 3374.33
                                                 -11.60
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 3471.5 SGR 567.0 SG3 92.9
RRT -.7342 RRF -.5129 RTF .9587
                                                                                                                     ST 2361.5 SR 174.0 SS 699.2
CRT -.5150 CRS .3987 CST -.9915
    TOE 3.7183 TRA-3.2774 TC3 -.5374 BAU .6474
   RDE -.0644 RRA .7580 RC3 -.0121 FAU .02501
FDE 1.3679 FRA -.6903 FC3 -.2404 BSP 10987
                                                                  SGB 3517.5 R23 -.2939 R13 -.9549
                                                                                                                     LSA 2462.9 MSA 173.6 55A
                                                                                                                                                         1.1
    BDE 3.7188 BRA 3.3639 BC3 .5375 FSP
                                                                   SG1 3496.6 SG2 382.2 THA 173.08
                                                                                                                     EL1 2363.2 EL2 149.0 ALF 177.62
                                                      -316
                                                                       FLIGHT TIME 128.00
                                                                                                                                ARRIVAL DATE MAY 4 1966
LAUNCH DATE DEC 27 1965
  HELIOCENTRIC CONIC
                                                                      DISTANCE 384.901
   RL 147.12 LAL .00 LOL 95.03 VL 27.860 GAL -8.26 AZL 78.98 MCA 187.94 SMA 129.10 ECC .19925 INC11.0181 V1 30.282 RP 108.86 LAP -1.51 LOP 282.83 VP 37.555 GAP 7.15 AZP 100.92 TAL 217.86 TAP 45.80 RCA 103.38 APO 154.83 V2 34.812
   RC 134.395 GL
                       46.02 GP -45.48 ZAL 122.52 ZAP 129.56 ETS 299.66 ZAE 114.45 ETE 208.11 ZAC 70.83 ETC 130.38 CLP-155.29
  PLANETOCENTRIC CONIC
    C3 53.635 VHL 7.324 DLA 27.54 RAL 303.17 RAD 6568.9 VEL 13.229 PTH
                                                                                                2.42 VHP 7.162 DPA -64.12 RAP 332.08 ECC 1.8827
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 20 8 42 3592.63 -18.23 136.76 190.04 67.95 21 8 34 2992.6 -21.07 129.23
                                                  -7.28
                  18 12 30
                                                                                                       19 18 41
                                                                                                                         3371.1
        90.00
                                 3971.14
                                                               159.15
                                                                             184.88
                                                                                              62.56
                                                                                                                                        -10.90
                                                                                              69.83 23 4 28
60.27 19 56 43
                  22 11 10
                                                                                                                         2597.8
       100.00
                                 3197.80
                                                 -22.54
                                                               109.48
                                                                             191.82
                                                                                                                                        -25.08
                               3841.20
                                                  -3.23
                                                              147.39
                                                                             182.66
                                                                                                                         3241.2
       100.00
                  18 52 42
                                                                                                                                        -7.16
                                                                                                                                                      140.81
                                                                                                                       ~2197.5
                                                                                              72.86 1 9 39
55.97 20 4 50
                  0 23 2 2797.47
19 1 16 3814.29
                                                 -30.04
                                                                             194.64
                                                                                                                                      -32.09
                                                                                                                                                       73.29
      110.00
                                                                81.91
      110.00
                                                   3.49
                                                               141.18
                                                                             178.49
                                                                                                                       3214.3
                                                                                                                                        -1.00
                                                                                                                                                      134.97
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 3582.0 SGR 327.7 SG3 134.4

RRT .0193 RRF .3932 RTF .9234

SGB 3597.0 R23 .3754 R13 .9235
    TOE 2.4630 TRA-2.8981 TC3-1.0964 BAU .7887
                                                                                                                     ST 2074.5 SR 213.5 SS 663.5
                                                                                                                     CRT .7657 CR5 -.8816 CST -.9786
    RDE .2591 RRA .2537 RC3 -.0869 FAU .04085
    FDE 1.3500 FRA -.6913 FC3 -.693 BSP 11103
BDE 2.4766 BRA 2.9092 BC3 1.0999 FSP -448
                                                                                                                     LSA 2160.5 MSA 186.8 SSA 2.0
ELI 2081.0 EL2 136.9 ALF 4.53
                                                                   5G1 3582.0 SG2 327.6 THA
                                                                                                      .10
                                                                                                                               ARRIVAL DATE MAY 6 1966
                                                                      FLIGHT TIME 130.00
LAUNCH DATE DEC 27 1985
                                                                      DISTANCE 390.712
   RL 147.12 LAL .00 LOL 95.03 VL 27.790 GAL -7.96 AZL 81.24 HCA 191.09 SHA 128.62 ECC .19868 INC 8.7632 V1 30.282
RP 108.87 LAP -1.68 LOP 286.00 VP 37.498 GAP 7.33 AZP 98.60 TAL 216.22 TAP 47.31 RCA 103.06 APO 154.17 VZ 34.806
    RC 136.709 GL 40.67 GP -35.27 ZAL 126.03 ZAP 137.63 ETS 306.69 ZAE 120.56 ETE 205.29 ZAC 65.83 ETC 137.17 CLP-154.81
   PLANETOCENTRIC CONIC
   C3 41.398 VHL 6.434 DLA 22.43 RAL 304.88 RAD 6568.6 VEL 12.758 PTH 2.32 VHP 6.343 DPA -53.71 RAP 328.34 ECC 1.6813 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          79.20 22 50 3
61.73 17 48 43
80.38 24 22 32
60.31 18 50 11
                                                                                                                     2581.5
                                                                                                                                       -27.56
       90.00 21 57 2 3181.47
90.00 16 37 50 4252.62
100.00 23 34 45 2866.38
                                                 -26.33
                                                              109.44
                                                                          188.17
                                                                                                                                                     100.99
                                                   1.74
                                                              174.92
                                                                             178.10
                                                                                                                        3652.6
                                                                                                                                       -2.06
                                                                                                                                                     168.29
                                                 -28.44
                                                                86.69
                                                                             188.59
                                                                                                                        2266.4
                                                                                                                                       -29.47
                                                                                                                                                      78.04
                                                   3.61
                                                              158.47
                                                                             177.06
                                                                                                                        3443.0
                                                                                                                                         -.37
                                                                                                                                                     151.94
      100.00
                  17 42 48
                                4042.95
                    1 20 42 2547.25
                                                 -33.60
                                                                63.31
                                                                            189.46
                                                                                             83.29
                                                                                                        2 3 9
                                                                                                                        1947.2
                                                                                                                                       -34.16
                                                                                                                                                      54.11
      110.00
                                                                                                      19 22 52
                                                              147.54
                                                                             174.32
                                                                                             56.67
                                                                                                                        3334.9
                                                                                                                                        3.61
                                                                                                                                                     141.27
      110.00
                  18 17 17
                                3934.86
                                                  8.05
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 3676.1 SGR 284.0 SG3 161.4
RRT .1921 RRF .5701 RTF .9053
SGB 3687.1 R23 .4027 R13 .9058
SGI 3676.5 SG2 278.6 THA .85
    TOE 1.9344 TRA-2.6792 TC3-1.5317 BAU .8493
                                                                                                                    ST 1889.5 SR 212.4 55 632.3
CRT .8025 CRS -.9287 CST -.9665
    RDE .2329 RRA .1582 RC3 -.0932 FAU .04994
FDE 1.2777 FRA -.6464 FC3-1.0443 BSP 11549
                                                                                                                    LSA 1994.1 MSA 196.7 SSA
                                                                                                                                                        3.2
                                                                                                      .85
                                                                                                                    ELI 1897.2 EL2 126.2 ALF 5.18
    BDE 1.9483 BRA 2.6839 BC3 1.5345 FSP -539
                                                                       FLIGHT TIME 132.00
                                                                                                                               ARRIVAL DATE MAY 8 1966
LAUNCH DATE DEC 27 1965
                                                                      DISTANCE 396.522
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 27.721 GAL -7.66 AZL 82.50 HCA 194.24 SHA 128.14 ECC .19824 INC 7.4968 V1 30.282 RP 108.89 LAP -1.84 LOP 289.16 VP 37.442 GAP 7.52 AZP 97.27 TAL 214.57 TAP 48.81 RCA 102.74 APO 153.55 VZ 34.801 RC 139.015 GL 37.12 GP -28.37 ZAL 127.67 ZAP 143.10 ETS 311.90 ZAE 124.00 ETE 201.91 ZAC 63.34 ETC 142.16 CLP-155.33
  PLANETOCENTRIC CONIC
    C3 35.285 VHL 5.940 DLA 19.23 RAL 306.67 RAD 6568.4 VEL 12.516 PTH
                                                                                               2.27 VHP 6.015 DPA -46.47 RAP 327.56 ECC 1.5807
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            85.49 23 32 41
62.08 17 19 2
                                                                                                                       2400.6
                  22 42 41 3000.56
                                                 -27.98
                                                               96.47
                                                                            185.88
                                                                                                                                      -28.32
                                                                                                                                                       87.82
       90.00
                                                                                                                         3752.8
                                                                                                                                         1.18
                                                                                                                                                     173.88
        90.00
                  16 6 29 4352.83
                                                  4.95
                                                               180.52
                                                                             176.27
                    0 19 52 2699.87
                                                                                              86.67
                                                                                                        1 4 52
                                                                                                                         2099.9
                                                                                                                                       -29.87
                                                                                                                                                       65.69
                                                 -29.72
                                                                74.49
                                                                             186.02
       100.00
                                                                                                      18 24 44
                                                                                                                         3528.8
                                                                                                                                        2.54
                  17 15 55
                               4128.75
                                                  6.48
                                                              163.22
                                                                            175.43
                                                                                              60.76
                                                                                                                                                     156.65
       100.00
                    1 53 51
                                2405.81
                                                 -34.18
                                                                52.32
                                                                            186.18
                                                                                              89.77
                                                                                                        2 33 57
                                                                                                                         1805.8
                                                                                                                                       -33.84
                                                                                                                                                       43.09
      110.00
                                                                                             57.23 19 5 1
                                                                                                                                                     144.46
                  17 58 25
                                                 10.31
                                                              150.80
                                                                            173.10
                                                                                                                         3395.6
                                                                                                                                         5.92
      110.00
                               3995.58
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 3771.7 SGR 246.5 SG3 176.2
RRT .1755 RRF .5526 RTF .8947
SGB 3779.8 R23 .4011 R13 .8950
                                                                                                                    ST 1778.1 SR 197.2 SS 603.3
CRT .7970 CRS -.9393 CST -.9557
   TOE 1.6572 TRA-2.5316 TC3-1.8789 BAU .8870
    ROE .2005 RRA .1255 RC3 -.0700 FAU .05422
                                                                                                                    LSA 1876.9 MSA 203.7 SSA
   FOE 1.1885 FRA -.5758 FC3-1.3304 89P 11883
BOE 1.6693 BRA 2.5347 BC3 1.8802 FSP -587
                                                                                                                                                         4.5
                                                                 SG1 3772.0 SG2 242.6 THA
                                                                                                                    EL1 1785.0 EL2 118.6 ALF 5.07
```

.66

ARRIVAL DATE MAY 10 1966

LAUNCH DATE DEC 27 1965

```
DISTANCE 402.326
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 27.653 GAL -7.35 AZL 83.32 HCA 197.40 SMA 127.68 ECC .19792 INC 6.6825 V1 30.282 RP 108.90 LAP -1.99 LOP 292.32 VP 37.387 GAP 7.70 AZP 96.38 TAL 212.90 TAP 50.30 RCA 102.41 APO 152.94 V2 34.797 RC 141.312 GL 34.65 GP -23.52 TAL 128.22 ZAP 147.01 ETS 316.01 ZAE 126.02 ETE 198.94 ZAC 62.38 ETC 146.08 CLP-156.16
  PLANETOCENTRIC CONIC
   C3 31.504 VHL 5.613 DLA 17.18 RAL 308.47 RAD 6568.3 VEL 12.364 PTM 2.23 VHP 5.881 DPA -41.20 RAP 327.92 ECC 1.5185
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          89.45 23 59 17
62.40 17 5 48
90.66 1 29 32
                                                                                                                      2291.8
                                                                                                                                  -28.09
                                                                                                                                                  79.88
                23 11 5 2891.83
15 52 24 4404.40
                                                                         184.61
       90.00
                                               -28.31
                                                             88.54
                                                                                                                      3804.4
                                                                                                                                      2.84
                                                                                                                                                  176.76
                                                             183.43
                                                                           175.86
                                                 6.59
       90.00
                0 46 15 2597.63
17 3 51 4173.63
2 16 15 2316.00
17 50 20 4028.23
                                                                                                                      1997.6
                                                                                                                                                   58.11
                                               -29.89
                                                              66.90
                                                                           184.61
      100.00
                                                                                           61.10 18 13 25
93.91 2 54 51
57.59 18 57 28
                                                                                                                      3573.8
                                                                                                                                      4.06
                                                                                                                                                 159.13
                                                             165.73
                                                                           175.11
      100.00
                                                 7.97
                                                                                                                     1716.0
                                                                                                                                    -33.07
                                               -33.99
                                                             45.31
                                                                           184.42
      110.00
                                                                                                                      3428.2
                                                                                                                                      7.15
                                                             152.57
                                                                           172.98
      110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                               SGT 3865.1 SGR 222.1 SG3 183.4

RRT .1025 RRF .4684 RTF .8873

SGB 3871.5 R23 .3791 R13 .8874

SGI 3865.2 SG2 221.0 THA .34
                                                                                                                  ST 1712.3 SR 188.2 SS 580.6
CRT .7929 CRS -.9471 CST -.9462
   TDE 1.4946 TRA-2.4149 TC3-2.1736 BAU .9156
    RDE .1813 RRA .1080 RC3 -.0378 FAU .05567
                                                                                                                  LSA 1805.7 MSA 209.6 SSA 5.7
   FDE 1.1074 FRA -.4954 FC3-1,5297 BSP 12148
                                                                                                                  EL1 1718.9 EL2 114.3 ALF
   BDE 1.5055 BRA 2.4173 BC3 2.1740 FSP
                                                    -605
                                                                                                                             ARRIVAL DATE MAY 12 1966
                                                                     FLIGHT TIME 136.00
LAUNCH DATE DEC 27 1965
                                                                    DISTANCE 408.123
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 27.585 GAL -7.03 AZL 83.89 MCA 200.55 SMA 127.22 ECC .19773 INC 6.1121 V1 30.282 RP 108.92 LAP -2.14 LOP 295.48 VP 37.333 GAP 7.88 AZP 95.73 TAL 211.21 TAP 51.77 RCA 102.06 APO 152.37 V2 34.793
   RC 143.598 GL 32.88 GP -19.98 TAL 128.09 TAP 149.97 ETS 319.30 TAE 127.26 ETE 196.48 TAC 62.36 ETC 149.22 CLP-157.10
  PLANETOCENTRIC CONIC
   C3 28.837 VHL 5.370 DLA 15.87 RAL 310.27 RAD 6568.2 VEL 12.256 PTH 2.20 VHP 5.838 DPA -37.17 RAP 328.85 ECC 1.4746
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      90.00 23 30 57 2820.94

90.00 15 46 56 4430.94

100.00 1 5 1 2530.27

100.00 16 59 29 4196.84

110.00 2 32 47 2255.67

110.00 17 48 13 4044.21
                                                                                          92.05 24 17 58
62.59 17 0 47
                                                                                                                     2220.9
                                                                                                                                     -27.67
                                                                                                                                                   74.74
                                               -28.25
                                                             83.35
                                                                         184.12
                                                                                                                      3830.9
                                                                                                                                       3.69
                                                  7.42
                                                             184.94
                                                                           176.10
                                                                                                                      1930.3
                                                                                                                                     -28.96
                                                                                                                                                    53.17
                                                                                            93.28
                                                                                                       1 47 12
                                                -29.73
                                                              61.89
                                                                           184.04
      100.00
                                                                                            61.30 18 9 26
                                                                                                                      3596.8
                                                                                                                                      4.83
                                                                                                                                                   160.40
                                                 8.73
                                                             167.02
                                                                           175.40
      100.00
                                                                                                      3 10 23
                                                                                                                      1655.7
                                                                                                                                     -32.32
                                                                                                                                                    31.65
                                                                                           96.65 3 10 23
57.78 18 55 37
                                               -33.61
                                                              40.64
                                                                           183.64
                                                                                                                      3444.2
                                                                                                                                                   147.03
                                                             153.44
      110.00
                                               12.09
                                                                           173.39
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 3961.7 SGR 210.7 SG3 186.7
RRT .0209 RRF .3594 RTF .8822
SGB 3967.3 R23 .3410 R13 .8822
                                                                                                                  ST 1672.8 SR 185.6 SS 562.1
CRT .7957 CRS -.9557 CST -.9381
    TOE 1.3894 TRA-2.3170 TC3-2.4445 BAU .9424
    RDE .1714 RRA .0942 RC3 -.0053 FAU .05577
                                                                                                                  LSA 1761.4 MSA 214.1 SSA 7.1
    FDE 1.0350 FRA -.4186 FC3-1.6742 BSP 12482
BOE 1.3999 BRA 2.3189 BC3 2.4445 FSP -615
                                                                                                                  EL1 1679.3 EL2 112.0 ALF 5.07
                                                                                                     .06
                                                                 SG1 3961.7 SG2 210.7 THA
                                                                                                                            ARRIVAL DATE MAY 14 1966
                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 27 1965
                                                                    DISTANCE 413.912
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 27.518 GAL -6.71 ATL 84.31 HCA 203.71 SHA 126.77 ECC .19765 INC 5.6880 VI 30.282 RP 108.93 LAP -2.28 LOP 298.64 VP 37.281 GAP 8.06 ATP 95.21 TAL 209.51 TAP 53.22 RCA 101.71 APO 151.82 V2 34.790
    RC 145.874 GL 31.56 GP -17.31 TAL 127.49 TAP 152.34 ETS 321.95 TAE 128.06 ETE 194.49 TAC 62.95 ETC 151.80 CLP-158.08
   PLANETOCENTRIC CONIC
    C3 26.790 VHL 5.176 OLA 15.05 RAL 312.11 RAD 6568.1 VEL 12.172 PTH 2.18 VHP 5.842 OPA -33.95 RAP 330.12 ECC 1.4409
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                         184.17
                                                                                           93.78 24 32 3
62.68 17 0 45
95.05 2 0 41
                                                                                                                     2173.3
                                                                                                                                   -27.26
       90.00 23 45 50 2773.28
90.00 15 46 43 4441.91
                                                -28.08
                                                              79.88
                                                                                                                                                  178.86
                                                                                                                      3841.9
                                                                                                                                      4.04
                                                                           176.72
                                                 7.77
                                                             165.56
                                                                                                                      1884.6
                                                                                                                                     -28.49
                                                                                                                                                   49.86
                   1 19 16 2484.61
16 59 53 4205.81
                                                                           184.04
      100.00
                                               -29.50
                                                              58.52
                                                                                            61.38 18 9 59
                                                                                                                      3605.8
                                                                                                                                     5.13
                                                                                                                                                  160.90
                                                  9.02
                                                              167.53
                                                                           176.04
                  16 59 53
      100.00
                                                                                            98.50 3 22 38
57.84 18 57 24
                                                                                                                      1614.1
                                                                                                                                    -31.70
                                                                                                                                                   28.55
                  2 45 44 2214.07
17 49 54 4049.12
                                                                           183.52
                                               -33.23
                                                              37.45
      110.00
                                                                                                                                      7.93
                                                                                                                                                  147.29
                                                                                                                      3449.1
                                                 12.26
                                                             153.71
                                                                           174.11
      110.00
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1654.6 SR 187.8 55 549.2
CRT .8060 CRS -.9652 CST -.9317
                                                                 SGT 4055.2 SGR 209.7 SG3 187.4
RRT -.0479 RRF .2529 RTF .8780
SGB 4060.7 R23 -.2954 R13 -.6780
    TDE 1.3233 TRA-2.2240 TC3-2.6979 BAU
                                                    . 9663
    RDE .1678 RRA .0817 RC3 .0256 FAU .05498
FDE .9758 FRA -.3435 FC3-1.7766 BSP 12774
BDE 1.3339 BRA 2.2255 BC3 2.6980 FSP -616
                                                                                                                  LSA 1739.9 MSA 217.6 SSA
                                                                                                                                                       8.3
                                                                                                                   EL1 1661.6 EL2 110.7 ALF 5.25
                                                                  5G1 4055.3 SG2 209.4 THA 179.86
                                                                                                                             ARRIVAL DATE MAY 16 1966
                                                                     FLIGHT TIME 140.00
                                                                    DISTANCE 419.692
    RL 147.12 LAL .00 LOL 95.03 VL 27.452 GAL -6.37 AZL 84.64 HCA 206.87 SHA 126.33 ECC .19770 INC 5.3587 VI 30.282 RP 108.93 LAP -2.42 LOP 301.80 VP 37.230 GAP 8.24 AZP 94.78 TAL 207.79 TAP 54.66 RCA 101.35 APO 151.30 V2 34.787 RC 148.138 GL 30.55 GP -15.23 ZAL 126.54 ZAP 154.31 ETS 324.10 ZAE 128.59 ETE 192.87 ZAC 63.94 ETC 153.94 CLP-159.06
   PLANETOCENTRIC CONIC
                                                                                              2.17 VHP 5.875 OPA -31.27 RAP 331.61 ECC 1.4136
    C3 25.130 VHL 5.013 DLA 14.60 RAL 313.99 RAD 6568.0 VEL 12.104 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 1 24 2741.31
15 50 6 4442.22
1 30 35 2453.71
17 3 36 4205.05
2 56 21 2185.35
17 54 19 4046.18
                                                                                                                     2141.3
                                                                                                                                                    69.02
                                                                                                       0 47 5
                                                                                                                                     -26.94
                                                              77.55
                                                                           184.63
                                                                                            94.94
                                                -27.92
        90.00
                                                                                                                                                    178.87
                                                                                                     17 4 8
                                                                                                                       3842.2
                                                                                                                                       4.05
                                                                            177.58
                                                                                            62.69
                                                  7.78
                                                              185.58
        90.00
                                                                                                                                                    47.64
                                                                                                     2 11 28
                                                                                                                       1853.7
                                                                                                                                     -2A.12
                                                -29.30
                                                               56.24
                                                                            184.48
                                                                                            96.23
       100.00
                                                                                                                                                   160.86
                                                                                                     18 13 41
                                                                                                                       3605.1
                                                                                                                                      5.11
                                                              167.48
                                                                            176.93
                                                                                            61.37
                                                 9.00
       100.00
                                                                                            99.76 3 32 46
57.80 19 1 45
                                                                                                                                                    26.46
                                                               35.27
                                                                            183.88
                                                                                                                       1585.4
                                                                                                                                     -31.23
      110.00
                                               -32.92
                                                              153.55
                                                                            175.04
                                                                                                                       3446.2
                                                                                                                                       7.82
                                                                                                                                                   147.14
                                                12.16
      110.00
                  17 54 19
                                4046.18
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1645.1 SR 192.8 SS 536.4
CRT .8197 CRS -.9737 CST -.9268
                                                                  SGT 4158.2 SGR 214.5 SG3 187.4
RRT -.0946 RRF .1607 RTF .8764
    TOE 1.2749 TRA-2.1402 TC3-2.9550 BAU .9929
    RDE .1673 RRA .0690 RC3 .0529 FAU .05410
FDE .9190 FRA -.2807 FC3-1.8640 BSP 13245
                                                                                                                   LSA 1727.2 HSA 219.0 SSA 9.7
                                                                  SGB 4163.7 R23 -.2449 R13 -.8763
                                                                 SG1 4158.2 SG2 213.6 THA 179.72
                                                                                                                ELI 1652.7 ELZ 109.9 ALF 5.51
    BDE 1.2859 BRA 2.1413 BC3 2.9554 FSP -628
```

FLIGHT TIME 134.00

ELI 1761.8 EL2 98.5 ALF 6.83

```
FLIGHT TIME 142.00
                                                                                                                                                         ARRIVAL DATE MAY 18 1966
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 425.467
    RL 147.12 LAL .00 LOL 95.03 VL 27.386 GAL -6.03 A7L 84.91 MCA 210.03 SMA 125.90 ECC .19788 INC 5.0942 V1 30.282 RP 108.94 LAP -2.55 LOP 304.97 VP 37.180 GAP 8.41 A7P 94.41 TAL 206.05 TAP 56.08 RCA 100.99 APO 150.81 V2 34.786 RC 150.390 GL 29.76 GP -13.58 ZAL 125.30 ZAP 156.00 ETS 325.85 ZAE 128.97 ETE 191.54 ZAC 65.22 ETC 155.76 CLP-160.02
   PLANETOCENTRIC CONIC
                                                                                                                   2.15 VMP 5.926 DPA -28.99 RAP 333.25 ECC 1.3905
     C3 23.729 VHL 4.871 DLA 14.42 RAL 315.94 RAD 6568.0 VEL 12.046 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 10 48 2720.85 -27.79 76.07 185.42 95.67 0 56 9 2120.8 -26.71 67.57
                    0 10 48 2720.85
15 56 14 4434.51
1 39 51 2433.66
17 9 52 4196.93
3 5 20 2166.16
18 0 52 4037.20
                                                                                                               62.62 17 10 9
96.98 2 20 24
61.30 18 19 49
100.59 3 41 27
57.69 19 8 9
                                                                            185.14
                                                                                             178.65
                                                                                                                                                                      3.61
                                                                                                                                                                                    178.44
         en.nn
                                                             7.53
                                                                                                                                                  3834.5
                                                                                                                                                 1833.7
                                                                                                                                                                   -27.87
                                                                                                                                                                                      46.20
        100.00
                                                           -29.14
                                                                             54.78
                                                                                             185.25
                                                                                          178.01
                                                                                                                                                 3596.9
                                                                                                                                                                      4.83
                                                                                                                                                                                    160.41
        100.00
                                                            8.73
                                                                            167.03
                                                                                                               100.59
                                                                                                                                                                                     25.07
                                                                                           184.61
                                                                                                                                                 1566.2
                                                                                                                                                                   -30.89
        110.00
                                                           -32.69
                                                                             33.82
                                                                                            176.15
                                                                                                                                                 3437.2
                                                                                                                                                                      7.48
                                                                                                                                                                                    146.66
       110.00
                                                           11.83
                                                                            153.06
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 4203.0 SGR 228.7 SG3 182.8
RRT -.1223 RRF .1132 RTF .8659
                                                                                                                                            ST 1681.6 SR 202.9 SS 549.7
CRT .8456 CRS -.9841 CST -.9243
     TOE 1.2836 TRA-2.0163 TC3-3.1452 BAU .9981
    RDE .1715 RRA .0592 RC3 .0824 FAU .05099
FDE .9100 FRA -.1788 FC3-1.8603 BSP 12796
                                                                                                                                            LSA 1766.5 MSA 224.8 SSA 10.5
ELI 1690.3 EL2 107.7 ALF 5.85
                                                                               SGB 4209.3 R23 -.2211 R13 -.8658
                                                                               SG1 4203.1 SG2 227.0 THA 179.62
    BDE 1.2950 BRA 2.0172 BC3 3.1463 FSP -552
                                                                                     FLIGHT TIME 144.00
                                                                                                                                                          ARRIVAL DATE MAY 20 1966
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 431.229
    RL 147.12 LAL .00 LOL 95.03 VL 27.321 GAL -5.69 A7L 85.12 MCA 213.19 SMA 125.48 ECC .19820 INC 4.8757 VI 30.282 RP 108.94 LAP -2.67 LOP 308.13 VP 37.131 GAP 8.59 A7P 94.08 TAL 204.30 TAP 57.49 RCA 100.61 APO 150.34 VZ 34.785 RC 152.629 GL 29.14 GP -12.24 ZAL 123.84 ZAP 157.50 ETS 327.26 ZAE 129.24 ETE 190.44 ZAC 66.71 ETC 157.30 CLP-160.97
   PLANETOCENTRIC CONIC
    C3 22.324 VHL 4.746 DLA 14.45 RAL 317.96 RAD 6367.9 VEL 11.996 PTH 2.14 VHP 5.990 DPA -26.97 RAP 335.00 ECC 1.3707 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 18 37 2709.08 -27.71 75.22 186.48 96.09 1 3 46 2109.1 -26.57 66.73
                     0 10 37 2709.08
16 4 32 4420.88
1 47 41 2421.83
17 18 9 4105.36
3 13 13 2154.21
18 9 6 4023.76
                                                                                                              96.09 1 3 46
62.52 17 18 13
97.43 2 28 3
61.18 18 27 52
101.10 3 49 7
57.54 19 16 10
                                                                                           186.48
                                                             7.11
                                                                            184.36
                                                                                             179.90
                                                                                                                                                  3820.9
                                                                                                                                                                      3.37
                                                                                                                                                                                     177.68
         90.00
                                                                                            186.30
                                                                                                                                                  1821.8
                                                                                                                                                                   -27.71
                                                                                                                                                                                      45.36
        100.00
                                                           -29.04
                                                                             53.91
                                                                                          179.26
                                                            8.29
                                                                            166.27
                                                                                                                                                  3583.4
                                                                                                                                                                      4.38
                                                                                                                                                                                    159.66
        100.00
                                                                                           185.63
                                                                                                                                                  1554.2
                                                                                                                                                                   -30.67
                                                                                                                                                                                      24.20
        110.00
                                                           -32.54
                                                                             32.92
                                                                            152.32
                                                                                                                                                  3423.8
                                        4023.76
                                                                                                                                                                      6.98
                                                                                                                                                                                     145.95
        110.00
                                                           11.34
                                                                                             177.43
                       18 9 6
   DIFFERENTIAL CORRECTIONS
                                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 4315.7 SCR 238.8 SC3 182.3
RRT -.1329 RRF .0565 RTF .8680
SCB 4322.4 R23 -.1737 R13 -.8680
                                                                                                                                             ST 1686.1 SR 210.7 SS 537.8
     TOE 1.2587 TRA-1.9364 TC3-3.4120 BAU 1.0279
    ROE .1740 RRA .0459 RC3 .1034 FAU .05018
FOE .8586 FRA -.1335 FC3-1.9288 BSP 13486
                                                                                                                                             CRT .8623 CRS -.9894 CST -.9226
                                                                                                                                            LSA 1768.3 MSA 222.3 SSA 11.9
                                                                                                                                           EL1 1695.9 EL2 106.1 ALF 6.18
     BOE 1.2706 BRA 1.9370 BC3 3.4136 FSP -582
                                                                               SG1 4315.9 SG2 236.7 THA 179.58
                                                                                    FLIGHT TIME 146.00
                                                                                                                                                         ARRIVAL DATE MAY 22 1966
LAUNCH DATE DEC 27 1965
                                                                                    DISTANCE 436.983
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 27.257 GAL -5.33 AZL 85.51 MCA-216.35 SMA 125.06 ECC .19866 INC 4.6913 V1 30.282 RP 108.94 LAP -2.78 LOP 311.29 VP 37.084 GAP 8.77 AZP 93.78 TAL 202.54 TAP 58.89 RCA 100.22 APO 149.91 V2 34.784 RC 154.855 GL 28.62 GP -11.13 ZAL 122.17 ZAP 158.85 ETS 328.40 ZAE 129.45 ETE 189.52 ZAC 68.35 ETC 158.64 CLP-161.91
   PLANETOCENTRIC CONIC
     C3 21.470 VHL 4.634 DLA 14.64 RAL 320.07 RAD 6567.9 VEL 11.952 PTH
                                                                                                                  2.13 VMP 6.063 OPA -25.16 RAP 336.83 ECC 1.3533
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 25 14 2704.48
16 14 43 4402.30
1 54 27 2416.78
17 28 12 4165.23
3 20 17 2148.21
18 18 51 4006.56
                                                                                                              96.25 1 10 19
62.38 17 28 6
                                                                                                                                             2104.5
                                                                                                                                                                                     66.41
                                                           -27.67
                                                                            74.89
                                                                                           187.78
                                                                                                                                                                 -26.52
         90.00
                                                             6.52
                                                                           183.31
                                                                                           181.33
                                                                                                                                                 3802.3
                                                                                                                                                                    2.77
                                                                                                                                                                                    176.64
         90.00
                                                                                                                                                 1816.8
                                                                                                                                                                                     45.00
                                                           -28.99
                                                                             53.54
                                                                                            187.60
                                                                                                                                                                   -27.64
        100.00
                                                                                                              97.62 2 34 44
61.03 18 37 37
101.35 3 56 5
57.34 19 25 38
        100.00
                                                             7.69
                                                                           165.25
                                                                                         180.69
                                                                                                                                                 3565.2
                                                                                                                                                                    3.77
                                                                                                                                                                                    158.66
                                                                                                                                                                                    23.77
                                                          -32.46
                                                                             32.47
                                                                                           186.93
                                                                                                                                                 1548.2
                                                                                                                                                                  -30.56
        110.00
                                                                                                                                                 3406.6
        110.00
                      18 18 51
                                        4006.56
                                                           10.71
                                                                           151.39
                                                                                            178.67
                                                                                                                                                                     6.33
                                                                                                                                                                                   145.04
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               56T 4403.8 SGR 252.0 SG3 180.2
RRT -.1323 RRF .0246 RTF .8670
SG8 4413.0 R23 -.1409 R13 -.8670
                                                                                                                                            ST 1712.4 SR 220.6 SS 536.7
CRT .8828 CRS -.9939 CST -.9226
     TOE 1.2595 TRA-1.8373 TC3-3.6548 BAU 1.0497
    ROE .1781 RRA .0338 RC3 .1238 FAU .04857
FDE .8272 FRA -.0754 FC3-1.9585 BSP 13836
BDE 1.2720 BRA 1.8376 BC3 3.6569 FSP -580
                                                                                                                                            LSA 1794.5 MSA 220.6 SSA 13.1
                                                                                SG1 4405.9 SG2 249.8 THA 179.56
                                                                                                                                            EL1 1723.4 ELZ 103.0 ALF
LAUNCH DATE DEC 27 1965
                                                                                     FLIGHT TIME 148.00
                                                                                                                                                         ARRIVAL DATE MAY 24 1966
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 442.729
    RL 147.12 LAL .00 LOL 95.03 VL 27.194 GAL -4.96 AZL 85.47 MCA 219.51 SMA 124.66 ECC .19927 INC 4.5326 VI 30.282 RP 108.94 LAP -2.88 LOP 314.46 VP 37.038 GAP 8.95 AZP 93.50 TAL 200.76 TAP 60.27 RCA 99.82 APO 149.50 V2 34.785 RC 157.067 GL - 28.19 GP -10.21 ZAL 120.32 ZAP 160.09 ETS 329.30 ZAE 129.62 ETE 188.75 ZAC 70.12 ETC 159.81 CLP-162.81
   PLANETOCENTRIC CONIC
    C3 20.542 VHL 4.532 DLA 14.98 RAL 322.27 RAO 6567.8 VEL 11.913 PTH 2.12 VHP 6.143 DPA -23.49 RAP 338.72 ECC 1.3381
    C3 20.542 VML 4.532 DLA 14.98 RAL 322.27 RAD 6567.8 VEL 11.915 PM 2.12 VMP 6.143 DPA 22.349 RAP 338.72 ECC 13.381 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 26 36 4379.63 5.80 182.03 182.93 62.24 17 39 35 3779.6 2.04 175.37 100.00 2 0 24 2417.43 -29.00 53.59 189.14 97.59 2 40 42 1817.4 -27.64 45.05 100.00 17 39 49 4143.36 6.97 164.03 182.29 60.86 18 48 53 3543.4 3.03 157.46 110.00 3 26 46 2147.23 -32.45 32.40 188.47 101.39 4 2 33 1547.2 -30.54 23.70 110.00 18 29 57 3986.32 9.97 150.30 180.47 57.13 19 36 24 3386.3 5.57 143.97
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 4490.3 SGR 266.0 SG3 177.6

RRT -.1237 RRF .0062 RTF .8659

SGB 4498.1 R23 -.1146 R13 -.8658

SG1 4490.4 SG2 264.0 THA 179.58
                                                                                                                                          5T 1749.3 SR 231.2 55 539.0
CRT .9033 CRS -.9966 CST -.9241
     TOE 1.2725 TRA-1.7302 TC3-3.8923 BAU 1.0696
     ROE .1827 RRA .0220 RC3 .1421 FAU .04680
     FOE .8023 FRA -.0178 FC3-1.9725 85P 14125
                                                                                                                                            LSA 1832.1 MSA 217.9 55A 14.2
```

BOE 1.2855 BRA 1.7303 BC3 3.8949 FSP -572

```
FLIGHT TIME 150.00
                                                                                                                                ARRIVAL DATE MAY 26 1966
LAUNCH DATE DEC 27 1965
   MELIOCENTRIC CONIC
                                                                       DISTANCE 448.465
    RL 147.12 LAL .00 LOL 95.03 VL 27.132 GAL -4.58 AZL 85.61 MCA 222.67 SNA 124.26 ECC .20003 INC 4.3938 V1 30.282 RP 108.94 LAP -2.98 LOP 317.62 VP 36.993 GAP 9.13 AZP 93.23 TAL 198.96 TAP 61.63 RCA 99.41 APO 149.12 VZ 34.786
    RC 159.265 GL 27.81 GP -9.43 7AL 118.29 7AP 161.24 ETS 329.99 7AE 129.77 ETE 188.09 7AC 71.99 ETC 160.83 CLP-163.70
   PLANETOCENTRIC CONIC
    C3 19.724 VHL 4.441 DLA 15.44 RAL 324.58 RAD 6567.8 VEL 11.879 PTH
                                                                                                2.11 VHP 6.229 OPA -21.94 RAP 340.66 ECC 1.3246
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 35 57 2712.68 -27.73 75.48 191.09 95.96 1 21 9 2112.7 -26.62 66.99
                                                 -27.73
                                                               75.48
                                                                                          62.09 17 52 36
97.38 2 46 8
60.69 19 1 33
101.25 4 8 40
56.91 19 48 23
        90.00
                   16 40 2
                                 4353.51
                                                   4.97
                                                                             184.72
                                                                                                                         3753.5
                                                                                                                                          1.20
                                                                                                                                                      173.91
                                                               180.56
                  2 5 45 2423.07
17 52 55 4118.35
3 32 49 2150.62
       100.00
                                                 -29.05
                                                                             190.92
                                                                                                                         1823.1
                                                                                                                                         -27.72
                                                                 54.00
       100.00
                                                                             184.08
                                                                                                                         3518.3
                                                                                                                                          2.18
                                                                                                                                                      156.08
                                                   6.14
                                                               162.64
       110.00
                                                 -32.49
                                                                 32.65
                                                                             190.26
                                                                                                                         1550.6
                                                                                                                                        -30.60
                                                                                                                                                       23.95
       110.00
                   18 42 20
                                                   9.12
                                                               149.07
                                                                             182.26
                                                                                                                         3363.6
                                                                                                                                          4.70
                                                                                                                                                       142.77
                                 3963.56
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                 SGT 4572.0 SGR 280.2 SG3 174.9
RRT -.1096 RRF -.0031 RTF .8652
                                                                                                                      ST 1794.8 SR 242.1 55 543.1
CRT .9228 CRS -.9976 CST -.9268
    TDE 1.2943 TRA-1.6161 TC3-4.1269 BAU 1.0890
    FOE .1876 RRA .0103 RC3 .1580 FAU .04501
FDE .7810 FRA .0373 FC3-1.9756 BSP 14406
BOE 1.3078 BRA 1.6161 BC3 4.1299 FSP -564
                                                                                                                     LSA 1878.6 MSA 213.8 SSA 15.3
EL1 1808.7 EL2 92.6 ALF 7.11
                                                                  SGB 4580.6 R23 -. 0926 R13 -. 8652
                                                                  SG1 4572.1 SG2 278.5 THA 179.61
LAUNCH DATE DEC 27 1965
                                                                       FLIGHT TIME 152.00
                                                                                                                                ARRIVAL DATE MAY 28 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 454.192
    RL 147.12 LAL .00 LOL 95.03 VL 27.070 GAL -4.20 AZL 85.73 HCA 225.83 SMA 123.88 ECC .20095 INC 4.2707 VI 30.282 RP 108.93 LAP -3.06 LOP 320.78 VP 36.950 GAP 9.32 AZP 92.98 TAL 197.16 TAP 62.99 RCA 98.98 APO 148.77 V2 34.788 RC 161.449 GL 27.46 GP -8.76 ZAL 116.10 ZAP 162.31 ETS 330.51 ZAE 129.90 ETE 187.54 ZAC 73.93 ETC 161.74 CLP-164.57
   PLANETOCENTRIC CONIC
    C3 19.006 VHL 4.360 DLA 16.00 RAL 327.01 RAD 6567.8 VEL 11.849 PTH 2.10 VHP 6.321 DPA -20.47 RAP 342.64 ECC 1.3128 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    PROPERTY OF THE L-1 TIME 90.00 0 40 22 2724.23 90.00 16 54 57 4324.40
                                                                                                                                                       67.81
                                                 -27.81
                                                                76.31
                                                                             193.09
                                                                                             95.55
                                                                                                         1 25 47
                                                                                                                         2124.2
                                                                                                                                        -26.75
                                                    4.04
                                                               178.93
                                                                             186.70
                                                                                              61.95 18
                                                                                                              7 2
                                                                                                                          3724.4
                                                                                                                                           .26
                                                                                                                                                       172.29
                                                                                           97.00 2 51 10
60.52 19 15 35
100.94 4 14 34
56.70 20 1 33
                 2 10 37 2433.22
18 7 24 4090.65
3 38 36 2157.92
18 55 54 3938.71
                                                 -29.13
                                                                 54.74
                                                                             192.92
                                                                                                                          1833.2
                                                                                                                                        -27.86
                                                                                                                                                        46.17
                                                   5.21
                                                               161.10
                                                                             186.06
                                                                                                                          3490.6
                                                                                                                                          1.25
                                                                                                                                                      154.56
                                                                                                                         3338.7
                                                 -32.59
                                                                 33.20
                                                                             192.29
                                                                                                                                        -30.74
                                                                                                                                                        24.47
                                                                                                                                          3.76
                                                  8.20
                                                               147.75
                                                                             184.23
                                                                                                                                                       141.47
   DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                 SGT 4646.2 SGR 294.3 SG3 171.9
RRT -.0911 RRF -.0034 RTF .8641
SGB 4655.5 R23 -.0759 R13 -.8641
                                                                                                                      ST 1851.5 SR 253.3 SS 550.2
CRT .9410 CRS -.9969 CST -.9305
    TDE 1.3268 TRA-1.4914 TC3-4.3504 BAU 1.1063
    ROE .1927 RRA -.0008 RC3 .1719 FAU .04310
                                                                                                                   LSA 1936.8 MSA 208.7 SSA 16.4
EL1 1866.8 EL2 85.0 ALF 7.35
    FOE .7650 FRA .0931 FC3-1.9631 BSP 14621
    BDE 1.3408 BRA 1.4914 BC3 4.3538 FSP -551
                                                                   SG1 4646.3 SG2 293.1 THA 179.67
                                                                      FLIGHT TIME 154.00
                                                                                                                               ARRIVAL DATE MAY 30 1966
LAUNCH DATE DEC 27 1965
                                                                      DISTANCE 459.908
    RL 147.12 LAL .00 LOL 95.03 VL 27.010 GAL -3.80 AZL 85.84 HCA 228.99 SMA 123.50 ECC .20205 INC 4.1601 VI 30.282 RP 108.92 LAP -3.14 LOP 323.95 VP 36.908 GAP 9.51 AZP 92.73 TAL 195.35 TAP 64.34 RCA 98.54 APO 148.45 VZ 34.791 RC 163.619 GL 27.13 GP -8.18 ZAL 113.74 ZAP 163.33 ETS 330.85 ZAE 130.02 ETE 187.06 ZAC 75.94 ETC 162.56 CLP-165.42
   PLANETOCENTRIC CONIC
    C3 18.383 VHL 4.288 DLA 16.65 RAL 329.55 RAD 6567.7 VEL 11.822 PTH 2.09 VMP 6.419 DPA -19.06 RAP 344.66 ECC 1.3025
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           94.97 1 30 1
61.63 18 22 51
96.46 2 55 55
60.38 19 30 54
100.47 4 20 21
56.49 20 15 50
                                                                           195.31
                 0 44 21 2740.23
17 11 18 4292.75
                                                 -27.91
                                                                77.47
                                                                                                                         2140.2
                                                                                                                                      -26.93
       90.00
        90.00
                                                   3.03
                                                               177.16
                                                                             188.90
                                                                                                                         3692.7
                                                                                                                                                      170.53
                                                                                                                         1847.5
      100.00
                    2 15 7
                                2447.51
                                                 -29.25
                                                                55.79
                                                                             195.16
                                                                                                                                        -28.05
                                                                                                                                                       47.19
                                                                           188.25
                                                               159.45
      100.00
                 18 23 13 4060.70
                                                   4.21
                                                                                                                         3460.7
                                                                                                                                          .23
                                                                                                                                                      152.92
                                                                           194.56
                                                 -32.73
                                                                34.02
                                                                                                                         1566.8
                                                                                                                                       -30.94
                                                                                                                                                       25.26
      110.00
                    3 44 12 2166.81
                  19 10 38
                                                               146.33
                                                                                                                       3312.2
      110.00
                                 3912.17
                                                 7.20
                                                                             185.40
                                                                                                                                          2.75
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4722.5 SGR 307.9 SG3 169.0
RRT -.0706 RRF -.0011 RTF .8644
SGB 4732.6 R23 -.0603 R13 -.8644
    TOE 1.3637 TRA-1.3619 TC3-4.5724 BAU 1.1246
                                                                                                                     ST 1913.0 SR 264.4 SS 556.6
    ROE .1978 RRA -.0116 RC3 .1830 FAU .D4133
FDE .7487 FRA .1440 FC3-1.9464 BSP 14890
                                                                                                                     CRT .9567 CRS -.9946 CST -.9349
                                                                                                                    LSA 1999.6 MSA 202.2 SSA 17.5
EL1 1929.7 EL2 76.3 ALF 7.55
    BOE 1.3780 BRA 1.3619 BC3 4.5760 FSP
                                                                   SG1 4722.6 SG2 307.1 THA 179.74
LAUNCH DATE DEC 27 1965
                                                                       FLIGHT TIME 156.00
                                                                                                                                ARRIVAL DATE JUN 1 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 465.614
   RL 147.12 LAL .00 LOL 95.03 VL 26.950 GAL -3.39 AZL 85.94 MCA 232.15 SMA 123.13 ECC .20333 INC 4.0596 V1 30.282 RP 108.91 LAP -3.20 LOP 327.12 VP 36.867 GAP 9.70 AZP 92.49 TAL 193.52 TAP 65.67 RCA 98.09 APO 148.16 V2 34.794
    RC 165.775 GL 26.79 GP -7.68 ZAL 111.24 ZAP 164.29 ETS 331.03 ZAE 130.14 ETE 186.65 ZAC 78.01 ETC 163.28 CLP-166.25
  PLANETOCENTRIC CONIC
    C3 17.853 VHL 4.225 DLA 17.37 RAL 332.23 RAD 6567.7 VEL 11.800 PTH 2.09 VHP 6.522 DPA -17.70 RAP 346.70 ECC 1.2938
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    0 47 58 2760.43
                                                 -28.02
                                                               78.94
                                                                           197.77
                                                                                              94.25
                                                                                                         1 33 58
                                                                                                                         2160.4
                                                                                                                                        -27.14
                                                                                                                                                       70.39
                  17 29 3
                                 4258.89
                                                   1.94
                                                               175.27
                                                                             191.31
                                                                                              61.74 18 40 2
95.77 3 0 27
60.26 19 47 29
                                                                                              61.74
                                                                                                        18 40 2
                                                                                                                         3658.9
                                                                                                                                         -1.85
                                                                                                                                                       168.64
       90.00
                    2 19 21 2465.69
                                                                             197.63
                                                                                                                         1865.7
                                                                                                                                        -28.27
                                                                                                                                                       48.50
      100.00
                                                 -29.38
                                                                57.13
                  18 40 20 4028.86
                                                   3.13
                                                                             190.65
                                                                                                                         3428.9
                                                                                                                                          -.85
                                                                                                                                                      151.17
      100.00
                                                               157.69
                                                                                              99.86 4 26 5
56.31 20 31 13
                                                 -32.90
      110.00
                   3 49 42
                                2183.02
                                                                35.09
                                                                             197.07
                                                                                                                         1583.0
                                                                                                                                        -31.19
                                                                                                                                                       26.29
      110.00
                  19 26 29
                                 3884.30
                                                  6.15
                                                               144.86
                                                                             186.78
                                                                                                                         3284.3
                                                                                                                                          1.68
                                                                                                                                                      138.62
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                 SGT 4796.5 SGR 321.0 SG3 166.2

RRT -.0485 RRF .0048 RTF .8652
                                                                                                                 3T 1981.7 SR 275.6 SS 563.6
CRT .9699 CRS -.9910 CST -.9397
L5A 2069.4 MSA 194.8 SSA 18.6
    TOE 1.4070 TRA-1.2243 TC3-4.7836 BAU 1.1427
   ROE .2031 RRA -.0220 RC3 .1916 FAU .03959
FOE .7342 FRA .1931 FC3-1.9198 BSP 15165
BOE 1.4215 BRA 1.2245 BC3 4.7875 FSP -536
                                                                  SGB 4807.3 R23 -.0471 R13 -.8651
                                                               SG1 4796.6 SG2 320.6 THA 179.81
                                                                                                                   ELI 1999.6 EL2 66.5 ALF 7.69
```

ARRIVAL DATE JUN 3 1966 FLIGHT TIME 158.00 LAUNCH DATE DEC 27 1965 DISTANCE 471.308 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOL 95.03 VL 26.891 GAL -2.97 A7L 86.03 HCA 235.31 SMA 122.76 ECC .20480 INC 3.9674 V1 30.282 RP 108.90 LAP -3.26 LOP 330.28 VP 36.828 GAP 9.90 A7P 92.26 TAL 191.68 TAP 67.00 RCA 97.62 APO 147.91 V2 34.798 RC 167.915 GL 26.44 GP -7.24 7AL 108.58 7AP 165.21 ETS 331.06 7AE 130.26 ETE 186.30 7AC 80.13 ETC 163.94 CLP-167.07 PLANETOCENTRIC CONIC C3 17.415 VML 4.173 DLA 18.14 RAL 335.04 RAD 6567.7 VEL 11.781 PTH 2.08 VMP 6.630 DPA -16.39 RAP 348.76 ECC 1.2866 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 51 17 2784.62 17 48 9 4223.17 2 23 24 2487.54 18 58 43 3995.48 3 55 12 2200.31 19 43 24 3855.47 93.37 2184.6 -27.37 1 37 41 72.12 200.46 80.70 90.00 -28.13 18 58 32 3623.2 -3.00 166.64 193.96 61.69 173.27 .79 90.00 50.07 1887.5 -28.52 200.35 94.93 3 4 52 58.73 -29.52 60.17 20 5 18 99.10 4 31 53 56.15 20 47 39 3395.5 -1.98 149.34 155.86 193.28 2.00 1600.3 -31.48 27.55 199.83 -33.09 36.41 191.38 3255.5 .58 137.12 5.06 143.34 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2057.2 SR 286.8 SS 571.1 CRT .9805 CRS -.9863 CST -.9447 SGT 4866.4 SGR 333.6 SG3 163.2 RRT -.0253 RRF .0141 RTF .8663 TOE 1.4564 TRA-1.0777 TC3-4.9775 BAU 1.1598 RDE .2086 RRA -.0316 RC3 .1975 FAU .03784 LSA 2146.0 MSA 186.9 55A 19.6 SG8 4877.8 R23 -. 0362 R13 -. 8663 FOE .7213 FRA .2405 FC3-1.8813 BSP 15428 SG1 4866.4 SG2 333.5 THA 179.90 EL1 2076.4 EL2 55.8 ALF 7.79 BDE 1.4713 BRA 1.0781 BC3 4.9815 FSP -529 FLIGHT TIME 160.00 ARRIVAL DATE JUN 5 1966 LAUNCH DATE DEC 27 1965 DISTANCE 476.990 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOL 95.03 VL 26.832 GAL -2.54 AZL 86.12 HCA 238.48 SMA 122.41 ECC .20647 INC 3.8819 VI 30.282 RP 108.89 LAP -3.31 LOP 333.45 VP 36.790 GAP 10.11 AZP 92.03 TAL 189.84 TAP 68.32 RCA 97.14 APO 147.69 V2 34.803 RC 170.040 GL 26.05 GP -6.85 ZAL 105.79 ZAP 166.09 ETS 330.94 ZAE 130.37 ETE 185.99 ZAC 82.28 ETC 164.52 CLP-167.87 PLANETOCENTRIC CONIC C3 17.072 VHL 4.132 DLA 18.97 RAL 337.99 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 6.745 DPA -15.10 RAP 350.84 ECC 1.2810 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.60 2212.7 0 54 21 2812.65 18 8 36 4185.93 203.40 92.35 1 41 14 74.14 -28.23 82.75 90.00 164.56 19 18 22 3585.9 -4.20 171.20 196.85 61.69 -.42 90.00 2 27 19 2512.87 19 18 19 3960.95 4 0 46 2220.50 20 1 21 3826.08 51.91 -29.65 60.61 203.31 93.96 3 9 12 1912.9 -28.79 100.00 93.96 3 9 12 60.12 20 24 20 98.22 4 37 46 56.02 21 5 7 147.44 .83 153.96 196.16 3360.9 -3.15 100.00 202.85 1620.5 -31.81 29.04 -33.30 37.95 110.00 141.80 3226.1 -.54 135.59 3.94 194.22 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2143.6 SR 298.1 SS 581.1 CRT .9887 CRS -.9805 CST -.9499 SGT 4927.9 SGR 345.8 SG3 160.0 RRT -.0003 RRF .0285 RTF .8669 TOE 1.5153 TRA -.9183 TC3-5.1420 BAU 1.1745 ROE .2145 RRA -.0405 RC3 .2009 FAU .03599 FOE .7124 FRA .2895 FC3-1.8253 BSP 15587 LSA 2233.6 MSA 179.0 SSA 20.6 ELI 2163.7 EL2 44.4 ALF 7.83 SGB 4940.0 R23 -.0288 R13 -.8669 SG1 4927.9 SG2 345.8 THA 180.00 BOE 1.5304 BRA .9192 BC3 5.1459 FSP -516 ARRIVAL DATE JUN 7 1956 FLIGHT TIME 162.00 LAUNCH DATE DEC 27 1965 DISTANCE 482.658 RL 147.12 LAL .00 LOL 95.03 VL 26.775 GAL -2.09 AZL 86.20 HCA 241.64 SMA 122.06 ECC .20836 INC 3.8020 V1 30.282 RP 108.87 LAP -3.35 LOP 336.62 VP 36.753 GAP 10.32 AZP 91.81 TAL 187.99 TAP 69.63 RCA 96.63 APO 147.50 V2 34.808 RC 172.148 GL 25.63 GP -6.50 ZAL 102.85 ZAP 166.94 ETS 330.65 ZAE 130.49 ETE 185.72 ZAC 84.47 ETC 165.05 CLP-168.65 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 16.826 VML 4.102 DLA 19.82 RAL 341.07 RAD 6567.7 VEL 11.756 PTH 2.08 VMP 6.865 OPA -13.84 RAP 352.93 ECC 1.2769 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 44 39 2244.3 -27.83 91.19 0 57 15 2844.35 85.06 206.57 -28.29 90.00 92.85 3 13 32 60.11 20 44 30 97.20 4 43 51 55.92 21 23 33 3547.6 -5.42 162.40 -1.65 169.06 200.00 18 30 19 4147.56 90.00 -29.06 53.99 1941.5 206.51 -29.77 62.72 2 31 10 2541.46 100.00 3325.7 -4.34 145.50 152.03 199.28 19 39 4 -.36 100.00 3925.68 1643.3 -32.15 30.73 4 6 28 2243.34 20 20 16 3796.56 39.70 206.13 -33.51 110.00 3196.6 -1.67 134.05 140.25 197.29 20 20 16 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 4992.0 SGR 357.2 SG3 157.1 RRT .0241 RRF .0415 RTF .8691 SGB 5004.7 R23 .0204 R13 .8691 SGI 4992.0 SG2 357.0 THA .10 ST 2228.8 SR 309.2 SS 587.9 TDE 1.5747 TRA -.7531 TC3-5.2896 BAU 1.1907 CRT .9939 CRS -.9739 CST -.9547 ROE .2208 RRA -.0486 RC3 .2011 FAU .03434 FDE .7008 FRA .3344 FC3-1.7668 BSP 15837 BDE 1.5902 BRA .7546 BC3 5.2934 FSP -509 LSA 2319.3 MSA 170.9 SSA 21.6 EL1 2249.9 EL2 33.7 ALF 7.85 ARRIVAL DATE JUN 9 1966 FLIGHT TIME 164.00 LAUNCH DATE DEC 27 1965 DISTANCE 488.312 HEL TOCENTRIC CONTC RL 147.12 LAL .00 LOL 95.03 VL 26.718 GAL -1.63 AZL 86.27 HCA 244.81 SMA 121.73 ECC .21048 INC 3.7268 VI 30.282 RP 108.85 LAP -3.37 LOP 339.79 VP 36.718 GAP 10.54 AZP 91.59 TAL 186.13 TAP 70.94 RCA 96.10 APO 147.35 VZ 34.814 RC 174.239 GL 25.15 GP -6.20 ZAL 99.81 ZAP 167.76 ETS 330.20 ZAE 130.61 ETE 185.49 ZAC 86.69 ETC 165.53 CLP-169.42 PLANETOCENTRIC CONIC C3 16.683 VHL 4.084 DLA 20.70 RAL 344.29 RAD 6567.7 VEL 11.750 PTH 2.07 VHP 6.993 OPA -12.60 RAP 355.04 ECC 1.2746 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 0 0 2879.55 -28.32 87.64 209.98 89.90 1 47.59 2279.6 -28.03 78.99 -6.66 20 1 44 3508.4 160.19 203.40 61.62 -2.91 166.87 18 53 16 4108.42 90.00 3 17 55 1973.1 -29.31 56.31 91.62 209.96 -29.85 65.07 100.00 2 35 2 2573.11 60.15 21 5 45 -5.53 145.53 20 0 55 3890.10 4 12 21 2268.61 20 40 4 3767.37 3290.1 150.08 -1.57 202.65 100.00 4 50 10 -32.50 32.62 96.06 1668.6 209.65 -33.71 41.64 110.00 55.85 21 42 52 3167.4 -2.79 132.52 138.73 1.70 200.61 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5050.0 SGR 367.9 SG3 154.0 RRT .0488 RRF .0575 RTF .8709 SGB 5063.4 R23 .0147 R13 .8709 ST 2317.9 SR 320.5 SS 595.1 TDE 1.6392 TRA -.5769 TC3-5.4011 BAU 1.2054 .9968 CRS -.9667 CST -.9592 ROE .2277 RRA -. 0557 RC3 .1987 FAU .03262 CRT CRT .9968 CR3 .500. LSA 2408.8 MSA 163.6 SSA 22.4 EL1 2339.8 EL2 25.4 ALF 7.85 FOE .6909 FRA .3795 FC3-1.6927 BSP 16046 BDE 1.6550 BRA .5796 BC3 5.4048 FSP -499 SG1 5050.0 SG2 367.5 THA .20

JPL TM 33-99

```
ARRIVAL DATE JUN 11 1966
                                                                   FLIGHT TIME 166.00
LAUNCH DATE DEC 27 1965
                                                                  DISTANCE 493.950
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 26.663 GAL -1.15 A7L 86.34 HCA 247.97 SMA 121.39 ECC .21284 INC 3.6553 V1 30.282 RP 108.83 LAP -3.39 LOP 342.97 VP 36.684 GAP 10.78 A7P 91.37 TAL 184.27 TAP 72.24 RCA 95.56 APO 147.23 V2 34.821 RC 176.312 GL 24.62 GP -5.93 7AL 96.65 7AP 168.55 ETS 329.56 7AE 130.74 ETE 185.29 7AC 88.94 ETC 165.96 CLP-170.18
   PLANETOCENTRIC CONIC
   C3 16.648 VML 4.080 DLA 21.57 RAL 347.65 RAD 6567.7 VEL 11.749 PTH 2.07 VHP 7.127 DPA -11.37 RAP 357.16 ECC 1.2740
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   1 51 17
                                                                                       88.49
                                                                                                                2318.0
                                                                        213.62
                                                            90.45
                   1 2 39 2918.05
                                              -28.28
                                                                                                                                               157.96
                                                                                                   20 25 9
                                                                                                                   3469.0
                                                                                                                                  -7.90
                                                                         207.06
                                                                                         61.97
                  19 17 20 4068.98
2 38 57 2607.54
                                               -4.1A
                                                            164.66
                                                                                                                                 -29.53
                                                                                                                                                58.84
                                                                                                   3 22 24
                                                                                                                   2007.5
                                                                                         90.27
                                                                         213.64
      100.00
                                              -29.89
                                                             67.63
                                                                                         60.22 21 27 58
94.82 4 56 48
55.82 22 2 57
                                                                                                                                              141.57
                                                                                                                   3254.7
                                                                                                                                 -6.71
                20 23 43 3854.72
4 18 32 2296.00
21 0 38 3739.03
                                                                         206.28
                                               -2.77
                                                            148.13
      100.00
                                                                                                                                                34.68
                                                                                                                   1696.0
                                                                                                                                -32.84
                                                                         213.44
                                                            43.76
      110.00
                                             -33.88
                                                                                                                                               131.04
                                                .62
                                                                         204.16
                                                                                                                   3139.0
                                                                                                                                 -3.87
                                                           137.25
      110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                ST 2405.9 SR 331.8 SS 600.5
CRT .9975 CRS -.9589 CST -.9633
                                                               SGT 5107.2 SGR 377.9 SG3 151.1
RRT .0738 RRF .0736 RTF .8739
   TOE 1.7060 TRA -.3913 TC3-5.4797 BAU 1.2204
   RDE .2354 RRA -.0618 RC3 .1931 FAU .03105
                                                                                                                LSA 2496.8 HSA 157.0 SSA 23.1
                                                               SGB 5121.2 R23 .0088 R13 .8739
   FOE .6804 FRA .4229 FC3-1.6145 BSP 16275
BDE 1.7222 BRA .3961 BC3 5.4831 FSP -492
                                                                                                                EL1 2428.6 EL2 23.3 ALF 7.83
                                                               SG1 5107.3 SG2 376.8 THA .31
                                                                                                                          ARRIVAL DATE JUN 13 1966
                                                                   FLIGHT TIME 168.00
LAUNCH DATE DEC 27 1965
                                                                  DISTANCE 499.570
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 26.608 GAL -.66 AZL 86.41 HCA 251.14 SHA 121.07 ECC .21547 INC 3.5869 VI 30.282 RP 108.81 LAP -3.39 LOP 346.14 VP 36.651 GAP 11.02 AZP 91.16 TAL 182.40 TAP 73.54 RCA 94.98 APO 147.16 V2 34.828 RC 178.366 GL 24.01 GP -5.68 TAL 93.40 ZAP 169.31 ETS 328.71 ZAE 130.86 ETE 185.12 ZAC 91.21 ETC 166.35 CLP-170.93
  PLANETOCENTRIC CONIC
   C3 16.730 VHL 4.090 DLA 22.44 RAL 351.12 RAD 6567.7 VEL 11.752 PTH 2.07 VHP 7.269 DPA -10.16 RAP 359.29 ECC 1.2753 ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  2359.6
                  1 5 15 2959.59
19 42 26 4029.69
2 43 0 2644.44
20 47 22 3820.08
                                                                                                    1 54 35
                                                                                                                                 -28.29
                                                                                                                                                84.83
                                              -28.17
                                                             93.49
                                                                         217.49
                                                                                        86.97
       90.00
                                                                                                                                                155.71
                                                                                                   20 49 35
                                                                                                                    3429.7
                                                                                                                                  -9.12
                                                                          210.98
                                                                                          62.17
                                                            162.45
                                               -5.43
       90.00
                                                                          217.56
                                                                                          88.83
                                                                                                   3 27 4
                                                                                                                    2044.4
                                                                                                                                  -29.71
                                                                                                                                                 61.57
                                              -29.87
                                                             70.37
      100.00
                                                                          210.16
                                                                                          60.34 21 51 2
                                                                                                                    3220.1
                                                                                                                                  -7.86
                                                                                                                                                139.63
                                                            146.23
                                               -3.94
      100.00
                 4 25 2 2325.20
21 21 49 3712.09
                                                                                                   5 3 48
                                                                                                                    1725.2
                                                                                                                                  -33.17
                                                                                                                                                 36.89
                                                                         217.46
                                                                                          93.49
      110.00
                                              -34.03
                                                             46.03
                                                                                          55.82 22 23 41
                                                                                                                    3112.1
                                                                                                                                  -4.89
                                                                                                                                                129.63
                                                                          207.96
                                                            135.84
      110.00
                                                -.41
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 2495.9 SR 343.1 55 606.1
CRT .9963 CRS -.9509 CST -.9671
                                                                SCT 5157.1 SGR 387.2 SG3 148.0
    TOE 1.7781 TRA -.1927 TC3-5.5086 BAU 1.2328
                                                                RRT .0995 RRF .0929 RTF .8767
5GB 5171.6 R23 .0052 R13 .8767
   RDE .2440 RRA -.0668 RC3 .1851 FAU .02939
FDE .6716 FRA .4667 FC3-1.5210 BSP 16417
BDE 1.7948 BRA .2039 BC3 5.5117 FSP -482
                                                                                                                LSA 2586.7 MSA 151.7 SSA 23.6
EL1 2519.2 EL2 29.2 ALF 7.80
                                                                SG1 5157.3 SG2 385.3 THA .43
                                                                                                                         ARRIVAL DATE JUN 15 1966
                                                                   FLIGHT TIME 170.00
LAUNCH DATE DEC 27 1965
                                                                  DISTANCE 505.170
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 16.939 VHL 4.116 DLA 23.27 RAL 354.70 RAD 6567.7 VEL 11.761 PTH 2.08 VHP 7.419 DPA -8.96 RAP
                                                                                                                                     1.43 ECC 1.2788
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 2403.8
                                                                                                                                                86.06
                 1 7 53 3003.85
20 8 22 3991.14
2 47 16 2683.38
21 11 39 3786.84
                                                                                          85.37
                                                                                                    1 57 56
                                                                                                                                -28.32
                                                             96.71
                                                                         221.55
                                               -27.97
        90.00
                                                                                                                                               153.50
                                                                                          62.41
                                                                                                                                  -10.30
                                                                          215.14
                                                                                                  21 14 53
                                                                                                                    3391.1
                                                             160.28
        90.00
                                               -6.65
                                                                                                                                  -29.84
                                                                                                                                                 64.46
                                                                                          87.31
                                                                                                   3 31 59
                                                                                                                    2083.4
                                                                          221.68
                                                              73.27
       100.00
                                              -29.78
                                                                                                                                               137.77
                                                                                                                                  -8.95
                                                                                          60.50 22 14 46
                                                                                                                    3186.8
                                                             144.39
                                                                          214.27
                                               -5.06
       100.00
                                                                                          92.08 5 11 14
55.84 22 44 54
                                                                                                                                                39.24
                                                                                                                                 -33.46
                                                                                                                    1755.8
                                                                          221.71
                  4 31 58 2355.81
21 43 26 3687.18
                                             -34.13
                                                              48.41
       110.00
                                                                                                                                                128.32
                                                                                                                                   -5.84
                                                                                                                    3087.2
                                                            134.55
                                                                          211.98
                                               -1.36
       110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                               HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 5213.0 SGR 395.2 SG3 144.9

RRT .1233 RRF .1063 RTF .8831

SGB 5228.0 R23 -.0032 R13 .8831

SGI 5213.2 SG2 392.2 THA .54
                                                                                                                ST 2566.8 SR 354.0 SS 603.0
CRT .9936 CRS -.9427 CST -.9703
    TOE 1.8412 TRA .0064 TC3-5.5146 BAU 1.2495
    ROE .2532 RRA -.0709 RC3 .1736 FAU .02816
                                                                                                                LSA 2656.2 MSA 146.7 SSA 23.8
ELI 2590.8 EL2 39.5 ALF 7.81
    FOE .6551 FRA .5021 FC3-1.4394 BSP 16835
                                                                                                  .54
    BOE 1.8586 BRA .0712 BC3 5.5173 FSP -490
                                                                                                                           ARRIVAL DATE JUN 17 1966
                                                                    FLIGHT TIME 172.00
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                   DISTANCE 510.748
    RL 147.12 LAL .00 LOL 95.03 VL 26.500 GAL .38 A7L 86.54 MCA 257.48 SMA 120.44 ECC .22160 INC 3.4572 V1 30.282 RP 108.76 LAP -3.37 LOP 352.49 VP 36.588 GAP 11.55 A7P 90.75 TAL 178.66 TAP 76.14 RCA 93.75 APO 147.13 V2 34.845 RC 182.414 GL 22.60 GP -5.26 TAL 86.69 ZAP 170.77 ETS 326.28 ZAE 131.11 ETE 184.83 ZAC 95.81 ETC 167.00 CLP-172.41
   PLANETOCENTRIC CONIC
    C3 17.286 VHL 4.158 DLA 24.06 RAL 358.37 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 7.579 DPA -7.78 RAP
                                                                                                                                     3.58 ECC 1.2845
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   2450.5
                                                                                                                                 -28.25
                                                -27.66
                                                                                                     2 1 24
                    1 10 34
                                                             100.09
                                                                         225.80
                                                                                        83.70
                                3050.50
        90.00
                                                                                                  21 40 52
                                                                                                                     3353.8
                                                                                                                                   -11.42
                                                                          219.54
                                                                                           62.70
                                3953.84
                                                 -7.82
                                                             158.16
        90.00
                  20 34 58
                                                                                          85.73 3 37 14
60.68 22 38 59
                                                                                                                                  -29.89
                                                                                                                                                  67.48
                                                                                                                     2124.0
                                                                          226.00
                    2 51 50
                                2723.96
                                                -29.61
                                                              76.27
       100.00
                                                                                                                                  -9.96
                                                                                                                     3155.6
                                                                          218.61
                  21 36 23
                                3755.60
                                                 -6.10
                                                             142.66
       100.00
                                                                                          90.62 5 19 11
55.88 23 6 24
                                                                                                                                                 41.67
                                                                                                                     1787.5
                    4 39 24
                                2387.46
                                               -34.18
                                                              50.89
                                                                          226.17
       110.00
                                                                                                                                  -6.68
                                                                                                                     3064.9
                  22 5 19
                                3664.88
                                                -2.21
                                                             133.38
                                                                          216.20
       110.00
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                              HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 5245.2 SGR 4D3.7 SG3 141.6

RRT .1487 RRF .1346 RTF .8816

SGB 5260.7 R23 .0028 R13 .8816

SGI 5245.6 SG2 399.2 THA .66
                                                                                                                 ST 2650.5 SR 365.8 55 611.7
     TOE 1.9192 TRA .2351 TC3-5.4306 BAU 1.2555
                                                                                                                 CRT .9896 CRS -.9341 CST -.9732
     ROE .2643 RRA -.0729 RC3 .1623 FAU .02608
                                                                                                               LSA 2740.6 MSA 146.2 SSA 23.8
EL1 2675.1 EL2 52.2 ALF 7.78
    FOE .6525 FRA .5536 FC3-1.3062 BSP 16766
BDE 1.9373 BRA .2462 BC3 5.4330 FSP -462
```

```
FLIGHT TIME 174.00
                                                                                                                                                 ARRIVAL DATE JUN 19 1966
LAUNCH DATE DEC 27 1965
                                                                                DISTANCE 516.302
   MELIOCENTRIC CONIC
     RL 147.12 LAL .00 LOL 95.03 VL 26.448 GAL .93 A7L 86.61 MCA 260.65 SMA 120.14 ECC .22514 INC 3.3948 V1 30.282 RP 108.73 LAP -3.35 LOP 355.67 VP 36.559 GAP 11.83 A7P 90.55 TAL 176.79 TAP 77.44 RCA 93.09 APO 147.19 VZ 34.854 RC 184.407 GL 21.80 GP -5.08 ZAL 83.28 ZAP 171.47 ETS 324.61 ZAE 131.24 ETE 184.72 ZAC 98.13 ETC 167.27 CLP-173.14
   PLANETOCENTRIC CONIC
     C3 17.784 VHL 4.217 DLA 24.79 RAL 2.11 RAD 6567.7 VEL 11.797 PTH 2.09 VHP 7.749 DPA -6.61 RAP 5.74 ECC 1.2927 LNCH AZHTH LNCH TIME L-I TIME INJLAT INJLONG INJ. RT ASC INJ. AZHTH INJ TIME PO CST TIM INJ. 2 LAT INJ. 2 LONG 90.00 1 13 24 3098.99 -27.25 103.58 230.20 82.00 2 5 3 2499.0 -28.08 95.01
                    1 13 24 3098.99
21 1 59 3918.52
2 56 49 2765.55
22 1 15 3727.20
4 47 23 2419.63
                                                                                                                     22 7 17
                                                                                        224.15
                                                                                                                                                          -12.47
         90.00
                                                        -8.92
                                                                        156.15
                                                                                                           63.01
                                                                                                                                          3318.5
                                                                                                                                                                           149.27
                                                                                        230.49
                                                                                                                      3 42 55
                                                                                                                                          2165.6
                                                                                                                                                          -29.87
                                                                                                                                                                            70.57
        100.00
                                                        -29.36
                                                                         79.34
                                                                                                           84.14
                                                                                                          60.87 23 3 22
89.13 5 27 43
55.93 23 27 56
                                                                        141.08
                                                                                        223.14
                                                                                                                                          3127.2
                                                                                                                                                          -10.87
                                                                                                                                                                           134.39
        100.00
                                                        -7.04
                                                       -34.17
                                                                                        230.82
                                                                                                                                                          -33.92
                                                                                                                                                                           44.16
       110.00
                                                                         53.40
                                                                                                                                         1819.6
                                                                        132.39
                                                                                        220.61
                                                                                                                                                            -7.39
                                                                                                                                                                           126.13
       110.00
                    22 27 10
                                     3645 AA
                                                        -2.94
                                                                                                                                          3045.9
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5288.2 SGR 410.4 SG3 138.6
RRT .1730 RRF .1533 RTF .8866
    TOE 1.9850 TRA .4637 TC3-5.3302 BAU 1.2678 ROE .2760 RRA -.0740 RC3 .1475 FAU .02472
                                                                                                                                    ST 2708.3 SR 376.5 SS 608.3
CRT .9846 CRS -.9254 CST -.9756
                                                                            SCB 5304.1 R23 -.0010 R13 .8866
AL1 5288.7 SC2 404.1 THA .77
                                                                                                                                     LSA 2797.4 MSA 145.5 SSA 23.5
EL1 2733.6 EL2 65.3 ALF 7.80
    FOE .6389 FRA .5936 FC3-1.2033 BSP 16978
                                                                           SG1 5288.7 SG2 404.1 THA
    BOE 2.0041 BRA .4696 BC3 5.3323 FSP -457
LAUNCH DATE DEC 27 1965
                                                                                FLIGHT TIME 176.00
                                                                                                                                                 ARRIVAL DATE JUN 21 1966
                                                                                DISTANCE 521.828
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 26.396 GAL 1.51 AZL 86.67 MCA 263.83 SMA 119.84 ECC .22905 INC 3.3335 V1 30.282 RP 108.70 LAP -3.31 LOP 358.85 VP 36.531 GAP 12.14 AZP 90.36 TAL 174.92 TAP 78.75 RCA 92.39 APO 147.29 V2 34.863 RC 186.379 GL 20.93 GP -4.92 ZAL 79.85 ZAP 172.14 ETS 322.54 ZAE 131.37 ETE 184.62 ZAC 100.47 ETC 167.51 CLP-173.86
   PLANETOCENTRIC CONIC
    C3 18.450 VHL 4.295 DLA 25.44 RAL 5.90 RAD 6567.7 VEL 11.825 PTH 2.09 VMP 7.930 DPA -5.44 RAP 7.91 ECC 1.3036 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                      1 16 29
6
        90.00
                                      3148.78
                                                       -26.73
                                                                        107.13
                                                                                       234.73
                                                                                                         80.29
                                                                                                                        2 8 58
                                                                                                                                         2548.8
                                                                                                                                                         -27.80
                                                                                                                                                                            98.63
                                                                                                                     22 33 52
                                                                                                                                          3285.9
         90.00
                     21 29 6
                                      3885.91
                                                                                        228.94
                                                                                                           63.34
                                                                                                                                                           -13.42
                                                                                                                                                                           147.35
                                                         -9.92
                                                                        154.28
                    3 2 20 2807.52
22 25 56 3702.39
4 56 0 2451.90
                                                                                                                                          2207.5
                                                                                                                                                                            73.68
       100.00
                                                       -29.03
                                                                         82.41
                                                                                        235.13
                                                                                                           82.55
                                                                                                                        3 49 8
                                                                                                                                                          -29.76
                                                                                                                     23 27 39
                                                                        139.70
                                                                                                                                          3102.4
       100.00
                                                       -7.86
                                                                                        227.84
                                                                                                           61.07
                                                                                                                                                          -11.66
                                                                                                                                                                           132.97
                                                        -34.11
                                                                         55.92
                                                                                        235.64
                                                                                                           87.64
                                                                                                                        5 36 52
                                                                                                                                                          -34.06
                                                                                                                                                                            46.67
       110.00
                                                                                                                                          1851.9
                                                                                                                    23 49 17
                    22 48 46
                                                        -3.52
                                                                        131.60
                                                                                                                                                            -7.96
       110.00
                                     3630.78
                                                                                        225.17
                                                                                                           55.98
                                                                                                                                          3030.8
                                                                                                                                                                           125.33
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           SGT 5321.2 SGR 416.5 SG3 135.5
RRT .1980 RRF .1765 RTF .8900
SGB 5337.5 R23 -.0008 R13 .8900
                                                                                                                                     5T 2760.7 SR 387.1 SS 606.6
CRT .9787 CRS -.9167 CST -.9779
     TOE 2.0537 TRA .7104 TC3-5.1679 BAU 1.2751
    ROE .2892 RRA -.0736 RC3 .1321 FAU .02315
FOE .6267 FRA .4371 FC3-4 GASS RAS
    FOE .6287 FRA .6371 FC3-1.0863 BSP 17052
BDE 2.0740 BRA .7142 BC3 5.1696 FSP -445
                                                                                                                                     LSA 2849.1 MSA 147.0 SSA 22.9
                                                                            SG1 5321.9 SG2 408.2 THA
                                                                                                                     .89
                                                                                                                                     EL1 2786.6 EL2 78.7 ALF 7.82
                                                                                FLIGHT TIME 178.00
                                                                                                                                                ARRIVAL DATE JUN 23 1966
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 527.322
    RL 147.12 LAL .00 LOL 95.03 VL 26.345 GAL 2.10 AZL 86.73 MCA 267.00 SMA 119.55 ECC .23334 INC 3.2730 V1 30.282 RP 108.67 LAP -3.27 LOP 2.03 VP 36.504 GAP 12.46 AZP 90.17 TAL 173.05 TAP 80.06 RCA 91.66 APO 147.45 V2 34.873 RC 188.330 GL 20.01 GP -4.77 ZAL 76.44 ZAP 172.78 ETS 320.01 ZAE 131.50 ETE 184.53 ZAC 102.82 ETC 167.70 CLP-174.58
   PLANETOCENTRIC CONIC
    C3 19.302 VHL 4.393 DLA 26.01 RAL 9.70 RAD 6567.8 VEL 11.861 PTH 2.10 VHP 8.124 DPA -4.29 RAP 10.08 ECC 1.3177 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 19 59 3199.07
21 55 58 3656.89
3 8 32 2649.10
22 50 6 3682.08
                                                                       110.68
                                                                                       239.37
                                                                                                          78.62
                                                                                                                       2 13 18
                                                                                                                                        2599.1
                                                                                                                                                         -27.41
                                                                                                                                                                         102.25
        90.00
                                                       -26.10
                                                                                                          63.67
                                                                       152.60
                                                                                       233.88
                                                                                                                    23 0 15
                                                                                                                                                         -14.26
                                                       -10.80
         90.00
                                                                                                                       3 56 1
                                                                         85.44
                                                                                       239.88
                                                                                                          81.01
                                                                                                                                         2249.1
                                                                                                                                                          -29.57
                                                      -28.63
       100.00
                                                                                                          61.24 23 51 28
                                                                                                                                                         -12.30
       100.00
                                                       -8.53
                                                                       138.56
                                                                                       232.68
                                                                                                                                         3082.1
                                                                                                                                                                         131.80
                     5 5 18 2483.77
23 9 49 3620.18
                                                                                                                      5 46 42
                                                      -33.99
                                                                         58.40
                                                                                       240.58
                                                                                                          86.18
                                                                                                                                         1883.8
                                                                                                                                                          -34.15
                                                                                                                                                                          49.16
       110.00
                                                                                                          56.02 24 10 10
       110.00
                                                       -3.92
                                                                       131.04
                                                                                       229.85
                                                                                                                                         3020.2
                                                                                                                                                         -8.35
                                                                                                                                                                        124.76
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.1144 TRA ..9663 TC3-4.9723 BAU 1.2835

ROE ..3034 RRA -.0717 RC3 ..1157 FAU .02174

FDE .6156 FRA .6789 FC3 -.9753 BSP 17208

BDE 2.1360 BRA ..9689 BC3 4.9737 FSP -437
                                                                          SGT 5353.4 SGR 421.5 SG3 132.4

RRT .2220 RRF .1982 RTF .8944

SG8 5370.0 R23 -.0015 R13 .8944

SG1 5354.2 SG2 411.0 THA 1.01
                                                                                                                                    ST 2792.4 SR 396.9 SS 600.7
CRT .9722 CRS -.9077 CST -.9797
                                                                                                                                    LSA 2879.7 MSA 150.0 SSA 22.1
                                                                                                                                     EL1 2818.9 EL2 92.1 ALF 7.88
                                                                                FLIGHT TIME 180.00
                                                                                                                                                 ARRIVAL DATE JUN 25 1966
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                               DISTANCE 532.779
    RL 147.12 LAL .00 LOL 95.03 VL 26.295 GAL 2.73 A7L 86.79 MCA 270.18 SMA 119.27 ECC .23805 INC 3.2127 V1 30.782 RP 108.63 LAP -3.21 LOP 5.22 VP 36.478 GAP 12.88 A7P 89.99 TAL 171.20 TAP 81.38 RCA 90.88 APO 147.66 V2 34.884 RC 190.259 GL 19.04 GP -4.64 ZAL 73.06 ZAP 173.40 ETS 316.88 ZAE 131.62 ETE 184.45 ZAC 105.17 ETC 167.86 CLP-175.30
   PLANETOCENTRIC CONIC
    C3 20.365 VHL 4.513 DLA 26.50 RAL 13.50 RAD 6567.8 VEL 11.906 PTH 2.12 VHP 8.331 DPA -3.15 RAP 12.26 ECC 1.3351
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 24 6 3248.92 -25.39 114.15 244.08 77.02 2 18 15 2648.9 -26.49 105.49
                    22 22 9 3832.49
3 15 35 2889.50
23 13 20 3667.15
5 15 20 2514.82
                                                                                                                                          3232.5
                                                                                                                                                                          144.16
                                                       -11.54
                                                                       151.18
                                                                                       238.92
                                                                                                           63.96
                                                                                                                     23 26 1
                                                                                                                                                          -14.95
        90.00
                                                                                                                                         2289.5
                                                                                                                                                                           79.74
       100.00
                                                       -28.16
                                                                                       244.73
                                                                                                          79.54
                                                                                                                                                          -29.32
                                                                                       237.60
                                                                                                           61.38 24 14 28
                                                                                                                                         3067.1
                                                                                                                                                         -12.77
       100.00
                                                         -9.02
                                                                       137.72
                                                                                                                                                                          130.94
                                                                                                          84.76 5 57 15
56.04 24 30 20
       110.00
                                                       -33.83
                                                                         60.81
                                                                                       245.64
                                                                                                                                         1914.8
                                                                                                                                                         -34.18
                                                                                                                                                                           51.58
                    23 30 5
                                     3614.59
                                                         -4.13
                                                                       130.75
                                                                                       234.61
                                                                                                                                         3014.6
                                                                                                                                                          -8.56
                                                                                                                                                                          124.46
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
    TOE 2.1700 TRA 1.2361 TC3-4.7380 BAU 1.2902
                                                                          SGT 5380.7 SGR 425.7 SG3 129.4 ST 2807.9 SR 405.8 SS 593.2 RRT 2457 RRF .2205 RTF .8988 CRT .9650 CR5 -.8984 CST -.9813 SGB 5397.5 R23 -.0017 R13 .8988 LSA 2894.2 MSA 154.4 SSA 21.1
    RDE .3188 RRA -.0681 RC3 .0992 FAU .02036
```

SG1 5381.7 SG2 412.5 THA 1.12

EL1 2835.1 EL2 105.4 ALF 7.95

FOE .6020 FRA .7215 FC3 -.8655 BSP 17350

BOE 2.1933 BRA 1.2380 BC3 4.7390 FSP -430

ARRIVAL DATE JUN 27 1966

```
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 538.195
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 26.246 GAL 3.38 A7L 86.85 MCA 273.36 SMA 118.99 ECC .24324 INC 3.1524 VI 30.282 RP 108.60 LAP -3.15 LOP 8.40 VP 36.453 GAP 13.17 A7P 89.81 TAL 169.35 TAP 82.71 RCA 90.05 APO 147.94 V2 34.895 RC 192.167 GL 18.03 GP -4.51 TAL 69.74 TAP 173.98 ETS 313.03 TAE 131.74 ETE 184.39 ZAC 107.53 ETC 167.99 CLP-176.01
   PLANETOCENTRIC CONIC
    C3 21.663 VHL 4.654 DLA 26.88 RAL 17.26 RAD 6567.9 VEL 11.960 PTH 2.13 VMP 8.554 DPA -2.02 RAP 14.45 ECC 1.3565 LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 29 6 3297.11
22 47 8 3815.98
3 23 38 2927.86
23 35 16 3658.46
                                                                                                                                          -26.36
                                                                               248.85
                                                                                              75.53
                                                                                                            2 24 3
                                                                                                                           2697.1
                                                                                                                                                         109.24
                                                  -24.61
                                                                 117.47
        90.00
                                                                                                 64.20 23 50 42
                                                                                                                             3214.0
                                                                                                                                            -15.46
                                                                                                                                                           143.05
                                                                               244.03
                                                                 150.10
        90.00
                                                  -12.09
                                                                               249.65
                                                                                                 78.19
                                                                                                           4 12 26
                                                                                                                             2327.9
                                                                                                                                            -29.01
                                                                                                                                                            82.55
                                                  -27.56
                                                                  91.09
      100.00
                                                                                                 61.46 24 36 15
                                                                                                                             3058.5
                                                                                                                                           -13.04
                                                                                                                                                          130.44
                                                                               242.57
                                                                 137.23
      100.00
                                                   -9.30
                                                                                                83.41 6 8 30
56.04 24 49 33
                                                                                                                            1944.7
                                                                                                                                           -34.16
                                                                                                                                                           53.92
                                                 -33.62
                                                                  63.12
                                                                               250.77
      110.00
                    5 26 5 2544.71
                                                                                                                                                          124.45
                                                                                                                           3014.4
                                                                                                                                           -8.57
                                                                               239.42
                                                                 130.74
       110.00
                   23 49 19
                                  3614.37
                                                  -4.14
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    RIG 5403.5 SGR 428.8 SG3 126.4

RRT .2692 RRF .2433 RTF .9031

SGB 5420.5 R23 -.0013 R13 .9031

SGI 5404.8 SG2 412.9 THA 1.23
                                                                                                                        ST 2807.5 SR 413.6 SS 584.4
CRT .9572 CRS -.8887 CST -.9826
    TOE 2.2202 TRA 1.5207 TC3-4.4712 BAU 1.2951
    ROE .3353 RRA -.0629 RC3 .0832 FAU .01900
FDE .5883 FRA .7650 FC3 -.7593 8SP 17473
                                                                                                                        LSA 2892.9 MSA 160.1.55A 20.1
EL1 2835.4 EL2 118.5 ALF 8.04
    BDE 2.2454 BRA 1.5220 BC3 4.4720 FSP -421
                                                                                                                                    ARRIVAL DATE JUN 29 1966
                                                                         FLIGHT TIME 184.00
LAUNCH DATE DEC 27 1965
                                                                        DISTANCE 543.564
  HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 26.197 GAL 4.07 AZL 86.91 MCA 276.54 SMA 118.72 ECC .24893 INC 3.0917 V1 30.282 RP 108.57 LAP -3.07 LOP 11.59 VP 36.429 GAP 13.57 AZP 89.65 TAL 167.51 TAP 84.05 RCA 89.17 APO 148.28 V2 34.906 RC 194.054 GL 17.00 GP -4.40 ZAL 66.50 ZAP 174.52 ETS 308.28 ZAE 131.86 ETE 184.33 ZAC 109.89 ETC 168.08 CLP-176.73
   PLANETOCENTRIC CONIC
    C3 23.229 VHL 4.820 DLA 27.17 RAL 20.95 RAD 6567.9 VEL 12.025 PTH
                                                                                                   2.15 VHP 8.794 OPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 35 24 3342.06
                                                                                                                                                         112.39
                                                                             253.67
                                                                                               74.20 2 31 6
                                                                                                                          2742.1
                                                                                                                                           -25.75
                                                  -23.81
                                                                 120.52
        90.00
                  23 10 19 3602.89
3 32 52 2963.40
23 55 32 3656.79
5 37 34 2573.16
0 11 15 3619.79
                                                                                                           24 13 42
                                                                                                                             3202.9
                                                                                                                                            -15.77
                                                                                                                                                           142.38
        90.00
                                                  -12.42
                                                                 149.45
                                                                                249.14
                                                                                                 64.35
                                                                                                           4 22 15
                                                                                                                             2363.4
                                                                                                                                            -28.66
                                                                                                                                                            85.13
                                                                                254.62
                                                                                                 76.96
       100.00
                                                   -27.14
                                                                  93.60
                                                                                                 61.48 24 56 29
                                                                                                                             3056.8
                                                                                                                                            -13.09
                                                                                                                                                           130.34
       100.00
                                                    -9.36
                                                                 137.13
                                                                               247.55
                                                                                                          6 20 27
1 11 35
                                                                                                 82.14
                                                                                                                             1973.2
                                                                                                                                            -34.10
                                                                                                                                                            56.14
      110.00
                                                  -33.37
                                                                  65.30
                                                                               255.95
                                                   -3.93
                                                                 131.02
                                                                                244.24
                                                                                                 56.02
                                                                                                                             3019.8
                                                                                                                                            -8.37
                                                                                                                                                           124.74
       110.00
                     0 11 15
                                  3619.79
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     SGT 5421.7 SGR 431.1 SG3 123.5
RRT .2931 RRF .2672 RTF .9076
                                                                                                                         ST 2795.3 SR 420.1 SS 575.5
CRT .9487 CRS -.8787 CST -.9840
    TOE 2.2672 TRA 1.8237 TC3-4.1745 BAU 1.2965
    ROE .3529 RRA -.0558 RC3 .0680 FAU .01763
    FOE .5754 FRA .8104 FC3 -.6570 BSP 17516
BDE 2.2945 BRA 1.8245 BC3 4.1751 FSP -411
                                                                     SGB 5438.8 R23 -.0003 R13 .9076
SG1 5423.2 SG2 412.1 THA 1.34
                                                                                                                         LSA 2879.8 MSA 166.7 SSA 19.1
                                                                                                                      EL1 2823.6 ELZ 131.5 ALF 8.13
                                                                                                                                   ARRIVAL DATE JUL 1 1966
                                                                         FLIGHT TIME 186.00
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 548.877
    RL 147.12 LAL .00 LOL 95.03 VL 26.150 GAL 4.79 AZL 86.97 MCA 279.73 SMA 118.46 ECC .25519 INC 3.0301 V1 30.282 RP 108.53 LAP -2.99 LOP 14.77 VP 36.405 GAP 14.00 AZP 89.49 TAL 165.69 TAP 85.41 RCA 88.23 APO 148.69 V2 34.918 RC 195.918 GL 15.96 GP -4.30 ZAL 63.35 ZAP 175.01 ETS 302.43 ZAE 131.97 ETE 184.28 ZAC 112.25 ETC 168.13 CLP-177.46
   PLANETOCENTRIC CONIC
    C3 25.101 VHL 5.010 DLA 27.37 RAL 24.56 RAD 6568.0 VEL 12.103 PTH 2.17 VHP 9.053 OPA
                                                                                                                                   .19 RAP 18.84 ECC 1.4131
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2782.0
                                                                                                                                                           115.15
                   1 43 27 3381.96
23 31 1 3801.01
3 43 21 2995.47
                                                                            258.53
                                                                                                                                            -25.15
                                                  -23.04
                                                                123.19
                                                                                             73.07
                                                                                                           2 39 49
        90.00
                                                                                                                                                           142.27
                                                  -12.47
                                                                 149.34
                                                                               254.21
                                                                                                 64.37
                                                                                                          24 34 22
                                                                                                                             3201.0
                                                                                                                                            -15.82
        90.00
                                                  -26.63
                                                                  95.85
                                                                               259.63
                                                                                                 75.88
                                                                                                           4 33 16
1 18 47
                                                                                                                            2395.5
                                                                                                                                            -28.30
                                                                                                                                                            87.45
       100.00
                                                                               252.49
                                                                                                 61.42
                                                                                                                             3062.7
                                                                                                                                            -12.91
                                                                                                                                                           130.68
                    0 17 44
                                   3662.73
                                                    -9.16
                                                                 137.47
       100.00
                                                                                                           6 33 2
1 28 23
                                                                                                                                                            58.23
                                                                                                 80.95
                                                                                                                             2000.0
                                                                                                                                            -34.00
                    5 49 42
                                  2600.04
                                                  -33.10
                                                                  67.35
                                                                               261.16
       110.00
                                                                                                                                            -7.95
                                                                               249.03
                                                                                                 55.98
                                                                                                                             3030.9
                                                                                                                                                           125.34
                     0 27 52
                                   3630.92
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2764.4 SR 425.0 SS 564.6
CRT .9395 CRS -.8681 CST -.9851
                                                                     SGT 5435.9 SGR 432.3 SG3 120.5
RRT .3160 RRF .2902 RTF .9123
SGB 5453.0 R23 .0003 R13 .9123
    TOE 2.3044 TRA 2.1398 TC3-3.8665 BAU 1.2976
    ROE .3713 RRA -.0471 RC3 .0539 FAU .01635
FOE .5609 FRA .8559 FC3 -.5641 BSP 17629
BOE 2.3341 BRA 2.1404 BC3 3.8669 FSP -403
                                                                                                                        LSA 2848.0 MSA 174.0 SSA 18.1
EL1 2793.2 EL2 144.1 ALF 8.24
                                                                     SG1 5437.6 SG2 410.0 THA 1.45
                                                                                                                                    ARRIVAL DATE JUL 3 1966
                                                                         FLIGHT TIME 188.00
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC CONIC
                                                                        DISTANCE 554.125
    RL 147.12 LAL .00 LOL 95.03 VL 26.103 GAL 5.55 A7L 87.03 MCA 282.91 SMA 118.20 ECC .26207 INC 2.9673 VI 30.282 RP 108.49 LAP -2.89 LOP 17.96 VP 36.383 GAP 14.46 AZP 89.34 TAL 163.88 TAP 86.79 RCA 87.22 APO 149.18 V2 34.930 RC 197.761 GL 14.91 GP -4.20 ZAL 60.30 ZAP 175.42 ETS 295.27 ZAE 132.07 ETE 184.23 ZAC 114.61 ETC 168.15 CLP-178.18
   PLANETOCENTRIC CONIC
                                                                                                                                 1.27 RAP 21.04 ECC 1.4497
    C3 27.324 VHL 5.227 DLA 27.47 RAL 28.05 RAD 6568.1 VEL 12.194 PTH 2.19 VHP 9.333 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            2 50 38
                                                                                                                             2815.1
                                                                                                                                            -24.60
                     1 53 43 3415.07
                                                   -22.37
                                                                 125.39
                                                                               263.44
                                                                                                 72.17
        90.00
                                                                                                           24 52 7
                                                                                                                                             -15.57
                                                                                                                                                           142.81
                                                                                                 64.25
                                                                                                                              3209.9
                    23 48 37
                                   3809.93
                                                   -12.21
                                                                  149.87
                                                                                259.19
        90.00
                                                                                                           +5 31
1 35 6
6 45
                                                                                                            4 45 31
                                                                                                                             2423.7
                                                                                                                                            -27.95
                                                                                                                                                             89.47
                     3 55 8
                                   3023.70
                                                  -26.14
                                                                   97.81
                                                                                264.65
                                                                                                 74.96
       100.00
                                                                                                                              3076.5
                                                                                                                                            -12.48
                                                                                                                                                           131.48
                                                                                257.36
       100.00
                    0 33 50
                                   3676.53
                                                   -8.71
                                                                  138.25
                                                                                                 61.29
                                                                                                              6 46 11
                                                                                                                             2025.3
                                                                                                                                            -33.87
-7.32
       110.00
                     6 2 26
                                  2625.33
                                                  -32.82
                                                                   69.27
                                                                                266.37
                                                                                                 79.85
                                                                                                             1 43 49
                                                                                                                             3047.7
                    0 43 1
                                                                                253-78
                                                                                                 55.92
       110.00
                                  3647.67
                                                   -2.87
                                                                  132.48
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5445.8 SGR 432.5 SG3 117.7
RRT .3389 RRF .3134 RTF .9172
SGB 5462.9 R23 .0009 R13 .9172
SGI 5447.7 SG2 406.7 THA 1.55
                                                                                                                        ST 2722.1 SR 428.1 SS 553.6
CRT .9294 CRS -.8570 CST -.9862
    TOE 2.3361 TRA 2.4738 TC3-3.5480 BAU 1.2952
    RDE .3904 RRA -.0365 RC3 .0412 FAU .01512 FDE .5467 FRA .9029 FC3 -.4791 BSP 17717
                                                                                                                      LSA 2804.7 MSA 181.8 SSA 17.1
EL1 2751.1 EL2 156.3 ALF 8.34
```

FLIGHT TIME 182.00

BDE 2.3685 BRA 2.4741 BC3 3.5482 FSP -395

ARRIVAL DATE JUL 5 1966

-26.80

-33.15

-2.91

ORBIT DETERMINATION ACCURACY

ST 2479.9 SR 421.8 SS 516.3 CRT .8800 CRS -.8072 CST -.9904

LSA 2559.1 MSA 211.7 SSA 13.8 EL1 2507.7 EL2 198.1 ALF 8.57

-8.43

138.66

2502.3

3202.6

2113.4

3164.3

5 43 56

2 20 8 7 41 44

2 31 42

72.52

60.42

76.15

55.85

LAUNCH DATE DEC 27 1965

HELIOCENTRIC CONIC

FLIGHT TIME 190.00

DISTANCE 559.298

284.65

275.67

286.85

271.87

MID-COURSE EXECUTION ACCURACY

SGT 5442.7 SGR 422.6 SG3 107.0 RRT 4288 RRF 4062 RTF 9378 SGB 5459.1 R23 .0023 R13 .9379 SGI 5445.7 SG2 381.5 THA 1.92

-24.64

-31.57

1.59

-4.52

4 52 14

1 16 45

6 56 30

DIFFERENTIAL CORRECTIONS

1 28 58

TDE 2.4159 TRA 4.0253 TC3-2.2877 BAU 1.2551 ROE .4715 RRA .0251 RC3 .0072 FAU .01045 FDE .4958 FRA 1.1163 FC3 -.2204 BSP 17896

BOE 2.4615 BRA 4.0254 BC3 2.2878 FSP -362

100.00

100.00

110.00

110.00

3102.25

3802.65

103.16

145.27

75.83

138.57

```
LAUNCH DATE DEC 27 1965
                                                                            FLIGHT TIME 198.00
                                                                                                                                        ARRIVAL DATE JUL 13 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 578.916
    RL 147.12 LAL .00 LOL 95.03 VL 25.881 GAL 10.16 ATL 87.38 MCA 298.88 SMA 117.00 ECC .30875 INC 2.6176 V1 30.282
RP 108.29 LAP -2.29 LOP 33.93 VP 36.286 GAP 17.49 ATP 88.74 TAL 155.32 TAP 94.20 RCA 80.88 APO 153.12 VZ 34.994
RC 206.614 GL 9.86 GP -3.84 ZAL 47.05 TAP 175.66 ETS 244.75 TAE 132.36 ETE 184.06 TAC 126.26 ETC 167.59 CLP 177.99
   PLANETOCENTRIC GONIC
                                                                                                      2.36 VHP 11.171 DPA
     C3 46.135 VHL 6.792 OLA 26.87 RAL 43.31 RAD 6568.7 VEL 12.942 PTH
                                                                                                                                      6.36 RAP 32.06 ECC 1.7593
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                4 11 20
        90.00
                     3 13 15 3485.19
                                                    -20.84
                                                                   129.96
                                                                                  288.23
                                                                                                    70.38
                                                                                                                                2885.2
                                                                                                                                                 -23.32
                                                                                                                                                                122.17
                                                                                                               1 41 30
         90.00
                      Ø 34 47
                                    4003.46
                                                     -6.26
                                                                    160.98
                                                                                   281.69
                                                                                                     62.33
                                                                                                                                  3403.5
                                                                                                                                                  -9.92
                                                                                                                                                                 154.21
                                                                                                                                                                  96.00
       100.00
                      5 7 43
                                    3116.17
                                                    -24.36
                                                                    104.10
                                                                                   289.53
                                                                                                     72.11
                                                                                                                 5 59 39
                                                                                                                                  2516.2
                                                                                                                                                  -26.57
                                                                                                              5 59 39
2 27 7
7 55 39
2 40 29
                     1 23 0 3847.72
7 10 6 2733.19
       100.00
                                                      -3.01
                                                                   147.75
                                                                                   279.90
                                                                                                     60.25
                                                                                                                                  3247.7
                                                                                                                                                  -6.94
                                                                                                                                                                 141.18
       110.00
                                                    -31.24
                                                                     77.28
                                                                                   291.79
                                                                                                     75.36
                                                                                                                                 2133.2
                                                                                                                                                 -32.93
                                                                                                                                                                  68.47
                     1 37 6
       110.00
                                   3803.45
                                                      3.08
                                                                    140.61
                                                                                  276.12
                                                                                                     55.94
                                                                                                                                 3203.5
                                                                                                                                                 -1.41
                                                                                                                                                                 134.41
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 5433.2 SGR 417.6 SG3 104.7

RRT .4513 RRF .4299 RTF .9432

SGB 5449.2 R23 .0025 R13 .9432

SGI 5436.5 SG2 372.4 THA 2.00
    TOE 2.4318 TRA 4.4805 TC3-1.9968 BAU 1.2316
                                                                                                                              ST 2414.7 SR 415.5 SS 511.1
    RDE .4924 RRA .0455 RC3 .0028 FAU .00929
FOE .4865 FRA 1.1791 FC3 -.1742 BSP 17827
                                                                                                                              CRT .8655 CRS -.7943 CST -.9915
                                                                                                                              LSA 2493.4 MSA 217.5 SSA 13.1
EL1 2441.5 EL2 205.9 ALF 8.53
    BOE 2.4812 BRA 4.4807 BC3 1.9968 FSP
                                                       -352
LAUNCH DATE DEC 27 1965
                                                                            FLIGHT TIME 200.00
                                                                                                                                         ARRIVAL DATE JUL 15 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 583.437
    RL 147.12 LAL .00 LOL 95.03 VL 25.840 GAL 11.29 AZL 87.46 MCA 302.08 SMA 116.78 ECC .32133 INC 2.5359 VI 30.282 RP 108.25 LAP -2.15 LOP 37.13 VP 36.270 GAP 18.29 AZP 88.65 TAL 153.75 TAP 95.83 RCA 79.25 APO 154.30 V2 35.007 RC 208.309 GL 8.93 GP -3.78 ZAL 44.83 ZAP 175.27 ETS 235.59 ZAE 132.35 ETE 184.03 ZAC 128.53 ETC 167.33 CLP 177.16
   PLANETOCENTRIC CONIC
    C3 52.173 VHL 7.223 DLA 26.58 RAL 45.86 RAD 6568.9 VEL 13.173 PTH 2.41 VHP 11.657 DPA 7.30 RAP 34.25 ECC 1.8586 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 31 2 3490.43
0 37 19 4059.63
5 23 9 3129.01
1 27 53 3896.29
7 23 28 2752.51
1 44 3 3845.55
        90.00
                                                   -20.72
                                                                                                                               2890.4
                                                                   130.29
                                                                                  293.05
                                                                                                    70.25 4 29 13
                                                                                                                                                             122.52
                                                                                                                                                -23.22
        90.00
                                                      -4.48
                                                                    164.14
                                                                                   285.72
                                                                                                     62.01
                                                                                                                 1 44 58
                                                                                                                                  3459.6
                                                                                                                                                   -8.19
                                                                                                                                                                 157.42
                                                                                                              6 15 18
2 32 49
8 9 21
2 48 8
       100.00
                                                   -24.08
                                                                   104.95
                                                                                   294.31
                                                                                                     71.74
                                                                                                                                  2529.0
                                                                                                                                                  -26.35
                                                                                                                                                                  96.89
       100.00
                                                    -1.36
                                                                   150.42
                                                                                   284.00
                                                                                                     60.14
                                                                                                                                  3296.3
                                                                                                                                                  -5.33
                                                                                                                                                                 143.87
       110.00
                                                   -30.90
                                                                     78.68
                                                                                   296.63
                                                                                                     74.59
                                                                                                                                 2152.5
                                                                                                                                                 -32.70
                                                                                                                                                                  69.93
       110.00
                                                      4.68
                                                                   142.82
                                                                                   280.24
                                                                                                     56.10
                                                                                                                                  3245.6
                                                                                                                                                      .20
                                                                                                                                                                 136.60
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       3GT 5417.5 3GR 411.3 3G3 102.3
RRT .4729 RRF .4526 RTF .9487
3GB 5433.1 R23 .0022 R13 .9487
    TOE 2.4422 TRA 4.9624 TC3-1.7267 BAU 1.2044
                                                                                                                             ST 2345.7 SR 407.3 SS 506.6
CRT .8500 CRS -.7807 CST -.9925
    FOE .4771 FRA 1.2451 FC3 -.0003 FAU .00819
FDE .4771 FRA 1.2451 FC3 -.1360 89P 17866
BDE 2.4955 BRA 4.9629 BC3 1.7267 FSP -345
                                                                                                                              LSA 2423.9 MSA 222.2 55A 12.4
                                                                        SG1 5421.0 SG2 362.2 THA 2.07
                                                                                                                             EL1 2371.3 EL2 212.3 ALF 8.46
                                                                           FLIGHT TIME 202.00
                                                                                                                                        ARRIVAL DATE JUL 17 1966
LAUNCH DATE DEC 27 1965
   HELIOCENTRIC' CONIC
                                                                           DISTANCE 587.736
    RL 147.12 LAL .00 LOL 95.03 VL 25.799 GAL 12.52 AZL 87.55 MCA 305.28 SMA 116.57 ECC .33536 INC 2.4483 V1 30.282 RP 108.21 LAP -2.00 LOP 40.34 VP 36.254 GAP 19.18 AZP 88.59 TAL 152.25 TAP 97.53 RCA 77.47 APO 155.66 V2 35.020 RC 209.976 GL 8.03 GP -3.73 ZAL 42.77 ZAP 174.74 ETS 227.79 ZAE 132.31 ETE 183.99 ZAC 130.77 ETC 167.02 CLP 176.30
   PLANETOCENTRIC CONIC
    C3 59.348 VHL 7.704 DLA 26.25 RAL 48.22 RAD 6569.1 VEL 13.443 PTH 2.46 VHP 12.197 DPA 8.21 RAP 36.42 ECC 1.9767 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 48 26 3495.49
0 38 48 4118.02
                                                                                                                              2895.5
                                                                                                                                              -23.12
                                                                               297.76
        90.00
                                                   -20.60
                                                                   130.62
                                                                                                    70.13
                                                                                                               4 46 41
1 47 26
                                                                                                                                                                122.85
        90.00
                                                    -2.61
                                                                   167.41
                                                                                  289.61
                                                                                                    61.79
                                                                                                                                 3518.0
                                                                                                                                                 -6.36
                                                                                                                                                                160.74
                    5 38 19 3141.20
1 31 36 3947.54
                                                                                  298.97
                                                                                                              6 30 41
2 37 23
       100.00
                                                   -23.62
                                                                   105.76
                                                                                                    71.39
                                                                                                                                 2541.2
                                                                                                                                                 -26.14
                                                                                                                                                                 97.73
       100.00
                                                       . 38
                                                                   153.23
                                                                                  287.96
                                                                                                    60.11
                                                                                                                                 3347.5
                                                                                                                                                 -3.60
                                                                                                                                                                146.70
                                                                                                               8 22 41
                                                   -30.55
       110.00
                     7 36 30 2771.45
                                                                    80.05
                                                                                  301.34
                                                                                                    73.85
                                                                                                                                 2171.4
                                                                                                                                                -32.45
                                                                                                                                                                 71.35
                     1 40 55
       110.00
                                   3890.05
                                                    6.37
                                                                   145.16
                                                                                  284.24
                                                                                                    56.34
                                                                                                                2 54 45
                                                                                                                                 3290.1
                                                                                                                                                  1.90
                                                                                                                                                                134.92
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.4534 TRA 5.4800 TC3-1.4738 BAU 1.1694
                                                                       SGT 5397.8 SGR 404.0 SG3 100.0
RRT .4943 RRF .4753 RTF .9541
SGB 5412.9 R23 .0018 R13 .9541
                                                                                                                             ST 2278.7 SR 397.4 55 504.5
CRT .8338 CRS -.7673 CST -.9935
    ROE .5335 RRA .0919 RC3 -.0023 FAU .00709
FOE .4693 FRA 1.3168 FC3 -.1034 89P 17891
BOE 2.5107 BRA 5.4808 BC3 1.4739 FSP -338
                                                                                                                            LSA 2356.7 MSA 225.6 SSA 11.7
EL1 2302.9 EL2 217.1 ALF 8.35
                                                                       SG1 5401.5 SG2 351.0 THA
                                                                                                             2.13
LAUNCH DATE DEC 27 1965
                                                                            FLIGHT TIME 204.00
                                                                                                                                        ARRIVAL DATE JUL 19 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 591.763
                        .00 LOL 95.03 VL 25.760 GAL 13.86 AZL 87.65 HCA 308.48 SMA 116.36 ECC .35105 INC 2.3533 VI 30.282
-1.84 LOP 45.54 VP 36.239 GAP 20.17 AZP 88.53 TAL 150.84 TAP 99.32 RCA 75.51 APO 157.21 V2 35.034
7.16 GP -3.69 ZAL 40.86 ZAP 174.10 ETS 221.29 ZAE 132.22 ETE 183.96 ZAC 132.96 ETC 166.65 CLP 175.39
   RL 147.12 LAL
RP 108.17 LAP
    RC 211.617 GL
  PLANETOCENTRIC CONIC
    C3 67.914 VHL 8.241 OLA 25.88 RAL 50.41 RAD 6569.3 VEL 13.757 PTH
                                                                                                      2.51 VHP 12.800 DPA
                                                                                                                                      9.08 RAP 38.57 FCC 2.1177
   ENCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 5 13 3500.73 -20.48 130.95 302.32 70.01 5 3 34 2900.7 -23.02 123.20
                     4 5 13
                                                    -20.48
                                                                   130.95
                                                                                 302.32
                                                                                                  70.01
                                                                                                                5 3 34
                                                                                                                                 2900.7
        90.00
                     0 39 27
                                  4177.76
                                                       -.68
                                                                   170.74
                                                                                  293.36
                                                                                                    61.69
                                                                                                                1 49 4
                                                                                                                                  3577.8
                                                                                                                                                  -4.46
                                                                                                                                                                 164.10
                                                                   106.54
                                                                                                              2 45 37
2 40 57
8 **
                                                                                                                 6 45 37
                    5 53 4
                                  3153.00
                                                    -23.56
                                                                                  303.50
                                                                                                    71.05
                                                                                                                                  2553.0
                                                                                                                                                 -25.93
                                                                                                                                                                 98.55
                    1 34 16
       100.00
                                  4000.73
                                                       2.18
                                                                   156.15
                                                                                  291.77
                                                                                                    60.18
                                                                                                                                 3400.7
                                                                                                                                                 -1.80
                                                                                                                                                                149.63
                                  2790.05
                                                    -30.19
                                                                                  305.90
                                                                                                    73.14
                                                                                                                                 2190.0
                                                                                                                                                                 72.74
                                                                                                                                                -32.20
       110.00
                     1 54 45
                                  3936.45
                                                                                  288.11
                                                                                                    56.68
                                                                                                                 3 0 22
                                                                                                                                 3336.4
                                                                                                                                                    3.67
                                                                                                                                                                141.35
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                     SGT 5374.4 SGR 395.7 SG3 97.8
RRT .5156 RRF .4978 RTF .9595
SGB 5388.9 R23 .0013 R13 .9595
SGI 5378.3 SG2 338.8 THA 2.18
                                                                                                                         ST 2215.0 SR 386.0 SS 504.9
CRT .8174 CRS -.7542 CST -.9945
    TOE 2.4675 TRA 6.0380 TC3-1.2390 BAU 1.1250
   ROE .5537 RRA .1180 RC3 -.0031 FAU .00594
FOE .4634 FRA 1.3950 FC3 -.0757 BSP 17890
                                                                                                                         LSA 2293.1 MSA '227.4 SSA 11.1
EL1 2237.6 EL2 220.1 ALF 8.19
```

BOE 2.5289 BRA 6.0392 BC3 1.2390 FSP -331

ARRIVAL DATE JUL 21 1966

-

```
FLIGHT TIME 206.00
LAUNCH DATE DEC 27 1965
                                                                      DISTANCE 595.455
   RL 147.12 LAL .00 LOL 95.03 VL 25.723 GAL 15.32 AZL 87.75 MCA 311.69 SMA 116.16 ECC .36866 INC 2.2494 V1 30.282 RP 108.13 LAP -1.68 LOP 46.74 VP 36.225 GAP 21.28 AZP 88.30 TAL 149.53 TAP 101.22 RCA 73.34 APO 158.99 VZ 35.047 RC 213.230 GL 6.32 GP -3.64 ZAL 39.11 ZAP 173.36 ETS 215.92 ZAE 132.08 ETE 183.92 ZAC 135.11 ETC 166.22 CLP 174.44
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 78.197 VHL .8.843 DLA 25.48 RAL 52.41 RAD 6569.5 VEL 14.126 PTH 2.57 VHP 13.476 DPA 9.92 RAP 40.69 ECC 2.2869 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2906.3
                                                                                                        5 19 42
                    4 21 16 3506.31
0 39 20 4238.23
                                                 -20.35
                                                               131.31
                                                                            306.73
                                                                                             69.87
       90.00
                                                                                                         1 49 58
                                                                                                                         3638.2
                                                                                                                                                      167.48
                                                                             296.95
                                                                                              61.71
                                                               174.11
                                                   1.27
       90.00
                                                                                                                                                       99.34
                                                                                                        7 0 1
                                                                                                                         2564.5
                                                 -23.31
                                                               107.30
                                                                             307.87
                                                                                              70.73
      100.00
                    6 7 17 3164.52
                                                                                                       2 43 35
8 47 57
                                                                                                                         3455.3
                                                                                                                                          .04
                                                                                                                                                      152.62
                                                                             295.43
                                                                                              60.35
                                                   4.02
                                                               159.15
      100.00
                   1 36 D
                                 4055.26
                                                                                                                         2208.3
                                                                                                                                        -31.93
                                                                                                                                                       74.09
                                                                             310.29
                                                                                              72.46
                                2808.27
                                                 -29.82
                                                                82.67
      110.00
                    8 1 8
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                         3384.3
                                                                                                                                          5.49
                                                                                                                                                      143.86
                                                               150.19
      110.00
                                                  9.89
                    1 58 38
                                 3984.27
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 5349.4 SGR 386.4 SG3 95.8
RRT .5370 RRF .5208 RTF .9647
                                                                                                                     ST 2157.3 SR 373.2 SS 508.8
CRT .8012 CRS -.7423 CST -.9955
    TOE 2.4901 TRA 6.6463 TC3-1.0204 BAU 1.0668
    RDE .5739 RRA .1462 RC3 -.0030 FAU .00467
                                                                  SGB 5363.3 RZ3 .0009 R13 .9647
SGI 5353.4 SGZ 325.7 THA 2.23
                                                                                                                     LSA 2236.2 MSA 227.4 SSA 10.5
   FDE .4607 FRA 1.4821 FC3 -.0517 BSP 17769
                                                                                                                     EL1 2178.2 EL2 221.2 ALF 7.97
    BOE 2.5554 BRA 6.6479 BC3 1.0204 FSP
                                                      -322
                                                                       FLIGHT TIME 208.00
LAUNCH DATE DEC 27 1965
                                                                       DISTANCE 598.724
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.03 VL 25.686 GAL 16.94 AZL 87.87 HCA 314.90 SHA 115.97 ECC .38849 INC 2.1346 VI 30.282 RP 108.09 LAP -1.51 LOP 49.95 VP 36.212 GAP 22.54 AZP 88.49 TAL 148.35 TAP 103.24 RCA 70.92 APO 161.03 V2 35.060 RC 214.816 GL 5.52 GP -3.60 ZAL 37.54 ZAP 172.51 ETS 211.45 ZAE 131.88 ETE 183.87 ZAC 137.20 ETC 165.73 CLP 173.43
   C3 90.618 VHL 9.519 DLA 25.05 RAL 54.21 RAD 6569.8 VEL 14.559 PTH 2.64 VHP 14.239 DPA 10.71 RAP 42.77 ECC 2.4914 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 36 29 3512.14 -20.21 131.68 310.94 69.74 5 35 1 2912.1 -22.79 123.96
  PLANETOCENTRIC CONIC
                                                                                                          1 50 10
                                                                                              61.85
                                                                177.50
                                                                              300.39
                    0 38 31
                                  4298.94
                                                   3.23
        90.00
                                                                                                       7 13 45
2 45 22
8 59 42
3 8 47
                                                                                                                          2575.7
                                                                                                                                        -25.51
                                                                                                                                                       100.10
                                                                                              70.42
                   6 20 50 3175.73
                                                  -23.05
                                                                108.04
                                                                              312.05
      100.00
                                                                                                                          3510.6
                                                                                                                                          1.92
                                                                                                                                                       155.65
                                                                                              60.64
                                                   5.88
                                                               162.21
                                                                             298.93
      100.00
                   1 36 51
                                 4110.58
                                                                                                                                        -31.65
                                                                                                                                                        75.40
                                                                                              71.60
                                                                                                                          2226.0
                                                 -29.45
                                                                 83.92
                                                                             314.49
                   8 12 36
                               2826.01
      110.00
                                                                                                                                                       146.44
                                                                                                          3 8 47
                                                                                                                          3433.1
                                                                                                                                          7.33
                                                                                              57.64
                    2 1 34
                                  4033.07
                                                  11.68
                                                                152.83
                                                                             295.43
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5317.5 SGR 375.9 SG3 93.8
RRT .5575 RRF .5427 RTF .9697
SGB 5330.7 R23 .0002 R13 .9697
SGI 5321.6 SG2 311.8 THA 2.26
                                                                                                                      ST 2099.7 SR 359.0 SS 514.8
CRT .7848 CRS -.7303 CST -.9963
    TOE 2.5136 TRA 7.3008 TC3 -.8235 BAU .9976
    RDE .5935 RRA .1759 RC3 -.0024 FAU .00337
    FOE .4589 FRA 1.5769 FC3 -.0322 BSP 17773
BOE 2.5827 BRA 7.3029 BC3 .8235 FSP -316
                                                                                                                      LSA 2179.8 MSA 225.8 SSA 9.9
                                                                                                                      EL1 2118.7 EL2 220.5 ALF 7.73
                                                                                                                                ARRIVAL DATE JUL 25 1966
                                                                       FLIGHT TIME 210.00
LAUNCH DATE DEC 27 1965
                                                                       DISTANCE 601.463
    RL 147.12 LAL .00 LOL 95.03 VL 25.652 GAL 18.74 AZL 87.99 MCA 318.11 SNA 115.79 ECC .41091 INC 2.0060 V1 30.282 RP 108.05 LAP -1.34 LOP 53.16 VP 36.200 GAP 23.97 AZP 88.51 TAL 147.31 TAP 105.42 RCA 68.21 APO 163.37 V2 35.073 RC 216.375 GL 4.74 GP -3.56 TAL 36.14 ZAP 171.56 ETS 207.72 ZAE 131.61 ETE 183.82 ZAC 139.21 ETC 165.18 CLP 172.34
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                2.71 VHP 15.105 DPA 11.46 RAP 44.79 ECC 2.7402
    C3 105.738 VHL 10.283 DLA 24.60 RAL 55.82 RAD 6570.0 VEL 15.069 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2918.0
                                                                                                                                        -22.67
                                                                                                         5 49 27
        90.00 4 50 49 3518.02
90.00 0 36 59 4359.48
                                                                             314.93
                                                                                              69.60
                                                               132.06
                                                  -20.07
                                                                                                      1 49 38
7 26 45
2 46 16
                                                                                                                         3759.5
                                                                                                                                          1.39
                                                                              303.66
                                                                                               62.12
                                                               180.90
                                                   5.16
                                                                                                                                                       100.84
                                                                                                                                        -25.30
                                                                                               70.13
                                                                                                                         2586.5
                                                                              316.01
                    6 33 39
                               3186.48
                                                  -22.81
                                                               108.74
       100.00
                                                                                                                                                      158.72
                                                                                                                                          3.80
                                                                                                                          3566.3
                                                                              302.26
                                                                                               61.03
                                                   7.72
                                                               165.31
                    1 36 50
                                  4166.26
       100.00
                                                                                                                                        -31.37
                                                                                                         9 10 48
                                                                                                                          2243.1
                                                                                               71.19
                                                                              318.46
                                                 -29.08
                                                                 85.11
                    8 23 25
                                2843.07
       110.00
                                                                                                                                          9.17
                                                                                                         3 11 36
                                                                                                                          3482.4
                                                               155.54
                                                                              298.85
                                                                                              58.28
                                                   13.46
                                  4082.43
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2046.2 SR 343.6 SS 524.3
CRT .7691 CRS -.7195 CST -.9971
                                                                   SGT 5281.9 SGR 364.3 SG3 91.8
RRT .5777 RRF .5643 RTF .9745
SGB 5294.5 R23 -.0004 R13 .9745
     TOE 2.5467 TRA 8.0158 TC3 -.6441 BAU .9105
     ROE .6129 RRA .2072 RC3 -.0012 FAU .00190
                                                                                                                      LSA 2128.5 MSA 222.3 55A
    FDE .4600 FRA 1.6826 FC3 -.0155 BSP 17744
BDE 2.6194 BRA 8.0185 BC3 .6441 FSP -310
                                                                                                                      EL1 2063.4 EL2 217.8 ALF 7.44
                                                                   SG1 5286.1 SG2 297.2 THA 2.29
                                                                                                                                 ARRIVAL DATE JUL 27 1966
                                                                        FLIGHT TIME 212.00
LAUNCH DATE DEC 27 1965
    RL 147.12 LAL .00 LOL 95.03 VL 25.619 GAL 20.75 A7L 88.14 MCA 321.32 SMA 115.65 ECC .43634 INC 1.8601 V1 30.282 MP 108.01 LAP -1.16 LOP 56.37 VP 36.190 GAP 25.61 A7P 88.55 TAL 146.47 TAP 107.79 RCA 65.17 APO 166.08 V2 35.086 RC 217.906 GL 4.00 GP -3.52 TAL 34.94 ZAP 170.50 ETS 204.56 ZAE 131.24 ETE 183.77 ZAC 141.14 ETC 164.56 CLP 171.17
                                                                       DISTANCE 603.525
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 124.297 VHL 11.149 DLA 24.13 RAL 57.21 RAD 6570.3 VEL 15.673 PTH 2.79 VHP 16.094 DPA 12.17 RAP 46.74 ECC 3.0456
     LNCH AZMTH LNCH TIME LET TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2923.7
                                                                                                                                         -22.56
                                                                                             69.47
                                                                                                          6 2 56
                                                                132.42
                                                                             318.67
                     5 4 13
                                 3523.66
                                                  -19.94
         90.00
                                                                                                                                           3.33
                                                                                                                                                       177.60
                                                                                                          1 48 21
                                                                                                                           3819.5
                                                                               306.72
                                                                                               62.51
                                                                184.29
                                                    7.06
                     0 34 42
                                 4419.53
         90.00
                                                                                                        7 38 57
                                                                                                                                                       101.52
                                                                                                                                         -25.11
                                                                                                                          2596.5
                                                                                               69.86
                                                  -22.57
                                                                109.40
                                                                               319.72
                     6 45 40
                                 3196.55
        100.00
                                                                                                                                                       161.79
                                                                                                                          3621.9
                                                                                               61.54
                                                                                                          2 46 17
                                                                                                                                           5.67
                                                    9.54
                                                                168.43
                                                                               305.39
                     1 35 56 4221.67
        100.00
                                                                                                                                        -31.09
                                                                                                                          2259.2
                                                                               322.17
                                                                                               70.61
                                                                                                          9 21 8
                                                                 86.23
                     8 33 29 2859.22
                                                  -28.72
        110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                          11.00
                                                                                                                          3532.0
                                                                158.31
                                                   15.22
                      2 4 36
                                  4131.97
        110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1996.2 SR 327.3 SS 537.7
                                                                  SGT 5242.2 SGR 351.7 SG3 90.0
RRT .5972 RRF .5854 RTF .9789
     TOE 2.5921 TRA 8.7991 TC3 -.4821 BAU .8012
                                                                                                                      CRT .7544 CRS -.7098 CST -.9977
     RDE .6319 RRA .2399 RC3 .0004 FAU .00020
FOE .4644 FRA 1.8011 FC3 -.0014 BSP 17706
                                                                                                                      LSA 2081.8 MSA 217.1 55A 8.7
                                                                   568 5253.9 R23 -.0011 R13 .9789
                                                                                                                      ELI 2011.6 EL2 213.2 ALF 7.13
                                                                  5G1 5246.4 5G2 281.9 THA 2.30
     BOE 2.6680 BRA 8.8024 BC3 .4821 FSP -304
```

ARRIVAL DATE JUL 29 1966

```
LAUNCH DATE DEC 27 1965
                                                                                            DISTANCE 604.715
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 95.03 VL 25.589 GAL 23.02 AZL 88.31 MCA 324.54 SMA 115.47 ECC .46532 INC 1.6921 VI 30.282 RP 107.97 LAP -.98 LOP 59.58 VP 36.181 GAP 27.50 AZP 88.62 TAL 145.85 TAP 110.39 RCA 61.74 APO 169.20 VZ 35.099 RC 219.410 GL 3.29 GP -3.49 ZAL 33.94 ZAP 169.30 ETS 201.85 ZAE 130.76 ETE 183.70 ZAC 142.95 ETC 163.89 CLP 169.88
    PLANETOCENTRIC CONIC
     C3 147.295 VML 12.137 DLA 23.63 RAL 58.37 RAD 6570.6 VEL 16.390 PTH 2.86 VMP 17.231 DPA 12.82 RAP 48.60 ECC 3.4241
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           69.35
                                                                                                                                         6 15 26
                                                                                                                                                              2928.6
                                                                                                                                                                               -22.45
                                                                                                                                                                                                   125.05
         90.00 5 16 37 3528.65
90.00 0 31 35 4478.81
                                                                                                     322.12
                                                                -19.82
                                                                                  132.74
                                                                                                                                                               3878.8
                                                                                                                                                                                   5.22
                                                                                                                                                                                                    140.93
                                                                                                                           63.01
                                                                                                                                        1 46 14
                                                                 8.91
                                                                                  187.66
                                                                                                     309.57
                         6 56 49 3205.59
1 34 4 4277.10
                                                                                                                           69.63
                                                                                                                                         7 50 14
                                                                                                                                                               2605.6
                                                                                                                                                                                  -24.93
                                                                                                                                                                                                    102.13
                                                                                                     323.14
         100.00
                                                               -22.36
                                                                                  109.99
                                                                                                                                        2 45 22
                                                                                                                                                               3677.1
                                                                                                                                                                                   7.50
                                                                                                                                                                                                    164.86
                                                                                                                           62.15
         100.00
                                                                 11.32
                                                                                  171.57
                                                                                                     308.30
                                                                                                                                       9 30 40
3 14 18
                                                                                                                                                              2274.1
                                                                                                                                                                                  -30.82
                                                                                                                                                                                                      78.91
                          8 42 46 2674.13
2 4 37 4181.32
                                                                                                                           70.09
                                                               -28.38
                                                                                   87.25
                                                                                                     325.58
         110.00
                                                                                                                                                                                 12.80
                                                                                                                                                                                                   154.44
                                                                                                                                                              3581.3
                                                                                                                           59.85
                                                                 16.93
                                                                                  161.11
                                                                                                     305.09
         110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 1951.6 SR 310.2 SS 556.2
CRT .7416 CRS -.7023 CST -.9983
                                                                                      SGT 5200.6 SGR 338.2 SG3 88.4
RRT .6163 RRF .6060 RTF .9829
     TDE 2.6586 TRA 9.6659 TC3 -.3356 BAU
                                                                     .6609
     RDE .651D RRA .2738 RC3 .0022 FAU-.00187
FDE .4737 FRA 1.9359 FC3 .0110 BSP 17523
                                                                                      SGB 5211.6 R23 -.0017 R13 .9829
SG1 5204.8 SG2 266.1 THA 2.30
                                                                                                                                                         LSA 2042.1 MSA 210.0 SSA 8.2
                                                                                                                                                         EL1 1965.2 EL2 206.7 ALF
                                                                                                                                                                                                          6.80
     BDE 2.7372 BRA 9.6698 BC3 .3356 FSP -296
                                                                                                                                                                        ARRIVAL DATE JUL 31 1966
                                                                                             FLIGHT TIME 216.00
LAUNCH DATE OFC 27 1965
                                                                                            DISTANCE 604.772
   HELIOCENTRIC CONIC
                               .00 LOL 95.03 VL 25.562 GAL 25.60 AZL 88.50 MCA 327.76 SMA 115.33 ECC .49843 INC 1.4952 V1 30.282 -.80 LOP 62.80 VP 36.174 GAP 29.69 AZP 88.74 TAL 145.51 TAP 113.27 RCA 57.85 APO 172.82 V2 35.111 2.60 GP -3.45 ZAL 33.17 ZAP 167.96 ETS 199.49 ZAE 130.15 ETE 183.62 ZAC 144.62 ETC 163.18 CLP 168.45
     RL 147.12 LAL
RP 107.93 LAP
     RC 220.887 GL
   PLANETOCENTRIC CONIC
    PLANETOCEMETRIC CONIL
C3 176.086 VHL 13.270 DLA 23.10 RAL 59.29 RAD 6570.9 VEL 17.246 PTH 2.94 VHP 18.546 DPA 13.41 RAP 50.34 ECC 3.8979
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 27 59 3532.51 -19.73 132.98 325.23 69.26 6 26 52 2932.5 -22.37 125.31
90.00 0 27 31 4537.09 10.69 191.02 312.14 63.62 1 43 8 3937.1 7.07 184.22
100.00 7 7 1 3213.20 -22.18 110.48 326.22 69.43 8 0 34 2613.2 -24.78 102.65
100.00 1 31 10 4331.63 13.03 174.71 310.94 62.86 2 43.22 3731.6 9.29 167.92
                                                                                                                                        2 43 22
9 39 17
                                                                                                                                                                                   -30.58
                                                                                                                                                                                                      79.86
                                                                                                                                                               2287.4
                           8 51 9 2887.41
                                                                                                                            69.64
                                                               -28.07
                                                                                    88.16
                                                                                                     326.65
         110.00
                                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                                                               3630.2
                                                                                                                                                                                   14.54
                                                                                                                                                                                                      157.15
                           2 3 31 4230.19
                                                               18.58
                                                                                  163.94
         110.00
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                          ST 1906.5 SR 292.4 SS 578.9
CRT .7299 CRS -.6955 CST -.9987
                                                                                        SGT 5150.9 SGR 323.4 SG3 86.7
RRT .6338 RRF .6249 RTF .9864
      TOE 2.7399 TRAID.6153 TC3 -.2071 BAU .4876
     RDE .6697 RRA .3076 RC3 .0040 FAU-.00434
FDE .4864 FRA 2.0874 FC3 .0213 BSP 17473
BDE 2.8206 BRA10.6198 BC3 .2071 FSP -292
                                                                                        SGB 5161.1 R23 -.0024 R13 .9864
SG1 5155.0 SG2 249.9 THA 2.28
                                                                                                                                                          LSA 2003.6 MSA 201.4 SSA 7.6
                                                                                                                                                          EL1 1918.5 EL2 198.6 ALF 6.46
                                                                                                                                                                       ARRIVAL DATE AUG 2 1966
                                                                                             FLIGHT TIME 218.00
LAUNCH DATE DEC 27 1965
                                                                                            DISTANCE 603.342
    HELIOCENTRIC CONIC
     RL 147.12 LAL .00 LOL 95.03 VL 25.539 GAL 28.56 AZL 88.74 MCA 330.98 SNA 115.21 ECC .53635 INC 1.2595 V1 30.282 RP 107.89 LAP -.61 LOP 66.02 VP 36.169 GAP 32.25 AZP 88.90 TAL 145.53 TAP 116.50 RCA 53.42 APO 177.01 V2 35.124 RC 222.336 GL 1.94 GP -3.41 7AL 32.68 ZAP 166.43 ETS 197.41 ZAE 129.36 ETE 183.53 ZAC 146.13 ETC 162.45 CLP 168.86
     PLANETOCENTRIC CONIC

C3 212.530 VHL 14.578 OLA 22.55 RAL 59.92 RAD 6571.2 VEL 18.272 PTH 3.03 VHP 20.078 OPA 13.94 RAP 51.91 ECC 4.4977

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 5 38 14 3534.70 -19.67 133.12 327.95 69.21 6 37 9 2934.7 -22.33 123.45

90.00 0 22 18 4594.22 12.40 194.35 314.40 64.34 1 38 52 3994.2 8.85 187.47

100.00 7 16 11 3218.90 -22.04 110.85 328.91 69.28 8 9 50 2618.9 -24.66 103.03

100.00 1 27 3 4385.25 14.68 177.85 313.26 63.66 2 40 8 3785.2 11.02 170.97

110.00 8 58 33 2898.62 -27.80 88.92 331.31 69.25 9 46.52 2298.6 -30.36 80.67

110.00 2 1 10 4278.29 20.15 166.79 310.31 61.79 312.28 3678.3 16.22 159.87
    PLANETOCENTRIC CONIC
                                                                                      J LONG INJ RT ASC INJ AZMTH INJ TIME
33.12 327.95 69.21 6 37 9
94.35 314.40 64.34 1 38 52
10.85 328.91 69.28 8 9 50
77.85 313.26 63.66 2 40 8
88.92 331.31 69.26 9 46 52
66.79 310.31 61.79 3 12 28
MID-COURSE EXECUTION ACCURACY
SCT SIDEA D SCR 307 4 623 423
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SCT 5096.0 SGR 307.4 SG3 85.2

RRT .6498 RRF .6421 RTF .9895

SGB 5105.3 R23 -.0030 R13 .9895

SG1 5099.9 SG2 233.5 THA 2.25
                                                                                                                                                          ST 1863.3 SR 274.1 55 607.7
      TOE 2.8495 TRA11.6648 TC3 -.0938 BAU .2669
                                                                                                                                                         CRT .7202 CRS -.6905 CST -.9990
      ROE .6885 RRA .3407 RC3 .0057 FAU-.00746
FOE .5054 FRA 2.2602 FC3 .0304 BSP 17381
                                                                                                                                                          LSA 1969.7 MSA 191.5 SSA 7.0
                                                                                                                                                          EL1 1873.8 EL2 189.1 ALF 6.11
      BOE 2.9315 BRA11.6698 BC3 .0939 FSP -287
                                                                                                                                                                         APRIVAL DATE AUG 4 1966
                                                                                             FLIGHT TIME 220.00
LAUNCH DATE DEC 27 1965
                                                                                             DISTANCE 599.953
    HELIOCENTRIC CONIC
     RL 147.12 LAL .00 LOL 95.03 VL 25.520 GAL 31.98 A7L 89.03 HCA 334.20 SMA 115.12 ECC .57978 INC .9705 V1 30.282 RP 107.86 LAP -.42 LOP 69.23 VP 36.167 GAP 35.27 A7P 89.13 TAL 145.98 TAP 120.18 RCA 48.37 APO 181.86 V2 35.135 RC 223.756 GL 1.31 GP -3.37 TAL 32.48 TAP 164.68 ETS 195.56 TAE 128.35 ETE 183.42 TAC 147.43 ETC 161.74 CLP 165.04
    PLANETOCENTRIC CONIC
      C3 259.187 VHL 16.099 DLA 21.96 RAL 60.23 RAD 6571.5 VEL 19.506 PTH 3.11 VHP 21.874 DPA 14.39 RAP 53.29 ECC 5.2656 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                 -22.33
                                                                                                                                            6 46 12
                                                                                                                                                              2934.6
                                                                                                                                                                                                    125.44
                                                                                    133.11
                                                                                                      330.21
                                                                                                                            69.22
                                                                 -19.68
                           5 47 17 3534.58
D 15 43 4650.11
           90.00
                                                                                                                                        1 33 13
8 17 54
2 35 27
9 53 16
                                                                                                                                                                                                      190.68
                                                                                                                             65.15
                                                                                                                                                                4050.1
                                                                                                                                                                                   10.56
                                                                                    197.65
                                                                                                       316.29
                                                                  14.03
           90.00
                          7 24 12 3222.09
                                                                                                                                                                                                      103.24
                                                                                                                                                                2622.1
                                                                                                                                                                                   -24.60
                                                                                    111.05
                                                                                                       331.14
                                                                                                                             69.20
                                                                 -21.96
         100.00
                                                                                                                                                                                                      173.99
                                                                                                                                                                3837.8
                                                                                                                                                                                   12.68
                                                                                    180.97
                                                                                                       315.21
                                                                                                                             64.55
         100.00
                           1 21 30
                                             4437.63
                                                                  16.24
                                                                                                                                                                                                       81.28
                                                                                                                             68.97
                                                                                                                                                                2307.2
                                                                                                                                                                                  -30.19
                                                                 -27.59
                                                                                                       333.51
                           9 4 50
                                             2907.23
                                                                                     89.51
         110.00
                                                                                                                                                                                   17.83
                                                                                                                                                                3725.5
                                                                                                                                                                                                      162.57
                                                                                   169.63
                                                                                                                             62.87
                                                                                                                                         3 9 26
                                                                                                       312.39
                                                                   21.64
         110.00
                                             4325.45
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                        SGT 5034.3 SGR 290.3 SG3 83.8

RRT .6636 RRF .6569 RTF .9922

SGB 5042.7 R23 -.0036 R13 .9921

SGI 5038.0 SG2 217.0 THA 2.20
                                                                                                                                                          ST 1820.5 SR 255.4 S5 643.4
CRT .7128 CR5 -.6873 CST -.9993
                                                    .0048 BAU .0303
      TOE 2.9941 TRA12.8222 TC3
      ROE .7076 RRA .3713 RC3 .0073 FAU-.01147
FOE .5319 FRA 2.4580 FC3 .0383 BSP 17256
BDE 3.0766 BRA12.8276 BC3 .0087 FSP -283
                                                                                                                                                        LSA 1939.3 MSA 180.4 SSA 6.4
EL1 1829.7 EL2 178.3 ALF 5.77
```

FLIGHT TIME 214.00

LAUNCH DATE DEC 28 1965

ARRIVAL DATE MAR 8 1966

```
HELIOCENTRIC CONIC
                                                                             DISTANCE 208.032
    RL 147.12 LAL .00 LOL 96.05 VL 29.529 GAL -14.24 AZL 86.92 MCA 95.84 SMA 142.36 ECC .24817 INC 3.0796 V1 30.283 RP 107.85 LAP 3.06 LOP 191.90 VP 39.101 GAP -3.14 AZP 90.31 TAL 248.26 TAP 344.10 RCA 107.03 APO 177.69 V2 35.138 RC 68.394 GL 11.72 GP 9.75 ZAL 162.35 ZAP 59.40 ETS 352.28 ZAE 171.74 ETE 14.14 ZAC 46.67 ETC 167.71 CLP -58.90
   PLANETOCENTRIC CONIC
    C3 57.264 VHL 7.567 DLA -10.44 RAL 289.26 RAD 6569.0 VEL 13.365 PTH 2.44 VHP 4.618 DPA -10.21 RAP 313.71 ECC 1.9424
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 33 52 2146.24

10 52 26 5449.78

2 50 1 1900.55

12 18 58 5170.70

3 46 29 1723.72

13 38 59 4920.29
                                                                                                                                 1546.2
                                                                                                   112.35
                                                                                                                                                  -14.67
                                                      -17.85
                                                                      37.20
                                                                                 165.96
                                                                                                                  2 9 38
                                                                                                                                                                     29.97
        90.00
                                                                                                                2 9 38
12 23 15
                                                       28.21
                                                                     251.20
                                                                                     173.78
                                                                                                      87.40
                                                                                                                                     4849.8
                                                                                                                                                     27.55
                                                                                                                                                                    242.59
         90.00
                                                                                                                                   1300.5
                                                                                                     113.33 3 21 42
66.58 13 45 8
116.07 4 15 13
64.28 15 0 59
       100.00
                                                      -19.24
                                                                      18.52
                                                                                    165.34
                                                                                                                                                     -15.92
                                                                                                                                                                     11.30
       100.00
                                                       29.71
                                                                     230.58
                                                                                     173.69
                                                                                                                                    4570.7
                                                                                                                                                     28.92
                                                                                                                                                                    221.87
                                                                                                                                  1123.7
                                                                       3.26
                                                                                    163.52
                                                                                                                                                    -19.24
                                                                                                                                                                    356.09
       110.00
                                                      -22.93
                                                                     211.19
                                                                                     173.31
                                                                                                                                    4320.3
                                                                                                                                                    32.60
                                                                                                                                                                    202.14
       110.00
                                                      33.76
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                         SGT 480.6 SGR 409.3 SG3 233.4

RRT -.1735 RRF -.3758 RTF .3666

SGB 631.3 R23 .1807 R13 -.4497

SG1 495.8 SG2 390.7 TMA 156.45
                                                                                                                                ST 155.2 SR 385.8 SS 188.1
CRT .3037 CRS .6670 CST -.4921
LSA 409.6 MSA 200.5 SSA 20.0
    TOE -.0812 TRA -.6168 TC3 .0273 BAU .0382
    RDE -.5071 RRA .1651 RC3 .0417 FAU .10404
    FOE .3680 FRA-1.6179 FC3-1.5730 BSP
                                                        555
-682
                                                                                                                                EL1 389.2 EL2 146.6 ALF 81.88
    BOE .5135 BRA .6385 BC3 .0498 FSP
                                                                              FLIGHT TIME 72.00
                                                                                                                                             ARRIVAL DATE MAR 10 1966
LAUNCH DATE DEC 28 1965
  HELIOCENTRIC CONIC
                                                                             DISTANCE 214.610
    RL 147.12 LAL .00 LOL 96.05 VL 29.527 GAL -14.09 AZL 86.99 HCA 99.06 SMA 142.34 ECC .24568 INC 3.0141 VI 30.283 RP 107.89 LAP 2.98 LOP 195.13 VP 39.089 GAP -2.48 AZP 90.48 TAL 248.29 TAP 347.36 RCA 107.37 APO 177.31 VZ 35.126 RC 70.553 GL 11.61 GP 10.25 ZAL 162.43 ZAP 64.49 ETS 353.07 ZAE 174.35 ETE 30.88 ZAC 44.72 ETC 168.10 CLP -64.05
   PLANETOCENTRIC CONIC
         56.024 VHL 7.485 DLA -10.55 RAL 289.27 RAD 6569.0 VEL 13.319 PTH
                                                                                                          2.43 VHP 4.429 DPA -10.18 RAP 311.72 ECC 1.9220
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   1 34 51 2137.00
10 51 31 5448.26
2 50 56 1991.53
12 18 6 5168.97
3 47 16 1715.16
13 38 17 4918.10
                                                      -17.61
                                                                      36.63
                                                                                    165.59
                                                                                                    112.54
                                                                                                                  2 10 28
                                                                                                                                  1537.0
                                                                                                                                                   -14.41
                                                                                                                                                                     29.42
        90.00
                                                      26.20
                                                                     251.09
                                                                                     173.43
                                                                                                      87.34 12 22 19
                                                                                                                                    4848.3
                                                                                                                                                     27.54
                                                                                                                                                                     242.48
        90.00
                                                      -19.00
                                                                      17.96
                                                                                     164.97
                                                                                                     113.52
                                                                                                                    3 22 28
                                                                                                                                     1291.5
                                                                                                                                                     -15.66
                                                                                                                                                                      10.76
       100.00
                                                                                                      86.51 13 44 15
116.29 4 15 51
84.18 15 0 15
       100.00
                                                       29.71
                                                                     230.45
                                                                                    173.34
                                                                                                                                    4569.D
                                                                                                                                                    28.91
                                                                                                                                                                     221.74
       110.00
                                                      -22.67
                                                                       2.75
                                                                                    163.15
                                                                                                     116.29
                                                                                                                                    1115.2
                                                                                                                                                    -18.96
                                                                                                                                                                     355.59
       110.00
                                                      33.74
                                                                     211.02
                                                                                    172.95
                                                                                                                                    4318.1
                                                                                                                                                     32.57
                                                                                                                                                                    201.98
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 523.2 SGR 414.8 SG3 253.6

RRT -.2424 RRF -.4169 RTF .4795

SGB 667.7 R23 .1581 R13 -.5486

SGI 544.1 SG2 387.0 THA 157.00
    TOE -.0681 TRA -.6681 TC3 -.0125 BAU .0417
                                                                                                                                ST 164.5 SR 385.4 S5 194.1
CRT .2141 CRS .6636 CST -.5748
    ROE -.5006 RRA .1754 RC3 .0542 FAU .11193
                                                                                                                                LSA 409.6 MSA 212.4 55A 20.1
ELI 387.3 EL2 159.9 ALF 83.70
    FOE .3849 FRA-1.7361 FC3-1.7296 BSP 746
BDE .5052 BRA .6908 BC3 .0556 FSP -754
                                                                             FLIGHT TIME 74.00
                                                                                                                                           ARRIVAL DATE MAR 12 1966
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 221.142
    RL 147.12 LAL .00 LOL 96.05 VL 29.516 GAL -13.95 A7L 87.05 HCA 102.29 SHA 142.24 ECC .24331 INC 2.9476 V1 30.283 RP 107.92 LAP 2.88 LOP 198.35 VP 39.069 GAP -1.86 A7P 90.63 TAL 248.20 TAP 350.48 RCA 107.63 APO 176.85 VZ 35.114 RC 72.741 GL 11.48 GP 10.74 ZAL 162.46 ZAP 69.65 ETS 353.89 ZAE 175.95 ETE 67.89 ZAC 42.69 ETC 168.52 CLP -69.28
   PLANETOCENTRIC CONIC
    C3 54.814 VHL 7.404 DLA -10.67 RAL 289.35 RAD 6569.0 VEL 13.273 PTH 2.43 VHP 4.274 DPA -10.15 RAP 309.65 ECC 1.9021
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 36 10 2127.65
10 50 51 5446.86
2 52 11 1882.40
12 17 31 5167.34
                                                                                                  112.72 2 11 38
87.29 12 21 38
113.72 3 23 35
                                                                                                                                  1527.6
                                                                                                                                                  -14.14
                                                     -17.37
                                                                     36.05
                                                                                  165.31
                                                                                                                                                                    28.86
        90.00
                                                                                                                                                     27.52
                                                                                                                                                                    242.38
         90.00
                                                      28.20
                                                                     250.98
                                                                                    173.16
                                                                                                                                    4846.9
                                                                                                                                   1282.4
                                                                                                                                                                     10.22
                                                     -18.75
                                                                     17.40
                                                                                    164.68
                                                                                                                                                    -15.39
       100.00
                                                                                                      86.45 13 43 39
                                                                                                                                   4567.3
       100.00
                                                     29.70
                                                                    230.33
                                                                                    173.07
                                                                                                                                                    28.89
                                                                                                                                                                    221.62
                      3 48 21 1706.51
13 37 51 4915.99
       110.00
                                                      -22.41
                                                                       2.22
                                                                                    162.85
                                                                                                     116.51
                                                                                                                 4 16 48
                                                                                                                                    1106.5
                                                                                                                                                    -18.67
                                                                                                                                                                    355.08
                                                                                                      84.09 14 59 47
                                                                                                                                                    32.54
                    13 37 51
                                                      33.73
                                                                     210.85
                                                                                    172.67
                                                                                                                                    4316.0
                                                                                                                                                                    201.52
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                              ST 176.8 SR 384.0 S5 199.2

CRT .1284 CRS .6640 CST -.6436

LSA 409.4 MSA 224.4 SSA 20.1

EL1 384.8 EL2 175.0 ALF 85.73
    TOE -.0550 TRA -.7263 TC3 -.0592 BAU .0657
                                                                         SGT 580.2 SGR 420.5 SG3 272.2
                                                                         RRT -.3116 RRF -.4580 RTF .5782
SGB 716.6 R23 .1420 R13 -.6322
SG1 605.8 SG2 382.6 THA 158.22
    ROE - .4929 RRA .1854 RC3 .0673 FAU .11896
    FOE .4006 FRA-1.8341 FC3-1.8788 BSP 999
BOE .4960 BRA .7496 BC3 .0896 FSP -816
LAUNCH DATE DEC 28 1965
                                                                             FLIGHT TIME 76.00
                                                                                                                                            ARRIVAL DATE MAR 14 1966
                                                                             DISTANCE 227.528
    RL 147.12 LAL .00 LOL 96.05 VL 29.497 GAL -13.80 AZL 87.12 HCA 105.51 SMA 142.07 ECC .24104 INC 2.8795 V1 30.283
RP 107.96 LAP 2.77 LOP 201.58 VP 39.044 GAP -1.27 AZP 90.77 TAL 247.97 TAP 353.48 RCA 107.83 APO 176.32 V2 35.101
RC 74.954 GL 11.33 GP 11.21 ZAL 162.45 ZAP 74.83 ETS 354.74 ZAE 175.04 ETE 112.54 ZAC 40.64 ETC 168.98 CLP -74.53
   PLANETOCENTRIC CONIC
    C3 53.824 VML 7.323 DLA -10.80 RAL 289.50 RAD 6568.9 VEL 13.228 PTH 2.42 VMP 4.152 DPA -10.12 RAP 307.57 ECC 1.8825 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                  1518.1
                                                                                  165.09
                                                                                                   112.91
                    1 37 47 2116.11
10 50 26 5445.56
                                                                                                                                                    -13.87
                                                                                                                  2 13 6
                                                                                                                                                                     28.29
        90.00
                                                     -17.12
                                                                     35.46
                                                                                                                 12 21 12
                                                                                                                                     4845.6
                                                                                                                                                                    242.29
        90.00
                                                      28.19
                                                                     250.89
                                                                                    172.95
                                                                                                      87.25
                                                                                                                                                     27.51
                   2 53 44 1873.09
12 17 11 5165.81
3 49 45 1697.70
13 37 40 4913.96
                                                    -18.49
                                                                      16.82
                                                                                    164.46
                                                                                                     113.91
                                                                                                                   3 24 57
                                                                                                                                    1273.1
                                                                                                                                                     -15.11
                                                                                                                                                                      9.67
       100.00
                                                                                                                                                                    221.51
                                                       29.69
                                                                     230.22
                                                                                    172.86
                                                                                                      86.39
                                                                                                                 13 43 16
                                                                                                                                     4565.8
                                                                                                                                                     28.88
       100.00
                                                                                                                4 18 2
14 59 34
                                                                                                                                    1097.7
                                                                                                                                                    -18.38
                                                    -22.14
                                                                       1.68
                                                                                    162.62
                                                                                                     116.73
                                                                                                                                                                    354.57
       110.00
                                                                                                                                    4314.0
       110.00
                                                      33.72
                                                                     210.70
                                                                                    172.46
                                                                                                      84.00
                                                                                                                                                     32.52
                                                                                                                                                                    201.67
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 650.7 SGR 425.9 SG3 288.9
RRT -.3764 RRF -.4975 RTF .6582
SGB 777.7 R23 .1295 R13 -.6990
                                                                                                                               ST 191.5 SR 381.3 SS 202.5
CRT .0473 CRS .6607 CST -.7069
LSA 408.1 MSA 236.8 SSA 20.2
     TDE -.0414 TRA -.7897 TC3 -.1116 BAU .0989
    ROE -.4836 RRA .1951 RC3 .0810 FAU .12513
    FDE .4071 FRA-1.9139 FC3-2.0201 BSP 1291
BDE .4854 BRA .8135 BC3 .1379 FSP -878
                                                                         SG1 680.1 SG2 377.2 THA 159.55
                                                                                                                              EL1 381.4 EL2 191.3 ALF 88.18
```

FLIGHT TIME 70.00

```
ARRIVAL DATE MAR 16 1966
                                                                          FLIGHT TIME 78.00
LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 234.070
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 95.05 VL 29.471 GAL -13.66 AZL 87.19 HCA 108.72 SMA 141.83 ECC .23884 INC 2.8092 VI 30.283 RP 108.00 LAP 2.66 LOP 204.80 VP 39.012 GAP -.70 AZP 90.90 TAL 247.63 TAP 356.35 RCA 107.96 APO 175.71 V2 35.089 RC 77.191 GL 11.18 GP 11.66 ZAL 162.40 ZAP 79.98 ETS 355.64 ZAE 172.41 ETE 135.11 ZAC 38.62 ETC 169.47 CLP -79.76
  PLANFTOCENTRIC CONIC
    C3 52.443 VML 7.242 OLA -10.93 RAL 289.72 RAO 6568.9 VEL 13.183 PTH 2.41 VMP 4.060 OPA -10.08 RAP 305.51 ECC 1.8631
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 39 43 2108.29
10 50 14 5444.35
2 55 35 1863.51
12 17 3 5164.35
3 51 26 1688.64
13 37 42 4911.98
                                                                                164.93
                                                                                                113.10
                                                                                                              2 14 51
                                                                                                                              1508.3
                                                                                                                                             -13.58
                                                                                                                                                               27.71
                                                                   34.86
        90.00
                                                    -16.86
                                                                                                             12 20 58
                                                                                                                                                27.50
                                                                                                                                                               242.20
                                                                                                   87.20
                                                                                                                                4844.3
                                                                                 172.81
        90.00
                                                    28.19
                                                                  250.80
                                                                                                  114.11
                                                                                                               3 26 39
                                                                                                                                1263.5
                                                                                                                                               -14.82
                                                                                                                                                                9.10
                                                                   16.24
                                                                                  164.30
       100.00
                                                   -18.23
                                                                                                 86.33 13 43 7
116.95 4 19 34
83.91 14 59 34
                                                                                                                                               28.86
                                                                                                                                                               221.40
                                                                                 172.71
       100.00
                                                    29.69
                                                                  230.11
                                                                                                                                               -18.07
                                                                                                                                                               354.04
                                                                                 162.45
                                                                                                                                1088.6
       110.00
                                                  -21.86
                                                                    1.12
                                                                                                                              4312.0
                                                                                                                                               32.49
                                                                                                                                                              201.52
                                                                                 172.31
                                                                  210.55
       110.00
                                                   33.70
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SGT 733.7 SGR 431.1 SG3 303.0
RRT -.4394 RRF -.5354 RTF .7202
SGB 851.0 R23 .1210 R13 -.7507
SG1 765.8 SG2 371.0 THA 160.87
                                                                                                                           ST 208.6 SR 377.2 SS 204.3
CRT -.0240 CRS .6567 CST -.7589
    TDE -.0283 TRA -.8576 TC3 -.1695 BAU .1362
   RDE -.4727 RRA .2039 RC3 .0950 FAU .13010
FDE .4069 FRA-1.9696 FC3-2.1477 BSP 1618
BDE .4735 BRA .8815 BC3 .1943 FSP -933
                                                                                                                           LSA 406.3 MSA 249.1 SSA 20.2
                                                                                                                            EL1 377.3 EL2 208.6 ALF 91.09
                                                                                                                                        ARRIVAL DATE MAR 18 1966
                                                                           FLIGHT TIME 80.00
LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 240.468
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 29.438 GAL -13.51 AZL 87.26 MCA 111.94 SMA 141.54 ECC .23670 INC 2.7363 VI 30.283 RP 108.04 LAP 2.54 LOP 208.01 VP 38.976 GAP -.17 AZP 91.02 TAL 247.18 TAP 359.12 RCA 108.04 APO 175.04 V2 35.076 RC 79.446 GL 11.00 GP 12.10 ZAL 162.31 ZAP 85.03 ETS 356.57 ZAE 169.28 ETE 145.48 ZAC 36.69 ETC 170.00 CLP -84.91
  PLANETOCENTRIC CONIC
   C3 51.265 VHL 7.160 DLA -11.06 RAL 289.99 RAD 6568.9 VEL 13.139 PTH 2.40 VHP 3.996 DPA -10.01 RAP 303.54 ECC 1.8437 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 41 57 2098.10

10 50 13 5443.24

2 57 45 1853.58

12 17 6 5162.99

3 53 24 1679.26

13 37 56 4910.07
                                                                                                                             1498.1
                                                                                                                                                                27.11
                                                                                164.82
                                                                                                 113.29
                                                                                                               2 16 55
                                                                                                                                              -13.29
       90.00
                                                    -16.58
                                                                   34.24
                                                                                                  87.16 12 20 56
114.31 3 28 38
86.28 13 43 9
117.18 4 21 24
83.82 14 59 46
                                                                   250.72
                                                                                  172.72
                                                                                                                                 4843.2
                                                                                                                                                 27.49
                                                                                                                                                                242.12
        90.00
                                                    28.19
                                                                                                                                 1253.6
                                                                                                                                               -14.52
                                                                                                                                                                 8.52
                                                    -17.95
                                                                    15.63
                                                                                  164.19
       100.00
                                                                                                                                                               221.31
                                                    29.68
                                                                  230.01
                                                                                  172.62
                                                                                                                                 4563.0
                                                                                                                                                 28.85
      100.00
                                                    -21.57
                                                                                  162.33
                                                                                                                                 1079.3
                                                                                                                                               -17.76
                                                                                                                                                               353.50
      110.00
                                                                      .55
                                                                  210.40
                                                                                                                                 4310.1
                                                                                                                                                32.47
                                                                                                                                                               201.38
      110.00
                                                  33.69
                                                                                  172.21
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 227.9 SR 372.1 55 204.8
CRT -. 0825 CRS .6553 CST -. 7968
                                                                       SGT 827.6 SGR 435.6 SG3 313.6
RRT -.4930 RRF -.5711 RTF .7668
    TOE -.0163 TRA -.9291 TC3 -.2326 BAU .1760
    ROE - .4604 RRA .2114 RC3 .1089 FAU .13351
FDE .4033 FRA-1.9956 FC3-2.2547 BSP 1976
BDE .4607 BRA .9528 BC3 .2568 FSP -971
                                                                      SGB 935.3 R23 .1165 R13 -.7897
SG1 861.5 SG2 364.1 TMA 162.16
                                                                                                                           LSA 404.7 MSA 260.9 SSA 20.2
                                                                                                                          EL1 372.8 EL2 226.6 ALF 94.59
                                                                          FLIGHT TIME 82.00
                                                                                                                                       ARRIVAL DATE MAR 20 1966
LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 246.825
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 29.399 GAL -13.36 AZL 87.34 MCA 115.15 SMA 141.20 ECC .23461 INC Z.6600 VI 30.283
RP 108.08 LAP 2.41 LOP 211.23 VP 38.955 GAP .34 AZP 91.13 TAL 246.63 TAP 1.78 RCA 108.07 APO 174.32 VZ 35.063
RC 81.719 GL 10.81 GP 12.51 ZAL 162.18 ZAP 89.94 ETS 357.54 ZAE 166.03 ETE 151.12 ZAC 34.88 ETC 170.56 CLP -89.94
   PLANETOCENTRIC CONTC
    C3 50.083 VHL 7.077 OLA -11.21 RAL 290.33 RAD 6568.8 VEL 13.094 PTH 2.39 VHP 3.957 OPA -9.91 RAP 301.70 ECC 1.8242
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               113.48 2 19 17

87.13 12 21 3

114.52 3 30 55

86.23 13 43 21

117.41 4 23 30

83.74 15 0 9
                                                                                                                            1487.4
                                                                              164.76
                                                                                                                                             -12.98
                                                                                                                                                               26.48
                   1 44 30 2087.43
10 50 21 5442.30
3 0 12 1843.19
                                                    -16.29
                                                                  33.59
        90.00
                                                                  250.65
                                                                                  172.68
                                                                                                                                4842.3
                                                                                                                                               27.49
                                                                                                                                                               242.06
                                                    28.18
        90.00
                                                                    15.00
                                                                                 164.13
                                                                                                                              1243.2
                                                                                                                                               -14.20
                                                                                                                                                                 7.91
                                                    -17.66
       100.00
                                                                                                                                4561.8
                                                                                                                                               28.84
                                                                                                                                                               221.22
                                                                                  172.58
                                                   29.68
                                                                   229.92
                                   5161.78
       100.00
                   12 17 19
                                                                                                                                1069.5
                                                                                                                                               -17.43
                                                                                                                                                               352.93
                                                    -21.27
                                                                   359.95
                                                                                  162.26
                   3 55 41 1669.47
13 38 20 4908.26
       110.00
                                                                                                                                               32.44
                                                                                                                                4308.3
                                                                                                                                                               201.24
                                                                                  172.17
                                                 33.67
                                                                   210.26
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 248.6 SR 365.4 SS 203.6

CRT -.1301 CRS .6502 CST -.8283

LSA 403.0 MSA 272.0 SSA 20.2
    TOE -.0056 TRA-1.0025 TC3 -.2998 BAU .2170
                                                                       SGT 929.9 SGR 439.5 SG3 321.5
    ROE - .4463 RRA .2179 RC3 .1229 FAU .13560
FDE .3907 FRA-1.9982 FC3-2.3440 83P 2352
BDE .4464 BRA 1.0259 BC3 .3240 FSP -1004
                                                                       RRT -.5406 RRF -.6045 RTF .8014
                                                                       SGB 1028.5 R23 .1142 R13 -.8189
                                                                       SG1 964.8 SGZ 356.4 THA 163.33
                                                                                                                            EL1 368.0 EL2 244.7 ALF 99.12
                                                                                                                                        ARRIVAL DATE MAR 22 1966
                                                                           FLIGHT TIME 84.00
LAUNCH DATE DEC 28 1965
                                                                           DISTANCE 253.143
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 29.355 GAL -13.20 A7L 87.42 MCA 118.36 SMA 140.81 ECC .23256 INC 2.5797 V1 30.283
RP 108.12 LAP 2.27 LOP 214.44 VP 38.890 GAP .82 A7P 91.23 TAL 245.99 TAP 4.35 RCA 108.06 APO 173.55 V2 35.050
RC 84.008 GL 10.60 GP 12.92 TAL 162.02 TAP 94.66 ETS 358.56 TAE 162.83 ETE 154.60 TAC 33.25 ETC 171.17 CLP -94.78
   PLANETOCENTRIC CONIC
    C3 48.895 VHL 6.992 DLA -11.37 RAL 290.72 RAD 6568.8 VEL 13.048 PTH 2.38 VMP 3.940 DPA -9.78 RAP 300.03 ECC 1.8047
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              1476.2
                                                    -15.99
                                                                   32.90
                                                                                 164.75
                                                                                                113.69
                                                                                                               2 21 58
                                                                                                                                               -12.65
                                                                                                                                                                25.82
        90.00
                      1 47 22 2076.16
                                                                                                  87.10 12 21 17
                                                                                                                                                                242.00
                   10 50 35
                                                                   250.60
                                                                                  172.69
                                                                                                                                 4841.6
                                                                                                                                                27.48
        90.00
                                   5441.59
                                                    28.18
                                                                    14.33
                                                                                  164.11
                                                                                                  114.73
                                                                                                              3 33 31
                                                                                                                                 1232.2
                                                                                                                                                -13.87
                                                                                                                                                                 7.27
                      3 2 59
                                   1832.22
                                                    -17.35
       100.00
                                                                                                  86.19 13 43 41
                                                                                  172.59
                                                                                                                                 4560.8
                                                                                                                                                28.83
                                                                                                                                                                221.14
                    12 17 40
                                   5160.76
                                                     29.67
                                                                   229.85
       100.00
                   3 58 15 1659.14
13 38 53 4906.60
                                                                                                  117.65 4 25 54
83.66 15 0 40
                                                   -20.94
                                                                                  162.24
                                                                                                                                 1059.1
                                                                                                                                               -17.08
                                                                                                                                                                352.33
       110.00
                                                                   359.33
                                                                                  172.17
                                                                                                                                4306.6
                                                                                                                                                 32.42
                                                                                                                                                               201.12
       110.00
                                                                   210.13
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ST 270.4 SR 357.3 SS 201.0 CRT -.1662 CRS .6428 CST -.8530 LSA 401.8 MSA 281.7 SSA 20.2 EL1 363.4 EL2 262.2 ALF 105.25
                                                                     SGT 1038.7 SGR 442.5 SG3 325.8

RRT -.5826 RRF -.6359 RTF .8268

SGB 1129.0 R23 .1144 R13 -.8405

SG1 1074.1 SG2 347.8 THA 164.38
    TOE .0030 TRA-1.0768 TC3 -.3708 BAU .2583
    ROE -.4306 RRA .2230 RC3 .1368 FAU .13635
    FOE .3711 FRA-1.9771 FC3-2.4142 BSP 2746
    BOE .4306 BRA 1.0996 BC3 .3952 FSP -1028
```

```
FLIGHT TIME 86.00
                                                                                                                                                ARRIVAL DATE MAR 24 1966
LAUNCH DATE DEC 28 1965
                                                                               DISTANCE 259.422
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 29.306 GAL -13.05 AZL 87.51 HCA 121.57 SMA 140.38 ECC .23054 INC 2.4945 VI 30.283 RP 108.16 LAP 2.13 LOP 217.64 VP 38.841 GAP 1.28 AZP 91.31 TAL 245.26 TAP 6.83 RCA 108.02 APO 172.75 V2 35.036 RC 86.309 GL 10.36 GP 13.32 ZAL 161.82 ZAP 99.17 ETS 359.61 ZAE 159.73 ETE 156.92 ZAC 31.82 ETC 171.83 CLP -99.43
   PLANETOCENTRIC CONTC
    C3 47.697 VHL 6.906 DLA -11.54 RAL 291.16 RAD 6568.8 VEL 13.002 PTH
                                                                                                            2.37 VHP 3.943 OPA
                                                                                                                                           -9.60 RAP 298.57 ECC 1.7850
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 50 36 2064.13
10 50 55 5441.20
                                                                        32.18
                                                                                      164.78
                                                                                                       113.90
                                                                                                                      2 25 0
                                                                                                                                        1464.1
                                                                                                                                                         -12.30
                                                                                                                                                                         25.11
                                                       -15.66
        90.00
                                                                                                                     12 21 36
                                                                       250.57
                                                                                       172.74
                                                                                                         87.09
                                                                                                                                         4641.2
        90.00
                                                       28.18
                     3 6 6 1820.53
12 18 6 5160.04
                                                                                       164.14
                                                                                                        114.95
                                                                                                                       3 36 27
                                                                                                                                        1220.5
                                                                                                                                                         -13.51
                                                                         13.62
                                                      -17.01
       100.00
                                                                                                        86.16 13 44 6
117.90 4 28 37
83.60 15 1 18
                                                                                                                                         4560.0
                                                                                                                                                         28.82
                                                                                                                                                                         221.09
                                                                       229.79
                                                                                       172.64
       100.00
                                                       29.67
                                                                                                                                                                         351.71
                                                      -20.60
                                                                       358.67
                                                                                       162.26
                                                                                                                                        1048.2
                                                                                                                                                         -16.70
       110.00
                      4 1 8 1648.17
                                                                       210.02
                                                                                                                                        4305.2
                                                                                                                                                          32.40
                                                                                       172.22
       110.00
                     13 39 33
                                     4905.17
                                                       33.65
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           36T 1152.0 SGR 444.7 SG3 326.8
RRT -.6189 RRF -.6654 RTF ..8451
SGB 1234.9 R23 .1179 R13 -.8563
                                                                                                                                    ST 293.0 SR 348.2 SS 197.4
CRT -.1922 CRS .6397 CST -.8682
    TOE .0094 TRA-1.1508 TC3 -.4449 BAU .2994
    RDE -.4138 RRA .2263 RC3 .1503 FAU .13557
FDE .3520 FRA-1.9291 FC3-2.4607 BSP 3146
                                                                                                                                    LSA 402.7 MSA 289.0 SSA 20.2
    BOE .4140 BRA 1.1728 BC3 .4696 FSP -1030
                                                                            SG1 1187.4 SG2 338.9 THA 165.34
                                                                                                                                    EL1 360.5 EL2 277.7 ALF 113.98
                                                                                FLIGHT TIME 88.00
                                                                                                                                                ARRIVAL DATE MAR 26 1966
LAUNCH DATE DEC 28 1965
                                                                               DISTANCE 265.664
   HELIOCENTRIC CONIC
                          .00 LOL 96.05 VL 29.253 GAL -12.89 AZL 87.60 HCA 124.77 SMA 139.92 ECC .22856 INC 2.4032 V1 30.283 1.97 LOP 220.85 VP 38.789 GAP 1.71 AZP 91.37 TAL 244.45 TAP 9.22 RCA 107.94 APO 171.91 V2 35.023 10.10 GP 13.73 ZAL 161.58 ZAP 103.44 ETS .72 ZAE 156.79 ETE 158.53 ZAC 30.61 ETC 172.56 CLP-103.84
    RL 147.12 LAL
    RP 108.20 LAP
    RC 88.623 GL
   PLANETOCENTRIC CONIC
    C3 46.487 VHL 6.818 OLA -11.74 RAL 291.66 RAD 6568.7 VEL 12.956 PTH
                                                                                                            2.36 VHP 3.963 OPA
                                                                                                                                            -9.36 RAP 297.33 ECC 1.7651
    LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 54 12 2051.18 -15.30 31.39 164.85 114.12 2 28 23 1451.2 -11.91 24.35
                    10 51 16 5441.29
3 9 36 1807.95
12 18 34 5159.75
4 4 22 1636.39
13 40 17 4904.07
                                                                                                                                         4841.3
                                                                                                                     12 21 58
        90.00
                                                        28.18
                                                                       250.58
                                                                                       172.84
                                                                                                          87.09
                                                                                                                                                          27.48
                                                                                                                                                                          241.98
                                                                                                                                         1208.0
                                                                                                                                                          -13.12
       100.00
                                                       -16.65
                                                                        12.86
                                                                                       164.20
                                                                                                         115.19
                                                                                                                     3 39 43
                                                                                                                                                                           5.85
                                                                                                                                                          28.82
                                                                                       172.73
                                                                                                                     13 44 34
                                                                                                                                         4559.7
                                                                                                                                                                          221.07
       100.00
                                                        29.67
                                                                       229.77
                                                                                                          86.15
                                                                                                          118.17 4 31 39
83.55 15 2 1
                                                                                                        118.17
                                                                                                                                         1036.4
                                                                                                                                                         -16.30
                                                                                                                                                                         351.03
       110.00
                                                       -20.22
                                                                       357.96
                                                                                      162.32
                     13 40 17
                                     4904.07
                                                        33.64
                                                                       209.94
                                                                                       172.31
                                                                                                                                         4304.1
                                                                                                                                                          32.38
                                                                                                                                                                         200.93
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           SGT 1268.4 SGR 446.1 SG3 325.7
RRT -.6521 RRF -.6937 RTF .8587
                                                                                                                                    ST 315.9 SR 337.4 SS 192.4
CRT -. 2090 CRS .6293 CST -. 8825
    TOE .0129 TRA-1.2235 TC3 -.5217 BAU .3399
    RDE -.3953 RRA .2287 RC3 .1642 FAU .13390
    FOE .3234 FRA-1.8677 FC3-2.4937 83P 3555
BOE .3955 8RA 1.2447 8C3 .5470 FSP -1033
                                                                                                                                     LSA 405.3 MSA 293.3 SSA 20.2
                                                                            5GB 1344.6 R23 .1229 R13 -.8680
                                                                           SG1 1303.7 SG2 329.0 THA 166.18
                                                                                                                                    EL1 360.8 EL2 288.9 ALF 126.26
                                                                                                                                                ARRIVAL DATE MAR 25 1966
                                                                               FLIGHT TIME 90.00
LAUNCH DATE DEC 28 1965
                                                                               DISTANCE 271.872
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 29.197 GAL -12.72 ATL 87.70 HCA 127.97 SHA 139.44 ECC .22661 INC 2.3047 V1 30.283 RP 108.24 LAP 1.82 LOP 224.05 VP 38.735 GAP 2.13 APP 91.42 TAL 243.57 TAP 11.55 RCA 107.84 APO 171.04 V2 35.010 RC 90.946 GL 9.80 GP 14.17 TAL 161.31 ZAP 107.45 ETS 1.88 ZAE 154.02 ETE 159.65 ZAC 29.63 ETC 173.38 CLP-108.02
   PLANETOCENTRIC CONIC
    C3 45.264 VHL 6.728 OLA -11.96 RAL 292.21 RAD 6568.7 VEL 12.908 PTH 2.35 VHP 3.998 DPA -9.06 RAP 296.32 ECC 1.7449
LNCH AZMTH LNCH TIME L-1 TIME INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     1437.1
                                                                                    164.96
                                                                                                                      2 32 12
                                                                                                                                                                          23.53
                      1 58 15 2037.06
                                                       -14.90
                                                                       30.54
                                                                                                     114.36
                                                                                                                                                        -11.49
        90.00
                                                                                                                                        4842.0
                                                                                                                                                         27.48
                                                                                                                                                                         242.04
                     10 51 37
                                     5442.03
                                                        28.18
                                                                      250.63
                                                                                       172.98
                                                                                                        87.12
                                                                                                                    12 22 19
         90.00
                                                                                                       3 13 30 1794.26
                                                      -16.25
                                                                        12.04
                                                                                       164.31
                                                                                                                                        1194.3
                                                                                                                                                        -12.70
                                                                                                                                                                          5.06
       100.00
                                                                                       172.88
                                                                                                                                        4560.1
                                                                                                                                                        28.82
                                                                                                                                                                         221.09
                                     5160.05
                                                       29.67
                                                                       229.79
       100.00
                     12 19 3
                                                                                       162.41
                                                                                                                                        1023.6
                                                                                                                                                        -15.85
                                                                                                                                                                         350.31
       110.00
                       4 7 59
                                   1623.63
                                                      -19.81
                                                                       357.20
                                                                                                                                                         32.38
                                                                                                                                                                         200.88
                                                                                       172.46
                                                                                                                                        4303.5
                     13 41 3
                                     4903.46
                                                        33.64
                                                                       209.89
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ST 338.9 SR 325.6 SS 186.5
CRT -.2179 CRS .6219 CST -.8906
LSA 411.0 MSA 293.8 SSA 20.1
                                                                           SGT 1386.3 SGR 446.8 SG3 321.7
RRT -.6815 RRF -.7209 RTF .8683
SGB 1456.6 R23 .1311 R13 -.8763
    TOE .0134 TRA-1.2936 TC3 -.6008 BAU .3792
    ROE - 3757 RRA .2294 RC3 .1780 FAU .13110
FDE .2960 FRA-1.7868 FC3-2.5074 B3P 3959
BDE .3760 BRA 1.3138 BC3 .6267 FSP -1019
                                                                           SG1 1421.2 SG2 319.0 THA 166.94
                                                                                                                                   Fi 1 367.3 FL2 293.2 ALF 140.19
                                                                                                                                                ARRIVAL DATE MAR 30 1966
                                                                               FLIGHT TIME 92.00
LAUNCH DATE DEC 28 1965
                                                                               015TANCE 278.047
   HELIOCENTRIC CONIC
                           .00 LOL 96.05 VL 29.137 GAL -12.55 AZL 87.80 MCA 131.17 SMA 138.93 ECC .22471 INC 2.1971 V1 30.283 1.65 LOP 227.25 VP 38.678 GAP 2.52 AZP 91.45 TAL 242.62 TAP 13.80 RCA 107.71 APO 170.15 VZ 34.996 9.46 GP 14.65 ZAL 161.01 ZAP 111.20 ETS 3.11 ZAE 151.42 ETE 160.41 ZAC 28.89 ETC 174.31 CLP-111.95
    RL 147.12 LAL
RP 108.29 LAP
    RC 93.279 GL
   PLANETOCENTRIC CONIC
    C3 44.029 VHL 6.635 DLA -12.21 RAL 292.81 RAD 6568.7 VEL 12.861 PTH 2.34 VMP 4.046 DPA -8.67 RAP 295.54 ECC 1.7246
    C3 44.029 VHL 6.635 OLA -12.21 RAL 292.81 RAD 6568.7 VEL 12.861 PTM 2.34 VHP 4.046 DPA -8.67 RAP 295.54 ECC 1.7246 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 48 2021.49 -14.46 29.61 165.10 114.61 2 36 29 1421.5 -11.02 22.62 90.00 10 51 51 5443.68 28.19 250.75 173.16 87.18 12 22 35 4843.7 27.50 242.15 100.00 3 17 54 1779.20 -15.81 11.14 164.44 115.70 3 47 33 1179.2 -12.22 4.19 100.00 12 19 27 5161.20 29.67 229.88 173.07 86.21 13 45 28 4561.2 28.83 221.17 110.00 4 12 2 1609.70 -19.35 356.37 162.53 118.74 4 38 52 1009.7 -15.37 349.52 110.00 13 41 47 4903.53 33.64 209.89 172.65 83.53 15 31 4303.5 32.38 200.89
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 1505.4 SGR 447.4 SG3 316.6
RRT --7094 RRF --7417 RTF .8753
SGB 1570.5 R23 .1411 R13 --8824
SG1 1540.0 SG2 308.2 THA 167_59
                                                                                                                                   ST 361.8 SR 312.2 SS 179.5
CRT -.2191 CRS .6053 CST -.8998
    TDE .0099 TRA-1.3609 TC3 -.6827 BAU .4175
    RDE -.3546 RRA .2292 RC3 .1927 FAU .12780
                                                                                                                                   LSA 419.3 MSA 290.5 SSA
    FOE .2606 FRA-1.6996 FC3-2.5128 BSP 4371
BOE .3547 BRA 1.3800 BC3 .7093 FSP -1008
                                                                                                                                                                            20.2
                                                                                                                                  EL1 379.6 EL2 290.4 ALF 152.01
```

ARRIVAL DATE APR 1 1966

EL1 455.4 EL2 241.2 ALF 173.51

LAUNCH DATE DEC 28 1965

```
HELIOCENTRIC CONIC
                                                                       DISTANCE 284.191
                        .00 LOL 96.05 VL 29.074 GAL -12.37 AZL 87.92 MCA 134.37 SMA 138.40 ECC .22283 INC 2.0787 V1 30.283 I.49 LOP 230.44 VP 38.619 GAP 2.89 AZP 91.45 TAL 241.61 TAP 15.99 RCA 107.56 APO 169.24 V2 34.983 9.06 GP 15.19 ZAL 160.69 ZAP 114.69 ETS 4.44 ZAE 149.00 ETE 160.87 ZAC 28.39 ETC 175.36 CLP-115.65
    RL 147.12 LAL
RP 108.33 LAP
    RC 95.621 GL
   PLANETOCENTRIC CONIC
    C3 42.781 VHL 6.541 DLA -12.51 RAL 293.47 RAD 6568.6 VEL 12.812 PTH
                                                                                                2.33 VHP 4.106 DPA -8.20 RAP 294.99 ECC 1.7041
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   7 57 2004.10
10 51 55 5442
3 22
                                                 -13.97
                                                                28.58
                                                                            165.28
                                                                                          114.88
                                                                                                         2 41 21
                                                                                                                         1404.1
                                                                                                                                        -10.50
                                                                                                                                                       21.62
       90.00
                                                                                              87.28 12 22 42
                                                                                                                                        27.52
       90.00
                                                 28.20
                                                               250.96
                                                                              173.41
                                                                                                                          4846.6
                                                                                                                                                       242.36
                  3 22 51 1762.42
12 19 42 5163.50
                                                 -15.31
                                                                10.15
                                                                              164.62
                                                                                             115.99
                                                                                                          3 52 14
                                                                                                                          1162.4
                                                                                                                                        -11.69
                                                                                                                                                        3.22
      100.00
                                                                                            86.30 13 45 45
119.06 4 43 10
83.57 15 4 12
      100.00
                                                               230.05
                                                                             173.31
                                                                                                                          4563.5
                                                                                                                                         28.85
                                                                                                                                                       221.34
                                                 29.68
                                                                                                                           994.1
      110.00
                    4 16 35 1594.13
                                                 -18.84
                                                               355.46
                                                                            162.70
                                                                                                                                        -14.82
                                                                                                                                                       348.64
                  13 42 27
                                                               209.97
                                                                             172.90
                                                                                                                         4304.6
                                                                                                                                       32.39
                                                                                                                                                       200.96
      110.00
                                 4904.55
                                                 33.65
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 1625.1 SGR 447.9 SG3 310.0
RRT -.7354 RRF -.7742 RTF .8604
SGB 1685.7 R23 .1539 R13 -.8668
                                                                                                                      ST 384.6 SR 297.5 SS 171.6
CRT -.2127 CRS .5822 CST -.9083
   TOE .0022 TRA-1.4245 TC3 -.7672 BAU .4546
   ROE - 3322 RRA .2280 RC3 .2081 FAU .12395
FOE .2215 FRA-1.6049 FC3-2.5082 B3P 4789
BOE .3322 BRA 1.4426 BC3 .7949 FSP -993
                                                                                                                      LSA 430.2 MSA 263.5 SSA 20.2
                                                                   SG1 1659.3 SG2 297.3 THA 168.16
                                                                                                                      EL1 395.8 EL2 282.5 ALF 160.35
                                                                       FLIGHT TIME 96.00
                                                                                                                                 ARRIVAL DATE APR 3 1966
LAUNCH DATE DEC 28 1965
                                                                       DISTANCE 290.306
  HELIOCENTRIC CONIC
                       .00 LOL 96.05 VL 29.010 GAL -12.18 AZL 88.05 MCA 137.57 SMA 137.86 ECC .22100 INC 1.9467 V1 30.283 1.31 LOP 233.64 VP 38.558 GAP 3.25 AZP 91.44 TAL 240.55 TAP 18.11 RCA 107.39 APO 168.33 V2 34.970 8.60 GP 15.81 ZAL 160.33 ZAP 117.90 ETS 5.88 ZAE 146.75 ETE 161.09 ZAC 28.13 ETC 176.56 CLP-119.10
   RL 147.12 LAL
RP 108.37 LAP
   RC 97.969 GL
  PLANETOCENTRIC CONIC
   C3 41.320 VML 6.444 DLA -12.87 RAL 294.17 RAD 6568.6 VEL 12.763 PTH 2.32 VMP 4.175 DPA -7.62 RAP 294.66 ECC 1.6833 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 13 50 1984.40 -13.40 27.41 165.51 115.18 2 46 54 1384.4 -9.90 20.48
       90.00
                   10 51 42
                                 5451.19
                                                  28.21
                                                               251.30
                                                                              173.70
                                                                                              87.45
                                                                                                        12 22 33
                                                                                                                          4851.2
                                                                                                                                          27.56
                                                                                                                                                       242.70
      100.00
                    3 28 31
                                 1743.45
                                                 -14.74
                                                                 9.03
                                                                              164.84
                                                                                             116.30
                                                                                                         3 57 34
                                                                                                                          1143.5
                                                                                                                                         -11.09
                                                                                                                          4567.4
      100.00
                   12 19 42
                                5167.37
                                                  29.70
                                                               230.33
                                                                             173.61
                                                                                              86.45 13 45 49
                                                                                                                                         28.89
                                                                                                                                                       221.62
                    4 21 45
                               1576.70
      110.00
                                                 -18.26
                                                               354.44
                                                                            162.90
                                                                                             119.41
                                                                                                         4 48 2
                                                                                                                          976.7
                                                                                                                                        -14.20
                                                                                                                                                       347.67
      110.00
                  13 42 57
                                 4906.89
                                                  33.66
                                                               210.15
                                                                              173.21
                                                                                              83.68
                                                                                                        15 4 44
                                                                                                                          4306.9
                                                                                                                                          32.42
                                                                                                                                                       201.14
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 1743.5 SGR 448.7 SG3 301.8
RRT -.7589 RRF -.8002 RTF .8835
                                                                                                                      ST 407.1 SR 281.8 55 163.2
CRT -.2003 CR5 .5592 CST -.9137
    TOE -.0095 TRA-1.4827 TC3 -.8538 BAU .4900
   RDE -.3091 RRA .2253 RC3 .2243 FAU .11946
FDE .1847 FRA-1.4996 FC3-2.4909 BSP 5182
                                                                   3GB 1800.3 R23 .1705 R13 -.8894
3G1 1777.3 SG2 286.6 THA 168.65
                                                                                                                      LSA 443.4 MSA 273.5 SSA 20.2
    BOE .3092 BRA 1.4997 BC3 .8828 FSP -963
                                                                                                                      EL1 414.1 EL2 271.4 ALF 165.99
                                                                                                                                ARRIVAL DATE APR 5 1966
                                                                       FLIGHT TIME 98.00
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 296.392
    RL 147.12 LAL .00 LOL 96.05 VL 28.943 GAL -11.99 AZL 88.20 MCA 140.76 SMA 137.31 ECC .21922 INC 1.7976 V1 30.283 RP 108.41 LAP 1.14 LOP 236.83 VP 38.496 GAP 3.59 AZP 91.39 TAL 239.42 TAP 20.18 RCA 107.21 APO 167.41 VZ 34.957 RC 100.323 GL 8.05 GP 16.54 ZAL 159.94 ZAP 120.85 ETS 7.46 ZAE 144.65 ETE 161.07 ZAC 28.09 ETC 177.93 CLP-122.34
   PLANETOCENTRIC CONIC
    C3 40.247 VHL 8.344 DLA -13.30 RAL 294.94 RAD 6568.5 VEL 12.713 PTH 2.31 VHP 4.253 DPA -6.90 RAP 294.53 ECC 1.6624
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 20 37 1961.74
10 51 2 5458.14
3 35 1 1721.70
12 19 19 5173.42
4 27 39 1556.85
13 43 10 4911.03
                                                                                                                       1361.7
                                                                          165.78
                                                 -12.74
                                                                26.07
                                                                                          115.50
                                                                                                         2 53 19
                                                                                                                                         -9.20
                                                                                                                                                       19.18
                                                                                             87.70
        90.00
                                                  28.23
                                                               251.81
                                                                              174.07
                                                                                                        12 22 0
                                                                                                                          4858.1
                                                                                                                                         27.61
                                                                                                                                                       243.20
       100.00
                                                -14.08
                                                                 7.75
                                                                              165.10
                                                                                             116.64
                                                                                                         4 3 43
                                                                                                                          1121.7
                                                                                                                                        -10.39
                                                                                                                                                          .90
                                                                                             86.68 13 45 32
119.79 4 53 36
83.86 15 5 1
                                                               230.78
                                                                              173.99
                                                                                                                          4573.4
                                                                                                                                         28.95
                                                                                                                                                       222.06
      100.00
                                                  29.72
                                                                              163.14
                                                                                                                          956.8
                                                                                                                                       -13.50
                                                                                                                                                       346.57
                                                -17.59
                                                               353.28
                                                               210.47
                                                                              173.60
                                                                                                                          4311.0
                                                                                                                                         32.48
                                                                                                                                                       201.45
                                                  33.69
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 429.9 SR 264.3 SS 154.0 CRT -.1795 CRS .5171 CST -.9234 LSA 458.6 MSA 260.2 SSA 20.3
    TDE -.0274 TRA-1.5363 TC3 -.9444 BAU .5246
                                                                   SGT 1862.5 SGR 450.5 SG3 293.4
                                                                   RRT -.7616 RRF -.8263 RTF .8857
SGB 1916.2 R23 .1899 R13 -.8914
    RDE - 2843 RRA .2219 RC3 .2425 FAU .11491
FDE .1398 FRA-1.3953 FC3-2.4718 BSP 5596
                                                                                                                      EL1 434.0 EL2 257.5 ALF 170.24
    BDE .2856 BRA 1.5522 BC3 .9750 FSP -941
                                                                   SG1 1896.3 SG2 276.1 THA 169.06
                                                                       FLIGHT TIME 100.00
                                                                                                                                 APRIVAL DATE APR 7 1966
                                                                       DISTANCE 302.453
  HELIOCENTRIC CONIC
                         .00 LOL 96.05 VL 28.874 GAL -11.80 AZL 88.37 MCA 143.95 SMA 136.75 ECC .21748 INC 1.6268 VI 30.283 .96 LOP 240.01 VP 38.433 GAP 3.91 AZP 91.32 TAL 238.25 TAP 22.20 RCA 107.01 APO 166.49 V2 34.945 7.39 GP 17.41 ZAL 159.53 ZAP 123.53 ETS 9.23 ZAE 142.67 ETE 160.83 ZAC 28.26 ETC 179.49 CLP-125.37
    RL 147.12 LAL
    RP 108.44 LAP
   RC 102.682 GL
  PLANETOCENTRIC CONIC
    C3 38.965 VHL 6.242 DLA -13.83 RAL 295.77 RAD 6568.5 VEL 12.662 PTH 2.30 VHP 4.341 DPA -6.01 RAP 294.57 ECC 1.6413
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          3 0 51
       90.00
                    2 28 35 1935.20
                                                 -11.96
                                                               24.51
                                                                             166.11
                                                                                           115.86
                                                                                                                        1335.2
                                                                                                                                          -8.38
                                                                                                                                                        17.66
                               5468.33
1696.30
                                                                                                        12 20 50
                                                                                                                          4868.3
                                                                                                                                          27.69
                                                                                                                                                       243.93
       90.00
                   10 49 42
                                                 28.26
                                                               252.55
                                                                              174.53
                                                                                              88.08
                                                                                                         4 10 54
                                                                                                                          1096.3
                                                                                                                                          -9.57
                                                                                                                                                       359.46
      100.00
                    3 42 38
                                 1696.30
                                                 -13.30
                                                                 6.27
                                                                              165.42
                                                                                             117.02
                               5182.~~
1533.84
4917.68
                                                                                                                                         29.03
                                                                                                                                                       222.72
      100.00
                   12 18 21
                                                 29.76
                                                               231.45
                                                                              174.45
                                                                                              87.03 13 44 43
                                                                                                                          4582.5
      110.00
                    4 34 30
                                                 -16.81
                                                               351.96
                                                                              163.44
                                                                                             120.21
                                                                                                         5 0 4
                                                                                                                           933.8
                                                                                                                                         -12.67
                                                                                                                                                       345.30
                                                                                                        15 4 56
                                                                                                                          4317.7
                                                                                                                                                       201.95
                                                                              174.09
                                                                                              84.15
                                                                                                                                          32.57
      110.00
                  13 42 58
                                                  33.74
                                                               210.99
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  SGT 1981.2 SGR 453.9 SG3 284.3
RRT -.8026 RRF -.8520 RTF .8870
SGB 2032.5 R23 .2129 R13 -.8925
                                                                                                                      ST 453.3 SR 245.1 SS 144.8
CRT -.1508 CRS .4570 CST -.9358
    TOE -.0520 TRA-1.5838 TC3-1.0387 BAU .5581
    RDE -.2583 RRA .2174 RC3 .2628 FAU .11015
   FOE .0910 FRA-1.2892 FC3-2.4473 B3P 6007
BDE .2633 BRA 1.5986 BC3 1.0714 F3P -916
                                                                                                                      LSA 476.1 MSA 243.9 SSA
                                                                                                                                                          20.4
```

FLIGHT TIME 94.00

SG1 2015.0 SG2 266.3 THA 169.39

```
ARRIVAL DATE APR 9 1966
                                                                         FLIGHT TIME 102.00
LAUNCH DATE DEC 28 1965
                                                                         OISTANCE 308.489
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 28.804 GAL -11.59 AZL 88.57 HCA 147.13 SMA 136.18 ECC .21579 INC 1.4277 V1 30.283 RP 108.48 LAP .77 LOP 243.20 VP 38.369 GAP 4.22 AZP 91.20 TAL 237.03 TAP 24.17 RCA 106.80 APO 165.57 VZ 34.932 RC 105.043 GL 6.58 GP 18.46 ZAL 159.08 ZAP 125.93 ETS 11.24 ZAE 140.80 ETE 160.36 ZAC 28.65 ETC 181.30 CLP-128.22
   PLANETOCENTRIC CONIC
    C3 37.676 VHL 6.138 DLA -14.49 RAL 296.68 RAD 6568.5 VEL 12.611 PTH 2.29 VHP 4.438 DPA -4.93 RAP 294.77 ECC 1.6200
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   2 38 7 1903.46
10 47 25 5483.05
3 51 42 1666.05
12 16 31 5195.70
4 42 35 1506.67
13 42 7 4927.84
                                                                               166.51
                                                                                               116.25
                                                                                                             3 9 50
                                                                                                                           1303.5
                                                                                                                                            -7.39
                                                                                                                                                            15.85
                                                                 22.67
                                                   -11.01
       90.00
                                                                                                          12 18 48
                                                                                                                              4883.1
                                                                                                                                              27.79
                                                                                                                                                           245.00
                                                                                                 88.62
                                                                                175.09
                                                   28.29
                                                                 253.63
        90.00
                                                                                                117.43
                                                                                                             4 19 28
                                                                                                                             1066.1
                                                                                                                                              -8.59
                                                                                                                                                           357.76
                                                                                165.82
                                                   -12.36
                                                                   4.51
                                                                                                 87.55 13 43 7
                                                                                                                                              29.14
                                                                                                                                                            223.69
                                                                                                                             4595.7
       100.00
                                                    29.80
                                                                 232.43
                                                                               175.03
                                                                                                                               906.7
                                                                                                                                           -11.69
32.70
                                                                                                                                                            343.81
                                                                                               120.68
                                                 -15.87
                                                                 350.41
                                                                               163.60
                                                                                                120.68 5 7 41
84.62 15 4 15
       110.00
                                                                                                                           4327.8
                                                                                                                                                           202.71
                                                                                174.71
                                                                 211.77
                                                   33.81
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2097.5 SGR 458.9 SG3 274.0
RRT -.8206 RRF -.8767 RTF .8872
SGB 2147.1 R23 .2405 R13 -.8927
SG1 2131.6 SG2 258.0 THA 169.67
                                                                                                                         ST 477.7 SR 224.6 55 135.7
CRT -.1143 CRS .3794 CST -.9489
    TOE -. 0836 TRA-1.6229 TC3-1.1361 BAU .5900
    ROE -.2313 RRA .2111 RC3 .2851 FAU .10499
                                                                                                                         LSA 496.0 MSA 224.9 SSA 20.6
    FDE .0419 FRA-1.1763 FC3-2.4126 BSP 6389
BOE .2459 BRA 1.6366 BC3 1.1713 FSP -880
                                                                                                                          EL1 478.6 EL2 222.7 ALF 176.07
                                                                                                                                     ARRIVAL DATE APR II 1966
                                                                         FLIGHT TIME 104.00
                                                                         DISTANCE 314.502
   HELIOCENTRIC CONIC
                          .00 LOL 96.05 VL 28.733 GAL -11.38 A7L 88.81 HCA 150.32 SMA 135.61 ECC .21416 INC 1.1914 VI 30.283 .59 LOP 246.38 VP 38.305 GAP 4.52 A7P 91.04 TAL 235.77 TAP 26.09 RCA 106.57 APO 164.66 V2 34.920 5.57 GP 19.76 7AL 158.60 7AP 128.03 ETS 13.55 7AE 138.99 ETE 159.63 7AC 29.25 ETC 183.38 CLP-130.89
    RL 147.12 LAL
   PLANETOCENTRIC CONIC
    C3 36.384 VHL 6.032 DLA -15.34 RAL 297.68 RAD 6568.4 VEL 12.560 PTH 2.28 VHP 4.547 DPA -3.58 RAP 295.09 ECC 1.5988 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1264.6
                                                                                                            3 20 51
                                                                 20.42
                                                                               167.03
                                                                                               116.69
                                                    -9.83
        90.00
                    2 49 47 1864.59
                                                                                                           12 15 25
                                                                                                                              4904.3
                                                                                                                                              27.93
                                                                                                                                                            246.54
                                                   28.31
                                                                 255.18
                                                                                175.80
                                                                                                 89.39
        90.00
                   10 43 41 5504.30
                   10 45 4

4 2 44 1629.18

12 13 24 5214.94

4 52 19 1473.88

4943.01
                                                                                                117.90 4 29 53
88.30 13 40 19
121.20 5 16 53
85.31 15 2 42
                                                                                                                              1029.2
                                                                                                                                              -7.38
                                                                                                                                                            144.60
                                                                                166.31
                                                                    2.40
       100.00
                                                   -11.19
                                                                                                                              4614.9
                                                                                                                                             29.29
                                                                                                                                                            225.10
                                                   29.85
                                                                 253.86
                                                                                175.76
       100.00
                                                                                                                              673.9
                                                                                                                                            -10.45
                                                                                                                                                            342.03
                                                   -14.72
                                                                  348.56
                                                                               164.26
       110.00
                                                                 212.95
                                                                                175.50
                                                                                                                              4343.0
                                                                                                                                              32.88
                                                                                                                                                            203.86
                                                  33.90
       110.00
                                  4943.01
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2214.8 SGR 467.1 SG3 263.7
RRT -.8368 RRF -.9006 RTF .8873
                                                                                                                          ST 505.4 SR 201.4 SS 128.5
CRT -.0677 CRS .2538 CST -.9675
    TOE -.1266 TRA-1.6545 TC3-1.2393 BAU .6216
    ROE - .2019 RRA .2039 RC3 .3113 FAU .09985
                                                                     SGB 2263.5 R23 .2710 R13 -.8929
SG1 2249.5 SG2 251.8 THA 169.86
    FOE -.0178 FRA-1.0662 FC3-2.3759 BSP 6794
BDE .2383 BRA 1.6670 BC3 1.2778 FSP -850
                                                                                                                          LSA 520.8 MSA 202.0 SSA 20.9
                                                                                                                          EL1 505.7 EL2 200.8 ALF 178.17
                                                                                                                                    ARRIVAL DATE APR 13 1966
                                                                         FLIGHT TIME 106.00
LAUNCH DATE DEC 28 1965
                                                                         DISTANCE 320.493
    RL 147.12 LAL .00 LOL 96.05 VL 28.661 GAL -11.17 A7L 89.10 MCA 153.50 SMA 135.04 ECC .21259 INC .9042 V1 30.283 RP 108.56 LAP .40 LOP 249.56 VP 38.240 GAP 4.80 A7P 90.81 TAL 234.47 TAP 27.97 RCA 106.33 APO 163.75 VZ 34.909 RC 109.770 GL 4.30 GP 21.37 ZAL 158.06 ZAP 129.79 ETS 16.26 ZAE 137.18 ETE 158.62 ZAC 30.07 ETC 185.83 CLP-133.41
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 35,100 VHL 5.924 OLA -16.43 RAL 298.78 RAD 6568.4 VEL 12.509 PTH 2.26 VHP 4.672 DPA
                                                                                                                                -1.90 RAP 295.49 ECC 1.5777
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1215.5
                                                                                             117.17
                                                                                                            3 34 46
                   3 4 31 1815.53
10 37 45 5535.20
4 16 36 1582.90
12 8 20 5243.05
                                                                             167.71
                                                   -8.32
                                                                 17.61
        90.00
                                                                                                 90.53 12 10 0
                                                                                                                                             28.09
                                                                                                                             4935.2
                                                    28.31
                                                                 257.44
                                                                                176.70
        90.00
                                                                                               118.41 4 42 33
89.40 13 35 43
121.79 5 28 16
86.34 14 59 49
                                                                                                                                                           353.12
                                                                                                                                              -5.84
                                                                                                                              982.9
                                                     -9.71
                                                                 359.77
                                                                                166.96
       100.00
                                                                                                                             4643.1
                                                                                                                                                           227.17
                                                                 235.95
                                                                                176.70
                                                   29.89
       100.00
                                                                                                                                              -8.98
                                                                                                                                                            339.84
                                                                 346.30
                                                                                                                              833.2
                                                                               164.85
                     5 4 23 1433.23
                                                   -13.28
       110.00
                                                                                                                             4365.5
                                                                                                                                             33.13
                                                                                                                                                           205.56
                                                                                176.52
                                                   34.01
                                                                 214.69
                                  4965.49
       110.00
                   13 37 3
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2329.7 SGR 478.5 SG3 252.2

RRT -.8491 RRF -.9226 RTF .8866

SGB 2378.3 R23 .3049 R13 -.8924

SG1 2365.2 SG2 249.0 THA 170.00
                                                                                                                         ST 538.5 SR 175.5 S5 124.9
CRT -.0131 CRS .0882 CST -.9815
     TOE -.1824 TRA-1.6745 TC3-1.3465 BAU .6518
    ROE -.1706 RRA .1942 RC3 .3411 FAU .09430
FOE -.0821 FRA -.9502 FC3-2.3260 BSP 7174
BOE .2497 BRA 1.6857 BC3 1.3891 FSP -811
                                                                                                                          LSA 552.3 MSA 175.8 SSA 21.4
                                                                                                                          EL1 538.5 EL2 175.5 ALF 179.73
                                                                                                                                     ARRIVAL DATE APR 15 1966
                                                                          FLIGHT TIME 108.00
LAUNCH DATE DEC 28 1965
                                                                         01STANCE 326.463
    RL 147.12 LAL .00 LOL 96.05 VL 28.588 GAL -10.94 A7L 89.45 MCA 156.68 SMA 134.47 ECC .21108 INC .5452 V1 30.283 RP 108.59 LAP .22 LOP 252.73 VP 38.175 GAP 5.07 A7P 90.50 TAL 233.12 TAP 29.81 RCA 106.09 APO 162.86 V2 34.897 RC 112.133 GL 2.63 GP 23.42 TAL 157.44 ZAP 131.14 ETS 19.48 ZAE 135.31 ETE 157.27 ZAC 31.14 ETC 188.72 CLP-135.81
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                                    .23 RAP 295.93 ECC 1.5569
    C3 33.841 VHL 5.817 DLA -17.89 RAL 300.03 RAD 6568.3 VEL 12.458 PTH 2.25 VHP 4.817 DPA
    LNCH AZHTH LNCH TIME L-I. TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                              -2.54
                                                                                                                             1151.1
                                                                                                                                                              7.29
                                                                               168.65
                                                                                               117.66
                                                                                                              3 53 7
                   3 23 56 1751.15
10 28 17 5581.14
                                                     -6.30
                                                                  13.96
        90.00
                                                                                                 92.21 12 1 18
118.96 5 0 7
                                                                                                                                              28.25
                                                                                                                                                            242.14
                                                                                                                              4981.1
                                                                                177.88
                                                     28.24
                                                                  260.80
         90.00
                                                                                                                                              -3.82
                                                                                                                                                            349.79
                                                                                                118.96
                                                                                                                               922.7
                                                     -7.74
                                                                  356.38
                                                                                167.87
                      4 34 44
                                   1522.68
       100.00
                                                                                                 91.03 13 26 14
122.45 5 42 55
67.89 14 54 48
                                                                                                                              4684.8
                                                                                                                                             29.70
                                                                                                                                                            230.26
                    12 0 10 5284.84
                                                                                177.93
                                                    29.88
                                                                  239.06
       100.00
                                                                                                                                                            337.07
                      5 19 54 1381.17
13 31 29 4999.11
                                                                                                122.45
                                                                                                                               781.2
                                                                                                                                              -7.03
                                                   -11.39
                                                                  343.45
                                                                                165.67
       110.00
                                                                                                                             4399.1
                                                                                                                                              33.46
                                                                                                                                                            208.13
                                                                                177.88
                                                                  217.31
                    13 31 29
                                                    34.13
       110.00
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 583.5 SR 145.1 SS 130.8
CRT .0423 CRS -.1188 CST -.9816
                                                                     SGT 2446.3 SGR 495.4 SG3 240.2
RRT -.8580 RRF -.9425 RTF .8862
     TOE -.2588 TRA-1.6825 TC3-1.4603 BAU .6823
     ROE -.1349 RRA .1826 RC3 .3767 FAU .08860
                                                                     5G8 2495.9 R23 .3386 R13 -.8923
5G1 2483.3 SG2 '250.7 THA 170.04
                                                                                                                         LSA 597.6 MSA 145.2 SSA 22.3
    FOE -.1617 FRA -.8349 FC3-2.2665 BSP 7583
BOE .2919 BRA 1.6924 BC3 1.5081 FSP -775
                                                                                                                        EL1 583.6 EL2 144.9 ALF
                                                                                                                                                                . 64
     BOE .2919 BRA 1.6924 BC3 1.5081 FSP
```

ARRIVAL DATE APR 17 1966

```
LAUNCH DATE DEC 28 1965
                                                                              FLIGHT TIME 110.00
   HELIOCENTRIC CONIC
                                                                             DISTANCE 332.414
                             .00 LOL 96.05 VL 28.515 GAL -10.71 ATL 89.92 MCA 159.86 SMA 133.91 ECC .20963 INC .0788 V1 30.283 .03 LOP 255.91 VP 38.110 GAP 5.33 ATP 90.08 TAL 231.75 TAP 31.60 RCA 105.84 APO 161.98 V2 34.886
     RL 147.12 LAL
     RP 108.63 LAP
                              .39 GP 26.08 7AL 156.64 7AP 131.97 ETS 23.33 7AE 133.26 ETE 155.51 7AC 32.52 ETC 192.21 CLP-138.12
     RC 114.493 GL
    PLANETOCENTRIC CONIC
     C3 32.648 VML 5.714 DLA -19.89 RAL 301.48 RAD 6568.3 VEL 12.410 PTH
                                                                                                        2.24 VHP 4.997 DPA
                                                                                                                                        2.97 RAP 296.34 ECC 1.5373
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 51 10 1661.83 -3.45 8.94 170.09 118.12 4 18 52 1061.8 .34 2.30 90.00 10 12 37 5652.57 27.94 265.99 179.44 94.79 11 46 50 5052.4 28.31 257.34
                    4 59 51 1440.21
11 46 38 5349.22
5 40 54 1311.57
13 22 5 5050.62
       100.00
                                                                                     169.24
                                                                                                      119.51
                                                                                                                    5 23 51
                                                                                                                                      840.2
                                                                                                                                                       -1.03
                                                                                                                                                                     345.25
                                                        -5.00
                                                                     351.79
                                                                                                       93.54 13 15 47
                                                                                                                                     4749.2
                                                       29.70
       100.00
                                                                     243.84
                                                                                     179.59
                                                                                                                                                      29.88
                                                                                                                                                                     235.04
       110.00
                                                        -8.83
                                                                     339.69
                                                                                     166.89
                                                                                                     123.16 6 2 45
90.27 14 46 15
                                                                                                                                     711.6
                                                                                                                                                       -4.40
                                                                                                                                                                     333.40
                    13 22 5
                                                       34.18
                                                                     221.33
                                                                                     179.76
                                                                                                                                     4450.6
                                                                                                                                                      33.84
       110.00
                                                                                                                                                                     212.11
                                     5050.62
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SGT 2562.4 SGR 518.8 SG3 226.5
RRT -.8621 RRF -.9594 RTF .8859
SGB 2614.3 R23 .3706 R13 -.8925
                                                                                                                                ST 650.0 SR 108.6 SS 152.0
CRT .0664 CRS -.2810 CST -.9620
    TOE -.3639 TRA-1.6728 TC3-1.5777 BAU .7124
     RDE -.0931 RRA .1672 RC3 .4184 FAU .08234
    FOE -.2566 FRA -.7138 FC3-2.1834 BSP 7995
                                                                                                                                 LSA 666.3 MSA 113.2 SSA 23.4
     BOE .3756 BRA 1.6811 BC3 1.6322 FSP -735
                                                                         SG1 2601.5 SG2 258.9 THA 170.00
                                                                                                                                 EL1 650.0 EL2 108.3 ALF
                                                                                                                                                                           .65
                                                                              FLIGHT TIME 112.00
                                                                                                                                            ARRIVAL DATE APR 19 1966
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 338.345
    RL 147.12 LAL .00 LOL 96.05 VL 28.442 GAL -10.47 AZL 90.55 MCA 163.03 SMA 133.34 ECC .20825 INC .5497 V1 30.283 RP 108.66 LAP -.16 LOP 259.08 VP 38.046 GAP 5.57 AZP 89.47 TAL 230.33 TAP 33.36 RCA 105.57 APO 161.11 V2 34.875 RC 116.852 GL -2.74 GP 29.60 ZAL 155.49 ZAP 132.05 ETS 28.01 ZAE 130.83 ETE 153.28 ZAC 34.33 ETC 196.49 CLP-140.39
   PLANETOCENTRIC CONIC
    C3 31.614 VHL 5.623 DLA -22.74 RAL 303.25 RAO 6568.3 VEL 12.369 PTH
                                                                                                          2.23 VHP 5.235 DPA
                                                                                                                                         6.58 RAP 296.61 ECC 1.5203
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 33 36 1525.50 .95 1.33 172.55 118.30 4 59 1 925.5 4.72 354.68 90.00 9 44 21 5772.49 26.96 274.64 181.90 99.02 11 20 34 5172.5 27.93 266.11 100.00 5 37 59 1317.68 -.86 345.05 171.54 119.88 5 59 57 717.7 3.12 338.53 100.00 11 22 39 5455.54 29.00 251.66 181.84 97.60 12 53 35 4855.5 29.75 242.93
                     6 11 31 1212.56
13 5 37 5133.43
                                                       -5.10
                                                                     334.45
                                                                                    168.90
                                                                                                     123.85
                                                                                                                   6 31 44
                                                                                                                                     612.6
                                                                                                                                                        - .62
                                                                                                                                                                     328.23
       110.00
                    13 5 37
                                                       33.97
                                                                     227.79
                                                                                     182.44
                                                                                                       94.08 14 31 10
                                                                                                                                     4533.4
                                                                                                                                                      34.16
                                                                                                                                                                     218.55
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    TDE -.5129 TRA-1.6363 TC3-1.6912 BAU .7413
                                                                         SGT 2675.5 SGR 548.7 SG3 209.7
RRT -.8596 RRF -.9726 RTF .8856
                                                                                                                                 ST 755.4 SR 66.0 SS 193.6
CRT -.0939 CRS -.2004 CST -.9430
    RDE -.0418 RRA .1448 RC3 .4652 FAU .07501
    FDE -.3688 FRA -.5809 FC3-2.0541 BSP 8369
BDE .5146 BRA 1.6427 BC3 1.7540 FSP -679
                                                                         SGB 2731.2 R23 .3976 R13 -.8929
SG1 2717.2 SG2 276.1 THA 169.90
                                                                                                                                LSA 777.3 MSA 87.9 SSA 22.9
EL1 755.4 EL2 65.7 ALF 179.53
LAUNCH DATE DEC 28 1965
                                                                             FLIGHT TIME 114.00
                                                                                                                                            ARRIVAL DATE APR 21 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 344.257
    RL 147.12 LAL .00 LOL 96.05 VL 28.368 GAL -10.23 AZL 91.46 MCA 166.20 SMA 132.78 ECC .20694 INC 1.4582 V1 30.283 RP 108.69 LAP -.35 LOP 262.25 VP 37.981 GAP 5.81 AZP 88.58 TAL 228.89 TAP 35.08 RCA 105.31 APO 160.26 V2 34.865 RC 119.206 GL -7.34 GP 34.43 ZAL 153.55 ZAP 131.02 ETS 33.69 ZAE 127.69 ETE 150.49 ZAC 36.81 ETC 201.84 CLP-142.72
   PLANETOCENTRIC CONIC
    C3 30.982 VHL 5.566 DLA -26.96 RAL 305.60 RAD 6568.2 VEL 12.343 PTH 2.23 VMP 5.584 DPA 11.46 RAP 296.56 ECC 1.5D99
    UNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 6 1 36 1250.73 9.65 345.83 177.96 116.75 6 22 26 650.7 13.17 338.92
                                                                                                  116.75 6 22 26
107.23 8 47 32
        90.00
                                      749.07
                                                      22.82
                                                                     314.98
                                                                                    183.48
                                                                                                                                      149.1
                                                                                                                                                      24.97
                                                                                                                                                                    306.97
                                                                                                    119.23 7 7 16
104.96 12 4 47
124.17 7 20 0
100.62 14 1 25
                      6 48 59 1097.65
                                                        6.56
                                                                     332.93
                                                                                 176.30
                                                                                                                                     497.6
                                                                                                                                                      10.41
                                                                                                                                                                    326.26
       100.00
                    10 30 21
                                    5665.42
                                                      26.18
                                                                     266.60
                                                                                    184.55
                                                                                                                                    5065.4
                                                                                                                                                     27.98
                                                                                                                                                                    258.26
                      7 2 24
                                   1055.50
                                                         .89
                                                                     326.24
                                                                                   172.79
                                                                                                                                      455.5
                                                                                                                                                                    320.01
       110.00
                    12 33 25
                                    5280.34
                                                      32.68
                                                                     239.05
                                                                                    186.24
                                                                                                                                    4680.3
                                                                                                                                                      33.80
                                                                                                                                                                    230.00
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SGT 2790.8 SGR 588.1 SG3 189.2
RRT -.8502 RRF -.9814 RTF .8871
SGB 2852.1 R23 .4142 R13 -.8954
SGI 2835.7 SG2 304.7 THA 169.72
                                                                                                                              ST 938.0 SR 52.0 SS 266.4

CRT - .9220 CRS .7944 CST - .9436

LSA 972.5 MSA 86.2 SSA 16.0

EL1 939.2 EL2 20.1 ALF 177.07
    TDE -.7423 TRA-1.5606 TC3-1.7867 BAU .7701
    ROE .0292 RRA .1119 RC3 .5147 FAU .06635
FOE -.5122 FRA -.4385 FC3-1.8539 BSP 8774
BOE .7429 BRA 1.5646 BC3 1.8593 FSP -616
                                                                             FLIGHT TIME 116.00
                                                                                                                                            ARRIVAL DATE APR 23 1966
                                                                            DISTANCE 350.148
    RL 147.12 LAL .00 LOL 96.05 VL 28.294 GAL -9.98 ATL 92.89 MCA 169.36 SMA 132.23 ECC .20569 INC 2.8942 V1 30.283 RP 108.72 LAP -.53 LOP 265.42 VP 37.917 GAP 6.03 ATP 87.16 TAL 227.41 TAP 36.77 RCA 105.03 APO 159.43 V2 34.856
    RC 121.557 GL -14.52 GP 41.29 TAL 149.75 TAP 128.21 ETS 40.58 TAE 123.21 ETE 147.25 TAC 40.41 ETC 208.64 CLP-145.41
  PLANETOCENTRIC CONIC
    C3 31.493 VHL 5.612 DLA -33.60 RAL 309.14 RAD 6568.3 VEL 12.364 PTH
                                                                                                         2.23 VHP 6.169 DPA 18.28 RAP 295.79 ECC 1.5183
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 71.10 5 9 29 1459.73 19.68 6.61 186.55 117.80 5 33 49 859.7 23.24 359.33
                                                                                                  117.80
                     5 9 29
                                                                      6.61
                                                                                    186.55
                                                                                                                   5 33 49
                                                                                                                                     859.7
                                                                                                                                                      23.25
      108.90
                      9 55 24
                                    5836.33
                                                      19.69
                                                                     276.66
                                                                                    186.56
                                                                                                     117.79 11 32 40
                                                                                                                                     5236.3
                                                                                                                                                                     269.38
        71.10
                      5 9 29
                                    1459.73
                                                      19.68
                                                                      6.61
                                                                                    186.55
                                                                                                     117.80
                                                                                                                  5 33 49
                                                                                                                                      859.7
                                                                                                                                                      23.24
                                                                                                                                                                     359.33
                                                                                                    117.79 11 32 40
121.05 9 25 39
114.68 12 24 8
                                   5836.33
                                                      19.69
      108.90
                     9 55 24
                                                                     276.66
                                                                                    186.56
                                                                                                                                     5236.3
                                                                                                                                                      23.25
                                                                                                                                                                     269.38
      110.00
                      9 14 26
                                    673.68
                                                      15.08
                                                                     305.77
                                                                                    183.83
                                                                                                                                       73.7
                                                                                                                                                      19.08
                                                                                                                                                                    298.94
                                                                                                                                     5070.4
                                                                                                                                                                    258.50
      110.00
                   10 49 38
                                   5670.38
                                                      24.43
                                                                     266.28
                                                                                    189.08
                                                                                                                                                     27.55
  DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                       SGT 2909.6 SGR 633.0 SG3 162.2

RRT -.8295 RRF -.9835 RTF .8924

SGB 2977.7 R23 .4162 R13 -.9016

SG1 2957.3 SG2 347.8 THA 169.63
    TOE-1.1308 TRA-1.4127 TC3-1.8115 BAU .7967
                                                                                                                              ST 1267.5 SR 142.1 S5 380.4
CRT -.9593 CRS .9983 CST -.9614
    ROE .1365 RRA .0562 RC3 .5467 FAU .05531
FOE -.6899 FRA -.2790 FC3-1.5206 BSP 9207
BOE 1.1390 BRA 1.4139 BC3 1.8922 FSP -533
                                                                                                                              LSA 1326.6 MSA 106.8 SSA 7.7
EL1 1274.8 EL2 39.9 ALF 173.86
```

```
ARRIVAL DATE APR 25 1966
                                                                         FLIGHT TIME 118.00
LAUNCH DATE DEC 28 1965
                                                                         DISTANCE 356.013
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 28.221 GAL -9.72 AZL 95.52 MCA 172.50 SMA 131.69 ECC .20449 INC 5.5193 V1 30.283 RP 108.75 LAP -.72 LOP 268.59 VP 37.854 GAP 6.25 AZP 84.53 TAL 225.90 TAP 38.40 RCA 104.76 APO 158.61 V2 34.846 RC 123.903 GL -26.46 GP 51.35 TAL 141.62 ZAP 122.52 ETS 49.07 ZAE 116.17 ETE 144.31 ZAC 45.98 ETC 217.60 CLP-149.40
   PLANETOCENTRIC CONIC
    C3 36.061 VML 6.005 DLA -44.49 RAL 315.94 RAD 6568.4 VEL 12.547 PTH 2.27 VMP 7.363 DPA 28.10 RAP 293.31 ECC 1.5935 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 13 13 1734.54
11 45 97 5629.84
4 13 13 1734.54
11 45 57 5629.84
4 13 13 1734.54
                                                                                                128.77
                                                                                                             4 42 7
                                                                                                                             1134.5
                                                                                                                                            28.64
                                                                               199.24
                                                    23.80
                                                                  32.26
        54.13
                                                                                                          13 19 46
                                                                                                                                              28.65
                                                                                                                                                            255.82
                                                                                                128.76
                                                                                                                              5029.8
                                                    23.81
                                                                 262.51
                                                                                199.25
       125.67
                                                                                                128.77
                                                                                                              4 42 7
                                                                                                                              1134.5
                                                                                                                                              28.64
                                                                                                                                                             25.58
                                                                                199.24
                                                    23.80
                                                                   32.26
                                                                                                128.77 4 42 7
128.76 13 19 46
128.77 4 42 7
128.76 13 19 46
        54.13
                                                                                                                                                            255.82
                                                                                                                              5029.8
                                                                                                                                              28.65
                                                    23.81
                                                                 262.51
                                                                                199.25
      125.87
                                                                                                                                              28.64
                                                                                                                                                            25.58
                                                                                                                              1134.5
                                                    23.80
                                                                   32.26
                                                                                199.24
        54.13
                                                                                                                            5029.8
                                                                                                                                                            255.82
                                                                                                                                            28.65
                                                                                199.25
                   11 45 57
                                                    23.81
                                                                 262.51
       125.87
                                  5629.84
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1872.8 SR 291.0 SS 546.5
CRT -.9512 CRS .9927 CST -.9814
                                                                     SGT 3029.1 SGR 658.1 SG3 126.0
RRT -.7778 RRF -.9659 RTF .9068
    TDE-1.9071 TRA-1.0956 TC3-1.6053 BAU
                                                       .8089
    RDE .3036 RRA -.0547 RC3 .4882 FAU .04067
                                                                     568 3099.7 R23 .3938 R13 -.9160
                                                                                                                         LSA 1968.1 MSA 131.8 SSA 3.1
    FDE -.8986 FRA -.0938 FC3 -.9764 BSP 9588
BDE 1.3311 BRA 1.0970 BC3 1.6779 FSP -413
                                                                     561 3072.8 562 407.8 THA 170.24
                                                                                                                          EL1 1893.2 EL2 88.8 ALF 171.57
                                                                                                                                     ARRIVAL DATE APR 27 1966
                                                                          FLIGHT MINE 120.00
LAUNCH DATE OFC 28 1965
                                                                          DISTANCE 361.827
   HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 28.147 GAL -9.44 AZL 101.86 MCA 175.61 SMA 131.15 ECC .20327 INC11.8632 VI 30.283 RP 108.78 LAP -.90 LOP 271.76 VP 37.791 GAP 6.44 AZP 78.17 TAL 224.34 TAP 39.95 RCA 104.49 APO 157.81 V2 34.838 RC 126.245 GL -45.96 GP 66.13 ZAL 125.06 ZAP 112.48 ETS 62.83 ZAE 104.04 ETE 146.89 ZAC 54.64 ETC 232.81 CLP-160.88
   PLANETOCENTRIC CONIC
                                                                                                    2.48 VHP 10.699 OPA 42.04 RAP 285.35 ECC 2.0378
    C3 63.059 VHL 7.941 DLA -60.49 RAL 336.02 RAD 6569.2 VEL 13.580 PTH
    LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 34.02 4 31 28 2014.40 22.16 59.96 232.69 147.87 5 5 2 1414.4 26.86 55.53 145.98 14 7 56 5628.54 22.17 260.36 232.70 147.87 15 41 45 5028.5 28.87 255.93
                                                                                                147.87 5 5 2
147.87 15 41 45
                                                                                                                              1414.4
                                                                                                                                               28.86
                  4 31 28 2014.40
14 7 56 5628.54
4 31 28 2014.40
                                                                   59.96
                                                                                 232.69
                                                    22.16
        34.02
                                                                                                                              5028.5
                                                                                                                                              28.87
                                                                                                                                                            255.93
                                                                  260.36
                                                                                 232.70
                                                    22.17
       145.98
                                                                                                147.87 5 5 2
147.87 15 41 45
                                                                                                                              1414.4
                                                                                                                                              28.86
                                                                                                                                                              55.53
                                                                   59.96
                                                                                 232.69
                                                    22.16
        34.02
                                                                                 232.70
                                                                                                                              5028.5
                                                                                                                                              28.87
                                                                                                                                                            255.93
                                                                  260.36
                   14 7 56 5628.54
                                                    22.17
       145.98
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 3174.8 SGR 526.7 SG3 83.5
RRT -.4609 RRF -.7099 RTF .9514
                                                                                                                        ST 2852.2 SR 207.8 SS 750.8
CRT -.7988 CRS .8567 CST -.9947
    TDE-3.9505 TRA -.2112 TC3 -.8585 BAU .7411
    ROE .2354 RRA -.2716 RC3 .1892 FAU .02251
    FOE-1.1226 FRA .1308 FC3 -.3090 BSP 10068
BOE 3.9575 BRA .3441 BC3 .8791 FSP -271
                                                                     SGB 3218.2 R23 .2949 R13 -.9548
                                                                                                                          LSA 2953.1 MSA 144.7 SSA
                                                                                                                                                                1.0
                                                                     SG1 3184.3 SG2 466.1 THA 175.53
                                                                                                                        EL1 2857.0 EL2 124.8 ALF 176.66
                                                                                                                                     ARRIVAL DATE APR 29 1966
                                                                          FLIGHT TIME 122.00
LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 367.345
   HELIOCENTRIC CONIC
    RL 147.12 LAL ... .00 LOL 96.05 VL 28.074 GAL -9.09 A7L 133.74 MCA 178.44 SMA 130.62 ECC .20136 INC43.7431 V1 30.283 RP 108.80 LAP -1.08 LOP 274.92 VP 37.729 GAP 6.55 A7P 46.27 TAL 222.63 TAP 41.06 RCA 104.32 APO 156.92 VZ 34.830 RC 128.581 GL -59.80 GP 69.69 TAL 101.40 TAP 98.20 ETS 149.59 TAE 76.09 ETE 225.31 TAC 65.31 ETC 324.93 CLP 114.26
   PLANETOCENTRIC CONIC
     C3 491.782 VHL 22.176 DLA -58.40 RAL 23.43 RAD 6572.3 VEL 24.760 PTH 3.33 VMP 29.207 DPA 53.14 RAP 245.52 ECC 9.0935
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1741.4
                                                                                                                                               9.02
                   7 46 56 2341.42
17 10 39 691.37
                                                                                             148.38 8 25 57
148.38 17 22 11
                                                    2.22
                                                                  68.95
                                                                              292.04
        36.52
                                                                                                                               91.4
                                                                                                                                                9.03
                                                                 294.55
                                                                                 292.07
                                                      2.23
                                                                                                148.38 8 25 57
148.38 17 22 11
148.38 8 25 57
148.38 17 22 11
                                                                                                                                                             65.13
                                                                                                                                                9.02
                                                                                 292.04
                                                                                                                              1741.4
                     7 46 56 2341.42
                                                                  68.95
                                                      2.22
         36.52
                                                                                                                                                            290.73
                                                                                                                               91.4
                                                                                                                                               9.03
                                                                                 292.07
                                                                 294.55
       143.48
                   17 10 39
                                    691.37
                                                      2.23
                                                                                                                                                9.02
                                                                                                                                                             65.13
                                                                                                                              1741.4
                    7 46 56 2341.42
17 10 39 691.37
                                                                   68.95
                                                                                 292.04
         36.52
                                                     2.22
                                                                                                                                                9.03
                                                                                                                               91.4
                                                                  294.55
                                                                                 292.07
                                   691.37
                                                     2.23
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 258.9 SR 2075.0 SS 858.4
CRT -.1692 CRS -.9959 CST .0792
                                                                     SGT 769.9 SGR 3028.1 SG3 48.6
RRT .6087 RRF .9912 RTF .7085
SGB 3124.5 R23 -.1010 R13 .9949
     TOE .4799 TRA 1.5364 TC3 -.0132 BAU .8284
     RDE-7.5990 RRA 4.5372 RC3 .1253 FAU-.01045
                                                                                                                          LSA 2244.7 MSA 265.6 SSA
     FDE-1.2020 FRA .9379 FC3 .0184 BSP 9642
BDE 7.6141 BRA 4.7903 BC3 .1260 FSP -157
                                                                                                                          EL1 2075.4 EL2 255.1 ALF 91.23
                                                                     SG1 3065.7 SG2 603.4 THA 80.84
                                                                                                                                     ARRIVAL DATE MAY 1 1966
                                                                          FLIGHT TIME 124.00
 LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 373.989
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 28.001 GAL -8.99 AZL 58.29 MCA 182.39 SMA 130.09 ECC .20272 INC31.7105 VI 30.283 RP 108.82 LAP -1.26 LOP 278.09 VP 37.668 GAP 6.98 AZP 121.69 TAL 221.41 TAP 43.80 RCA 103.72 APO 156.47 V2 34.822 RC 130.911 GL 61.13 GP -74.76 ZAL 105.08 ZAP 103.90 ETS 232.68 ZAE 84.84 ETE 157.14 ZAC 89.27 ETC 66.53 CLP 156.06
    PLANETOCENTRIC CONIC
     C3 275.627 VHL 16.602 DLA 45.85 RAL 308.33 RAD 6571.6 VEL 19.923 PTH 3.13 VHP 18.512 DPA -78.06 RAP 127.91 ECC 5.5361
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1747.4 SR 2084.0 SS 912.2
CRT -.9880 CRS .9937 CST -.9991
LSA 2860.7 MSA 211.7 SSA 1.0
                                                                     SGT 1890.9 SGR 2797.4 SG3 56.2
RRT -.9307 RRF -.9653 RTF ..9932
SGB 3376.6 R23 -.1473 R13 -.9886
     TOE 5.0209 TRA-1.5191 TC3 -.0244 BAU .1762
     RDE-5.7954 RRA 3.9376 RC3 -.0411 FAU .00290
     FOE 1.6281 FRA -.6588 FC3 -.0091 85P 9857
                                                                                                                        ELI 2711.7 ELZ 207.5 ALF 129.92
                                                                      SG1 3326.1 SG2 581.7 THA 123.33
     BOE 7.6679 BRA 4.2205 BC3 .0478 FSP -179
```

```
ARRIVAL DATE MAY 3 1966
                                                                        FLIGHT TIME 126.00
                                                                       DISTANCE 379.662
  HELIOCENTRIC CONIC
       147.12 LAL .00 LOL 96.05 VL 27.929 GAL -8.67 AZL 74.61 MCA 185.39 SMA 129.58 ECC .20148 INC15.3945 V1 30.283 108.85 LAP -1.43 LOP 281.25 VP 37.608 GAP 7.13 AZP 105.33 TAL 219.73 TAP 45.12 RCA 103.47 APO 155.69 V2 34.816
   RL 147.12 LAL
   RC 133.236 GL 52.93 GP -58.58 ZAL 116.88 ZAP 119.34 ETS 288.13 ZAE 104.87 ETE 205.68 ZAC 78.47 ETC 120.48 CLP-160.02
  PLANETOCENTRIC CONIC
    C3 84.393 VHL 9.187 DLA 34.74 RAL 302.73 RAD 6569.7 VEL 14.344 PTH 2.61 VHP 9.279 DPA -76.91 RAP 347.19 ECC 2.3889
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           3783.7
                                                                                                                                          -16.07
                  16 29 22 4383.74
21 40 27 3395.56
                                                                                               57.09 17 42 26
                                                  -11.82
                                                                192.59
                                                                              195.19
       68.98
                                                                                                        22 37 3
17 42 26
                                                                                                                                           -16.05
                                                                                                                                                          112.16
                                                                                                                            2795.6
                                                                118.72
                                                                               195.17
                                                                                                57.09
                                                  -11.80
      111.02
                                                                                                                                           -16.07
                   16 29 22 4383.74
21 40 27 3395.56
                                                                                                                            3783.7
                                                  -11.82
                                                                 192.59
                                                                               195.19
                                                                                                57.09
       58.98
                                                                                                57.09 22 37 3
57.09 17 42 26
57.09 22 37 3
                                                                                                                                           -16.05
                                                                                                                                                          112.16
                                                                                                                            2795.6
                                                -11.80
                                                                 118.72
                                                                               195.17
      111.02
                                                                                                                            3783.7
                                                                                                                                           -16.07
                                                                                                                                                          186.03
                   16 29 22 4383.74
21 40 27 3395.56
                                              -11.82
-11.80
                                                                 192.59
                                                                               195.19
       68.98
                                                                                                                           2795.6
                                                                                                                                           -16.05
                                                                                                                                                          112.16
                                                                118.72
                                                                               195.17
      111.02
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2296.4 SR 153.7 S5 680.5
CRT -.2334 CRS .0898 CST -.9894
                                                                    SGT 3485.3 SGR 511.3 SG3 95.7
RRT -.6733 RRF -.4173 RTF .9519
   TOE 3.4808 TRA-3.2852 TC3 -.6004 BAU .6778
    ROE .0236 RRA .6717 RC3 -.0194 FAU .02698
                                                                   SGB 3522.6 R23 -.3128 R13 -.9486
                                                                                                                        LSA 2393.5 MSA 177.3 SSA
                                                                                                                                                               1.2
   FOE 1.3371 FRA -. 6896 FC3 -. 2767 BSP 11015
                                                                                                                        EL1 2296.7 EL2 149.4 ALF 179.10
                                                                    SG1 3502.4 SG2 376.2 THA 174.29
    BOE 3.4809 BRA 3.3532 BC3 .6008 FSP
                                                      -325
                                                                                                                                    ARRIVAL DATE MAY 5 1966
                                                                         FLIGHT TIME 128.00
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 385.447
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 27.857 GAL -8.36 AZL 79.15 MCA 188.51 SMA 129.08 ECC .20070 INC10.8527 VI 30.283 RP 108.87 LAP -1.60 LOP 284.41 VP 37.549 GAP 7.30 AZP 100.74 TAL 218.09 TAP 46.60 RCA 103.17 APO 154.98 V2 34.809 RC 135.553 GL 45.33 GP -44.44 ZAL 123.22 ZAP 130.64 ETS 299.64 ZAE 115.02 ETE 207.75 ZAC 70.61 ETC 131.71 CLP-155.81
  PLANETOCENTRIC CONIC
   C3 53.249 VHL 7.297 OLA 27.01 RAL 303.82 RAO 6568.9 VEL 13.214 PTH 2.41 VHP 7.165 OPA -62.84 RAP 332.45 ECC 1.8763 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 17 53 56 4026.35 -5.54 162.27 184.57 62.19 19 1 3 3426.3 -9.22 155.52 100.00 22 20 25 3160.64 -23.39 107.05 192.53 70.84 23 13 5 2560.6 -25.79 99.07 100.00 18 40 51 3874.78 -2.09 149.24 182.66 60.17 19 45 26 3274.8 -6.04 142.68 110.00 18 53 55 3833.79 4.24 142.20 178.73 56.05 19 57 48 3233.8 -.25 135.99
   C3 53.249 WHL 7.297 DLA 27.01 RAL 303.82 RAD 6568.9 VEL 13.214 PTH 2.41 VHP 7.165 DPA -62.84 RAP 332.45 ECC 1.8763
                                                                                              69.23 21 23 33
62.19 19 1 3
70.84 23 13 5
60.17 19 45 26
73.74 1 14 1
56.05 19 57 48
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2031.7 SR 207.7 55 645.4
                                                                    SGT 3590.8 SGR 323.7 SG3 132.8
RRT -.0292 RRF .3584 RTF .9185
SGB 3605.4 R23 -.3856 R13 -.9184
    TOE 2.3908 TRA-2.9338 TC3-1.1227 BAU .8013
                                                                                                                         CRT .7453 CRS -.8724 CST -.9761
    ROE .2495 RRA .2605 RC3 -.0802 FAU .04115
   FOE 1.3076 FRA -.6775 FC3 -.6690 BSP 11210
BDE 2.4037 BRA 2.9454 BC3 1.1256 FSP -444
                                                                                                                         LSA 2133.4 MSA 190.2 SSA 2.2
                                                                     5G1 3590.8 SG2 323.6 THA 179.85
                                                                                                                      EL1 2037.6 EL2 138.1 ALF 4.38
                                                                                                                                   ARRIVAL DATE MAY 7 1966
                                                                        FLIGHT TIME 130.00
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 391.246
   HELIOCENTBIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 27.786 GAL -8.06 A7L 81.26 HCA 191.66 SMA 128.58 ECC .20009 INC 8.7433 VI 30.283 RP 108.88 LAP -1.76 LOP 287.58 VP 37.492 GAP 7.48 A7P 98.57 TAL 216.44 TAP 48.09 RCA 102.85 APO 154.31 V2 34.804 RC 137.863 GL 40.30 GP -34.87 ZAL 126.46 ZAP 138.27 ETS 306.22 ZAE 120.68 ETE 204.96 ZAC 66.16 ETC 138.15 CLP-155.45
   PLANETOCENTRIC CONTC
    C3 41.806 VHL 6.466 DLA 22.23 RAL 305.54 RAD 6568.6 VEL 12.774 PTH 2.32 VHP 6.416 DPA -53.04 RAP 329.27 ECC 1.6880
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             79.42 22 51 15
61.76 17 45 2
80.58 24 23 24
60.35 18 46 50
83.47 2 3 28
56.74 19 20 3
                                                                                                                         2574.7
                                                                                                                                                          100.50
        90.00 21 58 20 3174.67
90.00 16 33 57 4264.39
100.00 23 35 43 2860.69
                                                                            188.97
                                                                                                                                          -27.61
                                                   -26.42
                                                                108.96
                                                                                                                                                           168.94
                                                    2.12
                                                                175.57
                                                                                178.82
                                                                                                                             3664.4
                                                                                                                                            -1.68
                                                                                                                                                            77.62
                                                   -28.50
                                                                  86.28
                                                                              189.38
                                                                                                                             2260.7
                                                                                                                                            -29.51
       100.00
                                                                                                                             3453.6
                                                                                                                                             - .01
                                                                                                                                                           152.53
                                                     3.97
                                                                159.06
                                                                                177.79
                  17 39 16
                                  4053.60
       100.00
                                                                                                                             1943.4
                                                                                                                                           -34.17
                                                                                                                                                            53.81
                                  2543.36
                                                  -33.63
                                                                  63.01
                                                                               190.22
                    1 21 5
      110.00
                                                                                                                                                           141.73
                                                                148.01
                                                                                                                             3343.7
                                                                                                                                             3.95
                                                                                175.08
                                  3943.70
                                                   8.38
      110.00
                   18 14 19
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1852.5 SR 206.8 $5 614.7
CRT .7833 CR5 -.9208 CST -.9636
                                                                     SGT 3684.4 SGR 279.4 SG3 156.7
    TOE 1.9064 TRA-2.7229 TC3-1.5323 BAU .8577
                                                                    RRT .1252 RRF .5199 RTF .9007
SGB 3695.0 R23 .4097 R13 .9010
    ROE .2267 RRA .1693 RC3 -.0827 FAU .04918
    FDE 1.2341 FRA -.6260 FC3-1.0185 BSP 11582
BOE 1.9198 BRA 2.7281 BC3 1.5346 FSP -522
                                                                                                                         LSA 1962.1 MSA 199.6 SSA 3.4
                                                                     561 3684.6 SGZ 277.2 THA
                                                                                                         .55
                                                                                                                         EL1 1869.6 EL2 128.0 ALF 4.99
                                                                         FLIGHT TIME 132.00
                                                                                                                                    ARRIVAL DATE MAY 9 1966
LAUNCH DATE DEC 28 1965
                                                                         DISTANCE 397.045
  HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 27.716 GAL -7.75 A7L 82.48 MCA 194.81 SMA 128.10 ECC .19961 INC 7.5221 V1 30.283 RP 108.90 LAP -1.92 LOP 290.74 VP 37.435 GAP 7.66 A7P 97.27 TAL 214.77 TAP 49.58 RCA 102.53 APO 153.67 V2 34.799 RC 140.184 GL 36.90 GP -28.30 ZAL 127.98 ZAP 143.53 ETS 311.17 ZAE 123.94 ETE 201.74 ZAC 63.98 ETC 142.94 CLP-155.97
   PLANETOCENTRIC CONIC
    C3 35.846 VHL 5.987 OLA 19.20 RAL 307.33 RAD 6568.4 VEL 12.539 PTH
                                                                                                   2.27 VHP 6.104 OPA -46.11 RAP 328.65 ECC 1.5899
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            2403.4
                                                                                                                                                            88.03
                  22 41 41
16 4 51
                                                   -27.97
                                                                  96.68
                                                                              186.84
                                                                                               85.38 23 31 45
                                                                                                                                           -28.32
        90.00
                                  3003.37
                                                                                                                                                           174.16
                                                                                                 62.11 17 17 29
                                                                                                                             3758.0
                                                                                                                                              1.35
                                                    5.12
                                                                 180.81
                                                                                177.16
                                  4357.99
                                                                                                                             2102.8
                                                                                                                                            -29.87
                                                                                                                                                            65.90
                     0 18 50
                                                                  74.70
                                                                                186.98
                                                                                                 86.55
                                                                                                            1 3 53
                                  2702.78
                                                   -29.71
                                                                                                 86.55 1 3 73
60.79 18 23 13
89.62 2 32 55
57.28 19 3 34
                                                                                                                                                           156.93
                                                                                                                             3533.8
                                                                                                                                               2.71
                                                                 163.50
                                                                                176.32
                   17 14 20
                                  4133.81
                                                     6.65
                                                                                                                                            -33.86
                                                                                                                                                            43.33
                     1 52 46
                                  2408.90
                                                  -34.18
                                                                  52.56
                                                                                187.15
                                                                                                                             1808.9
                  1 52 46 2408.90
17 56 53 4000.44
                                                                                                                             3400.4
                                                                                                                                               6.10
                                                                 151.06
                                               10.49
                                                                               173.99
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1757.8 SR 194.8 55 586.8

CRT .7811 CRS -.9341 CST -.9524

LSA 1851.9 MSA 206.4 SSA 4.6

EL1 1764.4 EL2 121.1 ALF 4.97
                                                                    SGT 3780.2 SGR 245.0 SG3 170.1
RRT .1129 RRF .5041 RTF .8901
SGB 3788.1 R23 .4058 R13 .8903
    TOE 1.6427 TRA-2.5778 TC3-1.8665 BAU .8949
    ROE .1990 RRA .1345 RC3 -.0603 FAU .05303
    FOE 1.1481 FRA -.5551 FC3-1.2809 BSP 11922
                                                                    SG1 3780.3 SG2 243.5 THA .42
```

BDE 1.6547 BRA 2.5813 BC3 1.8675 FSP

ARRIVAL DATE MAY 11 1966

LAUNCH DATE DEC 28 1965

FLEGHT TIME 134.00

BOE 1.2809 BRA 2.1800 BC3 2.9237 FSP -602

SG1 4162.4 SG2 217.9 THA 179.66

```
ARRIVAL DATE HAY 19 1966
                                                                             FLIGHT TIME 142.00
LAUNCH DATE DEC 28 1965
                                                                             DISTANCE 425.940
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 27.375 GAL -6.10 AZL 84.87 MCA 210.60 SMA 125.82 ECC .19910 INC 5.1289 V1 30.283 RP 108.94 LAP -2.61 LOP 306.55 VP 37.170 GAP 8.54 AZP 94.42 TAL 206.17 TAP 56.77 RCA 100.77 APO 150.87 V2 34.785 RC 151.511 GL 29.69 GP -13.86 ZAL 125.54 ZAP 156.26 ETS 324.65 ZAE 128.87 ETE 191.72 ZAC 66.29 ETC 156.14 CLP-160.53
   PLANETOCENTRIC CONTC
    C3 Z4.141 VHL 4.913 DLA 14.57 RAL 316.61 RAD 6568.0 VEL 12.063 PTH Z.16 VHP 6.009 DPA -28.88 RAP 334.48 ECC 1.3973
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  -26.82
                    0 8 14 2730.25
15 56 19 4433.56
                                                                                   186.48
                                                                                                     95.33
                                                                                                                  0 53 44
                                                                                                                                  2130.2
                                                                                                                                                                     68.24
                                                     -27.85
                                                                      76.75
        90.00
                                                                                                                 17 10 13
                                                                                                                                     3833.6
                                                                                                                                                      3.78
                                                                                                                                                                    178.39
                                                                                    179.60
                                                                                                       62.62
                                                                     185.08
        90.00
                                                        7.50
                                                                                    186.32
                                                                                                       96.64
                                                                                                                   2 18 6
                                                                                                                                     1842.7
                                                                                                                                                    -27.98
                                                                                                                                                                     46.85
                                                                      55.44
                    1 37 24 2442.73
17 9 51 4196.31
                                                     -29.21
       100.00
                                                                                                    61.29 18 19 47
100.23 3 39 21
57.69 19 7 55
                                                                                                                                    3596.3
                                                                                                                                                      4.81
                                                                                                                                                                    160.37
                                                                                    178.95
                                                                     166.99
       100.00
                                                       8.71
                                                                                                                                    1574.5
                                                                                                                                                    -31.04
                                                                                                                                                                     25.67
                                                    -32.80
                                                                                   185.70
       110.00
                    3 3 6 2174.53
18 0 37 4037.28
                                                                      34.45
                                                                                                                                   3437.3
                                                                                                                                                     7.49
                                                                                                                                                                    146.66
                                                                                    177.08
                                                                    153.06
       110.00
                                                     11.83
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 4204.6 SGR 233.5 SG3 176.5
RRT -.1323 RRF .1099 RTF .8602
SGB 4211.0 R23 -.2260 R13 -.8601
                                                                                                                                ST 1668.5 SR 206.6 SS 538.4
CRT .8405 CRS -.9844 CST -.9200
    TOE 1.2793 TRA-2.0512 TC3-3.1109 BAU 1.0044
    ROE .1761 RRA .0614 RC3 .0844 FAU .04967
FDE .8867 FRA -.1660 FC3-1.7811 BSP 12751
BDE 1.2914 BRA 2.0521 BC3 3.1120 FSP -527
                                                                                                                                L5A 1750.5 MSA 227.7 55A 10.7
EL1 1677.5 EL2 111.3 ALF 5.97
                                                                         SG1 4204.7 SG2 231.4 THA 179.58
                                                                                                                                            ARRIVAL DATE MAY 21 1966
                                                                             FLIGHT TIME 144.00
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 431.692
    RL 147.12 LAL .00 LOL 96.05 VL 27.309 GAL -5.75 A7L 85.09 MCA 213.75 SMA 125.39 ECC .19940 INC 4.9062 V1 30.283 RP 108.94 LAP -2.72 LOP 309.71 VP 37.121 GAP 8.71 A7P 94.08 TAL 204.41 TAP 58.16 RCA 100.39 APO 150.59 V2 34.784 RC 153.743 GL 29.05 GP -12.52 ZAL 124.07 ZAP 157.75 ETS 326.03 ZAE 129.17 ETE 190.63 ZAC 67.81 ETC 157.65 CLP-161.46
    PLANETOCENTRIC CONIC
                   16 4 41 4419.58
1 45 14 2430.83
17 18 11 4182.41
3 10 59 2162.49
                                                                                                       62.51 17 18 21
97.09 2 25 45
61.17 18 27 54
100.74 3 47 2
57.53 19 15 59
                                                                                                                                     3819.5
                                                                                                                                                       3.33
                                                        7.07
                                                                     184.29
                                                                                     180.85
        90.00
                                                                                                                                     1830.8
                                                                                                                                                     -27.83
                                                                                                                                                                      46.00
                                                                       54.57
                                                                                     187.36
                                                      -29.11
       100.00
                                                                                                                                     3582.4
                                                                                                                                                      4.35
                                                                                                                                                                     159.61
                                                        8.26
                                                                     166.21
                                                                                     180.20
       100.00
                                                                                                                                    1562.5
                                                                                                                                                    -30.82
                                                                                                                                                                     24.80
                                                      -32.65
                                                                       33.54
                                                                                    186.72
                                                                                                     100.74
       110.00
                                                                     152.31
                                                                                     178.35
                                                                                                                                    3423.5
                                                                                                                                                      6.97
                                                                                                                                                                     145.93
                                                     11.33
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                        SGT 4320.6 SGR 243.0 SG3 176.4
RRT -.1379 RRF .D561 RTF .8631
                                                                                                                                ST 1670.1 SR 214.6 SS 525.4
CRT .8573 CRS -.9896 CST -.9181
    TOE 1.2512 TRA-1.9716 TC3-3.3814 BAU 1.0357
    RDE .1786 RRA .0473 RC3 .1041 FAU .04904
    FDE .8345 FRA -.1248 FC3-1.8538 BSP 13504
BDE 1.2638 BRA 1.9722 BC3 3.3830 FSP -562
                                                                                                                                 LSA 1749.4 MSA 224.9 SSA 12.1
                                                                        SGB 4327.4 R23 -.1772 R13 -.8630
                                                                                                                                EL1 1680.2 EL2 109.8 ALF 6.31
                                                                         SG1 4320.7 SG2 240.7 THA 179.55
                                                                                                                                            ARRIVAL DATE MAY 23 1966
                                                                             FLIGHT TIME 146.00
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 437.438
    RL 147.12 LAL .00 LOL 96.05 VL 27.244 GAL -5.39 AZL 85.28 HCA 216.91 SMA 124.97 ECC .19985 INC 4.7174 V1 30.283 RP 108.94 LAP -2.83 LOP 312.87 VP 37.074 GAP 8.89 AZP 93.77 TAL 202.63 TAP 59.54 RCA 100.00 APO 149.94 V2 34.784
    RC 155.962 GL 28.53 GP -11.41 ZAL 122.40 TAP 159.09 ETS 327.14 TAE 129.40 ETE 189.73 TAC 69.48 ETC 158.97 CLP-162.37
   PLANETOCENTRIC CONIC
     C3 21.811 VHL 4.670 DLA 14.80 RAL 320.76 RAD 6567.9 VEL 11.966 PTH 2.13 VMP 6.141 DPA -25.02 RAP 338.07 ECC 1.3590
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 2113.7
                                                                                                   95.92 1 7 55
62.37 17 28 17
                                                                                                                                                                      67.06
                    0 22 41 2713.72
16 14 57 4400.66
1 52 0 2425.65
                                                      -27.74
                                                                                  188.84
                                                                                                                  1 7 55
                                                                                                                                                     -26.63
                                                                     75.55
         90.00
                                                                                                                                                                     176.55
                                                                                                                                     3800.7
                                                        6.47
                                                                     183.22
                                                                                     182.27
                                                                                                                                                      2.72
         90.00
                                                                                                       97.29 2 32 26
61.01 18 37 42
                                                                                                                                                     -27.76
                                                                                                                                                                      45.63
                                                                                                                                    1825.7
                                                      -29.07
                                                                       54.19
                                                                                     188.66
                                                                                                       97.29
        100.00
                                                                                                                                                                     158.59
                                                                                     181.63
                                                                                                                                     3564.0
                                                                                                                                                       3.72
                    17 28 18 4163.95
                                                        7.65
                                                                     165.18
        100.00
                                                                                                                                                                     24.36
                     3 18 4 2156.35
18 18 44 4006.02
                                                                                                                                                     -30.71
                                                                                    188.00
                                                                                                      101.01
                                                                                                                3 54 1
                                                                                                                                    1556.4
                                                      -32.57
                                                                       33.08
                                                                                                                  3 34 1 1556.4
19 25 30 3406.0
       110.00
                                                                                                                                                                     145.01
                                                                     151.36
                                                                                     179.79
                                                                                                      57.34
                                                                                                                                                       6.31
                                                      10.69
       110.00
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 1695.4 SR 224.6 SS 524.5
CRT .8783 CRS -.9940 CST -.9182
                                                                         SGT 441D.1 SGR 256.0 SG3 174.5
RRT -.1336 RRF .0274 RTF .8622
SGB 4417.5 R23 -.1443 R13 -.8621
     TOE 1.2515 TRA-1.8703 TC3-3.6242 BAU 1.0574
    ROE .1828 RRA .0346 RC3 .1236 FAU .04748
FOE .8042 FRA -.0685 FC3-1.8847 8SP 13853
BOE 1.2647 BRA 1.8706 BC3 3.6263 FSP -560
                                                                                                                                LSA 1774.9 MSA 223.1 SSA 13.2
                                                                                                                                 EL1 1706.9 EL2 106.7 ALF 6.66
                                                                          5G1 4410.3 SG2 253.7 THA 179.55
                                                                                                                                             ARRIVAL DATE MAY 25 1966
                                                                              FLIGHT TIME 148.00
LAUNCH DATE DEC 28 1965
                                                                              DISTANCE 443.175
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 27.180 GAL -5.01 A7L 85.45 MCA 220.07 SMA 124.56 ECC .20044 INC 4.5545 VI 30.283

RP 108.94 LAP -2.93 LOP 316.04 VP 37.027 GAP 9.07 A7P 93.49 TAL 200.84 TAP 60.91 RCA 99.59 APO 149.53 V2 34.785

RC 158.168 GL 28.09 GP -10.49 7AL 120.55 ZAP 160.33 ETS 328.01 ZAE 129.59 ETE 188.96 ZAC 71.27 ETC 160.11 CLP-163.26
   PLANETOCENTRIC CONIC
     C3 20.851 VHL 4.566 DLA 15.14 RAL 322.98 RAD 6567.8 VEL 11.926 PTH 2.12 VHP 6.220 DPA -23.33 RAP 339.97 ECC 1.3432
    C3 20.851 VHL 4.566 DLA 15.14 RAL 322.98 RAD 6567.8 VEL 11.926 PTH 2.12 VHP 6.220 DPA -23.33 RAP 339.97 ECC 1.3432 LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 D 28 24 2715.04 -27.75 75.65 190.37 95.88 1 13 39 2115.0 -26.65 67.16 90.00 16 26 54 4377.67 5.74 181.92 183.87 62.22 17 39 52 3777.7 1.98 175.26 100.00 1 57 59 2426.17 -29.08 54.23 190.20 97.27 2 38 25 1826.2 -27.76 45.67 100.00 17 40 1 4141.77 6.91 163.94 183.23 60.85 18 49 2 3541.8 2.98 157.37 110.00 3 24 35 2155.22 -32.55 33.00 189.54 101.05 4 0 30 1555.2 -30.69 24.28 110.00 18 29 54 3985.49 9.93 150.25 181.40 57.12 19 36 20 3385.5 5.53 143.93
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1731.5 SR 235.3 S5 526.9
CRT .8996 CRS -.9967 CST -.9199
                                                                         SGT 4493.9 SGR 269.7 SG3 172.2
RRT -.1222 RRF .0113 RTF .8612
     TOE 1.2641 TRA-1.7606 TC3-3.8623 BAU 1.0774
     ROE .1874 RRA .0224 RC3 .1411 FAU .04578
FOE .7804 FRA -.0125 FC3-1.9007 BSP 14143
                                                                        SGB 4501.9 R23 -.1178 R13 -.8611
SG1 4494.0 SG2 267.7 THA 179.58
                                                                                                                              LSA 1811.8 MSA 220.2 SSA 14.4
EL1 1744.5 EL2 102.0 ALF 6.99
     BOE 1.2779 BRA 1.7607 BC3 3.8649 FSP -554
```

ARRIVAL DATE MAY 27 1966

LAUNCH DATE DEC 28 1965

```
DISTANCE 448.903
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 27.117 GAL -4.63 AZL 85.59 HCA 223.23 SMA 124.16 ECC .20119 INC 4.4116 V1 30.283 RP 108.94 LAP -3.02 LOP 319.20 VP 36.982 GAP 9.25 AZP 93.22 TAL 199.03 TAP 62.27 RCA 99.18 APO 149.14 VZ 34.787 RC 160.359 GL 27.70 GP -9.70 ZAL 118.51 ZAP 161.47 ETS 328.67 ZAE 129.75 ETE 188.31 ZAC 73.15 ETC 161.13 CLP-164.13
   PLANETOCENTRIC CONIC
    C3 20.004 VHL 4.473 CLA 15.60 RAU 325.30 RAU 6567.8 VEL 11.891 PTH 2.11 VHP 6.304 DPA -21.76 RAP 341.91 ECC 1.3292
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 33 25 2721.69
16 40 25 4351.20
                                                   -27.80
                                                                  76.13
                                                                               192.14
                                                                                                95.64
                                                                                                            1 18 47
                                                                                                                            2121.7
                                                                                                                                           -26.72
                                                                                                                                                            67.63
        90.00
                                                                                                 62.08
                                                                                                           17 52 57
                                                                                                                             3751.2
                                                                                                                                              1.13
                                                                                                                                                           173.79
                                                     4.90
                                                                 180.43
                                                                                165.66
        90.00
                  2 3 20 2431.69
17 53 11 4116.43
                                                  -29.12
                                                                  54.63
                                                                                191.97
                                                                                                 97.06
                                                                                                            2 43 52
                                                                                                                             1831.7
                                                                                                                                            -27.84
                                                                                                                                                            46.06
       100.00
                                                                                                60.67 19 1 48
100.92 4 6 39
56.90 19 48 23
                                                                                                                             3516.4
                                                                                                                                              2.12
                                                                                                                                                           155.98
                                                     6.07
                                                                 162.53
                                                                                185.02
      100.00
                    3 30 40 2158.45
                                                                                191.33
                                                                                               100.92
                                                                                                                             1558.5
                                                                                                                                            -30.75
                                                                                                                                                            24.51
                                                  -32.60
                                                                  33.24
      110.00
                                                                                                                            3362.4
                                                                                                                                             4.66
                                                                                                                                                          142.71
                                                                 149.01
                                                                                163.16
                   18 42 21
                                                   9.08
      110.00
                                  3962.43
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 4573.9 SGR 283.6 SG3 169.7
RRT -.1060 RRF .0038 RTF .8605
                                                                                                                         ST 1776,6 SR 246.3 55 531.3
CRT .9198 CRS -.9976 CST -.9229
    TOE 1.2860 TRA-1.6433 TC3-4.0968 BAU 1.0964
    ROE .1922 RRA .0104 RC3 .1564 FAU .04403
FDE .7603 FRA .0418 FC3-1.9054 BSP 14417
                                                                                                                         LSA 1858.0 MSA 215.9 SSA 15.5
EL1 1791.0 EL2 95.9 ALF 7.29
                                                                     5GB 4582.7 R23 -.0959 R13 -.8604
                                                                     SG1 4574.0 SG2 282.0 THA 179.62
    BDE 1.3003 BRA 1.6433 BC3 4.0998 FSP
                                                                                                                                    ARRIVAL CATE MAY 29 1966
                                                                         FLIGHT TIME 152.00
LAUNCH DATE DEC 28 1965
                                                                         DISTANCE 454.622
  HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 27.055 GAL -4.24 AZL 85.72 MCA 226.39 SMA 123.77 ECC .20211 INC 4.2846 V1 30.283 RP 108.93 LAP -3.10 LOP 322.37 VP 36.939 GAP 9.43 AZP 92.96 TAL 197.22 TAP 63.61 RCA 98.75 APO 148.79 VZ 34.789
                       27.34 GP -9.02 TAL 116.31 TAP 162.53 ETS 329.15 TAE 129.90 ETE 187.76 TAC 75.11 ETC 162.02 CLP-164.98
    RC 162.536 GL
   PLANE TOCENTRIC CONIC
   C3 19.260 VML 4.389 DLA 16.16 RAL 327.74 RAD 6567.8 VEL 11.859 PTH 2.10 VMP 6.395 DPA -20.27 RAP 343.89 ECC 1.3170 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 37 52 2733.17 -27.87 76.96 194.13 95.23 1 23 25 2133.2 -26.85 68.44 90.00 16 55 27 4321.74 3.96 178.78 187.65 61.94 18 7 29 3721.7 .18 172.14
                                                                                                 96.68 2 48 55
60.51 19 15 54
                   2 8 14 2441.74
18 7 46 4088.40
                                                                  55.37
                                                                                193.97
                                                                                                                             1841.7
                                                                                                                                             -27.97
                                                                                                                                                            45.7A
                                                   -29.20
                                                                160.98
                                                                                187.00
                                                                                                                             3488.4
                                                                                                                                              1.17
                                                                                                                                                           154.44
      100.00
                                                     5.14
                                                                                                          20 1 38
                    3 36 29 2165.63
                                                  -32.69
                                                                  33.78
                                                                                193.35
                                                                                               100.61
                                                                                                                             1565.6
                                                                                                                                            -30.88
                                                                                                                                                            25.03
       110.00
                   18 56 0 3937.28
                                                    8.14
                                                                 147.67
                                                                                185.16
                                                                                                 56.69
                                                                                                                             3337.3
                                                                                                                                              3.70
                                                                                                                                                           141.39
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1832.6 SR 257.6 SS 538.5
CRT .9386 CR5 -.9968 CST -.9270
                                                                     SCT 4647.3 SCR 297.5 SC3 166.9
RRT -.0859 RRF .0044 RTF .8596
SC8 4656.8 R23 -.0788 R13 -.8596
    TOE 1.3185 TRA-1.5159 TC3-4.3216 BAU 1.1136
    ROE .1973 RRA -.0010 RC3 .1697 FAU .04218
FOE .7450 FRA .0960 FC3-1.8959 BSP 14616
BDE 1.3332 BRA 1.5159 BC3 4.3250 FSP -534
                                                                                                                         LSA 1915.8 MSA 210.5 55A 16.6
                                                                     SG1 4647.4 SG2 296.4 THA 179.68
                                                                                                                         EL1 1848.5 EL2 88.1 ALF 7.53
                                                                                                                                   ARRIVAL DATE HAY 31 1966
                                                                        FLIGHT TIME 154.00
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 460.331
    RL 147.12 LAL ... .00 LOL 96.05 VL 26.993 GAL -3.84 AZL 85.83 MCA 229.56 SMA 123.39 ECC .20321 INC 4.1703 V1 30.283 RP 108.92 LAP -3.17 LOP 325.53 VP 36.897 GAP 9.62 AZP 92.71 TAL 195.39 TAP 64.94 RCA 98.31 APO 148.46 VZ 34.792 RC 164.699 GL 27.00 GP -8.44 ZAL 113.95 ZAP 163.54 ETS 329.46 ZAE 130.03 ETE 187.29 ZAC 77.14 ETC 162.82 CLP-165.82
   PLANETOCENTRIC CONIC
    C3 18.614 VHL 4.314 CLA 16.81 RAL 330.30 RAD 6567.8 VEL 11.832 PTH 2.10 VHP 6.491 CPA -18.84 RAP 345.91 ECC 1.3063
    ENCH APATH LUCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ Z LONG
                                                                                             94.65
                                                                                                                          2149.1
                                                                                                                                            -27.02
                                                                                                            1 27 40
                                                                                                                                                            69.58
      90.00 0 41 51 2749.13
90.00 17 11 55 4289.70
100.00 2 12 45 2455.97
                                                  -27.96
                                                                 78.12
                                                                               196.36
                                                                                                                                              -.86
                                                                                                61.82 18 23 25
                                                                                                                             3689.7
                                                    2.93
                                                                 176.99
                                                                               189.85
                                                                                                                                                            47.80
                                                                                                                            1856.0
                                                                                                                                            -28.15
                                                  -29.31
                                                                  56.41
                                                                               196.21
                                                                                                96.14
                                                                                                           2 53 41
                                                                                                60.37 19 31 20
                                                                                                                                                          152.77
                                                                 159.30
                                                                               189.20
                                                                                                                            3458.1
                                                                                                                                               -14
      100.00
                   18 23 42
                                 4058.09
                                                    4.12
                                                                                                100.15 4 18 23
56.48 20 16 0
                                                                                                                                                            25.81
                                                                                                           4 18 23
                                                                                                                                            -31.07
                    3 42 7
                                                                  34.59
                                                                               195.62
                                                                                              100.15
                                                                                                                            1576.4
      110.00
                                2176.40
                                                  -32.82
                                                                                                                             3310.4
                                                                                                                                             2.68
                                                                                                                                                           139.99
                   19 10 50 3910.43
                                                                 146.24
                                                                               187.33
       110.00
                                                    7.14
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1892.6 SR 268.7 SS 544.6
CRT .9548 CRS -.9944 CST -.9316
                                                                     SGT 4723.8 SGR 310.8 SG3 164.3
RRT -.0646 RRF .0069 RTF .8601
SGB 4734.0 R23 -.0628 R13 -.8601
    TOE 1.3546 TRA-1.3845 TC3-4.5463 BAU 1.1322
    ROE .2023 RRA -.0120 RC3 .1802 FAU .04047
FDE .7289 FRA .1453 FC3-1.8825 BSP 14905
                                                                                                                        LSA 1977.2 MSA 203.7 SSA 17.7
                                                                     SG1 4723.8 SG2 310.2 THA 179.76
    BOE 1.3696 BRA 1.3845 BC3 4.5498 FSP -528
                                                                                                                                    ARRIVAL DATE JUN 2 1966
                                                                         FLIGHT TIME 156.00
LAUNCH DATE DEC 28 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 466.029
    RL 147.12 LAL .00 LOL 96.05 VL 26.933 GAL -3.42 A7L 85.93 MCA 232.72 SMA 123.01 ECC .20448 INC 4.0662 VI 30.283 RP 108.91 LAP -3.23 LOP 328.70 VP 36.856 GAP 9.81 A7P 92.47 TAL 193.55 TAP 66.27 RCA 97.86 APO 148.17 VZ 34.796 RC 166.847 GL 26.65 GP -7.93 ZAL 111.43 ZAP 164.50 ETS 329.60 ZAE 130.17 ETE 186.88 ZAC 79.22 ETC 163.54 CLP-166.63
   PLANETOCENTRIC CONIC
                                                                                                  2.09 VHP 6.593 OPA -17.47 RAP 347.95 ECC 1.2973
    C3 18.063 VHL 4.250 OLA 17.53 RAL 333.00 RAD 6567.7 VEL 11.809 PTH
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 45 28 2769.34 -28.07 79.59 198.82 93.93 1 31 37 2169.3 -27.23 71.02 90.00 17 29 48 4255.43 1.83 175.07 192.28 61.74 18 40 44 3655.4 -1.97 168.44
                                                                                                                                            -28.37
                  2 17 1 2474.13
18 40 57 4025.87
3 47 39 2190.52
                                                                                                 95.45
                                                                                                           2 58 15
                                                                                                                             1874.1
                                                  -29.44
                                                                  57.75
                                                                                198.69
       100.00
                                                                                                 60.25 19 48 3
                                                                                                                             3425.9
                                                                                                                                              -.95
                                                                 157.53
                                                                                191.61
                                                    3.03
       100.00
                                                                                                 99.53
                                                                                                          4 24 10
                                                                                                                             1590.5
                                                  -32.98
                                                                  35.66
                                                                               198.14
       110.00
                                                                                                 56.30 20 31 30
                                                                                                                             3282.2
                                                                                                                                              1.60
                                                                                189.72
                                                   6.07
                                                                 144.75
                  19 26 47 3882.23
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 4796.8 SGR 323.8 SG3 161.7
RRT -.0416 RRF .0135 RTF .8610
                                                                                                                        ST 1961.1 SR 279.9 SS 552.0
CRT .9685 CRS -.9908 CST -.9368
    TDE 1.3981 TRA-1.2440 TC3-4.7590 BAU 1.1501
    RDE .2075 RRA -.0224 RC3 .1883 FAU .03878
                                                                                                                  LSA 2046.9 MSA 196.1 55A 18.8
EL1 1979.7 EL2 69.0 ALF 7.88
                                                                    SGB 4807.7 R23 -.0495 R13 -.8610
    FOE .7153 FRA .1934 FC3-1.8586 BSP 15173
                                                                    SG1 4796.8 SG2 323.5 THA 179.84
    BOE 1.4134 BRA 1.2442 BC3 4.7627 FSP -521
```

FLIGHT TIME 150.00

ARRIVAL DATE JUN 4 1966

```
LAUNCH DATE DEC 28 1965
                                                                       OISTANCE 471.715
  HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 26.873 GAL -3.00 A7C 86.03 HCA 235.88 SMA 122.65 ECC .20596 INC 3.9705 V1 30.283
RP 108.89 LAP -3.29 LOP 331.87 VP 36.816 GAP 10.01 A7P 92.23 TAL 191.70 TAP 67.58 RCA 97.39 APO 147.91 V2 34.800
RC 168.980 GL 26.29 GP -7.48 ZAL 108.76 ZAP 165.41 ETS 329.59 ZAE 130.30 ETE 186.52 ZAC 81.35 ETC 164.18 CLP-167.44
   PLANETOCENTRIC CONIC
    C3 17.607 VHL 4.196 DLA 18.31 RAL 335.83 RAD 6567.7 VEL 11.789 PTH
                                                                                                 2.08 VHP 6.701 DPA -16.14 RAP 350.01 ECC 1.2898
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            93.04
                                                                                                                                        -27.45
                                 2793.60
                                                  -28.17
                                                                 81,36
                                                                             201.52
                                                                                                           1 35 21
                                                                                                                          2193.6
                                                                                                                                                          72.77
       90.00
                    D 48 47
                  17 49 5
2 21 4
                                                                                                61.69 18 59 24
                                                                                                                           3619.3
                                                                                                                                          -3.13
                                                                                                                                                         166.42
                                                                173.05
                                                                              194.94
                                 4219.26
                                                    .66
        90.00
                                                  -29.57
                                                                 59.36
                                                                              201.41
                                                                                                94.61
                                                                                                           3 2 40
                                                                                                                           1896.0
                                                                                                                                          -28.61
                                                                                                                                                          50.68
                                 2496.00
      100.00
                                                                                               60.16 20 6 1
98.78 4 29 59
56.14 20 48 4
                                                                                                                           3392.1
                                                                                                                                          -2.10
                                                                                                                                                         149.15
                  18 59 29 3992.09
                                                   1.89
                                                                155.67
                                                                              194.26
      100.00
                                                                 36.97
                                                                              200.92
                                                                                                                           1607.8
                                                                                                                                         -31.60
                                                                                                                                                         28.10
                    3 53 12 2207.77
                                                  -33.17
      110.00
                                                                                                                                             .49
                                                                                                                         3253.1
                                                                                                                                                        137.00
                                                                143.21
                                                                              192.34
                  19 43 51
                                                   4.97
      110.00
                                  3853.08
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 4865.7 SGR 336.3 SG3 158.9
RRT -.D176 RRF .0233 RTF .8622
                                                                                                                       ST 2036.5 SR 291.1 S5 559.8 CRT .9796 CRS -.9859 CST -.9421
    TOE 1.4479 TRA-1.0944 TC3-4.9546 BAU 1.1671
    ROE .2129 RRA -.0321 RC3 .1938 FAU .03707
FOE .7032 FRA .2404 FC3-1.8229 BSP 15428
                                                                    SGB 4877.3 R23 -.0385 R13 -.8622
                                                                                                                       LSA 2123.6 MSA 187.9 SSA 19.8
EL1 2056.4 EL2 57.9 ALF 7.98
                                                                    SG1 4865.7 SG2 336.2 THA 179.93
    BOE 1.4634 BRA 1.0949 BC3 4.9584 FSP
                                                                                                                                  ARRIVAL DATE JUN 6 1966
                                                                        FLIGHT TIME 160.00
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 477.390
  HELIOCENTRIC CONIC
   RL 147.12 LAL .00 LOL 96.05 VL 26.814 GAL -2.56 A7L 86.12 HCA 239.04 SMA 122.29 ECC .20764 INC 3.8817 VI 30.283 RP 108.88 LAP -3.33 LOP 335.04 VP 36.778 GAP 10.22 A7P 92.00 TAL 189.85 TAP 68.89 RCA 96.90 APO 147.68 VZ 34.805 RC 171.096 GL 25.89 GP -7.09 7AL 105.95 7AP 166.28 ETS 329.40 7AE 130.43 ETE 186.22 7AC 83.52 ETC 164.76 CLP-168.22
  PLANETOCENTRIC CONIC
    C3 17.247 VHL 4.153 DLA 19.14 RAL 338.80 RAD 6567.7 VEL 11.774 PTH
                                                                                                 2.08 VMP 6.814 OPA -14.83 RAP 352.09 ECC 1.2838
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 51 51 2821.76 -28.25 83.41 204.46 92.02 1 38 53 2221.8 -27.67 74.80
                                                                                                         19 19 24
                                                                               197.85
                                                                                                                            3581.5
                                                                                                                                            -4.34
                                                                                                                                                         154.31
        90.00
                  18 9 43
                                  4181.54
                                                    -.56
                                                                170.95
                                                                                                61.69
                                                                                               93.63 3 7 2
60.12 20 25 12
97.89 4 35 56
56.01 21 5 40
                                                                                                                            1921.4
                                                                                                                                           -28.87
                                                                                                                                                          52.53
                    2 25 0 2521.40
                                                   -29.69
                                                                 61.24
                                                                               204.38
      100.00
      100.00
                                                                               197.15
                                                                                                                            3357.1
                                                                                                                                           -3.28
                                                                                                                                                         147.23
                  19 19 15 3957.14
                                                     .70
                                                                153.76
                    3 58 48 2227.94
                                                  -33.37
                                                                                                                           1627.9
                                                                                                                                         -31.92
                                                                                                                                                          29.59
      110.00
                                                                 38.52
                                                                               203.95
      110.00
                  20 1 57
                                  3823.36
                                                                141.65
                                                                               195.20
                                                                                                                           3223.4
                                                                                                                                            -.65
                                                                                                                                                         135,45
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                    SGT 4926.4 SGR 348.3 SG3 156.0
RRT .0076 RRF .0370 RTF .8631
SGB 4938.7 R23 .0304 R13 .8631
                                                                                                                       ST 2121.5 SR 302.3 SS 569.2
CRT .9880 CRS -.9800 CST -.9476
    TDE 1.5061 TRA -.9322 TC3-5.1219 BAU 1.1819
    RDE .2187 RRA -.0409 RC3 .1967 FAU .03529
    FDE .6940 FRA .2884 FC3-1.7715 BSP 15593
BDE 1.5219 BRA .9331 BC3 5.1257 FSP -502
                                                                                                                        LSA 2209.9 MSA 179.6 SSA 20.8
                                                                    SG1 4926.4 SG2 348.3 THA
                                                                                                                        EL1 2142.5 EL2 46.2 ALF 8.02
                                                                                                        .03
                                                                                                                                  ARRIVAL DATE JUN 8 1966
                                                                        FLIGHT TIME 162.00
LAUNCH DATE DEC 28 1965
  HELIOCENTRIC CONIC
                                                                       DISTANCE 483.051
   RL 147.12 LAL .00 LOL 96.05 VL 26.756 GAL -2.10 AZL 86.20 MCA 242.21 SMA 121.94 ECC .20954 INC 3.7986 V1 30.283

RP 108.86 LAP -3.36 LOP 338.21 VP 36.741 GAP 10.43 AZP 91.77 TAL 187.99 TAP 70.20 RCA 96.39 APO 147.49 V2 34.811

RC 173.196 GL 25.45 GP -6.74 ZAL 103.01 ZAP 167.12 ETS 329.06 ZAE 130.56 ETE 185.95 ZAC 85.72 ETC 165.28 CLP-169.00
   PLANETOCENTRIC CONIC
    C3 16.988 VML 4.122 DLA 19.99 RAL 341.91 RAD 6567.7 VEL 11.763 PTH 2.08 VMP 6.934 DPA -13.56 RAP 354.19 ECC 1.2796
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           90.85 1 42 18
61.74 19 40 42
92.51 3 11 23
60.11 20 45 34
96.87 4 42 3
55.91 21 24 15
                                                                                                                        2253.7
                                                                                                                                        -27.89
                                                                            207.65
                                                                                                                                                          77.10
                                                  -28.31
       90.00
                    0 54 44 2853.66
                                                                85.75
                                                                                                                           3542.7
                                                                                                                                           -5.58
                                                                                                                                                         162.13
                  18 31 39
                                  4142.66
                                                   -1.81
                                                                168.78
                                                                               201.02
        90.00
                                                                                                                                                          54.62
                    2 28 53 2550.11
                                                  -29.80
                                                                 63.37
                                                                              207.60
                                                                                                                           1950.1
                                                                                                                                          -29.13
       100.00
                                                                              200.30
                                                                                                                           3321.4
                                                                                                                                          -4.48
                                                                                                                                                         145.26
                  19 40 12
                                                    -.51
                                                                151.80
      100.00
                                  3921.44
                                                                                                                                         -32.26
                                                                                                                                                          31.28
                                                  -33.57
                                                                              207.24
                                                                                                                           1650.8
                    4 4 33
                                  2250.80
                                                                  40.27
      110.00
                                                                                                                                                         133.69
                                                                               198.29
                                                                                                                           3193.5
                                                                                                                                           -1.79
                  20 21 2
                                  3793.51
                                                   2.70
                                                                140.09
      110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2206.2 SR 313.4 SS 576.3
CRT .9936 CRS -.9734 CST -.9528
                                                                    SCT 4989.9 SCR 359.5 SC3 153.2
RRT .0323 RRF .0504 RTF .8655
SCB 5002.8 R23 .0222 R13 .8655
    TOE 1.5654 TRA -.7648 TC3-5.2716 BAU 1.1981
    RDE .2249 RRA -.0490 RC3 .1966 FAU .03366
FDE .6831 FRA .3320 FC3-1.7156 BSP 15840
BDE 1.5815 BRA .7663 BC3 5.2752 FSP -496
                                                                                                                       LSA 2295.2 M5A 171.2 SSA 21.8
EL1 2228.1 EL2 35.1 ALF 8.04
                                                                    SG1 4989.9 SG2 359.3 THA
                                                                                                         .13
                                                                                                                                   ARRIVAL DATE JUN 10 1966
                                                                        FLIGHT TIME 164.00
LAUNCH DATE DEC 28 1965
  HELIOCENTRIC CONIC
                                                                        DISTANCE 488.697
    RL 147.12 LAL .00 LOL 96.05 VL 26.699 GAL -1.64 AZL 86.28 HCA 245.37 SMA 121.60 ECC .21167 INC 3.7201 VI 30.283 RP 108.84 LAP -3.38 LOP 341.38 VP 36.706 GAP 10.65 AZP 91.55 TAL 186.12 TAP 71.49 RCA 95.86 APO 147.34 V2 34.817 RC 175.278 GL 24.96 GP -6.43 ZAL 99.94 ZAP 167.93 ETS 328.53 ZAE 130.69 ETE 185.72 ZAC 87.95 ETC 185.75 CLP-169.76
   PLANETOCENTRIC CONIC
    C3 16.834 VML 4.103 DLA 20.87 RAL 345.16 RAD 6567.7 VEL 11.757 PTH 2.08 VMP 7.061 DPA -12.30 RAP 356.30 ECC 1.2770
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            2289.1
                                                                                                            1 45 38
                    0 57 29 2889.13
                                                  -28.31
                                                                88.34
                                                                              211.08
                                                                                              89.55
       90.00
                                                                                                                            3503.0
                                                                                                                                            -6.83
                                                                                                61.84
                                                                                                          20 3 14
                  18 54 51
                                  4102.99
                                                   -3.09
                                                                166.57
                                                                               204.46
        90.00
                                                                                                            3 15 47
                                                                                                                            1981.9
                                                                                                                                           -29.37
                     2 32 45
                                  2581.94
                                                  -29.87
                                                                  65.73
                                                                               211.07
                                                                                                91.27
       100.00
                                                                                                60.15 21 7 1
95.72 4 48 26
55.85 21 43 44
                                                                                                                            3285.4
                                                                                                                                            -5.69
       100.00
                   20 2 16 3885.42
                                                   -1.73
                                                                149.82
                                                                               203.70
                                                                                                                            1676.1
                                                                                                                                                          33.18
      110.00
                    4 10 30 2276.11
                                                  -33.76
                                                                  42.22
                                                                               210.79
                                                                                                                 132.35

CREST DETERMINATION ACCURACY

ST 2294.4 SR 324.6 SS 582.9

CRT .9967 CRS -.9661 CST -.9575

LSA 2383.7 MSA 163.5 SSA 75

EL1 2377 CRS -.9661
                                                                                                                            3164.D
                                                   1.58
                                                                               201.64
      110.00
                  20 41 0
                                 3764.01
                                                                138.55
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5048.7 SGR 370.1 SG3 150.3
RRT .0573 RRF .0655 RTF .8679
SG8 5062.3 R23 .0156 R13 .8679
SG1 5048.8 SG2 369.5 THA .24
    TOE 1.6294 TRA -.5862 TC3-5.3875 BAU 1.2133
    ROE .2317 RRA -.0560 RC3 .1937 FAU .03204
    FDE .6729 FRA .3760 FC3-1.6477 BSP 16070
BDE 1.6458 BRA .5889 BC3 5.3910 FSP -489
                                                                                                                       EL1 2317.1 EL2 26.2 ALF 8.03
```

FLIGHT TIME 158.00

ARRIVAL DATE JUN 12 1966

EL1 2650.0 EL2 52.4 ALF 7.94

LAUNCH DATE DEC 28 1965

```
DISTANCE 494.327
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 26.643 GAL -1.15 AZL 86.35 MCA 248.54 SMA 121.27 ECC .21405 INC 3.6455 VI 30.283 RP 108.82 LAP -3.39 LOP 344.55 VP 36.672 GAP 10.88 AZP 91.34 TAL 184.25 TAP 72.79 RCA 95.31 APO 147.23 VZ 34.824 RC 177.341 GL 24.41 GP -6.15 ZAL 96.76 ZAP 168.71 ETS 327.80 ZAE 130.82 ETE 185.51 ZAC 90.21 ETC 166.17 CLP-170.51
   PLANETOCENTRIC CONIC
    C3 16.791 VHL 4.098 DLA 21.75 RAL 348.55 RAD 6567.7 VEL 11.755 PTH 2.07 VHP 7.195 DPA -11.06 RAP 358.42 ECC 1.2763
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               88.12 1 48 55
61.99 20 26 55
49 91 3 20 18
                                                                                                                                          -28.22
                     1 0 7
                                 2927.98
                                                   -28.26
                                                                  91.18
                                                                              214.74
                                                                                                            1 48 55
                                                                                                                            2328.0
                                                                                                                                                            82.52
                                                                                208.15
                                                                                                                             3463.0
                                                                                                                                             -8.08
                                                                                                                                                           157.61
        90.00
                 19 19 12 4062.98
                                                    -4.37
                                                                  164.33
       100.00
                     2 36 41
                                 2616.59
                                                   -29.89
                                                                   68.30
                                                                                214.77
                                                                                                                             2016.6
                                                                                                                                            -29.58
                                                                                                                                                            59.51
                                                                                                 60.24 21 29 29
94.48 4 55 8
55.82 22 4 1
                 20 25 19 3849.60
                                                                            207.36
                                                                                                                             3249.6
                                                                                                                                             -6.88
                                                                                                                                                           141.28
       100.00
                                                    -2.94
                                                                  147.85
       110.00
                  4 16 44 2303.57
21 1 45 3735.39
                                                                   44.35
                                                                               214.59
                                                                                                                             1703.6
                                                                                                                                           -32.93
                                                                                                                                                            35.25
                                                   -33.92
                                                                                                                                                           130.85
                                                                              205.23
                                                                                                                            3135.4
                                                                                                                                            -4.01
                                  3735.39
                                                                  137.06
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5103.5 SGR 380.1 SG3 147.5
RRT .0825 RRF .0828 RTF .8707
                                                                                                                         ST 2383.3 SR 335.9 SS 589.3
CRT .9975 CRS -.9584 CST -.9619
    TOE 1.6970 TRA -.3974 TC3-5.4647 BAU 1.2275
    ROE .2394 RRA -.0619 RC3 .1880 FAU .03044
FOE .6637 FRA .4190 FC3-1.5694 B3P 16277
B0E 1.7138 BRA .4022 BC3 5.4679 FSP -481
                                                                                                                         LSA 2472.9 MSA 156.8 SSA 23.4
EL1 2406.8 EL2 23.5 ALF 8.00
                                                                   SGB 5117.6 R23 .0106 R13 .8707
                                                                     SG1 5103.6 SG2 378.8 THA
                                                                                                           . 35
                                                                         FLIGHT TIME 168.00
                                                                                                                                    ARRIVAL DATE JUN 14 1966
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 499.940
    RL 147.12 LAL .00 LOL 96.05 VL 26.387 GAL -.66 AZL 86.43 MCA 251.71 SMA 120.94 ECC .21671 INC 3.5740 V1 30.283 RP 108.79 LAP -3.39 LOP 347.73 VP 36.639 GAP 11.13 AZP 91.12 TAL 182.37 TAP 74.08 RCA 94.73 APO 147.15 V2 34.832
    RC 179.385 GL 23.80 GP -5.90 TAL 93.48 TAP 169.46 ETS 326.86 TAE 130.95 ETE 185.34 TAC 92.49 ETC 166.55 CLP-171.25
   PLANETOCENTRIC CONIC
    C3 16.868 VHL 4.107 DLA 22.61 RAL 352.05 RAD 6567.7 VEL 11.758 PTH 2.08 VHP 7.337 DPA -9.84 RAP .55 ECC 1.2776 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             1 52 12
                                                                                                86.59
                                                                                                                             2369.9
                                                                                                                                           -28.30
        90.00
                     1 2 42 2969.95
                                                   -28.13
                                                                  94.24
                                                                              218.63
                                                                                                                                                            A5.5A
                                                                                                 62 20 20 51 40
88 46 3 24 59
60 37 21 52 48
93 14 5 2 13
55 82 22 24 57
        90.00
                   19 44 36
                                 4023.12
                                                    -5.64
                                                                  162.08
                                                                                212.11
                                                                                                                             3423.1
                                                                                                                                             -9.32
                                                                                                                                                            155.34
                  2 40 45 2653.75
20 49 14 3814.54
                                                   -29.86
                                                                  71.07
                                                                               218.71
                                                                                                                             2053.8
                                                                                                                                             -29.75
                                                                                                                                                             62.26
       100.00
       100.00
                                  3814.54
                                                   -4.12
                                                                  145.92
                                                                               211.28
                                                                                                                             3214.5
                                                                                                                                             -8.04
                                                                                                                                                            139.32
                  4 23 20 2332.85
21 23 9 3708.21
                                                                             218.64
       110.00
                                                  -34.06
                                                                  46.62
                                                                                                                             1732.8
                                                                                                                                           -33.25
                                                                                                                                                             37.48
       110.00
                                                     -.56
                                                                  135.64
                                                                               209.06
                                                                                                                             3108.2
                                                                                                                                             -5.04
                                                                                                                                                            129.42
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2473.2 SR 347.3 SS 595.1
CRT .9964 CRS -.9503 CST -.9661
                                                                     SGT 5151.7 SGR 389.4 SG3 144.6
RRT .1083 RRF .1024 RTF .8738
SGB 5166.4 R23 .0072 R13 .8738
    TOE 1.7690 TRA -.1957 TC3-5.4935 BAU 1.2395
    ROE .2480 RRA -.0667 RC3 .1797 FAU .02881
                                                                                                                         LSA 2562.8 MSA 151.2 SSA 23.9
EL1 2497.3 EL2 29.1 ALF 7.97
    FOE .6555 FRA .4620 FC3-1.4788 B5P 16397
BDE 1.7863 BRA .2067 BC3 5.4964 FSP -468
                                                                                                           .47
                                                                     SG1 5151.9 SG2 387.1 THA
                                                                         FLIGHT TIME 170.00
                                                                                                                                    ARRIVAL DATE JUN 16 1966
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 505.532
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 26.533 GAL -.14 A7L 86.49 MCA 254.88 SMA 120.62 ECC .21965 INC 3.5051 VI 30.283 RP 108.77 LAP -3.38 LOP 350.91 VP 36.607 GAP 11.38 A7P 90.92 TAL 180.49 TAP 75.37 RCA 94.13 APO 147.12 V2 34.840 RC 181.409 GL 25.11 GP -5.68 ZAL 90.13 ZAP 170.19 ETS 325.66 ZAE 131.08 ETE 185.19 ZAC 94.79 ETC 166.89 CLP-171.98
   PLANETOCENTRIC CONIC
    C3 17.075 VHL 4.132 DLA 23.44 RAL 355.67 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 7.488 DPA -8.64 RAP 2.70 ECC 1.2810 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             222.72
        90.00 1 5 17 3014.70

90.00 20 10 52 3983.98

100.00 2 45 3 2692.99

100.00 21 13 47 3780.91
                                                                 97.50
                                                                                               84.98
                                                                                                             1 55 31
                                                                                                                             2414.7
                                                                                                                                          -28.31
                                                   -27.90
                                                                                                 62.46 21 17 16
                                                                               216.32
                                                                                                                             3384.0
                                                                                                                                            -10.51
                                                                 159.87
                                                   -6.88
                                                                                                 86.93
                                                                                                             3 29 56
                                                                                                                             2093.0
                                                                                                                                            -29.86
                                                                                                                                                            65.18
                                                                  73.98
                                                                               222.87
      100.00
                                                  -29.75
                                                                                                 60.53 22 16 48
                                                                 144.06
                                                                               215.44
       100.00
                                                   -5.25
                                                                               222.93
                                                                                                             5 9 45
                                                                                                                             1763.5
                                                                                                                                                           39.83
                  4 30 22 2363.54
21 44 58 3683.13
                                                 -34.15
                                                                  49.02
                                                                                                 91.72
       110.00
                                                                                                         22 46 21
                                                                 134.33
                                                                               213.12
                                                                                                 55.85
                                                                                                                             3083.1
                                                                                                                                            -5.99
       110.00
                                                   -1.52
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   9GT 5207.4 SGR 397.0 SG3 141.8
RRT .1308 RRF .1128 RTF .8790
SGB 5222.5 R23 -.0028 R13 .8790
    TOE 1.8288 TRA .0093 TC3-5.5034 BAU 1.2569

RDE .2570 RRA -.0703 RC3 .1681 FAU .02760

FDE .6367 FRA .5017 FC3-1.3994 BSP 16775

BDE 1.8468 BRA .0709 BC3 5.5060 FSP -471
                                                                                                                         ST 2539.4 SR 357.8 55 590.2
                                                                                                                        CRT .9937 CRS -.9411 CST -.9687
                                                                                                                        LSA 2627.3 MSA 147.2 SSA 24.1
                                                                     SG1 5207.7 SG2 393.5 THA
                                                                                                                         EL1 2564.2 EL2 39.6 ALF
                                                                                                          .57
                                                                         FLIGHT TIME 172.00
                                                                                                                                    ARRIVAL DATE JUN 18 1966
LAUNCH DATE DEC 28 1965
                                                                        DISTANCE 511.102
   HELLOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 26.479 GAL .40 A7L 86.56 HCA 258.05 SMA 120.31 ECC .22289 INC 3.4382 V1 30.283 RP 108.74 LAP -3.36 LOP 354.08 VP 36.576 GAP 11.66 AZP 90.71 TAL 178.61 TAP 76.66 RCA 93.49 APO 147.13 V2 34.849 RC 183.413 GL 22.36 GP -5.47 ZAL 86.72 ZAP 170.89 ETS 324.18 ZAE 131.22 ETE 185.05 ZAC 97.10 ETC 167.19 CLP-172.71
   PLANETOCENTRIC CONIC
    C3 17.423 VHL 4.174 DLA 24.23 RAL 359.38 RAD 6567.7 VEL 11.782 PTH 2.08 VHP 7.648 DPA -7.44 RAP 4.85 ECC 1.2867
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                                                            92.30
                                                   -27.58
                     1 7 55 3061.89
                                                                 100.91
                                                                              226.99
                                                                                               83.30
                                                                                                            1 58 57
                                                                                                                             2461.9
                                                                                                                                          -28.22
       90.00
                  20 37 50
                                                                                                                             3346.1
                                                    -8.07
                                                                 157.72
                                                                               220.77
                                                                                                 62.76 21 43 36
                                                                                                                                            -11.65
                                                                                                                                                           150.88
        90.00
                                  3946.10
                 2 49 40 2733.86
21 38 46 3749.36
4 37 54 2395.24
                                                                                                                             2133.9
       100.00
                                                   -29.56
                                                                  77.00
                                                                               227.22
                                                                                                 85.35
                                                                                                            3 35 14
                                                                                                                                            -29.89
                                                                                                                                                            68.21
                                                                                                 60.72 22 41 16
                                                                                                                             3149.4
                                                    -6.31
                                                                 142.32
                                                                               219.82
                                                                                                                                            -10.16
                                                                                                                                                           135.65
       100.00
                                                                                                 90.26 5 17 49
55.89 23 8 3
                                                                                                                             1795.2
                                                   -34.18
                                                                  51.49
                                                                               227.42
                                                                                                                                            -33.77
                                                                                                                                                            42.27
       110.00
                  22 7 2
                                                    -2.37
                                                                 133.17
                                                                               217.38
                                                                                                                             3060.7
                                                                                                                                            -6.83
                                                                                                                                                           126.92
                                   3660.74
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5239.9 SGR 405.4 SG3 138.7

RRT .1572 RRF .1419 RTF .8793

SGB 5255.6 R23 .0029 R13 .8793

SG1 5240.3 SG2 400.3 THA .70
                                                                                                                      ST 2624.6 SR 369.6 SS 599.5
CRT .9897 CRS -.9330 CST -.9722
    TOE 1.9079 TRA .2386 TC3-5.4196 BAU 1.2629
    ROE .2682 RRA -.0721 RC3 .1565 FAU .02565
    FOE .6354 FRA .5491 FC3-1.2746 BSP 16758
                                                                                                                        LSA 2713.4 MSA 146.0 SSA 24.1
```

FLIGHT TIME 166.00

BOE 1.9266 BRA .2493 BC3 5.4218 FSP -452

```
FLIGHT TIME 174.00
LAUNCH DATE DEC 28 1965
                                                                                                                                                       ARRIVAL DATE JUN 20 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 516.647
     RL 147.12 LAL .00 LOL 96.05 VL 26.426 GAL .96 AZL 86.63 MCA 261.22 SMA 120.01 ECC .22648 INC 3.3728 V1 30.283
RP 108.71 LAP -3.33 LOP 357.26 VP 36.547 GAP 11.94 AZP 90.51 TAL 176.73 TAP 77.95 RCA 92.83 APO 147.19 V2 34.858
RC 185.395 GL 21.54 GP -5.29 ZAL 83.28 ZAP 171.57 ETS 322.35 ZAE 131.35 ETE 184.94 ZAC 99.44 ETC 167.45 CLP-173.43
    PLANETOCENTRIC CONIC
     C3 17.926 VHL 4.234 DLA 24.95 RAL
                                                                                                                 2.09 VHP 7.818 DPA -6.26 RAP
    C3 17.926 VML 4.234 DLA 24.95 RAL 3.16 RAD 6567.7 VEL 11.803 PTH 2.09 VMP 7.818 DPA -6.26 RAP 7.01 ECC 1.2950 LNCM AZMTM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 10 43 3110.98 -27.14 104.44 231.42 81.58 2 234 2511.0 -28.02 95.88 90.00 21 5 12 3910.23 -9.18 155.67 225.43 63.09 22 10 22 3310.2 -12.71 148.78 100.00 2 54 42 2775.72 -29.29 80.08 231.74 83.75 3 40 58 2175.7 -29.85 71.32 100.00 22 3 53 3720.73 -7.26 140.72 224.40 60.92 23 5 54 3120.7 -11.08 134.02 110.00 4 46 1 2427.45 -34.16 54.01 232.11 88.77 5 26 29 1827.5 -33.96 44.77 110.00 22 29 4 3641.76 -3.10 132.17 221.84 55.94 23 29 46 3041.8 -7.55 125.91
                                                               3.16 RAD 6567.7 VEL 11.803 PTH
                                                                                                                                                                     7.01 ECC 1.2950
                                                                              MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    TOE 1.9745 TRA .4712 TC3-5.3138 BAU 1.2739 ROE .2799 RRA -.0730 RC3 .1419 FAU .02422
                                                                              SGT 5280.2 SGR 412.1 SG3 135.6
RRT .1816 RRF .1619 RTF .884]
SGB 5296.3 R23 .0004 R13 .8841
SGI 5280.7 SG2 405.2 THA .82
                                                                                                                                          ST 2683.7 SR 380.2 SS 597.0
CRT .9847 CRS -.9244 CST -.9749
    FOE .6230 FRA .5887 FC3-1.1699 BSP 16960
                                                                                                                                          LSA 2771.6 MSA 145.3 SSA 23.7
EL1 2709.7 EL2 65.7 ALF 7.95
    BOE 1.9942 BRA .4768 BC3 5.3157 FSP -447
                                                                                                                          .82
LAUNCH DATE DEC 28 1965
                                                                                   FLIGHT TIME 176.00
                                                                                                                                                        ARRIVAL DATE JUN 22 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 522.164
    RL 147.12 LAL .00 LOL 96.05 VL 26.374 GAL 1.54 A7L 86.69 MCA 264.40 SMA 119.71 ECC .23043 INC 3.3084 V1 30.283
RP 108.68 LAP -3.29 LOP .44 VP 36.519 GAP 12.25 A7P 90.32 TAL 174.85 TAP 79.25 RCA 92.13 APO 147.29 V2 34.868
RC 187.357 GL 20.66 GP -5.12 ZAL 79.82 ZAP 172.23 ETS 320.11 ZAE 131.49 ETE 184.83 ZAC 101.78 ETC 167.67 CLP-174.15
   PLANETOCENTRIC CONIC
    C3 18.600 VHL 4.313 DLA 25.60 RAL 6.99 RAD 6567.8 VEL 11.831 PTH 2.10 VHP 8.000 DPA -5.09 RAP 9.18 ECC 1.3061 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     LNCH TIME L-1 TIME
1 13 46 3161.39
21 32 40 3877.11
3 0 19 2817.91
22 28 49 3695.82
4 54 48 2459.70
22 50 49 3626.79
        90.00
                                                         -26.58
                                                                          108.02
                                                                                          235.98
                                                                                                             79.87
                                                                                                                           2 6 28
                                                                                                                                             2561.4
                                                                                                                                                                -27.71
                                                                                                                                                                                  99.54
         90.00
                                                                                                                          22 37 17
                                                          -10.19
                                                                           153.77
                                                                                           230.28
                                                                                                               63.44
                                                                                                                                                3277.1
                                                                                                                                                                 -13.68
                                                                                                                                                                                  146.83
       100.00
                                                         -2A . Q4
                                                                            83.17
                                                                                           236.40
                                                                                                               82.16
                                                                                                                            3 47 16
                                                                                                                                               2217.9
                                                                                                                                                                 -29.72
                                                                                                                                                                                   74.45
                                                                                                               82.16 3 47 16
61.12 23 30 25
       100.00
                                                          -8.08
                                                                          139.33
                                                                                           229.15
                                                                                                                                               3095.8
                                                                                                                                                                 -11.87
                                                                                                                                                                                  132.59
       110.00
                                                         -34.09
                                                                            56.53
                                                                                           236.96
                                                                                                               87.28 5 35 48
55.99 23 51 16
                                                                                                                                               1859.7
                                                                                                                                                                -34.09
                                                                                                                                                                                  47.28
       110.00
                                                          -3.67
                                                                           131.39
                                                                                           226.44
                                                                                                                                               3026.8
                                                                                                                                                                 -8.11
                                                                                                                                                                                  125.12
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    TOE 2.0412 TRA .7209 TC3-5.1515 BAU 1.2814
                                                                              SGT 5312.8 SGR 418.0 SG3 132.7
RRT .2063 RRF .1843 RTF .8878
SGB 5329.3 R23 .0001 R13 .8878
                                                                                                                                          ST 2733.7 SR 390.6 SS 594.9 CRT .9787 CRS -.9154 CST -.9771
    ROE .2930 RRA -.0721 RC3 .1265 FAU .02271
FOE .6124 FRA .6321 FC3-1.0571 BSP 17028
BDE 2.0622 BRA .7245 BC3 5.1531 FSP -435
                                                                                                                                          LSA 2820.9 MSA 147.1 SSA 23.0
                                                                               SG1 5313.6 SG2 409.0 THA
                                                                                                                         .94
                                                                                                                                          EL1 2760.3 EL2 79.4 ALF 7.97
LAUNCH DATE DEC 28 1965
                                                                                   FLIGHT TIME 178.00
                                                                                                                                                       ARRIVAL DATE JUN 24 1966
                                                                                   DISTANCE 527.648
    RL 147.12 LAL .00 LOL 96.05 VL 26.323 GAL 2.14 AZL 86.76 MCA 267.57 SMA 119.42 ECC .23477 INC 3.2448 V1 30.283 RP 108.65 LAP -3.24 LOP 3.62 VP 36.491 GAP 12.57 AZP 90.14 TAL 172.98 TAP 80.56 RCA 91.38 APO 147.45 VZ 34.878 RC 189.297 GL 19.72 GP -4.97 ZAL 76.39 ZAP 172.85 ETS 317.37 ZAE 131.62 ETE 184.75 ZAC 104.13 ETC 167.86 CLP-174.86
   PLANETOCENTRIC CONIC
    C3 19.467 VHL 4.412 DLA 26.16 RAL 10.83 RAD 6567.8 VEL 11.868 PTH 2.11 VMP 8.195 DPA
                                                                                                                                                  -3.93 RAP 11.35 ECC 1.3204
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 17 14 3212.31
21 59 52 3847.66
3 6 38 2859.63
22 53 10 3675.57
                                                                                                                                             2612.3
                                                          -25.92
                                                                          111.60
                                                                                          240.65
                                                                                                               78.19
                                                                                                                            2 10 46
                                                                                                                                                                                103.21
                                                                                                                                                                -27.29
                                                                                                                                               3247.7
                                                          -11.08
                                                                         152.06
                                                                                           235.27
                                                                                                               63.77 23 4 0
                                                                                                                                                                -14.52
                                                                                                                                                                                 145.07
                                                         -28.51
                                                                            86.20
                                                                                           241.19
                                                                                                               80.62
                                                                                                                            3 54 17
                                                                                                                                               2259.6
                                                                                                                                                                -29.51
                                                                                                                                                                                   77.54
                                                                                                               61.30 23 54 25
                                                            -8.74
                                                                          138.19
                                                                                           234.04
                                                                                                                                               3075.6
                                                                                                                                                                 -12.51
                                                                                                                                                                                 131.43
                     5 4 17 2491.48
23 11 59 3616.47
                                       2491.48
                                                         -33.96
                                                                            59.00
                                                                                           241.95
                                                                                                               85.82
                                                                                                                            5 45 49
                                                                                                                                               1891.5
                                                                                                                                                                                   49.76
                                                                                                                                                                -34.16
                                                                                                               56.03 24 12 16
                                                          -4.06
                                                                          130.85
                                                                                           231.17
                                                                                                                                               3016.5
                                                                                                                                                                  -8.49
                                                                                                                                                                                  124.57
   DIFFERENTIAL CORRECTIONS
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                              SCT 5344.1 SCR 422.9 SC3 129.8
RRT .2299 RRF .2059 RTF .8924
SCB 5360.8 R23 -.0005 R13 .8924
SCI 5344.9 SCZ 411.5 THA 1.05
    TDE 2.0999 TRA .9796 TC3-4.9545 BAU 1.2897
                                                                                                                                          ST 2763.0 SR 400.2 SS 589.0
    ROE .3073 RRA -.0698 RC3 .1103 FAU .02133
FOE .5994 FRA .6735 FC3 -.9485 BSP 17189
BOE 2.1222 BRA .9821 BC3 4.9557 FSP -428
                                                                                                                                          CRT .9721 CRS -.9062 CST -.9790
                                                                                                                                          LSA 2849.2 MSA 150.2 SSA 22.2
EL1 2790.2 EL2 93.0 ALF 8.02
LAUNCH DATE DEC 28 1965
                                                                                   FLIGHT TIME 180.00
                                                                                                                                                       ARRIVAL DATE JUN 26 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 533.096
    RL 147.12 LAL .00 LOL 96.05 VL 26.272 GAL 2.77 ATL 86.82 MCA 270.75 SMA 119.13 ECC .23955 INC 3.1814 VI 30.283
RP 108.62 LAP -3.18 LOP 6.81 VP 36.465 GAP 12.92 ATP 89.96 TAL 171.12 TAP 81.87 RCA 90.60 APO 147.67 V2 34.889
RC 191.216 GL 18.74 GP -4.83 TAL 72.98 TAP 173.45 ETS 314.02 TAE 131.75 ETE 184.67 TAC 106.49 ETC 168.01 CLP-175.57
   PLANETOCENTRIC CONIC
    C3 20.547 VHL 4.533 DLA 26.64 RAL 14.66 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 8.403 DPA -2.79 RAP 13.54 ECC 1.3382
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 21 20 3262.72
22 26 21 3822.96
        90.00
                                                          -25.17
                                                                          115.31
                                                                                           245.39
                                                                                                               76.59
                                                                                                                             2 15 43
                                                                                                                                               2662.7
                                                                          150.63
        90.00
                                                          -11.82
                                                                                           240.37
                                                                                                               64.08
                                                                                                                          23 30 4
                                                                                                                                                3223.0
                                                                                                                                                                                  143.59
                      3 13 51 2900.01
23 16 32 3660.90
                                                                                                               79.17
       100.00
                                                         -28.03
                                                                            89.10
                                                                                           246.07
                                                                                                                           4 2 11
                                                                                                                                               2300.0
                                                                                                                                                                 -29.24
                                                                                                                                                                                   80.51
       100.00
                                                          -9.22
                                                                          137.37
                                                                                           239.01
                                                                                                               61.44
                                                                                                                          24 17 33
                                                                                                                                               3060.9
                                                                                                                                                                 -12.97
                                                                                                                                                                                  130.58
                       5 14 32 2522.38
       110.00
                                                         -33.78
                                                                            61.39
                                                                                           247.04
                                                                                                               84.42
                                                                                                                           5 56 34
                                                                                                                                               1922.4
                                                                                                                                                                                   52.17
                                                                                                               56.05 24 32 31
       110.00
                     23 32 20
                                       3611.30
                                                           -4.26
                                                                           130.58
                                                                                           235.97
                                                                                                                                               3011.3
                                                                                                                                                                                  124.29
   DIFFFRENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    TDE 2.1532 TRA 1.2528 TC3-4.7182 BAU 1.2963
                                                                                                                                          ST 2776.0 SR 408.8 SS 581.1
CRT .9647 CRS -.8965 CST -.9806
LSA 2861.2 MSA 154.9 SSA 21.2
                                                                              SGT 5370.5 SGR 426.9 SG3 126.8
    ROE .3226 RRA -.0658 RC3 .0940 FAU .01997
FOE .5856 FRA .7159 FC3 -.8416 BSP 17333
BOE 2.1772 BRA 1.2545 BC3 4.7191 FSP -421
                                                                              RRT .2533 RRF .2277 RTF .8970
SGB 5387.4 R23 -.0009 R13 .8970
```

SG1 5371.5 SG2 412.9 THA 1.16

EL1 2803.9 EL2 106.5 ALF 8.10

ARRIVAL DATE JUN 28 1966

```
LAUNCH DATE DEC 28 1965
                                                                               DISTANCE 538.501
    RL 147.12 LAL .00 LOL 96.05 VL 26.222 GAL 3.44 A7L 86.88 HCA 273.93 SHA 118.86 ECC .24480 INC 3.1178 V1 30.283 RP 108.58 LAP -3.11 LOP 9.99 VP 36.440 GAP 13.29 A7P 89.79 TAL 169.26 TAP 83.19 RCA 89.76 APO 147.95 V2 34.900 RC 193.113 GL 17.72 GP -4.71 ZAL 69.64 ZAP 174.00 ETS 309.93 ZAE 131.88 ETE 184.60 ZAC 108.85 ETC 168.13 CLP-176.28
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 21.870 VHL 4.677 DLA 27.01 RAL 18.46 RAD 6567.9 VEL 11.969 PTH 2.13 VHP 8.628 DPA -1.66 RAP 15.73 ECC 1.3599 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                        -26.17
                                                                                                                                         2711.3
                     1 26 23 3311.30
22 51 34 3804.39
                                                       -24.36
                                                                       118.44
                                                                                      250.18
                                                                                                        75.10
                                                                                                                      2 21 34
        90.00
                                                                                                                                                          -15.73
                                                                                       245.52
                                                                                                           64.32 23 54 58
                                                                                                                                          3204.4
                                                                       149.54
                                                      -12.37
         90.00
                    3 22 7 2938.20
23 38 31 3652.72
                                                                                                                                         2338.2
                                                                                                                                                          -28.91
                                                                         91.82
                                                                                       251.03
                                                                                                          77.83
                                                                                                                      4 11 5
                                                      -27.51
       100.00
                                                                                                                                                                          130.10
                                                                                                          61.52 24 39 24
                                                                                                                                         3052.7
                                                                                                                                                         -13.22
                                                                        136.90
                                                                                       244.02
       100.00
                                                        -9.49
                                                                                                                                         1952.0
                                                                                                                                                        -34.15
                    5 25 32 2552.03
23 51 36 3611.65
                                                                                       252.21
                                                                                                          83.08
                                                                                                                      6 8 4
                                                      -33.56
                                                                         63.68
       110.00
                                                                                                          56.05 24 51 47
                                                                                                                                         3011.7
                                                                                                                                                           -8.67
                                                                       130.60
                                                                                       240.82
                                                        -4.24
       110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           RET .2773 RRF .2515 RTF .9013
SGB 5408.6 R23 .D001 R13 .9013
SGI 5392.8 SG2 413.1 THA 1.27
                                                                                                                                     ST 2778.4 SR 416.4 SS 573.8
CRT .9567 CRS -.8867 CST -.9821
     TOE 2.2049 TRA 1.5450 TC3-4.4414 BAU 1.2988
    ROE .3393 RRA -.0600 RC3 .0784 FAU .01856
FOE .5734 FRA .7608 FC3 -.7349 BSP 17361
                                                                                                                                     LSA 2862.8 MSA 160.9 SSA 20.2
                                                                                                                                     EL1 2806.8 EL2 120.0 ALF 8.17
    BOE 2.2308 BRA 1.5462 BC3 4.4421 FSP
                                                            -410
                                                                                                                                                 ARRIVAL DATE JUN 30 1966
                                                                                FLIGHT TIME 184.00
LAUNCH DATE DEC 28' 1965
                                                                                DISTANCE 543.857
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.174 GAL 4.13 AZL 86.95 MCA 277.12 SMA 118.58 ECC .25057 INC 3.0538 V1 30.283 RP 108.55 LAP -3.03 LOP 13.18 VP 36.416 GAP 13.69 AZP 89.62 TAL 167.42 TAP 84.53 RCA 88.87 APO 148.30 V2 34.912 RC 194.989 GL 16.68 GP -4.59 ZAL 66.38 ZAP 174.51 ETS 304.91 ZAE 132.00 ETE 184.54 ZAC 111.22 ETC 168.21 CLP-177.00
   PLANETOCENTRIC CONIC
    C3 23.467 VHL 4.844 DLA 27.29 RAL 22.18 RAD 6568.0 VEL 12.035 PTH 2.15 VHP 8.870 DPA -.55 RAP 17.93 ECC 1.3862 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 50 3356.29 -23.54 121.48 255.03 73.79 2 28 46 2756.3 -25.54 113.38
                                                                                                                                          3193.7
                                                                                                                     24 18 4
                                                                                                                                                           -16.02
                                                                                                                                                                           141.82
                                                                                        250.68
                                                                                                           64.47
                     23 14 50 3793.66
                                                        -12.69
                                                                        148.91
         90.00
                                                                                                                    4 21 11
1 3 31
6 20 16
1 13 48
                     3 31 38 2973.33
0 2 39 3651.86
                                                                                                                                          2373.3
                                                                                                                                                          -28.56
                                                                                                                                                                             85.85
                                                                          94.30
                                                                                        256.03
                                                                                                           76.62
                                                        -26.98
       100.00
                                                                                                                                          3051.9
                                                                                                                                                          -13.25
                                                                                                                                                                           130.05
                                                                                                           61.53
                                                         -9.52
                                                                        136.85
                                                                                        249.04
       100.00
                                                                                                                                          1980.2
                                                                                                                                                          -34.08
                                                                                                                                                                             56.68
                      5 37 16 2580.16
                                                       -33.31
                                                                         65.84
                                                                                        257.42
                                                                                                           81.83
       110.00
                                                                                                                                          3017.8
                                      3617.79
                                                         -4.01
                                                                        130.92
                                                                                        245.68
                                                                                                           56.02
                       0 13 30
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 5409.4 SGR 432.0 SG3 121.2
RRT .3001 RRF .2738 RTF .9062
SGB 5426.6 R23 .0002 R13 .9062
SGI 5411.0 SG2 412.0 THA 1.38
                                                                                                                                     ST 2759.0 SR 422.4 SS 563.4
CRT .9479 CRS -.8760 CST -.9834
     TOE 2.2455 TRA 1.8481 TC3-4.1490 BAU 1.3019
     ROE .3567 RRA -.0526 RC3 .0634 FAU .01729
                                                                                                                                     LSA 2842.5 MSA 167.8 55A 19.1
    FOE .5588 FRA .8050 FC3 -.6379 BSP 17485
BDE 2.2736 BRA 1.8489 BC3 4.1495 FSP -403
                                                                                                                                     EL1 2788.0 EL2 133.2 ALF
                                                                                                                                                ARRIVAL DATE JUL 2 1966
                                                                                FLIGHT TIME 186.00
LAUNCH DATE DEC 28 1965
                                                                               DISTANCE 549.156
    VELIOCENTRIC CONIC

RL 147.12 LAL .00 LOL 96.05 VL 26.126 GAL 4.87 A7L 87.01 HCA 280.30 SMA 118.32 ECC .25692 INC 2.9887 VI 30.283

RP 108.51 LAP -2.94 LOP 16.37 VP 36.393 GAP 14.12 A7P 89.46 TAL 165.59 TAP 85.89 RCA 87.92 APO 148.72 V2 34.924

RC 196.842 GL 15.63 GP -4.49 ZAL 63.21 ZAP 174.96 ETS 298.82 ZAE 132.11 ETE 184.49 ZAC 113.58 ETC 168.25 CLP-177.72
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                                .55 RAP 20.13 ECC 1.4177
     C3 25.379 VHL 5.038 DLA 27.47 RAL 25.81 RAO 6568.0 VEL 12.114 PTH
                                                                                                            2.17 VHP 9.131 OPA
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      2795.7
                                                                                                                                                                         116.10
                                                                                                           72.70
                                                                                                                      2 37 48
                     1 41 12 3395.69
23 35 26 3792.72
                                                                                       259.92
                                                                       124.10
                                                        -22.77
         90.00
                                                                                                                     24 38 39
                                                                                                                                                                          141.76
                                                                                        255.79
                                                                                                           64.48
                                                                                                                                          3192.7
                                                                                                                                                          -16.05
                                                       -12.71
                                                                       148.86
         90.00
                                                                                                                     4 32 33
1 21 46
                     3 42 28 3004.76
0 20 47 3658.87
                                                                                                                                                                            88.12
                                                                                                                                          2404.8
                                                                                                                                                          -28.19
                                                                                        261.08
                                                                                                           75.58
                                                       -26.47
                                                                         96.50
        100.00
                                                                                                                                                                          130.46
                                                                                                                                          3058.9
                                                                                                                                                          -13.03
                                                                                        254.01
                                                                                                           61.46
                                                        -9.29
                                                                       137.25
        100.00
                                                                                                                     6 33 8
1 30 34
                                                                                                                                                                            58.74
                                                                                                                                          2006.7
                                                                                                                                                         -33.97
                                                                                        262.67
                                                                                                           80.66
                      5 49 41 2606.66
0 30 4 3629.75
                                                       -33.03
                                                                         67.86
        110.00
                                                                                                                                                                          125.27
                                                                                                                                                          -8.00
                                                                                                                                          3029.7
                                                                       131.54
                                                                                        250.50
                                                                                                           55.98
                                                        -3.55
        110.00
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                           SCT 5422.6 SGR 433.0 SG3 118.3
RRT .3228 RRF .2365 RTF .9112
SGB 5439.9 R23 .0007 R13 .9112
SGI 5424.4 SGZ 409.7 THA 1.48
                                                                                                                                     ST 2726.1 SR 426.8 SS 552.6
CRT .9383 CRS -.8649 CST -.9846
     TOE 2.2798 TRA 2.1683 TC3-3.8384 BAU 1.3025
     ROE .3750 RRA -.0434 RC3 .0497 FAU .01604
FDE .5444 FRA .8507 FC3 -.5473 BSP 17590
                                                                                                                                     LSA 2808.6 MSA 175.4 SSA 18.1
EL1 2755.5 EL2 146.0 ALF 8.38
     BOE 2.3105 BRA 2.1687 BC3 3.8387 FSP -396
                                                                                                                                                  ARRIVAL DATE JUL 4 1966
                                                                                 FLIGHT TIME 188.00
LAUNCH DATE DEC 28 1965
                                                                                DISTANCE 554.388
    HELIOCENTRIC CONIC
     RL 147.12 LAL .00 LOL 96.05 VL 26.079 GAL 5.64 AZL 87.08 HCA 283.49 SMA 118.06 ECC .26390 INC 2.9224 VI 30.283 RP 108.47 LAP -2.84 LOP 19.55 VP 36.371 GAP 14.59 AZP 89.32 TAL 163.78 TAP 87.27 RCA 86.90 APO 149.22 V2 34.936 RC 198.673 GL 14.57 GP -4.39 ZAL 60.15 ZAP 175.34 ETS 291.49 ZAE 132.22 ETE 184.44 ZAC 115.95 ETC 168.25 CLP-178.44
    PLANETOCENTRIC CONIC
     C3 27.652 VHL 5.259 DLA 27.55 RAL 29.33 RAD 6568.1 VEL 12.208 PTH 2.19 VHP 9.415 DPA
                                                                                                                                              1.63 RAP 22.34 ECC 1.4551
     LNCH AZMTH LNCH TIME L-I TIME 'INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 52 0 3427.60 -22.11 126.21 264.86 71.84 2 49 7 2827.6 -24.38 118.28
                                                                                                           71.84 2 49 7
64.34 24 56 5
                                                                                        260.78
                      23 52 42 3803.34
3 54 39 3032.17
                                                                        149.48
                                                         -12.40
                                                                          98.39 266.14 74.69 4 45 12 138.10 258.90 61.32 1 37 53 69.74 267.91 79.58 6 46 32 132.47 255.28 55.92 1 45 54 HD-COURSE EXECUTION ACCURACY
          90.00
                                                                                                                                                          -27.84
                                                                                                                                           2432.2
                                                        -25.99
                                                                          98.39
                                                                                                                                                                           131.34
                                                                                                                                                          -12.56
                                                                                                                                           3074.0
                                                                        138.10
                        0 36 39 3674.00
                                                          -8.79
                                                                                                                                                          -33.83
                                                                                                                                           2031.5
                       6 2 41 2631.52 -32.74
0 45 7 3647.42 -2.88
        110.00
                                                                                                                                                            -7.33
                                                                        132.47
                                                                                                                                          3047.4
        110.00
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          SGT 5431.6 SGR 432.9 SG3 115.6 ST 2681.4 SR 429.5 S5 541.6 RRT .3452 RRF .3192 RTF .9163 CRT .9278 CRS -.8531 CST -.9857 SGB 5448.8 R23 .0012 R13 .9163 LSA 2762.9 MSA 183.5 SSA 17.1 SG1 5433.7 SG2 406.2 THA 1.59 EL1 2711.0 EL2 158.5 ALF 8.48
    DIFFERENTIAL CORRECTIONS
      TOE 2.3079 TRA 2.5065 TC3-3.5180 BAU 1.3006
     ROE .3940 RRA -.0323 RC3 .0374 FAU .01483
FOE .5299 FRA .8981 FC3 -.4642 BSP 17682
BDE 2.3413 BRA 2.5068 BC3 3.5182 FSP -388
```

FLIGHT TIME 182.00

ARRIVAL DATE JUL 6 1966

LAUNCH DATE DEC 28 1965

DISTANCE 559.544 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOL 96.05 VL 26.032 GAL 6.46 A7L 87.15 MCA 286.68 SMA 117.81 ECC .27160 INC 2.8541 V1 30.283 RP 108.43 LAP -2.73 LOP 22.75 VP 36.350 GAP 15.10 A7P 89.18 TAL 161.99 TAP 88.67 RCA 85.81 APO 149.80 V2 34.948 RC 200.481 GL 13.52 GP -4.31 ZAL 57.22 ZAP 175.62 ETS 282.91 ZAE 132.31 ETE 184.40 ZAC 118.30 ETC 168.22 CLP-179.18 PLANETOCENTRIC CONIC C3 30.344 VHL 5.509 DLA 27.56 RAL 32.71 RAD 6568.2 VEL 12.317 PTH 2.82 VHP 9.723 DPA 2.69 RAP 24.55 ECC 1.4994 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 2 54 1 13 59 71.23 2851.2 -23.96 2 5 23 127.75 269.86 90.00 3451.16 -21.60 265.62 3226.2 -15.12 0 10 13 3826.23 -11.72 150.82 64.04 90.00 4 59 1 1 51 49 7 0 23 1 59 49 91.74 73.95 2455.6 -27.51 100.00 4 8 5 3055.58 -25.56 100.00 271.21 132.66 3097.0 -11.83 100.00 0 50 12 3697.03 -8.04 139.40 263.68 61.11 2054.8 -33.67 62.48 6 16 8 2654.85 -32.44 71.49 273.13 78.58 110.00 -6.46 55.87 3070.5 0 58 38 3670.53 -2.00 133.68 259.97 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5437.5 SGR 432.0 SG3 113.0 RRT .3681 RRF .3430 RTF .9213 SGB 5454.6 R23 .0021 R13 .9213 ST 2631.5 SR 430.4 SS 532.2 CRT .9164 CRS -.8410 CST -.9868 TOE 2.3341 TRA 2.8687 TC3-3.1891 BAU 1.2938 ROE .4137 RRA -.0192 RC3 .0270 FAU .01359 FDE .5173 FRA .9490 FC3 -.3876 BSP 17665 BDE 2.3705 BRA 2.8688 BC3 3.1892 FSP -378 LSA 2712.2 MSA 191.7 55A 16.2 EL1 2661.0 EL2 170.4 ALF 8.56 SG1 5439.8 SG2 401.4 THA 1.68 ARRIVAL DATE JUL 8 1966 LAUNCH DATE DEC 28 1965 FLIGHT TIME 192.00 DISTANCE 564.608 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOL 96.05 VL 25.987 GAL 7.33 AZL 87.22 MCA 289.87 SMA 117.56 ECC .28008 INC 2.7835 V1 30.283 RP 108.39 LAP -2.62 LOP 25.94 VP 36.330 GAP 15.65 AZP 89.05 TAL 160.24 TAP 90.11 RCA 84.63 APO 150.49 V2 34.961 RC 202.264 GL 12.49 GP -4.22 ZAL 54.42 ZAP 175.77 ETS 273.24 ZAE 132.39 ETE 184.36 ZAC 120.65 ETC 168.13 CLP-179.92 PLANETOCENTRIC CONIC C3 33.523 VHL 5.790 DLA 27.48 RAL 35.94 RAD 6568.3 VEL 12.446 PTH 2.25 VHP 10.060 DPA 3.73 RAP 26.76 ECC 1.5517 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 18 50 2867.1 120.95 2 21 3 3467.07 274.89 70.63 -23.67 90.00 -21.25 128.78 2 21 3860.46 4 22 33 3075.39 1 1 31 3727.37 6 29 54 2676.84 1 10 39 3698.68 1 24 40 5 13 48 2 3 38 7 14 31 3260.5 -14.16 145.84 en nn -10.70 152.81 270.29 63.62 2475.4 -27.22 276.27 73.33 100.00 -25.18 101.35 141.09 268.34 60.87 3127.4 -10.87 134.40 100.00 -7.04 77.66 2076.8 -33.50 64.17 -32.13 73.13 278.32 110.00 MID-COURSE EXECUTION ACCURACY 3098.7 -5.40 128.92 110.00 -.92 135.15 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RIT - 3902 RFF - 3654 RTF - 9267 SGB 5454.7 R23 - 0020 R13 - 9268 SGI 5440.3 SG2 395.5 TMA 1.78 ST 2570.2 SR 429.2 S5 521.8 CRT .9039 CRS -.8279 CST -.9878 TOE 2.3516 TRA 3.2474 TC3-2.8684 BAU 1.2856 ROE .4337 RRA ~00043 RC3 .0180 FAU .01245 FOE .5035 FRA 1.0006 FC3 -.3215 BSP 17705 BOE 2.3912 BRA 3.2474 BC3 2.8685 FSP -371 LSA 2650.0 MSA 199.8 SSA 15.3 EL1 2599.5 EL2 181.5 ALF 8.63 ARRIVAL DATE JUL 10 1966 FLIGHT TIME 194.00 LAUNCH DATE DEC 28 1965 DISTANCE 569.563 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOU 96.05 VL 25.942 CAL 8.26 AZL 87.29 MCA 293.06 SMA 117.32 ECC .28946 INC 2.7100 V1 30.283 RP 108.35 LAP -2.49 LOP 29.14 VP 36.310 GAP 16.26 AZP 88.94 TAL 158.52 TAP 91.58 RCA 83.36 APO 151.28 V2 34.974 RC 204.023 GL 11.47 GP -4.15 ZAL 51.75 ZAP 175.79 ETS 262.94 ZAE 132.45 ETE 184.33 ZAC 122.99 ETC 168.01 CLP 179.32 PLANETOCENTRIC CONIC C3 37.275 VHL 6.105 DLA 27.34 RAL 39.01 RAD 6568.5 VEL 12.595 PTH 2.28 VHP 10.428 DPA 4.75 RAP 28.97 ECC 1.6135 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 3 36 17 63.16 1 32 36 281.30 72.82 5 29 18 43,13 272.86 60.63 2 13 31 74.68 283.45 76.79 7 28 47 56.85 269.06 55.82 2 23 24 MID-COURSE EXECUTION ACCURACY SGT 5433.1 SGR 426.4 SG3 107 RRT .4117 RRF 2877.3 121.64 -23.48 2 38 20 3477.28 0 27 32 3903.84 4 37 46 3092.25 129.45 -21.02 90.00 148.41 155.31 3303.8 -12.90 90.00 -9.37 2492.3 -26.96 94.33 -24.85 102.49 100.00 -9.69 136.48 3164.1 1 10 47 3764.09 6 43 50 2697.75 143.13 -5.82 100.00 65.77 2097.7 -33.31 -31.62 74.68 110.00 -4.16 3131.4 130.64 .33 136.85 110.00 1 21 13 3731.36 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5433.1 SGR 426.4 SG3 107.9 RRT .4117 RRF .3880 RTF .9321 SGB 5449.8 R23 .0024 R13 .9321 ST 2502.2 SR 426.0 SS 512.8 CRT .8902 CRS -.8143 CST -.9889 TOE 2.3623 TRA 3.6492 TC3-2.5562 BAU 1.2738 TOE 2.3623 IRA 3.0024 RC3 .0108 FAU .01133 ROE .4539 RRA .0124 RC3 .0108 FAU .01133 FOE .4906 FRA 1.0554 FC3 -.2632 BSP 17803 ROE 2.4056 BRA 3.6492 BC3 2.5562 FSP -364 LSA 2581.2 MSA 207.5 SSA 14.5 SG1 5436.0 SG2 388.4 THA 1.86 EL1 2531.0 EL2 191.9 ALF 8.67 ARRIVAL DATE JUL 12 1966 FLIGHT TIME 196.00 LAUNCH DATE DEC 28 1965 DISTANCE 574.388 HELIOCENTRIC CONIC RL 147.12 LAL .00 LOL 96.05 VL 25.899 GAL 9.25 A7L 87.37 MCA 296.26 SMA 117.09 ECC .29985 INC 2.6328 V1 30.283 RP 108.31 LAP -2.36 LOP 32.34 VP 36.292 GAP 16.93 A7P 88.83 TAL 156.84 TAP 93.10 RCA 81.98 APO 152.19 V2 34.987 RC 205.757 GL 10.48 GP -4.08 ZAL 49.24 ZAP 175.66 ETS 252.68 ZAE 132.50 ETE 184.29 ZAC 125.31 ETC 167.83 CLP 178.54 PLANETOCENTRIC CONIC C3 41.705 VHL 6.458 DLA 27,13 RAL 41.91 RAD 6568.6 VEL 12.770 PTH 2.32 VHP 10.832 DPA 5.74 RAP 31.18 ECC 1.6864 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 284.92 70.41 3 54 31 2884.0 -23.35 122.08 2 56 27 3483.95 -20.87 129.88 90.00 2 56 27 3483.95 U 32 33 3953.89 1 38 27 5 45 12 279.10 62.70 3353.9 -11.42 151.34 90.00 -7.82 158.17 4 53 25 3106.90 1 18 16 3806.17 72.38 2506.9 -26.73 95.35 100.00 -24.55 103.47 286.27 -8.31 2 21 42 7 43 3 277.24 60.40 3206.2 138.85 100.00 145.46 6 57 45 76.16 288.50 75.97 2117.8 -33.10 67.30 110.00 2717.81 -31.50 273.43 55.86 2 33 13

MID-COURSE EXECUTION ACCURACY

SGT 5424 9 874 1 30 25 3768.03 138.76 3168.0 -2.76 132.56 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2433.5 SR 420.9 SS 505.2 CRT .8755 CRS -.8003 CST -.9900 SGT 5425.2 SGR 422.0 SG3 105.4 RRT .4333 RRF .4105 RTF .9376 TOE 2.3716 TRA 4.0776 TC3-2.2550 BAU 1.2573 RDE .4743 RRA .0312 RC3 .0052 FAU .01023 FDE .4787 FRA 1.1138 FC3 -.2124 BSP 17854 LSA 2511.6 MSA 214.4 SSA 13.7 EL1 2461.5 EL2 201.1 ALF 8.67 SGB 5441.6 R23 .0025 R13 .9376 SGI 5428.3 SGZ 380.1 THA 1.94

FLIGHT TIME 190.00

BOE 2.4186 BRA 4.0777 BC3 2.2550 FSP -357

ARRIVAL DATE JUL 14 1966

LAUNCH DATE DEC 28 1965

```
DISTANCE 579.059
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.856 GAL 10.31 ATL 87.45 MCA 299.46 SMA 116.86 ECC .31137 INC 2.5511 V1 30.283
RP 108.27 LAP -2.22 LOP 35.53 VP 36.274 GAP 17.66 AZP 88.74 TAL 155.21 TAP 94.67 RCA 80.47 APO 153.24 V2 35.000
RC 207.465 GL 9.51 GP -4.02 ZAL 46.87 ZAP 175.39 ETS 243.08 ZAE 132.51 ETE 184.26 ZAC 127.60 ETC 167.61 CLP 177.74
   PLANE TOCENTRIC CONIC
    C3 46.944 VHL 6.852 DLA 26.87 RAL 44.64 RAD 6568.8 VEL 12.973 PTH 2.37 VHP 11.278 DPA 6.70 RAP 33.38 ECC 1.7726
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        6.70 RAP 33.38 ECC 1.7726
                                                                                    289.86
                                                                                                      70.29
                                                                                                                  4 12 57
                                                                                                                                   2888.9
                    3 14 48 3488.85
0 35 55 4008.52
                                                                    130.19
        90.00
                                                     -20.75
                                                                                                                 1 42 44
                                                                                                       62.30
                                                                                                                                     3408.5
                                                                                    283.27
        90.00
                                                      -6.10
                                                                     161.26
                                                                                                                 6 1 13
2 28 25
                                                                                                       72.00
                                                                                                                                     2520.0
                                                                                                                                                     -26.51
                                                                     104.35
                                                                                    291.16
       100.00
                    5 9 13
                                    3120.05
                                                     -24.27
                                                                                                       60.23
                                                                                                                                     3252.6
                                                                                                                                                      -6.78
       100.00
                      1 24 12
                                   3852.56
                                                       -2.84
                                                                     148.02
                                                                                    281.48
                                                                                                                 7 57 10
2 41 50
                                                                                                                                    2137.2
                                                                                                                                                    -32.88
                                                                                                                                                                     68.78
       110.00
                     7 11 33 2737.25
                                                    -31.17
                                                                      77.58
                                                                                    293.45
                                                                                                       75.19
                                                                                    277.68
                                                                                                       55.95
                                                                                                                                     3208.1
                                                                                                                                                      -1.23
                      1 38 22
                                    3808.12
                                                       3.26
                                                                    140.86
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SCT 5415.2 SGR 416.7 SG3 103.1
RRI .4554 RRF .4338 RTF .9432
SGB 5431.2 R23 .0026 R13 .9432
                                                                                                                                ST 2368.3 SR 414.1 SS 500.5
CRT .8601 CRS -.7865 CST -.9912
    TDE 2.3835 TRA 4.5391 TC3-1.9643 BAU 1.2328
    ROE .4949 RRA .0520 RC3 .0013 FAU .00909
FOE .4693 FRA 1.1775 FC3 -.1676 BSP 17783
BOE 2.4343 BRA 4.5394 BC3 1.9643 FSP -347
                                                                                                                                LSA 2445.8 MSA 220.3 SSA 13.0
EL1 2395.1 EL2 208.9 ALF 8.62
                                                                         SG1 5418.5 SG2 370.8 THA 2.02
                                                                                                                                            ARRIVAL DATE JUL 16 1966
                                                                             FLIGHT TIME 200.00
LAUNCH DATE DEC 28 1965
                                                                             DISTANCE 583.541
   HELIOCENTRIC CONIC
                         .00 LOL 96.05 VL 25.815 GAL 11.47 A7L 87.54 HCA 302.66 SMA 116.64 ECC .32419 INC 2.4641 V1 30.283
-2.07 LOP 38.73 VP 36.257 GAP 18.48 A7P 88.67 TAL 153.65 TAP 96.30 RCA 78.83 APO 154.45 V2 35.014
8.58 GP -3.96 ZAL 44.66 ZAP 174.97 ETS 234.57 ZAE 132.50 ETE 184.22 ZAC 129.87 ETC 167.33 CLP 176.91
    RL 147.12 LAL
RP 108.23 LAP
    RC 209.146 GL
   PLANETOCENTRIC CONIC
    C3 53.155 VHL 7.291 DLA 26.56 RAL 47.18 RAD 6568.9 VEL 13.210 PTH 2.41 VHP 11.773 DPA 7.63 RAP 35.58 ECC 1.8748 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 32 57 3493.13
                                                                                                       70.19
                                                                                                                 4 31 10
                                                                                                                                  2893.1
                                                     -20.65
                                                                    130.47
                                                                                    294.70
                                                                                                                                                    -23.17
                                                                                                                                                                  122.70
        90.00
                                                                      1 45 51

71.64 6 17 6

265.57 60.13 2 33 51

(8.95 298.30 74.44 8 11 0

43.11 36.13 2 49 19

MID-COURSE EXECUTION ACCURACY

36T 5398.6 SGR 410.2 SG3
                                     4066.18
                                                       -4.27
                                                                     164.50
                                                                                                                                     3466.2
                                                                                                                                                      -7.99
                                                                                                                                                                     157.80
        90.00
                      0 38 4
                     5 24 54
                                                                     105.17
                                                                                                                                     2532.2
                                                                                                                                                     -26.30
                                                                                                                                                                      97.11
                                     3132.25
                                                     -24.02
       100.00
                                                                                                                                                      -5.12
                                                                                                                                                                     144.21
                     1 28 49
                                     3902.29
                                                       -1.16
                                                                     150.75
                                                                                                                                     3302.3
       100.00
                      7 25 4
1 45 B
                                                                                                                                                                     70.21
                                   2756.24
                                                     -30.63
                                                                                                                                     2156.2
                                                                                                                                                     -32.65
       110.00
                                                                                                                                     3251.1
                                    3851.07
                                                       4.89
                                                                     143.11
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                                                                ST 2299.3 SR 405.4 55 496.4
CRT .8436 CRS -.7720 CST -.9923
    TOE 2.3891 TRA 5.0276 TC3-1.6949 BAU 1.2044
    ROE .5152 RRA .0746 RC3 -.0015 FAU .00801
    FDE .4598 FRA 1.2447 FC3 -.1305 BSP 17817
BDE 2.4440 BRA 5.0282 BC3 1.6949 FSP -340
                                                                                                                                LSA 2376.3 MSA 225.1 55A 12.3
                                                                                                                                EL1 2324.8 EL2 215.3 ALF 8.53
                                                                         SG1 5402.1 SG2 360.4 THA 2.08
                                                                                                                                           ARRIVAL DATE JUL 18 1966
                                                                             FLIGHT TIME 202.00
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                             DISTANCE 587.793
    RL 147.12 LAL .00 LOL 96.05 VL 25.774 GAL 12.72 AZL 87.63 HCA 305.86 SMA 116.42 ECC .33849 INC 2.3705 V1 30.283 RP 108.19 LAP -1.92 LOP 41.94 VP 36.241 GAP 19.38 AZP 88.61 TAL 152.15 TAP 98.01 RCA 77.02 APO 155.83 V2 35.027 RC 210.800 GL 7.68 GP -3.91 ZAL 42.60 ZAP 174.44 ETS 227.26 ZAE 132.45 ETE 184.19 ZAC 132.11 ETC 167.00 CLP 176.04
   PLANETOCENTRIC CONIC
                                                                                                                                        8.53 RAP 37.75 ECC 1.9964
    C3 60.544 VHL 7.781 DLA 26.21 RAL 49.54 RAO 6569.1 VEL 13.487 PTH 2.47 VHP 12.322 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 50 35 3497.48 -20.55 130.75 299.42 70.08 4 48 53 2897.5 -23.08 122.99 90.00 0 39 16 4125.74 -2.36 167.84 291.18 61.77 1 48 2 3525.7 -6.11 161.17 100.00 5 40 16 3143.91 -23.76 105.94 300.64 71.31 6 32 40 2543.9 -26.09 97.92
                                                                                                                                                     -3.37
                                                                    153.61
                                                                                    289.53
                                                                                                       60.11
                                                                                                                  2 38 11
                                                                                                                                    3354.5
                     1 32 17
                                   3954.54
                                                         .61
       100.00
                                                                                                                                                                     71.61
                                                                                                                   8 24 27
                                                                                                                                    2174.9
                                                                                                                                                    -32.41
                                                     -30.48
                                                                      80.29
                                                                                    303.01
                                                                                                      73.72
       110.00
                     7 38 12 2774.88
                                                                    145.49
                                                                                                                                    3296.3
                                                                                                                                                      2.14
                                                       6.60
                                                                                    285.81
                                                                                                      56.38
                                                                                                                  2 55 46
       110.00
                      1 50 49
                                    3896.33
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2233.1 SR 395.0 55 494.8
CRT .8264 CRS -.7577 CST -.9934
                                                                         SGT 5378.2 SGR 402.5 SG3 98.7
RRT .4974 RRF .4782 RTF .9543
SGB 5393.3 R23 .0018 R13 .9544
    TOE 2.3960 TRA 5.5527 TC3-1.4430 BAU 1.1680
    ROE .5354 RRA .0991 RC3 -.0031 FAU .00691
FDE .4518 FRA 1.3177 FC3 -.0988 BSP 17837
                                                                                                                               LSA 2309.8 MSA 228.4 SSA 11.6
                                                                                                                                EL1 2257.0 EL2 220.0 ALF 8.40
                                                                         5G1 5382.0 SG2 349.0 THA 2.14
    BOE 2.4551 BRA 5.5536 BC3 1.4430 FSP -334
                                                                                                                                            ARRIVAL DATE JUL 20 1966
                                                                             FLIGHT TIME 204.00
LAUNCH DATE DEC 28 1965
                                                                            DISTANCE 591.763
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.735 GAL 14.08 AZL 87.73 MCA 309.07 SMA 116.22 ECC .35449 INC 2.2690 VI 30.283 RP 108.15 LAP -1.76 LOP 45.14 VP 36.226 GAP 20.39 AZP 88.57 TAL 150.75 TAP 99.82 RCA 75.02 APO 157.42 V2 35.040 RC 212.427 GL 6.81 GP -3.86 ZAL 40.70 ZAP 173.79 ETS 221.11 ZAE 132.36 ETE 184.15 ZAC 134.30 ETC 166.60 CLP 175.13
   PLANETOCENTRIC CONIC
                                                                                                                                         9.39 RAP 39.90 ECC 2.1418
    C3 69.378 VHL 8.329 DLA 25.83 RAL 51.71 RAD 6569.3 VEL 13.811 PTH
                                                                                                        2.52 VHP 12.937 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                  5 5 55
                                                                                    303.99
                                                                                                       69.97
                                                                                                                                     2902.2
                      4 7 32
                                  3502.21
                                                     -20.44
                                                                    131.05
                                                                                                                                     3586.4
                                                                                                                                                     -4.18
                                                                                     294.91
                                                                                                       61.69
                                                                                                                  1 49 26
                     0 39 39 4186.41
                                                        -.40
                                                                     171.22
                                                                                                                  6 47 44
                                                                                                                                                     -25.89
                                                                                                       70.99
                                                                                                                                     2555.3
                                   3155.29
                                                     -23.51
                                                                     106.70
                                                                                     305.17
       100.00
                     5 55 9
                                                                                                                 2 41 32
8 37 25
                                                                                                                                     3408.6
                                                                                                                                                      -1.54
                                                                                                                                                                    150.06
                                                                                                       60.20
                     1 34 44
                                     4008.57
                                                       2.45
                                                                    156.58
                                                                                     293.33
                                                                                                                                     2193.2
                      7 50 52
                                     2793.22
                                                     -30.12
                                                                      81.60
                                                                                     307.57
                                                                                                       73.02
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                     3343.4
                                                       8.37
                                                                    148.00
                     1 55 30 3943.40
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5354.0 SGR 393.8 SG3 96.6

RRT .5181 RRF .5003 RTF .9598

SGB 5368.5 R23 .0013 R13 .9598

SGI 5357.9 SG2 336.6 THA 2.19
                                                                                                                                ST 2170.1 SR 383.0 SS 495.8 CRT .8088 CRS -.7437 CST -.9944
    TOE 2.4053 TRA 6.1189 TC3-1.2096 BAU 1.1220
    RDE .5552 RRA .1254 RC3 -.0037 FAU .00576
FDE .4458 FRA 1.3975 FC3 -.0719 BSP 17835
                                                                                                                             LSA 2246.9 MSA 230.1 SSA 11.0
EL1 2192.3 EL2 222.9 ALF 8.21
     BOE 2.4686 BRA 6.1202 BC3 1.2096 FSP -327
```

FLIGHT TIME 198.00

ARRIVAL DATE JUL 22 1966

```
LAUNCH DATE DEC 28 1965
                                                                                 DISTANCE 595.384
   HELIOCENTAIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.697 GAL 15.57 A7L 87.84 MCA 312.27 SMA 116.02 ECC .37246 INC 2.1577 VI 30.283 RP 108.11 LAP -1.60 LOP 48.35 VP 36.212 GAP 21.53 A7P 88.55 TAL 149.45 TAP 101.73 RCA 72.81-APO 159.24 V2 35.053 RC 214.027 GL 5.98 GP -3.82 ZAL 38.97 ZAP 173.04 ETS 215.97 ZAE 132.22 ETE 184.10 ZAC 136.44 ETC 166.14 CLP 174.18
   PLANETOCENTRIC CONIC
    C3 79.996 VHL 8.944 DLA 25.42 RAL 53.70 RAD 6569.6 VEL 14.190 PTH 2.58 VHP 13.627 DPA 10.21 RAP 42.02 ECC 2.3165
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            J LONG INJ RT ASC INJ ARMTH INJ TIME
31.38 308.40 69.85 5 22 8
74.63 298.50 61.72 1 50 7
07.43 309.53 70.68 7 2 13
59.62 296.99 60.39 2 43 59
82.88 311.96 72.35 8 49 50
50.59 293.41 57.19 3 5 44
MID-COURSE EXECUTION ACCURACY
SCT 5328.2 8GP 384.2 8G3 94 6
                                                                                                                                           2907.4
                     4 23 41 3507.40
0 39 20 4247.59
6 9 26 3166.45
                                                         -20.32
                                                                        131.38
         90.00
                                                                                                                                              3647.6
                                                                                                                                                                -2.22
                                                           1.57
                                                                          174.63
         90.00
                                                                                                                                                                                 99.47
                                                                                                                                              2566.5
                                                                                                                                                               -25.68
                                                                          107.43
                                                         -23.26
        100.00
                                                                                                                                                                                153.09
                                                            4.31
                                                                          159.62
                                                                                                                                              3463.8
                                                                                                                                                                   . 33
                                       4063.77
       100.00
                      1 36 16
                                                                                                                                                               -31.88
                                                                                                                                                                                 74.31
                      8 2 59 2811.20
1 59 12 3991.79
                                                                                                                                              2211.2
                                                          -29.76
                                                                           82.88
       110.00
                                                                                                                                                                 5.77
                                                                                                                                                                                144.26
                                                                                                                                             3391.8
                                                          10.17
                                                                         150.59
       110.00
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ST 2113.6 SR 369.8 SS 500.2
CRT .7916 CRS -.7310 CST -.9954
                                                                             SCT 5328.2 SGR 384.2 SG3 94.6

RRT .5389 RRF .3227 RTF .9651

SGB 5342.1 R23 .0008 R13 .9651

SGI 5332.3 SG2 323.4 THA 2.23
     TOE 2.4235 TRA 6.7362 TC3 -.9927 BAU 1.0617
    ROE .5750 RRA .1537 RC3 -.0033 FAU .00450
FOE .4429 FRA 1.4864 FC3 -.0487 BSP 17712
BOE 2.4907 BRA 6.7380 BC3 .9927 FSP -318
                                                                                                                                         LSA 2191.2 MSA 229.9 SSA 10.4
                                                                                                                                         EL1 2134.0 EL2 223.8 ALF 7.97
                                                                                                                                                      ARRIVAL DATE JUL 24 1966
                                                                                   FLIGHT TIME 208.00
LAUNCH DATE DEC 28 1965
                                                                                   DISTANCE 598.565
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.661 GAL 17.23 A7L 87.97 MCA 315.48 SMA 115.83 ECC .39272 INC 2.0344 V1 30.283

RP 108.07 LAP -1.43 LOP 51.56 VP 36.199 GAP 22.82 AZP 88.55 TAL 148.28 TAP 103.77 RCA 70.34 APO 161.52 VZ 35.067

RC 215.599 GL 5.18 GP -3.77 ZAL 37.41 ZAP 172.19 ETS 211.65 ZAE 132.01 ETE 184.05 ZAC 138.52 ETC 165.61 CLP 173.16
   PLANETOCENTRIC CONIC
    C3 92.846 VHL 9.636 DLA 24.98 RAL 55.48 RAD 6569.8 VEL 14.635 PTH 2.65 VHP 14.407 DPA 11.00 RAP 44.10 ECC 2.5280 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      4 38 56 3512.93
0 38 19 4308.83
6 23 1 3177.36
1 36 56 4119.63
                                                                                                                          5 37 29
                                                                                                                                           2912.9
                                                                                                                                                              -22.77
                                                                          131.74
                                                                                          312.60
                                                                                                            69.72
         90.00
                                                          -20.19
                                                                              8.06 301.92 61.89 1 50 8

18.15 313.70 70.38 7 15 59

12.71 300.48 60.70 2 45 35

14.11 316.14 71.70 9 1 37

13.27 296.99 57.74 3 9 20

MID-COURSE EXECUTION ACCURACY

SGT $224 5 50
                                                                                                                                                                  -.24
                                                                                                                                                                                 171.42
                                                                                                                                               3708.8
                                                           3.55
                                                                          178.06
         90.00
                                                                                                                                               2577.4
                                                                                                                                                                -25.48
                                                          -23.02
                                                                          108.15
        100.00
                                                                                                                                               3519.6
                                                                                                                                                                 2.23
                                                                                                                                                                                156.15
                                                                          162.71
                                                            6.18
        100.00
                                                                                                                                                               -31.60
                      8 14 28 2828.71
                                                                                                                                               2228.7
                                                         -29.39
                                                                            84.11
        110.00
                                                                                                                                               3441.0
                                                                                                                                                                   7.63
                                                                                                                                                                                 146.86
                        2 1 59
                                                      11.97
                                                                          153.27
        110.00
                                       4041.05
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 5295.5 SGR 373.3 SG3 92.7
RRT .5588 RRF .5441 RTF .9702
SGB 5308.6 R23 .0001 R13 .9702
SGI 5299.6 SGZ 309.3 THA 2.26
                                                                                                                                          ST 2057.2 SR 355.2 SS 506.8
CRT .7742 CRS -.7182 CST -.9963
     TOE 2.4421 TRA 7.4011 TC3 -.7975 BAU .9899
    RDE .5942 RRA .1834 RC3 -.0025 FAU .00318
FDE .4409 FRA 1.5832 FC3 -.0297 BSP 17718
                                                                                                                                          LSA 2136.1 MSA 228.0 SSA 9.8
EL1 2075.7 EL2 222.8 ALF 7.70
     BDE 2.5133 BRA 7.4034 BC3 .7975 FSP -313
                                                                                                                                                      ARRIVAL DATE JUL 26 1966
                                                                                   FLIGHT TIME 210.00
LAUNCH DATE DEC 28 1965
                                                                                  DISTANCE 601.192
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 108.512 VHL 10.417 DLA 24.52 RAL 57.06 RAD 6570.1 VEL 15.161 PTH 2.72 VMP 15.293 DPA 11.73 RAP 46.12 ECC 2.7858
     ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           2918.6
                                                                                                                                                            -22.66 124.39
                       4 53 16 3518.58
0 36 38 4369.72
                                                                                                          69.58 5 51 54
                                                                         132.10
                                                                                        316.57
                                                          -20.06
         90.00
                                                                                                                        1 49 27
7 28 58
2 46 20
9 12 41
                                                                                                                                               3769.7
                                                                                                                                                                                174.82
                                                             5.49
                                                                          181.48
                                                                                           305.17
                                                                                                              62.18
          90.00
                                                                                                                                               2587.9
                                                                                                                                                                                100.93
                       6 35 50 3187.86
1 36 44 4175.68
                                                           -22.77
                                                                          108.83
                                                                                           317.64
                                                                                                              70.10
        100.00
                                                                                                                                                                                159.24
                                                                                                                                               3575.7
                                                                                                                                                                  4.12
                                                            8.04
                                                                        165.83
                                                                                           303.79
                                                                                                               61.11
        100.00
                                                                                                                                               2245.5
                                                                                                                                                                                  76.83
                       8 25 15 2845.55
2 3 49 4090.76
                                                          -29.03
                                                                            85.28
                                                                                           320.09
                                                                                                              71.10
        110.00
                                                                              6.00 300.39 58.40 3 11 59
MID-COURSE EXECUTION ACCURACY
                                                                                                                                               3490.8
                                                                                                                                                                                 149.52
                                                                          156.00
                                                          13.76
        110.00
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 5259.0 SGR 361.3 SG3 90.8

RRT .5782 RRF .5650 RTF .9749

SGB 5271.4 R23 -.0005 R13 .9749

SGI 5263.2 SG2 294.6 THA 2.28
                                                                                                                                         ST 2005.1 SR 339.4 S5 517.0 CRT .7575 CRS -.7067 CST -.9971
     TOE 2.4704 TRA 8.1277 TC3 -.6200 BAU .8995
     RDE .6131 RRA .2146 RC3 -.0011 FAU .00169
                                                                                                                                         LSA 2086.3 MSA 224.2 55A 9.2
EL1 2021.8 EL2 219.8 ALF 7.39
            .4417 FRA 1.6914 FC3 -.0135 BSP 17692
      BOE 2.5453 BRA 8.1305 BC3 .6200 FSP
                                                               -307
                                                                                                                                                       ARRIVAL DATE JUL 28 1966
                                                                                    FLIGHT TIME 212.00
 LAUNCH DATE DEC 28 1965
                                                                                   DISTANCE 603.111
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                 2.80 VHP 16.306 DPA
     C3 127.780 VHL 11.304 DLA 24.03 RAL 58.43 RAD 6570.4 VEL 15.783 PTH
     C3 127.780 VHL 11.304 OLA 24.03 RAL 58.43 RAD 6570.4 VEL 15.783 PTH 2.80 VHP 16.306 DPA 12.42 RAP 48.07 ECC 57.1029
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 5 6 36 3524.01 -19.93 132.44 320.28 69.46 6 5 20 2924.0 -22.55 124.75
90.00 0 34 11 4429.98 7.39 184.88 308.22 62.59 1 48 1 3830.0 3.66 178.19
100.00 6 47 49 3197.68 -22.54 109.47 321.32 69.83 7 41 6 2597.7 -25.09 101.60
100.00 1 35 39 4231.54 9.86 168.98 306.90 61.64 2 46 11 3631.5 5.99 162.32
                                                                                                                          9 22 58
3 13 41
                                                                                                                                               2261.5
                                                                                                               70.53
                        8 35 17 2861.45
2 4 41 4140.53
                                                                                            323.77
                                                          -28.67
                                                                            86.38
         110.00
                                                                                                                                                                                152.21
                                                                                                                                             3540.5
                                                                                                                                                               11.31
                                                                                                                59.15
                                                                                            303.60
         110.00
                                                            15.52
                                                                           158.79
                                                                             MID-COURSE EXECUTION ACCURACY
SGT 5218.6 SGR 348.3 SG3 89.1 ST 1956.8 SR 322.8 55 531.2
RRT .5970 RRF .5854 RTF .9794 CRT .7419 CRS -.6965 CST -.9977
SGB 5230.2 R23 -.0012 R13 .9794 LSA 2041.5 HSA 218.6 SSA 8.6
SG1 5222.8 SG2 279.2 THA 2.29 EL1 1971.6 EL2 214.8 ALF 7.06
    DIFFERENTIAL CORRECTIONS
      TOE 2.5114 TRA 8.9246 TC3 -.4599 BAU .7857
      RDE .6317 RRA .2469 RC3 .0005 FAU-.00004
FDE .4459 FRA 1.8128 FC3 .0003 BSP 17639
BDE 2.5896 BRA 8.9281 BC3 .4599 FSP -301
```

FLIGHT TIME 206.00

```
FLIGHT TIME 214.00
                                                                                                                                     ARRIVAL DATE JUL 30 1966
LAUNCH DATE DEC 28 1965
   HELIOCENTRIC CONIC
                                                                         DISTANCE 604.118
    RL 147.12 LAL .00 LOL 96.05 VL 25.565 GAL 23.44 AZL 88.44 HCA 325.13 SMA 115.34 ECC .47134 INC 1.5568 V1 30.283 RP 107.95 LAP -.89 LOP 61.19 VP 36.168 GAP 27.90 AZP 88.72 TAL 145.88 TAP 111.00 RCA 60.97 APO 169.70 VZ 35.105 RC 220.152 GL 2.97 GP -3.66 ZAL 33.89 ZAP 168.94 ETS 202.17 ZAE 130.85 ETE 183.86 ZAC 144.22 ETC 163.65 CLP 169.56
   PLANETOCENTRIC CONIC
    6 58 52 3206.48
1 33 38 4286.86
                                                                                                            7 52 18
2 45 5
       100.00
                                                   -22.34
                                                                  110.04
                                                                                 324.70
                                                                                                  69.60
                                                                                                                              2606.5
                                                                                                                                             -24.91
                                                                                                                                                             102.19
       100.00
                                                    11.63
                                                                  172.13
                                                                                 309.77
                                                                                                  62.27
                                                                                                                              3686.9
                                                                                                                                                7.83
                                                                                                                                                             165.41
                                                                                                            9 32 24
                     8 44 28 2876.11
2 4 32 4190.00
                                                  -28.33
                                                                  87.39
                                                                                 327.14
                                                                                                  70.02
                                                                                                                              2276.1
                                                                                                                                             -30.79
                                                                                                                                                              79.05
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                  161.61
                                                                                                                              3590.D
                                                                                                                                             13.11
                                                                                                                                                             154.92
       110.00
                                                    17.22
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 5176.1 SGR 334.2 SG3 87.5
RRT .6153 RRF .6052 RTF .9834
SGB 5186.9 R23 -.0018 R13 .9834
                                                                                                                          ST 1913.5 SR 305.5 SS 550.5 CRT .7283 CRS -.6883 CST -.9983
    TOE 2.5733 TRA 9.8064 TC3 -.3156 BAU .6400
    RDE .6502 RRA .2800 RC3 .0024 FAU-.00217
FDE .4550 FRA 1.9510 FC3 .0124 BSP 17457
                                                                                                                          LSA 2003.3 MSA 211.1 55A 8.1
                                                                      SG1 5180.2 SG2 263.3 THA 2.28
                                                                                                                          EL1 1926.5 EL2 207.9 ALF 6.71
    BDE 2.6542 BRA 9.8104 BC3 .3156 FSP -293
                                                                          FLIGHT TIME 216.00
                                                                                                                                      ARRIVAL DATE AUG 1 1966
LAUNCH DATE DEC 28 1965
                                                                          DISTANCE 603.934
   HELIOCENTRIC CONIC
                          .00 LOL 96.05 VL 25.538 GAL 26.09 AZL 88.66 HCA 328.35 SMA 115.20 ECC .50527 INC 1.3429 V1 30.283 -.70 LOP 64.41 VP 36.162 GAP 30.15 AZP 88.86 TAL 145.59 TAP 113.94 RCA 56.99 APO 173.41 V2 35.117 2.29 GP -3.62 ZAL 33.16 ZAP 167.58 ETS 199.80 ZAE 130.21 ETE 183.78 ZAC 145.87 ETC 162.90 CLP 168.11
    RL 147.12 LAL
    RP 107.91 LAP
    RC 221.615 GL
   PLANETOCENTRIC CONIC
    C3 181.718 VHL 13.480 DLA 23.00 RAL 60.44 RAD 6571.0 VEL 17.408 PTH
                                                                                                    2.96 VHP 18.823 DPA
                                                                                                                                13.63 RAP 51.63 ECC 3.9906
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    5 30 7
                                3532.45
                                                   -19.73
                                                                 132.98
                                                                                326.75
                                                                                                 69.26
                                                                                                             6 28 59
                                                                                                                            2932.4
                                                                                                                                             -22.37
                                                                                                                                                            125.30
                    0 26 41 4547.52
7 8 56 3213.83
1 30 33 4341.37
8 52 43 2889.10
        90.00
                                                   11.01
                                                                  191.62
                                                                                 313.57
                                                                                                  63.75
                                                                                                             1 42 28
                                                                                                                               3947.5
                                                                                                                                                7.39
                                                                                                                                                             TAA.RI
      100.00
                                                   -22.16
                                                                  110.52
                                                                                 327.73
                                                                                                  69.41
                                                                                                              8 2 30
                                                                                                                              2613.8
                                                                                                                                              -24.76
                                                                                                                                                             102.69
                                                                                                            2 42 54
9 40 53
                                                                                                  63.00
      100.00
                                                   13.34
                                                                  175.28
                                                                                312.37
                                                                                                                              3741.4
                                                                                                                                               9.61
                                                                                                                                                             168.47
                                                                                                                              2289.1
      110.00
                                                  -28.03
                                                                   88.28
                                                                                330.15
                                                                                                  69.58
                                                                                                                                              -30.54
                                                                                                                                                              79.99
                                                                    MIO-COURSE EXECUTION ACCURACY
      110.00
                    2 3 14
                                  4238.86
                                                   18.86
                                                                  164.45
                                                                                                                              3638.9
                                                                                                                                              14.85
                                                                                                                                                             157.64
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 5125.5 SGR 318.9 SG3 85.9
RRT .6317 RRF .6230 RTF .9869
    TOE 2.6506 TRAID.7727 TC3 -.1891 BAU .4595
                                                                                                                          ST 1869.8 SR 287.4 SS 574.1
CRT .7159 CRS -.6811 CST -.9987
    RDE .6684 RRA .3128 RC3 .0042 FAU-.00472
    FOE .4675 FRA 2.1063 FC3 .0225 BSP 17404
BOE 2.7335 BRA10.7773 BC3 .1892 FSP -289
                                                                     SGB 5135.4 R23 -.0025 R13 .9869
SG1 5129.5 SG2 247.0 THA 2.26
                                                                                                                          LSA 1966.6 MSA 202.2 SSA
EL1 1881.2 EL2 199.4 ALF
                                                                                                                                                                 7.5
                                                                                                                                                              6.35
                                                                         FLIGHT TIME 218.00
                                                                                                                                     ARRIVAL DATE AUG 3 1966
LAUNCH DÂTE DEC 28 1965
                                                                         DISTANCE 602.189
   HELIOCENTRIC CONIC
    RL 147.12 LAL .00 LOL 96.05 VL 25.515 GAL 29.13 AZL 88.91 MCA 331.57 SMA 115.08 ECC .54413 INC 1.0859 V1 30.283
RP 107.87 LAP -.52 LOP 67.62 VP 36.157 GAP 32.79 AZP 89.04 TAL 145.67 TAP 117.24 RCA 52.46 APO 177.70 V2 35.130
RC 223.050 GL 1.63 GP -3.58 ZAL 32.71 ZAP 166.02 ETS 197.70 ZAE 129.38 ETE 183.68 ZAC 147.34 ETC 162.13 CLP 166.48
   PLANETOCENTRIC CONIC
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 40 10 3534.40 -19.68 133.10 329.40 69.22 6 39 4 2934.4 -22.35 125.43 90.00 0 21 17 4604.44 12.70 194.95 315.78 64.48 1 38 1 4004.4 9.16 188.06 100.00 7 17 54 3219.24 -22.03 110.87 330.35 69.27 8 11 34 9610.2 -20.07
                    1 26 14 4394.83
8 59 57 2900.00
2 0 40 4286.84
                                                                                314.65
                                                                                                  63.82
                                                                                                             2 39 28
                                                                                                                              3794.8
                                                                                                                                              11.33
                                                                                                                                                            171.51
                                                                 178.41
       100.00
                                                   14.97
                                                  -27.77
                                                                   89.02
                                                                                332.75
                                                                                                  69.21
                                                                                                              9 48 17
                                                                                                                              2300.0
                                                                                                                                            -30.33
      110.00
                                                                                311.72
                                                                                                  61.98
                                                                                                             3 12 7
                                                                                                                              3686.8
                                                                                                                                              16.52
                                                                 167.30
       110.00
                    2 0 40
                                  4286.84
                                                    20.42
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 5069.3 SGR 302.4 SC3 84.5
RRT .6465 RRF .6390 RTF .9899
SCB 5078.3 R23 -.0031 R13 .9899
                                                                                                                          ST 1827.7 SR 268.9 55 603.8
CRT .7057 CRS -.6756 CST -.9991
    TOE 2.7561 TRAI1.8404 TC3 -.0779 BAU .2296
    ROE .6868 RRA .3442 RC3 .0059 FAU-.00796
FOE .4863 FRA 2.2837 FC3 .0313 BSP 17313
BOE 2.8404 BRA11.8454 BC3 .0781 FSP -284
                                                                                                                         LSA 1934.0 MSA 191.9 SSA
                                                                                                                                                               6.9
                                                                     SG1 5073.1 SG2 230.6 THA 2.21
                                                                                                                         EL1 1837.6 EL2 189.5 ALF 5.99
                                                                          FLIGHT TIME 220.00
                                                                                                                                     ARRIVAL DATE AUG 5 1966
LAUNCH DATE DEC 28 1965
                                                                         DISTANCE 598.385
   HELIOCENTRIC CONIC
                          .00 LOL 96.05 VL 25.497 GAL 32.66 AZL 89.23 HCA 334.79 SMA 114.99 ECC .58863 INC .7691 V1 30.283 -.33 LOP 70.84 VP 36.156 GAP 35.91 AZP 89.30 TAL 146.21 TAP 121.00 RCA 47.30 APO 182.68 V2 35.141 1.01 GP -3.53 ZAL 32.57 ZAP 164.23 ETS 195.81 ZAE 128.34 ETE 183.56 ZAC 148.60 ETC 161.38 CLP 164.62
    RL 147.12 LAL
RP 107.84 LAP
    RC 224.456 GL
   PLANETOCENTRIC CONIC
    C3 268.649 VHL 16.391 DLA 21.85 RAL 61.27 RAD 6571.6 VEL 19.747 PTH
                                                                                                    3.12 VHP 22.248 DPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 133.08
                                                                                331.58
                                                                                                  69.23
                                                                                                              6 47 51
                                                                                                                              2934.0
                                                                                                                                             -22.34
        90.00
                     5 48 57
                                 3534.02
                                                   -19.69
                                4660.01
                                                                                317.60
                                                                                                  65.30
                                                                                                             1 32 9
                                                                                                                              4060.0
                                                                                                                                             10.86
                    0 14 29
                                                   14.31
                                                                 198.24
                                                                                                                                                            191.25
        90.00
                    7 25 41 3222.13
1 20 26 4447.14
                                                                                332.50
                                                                                                             8 19 23
                                                                                                                              2622.1
      100.00
                                                   -21.96
                                                                 111.06
                                                                                                  69.20
                                                                                                                                             -24.59
                                                                                                                                                            103.25
                                                                                                  64.72
                                                                                                             2 34 34
                                                                                                                              3847.1
                                                   16.51
                                                                 181.53
                                                                                316.53
                                                                                                                                             12.97
                                                                                                                                                            174.52
      100.00
                                2908.26
4333.77
                                                                                                                                             -30.17
                                                   -27.57
                                                                                                  68.94
                                                                                                             9 54 29
                                                                                                                              2308.3
                                                                                                                                                             81.35
                    9 6 1
                                                                   89.58
                                                                                334.86
      110.00
                                              21.90
                                                                                                                                            18.11
                     1 56 36
                                                                                313.74
                                                                                                  63.07
                                                                                                                              3733.8
      110.00
                                                                 170.14
                                                                                                             3 8 50
                                                                                                                                                            163.06
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 5006.3 SGR 284.7 SG3 83.1

RRT .6587 RRF .6523 RTF .9925

SGB 5014.4 R23 -.0036 R13 .9925

SGI 5009.8 SG2 214.1 THA 2.15
                                                                                                                       ST 1785.8 SR 250.2 SS 640.6

CRT .6977 CRS -.6720 CST -.9993

LSA 1905.1 MSA 180.4 SSA 6.3

EL1 1794.4 EL2 178.4 ALF 5.64
    TOE 2.8977 TRAIS.0170 TCS .0186 BAU .0718
    RDE .7054 RRA .3725 RC3 .0074 FAU-.01215
FDE .5128 FRA 2.4867 FC3 .0392 BSP 17180
    BOE 2.9823 BRA13.0223 BC3 .0200 FSP -280
```

```
ARRIVAL DATE MAR 9 1966
                                                                                  FLIGHT TIME 70.00
LAUNCH DATE DEC 29 1965
                                                                                 DISTANCE 209.165
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 29.644 GAL -14.53 AZL 86.96 MCA 96.43 SMA 143.40 ECC .25215 INC 3.0404 V1 30.284 RP 107.87 LAP 3.02 LOP 193.52 VP 39.182 GAP -2.77 AZP 90.34 TAL 249.77 TAP 346.20 RCA 107.24 APO 179.56 V2 35.132 RC 69.470 GL 11.37 GP 10.34 7AL 163.22 ZAP 62.75 ETS 352.64 ZAE 173.66 ETE 26.56 ZAC 44.87 ETC 168.19 CLP -62.26
   PLANETOCENTRIC CONIC
     C3 59.612 VHL 7.721 DLA -10.77 RAL 289.46 RAD 6569.1 VEL 13.452 PTH 2.46 VHP 4.590 DPA -10.05 RAP 311.86 ECC 1.9811
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        112.37
                      1 33 26 2145.13
10 46 35 5470.53
                                                                                                                        2 9 11
                                                                                                                                          1545.1
                                                         -17.82
                                                                          37.13
                                                                                        166.76
         90.00
                                                                                                                                                             27.71
                                                                                                                        12 17 46
                                                                                                                                            4870.9
                                                                                         174.90
                                                                                                            88.16
                                                         28.26
                                                                         252.71
         90.00
                                                                                                                                                                               11.27
                      2 49 24 1900.06
12 13 18 5190.84
                                                                                                                                            1300.1
                                                                                                                                                             -15.91
                                                         -19.23
                                                                          18.49
                                                                                         166.13
                                                                                                           113.34
                                                                                                                         3 21 4
       100.00
                                                                                                                                                                              223.34
                                                                                                           87.36 13 39 49
116.05 4 14 11
85.14 14 56 4
                                                                                                                                            4590.8
                                                                                                                                                             29.10
                                                                         232.07
                                                         29.79
                                                                                         174.63
       100.00
                                                                                                                                                                              356.14
                                                                                                                                           1124.5
                                                                                                                                                             -19.27
                                                                                         164.30
                       3 45 26 1724.54
13 33 45 4939.12
                                                         -22.96
                                                                            3.34
       110.00
                                                                                                                                                              32.83
                                                                                                                                                                              203.56
                                                                                                                                            4339.1
                                                                         212.64
                                                                                         174.52
                     13 33 45
                                                         33.88
       110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ST 160.2 SR 385.0 SS 179.5
CRT .2485 CRS .6353 CST -.5754
                                                                             SGT 503.8 SGR 412.2 SG3 232.8
RRT -.2172 RRF -.3954 RTF .4453
SGB 650.9 R23 .1544 R13 -.5178
    TOE -.0750 TRA -.6629 TC3 .0000 BAU .0389
     ROE - .5160 RRA .1756 RC3 .0488 FAU .10618
                                                                                                                                        LSA 404.5 MSA 205.2 55A 19.8
                                                           673
-684
    FOE .3372 FRA-1.6349 FC3-1.5421 BSP
                                                                                                                                        EL1 387.4 EL2 154.2 ALF 82.98
                                                                              SG1 522.9 SG2 387.6 THA 156.47
    BOE .5214 BRA .6857 BC3 .0488 FSP
                                                                                                                                                     ARRIVAL DATE MAR 11 1966
                                                                                  FLIGHT TIME 72.00
LAUNCH DATE DEC 29 1965
                                                                                  DISTANCE 215.719
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 29.634 GAL -14.38 AZL 87.03 MCA 99.66 SMA 143.30 ECC .24961 INC 2.9715 V1 30.284
RP 107.90 LAP 2.93 LOP 196.74 VP 39.163 GAP -2.12 AZP 90.50 TAL 249.71 TAP 349.36 RCA 107.53 APO 179.07 V2 35.120
RC 71.643 GL 11.24 GP 10.83 ZAL 163.27 ZAP 67.88 ETS 353.47 ZAE 175.58 ETE 56.74 ZAC 42.88 ETC 168.63 CLP -67.45
    C3 58.289 VHL 7.635 DLA -10.89 RAL 289.52 RAD 6569.1 VEL 13.403 PTH 2.45 VHP 4.419 DPA -10.02 RAP 309.84 ECC 1.9593 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 34 41 2135.60 -17.58 36.54 166.44 112.56 2 10 16 1535.6 -14.37 29.34
   PLANETOCENTRIC CONIC
                     10 45 50 5469.11
2 50 34 1890.75
12 12 37 5189.19
3 46 28 1715.73
13 33 13 4936.97
                                                                                                                        12 16 59
                                                                                                                                             4869.1
                                                                         252.61
                                                                                          174.60
                                                                                                             88.11
         90.00
                                                          28.26
                                                                                                           113.54 3 22 5
87.30 13 39 6
116.28 4 15 3
85.04 14 55 30
                                                                                                                                                                                10.72
                                                                                                                                             1290.8
                                                                                                                                                              -15.63
                                                                                          165.81
                                                         -18.98
                                                                           17.91
       100.00
                                                                                                                                                                               223.22
                                                                                                                                                              29.09
                                                                                                                                             4589.2
                                                          29.78
                                                                         231.95
                                                                                          174.53
       100.00
                                                                                                                                            1115.7
                                                                                                                                                                               355.62
                                                         -22.69
                                                                           2.79
                                                                                        163.97
                                                                                                                                                              -18.98
       110.00
                                                                                                                                             4337.0
                                                                                                                                                               32.81
                                                          33.86
                                                                          212.48
                                                                                          174.21
       110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SGT 554.4 SGR 417.9 SG3 251.2

RRT -.2846 RRF, -.4351 RTF .5453

SGB 694.3 R23 .1376 R13 -.6031

SG1 578.4 SG2 384.0 THA 157.59
                                                                                                                                       ST 171.2 SR 384.2 SS 184.3
CRT .1649 CRS .6305 CST -.6480
LSA 403.9 MSA 217.6 SSA 19.8
     TOE -.0623 TRA -.7182 TC3 -.0412 BAU .0575
     RDE -.5087 RRA .1858 RC3 .0612 FAU .11344
    FDE .3481 FRA-1.7385 FC3-1.6849 BSP 897
BDE .5125 BRA .7418 BC3 .0738 FSP -752
                                                                                                                                        EL1 385.5 EL2 168.3 ALF 84.81
                                                                                                                                                    ARRIVAL DATE MAR 13 1966
                                                                                  FLIGHT TIME 74.00
LAUNCH DATE DEC 29 1965
                                                                                 DISTANCE 222.225
    HELIOCENTRIC CONIC .
    RL 147.11 LAL .00 LOL 97.07 VL 29.615 GAL -14.22 AZL 87.10 HCA 102.88 SMA 143.13 ECC .24717 INC 2.9015 V1 30.284 RP 107.94 LAP 2.83 LOP 199.97 VP 39.138 GAP -1.50 AZP 90.65 TAL 249.52 TAP 352.40 RCA 107.75 APO 178.51 V2 35.108 RC 73.845 GL 11.10 GP 11.31 ZAL 163.28 ZAP 73.03 ETS 354.34 ZAE 175.37 ETE 101.74 ZAC 40.85 ETC 169.09 CLP -72.69
    PLANETOCENTRIC CONIC
     C3 56.995 VHL 7.549 DLA -11.02 RAL 289.65 RAD 6569.0 VEL 13.355 PTH 2.44 VHP 4.282 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          1525.9
                                                                                                         112.76
                      1 36 14 2125.92
10 45 19 5467.79
2 52 4 1881.31
12 12 11 5187.63
                                                                                                                                                            -14.09
                                                                                                                                                                               28.76
                                                                                                                          2 11 40
                                                         -17.32
                                                                          35.94
                                                                                       165.20
                                                                                                                       2 11 40
12 16 26
         90.00
                                                                                                                                                              27.69
                                                                                                                                                                              243.69
                                                                                                                                             4867.8
                                                          28.26
                                                                         252.51
                                                                                          174.37
                                                                                                             88.06
         90.00
                                                                                                                                                                               10.15
                                                                                                                          3 23 25
                                                                                                                                             1281.3
                                                                                                            113.74
                                                         -18.72
                                                                           17.33
                                                                                          165.56
        100.00
                                                                                                             87.23 13 38 38
                                                                                                                                             4587.6
                                                                                                                                                              29.07
                                                                                                                                                                              223.10
                                                          29.78
                                                                          231.84
                                                                                          174.30
        100.00
                                                                                                                                                                              355.10
                                                                                                                       4 16 14
14 55 11
                                                                                                                                            1106.8
                                                                                                                                                              -18.68
                                     1706.79
                                                        -22.42
                                                                           2.24
                                                                                          163.71
                                                                                                           116.51
                        3 47 47
        110.00
                                                                                                                                                              32.78
                                                                                                                                                                              203.25
                                                                                                             84.95
                                                                                                                                             4334.9
                                                          33.85
                                                                          212.32
                                                                                          173.97
                      13 32 56
                                       4934.91
        110.00
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SGT 618.8 SGR 423.6 SG3 267.5

RRT -.3493 RRF -.4743 RTF .6292

SGB 749.9 R23 .1266 R13 -.6735

SG1 646.5 SG2 379.8 THA 159.01
                                                                                                                                       ST 184.9 SR 382.4 SS 188.2
CRT .0884 CRS .6304 CST -.7050
     TOE -.0502 TRA -.7798 TC3 -.0887 BAU .0880
     ROE -.5002 RRA .1953 RC3 .0739 FAU .11967
                                                                                                                                        LSA 403.1 MSA 230.1 55A 19.9
     FOE .3583 FRA-1.8194 FC3-1.8177 BSP 1171
BOE .5028 BRA .8039 BC3 .1154 FSP -806
                                                                                                                                         EL1 382.8 EL2 183.9 ALF 86.82
                                                                                                                                                     ARRIVAL DATE MAR 15 1966
                                                                                   FLIGHT TIME 76.00
LAUNCH DATE DEC 29 1965
                                                                                  DISTANCE 228.686
    HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 97.07 VL 29.589 GAL -14.07 AZL 87.17 HCA 106.10 SHA 142.89 ECC .24481 INC 2.8296 V1 30.284 RP 107.98 LAP 2.72 LOP 203.19 VP 39.107 GAP -.92 AZP 90.79 TAL 249.21 TAP 355.30 RCA 107.91 APO 177.87 V2 35.095 RC 76.070 GL 10.94 GP 11.76 TAL 163.25 ZAP 78.17 ETS 355.24 ZAE 173.12 ETE 129.46 ZAC 38.64 ETC 169.59 CLP -77.91
    PLANETOCENTRIC CONIC
     C3 55.719 VHL 7.465 DLA -11.15 RAL 289.84 RAD 6569.0 VEL 13.307 PTH 2.43 VHP 4.176 DPA -9.94 RAP 305.73 ECC 1.9170
     C3 55.719 VHL 7.465 DLA -11.15 RAL 289.84 RAD 6569.0 VEL 13.307 PTH 2.43 VHP 4.176 DPA -9.94 RAP 305.73 ECC 1.9170 LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 38 6 2116.01 -17.06 35.34 166.01 112.95 2 13.22 1516.0 -13.81 28.17 90.00 10 45 1 5466.57 28.25 252.42 174.20 88.01 12 16 8 4866.6 27.68 243.81 100.00 2 53 51 1871.64 -18.46 16.73 165.38 113.94 3 25 2 1271.6 -15.06 9.58 100.00 12 11 58 5186.16 29.77 231.73 174.13 87.18 13 38 24 4586.2 29.06 222.99 110.00 3 49 24 1697.66 -22.14 1.67 163.52 116.73 4 17 42 1097.7 -18.36 354.56 110.00 13 32 53 4932.91 33.84 212.16 173.80 84.86 14 55 6 4332.9 32.76 203.09
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 200.7 SR 379.1 SS 190.4
CRT .0179 CRS .6251 CST -.7576
                                                                              SGT 695.0 SGR 428.8 SG3 281.9
RRT -.4103 RRF -.5116 RTF .6955
     TOE -.0378 TRA -.8457 TC3 -.1413 BAU .1236
     RDE -.4899 RRA .2044 RC3 .0871 FAU .12496
                                                                             SG1 725.7 SG2 374.5 THA 160.37
     FDE .3586 FRA-1.8816 FC3-1.9416 BSP 1477
BDE .4914 BRA .8701 BC3 .1659 FSP -861
                                                                                                                                         LSA 401.0 MSA 243.0 SSA 19.9
                                                                                                                                      EL1 379.2 EL2 200.7 ALF 89.25
```

```
LAUNCH DATE DEC 29 1965
                                                                                   FLIGHT TIME 78.00
                                                                                                                                                      ARRIVAL DATE MAR 17 1966
                                                                                   DISTANCE 235.102
    HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 97.07 VL 29.555 GAL -13.92 AZL 87.24 HCA 109.31 SMA 142.59 ECC .24251 INC 2.7554 V1 30.284
RP 108.02 LAP 2.60 LOP 206.41 VP 39.070 GAP -.37 AZP 90.91 TAL 248.79 TAP 358.10 RCA 108.01 APO 177.17 V2 35.082
RC 78.316 GL 10.77 GP 12.19 ZAL 163.18 ZAP 83.24 ETS 356.18 ZAE 170.12 ETE 142.27 ZAC 36.90 ETC 170.13 CLP -83.08
    PLANETOCENTRIC CONIC
     C3 54.452 VHL 7.379 OLA -11.28 RAL 290.10 RAD 6569.0 VEL 13.259 PTH
                                                                                                                2.42 VHP 4.100 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 16 2105.78 -16.79 34.71 165.88 113.14 2 15 22 1505.8 -13.51 27.56 90.00 10 44 55 5465.45 28.25 252.34 174.09 87.97 12 16 0 4865.5 27.67 243.72
                      2 55 55 1861.68
12 11 56 5184.79
        100.00
                                                         -18.18
                                                                            16.12
                                                                                           165.25
                                                                                                             114.15
                                                                                                                            3 26 57
                                                                                                                                              1261.7
                                                                                                                                                                -14.77
                                                                                                                                                                                  6.99
                                                                                                             87.12 13 38 21
116.96 4 19 27
84.77 14 55 14
        100.00
                                                         29.77
                                                                          231.63
                                                                                           174.02
                                                                                                                                              4584.8
                                                                                                                                                                29.05
                        3 51 18 1688.25
13 33 3 4930.98
                                                                                         163.38
                                                                                                                                                                                354.02
        110.00
                                                        -21.85
                                                                             1.10
                                                                                                            116.96
                                                                                                                                              1088.3
                                                                                                                                                               -18.06
                                                                                        173.68
                                                                                                                                             4331.0
                      13 33 3
                                                         33.83
                                                                          212.01
                                                                                                                                                              32.73
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                              SCT 782.3 SGR 433.5 SG3 293.5
RRT -.4651 RRF -.5469 RTF .7464
SGB 894.4 R23 .1126 R13 -.7716
SG1 815.0 SG2 368.4 THA 161.67
                                                                                                                                          ST 218.6 SR 374.6 55 191.2
CRT -.0419 CRS .6191 CST -.7997
     TOE -.0263 TRA -.9156 TC3 -.1988 BAU .1621
     ROE -.4780 RRA .2124 RC3 .1004 FAU .12896
     FOE .3531 FRA-1.9194 FC3-2.0503 BSP 1813
                                                                                                                                          LSA 398.5 MSA 255.9 SSA 20.0
                                                                                                                                          EL1 374.8 EL2 218.3 ALF 92.12
     BOE .4787 BRA .9399 BC3 .2227 FSP
                                                                                   FLIGHT TIME 80.00
LAUNCH DATE DEC 29 1965
                                                                                                                                                      ARRIVAL DATE MAR 19 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 241.474
    RL 147.11 LAL .00 LOL 97.07 VL 29.516 GAL -13.76 AZL 87.32 HCA 112.53 SMA 142.23 ECC .24026 INC 2.6783 V1 30.284
RP 108.06 LAP 2.47 LOP 209.62 VP 39.028 GAP .15 AZP 91.03 TAL 248.26 TAP .79 RCA 108.06 APO 176.40 V2 35.069
RC 80.581 GL 10.38 GP 12.61 ZAL 163.07 ZAP 88.17 ETS 357.16 ZAE 166.93 ETE 149.04 ZAC 35.06 ETC 170.69 CLP -88.13
   PLANETOCENTRIC CONIC
     C3 53.187 VHL 7.293 DLA -11.43 RAL 290.42 RAD 6568.9 VEL 13.212 PTH 2.41 VHP 4.050 DPA -9.79 RAP 3D1.88 ECC 1.8753
    C3 53.187 VML 7.293 DLA -11.43 RAL 29D.42 RAD 6568.9 VEL 13.212 PTM 2.41 VMP 4.030 DPA -9.79 RAP 301.88 ECC 1.8753 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 10 44 2095.14 -16.50 34.06 165.61 113.34 2 17 39 1495.1 -13.20 26.93 90.00 10 44 59 5464.47 28.25 252.27 174.03 87.94 12 16 3 4864.5 27.66 243.65 100.00 2 58 18 1851.32 -17.89 15.49 165.17 114.36 3 29 9 1251.3 -14.45 8.38 100.00 12 12 5 5183.52 29.76 231.53 173.96 87.07 13 38 29 4583.5 29.04 222.80 110.00 3 53 30 1678.48 -21.55 .50 163.29 117.20 4 21 28 1078.5 -17.73 353.45 110.00 13 33 23 4929.13 33.82 211.87 175.61 84.68 14 55 32 4329.1 32.71 202.81
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                              SGT 878.7 SGR 437.5 SG3 301.6
RRT -.5127 RRF -.5801 RTF .7843
SGB 981.6 R23 .1110 R13 -.8036
                                                                                                                                         ST 238.2 SR 369.0 SS 190.9

CRT -.0900 CRS .6181 CST -.8283

LSA 396.3 MSA 268.1 SSA 20.0
     TDE -.0162 TRA -.9882 TC3 -.2607 BAU .2021
    RDE -.4648 RRA .2187 RC3 .1134 FAU .13135
FDE .3473 FRA-1.9268 FC3-2.1380 BSP 2170
BDE .4651 BRA 1.0121 BC3 .2843 FSP -934
                                                                               SG1 912.5 SG2 361.7 THA 162.91
                                                                                                                                       ELI 370.0 EL2 236.6 ALF 95.63
                                                                                  FLIGHT TIME 82.00
                                                                                                                                                     ARRIVAL DATE MAR 21 1966
LAUNCH DATE DEC 29 1965
                                                                                  DISTANCE 247.805
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 29.471 GAL -13.61 A7L 87.40 MCA 115.74 SMA 141.83 ECC .23805 INC 2.5976 V1 30.284
RP 108.10 LAP 2.34 LOP 212.83 VP 38.983 GAP .65 A7P 91.13 TAL 247.64 TAP 3.38 RCA 108.06 APO 175.59 V2 35.056
RC 82.862 GL 10.38 GP 13.00 ZAL 162.93 ZAP 92.94 ETS 358.17 ZAE 163.73 ETE 153.14 ZAC 35.39 ETC 171.30 CLP -93.02
   PLANETOCENTRIC CONIC
     C3 51.920 VHL 7.206 DLA -11.58 RAL 290.79 RAD 6568.9 VEL 13.164 PTH 2.40 VHP 4.023 DPA -9.67 RAP 300.17 ECC 1.8545
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       165.78
                                                                                                        113.55
                                                                                                                                           1484.0
                                                                                                                                                             -12.88
                                                                                                                           2 20 14
                      1 45 30 2083.98
10 45 10 5463.68
                                                                                                                                                                                 26.28
         90.00
                                                        -16.20
                                                                          33.36
                                                                                                             87.91 12 16 14
                                                                                          174.02
                                                                                                                                              4863.7
                                                                                                                                                               27.66
                                                                                                                                                                               243.60
         90.00
                                                        28.25
                                                                         252.21
                      3 0 59 1840.45
12 12 22 5182.44
                                                                                          165.13
                                                                                                            114.57
                                                                                                                           3 31 40
                                                                                                                                              1240.5
                                                                                                                                                              -14.12
                                                                                                                                                                                  7.75
       100.00
                                                      -17.58
29.76
                                                                           14.83
                                                                                                           87.03 13 38 45
117.44 4 23 47
84.60 14 56 0
                                                                                                                                              4582.4
                                                                                                                                                                               222.72
        100.00
                                                                          231.45
                                                                                          173.94
                                                                                                                                                               29.03
                                                                                                                                                             -17.39
                      3 55 58 1668.25
13 33 53 4927.40
                                                     -21.23
33.81
                                                                                                                                              1068.2
                                                                                                                                                                               352.86
        110.00
                                                                         359.88
                                                                                          163.25
                                                                                                                                              4327.4
                                                                         211.74
                                                                                          173.59
                                                                                                                                                               32.69
        110.00
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 981.9 SCR 440.7 SC3 307.3

RRT -.5556 RRF -.6113 RTF .8126

SCB 1076.3 R23 .1106 R13 -.8277

SC1 1016.4 SC2 354.0 THA 164.01
                                                                                                                                         ST 259.1 SR 361.7 SS 189.0
CRT -.1278 CRS .6089 CST -.8546
LSA 393.7 MSA 279.8 SSA 20.0
     TOE -.0078 TRA-1.0620 TC3 -.3262 BAU .2429
    RDE -.4496 RRA .2242 RC3 .1265 FAU .13266
FDE .3298 FRA-1.9163 FC3-2.2121 BSP 2546
                                                                                                                                         EL1 364.7 EL2 254.8 ALF 100.30
     BOE .4497 BRA 1.0854 BC3 .3499 FSP -962
                                                                                                                                                      ARRIVAL DATE MAR 23 1966
LAUNCH DATE DEC 29 1965
                                                                                   FLIGHT TIME 84.00
                                                                                  DISTANCE 254-097
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 29.421 GAL -13.45 A7L 87.49 MCA 118.94 SMA 141.38 ECC .23588 INC 2.5124 V1 30.284
RP 108.14 LAP 2.20 LOP 216.04 VP 38.933 GAP 1.12 A7P 91.22 TAL 246.93 TAP 5.88 RCA 108.03 APO 174.73 V2 35.043
RC 85.157 GL 10.15 GP 13.39 ZAL 162.75 ZAP 97.51 ETS 359.23 ZAE 160.63 ETE 155.85 ZAC 31.91 ETC 171.95 CLP -97.72
   PLANETOCENTRIC CONIC
     C3 50.647 VHL 7.117 DLA -11.75 RAL 291.22 RAC 6568.9 VEL 13.115 PTH 2.39 VHP 4.017 DPA -9.51 RAP 298.65 ECC 1.8335
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         113.76
                                                                                        165.79
                                                                                                                           2 23 9
                                                                                                                                           1472.1
                                                                                                                                                             -12.53
                                                                                                                                                                                 25.58
        90.00
                       1 48 37 2072.15
                                                         -15.88
                                                                          32.66
                      10 45 27 5463.16

3 3 59 1828.95

12 12 46 5181.59

3 58 45 1657.44

13 34 29 4925.86
                                                                                          174.05
                                                                                                              87.89
                                                                                                                         12 16 31
                                                                                                                                              4863.2
                                                                                                                                                               27.65
                                                         28.24
                                                                          252.18
                                                                                                                                                                               243.56
        90.00
                                                                           14.13
                                                                                          165.14
                                                                                                            114.79
                                                                                                                           3 34 28
                                                                                                                                              1228.9
                                                                                                                                                               -13.77
       100.00
                                                        -17.26
                                                                          231.39
                                                                                          173.97
                                                                                                              87.00 13 39 7
                                                                                                                                              4581.6
                                                                                                                                                               29.02
                                                                                                                                                                               222.66
                                                        29.76
       100.00
                                                                                                                         4 26 23
                                                                          359.22
                                                                                                            117.69
                                                                                                                                            1057.4
                                                                                                                                                             -17.02
                                                                                          163.24
                                                                                                                                                                               352.24
       110.00
                                                        -20.89
                                                                                                              84.53 14 56 35
                                                                                                                                              4325.9
                                                                                                                                                                32.67
                                                                                                                                                                               202.56
                                                      33.80
                                                                                          173.62
                                                                         211.62
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                                                                                     ST 280.8 SR 353.3 SS 186.1

CRT -.1552 CRS .6042 CST -.8713

LSA 392.6 MSA 289.4 SSA 20.0

EL1 359.9 EL2 272.3 ALF 106.90
                                                                             SGT 1090.3 SGR 442.8 SG3 309.5
RRT -.5925 RRF -.6406 RTF .8332
     TOE -. 0016 TRA-1.1361 TC3 -. 3949 BAU . 2836
    ROE -.4332 RRA .2279 RC3 .1393 FAU .13245
FDE .3128 FRA-1.8787 FC3-2.2641 BSP 2931
BOE .4332 BRA 1.1587 BC3 .4188 FSP -970
                                                                             SGB 1176.8 R23 .1135 R13 -.8453
                                                                             SG1 1124.9 SG2 345.8 THA 165.02
```

```
LAUNCH DATE DEC 29 1965
                                                                     FLIGHT TIME 86.00
                                                                                                                            ARRIVAL DATE MAR 25 1966
   MELIOCENTRIC CONIC
                                                                     01STANCE 260.350
                       .00 LDL 97.07 VL 29.367 GAL -13.28 AZL 87.58 MCA 122.15 SMA 140.90 ECC .23374 INC 2.4219 V1 30.284
2.05 LOP 219.25 VP 38.880 GAP 1.57 AZP 91.29 TAL 246.15 TAP 8.30 RCA 107.97 APO 173.84 V2 35.030
    RL 147.11 LAL
RP 108.18 LAP
    RC 87.465 GL
                         9.90 GP 13.79 7AL 162.53 7AP 101.85 ETS .32 7AE 157.66 ETE 157.72 7AC 30.64 ETC 172.66 CLP-102.20
   PLANETOCENTRIC CONIC
    C3 49.365 VHL 7.026 DLA -11.94 RAL 291.69 RAD 6568.8 VEL 13.066 PTH
                                                                                             2.38 VHP 4.029 DPA -9.30 RAP 297.35 ECC 1.8124
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   1 52 5 2059.49
                                               -15.53
                                                             31.89
                                                                          165.84
                                                                                        113.98
                                                                                                      2 26 24
                                                                                                                     1459.5
                                                                                                                                  -12.16
                    10 45 48 5463.04
3 7 21 1816.66
        90.00
                  10 45 48
                                                28.24
                                                             252.17
                                                                           174.13
                                                                                          87.88 12 16 51
                                                                                                                      4863.0
                                                                                                                                    27.65
      100.00
                                                -16.90
                                                              13.39
                                                                           165.19
                                                                                         115.03
                                                                                                      3 37 37
                                                                                                                      1216.7
                                                                                                                                    -13.39
                                                                                                                                                   6.36
                                                                                         86.98 13 39 34
117.96 4 29 18
84.48 14 57 16
                  12 13 13 5181.11
4 1 52 1645.93
13 35 11 4924.60
       100.00
                                               29.75
                                                             231.35
                                                                        174.05
                                                                                                                      4581.1
                                                                                                                                    29.02
                                                                                                                                                  222.63
      110.00
                                               -20.52
                                                             358.53
                                                                          163.28
                                                                                                                     1045.9
                                                                                                                                   -16.62
                                                                                                                                                  351.58
                                                                         173.69
      110.00
                                                33.79
                                                             211.52
                                                                                                                    4324.6
                                                                                                                                   32.64
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURAGY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 1202.3 SGR 444.2 SG3 309.7
RRT -.6263 RRF -.6687 RTF .8485
    TOE .0019 TRA-1.2093 TC3 -.4664 BAU .3238
                                                                                                                 ST 303.0 SR 343.4 SS 181.9
CRT -.1738 CRS .5925 CST -.8866
    ROE -.4151 RRA .2305 RC3 .1523 FAU .13131
                                                                                                               LSA 393.1 MSA 296.5 SSA 20.0
    FOE .2876 FRA-1.8269 FC3-2.3028 BSP 3327
BDE .4151 BRA 1.2311 BC3 .4907 FSP -978
                                                                 $68 1281.8 R23 - .1178 R13 -.8585
                                                                 $61 1236.8 $62 336.6 THA 165.91
                                                                                                                  EL1 356.6 EL2 287.4 ALF 117.09
LAUNCH DATE DEC 29 1965
                                                                     FLIGHT TIME 88.00
                                                                                                                            ARRIVAL DATE HAR 27 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 266.567
   RL 147.11 LAL .00 LOL 97.07 VL 29.309 GAL -13.12 AZL 87.68 HCA 125.35 SMA 140.40 ECC .23165 INC 2.3248 VI 30.284
RP 108.22 LAP 1.90 LOP 222.45 VP 38.824 GAP 1.99 AZP 91.35 TAL 245.28 TAP 10.64 RCA 107.87 APO 172.92 V2 35.016
RC 89.783 GL 9.61 GP 14.20 ZAL 162.28 ZAP 105.94 ETS 1.47 ZAE 154.85 ETE 159.04 ZAC 29.60 ETC 173.44 CLP-106.45
   PLANETOCENTRIC CONIC
    C3 48.074 VML 6.934 DLA -12.15 RAL 292.22 RAD 6568.8 VEL 13.017 PTH
                                                                                             2.37 VHP 4.057 OPA -9.03 RAP 296.28 ECC 1.7912
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                   1 55 57 2045.81
                                               -15.15
                                                             31.07
                                                                         165.93
                                                                                        114.21
                                                                                                     2 30 3
                                                                                                                   1445.8
                                                                                                                                                  24.04
                                                                                         87.90 12 17 12
115.27 3 41 9
86.98 13 40 2
118.23 4 32 33
84.44 14 58 0
                  10 46 8
       90.00
                                5463.47
                                                28.25
                                                             252.20
                                                                           174.25
                                                                                                                                                  243.58
                                                                                                                      4863.5
                                                                                                                                    27.66
                3 11 5 1803.39
12 13 41 5161.12
      100.00
                                               -16.52
                                                              12.59
                                                                           165.27
                                                                                                                      1203.4
                                                                                                                                    -12.98
                                                                                                                                                    5.59
      100.00
                                                29.75
                                                             231.35
                                                                           174.17
                                                                                                                                    29.02
                                                                                                                                                  222.63
                                                                                                                      4581.1
                4 5 19 1633.55
13 35 57 4923.73
      110.00
                                               -20.13
                                                             357.79
                                                                         163.36
                                                                                                                     1033.5
                                                                                                                                   -15.20
                                                                                                                                                  350.87
      110.00
                                               33.78
                                                             211.45
                                                                           173.81
                                                                                                                      4323.7
                                                                                                                                     32.64
                                                                                                                                                  202.40
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
    TOE .0024 TRA-1.2809 TC3 -.5405 BAU .3633
                                                                SCT 1316.8 SCR 444.8 SC3 307.5
RRT -.6569 RRF -.6998 RTF .8597
SCB 1389.9 R23 .1244 R13 -.8682
SCI 1350.9 SC2 326.9 THA 166.69
                                                                                                               ST 325.6 SR 332.2 SS 176.8
CRT -.1840 CRS .5784 CST -.8985
    RDE -.3955 RRA .2319 RC3 .1654 FAU .12920
   FOE .2591 FRA-1.7599 FC3-2.3267 BSP 3728
BOE .3955 BRA 1.3017 BC3 .5652 FSP -977
                                                                                                                 LSA 396.7 MSA 299.7 SSA
                                                                                                                                                    20.0
                                                                                                                 EL1 358.0 EL2 296.9 ALF 131.90
LAUNCH DATE DEC 29 1965
                                                                    FLIGHT TIME 90.00
                                                                                                                           ARRIVAL DATE MAR 29 1966
  MELIOCENTRIC CONIC
                                                                    DISTANCE 272.751
       147.11 LAL .00 LOL 97.07 VL 29.247 GAL -12.94 AZL 87.78 MCA 128.56 SMA 139.86 ECC .22958 INC 2.2198 V1 30.284 108.26 LAP 1.74 LOP 225.65 VP 38.786 GAP 2.40 AZP 91.38 TAL 244.35 TAP 12.91 RCA 107.75 APO 171.97 V2 35.003 92.112 GL 9.29 GP 14.64 ZAL 162.00 ZAP 109.77 ETS 2.68 ZAE 152.22 ETE 159.96 ZAC 28.79 ETC 174.31 CLP-110.46
    RL 147.11 LAL
    RC 92.112 GL
   PLANETOCENTRIC CONIC
    C3 46.770 VHL 6.839 DLA -12.39 RAL 292.80 RAD 6568.7 VEL 12.967 PTH 2.36 VHP 4.099 DPA -8.69 RAP 295.44 ECC 1.7697
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      2 0 17 2030.86
10 46 26 5464.66
                                                                       166.05
                                                                                                                  1430.9
       90.00
                                               -14.73
                                                             30.17
                                                                                                                                -11.31
                                                                                                                                                  23.17
       90.00
                                               28.25
                                                             252.28
                                                                          174.41
                                                                                                                     4864.7
                                                                                                                                    27.66
                                                                                                                                                 243.67
                   3 15 16 1788.92
12 14 7 5181.83
      100.00
                                               -16.10
                                                             11.72
                                                                          161.39
                                                                                                                     1188.9
                                                                                                                                  -12.53
                                                                                                                                                   4.75
                12 14 7
      100.00
                                               29.76
                                                             231.41
                                                                          174.33
                                                                                                                     4581.8
                                                                                                                                    29.02
                                                                                                                                                 222.68
      110.00
                   4 9 11
                              1620.09
4923.43
                                               -19.69
                                                             356.99
                                                                          163.47
                                                                                                                     1020.1
                                                                                                                                  -15.73
                                                                                                                                                 350.11
                 13 36 42
      110.00
                                               33.7A
                                                             211.43
                                                                           173.98
                                                                                                                     4323.4
                                                                                                                                    32.64
                                                                                                                                                 202.38
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SGT 1432.1 SGR 444.8 SG3 303.0

RRT -.6843 RRF -.7221 RTF .8675

SGB 1499.6 R23 .1342 R13 -.8750

SG1 1465.7 SG2 316.9 THA 167.40
    TOE -. 0001 TRA-1.3494 TC3 -. 6165 BAU .4013
                                                                                                                ST 348.2 SR 319.9 SS 171.0
CRT -1873 CRS .5664 CST -.9056
LSA 404.3 MSA 298.3 SSA 20.0
   TOE -.DUU1 MAR-1.359 C.3 .1786 FAU .12512 FDE .2320 FRA-1.6768 FC3-2.3345 85P 4119 GD .2320 FRA-1.3692 BC3 .6419 FSP -960
                                                                                                                 EL1 367.0 EL2 298.1 ALF 147.17
LAUNCH DATE DEC 29 1965
                                                                    FLIGHT TIME 92.00
                                                                                                                            ARRIVAL DATE MAR 31 1966
  MELIOCENTRIC CONIC
                                                                    DISTANCE 278.901
                       .00 LOL 97.07 VL 29.183 GAL -12.76 AZL 87.89 HCA 131.73 SMA 139.31 ECC .22756 INC 2.1051 V1 30.284 1.57 LOP 228.85 VP 38.706 GAP 2.78 AZP 91.40 TAL 243.36 TAP 15.11 RCA 107.61 APO 171.01 V2 34.990 8.92 GP 15.14 ZAL 161.69 ZAP 113.33 ETS 3.96 ZAE 149.76 ETE 160.57 ZAC 28.22 ETC 175.29 CLP-114.22
   RL 147.11 LAL
       108.31 LAP
   RC 94.449 GL
  PLANETOCENTRIC CONIC
   C3 45.457 VHL 6.742 OLA -12.66 RAL 293.43 RAO 6568.7 VEL 12.916 PTH 2.35 VHP 4.152 OPA
                                                                                                                        -A.27 RAP 294.83 ECC 1.7481
   UNCH AZMTH LNCH TIME L-I TIME
90.00 2 5 9 2014.33
                                             INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                       166.22
                                               -14.26
                                                             29.18
                                                                                        114.73
                                                                                                      2 38 43
                                                                                                                                  -10.81
                                                                                                                    1414.3
                                                                                                                                                  22.21
                 10 46 35
                                                                                          88.02 12 17 42
115.81 3 49 30
       90.00
                               5466.89
                                                28.25
                                                             252.45
                                                                           174.62
                                                                                                                     4866.9
                                                                                                                                   27.68
                                                                                                                                                 243.83
                   3 19 57 1772.95
      100.00
                                               -15.63
                                                              10.77
                                                                          165.55
                                                                                         115.81
                                                                                                      3 49 30
                                                                                                                     1172.9
                                                                                                                                    -12.03
                                                                                                                                                   3.83
                                                                                          87.07 13 40 51
118.83 4 40 15
84.45 14 59 29
      100.00
                  12 14 27
                               5183.50
                                                29.76
                                                             231.53
                                                                          174.55
                                                                                                                     4583.5
                                                                                                                                   29.04
                                                                                                                                                 222.80
                  4 13 29 1605.29
      110.00
                                               -19.21
                                                             356.11
                                                                                         118.83
                                                                         163.61
                                                                                                                     1005.3
                                                                                                                                   -15.21
                                                                                                                                                 349.27
      110.00
                 13 37 25
                               4923.92
                                                33.78
                                                             211.47
                                                                           174.20
                                                                                                                     4323.9
                                                                                                                                                 .202.42
                                                                                                                                    32.65
  DIFFERENTIAL CORRECTIONS
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                SGT 1548.7 SGR 444.7 SG3 297.7
RRT -.7106 RRF -.7484 RTF .8733
    TOE -.0070 TRA-1.4151 TC3 -.6954 BAU .4385
                                                                                                                ST 370.9 SR 306.0 SS 164.2
CRT - 1826 CR5 5426 CST - 9146
   ROE - .3529 RRA .2307 RC3 .1926 FAU .12266
FOE .1971 FRA-1.5898 FC3-2.3361 BSP 4526
BOE .3530 BRA 1.4338 BC3 .7216 FSP -948
                                                                                                               LSA 414.9 MSA 292.6 SSA 20.1
EL1 381.8 EL2 292.2 ALF 158.33
                                                              SGB 1611.3 R23 .1456 R13 -.8800
SG1 1581.9 SG2 306.3 THA 168.01
```

```
ARRIVAL DATE APR 2 1966
                                                                        FLIGHT TIME 94.00
LAUNCH DATE DEC 29 1965
                                                                        DISTANCE 285.022
    RL 147.11 LAL .00 LOL 97.07 VL 29.116 GAL -12.58 AZL 88.02 MCA 134.95 SMA 138.75 ECC .22557 INC 1.9785 VI 30.284 RP 108.35 LAP 1.40 LOP 232.04 VP 38.643 GAP 3.15 AZP 91.40 TAL 242.30 TAP 17.25 RCA 107.45 APO 170.04 V2 34.977 RC 96.794 GL 8.49 GP 15.70 ZAL 161.35 ZAP 116.64 ETS 5.35 ZAE 147.47 ETE 160.92 ZAC 27.89 ETC 176.40 CLP-117.76
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 44.132 VML 6.643 DLA -12.99 RAL 294.11 RAD 6568.7 VEL 12.865 PTH 2.34 VHP 4.216 DPA -7.76 RAP 294.44 ECC 1.7263
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          -10.25
                   2 10 39 1995.81
10 46 31 5470.54
3 25 15 1755.10
12 14 36 5186.48
4 18 20 1588.86
13 38 0 4925.49
                                                                                                           2 43 55
                                                                                                                          1395.8
                                                                  28.08
                                                                               166.42
                                                                                              115.01
                                                   -13.73
                                                                                                         12 17 42
                                                                                                                                           27.71
                                                                                                88.16
                                                                                                                             4870.5
                                                                 252.71
                                                                               174.89
                                                   28.26
        90.00
                                                                                                                            1155.1
                                                                                                                                            -11.46
                                                                   9.71
                                                                               165.74
                                                                                               116.11
                                                                                                            3 54 30
                                                  -15.09
       100.00
                                                                                                87.19 13 41 2
                                                                                                                                           29.06
                                                                                                                            4586.5
                                                                 231.75
                                                                               174.82
       100.00
                                                  29.77
                                                                                                           4 44 49
                                                                                                                                           -14.64
                                                                                               119.17
                                                                                                                             988.9
                                                                 355.15
                                                                               163.79
                                                  -18.67
       110.00
                                                                                                84.52 15 0 6
                                                                                                                                             32.67
                                                                                                                                                          202.53
                                                                                                                            4325.5
                                                                               174.47
                                                                 211.59
                                                   33.79
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 393.6 SR 290.8 SS 156.9
CRT -.1712 CRS .5114 CST -.9232
                                                                     SGT 1665.5 SGR 444.8 SG3 291.1
RRT -.7353 RRF -.7747 RTF .8774
SGB 1723.9 R23 .1600 R13 -.8836
    TOE -.0182 TRA-1.4767 TC3 -.7769 BAU .4745
    ROE - 3296 RRA .2286 RC3 .2076 FAU .11876
FOE .1598 FRA-1.4966 FC3-2.3298 BSP 4931
BOE .3301 BRA 1.4943 BC3 .8042 FSP -933
                                                                                                                        LSA 428.5 HSA 283.1 SSA
                                                                                                                         EL1 400.1 EL2 281.9 ALF 165.45
                                                                     SG1 1698.4 SG2 295.6 THA 168.54
                                                                                                                                    ARRIVAL DATE APR 4 1966
                                                                         FLIGHT TIME 96.00
LAUNCH DATE DEC 29 1965
                                                                         OJSTANCE 291.113
                         .DD LOL 97.07 VL 29.047 GAL -12.39 AZL 88.16 HCA 138.14 SMA 138.17 ECC .22363 INC 1.8370 V1 30.284
1.23 LOP 235.23 VP 38.580 GAP 3.50 AZP 91.37 TAL 241.19 TAP 19.53 RCA 107.27 APO 169.07 V2 34.964
7.99 GP 16.35 ZAL 160.98 ZAP 119.68 ETS 6.86 ZAE 145.34 ETE 161.04 ZAC 27.78 ETC 177.66 CLP-121.06
   HELIOCENTRIC CONIC
    RL 147.11 LAL
RP 108.39 LAP
   PLANETOCENTRIC CONIC
    C3 42.798 VML 6.542 DLA -13.37 RAL 294.85 RAD 6568.6 VEL 12.813 PTM 2.33 VMP 4.289 DPA -7.12 RAP 294.25 ECC 1.7D43
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
9D.00 2 16 57 1974.75 -13.12 26.84 166.66 115.32 2 49 52 1374.8 -9.60 19.92
                     2 16 57 1974.75
                                                                                               88.36 12 17 22
116.44 4 0 13
87.38 13 40 57
119.54 4 50 0
84.66 15 0 32
                                                                                                                             4876.1
                                                                                                                                             27.75
                  10 46 6 5476.13
3 31 18 1734.86
12 14 26 5191.25
4 23 50 1570.34
                                                                                175.21
                                                    28.27
                                                                 253.12
        90.00
                                                                                                                                            -10.82
                                                                                                                                                             1.65
                                                                                                                             1134.9
                                                                                165.98
                                                                   8.52
                                                   -14.48
       100.00
                                                                                                                             4591.2
                                                                                                                                            29.11
                                                                                                                                                           223.37
                                                                                175.15
       100.00
                                                    29.79
                                                                 232.10
                                                                                                                              970.3
                                                                                                                                           -13.98
                                                                                                                                                           347.32
                                                                              164.01
                                                   -16.05
                                                                 354.07
       110.00
                                                                                                                             4328.5
                                                                                                                                                           202.76
                                                    33.61
                                                                 211.83
                                                                                174.82
       110.00
                   13 38 24
                                  4928.54
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 416.4 SR 274.5 SS 149.1
CRT -.1539 CRS .4773 CST -.9300
                                                                     $61 1781.1 $GR 445.1 $G3 283.2

RRT -.7579 RRF -.8006 RTF .8797

$GB 1835.9 R23 .1783 R13 -.8856
     TOE -.0335 TRA-1.5327 TC3 -.8605 BAU .5087
    ROE - .3055 RRA .2250 RC3 .2235 FAU .11433
                                                                                                                         LSA 444.1 MSA 270.8 SSA 20.2
    FOE .1239 FRA-1.3947 FC3-2.3128 BSP 5315
BOF .3073 BRA 1.5491 BC3 .8891 FSP -904
                                                                      SG1 1813.6 SG2 285.2 THA 169.00
                                                                                                                         EL1 420.0 EL2 268.9 ALF 170.13
     BOE .3073 BRA 1.5491 BC3 .8891 FSP
                                                                                                                                   ARRIVAL DATE APR 6 1966
                                                                         FLIGHT TIME 98.00
LAUNCH DATE DEC 29 1965
    RL 147.11 LAL .00 LOL 97.07 VL 28.977 GAL -12.19 AZL 88.32 MCA 141.33 SMA 137.58 ECC .22174 INC 1.6769 V1 30.284
RP 108.43 LAP 1.05 LOP 238.42 VP 38.515 GAP 3.83 AZP 91.31 TAL 240.03 TAP 21.36 RCA 107.07 APO 168.09 V2 34.951
RC 101.502 GL 7.40 GP 17.12 ZAL 160.59 ZAP 122.46 ETS 8.52 ZAE 143.34 ETE 160.93 ZAC 27.88 ETC 179.08 CLP-124.16
                                                                         DISTANCE 297.178
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 41.455 VHL 6.439 DLA -13.84 RAL 295.65 RAD 6568.6 VEL 12.760 PTH 2.32 VHP 4.372 DPA -6.34 RAP 294.24 ECC 1.6822
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          -8.85
                                                                             166.96
                                                                                                                          1350.4
                                                                                                             2 56 45
                                                                                               115.66
                   2 24 15 1950.44
10 45 10 5484.36
3 38 17 1711.57
                                                                 25.41
                                                   -12.41
                                                                                                88.66 12 16 34
        90.00
                                                                                                                                                           245.09
                                                                                                                             4884.4
                                                                                                                                            27.60
                                                    28.29
                                                                 253.72
                                                                                175.61
         90.00
                                                                                                                             1111.6
                                                                                                                                            -10.07
                                                                                                                                                              . 32
                                                                                                116.79
                                                                                                             4 6 49
                                                   -13.77
                                                                   7.16
                                                                                166.27
                                                                                                87.66 13 40 27
        100.00
                                                                                                                                                          223.89
                                                                                                                             4598.5
                                                                                                                                           29.17
                                                                 232.64
                                                                                175.56
                                                   29.81
                    12 13 49 5198.47
        100.00
                                                                                               119.93 4 55 57
84.89 15 0 40
                                                                                                                                           -13.22
                                                                                                                                                          346.14
                                                                                                                              949.2
                                                                 352.84
                                                                              164.28
                   4 30 8 1549.16
13 38 27 4933.64
                                                   -17.33
        110.00
                                                                                                                           4333.6
                                                                                                                                           32.77
                                                                                                                                                          203.15
                                                                 212.22
                                                                                175.25
                                                   33.84
        110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     RRT -.1797 RRF -.8268 RTF ..8814
SGB 1949.5 R23 .1993 R13 -.8870
SGI 1930.0 SGZ 275.0 THA 169.38
                                                                                                                         ST 439.9 SR 256.4 SS 141.2
CRT -.1282 CRS .4206 CST -.9411
     TOE -.0556 TRA-1.5840 TC3 -.9483 BAU .5423
     RDE - .2798 RRA .2208 RC3 .2413 FAU .10988
                                                                                                                         LSA 462.2 MSA 255.3 SSA 20.3
     FOE .0807 FRA-1.2948 FC3-2.2946 BSP 5718
RNE .2843 BRA 1.5993 BC3 .9785 FSP -882
                                                                                                                         ELI 441.7 EL2 253.3 ALF 173.62
     BDE .2853 BRA 1.5993 BC3 .9785 FSP
                                                                                                                                    ARRIVAL DATE APR 8 1966
                                                                          FLIGHT TIME 100.00
 LAUNCH DATE DEC 29 1965
                                                                          DISTANCE 303.217
                         .00 LOL 97.07 VL 28.905 GAL -11.99 AZL 88.51 MCA 144.52 SMA 136.99 ECC .21990 INC 1.4929 V1 30.284 .87 LOP 241.60 VP 38.449 GAP 4.15 AZP 91.22 TAL 238.82 TAP 23.34 RCA 106.86 APO 167.11 V2 34.939 6.68 GP 18.05 ZAL 160.16 ZAP 124.96 ETS 10.39 ZAE 141.46 ETE 160.61 ZAC 28.20 ETC 180.70 CLP-127.07
    HELIOCENTRIC CONIC
     RL 147.11 LAL
     20
         108.46 LAP
     RC 103.862 GL
    PLANETOCENTRIC CONIC
     C3 40.106 VHL 6.333 DLA -14.42 RAL 296.51 RAD 6568.5 VEL 12.707 PTH 2.31 VHP 4.463 DPA -5.39 RAP 294.40 ECC 1.6600
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                               167.32
                                                                                               116.03
                                                                                                              3 4 52
                                                    -11.56
                                                                  23.74
                                   1921.85
                      2 32 50
         90.00
                                                                                                                                                            245.95
                                                                                                                              4896.3
                                                                                                                                              27.88
                                                                                                 89.10
                                                                                                          12 15 4
                                                                                176.11
                                   5496.25
                                                                  254.59
                    10 43 28
                                                    28.30
         90.00
                                                                                                 358.78
                                                                                                                              1084.3
                                                                                                                                              -9.18
                                                                                                117.19
                                                    -12.93
                                                                    5.57
                                                                                166.62
                                   1684.27
                      3 46 28
        100.00
                                                                                                                              4609.1
                                                                                                                                              29.25
                                                                                                                                                           224.67
                                                                                176.06
                     12 12 31 5209.06
                                                                  233.43
                                                    29.84
        100.00
                                                                                                120.38
                                                                                                                               924.5
                                                                                                                                             -12.33
                                                                                                                                                            344.79
                                 1524.54
4941.56
                                                    -16.49
                                                                  351.43
                                                                                164.60
                      4 37 28
        110.00
                                                                                                                             4341.6
                                                                                                                                              32.86
                                                                                                                                                           203.75
                                                                                175.79
                                                                  212.83
                     13 38 0
                                                    33.89
                                                                                                                         ORBIT DETERMINATION ACCURACY
        110.00
                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 464.5 SR 236.7 SS 133.7

CRT - .0949 CRS .3408 CST - .9546

LSA 482.8 MSA 236.9 SSA 20.5

EL1 465.3 EL2 235.2 ALF 176.28
                                                                      SGT 2013.8 SGR 449.8 SG3 266.6
RRT -.7999 RRF -.8528 RTF .8823
      TDE -.0847 TRA-1.6288 TC3-1.0398 BAU .5749
      ROE -. 2527 RRA . 2154 RC3 . 2614 FAU . 10524
                                                                     SGB 2063.5 R23 .2241 R13 -.8879
SG1 2046.3 SG2 265.7 THA 169.69
     FOE .0335 FRA-1.1931 FC3-2.2718 BSP 6123
BOE .2665 BRA 1.6430 BC3 1.0722 FSP -859
```

ARRIVAL DATE APR 10 1966

LAUNCH DATE DEC 29 1965

```
DISTANCE 309.232
  HELIOCENTRIC CONIC
                        .00 LOL 97.07 VL 28.831 GAL -11.78 AZL 88.72 MCA 147.71 SMA 136.39 ECC .21811 INC 1.2778 V1 30.284 .68 LOP 244.79 VP 38.383 GAP 4.45 AZP 91.08 TAL 237.57 TAP 25.27 RCA 106.64 APO 166.14 V2 34.926
   RL 147.11 LAL
RP 108.50 LAP
                        5.80 CP 19.17 ZAL 159.69 ZAP 127.19 ETS 12.52 ZAE 139.66 ETE 160.05 ZAC 28.72 ETC 182.57 CLP-129.79
   RC 106.225 GL
  PLANETOCENTRIC CONIC
    C3 38.754 VHL 6.225 DLA -15.14 RAL 297.45 RAD 6568.5 VEL 12.654 PTH 2.30 VMP 4.564 DPA -4.22 RAP 294.70 ECC 1.6378
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   Z 43 10 1887.49
10 40 39 5513.29
                                                                                      116.44
                                               -10.53
                                                             21.74
                                                                         167.77
                                                                                                    3 14 37
                                                                                                                   1287.5
                                                                                                                                  -6.89
                                                                                                                                                 14.95
       90.00
                                                                                          89.72 12 12 32
                                                                                                                    4913.3
                                                                                                                                    27.98
                                                                                                                                                247.19
                                               28.32
                                                            255.84
                                                                          176.72
                  10 40 39
       90.00
                 3 56 16 1651.61
12 10 13 5224.40
                                               -11.91
                                                              3.68
                                                                          167.06
                                                                                        117.62
                                                                                                    4 23 48
                                                                                                                    1051.6
                                                                                                                                    -8.12
                                                                                                                                                356.94
      100.00
                                                                                        117.62 4 23 46

88.67 13 37 18

120.87 5 11 5

85.79 14 59 23
                                                                                                                    4524.4
                                                                                                                                  29.36
                                                                                                                                                224.80
                                                            234.57
                                                                          176.69
                                              29.87
      100.00
                                                                                                                     895.4
                                                                                                                                  -11.27
                                                                                                                                                343.19
                 4 46 9 1495.35
13 36 50 4953.42
                                              -15.48
                                                            349.77
                                                                          165.00
      110.00
                                                                        176.46
                                                            213.75
                                                                                                                   4353.4
                                                                                                                                  33.00
                                                                                                                                                204.65
                                              33.95
      110.00
                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 2127.7 SGR 454.6 SG3 256.9
RRT -.8171 RRF -.8777 RTF .8822
                                                                                                               ST 491.0 SR 215.4 SS 126.9

CRT -.0539 CRS .2399 CST -.9676

LSA 506.4 MSA 216.1 SSA 20.7
    TOE -.1213 TRA-1.6649 TC3-1.1344 BAU .6058
   ROE -.2246 RRA .2080 RC3 .2835 FAU .10022
FOE -.0144 FRA-1.0854 FC3-2.2389 BSP 6494
BOE .2553 BRA 1.6778 BC3 1.1693 FSP -825
                                                                SGB 2175.8 R23 .2534 R13 -.8878
SG1 2160.4 SG2 258.1 THA 169.95
                                                                                                                 EL1 491.1 EL2 215.0 ALF 178.32
                                                                                                                           ARRIVAL DATE APR 12 1966
                                                                    FLIGHT TIME 104.00
LAUNCH DATE DEC 29 1965
                                                                    DISTANCE 315.225
  HELIOCENTRIC CONIC
                        .00 LOL 97.07 VL 28.757 GAL -11.56 A7L 88.98 HCA 150.89 SMA 135.79 ECC .21639 INC 1.0214 V1 30.284 .50 LOP 247.97 VP 38.316 GAP 4.74 A7P 90.89 TAL 236.27 TAP 27.16 RCA 106.41 APO 165.18 V2 34.914 4.71 GP 20.56 ZAL 159.18 ZAP 129.11 ETS 14.98 ZAE 137.91 ETE 159.24 ZAC 29.46 ETC 184.71 CLP-132.36
   RL 147.11 LAL
   Q P
       108.54 LAP
   RC 108.588 GL
  PLANETOCENTRIC CONIC
                                                                                            2.29 VHP 4.678 DPA -2.77 RAP 295.10 ECC 1.6156
   C3 37.408 VHL 6.116 DLA -16.07 RAL 298.49 RAD 6568.5 VEL 12.601 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 55 54 1845.15 -9.23 19.30 168.35 116.89 3 26 39 1245.2 -5.55 12.56
                                                                                          90.62
                                                                                                    12 8 27
                                                                                                                     4937.8
                                                                                                                                    28.10
                                                                                                                                                 248.97
       90.00
                  10 36 9
                               5537.75
                                               28.31
                                                            257.63
                                                                          177.49
                 10 36 9 5537.75
4 8 17 1611.58
12 6 27 5246.57
4 56 41 1459.96
                                                                                         118.10 4 35 9
89.54 13 33 54
                                                                                                                     1011.6
                                                                                                                                    -6.79
                                                                                                                                                354.71
                                               -10.63
                                                              1.39
                                                                          167.61
      100.00
      100.00
                                                                          177.49
                                                                                                                     4646.6
                                                                                                                                    29.50
                                                                                                                                                227.43
                                               29.89
                                                            236.21
                                                                                         121.41 5 21 1
86.59 14 57 24
                                                                                                                     860.0
                                                                                                                                   -9.97
                                                                                                                                                 341.28
      110.00
                                               -14.23
                                                            347.79
                                                                        165.50
                 13 34 33
                                4970.94
                                               34.03
                                                            215.12
                                                                          177.32
                                                                                                                     4370.9
                                                                                                                                   33.19
                                                                                                                                                 205.98
      110.00
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                SGT 2243.1 SGR 462.9 SG3 247.3
RRT -.8324 RRF -.9018 RTF .8821
                                                                                                                 5T 522.2 SR 191.2 SS 123.6

CRT -.0040 CRS .0891 CST -.9808

LSA 536.2 MSA 191.4 SSA 21.1
    TOE -.1706 TRA-1.6930 TC3-1.2350 BAU .6367
    RDE -.1939 RRA .1997 RC3 .3095 FAU .09525
   FDE -.0732 FRA -.9809 FC3-2.2043 BSP 6896
BDE .2583 BRA 1.7047 BC3 1.2732 FSP -797
                                                                SGB 2290.4 R23 .2853 R13 -.8878
                                                                SG1 2276.4 SG2 252.8 THA 170.13
                                                                                                                 EL1 522.2 EL2 191.2 ALF 179.90
                                                                                                                           ARRIVAL DATE APR 14 1956
                                                                    FLIGHT TIME 106.00
LAUNCH DATE DEC 29 1965
                                                                   DISTANCE 321.196
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 28.682 GAL -11.34 A7L 89.29 HCA 154.07 SHA 135.20 ECC .21472 INC .7083 V1 30.284 RP 108.58 LAP .31 LOP 251.15 VP 38.250 GAP 5.01 A7P 90.64 TAL 234.94 TAP 29.01 RCA 106.17 APO 164.23 V2 34.903
                       3.32 GP 22.29 TAL 158.60 TAP 130.68 ETS 17.86 TAE 136.13 ETE 158.15 TAC 30.41 ETC 187.25 CLP-134.79
   PLANETOCENTRIC CONIC
    C3 36.078 VHL 6.006 DLA -17.27 RAL 299.64 RAD 6568.4 VEL 12.548 PTH 2.27 VHP 4.808 DPA
                                                                                                                         -.97 RAP 295.56 ECC 1.5938
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 3 12 9 1791.27
10 29 6 5573.34
4 23 31 1560.95
12 0 24 5278.89
                                                                        169.13
                                                                                      117.37
                                                                                          117.37 3 42 0
91.92 12 1 59
                                                                                                                    1191.3
                                                                                                                                   -3.83
                                                -7.56
                                                             16.23
                                                                                                                                                251.57
                                                                                                                     4973.3
                                                                                                                                    28.23
        90.00
                                                28.26
                                                            260.23
                                                                          174.47
                                                                                                     4 49 32
                                                                                                                     961.0
                                                                                                                                    -5.10
                                                                                                                                                 351.90
                                                -8.99
                                                            358.53
                                                                          168.35
                                                                                         118.63
                                                                                          90.80 13 28 23
                                                                                                                     4678.9
                                                                                                                                   29.67
                                                                                                                                                 229.82
                  12 0 24
                                              29.88
                                                            238.62
                                                                          178.51
      100.00
                                                                                                                                    -8.33
                                                                                                                                                 338.91
                   5 9 51 1415.84
13 30 35 4996.77
                                                                                         122.02 5 33 26
87.78 14 53 51
                                                                                                                     815.8
                                              -12.65
                                                             345.34
                                                                          166.18
                                                                                                                     4396.8
                                                                                                                                   33.44
                                               34.12
                                                            217.13
                                                                          178.45
      110.00
                  13 30 35
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 5T 560.6 SR 164.1 SS 125.3
CRT .0515 CRS -.0885 CST -.9835
                                                                SCT 2356.1 SCR 474.3 SC3 236.3
RRT -.8434 RRF -.9239 RTF .8813
SCB 2403.3 R23 .3202 R13 -.8872
    TOE -.2338 TRA-1.7086 TC3-1.3392 BAU .6663
    RDE -.1610 RRA .1886 RC3 .3390 FAU .08983
                                                                                                                 LSA 574.1 MSA 163.9 SSA 21.7
    FOE -.1369 FRA -.8697 FC3-2.1556 BSP 7263
BOE .2839 BRA 1.7190 BC3 1.3815 FSP -759
                                                                SG1 2390.2 SG2 251.2 THA 170.26
                                                                                                                 EL1 560.7 EL2 163.9 ALF
                                                                                                                           ARRIVAL DATE APR 16 1966
                                                                    FLIGHT TIME 108.00
LAUNCH DATE DEC 29 1965
                                                                    DISTANCE 327.147
  HELIOCENTRIC CONIC
                        .00 LOL 97.07 VL 28.606 GAL -11.11 AZL 89.69 HCA 157.25 SMA 134.60 ECC .21312 INC .3136 V1 30.284
.12 LOP 254.32 VP 38.183 GAP 5.27 AZP 90.29 TAL 233.56 TAP 30.81 RCA 105.92 APO 163.29 V2 34.892
1.50 GP 24.48 ZAL 157.89 ZAP 131.82 ETS 21.27 ZAE 134.26 ETE 156.71 ZAC 31.62 ETC 190.20 CLP-137.11
    RL 147.11 LAL
    RP 108.61 LAP
    RC 113.313 GL
   PLANETOCENTRIC CONIC
                                                                                            2.26 VHP 4.964 DPA
                                                                                                                         1.32 RAP 296.04 ECC 1.5726
    C3 34.791 VHL 5.898 DLA -18.87 RAL 300.95 RAD 6568.4 VEL 12.496 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1119.7
                                                                                                                                                   5.53
                                                                         170.23
                                                                                        117.86
                                                                                                     4 2 32
                                                                                                                                    -1.53
       90.00
                   3 33 53 1719.73
                                                -5.30
                                                             12.19
                                                                                                                                                 255.46
                                                                                                    11 51 36
                                                                                                                     5026.5
                                                                                                                                    28.31
                  10 17 50 5626.54
4 43 42 1494.41
                                                28.07
                                                             264.11
                                                                           179.74
                                                                                           93.86
       90.00
                                                                                                                                                 348.23
                                                             354.80
                                                                           169.41
                                                                                          119.18
                                                                                                                      894.4
                                                                                                                                    -2.86
      100.00
                                                -6.80
                  11 50 41 5327.09
5 26 57 1358.90
13 23 56 5035.36
                                                                                                                     4727.1
                                                                                                                                    29.84
                                                                                                                                                 233.39
                                                             242.20
                                                                          179.86
                                                                                          92.68
                                                                                                    13 19 28
                                                29.78
      100.00
                                                                                          122.70
                                                                                                    5 49 36
                                                                                                                      758.9
                                                                                                                                                 335.89
      110.00
                                               -10.58
                                                             342.24
                                                                          167.12
                                                                                          89.56
                                                                                                    14 47 51
                                                                                                                     4435.4
                                                                                                                                    33.74
                                                                                                                                                 210.93
                                                                           179.96
                                                             220.14
      110.00
                                               34.18
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                              ST 613.7 SR 132.1 SS 138.3
CRT .1003 CRS -.2714 CST -.9699
                                                                 SGT 2470.0 SGR 491.2 SG3 224.6
RRT -.8508 RRF -.9437 RTF .8808
    TOE -.3196 TRA-1.7108 TC3-1.4486 BAU .6959
    ROE -.1234 RRA .1750 RC3 .3740 FAU .08419
FOE -.2159 FRA -.7585 FC3-2.0950 BSP 7654
BOE .3426 BRA 1.7197 BC3 1.4961 FSP -724
                                                                 SGB 2518.4 R23 .3545 R13 -.8871
                                                                                                                 LSA 628.4 MSA 133.4 SSA 22.6
                                                                SG1 2505.5 SG2 254.5 THA 170.30
                                                                                                               EL1 613.8 EL2 131.4 ALF 1.30
```

FLIGHT TIME 102.00

.

```
ARRIVAL DATE APR 18 1966
                                                                             FLIGHT TIME 110.00
LAUNCH DATE DEC 29 1965
                                                                             DISTANCE 333.079
  HELIOCENTRIC CONIC
                          .00 LOL 97.07 VL 28.530 GAL -10.87 A7L 90.20 HCA 160.42 SMA 134.01 ECC .21160 INC .1958 VI 30.284 -.07 LOP 257.50 VP 38.116 GAP 5.52 A7P 89.81 TAL 232.16 TAP 32.58 RCA 105.66 APO 162.37 V2 34.881 -.96 GP 27.34 ZAL 156.97 ZAP 132.38 ETS 25.36 ZAE 132.16 ETE 154.86 ZAC 35.16 ETC 193.79 CLP-139.36
    RL 147.11 LAL
    RP 108.64 LAP
    RC 115.673 GL
   PLANETOCENTRIC CONIC
    C3 33.601 VHL 5.797 OLA -21.07 RAL 302.49 RAD 6568.3 VEL 12.449 PTH 2.25 VHP 5.159 OPA
                                                                                                                                         A.26 RAP 296.46 FCC 1.5530
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT'INJ Z LONG
                   4 5 6 1618.39
9 58 56 5710.31
5 12 14 1401.73
11 34 29 5402.20
5 50 27 1281.91
13 12 44 5094.79
                                                                                                                                  1018.4
        90.00
                                                       -2.05
                                                                      6.51
                                                                                   171.96
                                                                                                   118.25
                                                                                                                  4 32 4
                                                                                                                                                       1.74
                                                                                                                                                                    359.88
                                                                                                                11 34 6
                                                       27.54
                                                                     270.18
                                                                                     181.43
                                                                                                      96.86
                                                                                                                                     5110.3
                                                                                                                                                      28.20
                                                                                                                                                                     261.58
       100.00
                                                       -3.70
                                                                     349.67
                                                                                     171.04
                                                                                                      119.68
                                                                                                                  5 35 35
                                                                                                                                      801.7
                                                                                                                                                        .28
                                                                                                                                                                     343.14
                                                                                                     95.58 13 4 31
123.40 6 11 49
92.31 14 37 39
                                                       29.41
                                                                     247.75
                                                                                     181.66
                                                                                                                                    4802.2
                                                                                                                                                      29.88
                                                                                                                                                                     238.97
       100.00
                                                       -7.72
                                                                     338.11
                                                                                    168.57
                                                                                                                                     681.9
                                                                                                                                                      -3.27
                                                                                                                                                                    331.85
       110.00
                                                                                    182.04
                                                                                                                                    4494.8
                                                                                                                                                     34.06
                                                                                                                                                                    215.54
       110.00
                                                       34.11
                                                                     224.78
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SCT 2584.5 SCR 514.5 SC3 211.3
RRT -.8530 RRF -.9604 RTF .8807
SCB 2635.2 R23 .3855 R13 -.8875
                                                                                                                               ST 693.1 SR 93.6 SS 167.5
CRT .0937 CRS -.3629 CST -.9481
    TOE -.4384 TRA-1.6937 TC3-1.5605 BAU .7253
    RDE -.0787 RRA .1570 RC3 .4146 FAU .07796
                                                                                                                                LSA 711.2 MSA 103.9 SSA 23.3
    FDE - .3112 FRA - .6418 FC3-2.0087 BSP 8060
                                                                         5G1 2621.9 SG2 264.7 THA 170.26
                                                                                                                                 EL1 693.1 EL2 93.1 ALF
                                                                                                                                                                          .74
    BDE .4454 BRA 1.7010 BC3 1.6147 FSP
                                                           -685
                                                                              FLIGHT TIME 112.00
                                                                                                                                             ARRIVAL CATE APR 20 1966
LAUNCH DATE DEC 29 1965
  HELIOCENTRIC CONIC
                                                                             DISTANCE 338.993
    RL 147.11 LAL .00 LOL 97.07 VL 28.454 GAL -10.65 AZL 90.90 HCA 163.59 SMA 133.43 ECC .21014 INC .9001 V1 30.284 RP 108.68 LAP -.25 LOP 260.67 VP 38.050 GAP 5.76 AZP 89.14 TAL 230.72 TAP 34.51 RCA 105.39 APO 161.47 V2 34.870 RC 118.029 GL -4.41 GP 31.14 ZAL 155.57 ZAP 132.13 ETS 30.28 ZAE 129.62 ETE 152.53 ZAC 35.16 ETC 198.20 CLP-141.60
  PLANETOCENTRIC CONIC
   PLANETOCENTRIC CONIC
C3 32.635 VHL 5.713 DLA -24.21 RAL 304.41 RAD 6568.3 VEL 12.410 PTH 2.24 VHP 5.424 DPA 8.15 RAP 296.69 ECC 1.5371
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 4 56 20 1455.93 3.19 357.44 175.06 118.15 5 20 36 855.9 6.93 350.76
90.00 9 22 59 5858.06 25.90 280.68 183.53 101.87 11 0 37 5258.1 27.28 272.28
100.00 5 57 19 1259.05 1.13 341.84 173.92 119.87 6 18 18 659.1 5.10 355.30
100.00 11 4 41 5530.16 28.20 257.06 184.04 100.34 12 36 51 4930.2 29.34 248.44
110.00 6 25 38 1170.24 -3.49 332.23 171.03 124.03 6 45 8 570.2 1.00 326.02
110.00 12 52 51 5191.74 33.59 232.30 184.98 96.73 14 19 23 4591.7 34.16 223.10
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 818.9 SR 51.5 55 216.8
CRT -.2428 CRS -.0648 CST -.9380
                                                                         SCT 2696.4 SCR 544.0 SC3 194.7

RRT -.8478 RRF -.9730 RTF .8808

SCB 2750.8 R23 .4106 R13 -.8884
    TOE -.6083 TRA-1.6466 TC3-1.6651 BAU .7536
    RDE -.0231 RRA .1309 RC3 .4587 FAU .07059
FDE -.4246 FRA -.5130 FC3-1.8725 BSP 8429
BOE .6088 BRA 1.6518 BC3 1.7272 FSP -630
                                                                                                                                 LSA 844.1 MSA 86.0 55A
                                                                                                                                                                         20.9
                                                                         SG1 2736.0 SGZ 284.3 THA 170.19
                                                                                                                                EL1 819.0 EL2 49.9 ALF 179.12
                                                                                                                                            ARRIVAL DATE APR 22 1966
                                                                             FLIGHT TIME 114.00
LAUNCH DATE DEC 29 1965
                                                                             DISTANCE 344.887
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 28.378 GAL -10.38 AZL 91.93 MCA 166.76 SMA 132.85 ECC .20875 INC 1.9273 V1 30.284
RP 108.71 LAP -.44 LOP 263.84 VP 37.984 GAP 5.99 AZP 88.12 TAL 229.25 TAP 36.01 RCA 105.12 APO 160.59 V2 34.860
RC 120.382 GL -9.52 GP 36.36 ZAL 153.15 ZAP 130.64 ETS 36.21 ZAE 126.25 ETE 149.70 ZAC 37.89 ETC 203.70 CLP-143.97
   PLANETOCENTRIC CONIC
    C3 32.226 VHL 5.677 OLA -28.91 RAL 307.01 RAO 6568.3 VEL 12.393 PTH 2.24 VHP 5.822 DPA 13.40 RAP 296.53 ECC 1.5304
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                6 49 7
8 24 36
                                                                                                                                                      20.02
                                                                                  183.50
                                                                                                   113.77
                                                                                                                                                                  336.32
                                                                                                                                      573.1
        83.93
                   6 29 34 1173.08
8 10 29 846.53
                                                      16.95
                                                                     343.69
                                                                                                                                      246.5
                                                                                                                                                                     312.39
                                                                                                     113.76
                                                                                                                                                      20.03
                                                                                    183.50
        96.07
                                                       16.96
                                                                     319.77
                                                                                                                                      354.3
                                                                                                                                                                     317.97
                                                                                                     117.88
                                                                                                                   7 52 53
                                                                                                                                                      14.88
       100.00
                     7 36 59
                                    954.33
                                                       11.24
                                                                     324.86
                                                                                    180.65
                                                                                                     109.81 11 22 54
                                                                                                                                                      25.34
                                                                                                                                                                    269.66
       100.00
                     9 45 46 5828.55
                                                      22.85
                                                                     277.57
                                                                                    186.01
                                                                                                                                     5228.6
                                                                                                                                                       8.06
       110.00
                                                                                                                   7 43 59
                                                                                                                                      383.9
                                                                                                                                                                    316.22
                     7 27 35
                                      983.91
                                                        3.62
                                                                     322.50
                                                                                    176.05
                                                                                                     124.01
                                                                                                                13 41 11
                                                                                                     104.43
                                                                                                                                     4771.7
                                                                                                                                                     32.99
                                                                                                                                                                    237.01
       110.00
                    12 11 39
                                    5371.74
                                                       31.33
                                                                     245.84
                                                                                    188.94
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                         SCT 2813.2 SGR 581.9 SC3 174.3
RRT -.8348 RRF -.9805 RTF .8836
SGB 2872.8 R23 .4239 R13 -.8919
                                                                                                                                ST 1034.9 SR 65.9 SS 297.5
CRT -.9788 CRS .9427 CST -.9471
    TOE -.8740 TRA-1.5553 TC3-1.7440 BAU .7818
    RDE .0546 RRA .0921 RC3 .5016 FAU .06179
FDE -.5690 FRA -.3752 FC3-1.6599 BSP 8859
BDE .8757 BRA 1.5581 BC3 1.8147 FSP --569
                                                                                                                                LSA 1074.8 MSA 92.1 55A 13.1
                                                                         5G1 2855.4 SG2 315.6 THA 170.08
                                                                                                                                 EL1 1036.9 EL2 13.5 ALF 176.43
                                                                                                                                            ARRIVAL DATE APR 24 1966
                                                                             FLIGHT TIME 116.00
LAUNCH DATE DEC 29 1965
  HELIOCENTRIC CONIC
                                                                             DISTANCE 350.759
    RL 147.11 LAL .00 LOL 97.07 VL 28.302 GAL -10.12 A7L 93.58 MCA 169.92 SMA 132.28 ECC .20743 INC 3.5826 VI 30.284
RP 108.74 LAP -.63 LOP 267.01 VP 37.918 GAP 6.21 A7P 86.47 TAL 227.74 TAP 37.66 RCA 104.84 APO 159.72 V2 34.851
RC 122.731 GL -17.53 GP 43.75 TAL 148.42 TAP 127.20 ETS 43.35 TAE 121.35 ETE 146.55 TAC 41.85 ETC 210.72 CLP-146.82
  PLANETOCENTRIC CONIC
                                                                                                         2.25 VHP 6.514 DPA 20.74 RAP 295.48 ECC 1.5500
    C3 33.422 VHL 5.781 DLA -36.28 RAL 311.11 RAD 6568.3 VEL 12.442 PTH
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                       958.4
                                                                                   190.30
                                                                                                     120.55
                                                                                                                    5 11 41
        66.31
                      4 45 43 1558.39
                                                       20.59
                                                                     14.93
                                                                                                     120.54 12 3 10
120.55 5 11 41
                                                                                     190.31
                                                                                                                                     5167.6
                                                                                                                                                      24.50
                    10 27 2 5767.61
4 45 43 1558.39
                                                       20.60
                                                                     271.79
       113.69
                                                                      14.93
                                                                                    190.30
                                                                                                                                      958.4
                                                                                                                                                      24.48
                                                                                                                                                                       7.78
        66.31
                                                       20.59
                                                                                                     120.54 12 3 10
120.55 5 11 41
120.54 12 3 10
                   10 27 2 5767.61
4 45 43 1558.39
10 27 2 5767.61
                                                                                                                                     5167.6
                                                                                                                                                      24.50
                                                                                                                                                                     264.63
                                                       20.60
                                                                                    190.31
       113.69
                                                                     271.79
                                                                                                                                                    24.50
24.48
                                                                                   190.30
                                                                                                                                      958.4
        66.31
                                                       20.59
                                                                      14.93
                                                                                                                                     5167.6
                                                                                                                                                      24.50
                                                                                     190.31
                                                       20.60
                                                                     271.79
       113.69
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 2931.3 SGR 620.7 SG3 147.2
RRT -.8066 RRF -.9787 RTF .8911
                                                                                                                               ST 1415.9 SR 171.1 55 418.9
CRT -.9500 CRS .9976 CST -.9669
    TDE-1.3325 TRA-1.3753 TC3-1.7275 BAU .8055
    ROE .1715 RRA .0251 RC3 .5156 FAU .05048
    FDE -.7452 FRA -.2195 FC3-1.3077 BSP 9282
BDE 1.3435 BRA 1.3756 BC3 1.8028 FSP -484
                                                                         SGB 2996.2 R23 .4209 R13 -.9002
                                                                                                                                LSA 1482.1 MSA 114.0 SSA
                                                                                                                            ELI 1425.2 EL2 53.1 ALF 173.44
                                                                       SG1 2974.3 SG2 361.6 THA 170.16
```

ARRIVAL DATE APR 26 1966

LAUNCH DATE DEC 29 1965

DISTANCE 356.603 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 28.227 GAL -9.85 AZL 96.72 HCA 173.06 SHA 131.72 ECC .20615 INC 6.7179 V1 30.284 RP 108.76 LAP -.81 LOP 270.18 VP 37.854 GAP 6.42 AZP 83.33 TAL 226.21 TAP 39.26 RCA 104.57 APO 158.87 V2 34.842 RC 125.075 GL -30.73 GP 54.55 TAL 138.67 ZAP 120.67 ETS 52.29 ZAE 113.57 ETE 144.26 ZAC 47.89 ETC 220.17 CLP-151.57 PLANETOCENTRIC CONIC C3 40.544 VHL 6.367 OLA -48.14 RAL 319.54 RAD 6568.6 VEL 12.724 PTH 2.31 VHP 7.992 OPA 31.19 RAP 292.26 ECC 1.6673
LNCH AZNATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 133.06 4 36 15 133.05 13 47 29 205.97 4 36 15 4 6 6 1808.77 24.03 39.48 255.02 5014.8 29.35 5614.82 24.04 261.31 205.99 130.71 12 13 54 1208.8 29.34 33.20 4 6 6 1808.77 12 13 54 5614.82 49.29 24.03 39.48 205.97 5014.8 29.35 255.02 5614.82 24.04 261.31 205.99 130.71 33.20 29.34 1208.8 4 6 6 1808.77 12 13 54 5614.82 24.03 39.48 205.97 49.29 5014.8 29.35 24.04 261.31 205.99 130.71 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2097.2 SR 304.3 SS 590.0 CRT -.9443 CRS .9866 CST -.9853 SCT 3050.4 SGR 625.2 SG3 111.8 RRT -.7285 RRF -.9420 RTF .9112 SGB 3113.8 R23 .3870 R13 -.9194 SG1 3084.9 SG2 423.5 THA 171.34 TOE-2.2878 TRA -.9805 TC3-1.4307 BAU .8074 ROE .3342 RRA -.1080 RC3 .4150 FAU .03569 FDE -.9490 FRA -.0392 FC3 -.7620 B9P 9642 BDE 2.3120 BRA .9864 BC3 1.4896 FSP -365 LSA 2195.5 HSA 136.4 SSA 2.4 EL1 2116.8 EL2 99.2 ALF 172.18 BDE 2.3120 BRA .9864 BC3 1.4896 FSP ARRIVAL DATE APR 28 1966 FLIGHT TIME 120.00 LAUNCH DATE DEC 29 1965 DISTANCE 362.379 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 28.151 GAL -9.56 AZL 104.89 MCA 176.14 SMA 131.17 ECC .20480 INC14.8909 V1 30.284
RP 108.79 LAP -.99 LOP 273.34 VP 37.790 GAP 6.60 AZP 75.14 TAL 224.62 TAP 40.76 RCA 104.30 APO 158.03 V2 34.834
RC 127.413 GL -51.00 GP 69.83 ZAL 120.28 ZAP 109.75 ETS 69.88 ZAE 100.01 ETE 151.47 ZAC 56.91 ETC 239.43 CLP-168.60 PLANETOCENTRIC CONIC C3 84.269 VHL 9.180 DLA -63.33 RAL 346.15 RAD 6569.7 VEL 14.339 PTH 2.61 VHP 12.428 DPA 43.48 RAP 281.65 ECC 2.3869 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1496.5 151.71 5 34 42 61.41 4 59 45 2096.46 18.73 65.19 246.34 16 27 19 5082.2 257.82 14 52 37 5682.19 18.74 261.60 246.35 151.71 149.35 1496.5 25.73 61.41 151.71 5 34 42 2096.46 18.73 65.19 246.34 30.65 4 59 45 257.82 151.71 16 27 19 5082.2 25.74 14 52 37 5682.19 18.74 261.60 246.35 149.35 1496.5 5 34 42 61.41 151.71 4 59 45 2096.46 18.73 65.19 246.34 5082.2 16 27 19 14 52 37 5682.19 18.74 261.60 246.35 151.71 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3176.6 SGR 462.9 SG3 72.5 RRT .1081 RRF -.1459 RTF .9672 ST 2970.1 SR 198.2 S5 773.0 CRT .7676 CRS -.7100 CST -.9963 TOE-4.7558 TRA .2360 TC3 -.5897 BAU .6714 ROE -.2504 RRA -.2918 RC3 .0864 FAU .01771 SCB 3210.1 R23 -.2542 R13 .9666 SG1 3177.0 SG2 460.2 THA .92 LSA 3072.1 MSA 142.8 SSA FDE-1.1452 FRA .2043 FC3 -.1820 BSP 9820 BDE 4.7624 BRA .3753 BC3 .5960 FSP -229 EL1 2974.0 EL2 126.9 ALF ARRIVAL DATE APR 30 1966 FLIGHT TIME 122.00 LAUNCH DATE DEC 29 1965 DISTANCE 367.619 HELTOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 28.076 GAL -9.15 A7L 154.16 HCA 178.70 SHA 130.62 ECC .20208 INC64.1591 V1 30.284 RP 108.81 LAP -1.17 LOP 276.51 VP 37.727 GAP 6.63 A7P 25.85 TAL 222.77 TAP 41.47 RCA 104.23 APO 157.02 V2 34.826 RC 129.747 GL -53.10 GP 58.95 TAL 98.15 TAP 96.00 ETS 166.15 TAE 64.18 ETE 239.48 TAC 66.13 ETC 343.86 CLP 101.70 PLANETOCENTRIC CONIC C3 973.230 VHL 31.197 DLA -49.55 RAL 23.15 RAD 6572.9 VEL 33.083 PTH 3.49 VMP 40.366 DPA 47.68 RAP 229.21 ECC17.0169 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 139.55 8 52 21 139.55 16 47 10 139.55 8 52 21 139.55 16 47 10 62.66 293.36 1715.4 5.82 57.87 - . 26 8 13 45 2315.43 47.47 293.37 203.9 5.84 298.86 303.65 132.53 16 33 46 803.86 - .24 293.36 1715.4 5.82 57.87 47.47 2315.43 62.66 8 13 45 - .26 203.9 5.84 298.86 293.37 132.53 303.65 16 33 46 803.86 - .24 139.55 V ACT 8 52 21 1715.4 5.82 57.87 8 13 45 2315.43 16 33 46 803.86 293.36 139.55 62.66 47.47 - . 26 16 47 10 203.9 5.84 298.86 293.37 303.65 - .24 132.53 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 707.8 SGR 2795.9 SG3 46.2 ST 631.5 SR 1620.6 55 1015.9 TOE 3.4365 TRA .2082 TC3 -.0505 BAU 2.3143 CRT -.9091 CRS -.9987 CST .8863 LSA 1996.9 MSA 263.7 SSA .5 RRT -.5820 RRF .9979 RTF -.5283 SGB 2884.2 R23 -.0954 R13 .9954 ROE-8.1199 RRA 7.4604 RC3 .1706 FAU-.03410 FDE-1.4254 FRA 1.5026 FC3 .0303 BSP 8841 BDE 8.8172 BRA 7.4633 BC3 .1779 FSP -149 EL1 1721.6 EL2 247.7 ALF 109.93 5G1 2827.4 SGZ 569.2 THA 98.74 ARRIVAL DATE MAY 2 1966 FLIGHT TIME 124.00 LAUNCH DATE DEC 29 1965 DISTANCE 374.520 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 28.002 GAL -9.10 A7L 62.64 HCA 182.92 SMA 130.09 ECC .20417 INC27.3610 V1 30.284 RP 108.84 LAP -1.34 LOP 279.67 VP 37.665 GAP 7.13 AZP 117.33 TAL 221.64 TAP 44.57 RCA 103.53 APO 156.65 V2 34.819 RC 132.074 GL 60.43 GP -73.26 ZAL 107.45 ZAP 106.52 ETS 248.60 ZAE 89.02 ETE 172.67 ZAC 87.55 ETC 83.16 CLP 170.85 PLANETOCENTRIC CONIC C3 213.488 VML 14.611 DLA 44.33 RAL 306.54 RAD 6571.2 VEL 18.298 PTH 3.03 VMP 16.006 DPA -81.94 RAP 111.95 ECC 4.5135 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 15 30 49 4758.95 23 1 37 3371.30 210.02 46.04 16 50 8 4159.0 -11.A7 214.09 -6.35 219.55 54.35 46.03 23 57 48 106.87 210.00 2771.3 -11.85 -6.34 112.32 125.65 46.04 16 50 8 46.03 23 57 48 46.04 16 50 8 46.03 23 57 48 214.09 210.02 4159.0 -11.87 -6.35 219.55 15 30 49 4758.95 54.35 106.87 -11.85 5371.30 210.00 2771.3 -6.34 112.32 125.65 23 1 37 214.09 4758.95 3371.30 210.02 4159.0 -11.87 15 30 49 -6.35 219.55 54.35 -11.85 106.87 2771.3 23 1 37 -6.34 112.32 210.00 125.65 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2134.3 SR 1515.2 53 820.5 CRT -.9880 CRS .9857 CST -.9999 LSA 2735.9 MSA 198.3 5SA 1.1 EL1 2610.5 EL2 191.4 ALF 144.74 SGT 2540.4 SGR 2264.2 SG3 60.1 RRT -.9534 RRF -.9381 RTF ..9983 SGB 3403.0 R23 -.1795 R13 -.9831 TOE 5.3326 TRA-2.5984 TC3 -.0782 BAU .2235 ROE-3.6208 RRA 3.2173 RC3 .0041 FAU .00803 FOE 1.8866 FRA -.6721 FC3 -.0326 BSP 10392 SG1 3363.6 SG2 516.0 THA 138.45 BDE 6.4457 BRA 4.1355 BC3 .0783 FSP -199

FIRST TIME 118.00

```
LAUNCH DATE DEC 29 1965
                                                                                FLIGHT TIME 126.00
                                                                                                                                                 ARRIVAL DATE MAY 4 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 380.213
          147.11 LAL .00 LOL 97.07 VL 27.928 GAL -8.78 A7L 75.25 MGA 185.96 SMA 129.56 ECC .20297 INC14.7482 V1 30.284 108.86 LAP -1.51 LOP 282.83 VP 37.604 GAP 7.28 A7P 104.67 TAL 219.97 TAP 45.92 RCA 103.27 APO 155.86 V2 34.812
     RL 147.11 LAL
     RC 134.395 GL 51.75 GP -56.59 7AL 118.11 ZAP 121.09 ETS 289.40 ZAE 106.33 ETE 206.35 ZAC 77.48 ETC 122.96 CLP-159.69
    PLANETOCENTRIC CONIC
     C3 80.052 VHL 8.947 OLA 33.65 RAL 303.26 RAD 6569.6 VEL 14.192 PTH 2.58 VHP 9.011 DPA -74.78 RAP 344.29 ECC 2.5175 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         58.29 17 51 59
58.29 22 23 30
58.29 17 51 59
58.29 17 51 59
58.29 22 23 30
59.89 25 12 40
56.44 21 46 6
                                                                        188.82
                                                                                      194.80
                                                                                                                                          3734.7
         71.01
                     16 39 44
                                     4334.67
                                                        -11.92
                                                                                                                                                        -16.02
                                                                                                                                                                          182.16
                    21 26 29
                                                                        120.75
                                                                                       194.78
                                                                                                                                          2820.6
                                                                                                                                                                          114.09
        108.99
                                     3420.64
                                                        -11.90
                                                                                                                                                          -16.01
                                                                                        194.80
                                                                                                                                          3734.7
         71.01
                     16 39 44
                                     4334.67
                                                        -11.92
                                                                        188.82
                                                                                                                                                         -16.02
                                                                                                                                                                          182.16
                    21 26 29 3420.64
                                                                                      194.78
                                                                       120.75
                                                                                                                                          2820.6
        108.99
                                                        -11.90
                                                                                                                                                         -16.01
                                                                                                                                                                          114.09
                     22 18 18 3262.15
20 47 5 3541.16
                                                        -17.00
                                                                        111.57
                                                                                       197.94
                                                                                                                                         2662.1
                                                                                                                                                         -20.87
                                                                                                                                                                          104.59
        110.00
                                                                                                                                                        -11.28
                                                                                                                                                                          120.51
        110.00
                                                         -6.91
                                                                        126.88
                                                                                        191.55
                                                                                                                                         2941.2
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            SGT 3494.2 SGR 475.6 SG3 97.9
RRT -.6233 RRF -.3377 RTF .9453
     TOE 3.2828 TRA-3.2921 TC3 -.6555 BAU .7021
                                                                                                                                     ST 2235.6 SR 149.9 SS 662.7
CRT -.0063 CRS -.1530 CST -.9672
    ROE .0781 RRA .6121 RC3 -.0246 FAU .02861
FOE 1.3059 FRA -.6850 FC3 -.3094 83P 10992
BOE 3.2838 BRA 3.3485 BC3 .6560 FSP -331
                                                                                                                                LSA 2329.6 MSA 180.9 SSA 2.4-
                                                                          SGB 3526.4 RZ3 -.3302 R13 -.9423
                                                                            SG1 3506.9 SG2 370.5 THA 175.10
                                                                                                                                     EL1 2235.6 EL2 149.9 ALF 179.98
                                                                                FLIGHT TIME 128.00
                                                                                                                                                 ARRIVAL DATE MAY 6 1966
LAUNCH DATE DEC 29 1965
   HELIOCENTRIC CONIC
                                                                                01STANCE 385.989
    RL 147.11 LAL .00 LOL 97.07 VL 27.855 GAL -8.47 AZL 79.30 MCA 189.08 SMA 129.05 ECC .20215 INC10.7013 V1 30.284
RP 108.87 LAP -1.68 LOP 286.00 VP 37.544 GAP 7.46 AZP 100.57 TAL 218.31 TAP 47.39 RCA 102.96 APO 155.14 V2 34.806
RC 136.709 GL 44.67 GP -43.46 ZAL 123.89 ZAP 131.67 ETS 299.59 ZAE 115.55 ETE 207.40 ZAC 70.46 ETC 133.01 CLP-156.33
   PLANETOCENTRIC CONIC
    C3 52.958 VHL 7.277 DLA 26.52 RAL 304.50 RAD 6568.9 VEL 13.203 PTH
                                                     RAL 304.50 RAO 6568.9 VEL 13.203 PTH 2.41 VMP 7.176 DPA -61.62 RAP 332.92 ECC 1.8715 INJ LAT INJ LONG INJ RT ASC INJ A7MIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -20.76 130.18 191.98 70.30 21 34 41 2888.7 -23.26 122.40 -4.19 164.65 184.51 61.97 18 47 22 368.8 -7.90 157.94 -24.09 104.94 193.22 71.74 25 20 19 2528.8 -26.36 96.87 -1.10 150.84 182.80 60.15 19 35 40 3303.9 -5.07 144.30 -30.88 78.77 195.54 74.54 1 17 33 2153.7 -32.68 70.02 4.92 143.15 179.06 56.13 19 51 24 3251.8 .44 136.93
                                                                                                             2.41 VMP 7.176 DPA -61.62 RAP 332.92 ECC 1.8715
    UNCH AZMTH LNCH TIME L-1 TIME
90.00 20 36 32 3488.69
         90.00
                      17 39 33
                                      4068.78
        100.00
                    22 28 10
                                     3128.79
        100.00
                    18 30 36
                                     3903.92
                     0 31 59 2753.67
18 47 12 3851.80
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            SCT 3598.7 SCR 320.8 SC3 131.0
RRT -.0781 RRF .3225 RTF .9134
                                                                                                                                     ST 1990.8 SR 202.5 SS 627.9
CRT .7241 CR5 -.8628 CST -.9734
     TOE 2.3236 TRA-2.9684 TC3-1.1459 BAU .8129
     ROE .2410 RRA .2677 RC3 -.0733 FAU .04132
     FOE 1.2663 FRA -.6621 FC3 -.6755 BSP 11283
                                                                            SGB 3612.9 R23 -.3956 R13 -.9132
                                                                                                                                     LSA 2088.3 MSA 193.6 SSA 2.4
                                                                            SG1 3598.7 SG2 319.8 THA 179.60
     BOE 2.3361 BRA 2.9805 BC3 1.1482 FSP -438
                                                                                                                                   EL1 1996.2 EL2 139.3 ALF 4.23
                                                                                FLIGHT TIME 130.00
                                                                                                                                                ARRIVAL DATE MAY 8 1966
LAUNCH DATE DEC 29 1965
                                                                                DISTANCE 391.777
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 27.782 GAL -8.16 A7L 81.28 MCA 192.22 SMA 128.54 ECC .20150 INC 8.7198 V1 30.284
RP 108.89 LAP -1.84 LOP 289.16 VP 37.485 GAP 7.63 A7P 98.52 TAL 216.64 TAP 48.86 RCA 102.64 APO 154.45 V2 34.801
RC 139.015 GL 39.92 GP -34.46 ZAL 126.88 ZAP 138.90 ETS 305.77 ZAE 120.80 ETE 204.65 ZAC 66.52 ETC 139.12 CLP-156.07
   PLANETOCENTRIC CONIC
     C3 42.203 VHL 6.496 DLA 22.04 RAL 306.22 RAD 6568.6 VEL 12.789 PTH 2.33 VHP 6.488 DPA -52.36 RAP 330.20 ECC 1.6946
    LNCH A7NTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7NTH INJ TIME PO CST TIM INJ 2 LAT INJ LONG 90.00 21 59 40 3167.85 -26.50 108.48 189.78 79.65 22 52 28 2367.8 -27.66 100.01 16 30 9 4275.98 2.49 176.22 179.55 61.78 17 41 25 3676.0 -1.30 169.59 100.00 23 36 43 2854.94 -28.57 85.86 190.18 80.79 24 24 18 2254.9 -29.54 77.19 100.00 17 35 48 4064.12 4.32 159.64 178.53 60.39 18 43 32 3464.1 .35 153.10 110.00 1 21 31 2431.37 -33.66 62.71 100.00 83.46 2 3.46 1 2431.37 -33.66 62.71
        110.00
                     1 21 31
18 11 25
                                                                                                          83.65 2 3 50
56.81 19 17 18
                                     2539.37
                                                       -33.66
                                                                         62.71
                                                                                       190.99
                                                                                                                                         1939.4
                                                                                                                                                         -34.17
                                                                                                                                                                          53.50
                                                         8.71
                                                                       148.48
                                                                                       175.84
                                                                                                                                         3352.5
                                                                                                                                                          4.28
                                                                                                                                                                         142.19
        110.00
                                     3952.45
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
     TOE 1.8777 TRA-2.7648 TC3-1.5329 BAU .8659
                                                                            SGT 3691.8 SGR 276.3 SG3 152.2
                                                                                                                                    ST 1835.4 SR 201.9 SS 597.8 CRT .7636 CRS -.9129 CST -.9606
    ROE .2214 RRA .1799 RC3 -.0727 FAU .04845
FOE 1.1923 FRA -.6053 FC3 -.9939 BSP 11604
BOE 1.8907 BRA 2.7706 BC3 1.5346 FSP -506
                                                                           RRT .0600 RRF .4698 RTF .8959
SG8 3702.1 R23 .4164 R13 .8961
                                                                                                                                    LSA 1930.3 MSA 202.4 SSA 3.6
                                                                                                                    .26
                                                                           SG1 3691.8 SG2 275.8 THA
                                                                                                                                    ELI 1841.9 ELZ 129.9 ALF 4.83
                                                                                FLIGHT TIME 132.00
                                                                                                                                                ARRIVAL DATE MAY 10 1966
LAUNCH DATE DEC 29 1965
   HELIOCENTRIC CONIC
                                                                                DISTANCE 397.564
    RL 147.11 LAL .00 LOL 97.07 VL 27.710 GAL -7.85 AZL 82.46 MCA 195.37 SMA 128.05 ECC .20098 INC 7.5409 V1 30.284
RP 108.90 LAP -1.99 LOP 292.32 VP 37.428 GAP 7.81 AZP 97.27 TAL 214.95 TAP 50.33 RCA 102.31 APO 153.79 V2 34.797
RC 141.312 GL 36.67 GP -28.20 ZAL 128.30 ZAP 143.97 ETS 310.49 ZAE 123.90 ETE 201.57 ZAC 64.62 ETC 143.72 CLP-156.58
   PLANETOCENTRIC CONIC
    C3 36.385 VHL 6.032 DLA 19.16 RAL 308.00 RAD 6568.4 VEL 12.560 PTH 2.28 VMP 6.192 DPA -45.71 RAP 329.73 ECC 1.5988
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                        85.31 23 30 59
62.14 17 15 53
        90.00
                     22 40 53 3005.44
                                                       -27.96
                                                                        46.A3
                                                                                      187.78
                                                                                                                                       2405.4
                                                                                                                                                        -28.31
                                                                                                                                                                           86.16
                                                                                       178.04
                                                                                                                                         3763.5
                                                                                                                                                            1.52
                                                                                                                                                                          174.47
         90.00
                    16 3 9
                                     4363.46
                                                          5.29
                                                                        181.12
                      0 18 0 2705.00
                                                                                       187.92
                                                                                                          86.47
                                                                                                                       1 3 5
                                                                                                                                         2105.0
                                                                                                                                                                           66.07
       100.00
                                                       -29.70
                                                                         74.87
                                                                                                                                                          -29.88
                    17 12 40 4139.13
1 51 50 2411.41
                                                                                                          60.83 18 21 39
                                                                                                                                         3539.1
                                                                                                                                                                          157.22
       100.00
                                                         6.83
                                                                       163.79
                                                                                       177.20
                                                                                                                                                           2.89
                                                                                                          89.51 2 32 1
57.33 19 2 4
                                                                         52.76
       110.00
                                                       -34.18
                                                                                       188.11
                                                                                                                                         1811.4
                                                                                                                                                         -33.67
                                                                                                                                                                           43.52
                                                                                                                                         3405.5
                                                                       151.33
                                                                                       174.88
                                                                                                                                                            6.29
                                                                                                                                                                          144.98
       110.00
                     17 55 19
                                     4005.49
                                                        10.67
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 3787.4 SGR 244.5 SG3 164.4
RRT .0523 RRF .4563 RTF .8853
SGB 3795.3 R23 .4104 R13 .8854
     TOE 1.6268 TRA-2.6219 TC3-1.8545 BAU .9025
                                                                                                                                  ST 1737.2 SR 192.8 S5 570.9
CRT .7652 CRS -.9290 CST -.9489
    ROE .1978 RRA .1432 RC3 -.0510 FAU .05190
    FOE 1.1095 FRA -.5345 FC3-1.2349 BSP 11930
BDE 1.6388 BRA 2.6258 BC3 1.8552 FSP -545
                                                                                                                                   LSA 1826.8 MSA 209.1 SSA 4.8
EL1 1743.5 EL2 123.6 ALF 4.88
                                                                          SG1 3787.4 SG2 244.2 THA
```

.19

ARRIVAL CATE MAY 12 1966

LAUNCH DATE DEC 29 1965

```
DISTANCE 403.347
   HELIOCENTRIC CONIC
    RL 147.11 LAL ... .00 LOL 97.07 VL 27.639 GAL -7.53 AZL 83.24 MCA 198.53 SHA 127.57 ECC .20059 INC 6.7557 V1 30.284 RP 108.92 LAP -2.14 LOP 295.48 VP 37.372 GAP 7.96 AZP 96.41 TAL 213.25 TAP 51.78 RCA 101.98 APO 153.16 V2 34.793 RC 143.598 GL 34.36 GP -23.69 ZAL 128.76 ZAP 147.69 ETS 314.26 ZAE 125.79 ETE 198.85 ZAC 64.00 ETC 147.37 CLP-157.37
   PLANETOCENTRIC CONIC
    C3 32.622 WHL 5.712 DLA 17.28 RAL 309.79 RAD 6568.3 VEL 12.409 PTH 2.24 VMP 6.D64 OPA -40.73 RAP 330.22 ECC 1.5369
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 7 34 2904.22 -28.30 89.44 186.66 88.99 23 55 58 2304.2 -28.14 80.78
90.00 15 50 46 4409.57 6.75 183.72 177.74 62.43 17 4 16 3809.6 3.01 177.05
100.00 0 42 49 2609.75 -29.89 67.80 186.68 90.18 1 26 18 2009.7 -29.55 59.01
                                                                                                                                                3579.3
                                                                                                               61.14 18 11 48
93.38 2 51 47
57.66 18 55 41
                                                                                                                                                                    4.24
                     17 2 9 4179.28
2 13 0 2327.58
17 48 27 4034.21
                                                            8.15
                                                                           166.04
                                                                                            176.98
       100.00
                                                                                                                                                1727.6
                                                                                                                                                                  -33.19
                                                                                                                                                                                    37.08
                                                                                            186.52
                                                         -34.04
                                                                            46.22
       110.00
                                                                                                                                                3434.2
                                                                                                                                                                    7.37
                                                                                            174.83
                                                          11.72
                                                                           152.89
       110.00
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 1678.0 SR 188.4 55 550.5
CRT .7676 CRS -.9412 CST -.9386
                                                                               SGT 3880.0 SGR 225.7 SG3 170.5
RRT -.0008 RRF .3850 RTF .8776
SGB 3886.6 R23 -.3857 R13 -.8776
    TOE 1.4743 TRA-2.5045 TC3-2.1344 BAU .9309
    RDE .1839 RRA .1214 RC3 -.0223 FAU .05303
FDE 1.0365 FRA -.4571 FC3-1.4074 BSP 12189
BDE 1.4857 BRA 2.5074 BC3 2.1345 FSP -559
                                                                                                                                          CRT .7676 CR5 -- 31.6 -- 6.1 LSA 1763.0 M5A 215.0 S5A 6.1 -- 120.3 ALF 4.95
                                                                                SG1 3880.0 SG2 225.7 THA 180.00
                                                                                                                                                        ARRIVAL DATE MAY 14 1966
                                                                                    FLIGHT TIME 136.00
LAUNCH DATE DEC 29 1965
                                                                                   DISTANCE 409.123
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 27.569 GAL -7.20 AZL 83.81 MCA 201.69 SMA 127.09 ECC .20033 INC 6.1924 V1 30.284
RP 108.93 LAP -2.28 LOP 298.64 VP 37.317 GAP 8.15 AZP 95.76 TAL 211.53 TAP 53.22 RCA 101.63 APO 152.55 V2 34.790
RC 145.874 GL 32.66 GP -20.34 ZAL 128.58 ZAP 150.57 ETS 317.32 ZAE 127.01 ETE 196.57 ZAC 64.19 ETC 150.33 CLP-158.25
   PLANETOCENTRIC CONIC
    C3 29.897 VHL 5.468 DLA 16.05 RAL 311.60 RAD 6568.2 VEL 12.299 PTH 2.22 VHP 6.018 OPA -36.84 RAP 331.22 ECC 1.4920
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 26 39 2836.74 -28.28 84.51 186.23 91.47 24 13 56 2236.7 -27.78 75.88
                                                                                                                           17 0 1
                                                                                                                                                                     3.77
                                                                                                                                                 3833.2
                                                                                                                                                                                   178.37
                      15 46 8 4433.20
                                                                           185.06
                                                                                            178.01
                                                                                                                62.61
                                                             7.49
         90.00
                     1 0 52 2545.60
16 58 32 4199.57
2 28 56 2270.04
17 46 57 4047.90
                                                                                                                            1 43 17
                                                                                                                                                 1945.6
                                                                                                                                                                  -29.09
       100.00
                                                           -29.78
                                                                             63.03
                                                                                            186.17
                                                                                                                92.69
                                                                                                                61.32 18 8 31
96.00 3 6 46
                                                                                                                                                 3599.6
                                                                                                                                                                    4.92
                                                                                                                                                                                   160.55
                                                             8.82
                                                                            167.18
                                                                                            177.30
                                                                                                                                                 1670.0
                                                                                                                                                                  -32.52
                                                                                                                                                                                    32.72
                                                         -33.72
                                                                            41.75
                                                                                            185.82
       110.00
                                                                                                                           18 54 25
                                                                                                                                                 3447.9
                                                                                                                                                                     7.88
                                                                            153.64
                                                                                            175.26
                                                                                                                57.82
       110.00
                                                         12.22
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              SCT 3975.4 SGR 217.7 SG3 173.6
RRT -.0575 RRF .2953 RTF .8723
SGB 3981.3 R23 -.3461 R13 -.8722
                                                                                                                                           ST 1641.8 SR 188.6 S5 533.9
CRT .7755 CRS -.9527 CST -.9299
     TOE 1.3733 TRA-2.4035 TC3-2.3958 BAU .9576
     RDE .1770 RRA .1043 RC3 .0066 FAU .05306
                                                                                                                                            LSA 1722.7 MSA 219.5 SSA
     FDE .9714 FRA -.3846 FC3-1.5366 BSP 12515
                                                                                                                                            EL1 1648.3 EL2 118.6 ALF 5.12
                                                                                5G1 3975.4 SG2 217.3 THA 179.82
     BDE 1.3847 BRA 2.4058 BC3 2.3958 FSP -569
                                                                                                                                                        ARRIVAL DATE MAY 16 1966
                                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 29 1965
                                                                                   DISTANCE 414.891
    HELIOCENTRIC CONIC
    RE 147.11 LAL .00 LOL 97.07 VL 27.500 GAL -6.87 A7L 84.23 MCA 204.84 SMA 126.63 ECC .20020 INC 5.7665 V1 30.284 RP 108.93 LAP -2.42 LOP 301.81 VP 37.263 GAP 8.32 A7P 95.24 TAL 209.80 TAP 54.64 RCA 101.28 APO 151.98 V2 34.787 RC 148.138 GL 31.37 GP -17.76 7AL 127.96 7AP 152.89 E15 319.81 7AE 127.82 ETE 194.70 7AC 64.92 ETC 152.76 CLP-159.17
    PLANETOCENTRIC CONIC
     C3 27.770 VHL 5.270 DLA 15.29 RAL 313.45 RAD 6568.1 VEL 12.213 PTH 2.19 VHP 6.018 DPA -33.68 RAP 332.54 ECC 1.4570
    C3 27.770 VHL 5.270 DLA 15.29 RAL 313.45 RAD 6568.1 VEL 12.213 PTH 2.19 VHP 5.018 UPA 33.68 RAP 332.34 ECC 1.970 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 25 41 8 2790.64 -28.16 81.14 186.30 93.15 24 27 39 2190.6 -27.42 72.55 90.00 15 46 21 4442.42 7.78 185.59 178.65 62.69 17 0 23 3842.4 4.06 178.68 100.00 1 14 46 2501.40 -29.60 59.76 186.19 94.40 1 56 27 1901.4 -28.67 51.08
                     LNCH TIME L-I TIME
23 41 8 2790.64
15 46 21 4442.42
1 14 46 2501.40
16 59 21 4206.89
2 41 36 2229.71
17 49 0 4051.35
                                                           -29.60
        100.00
                                                                                                                61.39 18 9 28
                                                                                                                                                                                   160.96
                                                                                                                                                 3606.9
                                                                                                                                                                    5.17
                                                                                            177.94
                                                             9.06
                                                                           167.59
                                                                                                                97.81 3 18 45
57.87 18 56 31
                                                                                                                                                 1629.7
                                                                                                                                                                                    29.72
        110.00
                                                           -33.39
                                                                             38.65
                                                                                            185.72
                                                                                                                                                 3451.4
                                                                                                                                                                    8.01
                                                                                                                                                                                    147.41
                                                          12.35
                                                                            153.83
                                                                                            175.98
        110.00
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                SGT 4073.2 SGR 217.7 SG3 174.8
RRT -.1018 RRF .2083 RTF .8689
SGB 4079.0 R23 -.2986 R13 -.8689
                                                                                                                                            ST 1621.5 SR 192.4 55 520.5
     TOE 1.3045 TRA-2.3108 TC3-2.6492 BAU .9836
                                                                                                                                            CRT .7884 CRS -.9636 CST -.9229
     RDE .1748 RRA .0889 RC3 .0336 FAU .05252 FDE .9140 FRA -.3181 FC3-1.6373 8SP 12900
                                                                                                                                            LSA 1699.3 MSA 222.5 55A
                                                                                                                                                                                       8.7
                                                                                                                                            EL1 1628.6 EL2 117.8 ALF 5.37
                                                                                5G1 4073.3 5G2 216.6 THA 179.69
     BDE 1.3161 BRA 2.3125 BC3 2.6494 FSP -578
                                                                                                                                                         ARRIVAL DATE MAY 18 1966
                                                                                     FLIGHT TIME 140.00
LAUNCH DATE DEC 29 1965
                                                                                    DISTANCE 420.651
    RL 147.11 LAL .00 LOL 97.07 VL 27.431 GAL -6.52 AZL 84.57 HCA 208.00 SMA 126.18 ECC .20020 INC 5.4313 VI 30.284
RP 108.94 LAP -2.55 LOP 304.97 VP 37.211 GAP 8.50 AZP 94.80 TAL 208.05 TAP 56.05 RCA 100.92 APO 151.44 V2 34.786
RC 150.390 GL 30.37 GP -15.74 ZAL 127.01 ZAP 154.83 ETS 321.84 ZAE 128.38 ETE 193.16 ZAC 66.01 ETC 154.80 CLP-160.10
    PLANETOCENTRIC CONIC
     C3 26.027 VHL 5.102 DLA 14.86 RAL 315.34 RAD 6568.1 VEL 12.141 PTH 2.18 VHP 6.046 DPA -31.03 RAP 334.05 ECC 1.4283
     LNCH AZMTH LNEH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 94.29 24 38 35
62.68 17 4 2
                                                                                                                                                 2159.3
                                                                                                                                                                  -27.13
                                                                                                                                                                                     70.31
                                                                                            186.76
         90.00
                                                                             78.86
                       23 52 36 2759.32
15 50 0 4441.55
                                                           -28.02
                                                                                                                                                                     4.03
                                                                                                                                                                                    178.84
                                                                            185.54
                                                                                                                                                 3841.5
                                                             7.75
                                                                                             179.49
          90.00
                                                                                                                              2 7 5
                                                                                                                                                 1871.1
                                                                                                                                                                   -28.34
                                                                                                                                                                                     48.89
                       1 25 54 2471.10
17 3 19 4204.99
                                                                                                                 95.56
                                                                             57.52
                                                                                             186.63
        100.00
                                                           -29.42
                                                                                                                 61.37 18 13 24
                                                                                                                                                  3605.0
                                                                                                                                                                     5.10
                                                                                                                                                                                    160.85
        100.00
                                                             9.00
                                                                            167.48
                                                                                             178.82
                                                        -33.10
                                                                                                                 99.05 3 28 46
57.82 19 1 6
                                                                                                                                                 1601.5
                                                                                                                                                                  -31.50
                                                                                                                                                                                     27.64
                                                                                             186.07
                        2 52 4
                                                                              36.50
        110.00
                                        2201.48
                                                                                                                                                 3447.4
                                                                                                                                                                   7.87
                                                                                                                                                                                   147.20
                                                                                             176.91
                                                                            153.61
        110.00
                       17 53 36
                                        4047.38
                                                            12.20
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                               HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                               SGT 4180.4 SGR 222.5 SG3 175.5 ST 1609.1 SR 198.4 S5 506.9

RRT -.1294 RRF .1317 RTF .8683 CRT .8038 CRS -.9729 CST -.9176

SGB 4186.3 R23 -.2464 R13 -.8682 LSA 1683.9 MSA 223.3 SSA 10.1

SGI 4180.5 SG2 220.7 THA 179.60 EL1 1617.0 EL2 117.4 ALF 5.69
     TOE 1.2526 TRA-2.2262 TC3-2.9083 BAU 1.0122
     ROE .1751 RRA .0738 RC3 .0578 FAU .05190
FOE .8588 FRA -.2627 FC3-1.7265 BSP 13459
     BOE 1.2648 BRA 2.2274 BC3 2.9088 FSP -598
```

FLIGHT TIME 134.00

FLIGHT TIME 142.00 ARRIVAL DATE MAY 20 1966 LAUNCH DATE DEC 29 1965 DISTANCE 426.408 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 27.363 GAL -6.17 A7L 84.84 HCA 211.16 SMA 125.73 ECC .20033 INC 5.1592 V1 30.284
RP 108.94 LAP -2.67 LOP 308.13 VP 37.160 GAP 8.67 AZP 94.42 TAL 206.28 TAP 57.44 RCA 100.54 APO 150.92 V2 34.785
RC 152.629 GL 29.59 GP -14.11 7AL 125.77 ZAP 156.51 ETS 323.50 ZAE 128.79 ETE 191.88 ZAC 67.36 ETC 156.54 CLP-161.02 PLANETOCENTRIC CONIC C3 24.547 VHL 4.954 DLA 14.70 RAL 317.30 RAD 6568.0 VEL 12.080 PTH 2.16 VHP 6.092 OPA -28.74 RAP 335.71 ECC 1.4040 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 187.54 0 5 51 2739.03 15 56 20 4432.95 1 35 6 2451.20 95.02 0 51 30 2139.0 90.00 -27.91 77.39 185.05 180.55 62.61 17 10 13 3832.9 90.00 7.49 96.32 2 15 58 1851.2 -28.09 187.39 100.00 -29.28 56.06 61.29 18 19 42 3596.0 4.80 17 9 46 4196.01 3 1 1 2182.37 18 0 21 4037.61 179.90 166.98 100.00 8.70 3 37 24 1582.4 -31.18 35.05 186.79 99.89 110.00 -32.89 178.02 57.70 19 7 38 3437.6 7.50 153.08 110.00 11.85 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4229.5 SGR 236.1 SG3 171.9 RRT -.1429 RRF .0952 RTF .8587 ST 1640.0 SR 209.0 SS 517.9 CRT .8314 CRS -.9836 CST -.9149 TOE 1.2570 TRA-2.1011 TC3-3.1049 BAU 1.0193 ROE .1797 RRA .0623 RC3 .0845 FAU .04918 FOE .8480 FRA -.1702 FC3-1.7346 BSP 13091 BOE 1.2698 BRA 2.1020 BC3 3.1060 FSP -536 LSA 1717.3 MSA 228.4 SSA 11.0 EL1 1649.2 EL2 115.5 ALF 6.08 SGB 4236.1 R23 -.2205 R13 -.8586 SG1 4229.7 SG2 233.7 THA 179.54 FLIGHT TIME 144.00 ARRIVAL DATE MAY 22 1966 LAUNCH DATE DEC 29 1965 **DISTANCE 432.153** HELIOCENTRIC CONIC RE 147.11 LAL .00 LOL 97.07 VL 27.297 GAL -5.81 A7L 85.07 MCA 214.32 SMA 125.30 ECC .20061 INC 4.9325 V1 30.284
RP 108.94 LAP -2.78 LOP 311.29 VP 37.111 GAP 8.84 A7P 94.08 TAL 204.51 TAP 58.82 RCA 100.16 APO 150.44 V2 34.784
RC 154.855 GL 28.95 GP -12.78 ZAL 124.30 ZAP 157.99 ETS 324.84 ZAE 129.11 ETE 190.82 ZAC 68.91 ETC 158.02 CLP-161.93 PLANETOCENTRIC CONIC C3 23.267 VHL 4.824 DLA 14.74 RAL 319.34 RAD 6567.9 VEL 12.027 PTH 2.15 VHP 6.151 DPA -26.70 RAP 337.47 ECC 1.3829
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 D 13 39 2727.24 -27.83 76.53 188.59 95.44 D 59 6 2127.2 -26.79 68.02 62.50 17 18 27 177.55 7.03 184.23 181.80 3818.5 3.29 15 4 48 4418.52 90.00 1 42 56 2439.32 17 18 12 4181.67 1839.3 -29.18 55.19 188.43 96.77 2 23 35 -27.94 46.61 100.00 61.16 18 27 54 17 18 12 8.23 166.17 181.15 3581.7 4.32 159.57 100.00 2170.31 3 45 4 1570.3 25.37 3 8 54 18 8 43 -32.75 34.13 187.80 100.41 -30.96 110.00 100.41 3 45 4 57.53 19 15 47 3423.4 152.31 179.29 6.97 145.93 4023.45 11.33 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4324.0 SGR 247.3 SG3 170.8 RRT -.1431 RRF .0555 RTF .8580 SGB 4331.1 R23 -.1806 R13 -.8579 ST 1653.7 SR 218.3 SS 513.5 TOE 1.2428 TRA-2.0051 TC3-3.3514 BAU 1.0430 ROE .1832 RRA .0485 RC3 .1050 FAU .04790 FDE .8115 FRA -.1156 FC3-1.7823 BSP 13506 CRT .8522 CRS -.9898 CST -.9134 LSA 1730.3 MSA 227.5 SSA 12.2 5G1 4324.2 SG2 244.7 THA 179.53 ELI 1664.1 ELZ 113.5 ALF BDE 1.2562 BRA 2.0057 BC3 3.3530 FSP -541 ARRIVAL DATE MAY 24 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 29 1965 DISTANCE 437.890 RL 147.11 LAL .00 LOL 97.07 VL 27.231 GAL -5.44 AZL 85.26 HCA 217.48 SHA 124.88 ECC .20104 INC 4.7398 V1 30.284 RP 108.94 LAP -2.88 LOP 314.45 VP 37.063 GAP 9.01 AZP 93.76 TAL 202.71 TAP 60.19 RCA 99.77 APO 149.98 V2 34.785 RC 157.067 GL 28.42 GP -11.67 TAL 122.63 ZAP 159.33 ETS 325.91 ZAE 129.35 ETE 189.93 ZAC 70.60 ETC 159.31 CLP-162.82 PLANETOCENTRIC CONIC C3 22.145 VHL 4.706 DLA 14.94 RAL 321.47 RAD 6567.9 VEL 11.980 PTH 2.14 VHP 6.220 DPA -24.85 RAP \$39.31 ECC 1.3644 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM IRJ 2 LAT INJ 2 LONG 95.61 1 5 39 62.36 17 28 28 96.97 2 30 16 -26.73 D 20 17 2722.48 16 15 9 4399.25 67.68 189.89 2122.5 -27.80 76.19 90.00 2.67 176.47 6.43 183.14 183.22 3799.2 90.00 16 15 9 1 49 42 2434.08 17 28 24 4162.88 46.23 189.72 1834.1 -27.87 -29.14 54.81 100.00 61.01 18 37 47 100.68 3 52 4 57.33 19 25 22 7.61 165.12 182.57 3562.9 3.69 158.53 100.00 3 16 0 2164.09 18 18 36 4005.63 -32.67 33.66 189.08 1564.1 -30.85 24.92 110.00 18 18 36 180.72 3405.6 6.30 144.99 10.68 151.34 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1677.8 SR 228.5 SS 512.5 CRT .8739 CRS -.9942 CST -.9136 SGT 4414.0 SGR 259.9 SG3 169.1 RRT -.1352 RRF .0296 RTF .8573 SGB 4421.7 R23 -.1473 R13 -.8573 TOE 1.2423 TRA-1.9019 TC3-3.5955 BAU 1.0651 ROE .1873 RRA .0353 RC3 .1235 FAU .04644 FDE .7820 FRA -.0615 FC3-1.8155 BSP 13869 LSA 1754.7 MSA 225.5 SSA 13.4 EL1 1689.7 EL2 110.3 ALF 6.82 BDE 1.2563 BRA 1.9023 BC3 3.5977 FSP SG1 4414.2 SG2 257.5 THA 179.54 LAUNCH DATE DEC 29 1965 FLIGHT TIME 148.00 ARRIVAL DATE MAY 26 1966 **DISTANCE 443.619** HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 27.166 CAL -5.07 AZL 85.43 MCA 220.64 SMA 124.46 ECC .20162 INC 4.5730 VI 30.284 RP 108.94 LAP -2.98 LOP 317.62 VP 37.017 CAP 9.19 AZP 93.47 TAL 200.91 TAP 61.55 RCA 99.37 APO 149.56 VZ 34.786 RC 159.265 GL 27.97 CP -10.74 ZAL 120.77 ZAP 160.55 ETS 326.75 ZAE 129.56 ETE 189.17 ZAC 72.41 ETC 160.43 CLP-163.69 PLANETOCENTRIC CONIC C3 21.153 VHL 4.599 DLA 15.28 RAL 323.70 RAD 6567.9 VEL 11.939 PTH 2.12 VHP 6.296 DPA -23.15 RAP 341.21 ECC 1.3481 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 191.42 95.57 1 11 24 2123.7 2723.73 67.77 -26.75 0 26 0 -27.81 76.28 17 40 7 3775.9 1.92 175.16 90.00 16 27 11 4375.90 5.69 181.82 184.82 62.21 2 36 16 1 55 41 2434.51 191.25 96.95 1834.5 -27.88 46.26 -29.15 54.84 100.00 163.86 184.18 60.84 18 49 11 3540.4 2.93 157.29 17 40 11 4140.35 6.87 100.00 100.73 3 58 34 57.12 19 36 15 1562.8 -30.83 24.83 3 22 31 2162.83 3984.79 -32.65 35.57 190.62 110.00 143.89 150.21 5.51 18 29 51 9.91 182.33 3384.8 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1713.5 SR 239.4 SS 515.4 CRT .8959 CRS -.9968 CST -.9155 LSA 1791.5 MSA 222.5 SSA 14.6 EL1 1727.0 EL2 105.5 ALF 7.16 SGT 4496.2 SGR 273.4 SG3 167.0 RRT -.1210 RRF .0160 RTF .8563 SGB 4504.5 R23 -.1209 R13 -.8562 TOE 1.2551 TRA-1.7890 TC3-3.8332 BAU 1.0848 RDE .1920 RRA .0227 RC3 .1403 FAU .04478 FDE .7594 FRA -.0063 FC3-1.8326 BSP 14142 BDE 1.2697 BRA 1.7892 BC3 3.8358 FSP -535 5G1 4496.3 5G2 271.3 THA 179.58

```
ARRIVAL CATE MAY 28 1966
                                                                 FLIGHT TIME 150.00
LAUNCH DATE DEC 29 1965
                                                                DISTANCE 449.339
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 97.07 VL 27.102 GAL -4.68 A7L 85.57 HCA 223.80 SMA 124.06 ECC .20237 INC 4.4262 V1 30.284
RP 108.93 LAP -3.06 LOP 320.78 VP 36.971 GAP 9.37 A7P 93.20 TAL 199.09 TAP 62.89 RCA 98.95 APO 149.16 V2 34.788
RC 161.449 GL 27.58 GP -9.95 TAL 118.73 TAP 161.69 ETS 327.38 TAE 129.74 ETE 188.53 TAC 74.32 ETC 161.43 CLP-164.55
  PLANETOCENTRIC CONIC
   C3 20.278 VHL 4.503 OLA 15.75 RAL 326.03 RAO 6567.8 VEL 11.902 PTH 2.11 VHP 6.379 OPA -21.56 RAP 343.15 ECC 1.3337
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              2130.3
                 0 31 2 2730.30
16 40 48 4349.08
                                                                                                                             -26.82
                                                                                                                                           68.24
                                                          76.75
                                                                      193.18
                                                                                    95.33 1 16 32
                                             -27.85
                                                                                                                                           173.67
                                                                       186.61
                                                                                       62.06
                                                                                               17 53 17
                                                                                                                3749.1
                                                                                                                               1.06
       90.00
                                               4.83
                                                          180.31
                2 1 4 2439.94
17 53 27 4114.68
3 28 38 2165.95
18 42 22 3961.43
                                                                                               2 41 44
                                                                                                                             -27.95
                                                                                                                                           46.65
                                                                       193.02
                                                                                       96.75
                                                                                                                1839.9
                                              -29.19
                                                           55.23
      100.00
                                                                                               19 2 2
      100.00
                                               6.01
                                                          162.43
                                                                       185.97
                                                                                       60.66
                                                                                                                3514.7
                                                                                                                               2.06
                                                                                                                                          155.88
                                                                                               4 4 44
19 48 24
                                                                                                                                           25.05
                                                                       192.40
                                                                                     100.60
                                                                                                                1566.D
                                                                                                                             -30.48
     110.00
                                            -32.69
                                                           33.81
      110.00
                              3961.43
                                             9.04
                                                          148.96
                                                                       184.11
                                                                                      56.89
                                                                                                                3361.4
                                                                                                                               4.62
                                                                                                                                           142.66
                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 4576.3 SGR 287.0 SG3 164.8
RRT -.1029 RRF .0097 RTF .8558
    TOE 1.2765 TRA-1.6698 TC3-4.0693 BAU 1.1040
                                                                                                            ST 1757.5 SR 250.4 SS 519.6
CRT .9167 CRS -.9976 CST -.9187
   ROE .1968 RRA .DID4 RC3 .1549 FAU .D4310
FDE .7398 FRA .D460 FC3-1.8401 BSP 14423
BDE 1.2916 BRA 1.6698 BC3 4.0723 FSP -529
                                                                                                            LSA 1836.8 MSA 217.9 SSA 15.7
                                                              SGB 4585.3 R23 -.0986 R13 -.8558
                                                                                                            EL1 1772.4 EL2 99.2 ALF 7.47
                                                             5G1 4576.4 5G2 285.4 THA 179.63
LAUNCH DATE DEC 29 1965
                                                                 FLIGHT TIME 152.00
                                                                                                                      ARRIVAL DATE MAY 30 1966
  HELIOCENTRIC CONIC
                                                                 DISTANCE 455.050
   RL 147.11 LAL .00 LOL 97.07 VL 27.039 GAL -4.28 AZL 85.70 MCA 226.96 SMA 123.66 ECC .20328 INC 4.2955 V1 30.284
RP 108.92 LAP -3.14 LOP 323.95 VP 36.928 GAP 9.55 AZP 92.93 TAL 197.26 TAP 64.22 RCA 98.53 APO 148.80 V2 34.791
RC 163.619 GL 27.21 GP -9.27 ZAL 116.53 ZAP 162.75 ETS 327.82 ZAE 129.90 ETE 187.98 ZAC 76.30 ETC 162.31 CLP-165.39
  PLANETOCENTRIC CONIC
   C3 19.509 VHL 4.417 DLA 16.31 RAL 328.49 RAD 6567.8 VEL 11.870 PTH 2.11 VHP 6.469 DPA -20.05 RAP 345.14 ECC 1.3211 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              2141.7
                                                                                                                                            69.05
                   0 35 29 2741.74
                                             -27.92
                                                          77.58
                                                                      195.18
                                                                                      94.92
                                                                                                 1 21 10
                                                                                                                             -26.95
       90.00
                                                                                                                                           172.00
                 16 55 56 4319.25
                                               3.68
                                                          178.64
                                                                       188.61
                                                                                       61.93 18 7 55
                                                                                                                3719.2
                                                                                                                                .09
       90.00
                2 5 58 2449.92
18 8 8 4086.29
3 34 28 2173.02
18 56 7 3935.97
                                                                                                2 46 48
      100.00
                                              -29.27
                                                           55.97
                                                                       195.02
                                                                                       96.37
                                                                                                                1849.9
                                                                                                                              -28.08
                                                                                                                                            47.37
                                                                                      60.50 19 16 14
100.29 4 10 41
                                                                                                                3486.3
                                                                                                                               1.10
                                                                                                                                           154.32
      100.00
                                               5.06
                                                          160.86
                                                                       187.96
                                             -32.78
                                                           34.34
                                                                       194.42
                                                                                     100.29
                                                                                                                1573.0
                                                                                                                             -31.01
                                                                                                                                            25.56
      110.00
                                                                                      56.68 20 1 43
                                              8.09
                                                          147.60
                                                                       186.09
                                                                                                                3336.0
                                                                                                                               3.65
                                                                                                                                           141.32
      110.00
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              SGT 4649.6 SGR 300.6 SG3 162.2
RRT -.0815 RRF .0111 RTF .8551
SGB 4659.4 R23 -.0813 R13 -.8551
                                                                                                            ST 1812.3 SR 261.7 S5 526.9
CRT .9361 CRS -.9967 CST -.9232
   TOE 1.3086 TRA-1.5403 TC3-4.2962 BAU 1.1214
   RDE .2017 RRA -.0012 RC3 .1675 FAU .04132
                                                                                                            LSA 1893.5 MSA 212.4 SSA 16.8
EL1 1828.9 EL2 91.2 ALF 7.72
   FOE .7251 FRA .0987 FC3-1.8335 BSP 14635
                                                             5G1 4649.7 5G2 299.6 THA 179.70
    BOE 1.3240 BRA 1,5403 BC3 4.2995 FSP -518
                                                                                                                      ARRIVAL DATE JUN 1 1966
                                                                 FLIGHT TIME 154.00
LAUNCH DATE DEC 29 1965
                                                                 DISTANCE 460.751
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 97.07 VL 26.977 GAL -3.87 A7L 85.82 HCA 230.12 SMA 123.28 ECC .20437 INC 4.1776 V1 30.284 RP 108.91 LAP -3.20 LOP 327.12 VP 36.885 GAP 9.73 A7P 92.68 TAL 195.42 TAP 65.54 RCA 98.08 APO 148.47 V2 34.794
   RC 165.775 GL 26.85 GP -8.68 ZAL 114.15 ZAP 163.75 ETS 328.09 ZAE 130.06 ETE 187.50 ZAC 78.34 ETC 163.09 CLP-166.21
  PLANETOCENTRIC CONIC
    C3 18.839 VHL 4.340 DLA 16.96 RAL 331.07 RAO 6567.8 VEL 11.842 PTH 2.10 VHP 6.564 DPA -18.61 RAP 347.15 ECC 1.3100
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                U 39 28 2757.69
17 12 32 4286.81
2 10 31 2464.11
18 24 11 4055.62
3 40 8 2183.70
19 11 3 3908.79
                                                                                                             2157.7
                                                                                      94.35 1 25 26
                                                                                                                                         70.19
                                                                      197.40
                                                                                                                            -27.11
                                             -28.01
                                                          78.74
       90.00
                                                                                                                3686.8
                                                                                                                               - .95
                                                                       190.82
                                                                                       61.81
                                                                                               18 23 59
       90.00
                                              2.84
                                                          176.82
                                                                                                                              -28.25
                                                                                                                                            48.38
                                                                       197.27
                                                                                       95.83
                                                                                               2 51 35
                                                                                                                1864.1
                                             -29.37
                                                           57.01
      100.00
                                                                                       60.36 19 31 46
99.83 4 16 32
56.47 20 16 12
                                                                                                                3455.6
                                                                                                                                .06
                                                                                                                                          152.64
                                                                       190.16
                                              4.03
                                                          159.17
      100.00
                                                                                                                1583.7
                                                                                                                             -31.20
                                                                                                                                           26.34
                                                                       196.70
                                            -32.91
                                                           35.15
      110.00
                                                                                                                               2.62
                                             7.07
                                                                                                                3308.8
     110.00
                                                                       188.28
                                                          146.15
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                            MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                             SGT 4724.3 SGR 313.8 SG3 159.8
RRT -.0589 RRF .0146 RTF .8556
                                                                                                            ST 1872.2 SR 272.9 55 533.4
CRT .9529 CRS -.9942 CST -.9282
    TOE 1.3451 TRA-1.4052 TC3-4.5214 BAU 1.1397
    ROE .2067 RRA -.0124 RC3 .1775 FAU .03965
   FOE .7101 FRA .1477 FC3-1.8219 BSP 14903
                                                             SGB 4734.7 R23 -. 0654 R13 -. 8556
                                                                                                            LSA 1954.9 MSA 205.4 SSA 17.9
                                                                                                            EL1 1890.2 EL2 82.0 ALF 7.92
                                                             SG1 4724.4 SG2 313.3 THA 179.77
   BOE 1.3609 BRA 1.4053 BC3 4.5249 FSP -512
                                                                 FLIGHT TIME 156.00
                                                                                                                       ARRIVAL DATE JUN 3 1966
LAUNCH DATE DEC 29 1965
                                                                 DISTANCE 466.441
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 97.07 VL 26.915 GAL -3.45 AZL 85.93 HCA 233.28 SMA 122.90 ECC .20565 INC 4.0700 V1 30.284 RP 108.90 LAP -3.26 LOP 330.28 VP 36.844 GAP 9.92 AZP 92.44 TAL 193.58 TAP 66.86 RCA 97.63 APO 148.18 V2 34.798
                     26.50 GP -8.17 TAL 111.62 TAP 164.69 ETS 328.18 TAE 130.20 ETE 187.09 TAC 80.44 ETC 163.80 CLP-167.01
   RC 167.915 GL
  PLANETOCENTRIC CONIC
   C3 18.268 VHL 4.274 DLA 17.68 RAL 333.78 RAD 6567.7 VEL 11.817 PTH 2.09 VHP 6.664 DPA -17.22 RAP 349.20 ECC 1.3006
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 43 6 2777.94
17 30 34 4252.09
                                                                                                  1 29 24
                                                                                                                             -27.31
                                              -28.10
                                                           80.22
                                                                       199.87
                                                                                       93.61
                                                                                                                2177.9
                                                                                                                                            71.64
       90.00
                                                                                                                              -2.07
                                                                       193.26
                                                                                       61.73
                                                                                               18 41 26
                                                                                                                3652.1
                                                                                                                                           168.26
       90.00
                                               1.72
                                                          174.89
                 2 14 47 2482.27
18 41 34 4023.01
                                             -29.49
                                                           58.35
                                                                       199.75
                                                                                       95.14
                                                                                                 2 56 9
                                                                                                                1882.3
                                                                                                                              -28.46
                                                                                                                                            49.69
      100.00
                                                                                       60.24 19 48 37
                                                                                                                              -1.05
                                                                                                                                           150.85
                                               2.93
                                                          157.37
                                                                       192.58
                                                                                                                3423.0
      100.00
                   3 45 43 2197.76
19 27 7 3880.28
                                                                                                4 22 21
                                                                                                                1597.8
                                                                                                                             -31,44
1,53
                                                                                                                                            27.36
                                              -33.06
                                                            36.21
                                                                       199.22
                                                                                       99.22
      110.00
                                                                                       56.28 20 31 48
                                                                                                                3280.3
      110.00
                                              6.00
                                                                                                                                           138.41
  DIFFERENTIAL CORRECTIONS
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                            ORBIT DETERMINATION ACCURACY
                                                              SGT 4795.3 SGR 326.6 SG3 157.3
                                                                                                           ST 1940.5 SR 284.1 55 541.0
   TOE 1.3890 TRA-1.2618 TC3-4.7340 BAU 1.1570
   ROE .2118 RRA -.0229 RC3 .1852 FAU .03796
FOE .6973 FRA .1949 FC3-1.7990 BSP 15160
```

SG1 4795.3 SG2 326.4 THA 179.86

BDE 1.4050 BRA 1.2621 BC3 4.7376 FSP -505

```
FLIGHT TIME 158.00
                                                                                                                                                             ARRIVAL DATE JUN 5 1966
LAUNCH DATE DEC 29 1965
                                                                                       DISTANCE 472.120
    HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 97.07 VL 26.855 GAL -3.02 AZL 86.03 MCA 236.44 SMA 122.53 ECC .20713 INC 3.9710 V1 30.284
RP 108.89 LAP -3.31 LOP 333.45 VP 36.805 GAP 10.12 AZP 92.20 TAL 191.72 TAP 68.16 RCA 97.15 APO 147.91 V2 34.803
     RC 170.040 GL 26.12 GP -7.72 TAL 108.94 TAP 165.60 ETS 328.11 TAE 130.34 ETE 186.74 TAC 82.58 ETC 164.43 CLP-167.80
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 46 25 2802.29 -28.20 81.99 202.58 92.73 1 33 7 2202.3 -27 40 74 40
                      17 50 1 4215.49
2 18 51 2504.18
                                                                                               195.94
                                                                                                                    61.69
                                                                                                                               19 0 16
                                                                                                                                                     3615.5
                                                                                                                                                                        -3.25
                                                                                                                                                                                         166.21
                                                                .54
                                                                              172.84
          90.00
                                                                               59.96
                                                                                               202.48
                                                                                                                    94.29
                                                                                                                              3 0 36
                                                                                                                                                     1904.2
                                                                                                                                                                       -28.70
        100.00
                                                             -29.61
                                                                                                                    60.16 20 6 44
98.46 4 28 12
56.13 20 48 29
                      19 0 15 3988.83
3 51 17 2214.98
19 44 19 3850.79
                                                                                               195.25
                                                                                                                                                     3368.8
                                                                                                                                                                        -2.21
                                                                                                                                                                                         145.97
        100.00
                                                               1.78
                                                                              155.49
                                                            -33.24
                                                                               37.52
                                                                                               202.00
                                                                                                                                                     1615.0
                                                                                                                                                                                          28.63
        110.00
                                                              4.88
                                                                             143.09
                                                                                               193.31
                                                                                                                                                     3250.8
        110.00
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                  SGT 4864,4 SGR 338.9 SG3 154.8
RRT -.0106 RRF .0315 RTF .8580
                                                                                                                                               ST 2014.4 SR 295.2 S5 548.4
CRT .9786 CRS -.9855 CST -.9394
     TOE 1.4380 TRA-1.1097 TC3-4.9333 BAU 1.1744
     ROE .2171 RRA -.0326 RC3 .1901 FAU .03633
                                                                                  FOE .6851 FRA .2408 FC3-1.7676 BSP 15422
BOE 1.4543 BRA 1.1102 BC3 4.9370 FSP -499
                                                                                       FLIGHT TIME 160.00
                                                                                                                                                              ARRIVAL DATE JUN 7 1966
LAUNCH DATE DEC 29 1965
                                                                                       DISTANCE 477.787
   HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 97.07 VL 26.795 GAL -2.58 AZL 86.12 MCA 239.61 SMA 122.17 ECC .20881 INC 3.8789 V1 30.284
RP 108.87 LAP -3.35 LOP 336.62 VP 36.766 GAP 10.33 AZP 91.96 TAL 189.85 TAP 69.46 RCA 96.66 APO 147.68 V2 34.808
                             25.71 GP -7.32 TAL 106.11 TAP 166.46 ETS 327.87 TAE 130.48 ETE 186.43 TAC 84.76 ETC 165.00 CLP-168.58
     RC 172.148 GL
   PLANETOCENTRIC CONIC
     C3 17.419 VHL 4.174 DLA 19.30 RAL 339.63 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 6.884 OPA -14.55 RAP 353.34 ECC 1.2867
    C3 17.419 VHL 4.174 DLA 19.30 RAL 339.63 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 6.884 OPA -14.95 RAP 353.54 ECC 1.2867
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 49 29 2830.60 -28.27 84.06 205.53 91.69 1 36 39 2230.6 -27.74 75.43
90.00 18 10 51 4177.29 -.69 170.71 198.87 61.69 19 20 28 3577.3 -4.47 164.07
100.00 2 22 48 2529.66 -29.73 61.85 205.46 93.31 3 4 58 1929.7 -28.95 53.13
100.00 19 20 12 3953.46 .58 153.55 198.16 60.11 20 26 6 3353.5 -3.40 147.03
110.00 3 56 56 2235.15 -33.44 39.07 205.05 97.57 4 34 12 1635.1 -32.03 30.12
110.00 20 2 34 3820.74 3.74 141.52 196.19 56.00 21 6 14 3220.7 -.75 135.31
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                 SGT 4924.5 SGR 350.8 SG3 152.1
RRT .0152 RRF .0455 RTF .8590
SGB 4937.0 R23 .0324 R13 .8590
SGI 4924.5 SG2 350.8 THA .06
                                                                                                                                               ST 2099.3 SR 306.5 55 558.0 CRT .9874 CR5 -.9795 CST -.9453
     TOE 1.4965 TRA -.9448 TC3-5.1027 BAU 1.1891
     ROE .2228 RRA -.0414 RC3 .1927 FAU .03459
FDE .6765 FRA .2879 FC3-1.7192 BSP 15588
BDE 1.5130 BRA .9457 BC3 5.1063 FSP -488
                                                                                                                                               LSA 2186.1 MSA 180.3 SSA 21.1
EL1 2121.0 EL2 47.9 ALF 8.21
                                                                                                                                                            ARRIVAL DATE JUN 9 1966
                                                                                      FLIGHT TIME 162.00
LAUNCH DATE DEC 29 1965
                                                                                      DISTANCE 483.441
   HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 97.07 VL 26.737 GAL -2.12 AZL 86.21 HCA 242.77 SHA 121.82 ECC .21072 INC 3.7926 VI 30.284
RP 108.85 LAP -3.37 LOP 339.79 VP 36.729 GAP 10.54 AZP 91.74 TAL 187.98 TAP 70.75 RCA 96.13 APO 147.49 V2 34.814
RC 174.239 GL 25.26 GP -6.96 ZAL 103.15 ZAP 167.29 ETS 327.46 ZAE 130.62 ETE 186.17 ZAC 86.97 ETC 165.51 CLP-169.34
    PLANETOCENTRIC CONIC
     C3 17.147 VHL 4.141 DLA 20.16 RAL 342.77 RAD 6567.7 VEL 11.770 PTH 2.08 VHP 7.003 DPA -13.26 RAP 355.44 ECC 1.2822
    C3 17.147 VHL 4.141 DLA 20.16 RAL 342.77 RAD 6567.7 VEL 11.770 PTH 2.08 VHP 7.003 DPA -13.26 RAP 355.44 ECC 1.2822 LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T. TIM INJ 2 LAT INJ 2 LONG 90.00 D 52 21 2862.71 -28.31 86.41 208.74 90.52 1 40 4 2262.7 -27.94 77.76 90.00 18 33 1 4137.89 -11.97 168.52 202.06 61.75 19 41 59 3557.9 -5.73 161.86 100.00 2 26 41 2558.52 -29.82 63.99 208.70 92.18 3 9 20 1958.5 -29.20 55.24 100.00 19 41 22 3917.32 -.65 151.57 201.33 60.11 20 46 39 3317.3 -4.62 145.04 110.00 4 2 44 2258.03 -33.63 40.83 208.35 96.54 4 40 22 1658.0 -32.36 31.82 110.00 20 21 48 3790.57 2.59 139.40 199.51 55.90 21 24 59 3190.6 -1.90 133.74
                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 4986.5 SGR 361.9 SG3 149.4
RRT .0404 RRF .0592 RTF .8614
SG8 4999.6 R23 .0243 R13 .8614
                                                                                                                                               ST 2184.5 SR 317.6 SS 565.4
CRT .9933 CRS -.9728 CST -.9508
     TOE 1.5564 TRA -.7738 TC3-5.2530 BAU 1.2050
     RDE .2290 RRA -.0493 RC3 .1922 FAU .03299
FDE .6663 FRA .3314 FC3-1.6656 BSP 15822
BDE 1.5732 BRA .7754 BC3 5.2565 FSP -482
                                                                                                                                               LSA 2272.1 MSA 171.7 SSA 22.1
EL1 2207.1 EL2 36.4 ALF 8.22
                                                                                  SG1 4986.5 SG2 361.6 THA
                                                                                                                              .17
                                                                                                                                                            ARRIVAL DATE JUN 11 1966
                                                                                      FLIGHT TIME 164.00
LAUNCH DATE DEC 29 1965
                                                                                      DISTANCE 489.079
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.679 GAL -1.64 AZL 86.29 MCA 245.94 SMA 121.48 ECC .21287 INC 3.7110 V1 30.284
RP 108.83 LAP -3.39 LOP 342.97 VP 36.694 GAP 10.76 AZP 91.51 TAL 186.10 TAP 72.04 RCA 95.62 APO 147.34 V2 34.821
RC 176.312 GL 24.76 GP -6.65 ZAL 100.06 ZAP 168.08 ETS 326.85 ZAE 130.76 ETE 185.94 ZAC 89.21 ETC 165.97 CLP-170.09
   PLANETOCENTRIC CONIC
     C3 16.982 VHL 4.121 DLA 21.04 RAL 346.05 RAD 6567.7 VEL 11.763 PTH 2.08 VHP 7.130 DPA -11.99 RAP 357.55 ECC 1.2795
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      0 55 5 2898.47
18 56 28 4097.70
2 30 35 2590.52
20 3 39 3880.87
                                                                                              212.18
                                                                                                                  89.21
                                                                                                                                 1 43 23
                                                                                                                                                   2298.5
                                                                                                                                                                       -28.12
                                                                                                                                                                                          80.36
                                                                              89.02
         90.00
                                                            -28.31
                                                                                                                               20 4 45
                                                                                                                                                     3497.7
                                                                                                                                                                        -7.00
                                                                              166.27
                                                                                               205.53
                                                                                                                    61.86
         90.00
                                                             -3.26
                                                                                                                    90.93
                                                                                                                                3 13 45
                                                                                                                                                     1990.5
                                                                                               212.18
                                                                               66.37
        100.00
                                                            -29.88
                                                                                                                    60.16 21 8 20
                                                                                                                                                     3280.9
                                                                                                                                                                       -5.84
                                                                             149.57
                                                                                               204.76
        100.00
                                                             -1.88
                      4 8 45 2283.39
20 41 58 3760.77
                                                                                                                   95.39 4 46 48
55.84 21 44 38
                                                                                                                                                                      -32.69
-3.04
                                                                                                                                                     1683.4
                                                                                                                                                                                          33.73
                                                                               42.78
                                                                                               211.93
        110.00
                                                           -33.81
                                                                                                                                                     3160.8
        110.00
                                                              1.45
                                                                              138.38
                                                                                               202.68
                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5045.2 SG2 371.6 THA .28 EL1 2295.4 EL2 27.1 ALF 8.21
     TDE 1.6201 TRA -.5931 TC3-5.3714 BAU 1.2203
     RDE .2357 RRA -.0562 RC3 .1889 FAU .03142
FDE .6564 FRA .3738 FC3-1.6019 BSP 16050
     BOE 1.6371 BRA .5958 BC3 5.3748 FSP -475
```

ARRIVAL DATE JUN 13 1966

LAUNCH DATE DEC 29 1965

DISTANCE 494.702 HELIOCENTRIC CONIC RL 147.11 LAL .0D LOL 97.07 VL 26.622 GAL -1.16 A7L 86.37 MCA 249.11 SMA 121.14 ECC .21528 INC 3.6333 V1 30.284 RP 108.81 LAP -3.39 LOP 346.14 VP 36.660 GAP 10.99 A7P 91.30 TAL 184.22 TAP 73.33 RCA 95.06 APO 147.22 V2 34.828 RC 178.366 GL 24.20 GP -6.37 ZAL 96.85 ZAP 168.85 ETS 326.04 ZAE 130.90 ETE 185.73 ZAC 91.48 ETC 166.38 CLP-170.83 PLANETOCENTRIC CONIC C3 16.932 VHL 4.115 DLA 21.92 RAL 349.47 RAD 6567.7 VEL 11.761 PTH 2.08 VHP 7.263 DPA -10.75 RAP 359.67 ECC 1.2787 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 57 42 2937.66 19 21 6 4057.14 2 34 32 2625.40 20 26 56 3844.63 4 15 3 2310.91 21 2 54 3731.88 2337.7 215.87 87.77 1 46 39 62.02 20 28 43 -28.25 -28.24 91.89 90.00 3457.1 -8.27 164.00 209.26 -4.56 90.00 89.57 3 18 17 60.25 21 31 1 -29.63 60.16 2025.4 68.96 215.91 -29.89 100.00 141.00 -7.05 147.58 208.46 3244.6 -3.11 100.00 215,.76 94.14 4 53 34 55.82 22 5 6 35.81 -33.02 1710.9 -33.96 44.92 110.00 110.00 .35 136.88 206.30 3131.9 -4.14 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5099.0 SGR 382.1 SG3 143.9 RRT .0905 RRF .0905 RTF .8677 SG8 5113.3 R23 .0116 R13 .8677 SG1 5099.1 SG2 380.6 THA .39 ST 2358.9 SR 339.9 S5 577.1 CRT .9975 CRS -.9576 CST -.9605 LSA 2447.0 MSA 156.4 SSA 23.7 TOE 1.6863 TRA -.4024 TC3-5.4506 BAU 1.2345 ROE .2432 RRA -.0620 RC3 .1829 FAU .02985 FDE .6460 FRA .4152 FC3-1.5263 BSP 16278 BDE 1.7038 BRA .4071 BC3 5.4537 FSP -470 EL1 2383.1 EL2 23.7 ALF 8.18 ARRIVAL DATE JUN 15 1966 FLIGHT TIME 168.00 LAUNCH DATE DEC 29 1965 DISTANCE 500.307 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 26.566 GAL -.65 A7L 86.44 MCA 252.28 SMA 120.81 ECC .21795 INC 3.5588 V1 30.284
RP 108.78 LAP -3.39 LOP 349.32 VP 36.626 GAP 11.24 A7P 91.08 TAL 182.33 TAP 74.61 RCA 94.48 APO 147.14 V2 34.836
RC 180.400 GL 23.57 GP -6.11 7AL 93.55 7AP 169.59 ETS 324.99 7AE 131.04 ETE 185.56 7AC 93.77 ETC 166.75 CLP-171.56 PLANETOCENTRIC CONIC C3 17.004 VHL 4.124 DLA 22.78 RAL 353.01 RAD 6567.7 VEL 11.764 PTH 2.08 VMP 7.405 DPA -9.51 RAP 1.81 ECC 1.2798 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 86.23 1 49 55 62.24 20 53 45 88.11 3 23 1 60.39 21 54 35 92.79 5 0 44 55.82 22 26 14 1 LNCH TIME L-1 TIME 1 0 15 2980.05 19 46 48 4016.71 2 38 38 2662.82 20 51 6 3809.17 4 21 44 2340.27 21 24 29 3704.49 -28.31 2380.1 86.32 219.78 -28.09 94,98 90.00 154.97 -9.52 3416.7 -5.84 161.72 213.26 90.00 62.94 -29.78 71.74 219.88 2062.8 -29.84 100.00 3209.2 -8.22 139.02 145.63 212.42 -4.31 100.00 38.05 219.84 210.17 1740.3 -33.32 -34.08 47.20 110.00 3104.5 -5.18 129.23 135.45 -.70 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2447.9 SR 351.1 SS 582.8 CRT .9965 CRS -.9493 CST -.9647 SGT 5146.5 SGR 391.3 SG3 141.3 TOE 1.7579 TRA -.1969 TC3-5.4809 BAU 1.2466 ROE .2518 RRA -. 0665 RC3 .1743 FAU .02828 FDE .6378 FRA .4587 FC3-1.4400 BSP 16398 RRT .1164 RRF .1094 RTF .8708 SGB 5161.4 R23 .0076 R13 .8708 LSA 2536.1 MSA 151.0 SSA 24.2 EL1 2472.8 EL2 29.1 ALF 8.14 BDE 1.7758 BRA .2078 BC3 5.4837 FSP -459 SG1 5146.7 SG2 388.6 THA .51 ARRIVAL DATE JUN 17 1956 FLIGHT TIME 170.00 LAUNCH DATE DEC 29 1965 DISTANCE 505.892 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 26.511 GAL -.13 AZL 86.51 MCA 255.45 SMA 120.49 ECC .22092 INC 3.4869 V1 30.284 RP 108.76 LAP -3.37 LOP 352.49 VP 36.595 GAP 11.49 AZP 90.88 TAL 180.45 TAP 75.89 RCA 93.87 APO 147.11 V2 34.845 RC 182.414 GL 22.87 GP -5.89 ZAL 90.18 ZAP 170.31 ETS 323.68 ZAE 131.18 ETE 185.40 ZAC 96.08 ETC 167.08 CLP-172.29 PLANETOCENTRIC CONIC C3 17.209 VHL 4.148 DLA 23.61 RAL 356.66 RAD 6567.7 VEL 11.773 PTH 2.08 VHP 7.556 DPA -8.30 RAP ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 223.89 21 84.60 1 53 14 62.52 21 19 41 86.57 3 28 0 60.56 22 18 50 91.37 5 8 23 55.85 22 47 50 -28.30 2425.3 98.27 90.00 1 2 48 3025.29 20 13 24 3977.00 -27.84 3377.0 -10.73 152.68 159.48 -7.10 90.00 -29.87 65.87 2 42 58 2702.35 21 15 55 3775.17 4 28 52 2371.04 21 46 31 3679.24 224.06 143.75 216.62 49.60 224.15 134.13 21 2102.3 224.06 100.00 -29.71 3175.2 -9.33 137.11 216.62 -5.45 100.00 40.41 -33.59 1771.0 -34.16 110.00 127.90 -6.14 3079.2 214.27 -1.67 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5192.6 SGR 399.3 SG3 137.9 RRT .1406 RRF .1259 RTF .8771 SGB 5208.0 R23 .0019 R13 .8771 SG1 5192.9 SG2 395.4 THA .62 ST 2522.5 SR 361.9 SS 581.1 CRT .9939 CRS -.9414 CST -.9686 TOE 1.8237 TRA .0106 TC3-5.4729 BAU 1.2597 ROE .261D RRA -.0702 RC3 .1632 FAU .02685 FOE .6235 FRA .4922 FC3-1.3506 BSP 16695 BOE 1.8423 BRA .0710 BC3 5.4753 FSP -464 LSA 2609.6 MSA 145.4 SSA 24.4 ELI 2548.1 EL2 39.7 ALF 8.12 ARRIVAL DATE JUN 19 1966 FLIGHT TIME 172.00 LAUNCH DATE DEC 29 1965 HELIOCENTRIC CONIC DISTANCE 511.453 RL 147.11 LAL .00 LOL 97.07 VL 26.457 GAL .42 A7L 86.58 MCA 258.62 SMA 120.18 ECC .22420 INC 3.4170 V1 30.284 RP 108.73 LAP -3.35 LOP 355.67 VP 36.564 GAP 11.76 A7P 90.67 TAL 178.56 TAP 77.18 RCA 93.24 APO 147.12 V2 34.854 RC 184.407 GL 22.11 GP -5.68 TAL 86.74 ZAP 171.00 ETS 322.07 ZAE 131.33 ETE 185.27 ZAC 98.40 ETC 167.37 CLP-173.01 PLANETOCENTRIC CONIC .41 RAD 6567.7 VEL 11.787 PTH 2.08 VMP 7.716 OPA -7.10 RAP 6.11 ECC 1.2890 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 5 25 3073.02 -27.48 150.44 21 46 20 3338.6 -11.88 222.02 62.83 3938.57 -8.30 157.29 20 40 42 90.00 20 40 42 3938.57 2 47 37 2743.49 84.98 3 33 21 60.76 22 43 34 -29.89 2143.5 -29.51 77.71 228.44 100.00 135.31 -10.36 221.05 3143.3 21 41 10 3743.34 4 36 31 2402.80 -6.51 141.98 100.00 -33.82 89.91 5 16 34 55.90 23 9 43 1802.8 -34.18 52.08 228.69 110.00 -6.98 3656.80 -2.52 132.96 218.58 3056.8 22 8 46 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5234.6 SGR 407.2 SG3 135.8 ST 2599.4 SR 373.4 SS 588.4 RRT .1655 RRF .1501 RTF .8768 CRT .9898 CRS -.9321 CST -.9714 SGB 5250.4 R23 .0042 R13 .8768 LSA 2687.1 MSA 145.7 SSA 24.3 SG1 5235.0 SG2 401.6 THA .74 EL1 2625.5 EL2 52.6 ALF 8.10 ST 2599.4 SR 373.4 SS 588.4 TOE 1.8968 TRA .2431 TC3-5.4080 BAU 1.2700 RDE .2720 RRA -.0714 RC3 .1508 FAU .02519 FDE .6196 FRA .5445 FC3-1.2418 BSP 16752 BDE 1.9162 BRA .2533 BC3 5.4101 FSP -442

FLIGHT TIME 166.00

```
FLIGHT TIME 174.00
                                                                                                                                     ARRIVAL CATE JUN 21 1966
LAUNCH DATE DEC 29 1965
                                                                         CISTANCE 516.990
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.404 GAL .98 AZL 86.65 MCA 261.79 SMA 119.87 ECC .22783 INC 3.3485 V1 30.284
RP 108.70 LAP -3.31 LOP 358.85 VP 36.535 GAP 12.05 AZP 90.48 TAL 176.67 TAP 78.46 RCA 92.56 APO 147.18 V2 34.863
    RC 186.379 CL 21.27 GP -5.49 ZAL 83.27 ZAP 171.66 ETS 320.08 ZAE 131.47 ETE 185.15 ZAC 100.74 ETC 167.63 CLP-173.72
   PLANETOCENTRIC CONIC
                                                       4.23 RAD 6567.7 VEL 11.809 PTH 2.09 VMP 7.887 DPA -5.91 RAP
    C3 18.067 VML 4.251 OLA 25.11 RAL
    LNCM AZMITH LNCM TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 8 10 3122.71 -27.02 105.27 232.66 81.18 2 0 13 2522.7 -27.96 96.74
                                                                              232.66
                                                                                                                                           -27.96
        90.00
                                                                                                          22 13 27
3 39 10
        90.00
                   21 8 25
                                  3902.17
                                                     -9.42
                                                                  155.21
                                                                                226.73
                                                                                                  63.17
                                                                                                                              3302.2
                                                                                                                                              -12.95
                                                                                                                                                             148.31
       100.00
                     2 52 44 2785.61
                                                    -29.22
                                                                   80.81
                                                                                232.99
                                                                                                  83.38
                                                                                                                              2185.6
                                                                                                                                              -29.83
                                                                                                                                                             72.06
                                                                                                  60.97 23 8 27
88.42 5 25 22
55.95 23 31 36
                  22 6 32 3714.51
4 44 47 2435.03
22 30 58 3637.85
       100.00
                                                    -7.46
                                                                  140.37
                                                                               225.68
                                                                                                                              3114.5
                                                                                                                                             -11.28
                                                                                                                                                             133.66
                                                                              233.41
                                                   -34.15
                                                                   54.60
                                                                                                                              1835.0
                                                                                                                                           -33.99
       110.00
                                                   -3.25
                                                                 131.97
                                                                                223.08
                                                                                                                              3037.9
                                                                                                                                              -7.69
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   SGT 5272.2 SGR 413.7 SG3 132.7

RRT .1895 RRF .1695 RTF .8819

SGB 5288.4 R23 .0014 R13 .8819

SGI 5272.8 SG2 406.2 TMA .86
                                                                                                                          ST 2656.5 SR 363.8 55 585.3
CRT .9847 CRS -.9232 CST -.9741
    TOE 1.9618 TRA .4788 TC3-5.2993 BAU 1.2804
    RDE .2837 RRA -.0719 RC3 .1363 FAU .02377
    FOE .6068 FRA .5834 FC3-1.1388 BSP 16937
BDE 1.9822 BRA .4841 BC3 5.3011 FSP -437
                                                                                                                          LSA 2743.3 MSA 145.0 SSA 23.9
                                                                                                                          EL1 2683.3 EL2 66.1 ALF 8.10
LAUNCH DATE DEC 29 1965
                                                                          FLIGHT TIME 176.00
                                                                                                                                      ARRIVAL CATE JUN 23 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 522.498
    RL 147.11 LAL .00 LOL 97.07 VL 26.351 GAL 1.57 AZL 86.72 MCA 264.97 SMA 119.57 ECC .23182 INC 3.2812 V1 30.284
RP 108.67 LAP -3.27 LOP 2.03 VP 36.508 GAP 12.36 AZP 90.29 TAL 174.78 TAP 79.75 RCA 91.85 APO 147.29 V2 34.873
RC 188.330 GL 20.38 GP -5.32 ZAL 79.79 ZAP 172.30 ETS 317.67 ZAE 131.61 ETE 185.05 ZAC 103.09 ETC 167.84 CLP-174.43
   PLANETOCENTRIC CONIC
    C3 18.752 VHL 4.330 DLA 25.75 RAL 8.10 RAD 6567.8 VEL 11.838 PTH 2.10 VHP 8.070 DPA -4.73 RAP 10.45 ECC 1.3086

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              237.25
                                  3173.74
                                                   -26.43
                                                                                                              2 4 5
                                                                                                                              2573.7
       90.00
                     1 11 11
                                                                  108.90
                                                                                                79.45
                                                                                                                                            -27.62
                                                                                                  63.53 22 40 43
                                  3868.57
                                                   -10.45
                                                                  153.28
                                                                               231.63
                                                                                                                               3268.6
                                                                                                                                                              75.20
       100.00
                     2 58 26 2828.00
                                                   -28.84
                                                                   83.91
                                                                                237.69
                                                                                                  81.79
                                                                                                              3 45 34
                                                                                                                              2228.0
                                                                                                                                             -29.68
                 22 31 41 3689.54
4 53 44 2467.24
22 52 52 3623.06
                                                                                                  61.18 23 33 10
                                                    -8.29
                                                                 138.98
                                                                                230.48
                                                                                                                               3089.5
                                                                                                                                             -12.07
                                                                                                                                                             132.23
                                                   -34.06
                                                                                238.30
                                                                                                  86.93 5 34 51
56.00 23 53 15
                                                                                                                              1867.2
      110.00
                                                                   57.11
                                                                                                                                            -34.11
                                                                                                                                                              47.87
                                                                                                                              3023.1
                                                                                                                                             -8.25
                                                   -3.81
                                                                  131.19
                                                                                227.73
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   3GT 5304.3 3GR 419.5 3G3 130.0
RRT .2140 RRF .1914 RTF .8857
3GB 5320.8 R23 .0008 R13 .8857
    TOE 2.0272 TRA .7321 TC3-5.1358 BAU 1.2879
                                                                                                                          ST 2704.9 SR 394.0 SS 582.8
    ROE .2968 RRA -.0706 RC3 .1209 FAU .02229
                                                                                                                          CRT .9787 CRS -.9139 CST -.9764
                                                                                                                          LSA 2790.9 MSA 147.1 SSA 23.2
EL1 2732.2 EL2 80.1 ALF 8.12
    FOE .5959 FRA .6270 FC3-1.0290 BSP 17011
    BOE 2.0488 BRA .7355 BC3 5.1372 FSP -426
                                                                     561 5305.0 SG2 409.7 THA
                                                                                                           .98
                                                                                                                                    ARRIVAL DATE JUN 25 1966
                                                                         FLIGHT TIME 178.00
LAUNCH DATE DEC 29 1965
                                                                         DISTANCE 527.972
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.300 GAL 2.18 AZL 86.79 MCA 268.15 SMA 119.28 ECC .23622 INC 3.2144 VI 30.284
RP 108.63 LAP -3.21 LOP 5.22 VP 36.479 GAP 12.68 AZP 90.10 TAL 172.90 TAP 81.05 RCA 91.11 APO 147.46 V2 34.884
RC 190.259 GL 19.43 GP -5.17 ZAL 76.33 ZAP 172.91 ETS 314.74 ZAE 131.75 ETE 184.96 ZAC 105.44 ETC 168.02 CLP-175.14
   PLANETOCENTRIC CONIC
    C3 19.632 VHL 4.431 DLA 26.31 RAL 11.98 RAD 6567.8 VEL 11.875 PTH 2.11 VHP 8.266 DPA -3.57 RAP 12.63 ECC 1.3231
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 14 38 3225.25 -25.74 112.51 241.94 77.77 2 8 23 2625.3 -27.17 104.13 90.00 22 3 46 3838.72 -11.35 151.55 236.68 63.88 23 7 45 3236.7 -14.77 144.34
                                                                                                             3 52 43
                                                                                                                                                             78.29
                     3 4 53
                                                                  86.93
                                                                                242.52
                                                                                                 80.25
                                                                                                                             2269.8
                                                                                                                                             -29.45
      100.00
                                 2869.81
                                                   -28.40
                                                                                                 61.36 23 57 21
                 22 56 12 3669.40
                                                                 137.84
                                                                                235.41
                                                                                                                             3069.4
                                                                                                                                            -12.70
                                                                                                                                                            131.07
      100.00
                                                    -8.94
                                                                                                85.48 5 45 4
56.04 24 14 22
                     5 3 25 2498.92
23 14 9 3613.06
                                                   -33.92
                                                                  59.58
                                                                                243.32
                                                                                                                             IAGA . 4
                                                                                                                                            -34.17
                                                                                                                                                             50.34
      110.00
                  23 14 9
                                                                 130.67
                                                                               232.50
                                                                                                                             3013.1
                                                                                                                                             -8.62
                                                                                                                                                           124.38
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                    SCT 5334.0 SGR 424.3 SG3 127.2
RRT .2375 RRF .2129 RTF .8905
SGB 5350.8 R23 .0001 R13 .8905
SGI 5334.9 SG2 412.1 THA 1.09
                                                                                                                         ST 2732.6 SR 403.3 SS 577.0
CRT .9719 CRS -.9044 CST -.9783
    TDE 2.0843 TRA .9946 TC3-4.9354 BAU 1.2956
    RDE .3111 RRA -.0679 RC3 .1048 FAU .02092
FDE .5830 FRA .6683 FC3 -.9226 BSP 17158
                                                                                                                         LSA 2817.7 MSA 150.5 SSA 22.3
EL1 2760.6 EL2 94.0 ALF 8.17
    BOE 2.1074 BRA .9969 BC3 4.9365 FSP
                                                                                                                                     ARRIVAL DATE JUN 27 1966
                                                                         FLIGHT TIME 180.00
LAUNCH DATE DEC 29 1965
                                                                         DISTANCE 533.409
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 97.07 VL 26.249 GAL 2.82 AZL 88.85 MCA 271.33 SMA 119.00 ECC .24106 INC 3.1478 V1 30.284
RP 108.60 LAP -3.15 LOP 8.40 VP 36.453 GAP 13.03 AZP 89.93 TAL 171.03 TAP 82.36 RCA 90.31 APO 147.68 V2 34.895
RC 192.167 GL 18.43 GP -5.03 ZAL 72.90 ZAP 173.48 ETS 311.17 ZAE 131.88 ETE 184.88 ZAC 107.81 ETC 168.16 CLP-175.84
  PLANETOCENTRIC CONIC
    C3 20.732 VHL 4.553 DLA 26.77 RAL 15.85 RAD 6567.8 VEL 11.921 PTH 2.12 VHP 8.476 DPA -2.42 RAP 14.82 ECC 1.3412
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 76.17 2 13 20
64.20 23 34 6
78.81 4 0 47
61.50 24 20 35
84.09 5 56 3
56.06 24 34 42
                                                                              246.70
                                                                                                             2 13 20
                                                                                                                             2676.2
                                                                                                                                            -26.61
                                                                                                                                                            107.76
                     1 18 44 3276.18
                                                   -24.96
                                                                 116.03
        90.00
                                                                                                                              3213.8
                                                                                                                                                            143.04
                  22 30 32
                                  3813.79
                                                   -12.09
                                                                 150.09
                                                                                241.83
                                                                                                                                             -15.47
       90.00
                                                                                                                                                             81.25
                    3 12 17
                                  2910.14
                                                   -27.90
                                                                  89.83
                                                                               247.43
                                                                                                                              2310.1
                                                                                                                                             -29.16
       100.00
                   23 19 40
                                  3655.07
                                                   -9.41
                                                                 137.04
                                                                                240.43
                                                                                                                              3055.1
                                                                                                                                            -13.15
                                                                                                                                                            130.24
      100.00
                                                                                                                                           -34.18
                                                                                                                              1929.6
                                                                                                                                                             52.74
      110.00
                    5 13 53 2529.63
                                                   -33.73
                                                                   61.95
                                                                                248.45
       110.00
                   23 34 33
                                  3608.35
                                                   -4.37
                                                                 130.42
                                                                                237.35
                                                                                                                              3008.3
                                                                                                                                              -8.80
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 5359.7 SGR 428.1 SG3 124.4 ST 2743.8 SR 411.7 SS 569.4 RRT .2606 RRF .2347 RTF .8953 CRT .9644 CRS -.8945 CST -.9800 SGB 5376.8 R23 -.0000 R13 .8953 LSA 2827.9 MSA 155.4 SSA 21.3 SG1 5360.9 SG2 413.2 TMA 1.20 EL1 2772.4 EL2 107.8 ALF 8.25
    TOE 2.1358 TRA 1.2711 TC3-4.6968 BAU 1.3021
    ROE .3264 RRA -.0635 RC3 .0888 FAU .01959
FOE .5696 FRA .7106 FC3 -.8180 BSP 17306
    BOE 2.1606 BRA 1.2727 BC3 4.6977 FSP -413
```

ARRIVAL DATE JUN 29 1966

LAUNCH DATE DEC 29 1965

```
HELIOCENTRIC CONIC
                                                                       DISTANCE 538.803
    RL 147.11 LAL .00 LOL 97.07 VL 26.199 GAL 3.50 AZL 86.92 MCA 274.51 SMA 118.72 ECC .24638 INC 3.0811 V1 30.284 RP 108.57 LAP -3.07 LOP 11.59 VP 36.428 GAP 13.41 AZP 89.76 TAL 169.17 TAP 83.68 RCA 89.47 APO 147.97 V2 34.906 RC 194.054 GL 17.40 GP -4.90 ZAL 69.53 ZAP 174.01 ETS 306.84 ZAE 132.01 ETE 184.81 ZAC 110.18 ETC 168.27 CLP-176.55
   PLANETOCENTRIC CONIC
    C3 22.08) VML 4.699 DLA 27.13 RAL 19.67 RAD 6567.9 VEL 11.977 PTH 2.13 VMP 8.702 DPA -1.29 RAP 17.01 ECC 1.3634
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 23 51 3325.09
22 55 57 3795.24
                                                                119.37
                                                                              251.53
                                                                                               74.70
                                                                                                          2 19 16
                                                                                                                          2725.1
                                                                                                                                          -25.99
                                                  -24.12
        90.00
                                                                149.00
                                                                               247.03
                                                                                                64.45
                                                                                                         23 59 12
                                                                                                                           3195.2
        90.00
                                                  -12.64
                                                                               252.42
                                                                                                77.48
                                                                                                           4 9 56
                                                                                                                           2348.1
                                                                                                                                          -28.82
                                                                                                                                                          84.02
                   3 20 48 2948.07
23 41 41 3647.49
                                                  -27.37
                                                                 92.52
       100.00
                                                                                               61.57 24 42 28
82.77 6 7 47
56.06 24 53 59
                                                                                                                           3047.5
                                                                                                                                                         129.80
                                                                               245.48
      100.00
                                                  -9.66
                                                                136.61
                  5 25 8 2559.01
23 53 50 3609.32
                                                                                                                           1959.0
                                                                                                                                                          55.03
                                                 -33.50
                                                                 64.22
                                                                              253.66
                                                                                                                                          -34.14
      110.00
                                                                              242.24
                                                                                                                           3009.3
                                                                                                                                          -8.76
                                                  -4.33
                                                                130.47
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 5379.9 SGR 431.1 SG3 121.7
RRT .2843 RRF .2581 RTF .8998
SGB 5397.2 R23 .0008 R13 .8998
                                                                                                                       ST 2743.7 $R 418.9 $5 561.9
CRT .9561 CRS -.8842 CST -.9815
    TOE 2.1849 TRA 1.5671 TC3-4.4176 BAU 1.3043
    ROE .3430 RRA -.0572 RC3 .0735 FAU .01821
FDE .5572 FRA .7559 FC3 -.7138 BSP 17329
                                                                                                                       LSA 2827.1 MSA 161.8 55A 20.2
                                                                                                                        EL1 2772.8 EL2 121.5 ALF 8.32
    BDE 2.2117 BRA 1.5682 BC3 4.4182 FSP
                                                                    SG1 5381.3 SG2 413.2 THA 1.31
                                                       -402
                                                                                                                                   ARRIVAL DATE JUL 1 1966
                                                                        FLIGHT TIME 184.00
LAUNCH DATE DEC 29 1965
                                                                       DISTANCE 544.146
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.150 GAL 4.20 AZL 86.99 MCA 277.69 SMA 118.45 ECC .25223 INC 3.0137 VI 30.284
RP 108.53 LAP -2.99 LOP 14.77 VP 36.404 GAP 13.81 AZP 89.60 TAL 167.32 TAP 85.01 RCA 88.57 APO 148.32 VZ 34.918
RC 195.918 GL 16.35 GP -4.78 ZAL 66.25 ZAP 174.49 ETS 301.60 ZAE 132.14 ETE 184.75 ZAC 112.55 ETC 168.34 CLP-177.26
   PLANETOCENTRIC CONIC
    C3 23.711 VHL 4.869 DLA 27.39 RAL 23.43 RAD 6568.0 VEL 12.045 PTH
                                                                                                 2.15 VHP 8.946 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                    1 30 29 3370.02
                                                                                              73.41 2 26 39
                                                                                                                        2170.0
                                                  -23.28
                                                                              256.40
        90.00
                                                                122.40
                   23 19 16
3 30 37
                                  3784.98
                                                                148.40
                                                                               252.23
                                                                                                64.59
                                                                                                         24 22 21
                                                                                                                            3185.0
                                                                                                                                           -16.26
                                                                                                                                                          141.29
        90.00
                                                  -12.94
                                                                                                         4 20 20
1 6 32
      100.00
                                                                                                76.31
                                                                                                                            2382.7
                                                                                                                                           -28.45
                                  2982.73
                                                  -26.83
                                                                 94.96
                                                                               257.46
      100.00
                    0 5 45
                                  3647.51
                                                    -9.66
                                                                136.61
                                                                   250.53
                                                                                                61.57
                                                                                                                            3047.5
                                                                                                                                           -13.38
                                                                                                                                                          129.80
                    5 37 8 2586.80
      110.00
                                                  -33.24
                                                                  66.35
                                                                                                                            1986.8
                                                                                                                                                          57.20
                     0 15 43
                                                                130.84
                                                                                                                            3016.2
                                                                                                                                           -8.50
      110.00
                                  3616.20
                                                   -4.07
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    RET .3068 REF .2802 REF .9049
SGB 5414.4 R23 .0010 R13 .9049
SGI 5396.7 SG2 411.9 THA 1.42
                                                                                                                       5T 2721.9 SR 424.5 55 551.6
CRT .9470 CRS -.8732 CST -.9828
    TOE 2.2226 TRA 1.8739 TC3-4.1229 BAU 1.3071
    LSA 2804.4 MSA 169.0 SSA 19.1
EL1 2751.5 EL2 135.0 ALF 8.42
                                                                                                                                  ARRIVAL DATE JUL 3 1966
                                                                        FLIGHT TIME 186.00
LAUNCH DATE DEC 29 1965
                                                                        DISTANCE 549.431
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.102 GAL 4.94 AZL 87.05 MCA 280.88 SMA 118.18 ECC .25867 INC 2.9452 V1 30.284 RP 108.49 LAP -2.89 LOP 17.96 VP 36.381 GAP 14.25 AZP 89.44 TAL 165.49 TAP 86.36 RCA 87.61 APO 148.75 V2 34.930 RC 197.761 GL 15.29 GP -4.68 ZAL 63.07 ZAP 174.91 ETS 295.32 ZAE 132.26 ETE 184.70 ZAC 114.92 ETC 168.37 CLP-177.98
   PLANETOCENTRIC CONIC
    C3 25.665 VHL 5.066 DLA 27.55 RAL 27.09 RAD 6568.0 VEL 12.126 PTH 2.17 VHP 9.211 DPA
                                                                                                                                 .92 RAP 21.42 ECC 1.4224
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           261.33
                                                                                                                       2808.7
                   1 39 13 3408.73
23 39 42 3785.20
3 41 50 3013.46
                                                                                           72.34 2 36 2
                                                                                                                                       -24.71 116.99
                                                  -22.50
                                                               124.97
        90.00
                                                 -12.93
                                                                148.41
                                                                              257.37
                                                                                                64.59 24 42 47
                                                                                                                           3185.2
                                                                                                                                          -16.25
                                                                                                                                                         141.31
        90.00
                                                                                                        4 32 3
1 24 38
6 33 23
                                                -26.32
                                                                 97.10
                                                                              262.54
                                                                                               75.29
                                                                                                                           2413.5
                                                                                                                                          -28.08
                                                                                                                                                          88.74
       100.00
                                                                                                                           3055.7
                                                                                                                                          -13.13
                                                                                                                                                        130.28
                    0 23 42
                                  3655.70
                                                   -9.39
                                                                137.07
                                                                              255.53
                                                                                                61.49
       100.00
                    5 49 50
                                                                              264.19
                                                                                                                                          -33.94
                                                                                                                                                          59.23
                                  2612.89
                                                 -32.96
                                                                 68.33
                                                                                                80.39
                                                                                                                           2012.9
      110.00
                                                                                                                                          -8.02
                                                                                                                                                         125.24
                                                                131.51
                                                                               251.98
                                                                                                55.98
                                                                                                           1 32 41
                                                                                                                           3029.0
      110.00
                    0 32 12
                                  3629.03
                                                  -3.58
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5409.8 SGR 433.6 SG3 116.2
RRT .3290 RRF .3023 RTF .9101
SGB 5427.2 R23 .0012 R13 .9101
                                                                                                                       ST 2686.4 SR 428.5 SS 540.6
    TOE 2.2535 TRA 2.1982 TC3-3.8107 BAU 1.3076
    RDE .3786 RRA -.0396 RC3 .0455 FAU .01574
FDE .5278 FRA .8460 FC3 -.5308 BSP 17558
BDE 2.2851 BRA 2.1985 BC3 3.8110 FSP -389
                                                                                                                      CRT .9369 CRS -.8613 CST -.9840
                                                                                                                     LSA 2767.8 MSA 177.0 SSA 18.1
EL1 2716.3 EL2 148.1 ALF 8.52
                                                                    5G1 5411.7 SG2 409.3 THA 1.52
                                                                                                                                   ARRIVAL DATE JUL 5 1966
                                                                        FLIGHT TIME 188.00
LAUNCH DATE DEC 29 1965
   HELIOCENTRIC CONIC
                                                                       DISTANCE 554.648
    RL 147.11 LAL .00 LOL 97.07 VL 26.054 GAL 5.73 AZL 87.12 MCA 284.06 SMA 117.92 ECC .26576 INC 2.8752 V1 30.284
RP 108.45 LAP -2.79 LOP 21.15 VP 36.359 GAP 14.72 AZP 89.30 TAL 163.67 TAP 87.74 RCA 86.58 APO 149.26 V2 34.942
RC 199.580 GL 14.23 GP -4.58 ZAL 59.99 ZAP 175.24 ETS 287.89 ZAE 132.36 ETE 184.65 ZAC 117.29 ETC 168.36 CLP-178.70
   PLANETOCENTRIC CONIC
    C3 27.989 VHL 5.290 OLA 27.62 RAL 30.62 RAD 6568.1 VEL 12.221 PTH 2.20 VHP 9.497 DPA
                                                                                                                              2.00 RAP 23.63 ECC 1.4606
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 50 36 3439.20
0 0 28 3797.77
                                                  -21.86
                                                                126.97
                                                                              266.31
                                                                                               71.54
                                                                                                          2 47 55
                                                                                                                          2839.2
                                                                                                                                         -24.18
                                                                                                                                                        114.07
        90.00
                                                                                                          1 3 46
                                                  -12.57
                                                                149.15
                                                                               262.38
                                                                                                64,41
                                                                                                                            3197.8
                                                                                                                                          -15.91
                                                                                                                                                         142.07
        90.00
                                                                  74.44 4 45 7
138.00 260.44 61.33 1 40 31
70.17 269.46 79.33 6 47 4
132.48 256.78 55.92 1 47 55
MID-COURSE EXECUTION ACCURACY
SGT 5417.3 SGR 433 3 4
                     3 54 27
                                  3039.97
                                                  -25.85
                                                                 98.93
                                                                               267.64
                                                                                                74.44
                                                                                                                            2440.0
                                                                                                                                          -27.73
                                                                                                                                                           90.63
       100.00
                    0 39 19
                                  3672.23
                                                                138.00
                                                                                                                            3012.2
                                                                                                                                          -12.61
                                                                                                                                                         131.23
       100.00
                                                   -8.85
                   6 3 7 2637.30
0 47 8 3647.67
                                                 -32.67
                                                                 70.17
                                                                                                                           2037.3
                                                                                                                                          -33.80
                                                                                                                                                          61.12
      110.00
                                                                                                                                          -7.32
      110.00
                                                                132.48
                                                                                                                           3047.7
                                                                                                                                                         126.23
                                                   -2.87
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5417.3 SGR 433.3 SG3 113.6
RRT .3511 RRF .3247 RTF .9153
SGB 5434.7 R23 .0017 R13 .9153
SGI 5419.5 SG2 405.6 THA 1.62
                                                                                                                      ST 2639.4 SR 430.6 55 529.7
CRT .9259 CRS -,8489 CST -.9852
    TOE 2.2780 TRA 2.5404 TC3-3.4878 BAU 1.3051
    ROE .3975 RRA -.0280 RC3 .0337 FAU .01454
FDE .5134 FRA .8936 FC3 -.4497 BSP 17650
                                                                                                                     LSA 2719.9 MSA 185.4 55A 17.0
EL1 2669.5 EL2 160.8 ALF 8.62
```

FLIGHT TIME 182.00

-382

BOE 2.3124 BRA 2.5406 BC3 3.4879 FSP

ARRIVAL DATE JUL 7 1966

```
LAUNCH DATE DEC 29 1965
                                                                            DISTANCE 559.785
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 26.008 GAL 6.56 AZL 87.20 MCA 287.25 SMA 117.67 ECC .27358 INC 2.8032 V1 30.284
RP 108.41 LAP -2.68 LOP 24.35 VP 36.337 GAP 15.24 AZP 89.17 TAL 161.88 TAP 89.14 RCA 85.48 APO 149.86 VZ 34.955
RC 201.376 GL 13.17 GP -4.49 ZAL 57.05 ZAP 175.47 ETS 279.37 ZAE 132.46 ETE 184.61 ZAC 119.65 ETC 168.30 CLP-179.43
   PLANETOCENTRIC CONIC
    C3 30.744 VHL 5.545 DLA 27.61 RAL 34.02 RAD 6568.2 VEL 12.334 PTH 2.22 VHP 9.809 DPA 3.05 RAP 25.85 ECC 1.5060 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG 'INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 4 45 3460.72
0 13 25 3623.24
                                                                    128.37
                                                                                   271.35
                                                                                                     70.99
                                                                                                                 3 2 26
                                                                                                                                   2860.7
                                                                                                                                                  -23.79
                                                                                                                                                                  120.52
                                                     -21.39
        90.00
                                                                                                                 1 17 8
                                                                                                      64.08
                                                                                                                                    3223.2
                                                                                                                                                   -15.21
                                                                                                                                                                   143.61
                                                                    150.64
        90.00
                                                     -11.81
                                                                    100.46
                                                                                    272.75
                                                                                                      73.74
                                                                                                                 4 59 22
                                                                                                                                    2462.4
                                                                                                                                                    -27.42
                                                                                                                                                                     92.22
                     4 8 19 3062.38
0 52 32 3696.82
                                                     -25.43
      100.00
                                                                                                                1 54 9
7 1 11
2 1 42
                                                                                                                                    3096.8
                                                                                                                                                   -11.84
                                                                                                                                                                   132.65
                                                                    139.38
                                                                                    265.24
                                                                                                      61.11
                                                     -8.05
       100.00
                                                                                    274.72
                                                                                                                                   2060.2
                                                                                                                                                   -33.63
                                                                                                                                                                    62.89
                                                     -32.37
                                                                      71.89
                                                                                                      78.36
       110.00
                      6 16 51
                                   2660.17
                                                                                                                                  3071.8
                                                                                                                                                    -6.42
                                                                                                                                                                   127.50
                                                                    133.74
                                                                                   261.50
                                                                                                     55.87
       110.00
                     1 0 30
                                   3671.79
                                                     -1.95
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2587.7 SR 431.0 SS 520.4
CRT .9139 CRS -.8361 CST -.9863
                                                                        RCT 3422.0 SGR 432.1 SG3 111.1
RRT .3736 RRF .3481 RTF .9207
SGB 5439.2 R23 .0024 R13 .9207
SGI 5424.5 SG2 400.6 THA 1.71
    TOE 2.3004 TRA 2.9073 TC3-3.1568 BAU 1.2975
    RDE .4171 RRA -.0144 RC3 .0237 FAU .01332
FDE .5006 FRA .9449 FC3 -.3751 BSP 17625
                                                                                                                               LSA 2667.4 MSA 193.9 SSA 16.1
EL1 2617.6 EL2 173.0 ALF 8.69
                                                                                                                               EL1 2617.6 EL2 173.0 ALF
    BOE 2.3379 BRA 2.9073 BC3 3.1569 FSP
                                                         -372
                                                                                                                                           ARRIVAL DATE JUL 9 1966
                                                                             FLIGHT TIME 192.00
LAUNCH DATE DEC 29 1965
                                                                            DISTANCE 564.828
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 25.962 GAL 7.44 AZL 87.27 HCA 290.45 SMA 117.42 ECC .28220 INC 2.7285 V1 30.284
RP 108.37 LAP -2.56 LOP 27.54 VP 36.317 GAP 15.80 AZP 89.05 TAL 160.13 TAP 90.57 RCA 84.28 APO 150.56 VZ 34.968
RC 203.147 GL 12.13 GP -4.41 ZAL 54.24 ZAP 175.59 ETS 270.00 ZAE 132.54 ETE 184.57 ZAC 122.00 ETC 168.21 CLP 179.83
  PLANETOCENTRIC CONIC
    C3 34.002 VHL 5.831 OLA 27.51 RAL 37.26 RAD 6568.3 VEL 12.465 PTH 2.25 VHP 10.150 OPA
                                                                                                                                        4.09 RAP 28.07 ECC 1.5596
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 2874.4
                                                                                                                 3 19 9
1 27 9
                                                                                                                                                   -23.53
                                                                                   276.43
                                                                                                      70.65
                                                                                                                                                                   121.45
                     2 21 14 3474.43
                                                     -21.08
                                                                    129.26
        90.00
                                                                                                                                                                    145.82
                                                                      277.84 73.16 5 14 35
141.17 269.91 60.86 2 5 39
73.50 279.93 77.46 7 15 34
35.27 266.11 55.83 2 14 2
MID-COURSE EXECUTION ACCURACY
SGT 5422.9 SGR 429.6 202
                                                                                    271.89
                                                                                                      63.63
                                                                                                                                    3260.2
                                                                                                                                                    -14.16
                      0 22 49
                                    3860.25
                                                     -10.70
                                                                     152.79
        90.00
                                                                                                                                                    -27.13
                                                                                                                                                                     93.55
                                                                                                                                    2461.2
                     4 23 14
                                    3081.16
                                                     -25.07
                                                                    101.74
       100.00
                     1 3 30
                                                                    141.17
                                                                                                                                    3128.7
                                                                                                                                                    -10.82
                                                                                                                                                                    134.48
       100.00
                                    3728.75
                                                       -6.99
                                                                                                                                    2081.7
                                                                                                                                                    -33.46
                                                                                                                                                                     64.54
                     6 30 52 2681.71
                                                     -32.06
                                                                      73.50
       110.00
                                                                                                                                                                    129.04
                      1 12 21
                                    3700.97
                                                       -.84
                                                                    135.27
                                                                                                                                    3101.0
                                                                                                                                                     -5.31
       110.00
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2524.0 SR 429.2 SS 510.3
CRT .9005 CRS -.8222 CST -.9875
                                                                        SCT 5422.9 SCR 429.6 SC3 108.6
RRT .3950 RRF .3702 RTF .9263
SCB 5439.9 R23 .0026 R13 .9264
    TOE 2.3125 TRA 3.2927 TC3-2.8358 BAU 1.2891
    RDE .4368 RRA .0009 RC3 .0153 FAU .01221
FDE .4867 FRA .9970 FC3 -.3108 BSP 17703
BDE 2.3534 BRA 3.2927 BC3 2.8359 FSP -365
                                                                                                                                LSA 2602.7 MSA 202.3 SSA 15.2
                                                                        SG1 5425.6 SG2 394.5 THA 1.80
                                                                                                                                EL1 2553.6 EL2 184.5 ALF 8.75
                                                                                                                                          ARRIVAL DATE JUL 11 1966
                                                                            FLIGHT TIME 194.00
LAUNCH DATE DEC 29 1965
                                                                            DISTANCE 569.759
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 25.917 GAL 8.38 AZL 87.35 HCA 293.64 SHA 117.18 ECC .29174 INC 2.6506 VI 30.284 RP 108.33 LAP -2.43 LOP 30.74 VP 36.298 GAP 16.42 AZP 88.94 TAL 158.40 TAP 92.05 RCA 82.99 APO 151.36 V2 34.981 RC 204.883 GL 11.11 GP -4.33 ZAL 51.57 ZAP 175.57 ETS 260.18 ZAE 132.61 ETE 184.53 ZAC 124.34 ETC 168.06 CLP 179.07
   PLANETOCENTRIC CONIC
    C3 37.850 VHL 6.152 DLA 27.35 RAL 40.34 RAD 6568.5 VEL 12.618 PTH 2.29 VMP 10.523 DPA
                                                                                                                                        5.10 RAP 30.29 ECC 1.6229
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                3 37 16
1 34 28
5 30 28
2 15 13
7 30 4
2 24 59
                                                                                                                                   2882.7
                                                                                                                                                   -23.37
                                                                                                                                                                   122.00
                  2 39 14 3482.67
0 29 22 3906.17
4 38 51 3097.05
1 12 26 3767.02
                                                                                                      70.44
                                                                    129.79
                                                                                   281.50
                                                     -20.89
                                                                                                      63.13
                                                                                                                                    3306.2
                                                                                                                                                    -12.83
                                                                                                                                                                   148.54
                                                                                    276.37
         90.00
                                                      -9.30
                                                                     155.44
                                                                                                                                    2497.1
                                                                                                                                                    -26.89
                                                                                                                                                                     94.66
                                                                                                      72.68
                                                                                    282.90
        100.00
                                                    -24.75
                                                                    102.81
                                                                                                                                                                   136.65
                                                                                                      60.61
                                                                                                                                    3167.0
                                                                                                                                                    -9.59
                                                      -5.72
                                                                     143.30
                                                                                    274.44
        100.00
                      1 12 26
                                                                                                                                                    -33.26
                                                                                                                                                                     66.11
                      6 45 2 2702.17
1 22 44 3734.67
                                                                                                                                    2102.2
                                                                                    285.08
                                                                                                      76.61
                                                    -31.75
                                                                      75.01
       110.00
                                                                                                                                                    -4.03
                                                                                                                                                                   130.81
                                                        .45
                                                                                    270.61
                                                                                                      55.82
                                                                                                                                    3134.7
                                                                     137.02
        110.00
                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5416.9 SGR 426.0 SG3 106.2
RRT .4164 RRF .3924 RTF .9318
SGB 5433.7 R23 .0026 R13 .9318
                                                                                                                               ST 2456.4 SR 425.5 SS 501.6
CRT .8862 CRS -.8077 CST -.9886
     TOE 2.3208 TRA 3.6983 TC3-2.5227 BAU 1.2765
    RDE .4569 RRA .0181 RC3 .0085 FAU .01111
FDE .4737 FRA 1.0526 FC3 -.2540 BSP 17767
BDE 2.3654 BRA 3.6984 BC3 2.5227 FSP -358
                                                                                                                               LSA 2534.2 MSA 210.2 S5A 14.4
EL1 2485.3 EL2 194.9 ALF 8.78
                                                                         SG1 5419.9 SG2 387.1 THA 1.89
                                                                                                                                            ARRIVAL DATE JUL 13 1966
                                                                             FLIGHT TIME 196.00
                                                                             DISTANCE 574.557
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 25.873 GAL 9.39 AZL 87.43 HCA 296.84 SMA 116.94 ECC .30230 INC 2.5688 V1 30.284 RP 108.29 LAP -2.29 LOP 33.93 VP 36.279 GAP 17.09 AZP 88.84 TAL 156.73 TAP 93.57 RCA 81.59 APO 152.30 V2 34.994 RC 206.614 GL 10.12 GP -4.26 ZAL 49.05 ZAP 175.41 ETS 250.54 ZAE 132.65 ETE 184.49 ZAC 126.65 ETC 167.87 CLP 178.29
   PLANETOCENTRIC CONIC
     C3 42.398 VHL 6.511 OLA 27.12 RAL 43.24 RAD 6568.6 VEL 12.797 PTH
                                                                                                         2.33 VHP 10.934 OPA
                                                                                                                                        6.08 RAP 32.50 ECC 1.6978
     ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  3 56 3
                                                                                                                                    2887.8
                                                                                                                                                    -23.27
                                                                                    286.54
                                                                                                       70.52
                      2 57 56 3487.78
                                                      -20.78
                                                                     130.12
                     0 33 50 3958.36
4 54 51 3110.84
1 19 35 3810.54
6 59 10 2721.83
                                                                                                                                     3358.4
                                                                                                                                                    -11.29
                                                                                                                                                                    141.60
                                                                                    280.68
                                                                                                       62.66
                                                                                                                   1 39 48
                                                                     158.42
                                                      -7.68
                                                                                                                 5 46 42
2 23 6
7 44 32
                                                                                                                                     2510.8
                                                                                                                                                                     95.63
                                                                     103.74
                                                                                     287.90
                                                                                                       72.27
                                                                                                                                                    -26.66
                                                      -24.47
        100.00
                                                                                                                                     3210.5
                                                                                                                                                     -8.17
                                                                                                                                                                    139.10
                                                                     145.70
                                                                                    278.82
                                                                                                       60.38
                                                       -4.26
                                                                                                                                                    -33.06
                                                                                    290.15
                                                                                                       75.81
                                                                                                                                    2121.8
                                                                                                                                                                     67.61
                                                    -31.43
                                                                       76.45
                                                                                                       55.86
                                                                                                                   2 34 38
                                                                                                                                    3172.3
                                                                                                                                                     -2.60
                                                                                                                                                                    132.78
                                                     1.89
                                                                     138.99
                                                                                     274.99
                      1 31 46 3772.31
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 5408.1 SGR 421.4 SG3 103.8 ST 2387.4 SR 419.9 S5 494.4 RRT .4376 RRT .4145 RTF .9375 CRT .8706 CRS -.7927 CST -.9897 SG8 5424.5 R23 .0025 R13 .9375 LSA 2464.4 MSA 217.3 S5A 13.6 SG1 5411.2 SG2 378.7 TMA 1.96 EL1 2415.5 EL2 204.2 ALF 8.77
     TOE 2.3263 TRA 4.1320 TC3-2.2213 BAU 1.2591
     ROE .4770 RRA .0373 RC3 .0034 FAU .01002
FOE .4618 FRA 1.1118 FC3 -.2046 BSP 17802
BOE 2.3747 BRA 4.1322 BC3 2.2213 FSP -351
```

FLIGHT TIME 190.00

ARRIVAL DATE JUL 15 1966 FLIGHT TIME 198.00 DISTANCE 579.194 RL 147.11 LAL .00 LOL 97.07 VL 25.831 GAL 10.47 A7L 87.52 MCA 300.04 SMA 116.72 ECC .31403 INC 2.4822 V1 30.284 RP 108.25 LAP -2.15 LOP 37.13 VP 36:261 GAP 17.84 A7P 88.76 TAL 155.10 TAP 95.14 RCA 80.06 APO 153.37 V2 35.007 RC 208.309 GL 9.16 GP -4.20 TAL 46.69 ZAP 175.11 ETS 241.60 ZAE 132.66 ETE 184.45 ZAC 128.95 ETC 167.62 CLP 177.48 HELIOCENTRIC CONIC PLANE TOCENTRIC CONIC C3 47.781 VHL 6.912 DLA 26.85 RAL 45.97 RAD 6568.8 VEL 13.006 PTM 2.37 VHP 11.387 DPA 7.03 RAP 34.71 ECC 1.7864 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG 2891.5 4 14 54 3 16 43 3491.51 0 36 46 4014.72 5 10 57 3123.26 1 25 13 3658.20 70.23 291.51 -20.69 130.36 90.00 3414.7 -9.58 154.85 1 43 41 62.26 -5.91 161.61 284.85 90.00 96.49 2523.3 -26.45 71.90 292.81 -24.21 104.57 100.00 141.76 2 29 32 7 58 49 2 43 5 60.21 3258.2 -6.60 283.05 -2.65 148.33 100.00 69.05 2140.9 -32.84 75.05 7 13 8 2740.91 1 39 31 3613.31 -31.10 77.84 295.12 110.00 134.92 55.97 3213.3 -1.03 279.25 1 39 31 141.13 3.46 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5396.8 SGR 415.8 SG3 101.7 RRT .4591 RRF .4373 RTF .9432 SGB 5412.8 R23 .0026 R13 .9432 SGI 5400.2 SG2 369.2 THA 2.03 ST 2321.4 SR 412.5 SS 490.0 CRT .8542 CRS -.7780 CST -.9909 TOE 2.3331 TRA 4.5991 TC3-1.9315 BAU 1.2338 ROE .4973 RRA .0585 RC3 -.0002 FAU .00889 LSA 2397.8 MSA 223.2 SSA 12.9 EL1 2348.3 EL2 212.0 ALF 8.70 FDE .4522 FRA 1.1764 FC3 -.1612 BSP 17738 BDE 2.3855 BRA 4.5994 BC3 1.9315 FSP -342 ARRIVAL DATE JUL 17 1966 FLIGHT TIME 200,00 LAUNCH DATE DEC 29 1965 DISTANCE 583.636 RL 147.11 LAL .00 LOL 97.07 VL 25.789 GAL 11.63 A7L 87.61 MCA 303.24 SMA 116.50 ECC .32709 INC 2.3897 V1 30.284 RP 108.21 LAP -2.00 LOP 40.34 VP 36.245 GAP 18.67 A7P 88.69 TAL 153.54 TAP 96.76 RCA 78.39 APO 154.60 V2 35.020 RC 209.976 GL 8.23 GP -4.14 ZAL 44.48 ZAP 174.68 ETS 233.64 ZAE 132.65 ETE 184.42 ZAC 131.22 ETC 167.32 CLP 176.65 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 54.171 VHL 7.360 DLA 26.52 RAL 48.50 RAD 6569.0 VEL 13.249 PTH 2.42 VHP 11.890 DPA 7.96 RAP 36.91 ECC 1.8915
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 33 25 2895.0 -23.13 130.58 296.37 70.14 3 35 10 3494.95 -20.61 3473.7 -7.75 158.23 61.95 1 46 28 288.86 4073.73 -4.03 164.93 90.00 6 19 6 2 34 43 6 12 47 2 50 24 5 26 51 3134.87 1 29 34 3909.05 7 26 48 2759.59 1 46 7 3857.10 297.62 71.57 2534.9 -26.25 97.29 -23.96 105.34 100.00 60.12 3309.0 -4.90 144.58 267.15 -.93 151.12 100.00 2159.6 -32.61 70.46 74.31 299.97 -30.77 79.20 110.00 3257.1 .64 137.21 56.16 110.00 5.12 143.43 283.39 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5379.5 SGR 408.9 SG3 99.5 RRT .4796 RRF .4591 RTF .9489 SGB 5395.0 R23 .0022 R13 .9489 SGI 5383.1 SG2 358.5 THA 2.10 ST 2252.9 SR 403.2 55 486.5 CRT .8366 CRS -.7626 CST -.9921 TOE 2.3343 TRA 5.0944 TC3-1.6628 BAU 1.2042 ROE .5173 RRA .0814 RC3 -.0026 FAU .00783 FOE .4425 FRA 1.2447 FC3 -.1251 BSP 17769 LSA 2328.7 MSA 228.0 SSA 12.2 EL1 2278.3 EL2 218.5 ALF 8.60 BOE 2.3909 BRA 5.0951 BC3 1.6628 FSP -336 ARRIVAL DATE JUL 19 1966 FLIGHT TIME 202.00 LAUNCH DATE DEC 29 1965 01STANCE 587.839 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 97.07 VL 25.748 GAL 12.92 A7L 87.71 HCA 306.44 SMA 116.28 ECC .34167 INC 2.2900 VI 30.284 RP 108.17 LAP -1.84 LOP 43.54 VP 36.229 GAP 19.59 A7P 88.64 TAL 152.05 TAP 98.50 RCA 76.55 APO 156.01 V2 35.034 RC 211.617 GL 7.33 GP -4.09 ZAL 42.43 ZAP 174.13 ETS 226.77 ZAE 132.60 ETE 184.38 ZAC 133.45 ETC 166.96 CLP 175.78 PLANETOCENTRIC CONIC C3 61.784 VHL 7.860 DLA 26.16 RAL 50.86 RAD 6569.2 VEL 13.533 PTH 2.47 VHP 12.450 DPA 8.84 RAP 39.08 ECC 2.0168 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.05 4 51 19 61.75 1 48 24 71.25 6 34 50 60.12 2 38 49 73.60 8 26 20 56.43 2 56 41 2898.7 -23.06 90.00 3 53 1 3498.70 90.00 0 39 29 4134.36 100.00 5 42 24 3146.06 100.00 1 32 47 3962.24 110.00 7 40 2 2777.95 110.00 1 51 38 3903.10 301.10 -20.53 130.82 3534.4 161.66 -5.84 292.74 -2.08 168.32 98.07 2546.1 -26.06 302.31 -23.72 106.09 100.00 147.51 3362.2 -3.11 .88 154.03 291.09 100.00 71.84 2178.0 -32.37 -30.42 304.69 80.51 110.00 2.40 139.61 3303.1 287.39 6.86 145.85 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2187.5 SR 392.3 SS 485.4 CRT .8183 CRS -.7473 CST -.9932 SCT 5358.4 SGR 400.9 SG3 97.4 RRT .5000 RRF .4809 RTF .9546 SGB 5373.4 R23 .0018 R13 .9546 TOE 2.3367 TRA 5.6270 TC3-1.4120 BAU 1.1663 ROE .5371 RRA .1062 RC3 -.0038 FAU .00673 FOE .4345 FRA 1.3191 FC3 -.0943 BSP 17782 BOE 2.3976 BRA 5.6280 BC3 1.4120 FSP -329 LSA 2263.0 MSA 231.3 SSA 11.6 EL1 2211.2 EL2 223.1 ALF 8.44 5G1 5362.2 SG2 346.9 THA 2.15 ARRIVAL DATE JUL 21 1966 FLIGHT TIME 204.00 LAUNCH DATE DEC 29 1965 DISTANCE 591.750 RL 147.11 LAL .00 LOL 97.07 VL 25.709 GAL 14.31 AZL 87.82 MCA 309.65 SMA 116.08 ECC .35800 INC 2.1817 V1 30.284
RP 108.13 LAP -1.68 LOP 46.74 VP 36.214 GAP 20.62 AZP 88.61 TAL 150.66 TAP 100.31 RCA 74.52 APO 157.63 V2 35.047
RC 213.230 GL 6.47 GP -4.04 ZAL 40.54 ZAP 173.48 ETS 220.93 ZAE 132.50 ETE 184.33 ZAC 135.64 ETC 166.53 CLP 174.87 PLANE TOCENTRIC CONIC C3 70.897 VML 8.420 DLA 25.77 RAL 53.02 RAD 6569.4 VEL 13.865 PTM 2.53 VMP 13.076 DPA 9.70 RAP 41.24 ECC 2.1668 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -22.97 303.67 69.95 5 *8 28* 131.10 4 10 5 3403.01 -20.43 90.00 -3.88 3595.9 61.68 1 49 35 106.81 306.84 70.94 6 50 1 197.04 294.89 60.22 2 41 59 81.80 309.25 72.91 8 39 23 148.39 291.25 56.80 3 1 59 MID-COURSE EXECUTION ACCURACY SGT 5333.5 SGR 301 6 67 296.46 -.10 171.75 0 39 39 4195.85 90.00 2557.0 -25.86 -23.47 106.81 5 57 24 3157.05 100.00 150.52 -1.25 3417.0 2.73 157.04 1 35 2 4017.04 100.00 7 52 47 2796.04 1 56 8 3950.81 73.19 -32.11 2196.0 81.80 -30.07 110.00 4.22 148.39 3350.8 8.65 3950.81 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS \$T 2125.6 SR 379.9 55 486.9 CRT .7996 CR5 -.7324 CST -.9943 SGT 5333.5 SGR 391.8 SG3 95.4
RRT .5202 RRF .5024 RTF .9602
SGB 5347.8 R23 .0012 R13 .9602
SGI 5337.4 SG2 334.4 THA 2.20 TOE 2.3413 TRA 6.2016 TC3-1.1801 BAU 1.1185 ROE .5566 RRA .1327 RC3 -.0041 FAU .00559 LSA 2201.1 MSA 232.9 SSA 10.9 EL1 2147.4 EL2 225.8 ALF 8.22 FOE .4282 FRA 1.4005 FC3 -.0683 BSP 17784 BOE 2.4065 BRA 6.2030 BC3 1.1801 FSP -323

```
LAUNCH DATE DEC 29 1965
                                                                            FLIGHT TIME 206.00
                                                                                                                                         ARRIVAL DATE JUL 23 1966
   HELIOCENTRIC CONTC
                                                                            DISTANCE 595.297
    RL 147.11 LAL .00 LOL 97.07 VL 25.672 GAL 15.83 AZL 87.94 MCA 312.86 SMA 115.88 ECC .37635 INC 2.0627 V1 30.284
RP 108.09 LAP -1.51 LOP 49.95 VP 36.200 GAP 21.79 AZP 88.60 TAL 149.37 TAP 102.23 RCA 72.27 APO 159.49 V2 35.060
RC 214.816 GL 5.64 GP -3.99 ZAL 38.83 ZAP 172.72 ETS 216.00 ZAE 132.35 ETE 184.29 ZAC 137.77 ETC 166.04 CLP 173.91
   PLANETOCENTRIC CONIC
     C3 81.868 VML 9.048 DLA 25.34 RAL 54.98 RAD 6569.6 VEL 14.255 PTH
                                                                                                       2.59 VHP 13.781 DPA 10.51 RAP 43.36 ECC 2.3473
    DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SCT 5306.8 SGR 381.8 SG3 93.5
RRT .5404 RRF .5243 RTF .9655
SG8 5320.5 R23 .0007 R13 .9655
SG1 5310.8 SG2 321.0 THA 2.23
                                                                                                                             ST 2070.2 SR 366.3 SS 491.9
CRT .7812 CRS -.7188 CST -.9953
    TOE 2.3545 TRA 6.8281 TC3 -.9649 BAU 1.0561
    RDE .5759 RRA .1611 RC3 -.0035 FAU .00432
                                                                                                                             L5A 2146.6 M5A 232.4 S5A 10.3
EL1 2090.1 EL2 226.5 ALF 7.96
    FOE .4250 FRA 1.4911 FC3 -.0457 BSP 17663
    BOE 2.4239 BRA 6.8300 BC3 .9649 FSP -314
LAUNCH DATE DEC 29 1965
                                                                            FLIGHT TIME 208.00
                                                                                                                                         ARRIVAL DATE JUL 25 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 598.386
    RL 147.11 LAL .00 LOL 97.07 VL 25.635 GAL 17.52 AZL 88.07 MCA 316.07 SMA 115.69 ECC .39705 INC 1.9306 V1 30.284
RP 108.05 LAP -1.34 LOP 53.16 VP 36.187 GAP 23.10 AZP 88.61 TAL 148.22 TAP 104.30 RCA 69.76 APO 161.63 VZ 35.073
RC 216.375 GL 4.84 GP -3.95 ZAL 37.28 ZAP 171.86 ETS 211.81 ZAE 132.13 ETE 184.23 ZAC 139.84 ETC 165.47 CLP 172.88
   PLANETOCENTRIC CONIC
    C3 95.164 VHL 9.755 DLA 24.9D RÅL 56.75 RÅD 6569.9 VEL 14.714 PTH 2.66 VHP 14.578 DPA 11.28 RAP 45.44 ECC 2.5662
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    4 41 34 3513.20
0 37 58 4319.33
6 25 21 3178.56
1 36 51 4129.20
8 16 25 2831.09
2 2 17 4049.43
                                                                                                                5 40 7
        90.00
                                                   -20.19
                                                                  131.75
                                                                                  314.26
                                                                                                  69.71
                                                                                                                               2913.2
                                                                                                                                                 -22.77
        90.00
                                                      3.88
                                                                    178.64
                                                                                   303.45
                                                                                                     61.93
                                                                                                                 1 49 57
                                                                                                                                  3719.3
                                                                                                                                                     .10
                                                                                                                                                                 172.01
                                                                                                              7 18 20
2 45 41
9 3 36
3 9 47
       100.00
                                                    -22.99
                                                                   108.23
                                                                                   315.35
                                                                                                     70.35
                                                                                                                                  2578.6
                                                                                                                                                  -25.46
                                                                                                                                                                 100.30
       100.00
                                                      6.50
                                                                   163.24
                                                                                   302.02
                                                                                                     60.76
                                                                                                                                  3529.2
                                                                                                                                                   2.55
                                                                                                                                                                 156.68
                                                                                                                                  2231.1
       110.00
                                                    -29.34
                                                                     84.27
                                                                                   317.79
                                                                                                    71.62
                                                                                                                                                -31.57
                                                                                                                                                                  75.77
                                                                                                                                                                 147.31
       110.00
                      2 2 17
                                   4049.43
                                                     12.28
                                                                    153.72
                                                                                   298.54
                                                                                                     57.84
                                                                                                                                  3449.4
                                                                                                                                                    7.94
                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SCT 5273.5 5GR 370.5 5G3 91.6

RRT .5596 RRF .5451 RTF .9707

SGB 5286.5 R23 .0000 R13 .9707

SGI 5277.6 SG2 306.8 THA 2.26
    TOE 2.3688 TRA 7.5041 TC3 -.7714 BAU .9814
                                                                                                                             ST 2015.6 SR 351.2 SS 499.2
CRT .7627 CRS -.7053 CST -.9962
    ROE .5947 RRA .1908 RC3 -.0025 FAU .00299
FOE .4229 FRA 1.5902 FC3 -.0272 BSP 17651
BOE 2.4423 BRA 7.5065 BC3 .7714 FSP -309
                                                                                                                              LSA 2093.3 MSA 230.2 55A 9.7
                                                                                                                             EL1 2033.5 EL2 225.1 ALF 7.67
                                                                           FLIGHT TIME 210.00
                                                                                                                                        ARRIVAL DATE JUL 27 1966
LAUNCH DATE DEC 29 1965
                                                                           DISTANCE 600.897
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 97.07 VL 25.601 GAL 19.39 AZL 88.22 HCA 319.28 SMA 115.52 ECC .42049 INC 1.7820 VI 30.284
RP 108.01 LAP -1.16 LOP 56.37 VP 36.175 GAP 24.60 AZP 88.65 TAL 147.24 TAP 106.52 RCA 66.94 APO 164.09 VZ 35.086
RC 217.906 GL 4.08 GP -3.91 ZAL 35.93 ZAP 170.90 ETS 208.23 ZAE 131.84 ETE 184.17 ZAC 141.83 ETC 164.84 CLP 171.77
   PLANETOCENTRIC CONIC
    C3 111,404 VHL 10.555 DLA 24.45 RAL 58.31 RAD 6570.1 VEL 15.256 PTH
                                                                                                      2.74 VHP 15.484 DPA 12.00 RAP
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              318.21
                     4 55 51 3518.66
0 36 7 4380.51
                                                    -20.06
                                                                   132.10
                                                                                                    69.58
                                                                                                                5 54 29
                                                                                                                                 2918.7
                                                                                                                                                               124.39
        90.00
                                                                                                                                                 -22.66
                                                                                                               1 49 8
                                                                                                                                 3780.5
                                                                                                                                                  2.07
                                                                   182.08
                                                                                  306.68
                                                                                                    62.24
                                                                                                                                                                175.42
        90.00
                                                      5.83
                    6 38 9 3188.82
1 36 30 4185.58
8 27 10 2847.72
                                                                                  319.27
                                                                                                    70.07
                                                                                                                7 31 17
                                                                                                                                 2588.8
                                                                                                                                                 -25.26
                                                                                                                                                                101.00
                                                   -22.75
                                                                   108.90
       100.00
                                                                                                             2 46 16
                                                                                                    61.20
                                                                                                                                 3585.6
                                                                                                                                                                159.78
       100.00
                                                      8.36
                                                                   166.39
                                                                                  305.31
                                                                                                                                                  4.45
                                                                                                                9 14 38
                                                                                                                                                 -31.29
       110.00
                                                    -28.98
                                                                    85.43
                                                                                  321.71
                                                                                                    71.02
                                                                                                                                 2247.7
                                                                                                                                                                  76.99
                                                                   156.49
                                                                                  301.93
                                                                                                    58.52
                                                                                                                 3 12 17
                                                                                                                                 3499.4
                                                                                                                                                   9.80
                                                                                                                                                                149.99
       110.00
                      2 3 48
                                   4099.45
                                                    14.07
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      SCT 5236.3 SCR 358.1 SCS 89.9
RRT .5784 RRF .5654 RTF .9755
SCB 5248.6 R23 -.0006 R13 .9755
    TOE 2.3924 TRA 8.2427 TC3 -.5958 BAU
                                                                                                                             ST 1965.1 SR 335.2 SS 510.1
                                                        .8874
    ROE .6131 RRA .2217 RC3 -.0010 FAU .00148
FOE .4235 FRA 1.7009 FC3 -.0115 BSP 17619
BDE 2.4697 BRA 8.2457 BC3 .5958 FSP -303
                                                                                                                             CRT .7450 CRS -.6930 CST -.9970
                                                                                                                            LSA 2045.2 MSA 226.1 35A 9.1
                                                                       SG1 5240.4 SG2 291.9 THA 2.27
                                                                                                                             ELI 1981.1 ELZ 221.8 ALF 7.33
LAUNCH DATE DEC 29 1965
                                                                           FLIGHT TIME 212,00
                                                                                                                                         ARRIVAL DATE JUL 29 1965
  HELIOCENTRIC CONIC
                                                                           DISTANCE 602.666
                         .00 LOL 97.07 VL 25.569 GAL 21.50 A7L 88.39 MCA 322.50 SMA 115.35 ECC .44713 INC 1.6127 V1 30.284
-.98 LOP 59.58 VP 36.165 GAP 26.32 A7P 88.72 TAL 146.45 TAP 108.95 RCA 63.78 APO 166.93 V2 35.099
3.35 GP -3.87 ZAL 34.77 ZAP 169.81 ETS 205.14 ZAE 131.44 ETE 184.10 ZAC 143.72 ETC 164.14 CLP 170.56
   RL 147.11 LAL
        107.97 LAP
    RC 219.410 GL
  PLANETOCENTRIC CONIC
    C3 131.415 VHL 11.464 OLA 23.93 RAL 59.65 RAO 6570.4 VEL 15.898 PTH
                                                                                                       2.81 VHP 16.523 OPA 12.67 RAP 49.39 ECC 3.1628
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 9 6 3523.92 -19.93 132.44 321.89 69.46 6 7 49 2923.9 -22.55 124.74
                                                    -19.93
                                                                                                                1 47 33
        90.00
                     0 33 32
                                  4440.89
                                                      7.73
                                                                   185.50
                                                                                  309.71
                                                                                                    62.68
                                                                                                                                  3640.9
                                                                                                                                                  4.01
                                                                                                                                                                 178.80
                    6 50 3 3198.43
1 35 16 4241.62
8 37 8 2863.40
2 4 40 4149.41
       100.00
                                                    -22.33
                                                                   109.52
                                                                                  322.92
                                                                                                    69.81
                                                                                                                                  2598.4
                                                                                                                                                 -25.07
                                                                                                    61.74
       100.00
                                                     10.18
                                                                   169.55
                                                                                  308.40
                                                                                                               2 45 57
                                                                                                                                  3641.6
                                                                                                                                                   6.33
                                                                                                                                                                162.88
                                                    -28.63
                                                                     86.52
                                                                                  325.36
                                                                                                    70.47
                                                                                                               9 24 51
                                                                                                                                 2263.4
                                                                                                                                                 -31.02
       110.00
                                                    15.83
                                                                   159.29
                                                                                  305.13
                                                                                                    59.30
                                                                                                                3 13 50
                                                                                                                                 3549.4
                                                                                                                                                  11.64
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                  SCT 5195.0 SGR 344.6 SG3 88.2 ST 1918.2 ST 318.2 ST 525.0 RRT .5963 RRF .5849 RTF .9799 CRT .7285 CRS -.6821 CST -.9977 SGB 5206.4 R23 -.0013 R13 .9799 LSA 2002.0 MSA 220.1 SSA 8.5 SGI 5199.0 SG2 276.4 THA 2.27 ELI 1932.4 EL2 216.4 ALF 6.98
    TOE 2.4283 TRA 9.0530 TC3 -.4379 BAU .7694
    ROE .6312 RRA .2535 RC3 .0007 FAU-.00029
FOE .4273 FRA 1.8252 FC3 .0019 89P 17574
BOE 2.5090 BRA 9.0566 BC3 .4379 FSP -298
```

```
LAUNCH DATE OFC 29 1965
                                                                             FLIGHT TIME 214.00
                                                                                                                                           ARRIVAL DATE JUL 31 1966
    HELIOCENTRIC CONIC
                                                                             DISTANCE 603.480
     RL 147.11 LAL
                          .00 LOL 97.07 VL 25.540 GAL 23.88 AZL 88.58 MCA 325.72 SNA 115.20 ECC .47751 INC 1.4162 V1 30.284 -.80 LOP 62.80 VP 36.156 GAP 28.31 AZP 88.83 TAL 145.91 TAP 111.63 RCA 60.19 APO 170.21 V2 35.111 2.65 GP -3.83 ZAL 33.84 ZAP 168.58 ETS 202.45 ZAE 130.93 ETE 184.02 ZAC 145.49 ETC 163.38 CLP 169.24
     RP 107.93 LAP
     RC 220.887 GL
    PLANETOCENTRIC CONIC
     C3 156.313 VHL 12.503 OLA 23.42 RAL 60.74 RAD 6570.7 VEL 16.663 PTM
                                                                                                        2.89 VHP 17.719 DPA 13.29 RAP 51.22 ECC 3.5725
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      5 21 16 3528.55
0 30 7 4500.22
         90.00
                                                      -19.82
                                                                     132.73
                                                                                    325.25
                                                                                                      69.35
                                                                                                                 6 20 5
                                                                                                                                   2928.5
                                                                                                                                                    -22.45
                                                                                                                                                                   125.05
         90.00
                                                                                                                 1 45 7
                                                        9.57
                                                                     188.89
                                                                                     312.49
                                                                                                       63.22
                                                                                                                                    3900.2
                                                                                                                                                      5.90
                                                                                                                                                                   182.13
                                                                                                                 7 54 27
2 44 42
                      7 1 0 3207.01
1 33 5 4296.99
       100.00
                                                       -22.32
                                                                     110.08
                                                                                     326.26
                                                                                                       69.59
                                                                                                                                    2607.0
                                                                                                                                                    -24.90
                                                                                                                                                                   102.23
        100.00
                                                       11.95
                                                                     172.71
                                                                                    311.24
                                                                                                       62.40
                                                                                                                                    3697.0
                                                                                                                                                      8.16
                                                                                                                                                                   165.97
                                                                                                                 9 34 11
3 14 19
                      8 46 13 2877.81
        110.00
                                                     -28.29
                                                                      87.51
                                                                                    328.69
                                                                                                       69.97
                                                                                                                                    2277.8
                                                                                                                                                    -30.75
                                                                                                                                                                     79.17
                     2 4 20 4198.95
       110.00
                                                      17.53
                                                                                    308.08
                                                                                                       60.17
                                                                     162.13
                                                                                                                                    3599.0
                                                                                                                                                     13.43
                                                                                                                                                                   155.41
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 5151.5 SGR 330.1 SG3 86.7

RRT .6137 RRF .6038 RTF .9839

SGB 5162.0 R23 -.0019 R13 .9839

SGI 5155.5 SG2 260.4 THA 2.26
     TOE 2.4855 TRA 9.9500 TC3 -.2957 BAU .6179
                                                                                                                                ST 1876.3 SR 300.6 SS 545.1
CRT .7141 CRS -.6735 CST -.9983
     ROE .6493 RRA .2858 RC3 .0026 FAU-.00248
     FDE .4361 FRA 1.9668 FC3 .0137 BSP 17392
                                                                                                                                LSA 1965.4 HSA 212.2 SSA 8.0
     BOE 2.5689 BRA 9.9541 BC3 .2957 FSP
                                                                                                                                EL1 1888.7 EL2 209.1 ALF 6.61
 LAUNCH DATE DEC 29 1965
                                                                             FLIGHT TIME 216.00
                                                                                                                                           ARRIVAL DATE AUG 2 1986
   HELIOCENTRIC CONIC
                                                                             DISTANCE 603.044
    RL 147.11 LAL .00 LOL 97.07 VL 25.513 GAL 26.60 AZL 88.82 HCA 328.94 SMA 115.07 ECC .51227 INC 1.1843 VI 30.284
RP 107.89 LAP -.61 LOP 66.02 VP 36.149 GAP 30.63 AZP 88.99 TAL 145.68 TAP 114.61 RCA 56.12 APO 174.02 V2 35.124
RC 222.336 GL 1.97 GP -3.78 ZAL 33.15 ZAP 167.20 ETS 200.07 ZAE 130.26 ETE 183.93 ZAC 147.11 ETC 162.58 CLP 167.76
   PLANETOCENTRIC CONIC
     C3 187.617 VHL 13.697 DLA 22.88 RAL 61.58 RAD 6571.0 VEL 17.577 PTH
                                                                                                        2.97 VHP 19.107 DPA
    C3 187.017 VML 13.097 OLA 22.88 RAL 61.38 RAD 6571.0 VEL 17.577 PTH 2.97 VMP 19.107 DPA 13.84 RAP 52.92 ECC 4.0877 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT A9C INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 25 43 4558.28 11.33 192.25 314.98 63.88 1 41 41 3958.3 7.73 185.42 100.00 7 10 54 3214.13 -22.15 110.54 329.23 69.40 8 4 28 2614.1 -24.76 102.71 100.00 1 29 49 4351.41 13.64 175.86 313.80 63.14 2 42 20 3751.4 .9.93 169.04 110.00 8 54 20 2890.54 -27.99 88.38 331.65 69.53 9 42 30 2290.5 -30.52 80.09 110.00 2 2 52 4247.76 19.16 164.97 310.77 61.13 3 13 40 3647.8 15.16 158.14
                                                                                                                                      13.84 RAP 52.92 ECC 4.0877
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        SGT 5099.9 SGR 314.3 SG3 85.2
RRT .6291 RRF .6206 RTF .9874
    TOE 2.5587 TRAID.9335 TC3 -.1713 BAU .4298
                                                                                                                               ST 1834.0 SR 282.4 SS 569.6
CRT .7010 CRS -.6657 CST -.9987
    ROE .6671 RRA .3173 RC3 .0044 FAU-.00512
FOE .4485 FRA 2.1262 FC3 .0236 BSP 17330
BDE 2.6443 BRA10.9381 BC3 .1714 FSP -286
                                                                        SGB 5109.6 R23 -.0025 R13 .9874
SG1 5103.8 SG2 244.1 THA 2.23
                                                                                                                               LSA 1930.5 MSA 202.8 SSA
EL1 1844.8 EL2 200.2 ALF
                                                                                                                                                                        7.4
                                                                                                                                                                       6.23
LAUNCH DATE DEC 29 1965
                                                                             FLIGHT TIME 218.00
                                                                                                                                          ARRIVAL DATE AUG 4 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 600.968
                         .00 LOL 97.07 VL 25.491 GAL 29.72 A7L 89.10 MCA 332.16 SMA 114.96 ECC .55210 INC .9046 V1 30.284 -.42 LOP 69.23 VP 36.145 GAP 33.35 A7P 89.20 TAL 145.82 TAP 117.98 RCA 51.49 APO 178.42 V2 35.135 1.33 GP -3.74 ZAL 32.74 ZAP 165.61 ETS 197.95 ZAE 129.40 ETE 183.82 ZAC 148.54 ETC 161.77 CLP 166.10
    RL 147.11 LAL
    RP 107.86 LAP
    RC 223.756 GL
   PLANETOCENTRIC CONIC
    C3 227.418 VML 15.080 DLA 22.32 RAL 62.11 RAD 6571.3 VEL 18.674 PTH 3.06 VMP 20.728 DPA 14.34 RAP 54.44 ECC 4.7427
     LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      5 42 8 3533.78
0 20 9 4614.94
        90.00
                                                     -19.70
                                                                                330.84
                                                                                                                                2933.8
                                                                                                                                                -22.35 125.39
                                                                    133.06
                                                                                                 69.23
                                                                                                                6 41 2
        90.00
                                                      13.01
                                                                    195.56
                                                                                    317.14
                                                                                                      64.63
                                                                                                                  1 37 4
                                                                                                                                   4014.9
                                                                                                                                                     9.49
                                                                                                                                                                   188.66
       100.00
                     7 19 40 3219.29
                                                     -22.03
                                                                    110.87
                                                                                   331.79
                                                                                                      69.27
                                                                                                                  8 13 19
                                                                                                                                   2619.3
                                                                                                                                                   -24.65
       100.00
                     1 25 18
                                   4404.66
                                                      15.26
                                                                    178.99
                                                                                    316.02
                                                                                                                  2 38 42
                                                                                                      63.98
                                                                                                                                   3804.7
                                                                                                                                                    11.64
                                                                                                                                                                   172.06
                     9 1 22 2901.13 2 0 5 4295.59
                                                                                   334.17
       110.00
                                                     -27.74
                                                                      89.09
                                                                                                                  9 49 43
                                                                                                      69.17
                                                                                                                                   2301.1
                                                                                                                                                                    80.85
       110.00
                                                      20.70
                                                                    167.82
                                                                                   313.12
                                                                                                                  3 11 41
                                                                                                      62.17
                                                                                                                                   3695.6
                                                                                                                                                    16.82
                                                                                                                                                                   160.85
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                        SGT 5042.7 SGR 297.3 SG3 83.8
RRT .6425 RRF .6352 RTF .9904
SGB 5051.4 R23 -.0031 R13 .9903
    TDE 2.6607 TRA12.0199 TC3 -.0622 BAU .1901
                                                                                                                               ST 1793.1 SR 263.7 SS 600.4
    RDE .6849 RRA .3470 RC3 .0061 FAU-.00849
FOE .4670 FRA 2.3083 FC3 .0323 BSP 17229
                                                                                                                              CRT .6902 CRS -.6599 CST -.9991
                                                                                                                              LSA 1699.6 MSA 192.1 SSA
EL1 1802.4 EL2 189.9 ALF
                                                                                                                                                                    6.8
5.86
                                                                                                                                                                       6.8
    BOE 2.7474 BRA12.0249 BC3 .0625 FSP -282
                                                                        SG1 5046.3 SG2 227.6 THA 2.17
LAUNCH DATE DEC 29 1965
                                                                             FLIGHT TIME 220.00
  HELTOCENTRIC CONIC
                                                                            DISTANCE 596.728
                          .00 LOL 97.07 VL 25.474 GAL 33.35 AZL 89.44 MCA 335.38 SMA 114.87 ECC .59769 INC .5578 V1 30.284
-.23 LOP 72.45 VP 36.144 GAP 36.56 AZP 89.49 TAL 146.45 TAP 121.83 RCA 46.21 APO 183.52 V2 35.147
-71 GP -3.69 ZAL 32.67 ZAP 163.78 ETS 196.03 ZAE 128.31 ETE 183.69 ZAC 149.76 ETC 160.98 CLP 164.20
   RL 147.11 LAL
    RP 107.82 LAP
   RC 225.148 GL
  PLANETOCENTRIC CONIC
    C3 278.596 VHL 16.691 OLA 21.73 RAL 62.30 RAD 6571.6 VEL 19.998 PTH
                                                                                                       3.14 VMP 22.633 DPA 14.76 RAP 55.74 ECC 5.5850
    LNCM AZMIM LNCM TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                      5 50 39 3533.17
                                                     -19.71
                                                                    133.02
                                                                                  332.93
                                                                                                     69.25
                                                                                                                  6 49 32
                                                                                                                                   2933.2
                                                                                                                                                   -22.36
       90.00
                      0 13 8
                                   4670.12
                                                     14.59
                                                                    198.84
                                                                                   318.89
                                                                                                      65.46
                                                                                                                  1 30 58
                                                                                                                                   4070.1
                                                                                                                                                    11.16
      100.00
                     7 27 11
                                   3221.89
                                                     -21.97
                                                                    111.04
                                                                                   333.85
                                                                                                      69.20
                                                                                                                  8 20 53
                                                                                                                                   2621.9
                                                                                                                                                   -24.60
                                                                                                                                                                   103.23
      100.00
                     1 19 17
                                  4456.63
                                                     16.79
                                                                    182.10
                                                                                   317.84
                                                                                                      64.90
                                                                                                                  2 33 33
                                                                                                                                   3856.6
                                                                                                                                                    13.27
                                                                                                                                                                   175.08
      110.00
                      9 7 11 2909.05
                                                     -27.55
                                                                     89.63
                                                                                   336.20
                                                                                                      68.91
                                                                                                                  9 55 40
                                                                                                                                   2309.0
                                                                                                                                                   -30.16
                                                                                                                                                                    81.41
                      1 55 46
      110.00
                                   4342.24
                                                     22.16
                                                                    170.66
                                                                                   315.07
                                                                                                     63.28
                                                                                                                  3 8 9
                                                                                                                                   3742.2
                                                                                                                                                   18.39
                                                                                                                                                                  163.55
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   TOE 2.7993 TRA13.2153 TC3 .0321 BAU .1228
ROE .7032 RRA .3726 RC3 .0075 FAU-.01288
FOE .4935 FRA 2.5166 FC3 .0400 B3P 17090
BDE 2.8863 BRA13.2206 BC3 .0330 FSP -278
                                                                       SCT 4978.1 SGR 279.0 SG3 82.5
RRT .6530 RRF .6468 RTF .9928
SG8 4986.0 R23 -.0036 R13 .9928
SG1 4981.5 SG2 211.2 THA 2.10
                                                                                                                            ST 1752.0 SR 244.9 SS 638.3

CRT .6816 CRS -.6558 CST -.9993

LSA 1872.0 MSA 180.3 SSA 6.3

EL1 1760.0 EL2 178.4 ALF 5.50
```

ARRIVAL DATE MAR 10 1966

```
LAUNCH DATE DEC 30 1965
                                                                                             DISTANCE 210.308
    RL 147.1] LAL .00 LOL 98.09 VL 29.759 GAL -14.82 AZL 87.00 HCA 97.03 SMA 144.45 ECC .25634 INC 2.9990 V1 30.285 RP 2107.89 LAP 2.98 LOP 195.13 VP 39.263 GAP -2.39 AZP 90.37 TAL 251.21 TAP 348.24 RCA 107.42 APO 181.48 V2 35.126 RC 70.553 GL 11.02 GP 10.90 ZAL 164.05 ZAP 66.13 ET8 353.05 ZAE 175.12 ETE 47.84 ZAC 43.05 ETC 168.71 CLP -65.66
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 62.037 VHL 7.876 DLA -11.09 RAL 289.70 RAD 6569.2 VEL 13.542 PTH 2.48 VHP 4.576 DPA -9.91 RAP 310.00 ECC 2.0210
    C3 62.037 VHL 7.876 DLA -11.09 RAL 289.70 RAD 6569.2 VEL 13.542 PTH 2.48 VHP 4.576 DPA -9.91 RAP 310.00 ECC 2.0210 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 33 8 2144.12 -17.80 37.07 167.60 112.39 2 8 52 1544.1 -14.61 29.85 90.00 10 40 59 5490.91 28.30 254.20 176.06 88.90 12 12 30 4890.9 27.85 245.57 100.00 2 48 54 1899.65 -19.22 18.46 166.97 113.14 3 20 34 1299.7 -15.90 11.25 100.00 12 7 53 5210.62 29.84 233.54 176.01 88.13 13 34 44 4610.6 29.26 224.79 110.00 3 44 32 1725.44 -22.98 3.39 165.12 116.03 4 13 18 1125.4 -19.29 356.20 110.00 13 28 45 4937.60 33.97 214.08 175.76 85.98 14 51 23 4357.6 33.05 204.96
                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                         SGT 531.5 SGR 414.8 SG3 230.9
RRT -.2580 RRF -.4124 RTF .5125
SGB 674.2 R23 .1337 R13 -.5735
                                                                                                                                                            ST 166.1 SR 383.8 SS 170.7
CRT .2003 CRS .5997 CST -.6493
     TDE -.0696 TRA -.7115 TC3 -.0264 BAU .0507
     RDE -.5245 RRA .1856 RC3 .0552 FAU .10782
                                                                                                                                                            LSA 399.4 MSA 210.0 SSA 19.5
     FOE .3032 FRA-1.6382 FC3-1.5047 BSP
                                                                     809
-685
                                                                                          5G1 553.7 SG2 384.7 THA 157.07
                                                                                                                                                            EL1 365.5 EL2 162.0 ALF 83.98
     BDE .5291 BRA .7353 BC3 .0612 FSP
                                                                                                                                                                           ARRIVAL DATE MAR 12 1966
                                                                                              FLIGHT TIME 72.00
LAUNCH DATE DEC 30 1965
                                                                                              DISTANCE 216.835
     RL 147.11 LAL .00 LOL 98.09 VL 29.740 GAL -14.66 A7L 87.07 HCA 100.25 SHA 144.28 ECC .25372 INC 2.9268 V1 30.285 RP 107.92 LAP 2.88 LOP 198.35 VP 39.238 GAP -1.76 A7P 90.52 TAL 251.06 TAP 351.31 RCA 107.67 APO 180.88 V2 35.114 RC 72.741 GL 10.88 GP 11.38 7AL 164.08 7AP 71.26 ETS 353.93 7AE 175.54 ETE 90.27 7AC 41.05 ETC 169.18 CLP -70.86
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 60.625 VHL 7.786 OLA -11.22 RAL 289.81 RAD 6569.1 VEL 13.490 PTH 2.47 VHP 4.423 OPA -9.86 RAP 307.97 ECC 1.9977
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 34 38 2134.30 -17.54 36.46 167.33 112.59 2 10 12 1534.3 -14.33 29.26
90.00 10 40 22 5489.56 28.30 254.10 175.80 88.85 12 11 52 4889.6 27.84 245.47
100.00 2 50 20 1890.07 -18.96 17.87 166.69 113.55 3 21 50 1290.1 -15.61 10.67
100.00 12 7 21 5209.03 29.84 233.42 175.75 88.07 13 34 10 4609.0 29.25 224.67
110.00 3 45 48 1716.37 -22.71 2.83 164.83 116.26 4 14 24 1116.4 -19.00 355.66
110.00 13 28 23 4955.49 33.96 213.92 175.50 85.88 14 50 58 4555.5 33.02 204.80
                                                                                                                                 2.47 VHP 4.423 DPA
                                                                                                                                                                    -9.86 RAP 307.97 ECC 1.9977
     C3 60.625 VHL 7.786 OLA -11.22 RAL 289.81 RAD 6569.1 VEL 13.490 PTH
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                             ST 178.7 SR 382.8 SS 174.7

CRT .1265 CRS .5987 CST -.7054

LSA 398.8 MSA 222.7 SSA 19.6
                                                                                          SGT 589.6 SGR 420.6 SG3 247.0
RRT -.3210 RRF -.4507 RTF .5992
      TOE -.0582 TRA -.7707 TC3 -.0690 BAU .0780
      RDE -.5167 RRA .1952 RC3 .0671 FAU .11421
                                                                                          3G8 724.3 R23 .1230 R13 -.6468
3G1 615.6 SG2 381.5 THA 158.50
     FOE .3128 FRA-1.7226 FC3-1.6309 BSP 1062
BDE .5200 BRA .7950 BC3 .0962 FSP -737
                                                                                                                                                             EL1 383.6 EL2 176.9 ALF 85.70
                                                                                                                                                                          ARRIVAL DATE MAR 14 1966
                                                                                              FLIGHT TIME 74.00
LAUNCH DATE DEC 30 1965
                                                                                              DISTANCE 223.315
     RL 147.11 LAL .00 LOL 98.09 VL 29.714 GAL -14.50 AZL 87.15 MCA 103.47 SHA 144.03 ECC .25118 INC 2.8531 VI 30.285 RP 107.96 LAP 2.77 LOP 201.58 VP 39.206 GAP -1.15 AZP 90.67 TAL 250.78 TAP 354.25 RCA 107.85 APO 180.21 V2 35.101 RC 74.954 GL 10.72 GP 11.84 ZAL 164.07 ZAP 76.38 ETS 354.84 ZAE 173.74 ETE 122.98 ZAC 39.05 ETC 169.69 CLP -76.08
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 59.240 VHL 7.697 DLA -11.35 RAL 289.99 RAD 6569.1 VEL 13.439 PTH 2.46 VHP 4.303 DPA -9.82 RAP 305.93 ECC 1.9749 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                             1524.3
                        LNCH TIME L-1 TIME
1 36 25 2124.29
10 39 59 5488.32
2 52 3 1880.32
12 7 3 5207.53
3 47 20 1707.15
13 28 15 4953.46
                                                                                                                        112.79 2 11 50
88.81 12 11 28
                                                                                                   167.12
                                                                                     35.84
                                                                  -17.28
           90.00
                                                                                                                                                                                     27.83
                                                                                                                                                                                                         245.36
                                                                                                                                                                  4888.3
                                                                                                        175.61
                                                                                     254.01
                                                                  28.29
           90.00
                                                                                                                             113.76 3 25 23
88.01 13 33 51
                                                                                                                                                                                                          10.10
                                                                                                                                                                                      -15.32
                                                                                                                                                                 1280.3
                                                                                                       166.48
                                                                                                                            113.76
                                                                                      17.27
                                                                  -18.69
          100.00
                                                                                                                                                                 4607.5
                                                                                                                                                                                     29.24
                                                                                                                                                                                                         224.56
                                                                                                        175.56
                                                                                   233.31
          100.00
                                                                  29.83
                                                                                                                                                                                     -18.69
                                                                                                                                                                                                         355.12
                                                                                                                                                                 1107.2
                                                                                                                            116.50 4 15 47
                                                                                                       164.61
                                                                                        2.25
                                                                  -22.43
          110.00
                                                                                                                                                                 4353.5
                                                                                                                                                                                       33.00
                                                                                                                             85.79
                                                                                                                                           14 50 48
                                                                                                        175.30
                                                                   33.95
                                                                                     213.76
          110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 193.3 SR 380.3 38 177.3
CRT .0575 CR5 .5925 CST -.7577
LSA 396.8 MSA 235.8 SSA 19.7
                                                                                          SGT 659.5 SGR 426.0 SG3 261.5
RRT -.3813 RRF -.4874 RTF .6694
SGB 785.1 R23 .1146 R13 -.7057
       TDE -.0466 TRA -.8346 TC3 -.1164 BAU .1116
      ROE -.5071 RRA .2043 RC3 .0794 FAU .11975
      FOE .3138 FRA-1.7900 FC3-1.7501 BSP 1344
BDE .5092 BRA .8593 BC3 .1410 FSP -792
                                                                                                                                                             ELI 380.5 ELE 192.9 ALF 87.75
                                                                                          5G1 688.6 5G2 377.2 THA 159.89
                                                                                                                                                                           APPIVAL DATE MAR 16 1966
                                                                                               FLIGHT TIME 76.00
 LAUNCH DATE DEC 30 1965
                                                                                               DISTANCE 229.749
      RL 147.11 LAL .00 LOL 98.09 VL 29.680 GAL -14.34 AZL 87.22 MCA 106.69 SMA 143.72 ECC .24871 INC 2.7775 V1 30.285
RP 108.00 LAP 2.66 LOP 204.80 VP 39.169 GAP -.58 AZP 90.80 TAL 250.39 TAP 357.07 RCA 107.97 APO 179.46 V2 35.089
RC 77.191 GL 10.55 GP 12.27 ZAL 164.02 ZAP 81.45 ETS 355.78 ZAE 170.92 ETE 138.69 ZAC 37.10 ETC 170.23 CLP -81.25
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                 2.45 VHP 4.213 DPA -9.76 RAP 303.94 ECC 1.9524
       C3 57.873 VHL 7.607 DLA -11.48 RAL 290.23 RAD 6569.1 VEL 13.388 PTH
       UNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 38 31 2114.02 -17.01 35.21 166.97 112.99 2 13 45 1514.0 -13.75 28.05
                                                                                                                           112.99 2 13 45

88.77 12 11 16

113.97 3 25 13

87.96 13 33 43

116.73 4 17 28

85.70 14 50 51
                          1 38 31 2114.02
10 39 49 5487.18
                                                                                                                                                                   4887.2
                                                                                      253.93
                                                                                                        175.46
                                                                   26.29
            90.00
                                                                                                                                                                                                           9.50
                                                                                                                                                                   1270.3
                                                                                                                                                                                     -15.02
                                                                                                        166.33
                                                                  -18.42
                                                                                       16.65
                          2 54 3 1870.31
           100.00
                                                                                                                                                                                                          224.46
                                                                                                                                                                   4606.1
                                                                                                                                                                                      29.23
                                                                                                        175.43
                                                                   29.83
                                                                                      233.21
                          12 6 57
                                             5206.12
           100.00
                                                                                                                                                                  1097.7
                                                                                                                                                                                                          354.57
                                                                                                        164.45
                                                              -22.14
                                                                                        1.68
                             3 49 10 1697.71
           110.00
                                                                                                                                                                                        32.98
                                                                                                                                                                                                          204.50
                                                                                                                                                                   4351.5
                                                                                      213.60
                                                                                                         175.16
           110.00
                          13 28 20 4951.49
                                                                   33.94
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ST 210.0 SR 376.6 SS 178.5
CRT -.0022 CRS .5855 CST -.8003
                                                                                         SGT 740.3 SGR 430.9 SG3 273.6

RRT -.4364 RRF -.3224 RTF .7243

SGB 856.6 R23 .1092 R13 -.7519

SG1 771.6 SG2 372.0 THA 161.23
        TOE -.0358 TRA -.9027 TC3 -.1688 BAU .1488
       RDE -.4958 RRA .2125 RC3 .0920 FAU .12415
FDE' .3096 FRA-1.8350 FC3-1.8572 BSP 1660
BDE .4971 BRA .9274 BC3 .1923 FSP -839
                                                                                                                                                          LSA 394.1 MSA 249.2 SSA 19.7
EL1 376.6 EL2 210.0 ALF 90.10
```

FLIGHT TIME 70.00

ARRIVAL DATE MAR 18 1966

LAUNCH DATE DEC 30 1965

HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 29.639 GAL -14.18 AZL 87.30 HCA 109.90 SMA 143.35 ECC .24629 INC 2.6993 V1 30.285 RP 108.04 LAP 2.54 LOP 208.01 VP 39.127 GAP -.04 AZP 90.92 TAL 249.89 TAP 359.79 RCA 108.04 APO 178.65 V2 35.076 RC 79.445 GL 10.37 GP 12.68 ZAL 163.93 ZAP 86.41 ETS 356.76 ZAE 167.80 ETE 146.80 ZAC 35.25 ETC 170.79 CLP -86.33 DISTANCE 236.138 PLANETOCENTRIC CONIC C3 56.515 VML 7.518 OLA -11.63 RAL 290.53 RAD 6569.0 VEL 13.337 PTM 2.44 VMP 4.151 DPA -9.68 RAP 302.06 ECC 1.9301 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 54 2103.40 -16.72 34.56 166.87 113.19 2 15 57 1503.4 -13.44 27.42 90.00 10 39 48 5486.15 28.29 253.86 175.39 88.73 12 11 14 4886.2 27.81 245.22 100.00 2 56 21 1859.96 -18.13 16.02 166.23 114.18 3 27 21 1260.0 -14.71 8.89 87.90 13 33 47 116.97 4 19 25 85.62 14 51 5 12 7 2 5204.82 3 51 17 1687.95 13 28 36 4949.60 224.36 29.22 5204.82 29.83 233.11 175.34 4604.8 100.00 354.00 1088.0 -18.05 -21.84 164.34 110.00 32.96 175.07 4349.6 33.93 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 228.4 SR 371.5 SS 178.5 CRT -.0518 CRS .5763 CST -.8349 LSA 390.7 MSA 262.7 SSA 19.8 EL1 371.8 EL2 227.9 ALF 92.92 SGT. 830.4 SGR 435.1 SG3 283.1 RRT -.4857 RRF -.5553 RTF .7661 SGB 937.5 R23 .1062 R13 -.7871 TDE -.0261 TRA -.9739 TC3 -.2255 BAU .1878 RDE -.4828 RRA .2196 RC3 .1045 FAU .12728 FDE .2993 FRA-1.8569 FC3-1.9497 BSP 2000 SG1 863.1 SG2 365.9 THA 162.48 BDE .4835 BRA .9983 BC3 .2485 FSP ARRIVAL DATE MAR 20 1966 FLIGHT TIME 80.00 LAUNCH DATE DEC 30 1965 DISTANCE 242.483 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 29.593 GAL -14.02 A7L 87.38 MCA 113.11 SNA 142.92 ECC .24392 INC 2.6180 V1 30.285 RP 108.08 LAP 2.41 LOP 211.23 VP 39.080 GAP .47 AZP 91.03 TAL 249.29 TAP 2.41 RCA 108.06 APO 177.78 V2 35.063 RC 81.719 GL 10.17 GP 13.07 ZAL 163.80 ZAP 91.22 ETS 357.78 ZAE 164.63 ETE 151.60 ZAC 33.54 ETC 171.40 CLP -91.26 PLANETOCENTRIC CONIC LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 35 2092.32 -16.43 33.89 166.82 113.39 2 18 27 1492.3 -13.12 26.77 C3 55.160 VHL 7.427 DLA -11.78 RAL 290.88 RAD 6569.0 VEL 13.286 PTH 2.43 VHP 4.114 DPA -9.57 RAP 300.31 ECC 1.9078 175.36 88.70 12 11 22 4885.3 27.61 245.16 10 39 56 5485.29 28.29 253.79 90.00 8.26 166.17 114.40 3 29 46 1249.2 -14.39 100.00 2 58 57 1849.18 -17.83 15.36 2 58 57 1849.18 12 7 16 5203.66 87.86 13 34 D 117.22 4 21 38 85.53 14 51 30 4603.7 29.21 224.28 233.03 175.31 29.82 100.00 1677.80 4947.81 1077.8 353.41 110.00 -21.53 164.27 117.22 -17.71 3 53 40 .46 213.32 175.03 4347.8 32.94 204.22 110.00 13 29 2 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 928.3 SCR 438.3 SC3 289.1 RRT -.5282 RRF -.5863 RTF .7972 SCB 1026.6 R23 .1066 R13 -.8136 SCI 961.7 SC2 359.3 THA 163.65 ST 248.3 SR 365.4 SS 177.5 CRT -.0901 CRS .5726 CST -.8575 TOE -.0182 TRA-1.0472 TC3 -.2861 BAU .2278 RDE -.4685 RRA .2250 RC3 .1167 FAU .12883 LSA 387.7 MSA 275.6 SSA 19.8 EL1 366.6 EL2 246.4 ALF 96.41 FOE .2895 FRA-1.8502 FC3-2.0220 8SP 2359 BDE .4689 BRA 1.0711 BC3 .3089 FSP -900 BDE .4689 BRA 1.0711 BC3 .3089 FSP ARRIVAL DATE MAR 22 1966 FI IGHT TIME 82.00 LAUNCH DATE DEC 30 1965 DISTANCE 248.787 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 29.542 GAL -13.86 AZL 87.47 HCA 116.32 SHA 142.46 ECC .24158 INC 2.5327 V1 30.285 RP 108.12 LAP 2.27 LOP 214.44 VP 39.030 GAP .96 AZP 91.12 TAL 248.61 TAP 4.93 RCA 108.04 APO 176.87 V2 35.050 RC 84.008 GL 9.95 GP 13.45 ZAL 163.64 ZAP 95.84 ETS 358.83 ZAE 161.52 ETE 154.72 ZAC 32.01 ETC 172.04 CLP -96.01 PLANETOCENTRIC CONIC C3 53.803 VHL 7.335 DLA -11.94 RAL 291.29 RAD 6568.9 VEL 13.235 PTH 2.42 VMP 4.098 DPA -9.43 RAP 298.75 ECC 1.8855 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1460.7 1 46 35 2080.65 10 40 11 5484.65 113.61 2 21 16 88.67 12 11 36 -12.78 166.82 -16.11 33.18 90.00 245.11 4884.7 27.81 28.29 253.75 175.36 90.00 1237.6 -14.04 7.59 166.16 114.62 3 32 29 3 1 51 1837.83 12 7 37 5202.71 1837.83 -17.51 14.67 100.00 224.21 29.20 13 34 19 4602.7 29.82 232.95 175.32 87.82 100.00 117.47 4 24 8 85.46 14 52 2 352.79 3 56 21 1667.14 13 29 36 4946.17 1067.1 -17.35 -21.20 359.81 164.25 117.47 110.00 32.92 204.10 13 29 36 213.19 175.04 4346.2 33.92 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS CRT -.1194 CRS .5620 CST -.8779
LSA 384.6 MSA 287.6 35A 19.8
EL1 360.8 EL2 264.8 ALF 101.25 SGT 1031.7 SGR 440.7 SG3 292.9 RRT -.5665 RRF -.6155 RTF .8204 SGB 1121.8 R23 .1083 R13 -.8335 SG1 1065.3 SG2 351.7 THA 164.69 TOE -.0121 TRA-1.1210 TC3 -.3497 BAU .2681 ROE -.4524 RRA .2293 RC3 .1290 FAU .12933 FOE .2713 FRA-1.8265 FC3-2.0811 BSP 2729 ARRIVAL DATE MAR 24 1966 LAUNCH DATE DEC 30 1965 FLIGHT TIME 84.00 DISTANCE 255.052 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 29.486 GAL -13.69 AZL 87.56 MCA 119.53 SMA 141.96 ECC .23928 INC 2.4426 V1 30.285 RP 108.16 LAP 2.13 LOP 217.64 VP 38.976 GAP 1.42 AZP 91.20 TAL 247.84 TAP 7.37 RCA 107.99 APO 175.93 V2 35.036 RC 86.309 GL 9.71 GP 13.83 ZAL 163.45 ZAP 100.24 ETS 359.92 ZAE 158.53 ETE 156.88 ZAC 30.68 ETC 172.73 CLP-100.55 PLANETOCENTRIC CONIC C3 52.441 VHL 7.242 DLA -12.12 RAL 291.75 RAD 6568.9 VEL 13.183 PTH 2.41 VHP 4.102 DPA -9.25 RAP 297.40 ECC 1.8630 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.83 2 24 24 88.66 12 11 55 1468.3 -12.42 27.80 2 24 24 166.85 1 49 55 2068.26 -15.77 32.42 10 40 30 5484.34 3 5 4 1825.80 4884.3 90.00 10 40 30 28.29 253.72 175.43 1225.8 6.89 -13.67 13.94 166.19 114.85 3 35 30 100.00 -17.17 87.80 13 34 45 29.19 224.16 12 8 2 29.82 232.91 175.38 4602.0 100.00 5202,04 117.73 4 26 56 85.39 14 52 41 352.15 3 59 20 1655.85 13 30 16 4944.75 1055.9 -16.96 -20.84 359.13 164.27 110.00 32.90 4344.8 110.00 33.91 213.08 175.09 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 290.6 SR 348.8 SS 172.0 CRT -.1394 CRS .5546 CST -.8910 LSA 383.2 MSA 297.4 SSA 19.8 SGT 1139.1 SGR 442.0 SG3 293.7 RRT -.6000 RRF -.6431 RTF .8374 SGB 1221.9 R23 .1128 R13 -.8482 TOE -.0085 TRA-1.1946 TC3 -.4160 BAU .3079 ROE -.4350 RRA .2319 RC3 .1409 FAU .12848 FOE .2532 FRA-1.7799 FC3-2.1211 BSP 3106 BOE .4351 BRA 1.2169 BC3 .4392 FSP -921 EL1 355.6 EL2 282.3 ALF 108.61 SG1 1172.6 SG2 343.5 THA 165.64

FLIGHT TIME 78.00

```
FLIGHT TIME 86.00
                                                                                                                                      ARRIVAL DATE MAR 26 1966
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 261.279
   HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 29.427 GAL -13.52 A7L 87.65 HCA 122.73 SMA 141.43 ECC .23702 INC 2.3467 V1 30.285 RP 108.20 LAP 1.97 LOP 220.85 VP 38.919 GAP 1.86 A7P 91.27 TAL 247.00 TAP 9.73 RCA 107.91 APO 174.95 V2 35.023 RC 88.623 GL 9.44 GP 14.22 TAL 163.22 TAP 104.40 ETS 1.06 TAE 155.69 ETE 158.41 TAC 29.58 ETC 173.48 CLP-104.87
   PLANETOCENTRIC CONIC
    C3 51.072 VHL 7.146 OLA -12.32 RAL 292.26 RAD 6568.9 VEL 13.131 PTH 2.40 VMP 4.123 DPA -9.01 RAP 296.26 ECC 1.8405 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 53 38 2054.97
10 40 51 5484.50
3 8 40 1812.91
12 8 31 5201.80
4 2 39 1643.80
13 31 0 4943.67
                                                                                              114.06
                                                                                                              2 27 53
                                                                                                                               1455.0
                                                                                 166.92
                                                                                                                                              -12.02
                                                                                                                                                               24.57
        90.00
                                                                   31.62
                                                  -15.40
                                                                                                            12 12 16
                                                                                                                                               27.80
                                                                                 175.53
                                                                                                  88.67
                                                                                                                                                             245.10
        90.00
                                                    28.29
                                                                  253.73
                                                                                                                               4884.5
                                                                                                                               1212.9
                                                                                                                                               -13.27
                                                                                 166.26
                                                                                                 115.10
                                                                                                              3 38 53
                                                                                                                                                               6.14
      100.00
                                                  -16.79
                                                                   13.16
                                                                                                  87.79 13 35 12
                                                                                                                                                              224.14
       100.00
                                                    29.82
                                                                  232.89
                                                                                 175.48
                                                                                                                               4601.8
                                                                                                                                               29.19
                                                                                                 118.00 4 30 3
85.34 14 53 24
      110.00
                                                  -20.46
                                                                  358.40
                                                                                 164.33
                                                                                                                               1043.6
                                                                                                                                             -16.55
                                                                                                                                                              351.46
                                                                                                                               4343.7
                                                                                                                                                32.69
                                                                                                                                                              203.91
                                                    33.90
                                                                 213.00
                                                                                 175.19
      110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SCT 1249.5 SGR 442.5 SG3 292.7

RRT -.6310 RRF -.6699 RTF .8500

SGB 1325.5 R23 .1186 R13 -.8591

SG1 1282.7 SG2 334.4 THA 166.47
                                                                                                                           ST 312.6 SR 338.4 SS 167.7

CRT -.1512 CRS .5389 CST -.9038

LSA 384.3 MSA 303.8 SSA 19.9
    TOE -.0078 TRA-1.2668 TC3 -.4849 BAU .3472
   ROE -.4159 RRA .2336 RC3 .1531 FAU .12688
FOE .2277 FRA-1.7219 FC3-2.1507 BSP 3494
BOE .4160 BRA 1.2862 BC3 .5085 FSP -925
                                                                                                                           EL1 352.4 EL2 296.8 ALF 121.15
                                                                                                                                       ARRIVAL DATE MAR 28 1966
LAUNCH DATE DEC 30 1965
                                                                          FLIGHT TIME 88.00
  HELIOCENTRIC CONIC
                                                                          DISTANCE 267.470
                         .00 LOL 98.09 VL 29.363 GAL -13.34 AZL 87.76 HCA 125.94 SMA 140.87 ECC .23479 INC 2.2437 VI 30.285 1.82 LOP 224.05 VP 38.859 GAP 2.28 AZP 91.32 TAL 246.08 TAP 12.02 RCA 107.79 APO 173.94 V2 35.010 9.13 GP 14.63 ZAL 162.96 ZAP 108.31 ETS 2.24 ZAE 153.02 ETE 159.50 ZAC 28.71 ETC 174.31 CLP-108.95
   RL 147.11 LAL
    RP 108.24 LAP
   RC 90.946 GL
  PLANETOCENTRIC CONIC
                                                                                                     2.39 VHP 4.158 OPA
                                                                                                                                 -8.71 RAP 295.36 ECC 1.8179
    C3 49.695 VHL 7.049 DLA -12.55 RAL 292.81 RAD 6568.8 VEL 13.079 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               114.30 2 31 46
                                                                                167.03
                                                                                                                              1440.6
                                                                                                                                             -11.60
                                                                                                                                                               23.73
       90.00
                    1 57 46 2040.57
                                                   -15.00
                                                                  30.76
                  10 41 10 5485.28
3 12 39 1798.95
12 8 58 5202.13
4 6 20 1630.81
13 31 46 4943.04
                                                                                                  88.70
                                                                                                             12 12 36
                                                                                                                                4885.3
                                                                                                                                                              245.16
       90.00
                                                    28.29
                                                                  253.79
                                                                                 175.67
                                                                                                                                               27.61
                                                                   12.32
                                                                                 166.36
                                                                                                 115.35
                                                                                                               3 42 38
                                                                                                                                1199.0
                                                                                                                                               -12.84
                                                                                                                                                                5.33
      100.00
                                                   -16.39
                                                                                                                                                              224.16
                                                                                 175.62
                                                                                                  87.80 13 35 40
                                                                                                                               4602.1
                                                                                                                                               29.19
      100.00
                                                   29.82
                                                                  232.91
                                                                                                 118.29
                                                                                                             4 33 31
                                                                                                                               1030.8
                                                                                                                                               -16.10
                                                                                                                                                              350.72
                                                   -20.04
      110.00
                                                                  357.63
                                                                                 164.42
                                                                                 175.33
                                                                                                  85.32 14 54 9
                                                                                                                               4343.0
                                                                                                                                                              203.86
                                                                                                                                                32.88
      110.00
                                                    33.90
                                                                  212.95
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SGT 1361.3 SGR 442.2 SG3 - 289.4
RRT -.6586 RRF -.6959 RTF .8590
                                                                                                                           ST 334.8 SR 327.0 SS 162.7
CRT -.1560 CRS .5258 CST -.9116
    TOE -. 0098 TRA-1.3367 TC3 -. 5559 BAU .3853
   RDE -.3958 RRA .2336 RC3 .1652 FAU .12424
FDE .2035 FRA-1.6473 FC3-2.1644 B3P 3876
BDE .3959 BRA 1.3570 BC3 .5799 FSP -913
                                                                      SGB 1431.3 R23 .1274 R13 -.8669
SG1 1393.9 SG2 325.0 THA 167.22
                                                                                                                           LSA 390.0 MSA 305.0 SSA 19.9
                                                                                                                           EL1 356.1 EL2 303.7 ALF 139.32
                                                                          FLIGHT TIME 90.00
                                                                                                                                      ARRIVAL DATE MAR 30 1966
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 273.628
   HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 29.297 GAL -13.16 A7L 87.87 MCA 129.14 SMA 140.29 ECC .23260 INC 2.1321 V1 30.285 RP 108.29 LAP 1.65 LOP 227.25 VP 38.797 GAP 2.67 A7P 91.35 TAL 245.10 TAP 14.23 RCA 107.66 APO 172.92 VZ 34.996 RC 93.279 GL 8.78 GP 15.08 ZAL 162.67 ZAP 111.96 ETS 3.50 ZAE 150.52 ETE 160.25 ZAC 28.07 ETC 175.22 CLP-112.78
   PLANETOCENTRIC CONTC
    C3 48.309 VML 6.950 DLA -12.80 RAL 293.42 RAD 6568.8 VEL 13.026 PTH 2.38 VMP 4.205 DPA -8.34 RAP 294.68 ECC 1.7950
    LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              114.56 2 36 7
88.76 12 12 51
                                                                              167.18
                                                                                                                           1424.8 -11.12 22.81
                                                                  29.81
                                                  -14.56
        90.00
                     2 2 22 2024.78
                   10 41 24 5486.95
3 17 6 1783.69
12 9 22 5203.27
4 10 26 1616.65
13 32 31 4943.07
                                                                                 175.86
                                                                                                                                4886.9
                                                                                                                                               27.82
                                                                                                                                                             245.28
                                                   28.29
                                                                  253.91
        90.00
                                                                                 166.50
                                                                                                 115.63 3 46 50
                                                                                                                             1183.7
                                                                                                                                              -12.36
                                                                                                                                                               4.45
                                                                   11.41
      100.00
                                                  -15.94
                                                                                                 87.84 13 36 5
118.60 4 37 23
                                                                                                                               4603.3
                                                                                                                                               29.20
                                                                                                                                                             224.25
                                                  29.82
                                                                 233.00
                                                                                 175.81
      100.00
                                                                                                            4 37 23
                                                                                 164.55
                                                                                                                              1016.7
                                                                                                                                             -15.61
                                                                                                                                                             349.91
                                                                  356.78
      110.00
                                                  -19.58
                                                                                                  85.32 14 54 54
                                                                                                                               4343.1
                                                                                                                                               32.88
                                                                                                                                                             203.86
                                                                                 175.52
     110.00
                                                 33.90
                                                                  212.95
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                     SCT 1474.5 SGR 441.7 SGS 285.1
RRT -.6851 RRF -.7219 RTF .8656
SGB 1539.2 R23 .1379 R13 -.8727
SG1 1506.7 SG2 314.9 THA 167.87
                                                                                                                           ST 357.3 SR 314.0 SS 156.9
CRT -.1534 CRS .5022 CST -.9206
    TOE -.0158 TRA-1.4040 TC3 -.6293 BAU .4224
    RDE -.3740 RRA .2328 RC3 .1781 FAU .12117
FDE .1730 FRA-1.5676 FC3-2.1714 BSP 4267
BDE .3744 BRA 1.4232 BC3 .6540 FSP -904
                                                                                                                          LSA 399.8 MSA 301.0 35A 19.9
                                                                                                                           EL1 368.3 EL2 301.0 ALF 155.08
                                                                                                                                       ARRIVAL DATE APR 1 1966
                                                                          FLIGHT TIME 92.00
LAUNCH DATE DEC 3D 1965
                                                                          OISTANCE 279.754
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 29.228 GAL -12.98 AZL 87.99 HCA 132.33 SMA 139.69 ECC .23045 INC 2.0100 V1 30.285 RP 108.33 LAP 1.49 LOP 230.44 VP 38.733 GAP 3.05 AZP 91.35 TAL 244.06 TAP 16.39 RCA 107.50 APO 171.89 V2 34.983 RC 95.621 GL 8.39 GP 15.59 ZAL 162.35 ZAP 115.35 ETS 4.83 ZAE 148.20 ETE 160.73 ZAC 27.67 ETC 176.25 CLP-116.39
   RC 95.621 GL
   PLANETOCENTRIC CONIC
    C3 46.915 VHL 6.849 DLA -13.10 RAL 294.08 RAD 6568.8 VEL 12.972 PTH 2.37 VHP 4.264 DPA -7.89 RAP 294.23 ECC 1.7721
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              114.84
                    2 7 33 2007.27
10 41 28 5489.79
                                                                                                                               1407.3
                                                                                                                                               -10.59
                                                                   28.76
                                                                                 167.36
                                                                                                               2 41
                                                                                                                                                               21.80
        90.00
                                                   -14.06
                                                                                                             12 12 58
                                                                                 176.09
                                                                                                  88.86
                                                                                                                                4889.8
                                                                                                                                               27.84
                                                                                                                                                              245.49
                                                   -28.30
                                                                  254.12
        90.00
                                                                                                                                                                3.46
                    3 22 5 1766.80
12 9 37 5205.50
                                                                   10.41
                                                                                 166.68
                                                                                                 115.92
                                                                                                                               1166.5
                                                                                                                                               -11.83
      100.00
                                                  -15.44
                                                                                                  87.93 13 36 22
118.92 4 41 42
85.36 14 55 35
                                                                                                                                                              224.41
                                                                  233.16
                                                                                 176.04
                                                                                                                                4605.5
                                                                                                                                               29.22
      100.00
                                                  29.83
                                                                                                                                                              349.03
                                                  -19.07
                                                                                 164.71
                                                                                                 118.92
                                                                                                                               1001.1
                                                                                                                                               -15.06
                    4 15 1 1601.05
                                                                  355.86
       110.00
                                                                                                                              4344.0
                                                                                                                                              32.89
                                                                                                                                                              203.93
                                                   33.90
                                                                  213.02
                                                                                 175.76
       110.00
                    13 33 11
                                  4944.00
   DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                        ST 379.9 SR 299.7 SS 150.7

CRT -.1439 CRS .4704 CST -.9295

LSA 413.3 MSA 292.6 SSA 20.0

ELI 385.9 EL2 292.0 ALF 164.51
                                                                     SCT 1588.5 SGR 441.0 SG3 279.6
RRT -.7101 RRF -.7479 RTF .8704
SGB 1648.6 R23 .1508 R13 -.8768
    TOE -. 0259 TRA-1.4679 TC3 -. 7053 BAU .4584
    RDE -.3510 RRA .2310 RC3 .1917 FAU .11764
    FOE .1394 FRA-1.4817 FC3-2.1708 BSP 4664
BDE .3519 BRA 1.4859 BC3 .7309 FSP -891
                                                                      SG1 1620.2 SG2 304.4 THA 168.43
```

```
ARRIVAL DATE APR 3 1966
                                                                        FLIGHT TIME 94.00
LAUNCH DATE DEC 30 1965
    RL 147.11 LAL .00 LOL 98.09 VL 29.157 GAL -12.79 A7L 88.13 MCA 135.53 SMA 139.09 ECC .22835 INC 1.8749 V1 30.285 RP 108.37 LAP 1.31 LOP 233.64 VP 38.668 GAP 3.41 AZP 91.34 TAL 242.96 TAP 18.49 RCA 107.33 APO 170.85 V2 34.970 RC 97.969 GL 7.93 GP 16.18 7AL 162.00 ZAP 118.48 ETS 6.28 ZAE 146.03 ETE 160.97 ZAC 27.49 ETC 177.41 CLP-119.77
                                                                        DISTANCE 285.851
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                              -7.32 RAP 293.98 ECC 1.7490
    C3 45.513 VHL 6.746 DLA -13.45 RAL 294.79 RAD 6568.7 VEL 12.918 PTH 2.35 VHP 4.331 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.13 2 46 34
                    2 13 26 1987.59
10 41 15 5494.24
                                                                 27.60
                                                                              167.58
                                                  -13.49
                                                                                                                                            27.87
                                                                                                                                                          245.81
                                                                                                          12 12 49
                                                                                                                             4894.2
                                                                                                89.03
                                                                 254.45
                                                                               176.38
                                  5494.24
                                                   28.30
        90.00
                   10 41 15
                                                                                                                                                           2.39
                                                                                                                             1147.9
                                                                                                                                            -11.23
                   3 27 44 1747.86
12 9 38 5209.20
4 20 9 1583.68
13 33 42 4946.15
                                                                                                           3 56 52
                                                                   9.29
                                                                               166.89
                                                                                               116.23
                                                  -14.88
                                                                                               38.08 13 36 27
119.27 4 46 33
85.46 14 56 8
       100.00
                                                                                                                             4609.2
                                                                                                                                            29.25
                                                                                                                                                          224.68
                                                                               176.34
                                                                 233.44
                                                   29.84
       100.00
                                                                                                                              983.7
                                                                                                                                                          348.06
                                                                 354.84
                                                                               164.91
                                                 -18.49
       110.00
                                                                                                                             4346.2
                                                                                                                                             32.92
                                                                                                                                                          204.10
                                                                               176.07
                                                                 213.19
                                                   33.92
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 402.9 SR 283.9 SS 144.1
CRT -.1276 CRS .4283 CST -.9388
                                                                     SGT 1702.9 SGR 440.6 SG3 273.4
RRT -.7339 RRF -.7741 RTF .6757
SGB 1759.0 R23 .1667 R13 -.8797
     TOE -.0407 TRA-1.5276 TC3 -.7841 BAU .4933
     ROE - .3267 RRA .2282 RC3 .2063 FAU .11377
                                                                                                                        LSA 429.6 MSA 280.6 55A 20.1
    FOE .1031 FRA-1.3915 FC3-2.1641 BSP 5063
BOE .3292 BRA 1.5445 BC3 .8108 FSP -876
                                                                                                                        EL1 406.1 EL2 279.5 ALF 170.17
                                                                     5G1 1734.3 SG2 293.9 THA 168.93
                                                                                                                                    ARRIVAL DATE APR 5 1966
                                                                         FLIGHT TIME 96.00
                                                                         DISTANCE 291.919
                          .00 LOL 98.09 VL 29.084 GAL -12.59 ATL 88.28 HCA 138.72 SMA 138.47 ECC .22629 INC 1.7236 V1 30.285 1.14 LOP 236.83 VP 38.601 GAP 3.75 ATP 91.30 TAL 241.81 TAP 20.53 RCA 107.14 APO 169.80 V2 34.957 7.39 GP 16.87 ZAL 161.61 ZAP 121.35 ETS 7.86 ZAE 144.01 ETE 160.99 ZAC 27.53 ETC 178.71 CLP-122.93
   HELIOCENTRIC CONIC
    RL 147.11 LAL
RP 108.41 LAP
    RC 100.323 GL
   PLANETOCENTRIC CONIC
    C3 44.103 VHL 6.641 DLA -13.87 RAL 295.55 RAD 6568.7 VEL 12.863 PTH 2.34 VHP 4.408 DPA -6.64 RAP 293.93 ECC 1.7258 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               115.46 2 52 55
                                                                              167.85
                                                                  26.27
                                                   -12.84
                      2 20 10 1965.14
         90.00
                                                                                                                                              27.91
                                                                                                                                                           246.29
                                                                                                           12 12 18
                                                                                                                              4900.9
                                                                                                 89.27
                                                                  254.93
                                                                                176.74
                    10 40 37
                                   5500.87
                                                    28.31
                                                                                                116.57 4 2 57
88.30 13 36 12
119.66 4 52 4
85.63 14 56 28
                                                                                                                              1126.3
                                                                                                                                            -10.54
                                                                                                                                                            1.16
                   3 34 11 1726.33
12 9 17 5214.92
4 26 0 1564.04
13 33 58 4949.97
                                                                   8.02
                                                                                167.15
                                                   -14.22
        100.00
                                                                                                                              4614.9
                                                                                                                                            29.29
                                                                                                                                                           225.10
                                                    29.85
                                                                  233.86
                                                                                176.70
                                                                                                                                                           346.97
                                                                                                                              964.0
                                                                                                                                            -13.75
                                                   -17.84
                                                                  353.70
                                                                              165.15
                                                                                                                                                           204.36
                                                                                                                              4350.0
                                                                                                                                             32.96
                                                                  213.49
                                                                                176.45
                                                    33.94
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 426.1 SR 267.2 55 137.2
CRT -.1060 CRS .3834 CST -.9461
                                                                      SGT 1815.8 SGR 440.5 SG3 265.7
RRT -.7555 RRF -.8002 RTF .8754
SGB 1868.5 R23 .1866 R13 -.8811
     TOE -. 0596 TRA-1.5813 TC3 -. 8649 BAU .5265
     ROE - .3018 RRA .2237 RC3 .2218 FAU .10939
                                                                                                                        LSA 447.8 MSA 266.3 SSA 20.1
     FOE .0694 FRA-1.2934 FC3-2.1473 BSP 5433
BOE .3076 BRA 1.5971 BC3 .8929 FSP -848
                                                                      5G1 1846.8 SG2 283.7 THA 169.36
                                                                                                                       EL1 427.6 EL2 264.8 ALF 173.82
                                                                                                                                    ARRIVAL DATE APR 7 1965
                                                                         FLIGHT TIME 98.00
 LAUNCH DATE DEC 30 1965
     RL 147.11 LAL .00 LOL 98.09 VL 29.010 GAL -12.38 AZL 88.45 MCA 141.91 SMA 137.85 ECC .22429 INC 1.5519 V1 30.285 RP 108.44 LAP .96 LOP 240.01 VP 38.534 GAP 4.07 AZP 91.22 TAL 240.61 TAP 22.52 RCA 106.93 APO 168.77 V2 34.945 RC 102.682 GL 6.74 GP 17.68 ZAL 161.20 ZAP 123.96 ETS 9.61 ZAE 142.12 EYE 160.81 ZAC 27.78 ETC 180.18 CLP-125.90
                                                                          DISTANCE 297.961
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
     C3 42.688 VML 6.534 DLA -14.38 RAL 296.38 RAD 6568.6 VEL 12.808 PTH 2.33 VMP 4.493 OPA -5.80 RAP 294.04 ECC 1.7025
      ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.81 3 U 19
89.62 12 11 14
4 10 1
                                                                              168.17
                                                    -12.07
                                                                   24.74
                       2 27 59 1939.12
                                                                                                                                                            246.99
                                                                                                                                              27.96
                                                                                                                              4910.5
                                                     28.31
                                                                  255.63
                                                                                 177.17
                                                                                               89.02
116.94 4 10 1
88.63 13 35 28
120.07 4 58 24
84.91 14 56 26
                     10 39 23 5510.47
                                                                                                                                                            359.75
                                                                                                                                              -9.74
                                                                                                                              1101.4
                                                    -13.46
                                                                    6.56
                                                                                 167.47
                      3 41 39
                                   1701.44
                                                                                                                                                            225.72
         100.00
                                                                                                                                             29.35
                                                                                                                              4623.4
                                                                                 177.14
                                                    29.86
                                                                  234.49
                     12 8 25 5223.38
                                                                                                                                                            345.72
                                                                                                                               941.5
                                                                                                                                             -12.95
                                                                  352.40
                                                                                 165.44
                     4 32 43 1541.51
13 33 50 4956.08
                                                    -17.07
         110.00
                                                                                                                                             33.03
                                                                                                                                                            204.85
                                                                                                                             4356.1
                                                                                 176.91
                                                                  213.96
                                                    33.97
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 450.6 SR 248.6 SS 130.7
CRT -.0760 CRS .3101 CST -.9577
                                                                      RRT -.7766 RRF -.8267 RTF .8766
SGB 1979.7 R23 .2093 R13 -.8821
SGI 1960.6 SG2 273.9 THA 169.72
      TDE -.0857 TRA-1.6301 TC3 -.9498 BAU .5590
      FOE -.2751 RRA .2186 RC3 .2394 FAU .10504
FOE .0277 FRA-1.1979 FC3-2.1303 B3P 5828
BDE .2881 BRA 1.6447 BC3 .9795 FSP -827
                                                                                                                          LSA 468.6 HSA 248.9 SSA 20.3
EL1 451.2 EL2 247.6 ALF 176.56
                                                                                                                                      ARRIVAL DATE APR 9 1966
                                                                           FLIGHT TIME 100.00
  LAUNCH DATE DEC 30 1965
                                                                           DISTANCE 303.978
                          .00 LOL 98.09 VL 28.934 GAL -12.17 AZL 88.65 MCA 145.10 SMA 137.22 ECC .22234 INC 1.3539 V1 30.285 .77 LOP 243.20 VP 38.465 GAP 4.38 AZP 91.11 TAL 239.36 TAP 24.46 RCA 106.71 APO 167.73 V2 34.932 5.97 GP 18.67 ZAL 160.75 ZAP 126.30 ETS 11.59 ZAE 140.32 ETE 160.40 ZAC 28.23 ETC 181.85 CLP-128.68
     HELIOCENTRIC CONIC
      RL 147.11 LAL
           108.48 LAP
      RC 101.043 GL
     PLANETOCENTRIC CONIC
                                                                                                     2.32 VHP 4.588 OPA -4.78 RAP 294.31 ECC 1.6792
      C3 41.272 VHL 6.424 DLA -15.00 RAL 297.27 RAD 6568.6 VEL 12.753 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 116.20
                                                                                                              3 9 3
                                                                    22.95
                                                                                168.57
                      2 37 15 1908.38
10 37 17 5524.19
                                                     -11.16
          90.00
                                                                                                                                                             247.98
                                                                                                                                               28.03
                                                                                                             12 9 21
                                                                                                                               4924.2
                                                                                                   90.12
                                                                                  177.70
                                                                   256.64
                                                     28.32
                      10 37 17
          90.00
                                                                                                                                                            358.10
                                                                                                             4 18 19
                                                                                                                                                -8.79
                                                                                                                               1072.2
                                                                                                  117.35
                      3 50 27 1672.16
12 6 45 5235.64
                                                                     4.87
                                                                                  167.85
                                                     -12.55
         100.00
                                                                                                                               4635.6
                                                                                                                                               29.44
                                                                                                   89.11
                                                                                                             13 34 1
                                                                   235.40
                                                                                 177.69
                                                     29.88
         100.00
                                                                                                   120.54 5 5 49
86.34 14 55 54
                                                                                                                                              -12.00
                                                                                                  120.54
                                                                                                                               915.2
                                                    -16.17
                                                                   350.90
                                                                                 165.79
                       4 40 33 1515.22
         110.00
                                                                                                                               4365.3
                                                                                                                                               33.13
                                                                                  177.50
                                                                   214.68
                      13 33 9
                                    4965.34
         110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ST 476.4 SR 228.6 55 124.8

CRT - .0393 CRS .2198 CST - .9685

LSA 491.7 MSA 229.3 SSA 20.5
     DIFFERENTIAL CORRECTIONS
                                                                       SGT 2041.9 SGR 444.3 SG3 249.6
RRT -.7953 RRF -.8526 RTF .8767
       TOE -.1182 TRA-1.6711 TC3-1.0376 BAU .5901
       ROE - .2475 RRA .2117 RC3 .2587 FAU .10036
                                                                      SGB 2089.7 R23 .2366 R13 -.8822
SG1 2072.8 SG2 265.3 THA 170.02
      FOE -.0143 FRA-1.0970 FC3-2.1052 BSP 6192
                                                                                                                           EL1 476.5 EL2 228.4 ALF 178.60
```

RP

110.00

13 16 13

DIFFERENTIAL CORRECTIONS

5072.66

TOE -.3848 TRA-1.7373 TC3-1.4356 BAU .7092 ROE -.1114 RRA .1660 RC3 .3703 FAU .08003 FDE -.2659 FRA -.6866 FC3-1.9363 BSP 7739 BDE .4006 BRA 1.7452 BC3 1.4826 FSP -678 182.08

HID-COURSE EXECUTION ACCURACY

RRT -.8423 RF -.9448 RTF .8753 SGB 2540.1 R23 .3701 R13 -.8817 SGI 2526.9 SG2 258.5 THA 170.58

213.82

33.96

ORBIT DETERMINATION ACCURACY

ST 648.3 SR 118.9 SS 149.0 CRT .1522 CRS -.3895 CST -.9552

LSA 664.1 MSA 122.8 SSA 22.7 EL1 648.5 EL2 117.5 ALF 1.65

4472.7

34.16

223.06

```
ARRIVAL DATE APR 19 1966
LAUNCH DATE DEC 30 1965
                                                                             FLIGHT TIME 110.00
                                                                             OISTANCE 333.741
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.545 GAL -11.03 A7L 90.49 HCA 160.99 SHA 134.12 ECC .21358 INC .4920 V1 30.285 RP 108.66 LAP -.16 LOP 259.08 VP 38.121 GAP 5.72 A7P 89.53 TAL 232.55 TAP 33.54 RCA 105.48 APO 162.77 V2 34.875 RC 116.852 GL -2.35 GP 28.61 7AL 157.19 7AP 132.70 ETS 27.41 7AE 131.08 ETE 154.23 7AC 33.86 ETC 195.28 CLP-140.57
   PLANETOCENTRIC CONIC
    C3 34.610 VHL 5.883 DLA -22.28 RAL 303.55 RAD 6568.4 VEL 12.489 PTH 2.26 VHP 5.328 DPA
                                                                                                                                        5.57 RAP 296.60 ECC 1.5696
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    970.6
                     4 20 41 1570.63
9 43 56 5773.00
                                                        -.51
                                                                       3.84
                                                                                   173.99
                                                                                                  118.31
                                                                                                                   4 46 52
                                                                                                                                                      3.28
        90.00
                                                                                                                                                                    266.14
                                                                                                                                    5173.0
                                                                                    183.41
                                                                                                     99.04 11 20 9
                                                                                                                                                     27.92
                                                       26.95
                                                                     274.67
        90.00
                   5 25 55 1360.09
11 21 23 5458.78
                                                                                                                                                                    340.86
                                                       -2.29
                                                                     347.38
                                                                                    173.00
                                                                                                     119.81
                                                                                                                  5 48 35
                                                                                                                                      760.1
                                                                                                                                                       1.69
       100.00
                                                                                                     97.72 12 52 22
                                                                                                                                                                    243.17
                                                                                                                                    4858.8
                                                                                                                                                     29.73
                                                                                    183.75
                                                      28.97
                                                                    251.89
       100.00
                                                                                                     123.63 6 21 42
94.43 14 28 38
                                                                                                                                                                    330.21
                    6 0 51 1250.58
13 2 57 5141.05
                                                                                                                                                      -2.DS
                                                                     336.45
                                                                                    170.37
                                                                                                                                      650.6
                                                       -6.54
       110.00
                                                                                                                                                                    219.15
                                                                                                                                                      34.17
                                                                                                                                    4541.1
                                                                     228.38
                                                                                    184.36
                                                      33.93
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 741.7 SR 78.7 SS 184.7
CRT .1002 CRS -.4009 CST -.9383
                                                                        SGT 2606.0 SGR 509.1 SG3 197.2
RRT -.8423 RRF -.9611 RTF .8754
SGB 2655.3 R23 .4001 R13 -.8824
    TOE -.5185 TRA-1.7122 TC3-1.5414 BAU .7379
    ROE -.0639 RRA .1453 RC3 .4093 FAU .07380
FOE -.3615 FRA -.5741 FC3-1.8461 BSP 8133
BOE .5224 BRA 1.7184 BC3 1.5948 FSP -639
                                                                                                                               LSA 761.9 MSA 97.3 SSA 22.6
                                                                                                                                EL1 741.8 EL2 78.3 ALF
                                                                         5G1 2641.5 SGZ 270.7 THA 170.56
                                                                                                                                             ARRIVAL DATE APR 21 1966
                                                                              FLIGHT TIME 112.00
LAUNCH DATE DEC 30 1965
                                                                             DISTANCE 339.636
  MELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.467 GAL -10.78 A7L 91.27 MCA 164.16 SMA 133.52 ECC .21204 INC 1.2749 V1 30.285 RP 108.69 LAP -.35 LOP 262.25 VP 38.053 GAP 5.95 A7P 88.77 TAL 231.09 TAP 35.25 RCA 105.21 APO 161.83 V2 34.865 RC 119.206 GL -6.15 GP 32.70 ZAL 155.49 ZAP 132.09 ETS 32.56 ZAE 128.40 ETE 151.82 ZAC 36.05 ETC 199.81 CLP-142.80
    23 33.747 VML 3.809 DLA -25.74 RAL 305.63 RAD 6568.3 VEL 12.455 PTH 2.25 VMP 5.623 DPA 9.74 RAP 296.78 ECC 1.5554 ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 24 45 1370.01 5.93 352.62 177.98 117.74 5 47 38 370.00
   PLANETOCENTRIC CONIC
                                                                                                                                                                     301.67
                                                                                    185.38
                                                                                                      105.06
                                                                                                                    9 7 41
                                                                                                                                       72.8
                                                                                                                                                      26.10
        90.00
                     8 56 28
                                      672.80
                                                       24.27
                                                                     309.86
                                                                                                     105.06 9 7 41
119.71 6 40 7
103.31 12 17 13
124.14 7 0 17
99.52 14 6 25
                   6 20 16 1190.72
10 43 38 5615.36
6 41 33 1123.95
                                                                                                                                                                     331.50
                                                                                                                                       590.7
                                                                                                                                                       7.37
                                                        3.44
                                                                     338.08
                                                                                    176.62
       100.00
                                                                                                                                                      28.58
                                                                                                                                                                     254.66
                                                                                    186.15
                                                                                                                                     5015.4
       100.00
                                                       27.01
                                                                     263.11
                                                                                                                                                                     323.60
                                                                                   173.40
                                                                                                                                     524.0
                                                                                                                                                       2.76
       110.00
                                                        -1.73
                                                                     329.81
                                                                                                                                                                     228.02
                    12 38 51
                                                      32.99
                                                                     237.13
                                                                                     187.55
                                                                                                                                     4654.9
                                                                                                                                                      33.95
                                    5254.89
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 889.5 SR 41.1 55 240.7
CRT -.5115 CRS .2305 CST -.9372
                                                                         SGT 2717.6 SGR 537.9 SG3 180.8
RRT -.8342 RRF -.9729 RTF .8763
SGB 2770.4 R23 .4230 R13 -.8839
     TOE -.7118 TRA-1.6539 TC3-1.6362 BAU .7655
     RDE -. 0039 RRA .1151 RC3 .4501 FAU .06639
    FDE -.4757 FRA -.4499 FC3-1.7033 BSP 8504
BDE .7118 BRA 1.6578 BC3 1.6969 FSP -585
                                                                        SGB 2770.4 R23 .4230 R13 -.8839 LSA 918.2 MSA 86.9 SSA 18.4 SG1 2754.9 SG2 292.6 TMA 170.52 EL1 889.8 EL2 35.3 ALF 178.64
                                                                                                                               LSA 918.2 MSA 86.9 55A 18.4
                                                                                                                                            ARRIVAL DATE APR 23 1966
                                                                             FI IGHT TIME 114.00
LAUNCH DATE DEC 30 1965
                                                                             DISTANCE 345.512
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.388 GAL -10.52 ATL 92.44 HCA 167.32 5HA 132.92 ECC .21057 INC 2.4350 V1 30.285 RP 108.72 LAP -.53 LOP 265.42 VP 37.986 GAP 6.18 ATP 87.62 TAL 229.59 TAP 36.91 RCA 104.93 APO 160.91 V2 34.856 RC 121.557 GL -11.80 GP 38.31 TAL 152.52 TAP 130.12 ETS 38.73 TAE 124.77 ETE 148.97 TAC 39.04 ETC 205.47 CLP-145.22
   PLANETOCENTRIC CONIC
    C3 33.642 VML 5.800 DLA -30.92 RAL 308.54 RAD 6568.3 VEL 12.450 PTH 2.25 VMP 6.080 DPA 15.38 RAP 296.47 ECC 1.5537
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
77.03 5 38 48 1353.02 17.73 357.44 186.25 115.75 6 1 21 753.0 21.05 350.14
                                                                                                 115.75 6 1 21
115.75 9 17 2
115.75 6 1 21
115.75 6 1 21
115.75 9 17 2
123.55 8 14 31
108.64 13 15 20
                                                                                                                                 753.0
                                                                                  186.25
        77.03 5 38 48 1353.02
                                                                                                                                                      21.06
                                                       17.74
                                                                     308.39
                                                                                    186.26
                                                                                                                                       88.2
                     9 5 34
                                      688.24
        102.97
                                                                                                                                                                     350.14
                                                                                                                                                      21.05
                                                       17.73
                                                                     357.44
                                                                                   186.25
                                                                                                                                      753.0
                    5 38 48 1353.02
        77.03
                                                                                                                                                                     301.09
                                                                                                                                       88.2
                                                                                                                                                      21.06
                                                      17.74
                                                                     308.39
                                                                                    186.26
                     9 5 34
                                      688.24
       102.97
                                                                                                                                                      11.35
                                                                                                                                                                     311.44
                                                                                                                                      295.0
                                                         6.99
                                                                     317.82
                                                                                    180.01
                      7 59 36
                                      894.98
       110 00
                                                                     253.73
                                                                                     191.34
                                                                                                                                    4882.3
                                                                                                                                                      31.45
                                                      29.18
                                    5482.33
       110.00
                    11 43 57
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 1138.7 SR 84.4 SS 327.8

CRT -,9704 CRS .9863 CST --9517

LSA 1183.8 MSA 98.3 SSA 10.7

EL1 1141.6 EL2 20.3 ALF 175.88
                                                                         SGT 2831.7 SGR 573.1 SG3 160.3
RRT -.8162 RRF -.9784 RTF .8802
SGB 2889.1 R23 .4330 R13 -.8886
     TDE-1.0170 TRA-1.5422 TC3-1.6926 BAU .7918
    RDE .0802 RRA .0692 RC3 .4844 FAU .05740
FDE -.6199 FRA -.3156 FC3-1.4771 BSP 8905
BDE 1.0202 BRA 1.5438 BC3 1.7606 FSP -523
     BOE 1.0202 BRA 1.5438 BC3 1.7606 FSP
                                                                         SG1 2870.5 SG2 326.6 THA 170.50
                                                                                                                                             ARRIVAL DATE APR 25 1966
                                                                              FLIGHT TIME 116.00
LAUNCH DATE DEC 30 1965
                                                                              DISTANCE 351.366
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.310 GAL -10.25 A7L 94.35 MCA 170.47 SMA 132.33 ECC .20917 INC 4.3478 VI 30.285 RP 108.75 LAP -.72 LOP 268.59 VP 37.919 GAP 6.39 A7P 85.71 TAL 228.06 TAP 38.54 RCA 104.65 APO 160.01 V2 34.846 RC 123.903 GL -20.68 GP 46.27 7AL 146.76 7AP 126.03 ETS 46.11 7AE 119.41 ETE 145.98 7AC 43.35 ETC 212.72 CLP-148.32
   PLANETOCENTRIC CONIC
     C3 35.770 VHL 5.981 DLA -39.05 RAL 313.32 RAD 6568.4 VEL 12.536 PTH 2.27 VHP 6.902 OPA 23.23 RAP 295.08 ECC 1.5887
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    25.59
                                                                                                                   4 55 36
                                                                                                                                    1040.7
                                                       21.34
                                                                      22.17
                                                                                    194.50
                                                                                                    123.50
                       4 28 15
                                     1640.74
         61.91
                                                                                                                                                       25.61
                    10 54 17 5719.54
                                                                                                      123.50 12 29 37
                                                                                                                                      5119.5
                                                                      268.36
                                                                                     194.51
                                                        21.36
        118.09
                                                                                                                   4 55 36
                                                                                                                                     1040.7
                                                                                                                                                       25.59
                                                                                                                                                                      15.19
                                                                       22.17
                                                                                     194.50
                                                                                                      123.50
                       4 28 15
                                    1640.74
                                                        21.34
         61.91
                                                                                                     123.50 12 29 37
                                                                                                                                     5119.5
                                                                                                                                                      25.61
                    10 54 17 5719.54
                                                                      268.36
                                                                                     194.51
        118.09
                                                       21.36
                                                                                                                                     1040.7
                                                                                                                                                      25.59
                                                                                                                                                                      15.19
                    4 28 15 1640.74
10 54 17 5719.54
                                                                                                                   4 55 36
                                                       21.34
                                                                       22.17
                                                                                     194.50
                                                                                                      123.50
         61.91
                                                                                                                 12 29 37
                                                                                                                                     5119.5
                                                                                                                                                       25.61
                                                                                                     123.50
                                                                      268.36
                                                                                     194.51
        118.09
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 2948.7 3GR 604.1 SG3 133.4 ST 1573.4 SR 196.8 S5 455.9 RRT -.7772 RRF -.9705 RTF .8907 CRT -.9428 CRS .9945 CST -.9720 SG8 3009.9 R23 .4239 R13 -.8995 L5A 1645.5 MSA 120.2 SSA 5.0 SG1 2986.5 SG2 375.3 THA 170.81 EL1 1584.3 EL2 65.1 ALF 173.26
     TOE-1.5595 TRA-1.3242 TC3-1.6286 BAU .8116
     ROE .2046 RRA -.0105 RC3 .4776 FAU .04586
FOE -.7943 FRA -.1644 FC3-1.1100 BSP 9316
BOE 1.5729 BRA 1.3242 BC3 1.6971 FSP -438
```

ARRIVAL DATE APR 27 1966

```
FLIGHT TIME 118.00
LAUNCH DATE DEC 30 1965
   HELIOCENTRIC CONIC
                                                                          DISTANCE 357.185
    RL 147.11 LAL .0D LOL 98.09 VL 28.232 GAL -9.98 A7L 98.12 HCA 173.60 SMA 131.75 ECC .20780 INC 8.1163 V1 30.285 RP 108.78 LAP -.90 LOP 271.76 VP 37.853 GAP 6.59 A7P 81.93 TAL 226.50 TAP 40.11 RCA 104.38 APO 159.13 V2 34.838 RC 126.245 GL -35.11 GP 57.78 7AL 135.33 7AP 118.67 ETS 55.70 7AE 110.84 ETE 144.66 7AC 49.83 ETC 222.91 CLP-154.15
   PLANETOCENTRIC CONIC
    C3 46.580 VHL 6.825 OLA -51.74 RAL 323.89 RAD 6568.7 VEL 12.959 PTH 2.36 VMP 8.759 DPA 34.28 RAP 290.94 ECC 1.7666
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                               213.64
                                                                                               137.45 4 36 D
                                                                                                                              1278.9
       44.70
                     4 4 41
                                  1878.92
                                                    23.68
                                                                  46.22
                                                                                                                                            29.45
                                                                                                                                                             40.44
                                                                                                137.45 14 15 46
137.45 4 36 0
                                                                                                                               3014.6
                                                                                                                                                             255.11
                                                                  260.90
                                                                                213.65
                                                                                                                                               29.46
                  12 42 11 5614.55
                                                     23.69
                                                                                                                                                              40.44
        44.70
                     4 4 41
                                  1878.92
                                                    23.68
                                                                  46.22
                                                                                213.64
                                                                                                                              1278.9
                                                                                                                                               29.45
                                                                                               137.45 14 15 46
137.45 4 36 0
137.45 14 15 46
                                                                                                                                                            255.11
                  12 42 11 5614.55
                                                                  260.90
                                                                                213.65
                                                                                                                              5014.6
                                                                                                                                              29.46
       135.30
                                                    23.69
                                                                  46.22
                                                                                213.64
                                                                                                                              1278.9
                                                                                                                                              29.45
                                                                                                                                                             40.44
        44.70
                     4 4 41
                                  1878.92
                                                    23.68
                  12 42 11
                                                                                                                                                            255.11
                                                                  260.90
                                                                                213.65
                                                                                                                              5014.6
                                                                                                                                              29.46
       135.30
                                   5614.55
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2327.1 SR 291.2 SS 630.8

CRT -.9278 CRS .9735 CST -.9885

LSA 2424.6 MSA 139.8 SSA 2.0

EL1 2342.8 EL2 107.9 ALF 173.36
                                                                     SGT 3072.6 SGR 583.2 SG3 99.2
RRT -.6529 RRF -.8959 RTF .9181
    TDE-2.7419 TRA -.8318 TC3-1.2413 BAU .8006
    ROE .3369 RRA -.1670 RC3 .3348 FAU .03107
FOE -.9948 FRA .0118 FC3 -.5776 BSP 9716
BDE 2.7625 BRA .8485 BC3 1.2856 FSP -324
                                                                     SGB 3127.4 R23 .3749 R13 -.9250
SG1 3096.6 SG2 438.3 THA 172.79
                                                                                                                                      ARRIVAL DATE APR 29 1966
                                                                          FLIGHT TIME 120.00
LAUNCH DATE DEC 3D 1965
                                                                          DISTANCE 362.914
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.155 CAL -9.68 AZL 108.85 MCA 176.65 SMA 131.19 ECC .20630 INC18.8478 VI 30.285 RP 108.80 LAP -1.08 LOP 274.92 VP 37.788 CAP 6.76 AZP 71.18 TAL 224.88 TAP 41.54 RCA 104.12 APO 158.25 VZ 34.830 RC 128.581 GL -55.42 GP 72.99 ZAL 115.54 ZAP 107.01 ETS 80.32 ZAE 95.58 ETE 159.76 ZAC 59.00 ETC 249.55 CLP 179.40
   PLANETOCENTRIC CONIC
    C3 118.600 VHL 10.890 DLA -64.76 RAL 357.80 RAD 6570.2 VEL 15.490 PTH 2.76 VHP 14.724 DPA 48.55 RAP 276.69 ECC 2.9519
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                260.77
                                                                                                153.87
                                                                                                              6 14 36
                                                                                                                              1575.8
                                                                                                                                              21.67
                                                                                                                                                              65.27
       28.97
                    5 38 21 2175.76
                                                    14.52
                                                                  68.64
                  15 39 5
                                                                                                                                                             259.77
                                                                                                             17 14 54
                                                                                                                               5148.8
                                                                                                                                               21.68
       151.03
                                  5748.80
                                                    14.53
                                                                  263.13
                                                                                 260.80
                                                                                                 153.87
                                                                                                153.87
                                                                                                              6 14 36
                                                                                                                               1575.8
                                                                                                                                               21.67
                                                                                                                                                              65.27
        28.97
                    5 38 21 2175.76
                                                    14.52
                                                                   68.64
                                                                                260.77
                                                                                                153.87 6 14 36
153.87 17 14 54
                                                                                                                               5148.8
                                                                                                                                               21.68
                                                                                                                                                             259.77
       151.03
                  15 39 5 5748.80
                                                    14.53
                                                                  263.13
                                                                                260.80
                                                                                                                                                              65.27
                                                                                                153.87
                                                                                                              6 14 36
                                                                                                                               1575.8
        28.97
                    5 38 21 2175.76
                                                    14.52
                                                                   68.64
                                                                                260.77
                                                                                                                                               21.67
                                                                                                          17 14 54
                                                                                                 153.87
                                                                                                                                                             259.77
                                                                                                                               5148.8
                                                                                                                                               21.68
       151.03
                   15 39 5
                                  5748.80
                                                   14.53
                                                                  263.13
                                                                                260.80
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                     5GT 3118.5 SGR 729.9 SG3 63.4
RRT .7783 RRF .6500 RTF .9827
SGB 3202.8 R23 -.2088 R13 .9776
                                                                                                                          ST 2852.3 SR 706.5 SS 778.5
CRT .9816 CRS -.9662 CST -.9976
    TDE-5.3876 TRA .8564 TC3 -.3479 BAU .5522
    ROE-1.3385 RRA -.1535 RC5 .0147 FAU .01300
FOE-1.1443 FRA .2959 FC3 -.0949 BSP 9381
BOE 5.5514 BRA .8700 BC3 .3482 FSP -194
                                                                                                                          LSA 3036.4 MSA 144.0 SSA
                                                                      5G1 3170.9 SG2 450.8 THA 10.54
                                                                                                                          EL1 2935.5 EL2 131.1 ALF 13.69
                                                                                                                                     ARRIVAL CATE MAY 3 1966
                                                                         FLIGHT TIME 124.00
LAUNCH DATE DEC 30 1965
                                                                         DISTANCE 375.059
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 28.002 GAL -9.21 AZL 65.65 MCA 183.47 SMA 130.08 ECC .20566 INC24.3498 V1 30.285 RP 108.85 LAP -1.43 LOP 281.25 VP 37.661 GAP 7.28 AZP 114.31 TAL 221.87 TAP 45.34 RCA 103.33 APO 156.83 V2 34.816
    RC 133.236 GL 59.30 GP -71.01 ZAL 109.59 ZAP 108.99 ETS 259.98 ZAE 92.39 ETE 183.62 ZAC 85.93 ETC 95.41 CLP-179.92
   PLANETOCENTRIC CONIC
                                                                                                   2.94 VHP 14.307 DPA -84.34 RAP 84.48 ECC 3.8911
    C3 175.674 VHL 13.254 DLA 42.72 RAL 305.67 RAD 6570.9 VEL 17.234 PTH
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              47.83 16 50 38 4104.6

47.83 23 41 24 2764.2

47.83 16 50 38 4104.6

47.83 23 41 24 2764.2

47.83 16 50 38 4104.6

47.83 23 41 24 2764.2

47.83 23 41 24 2764.2
       56.57 15 32 14 4704.59
123.43 22 45 19 3364.23
                                                                                                                                           -12.89
                                                                                                                                                          210.16
                                                    -7.57
                                                                 215.82
                                                                               207.40
                                                                                                                                             -12.88
                                                                                207.39
                                                                                                                                                            107.18
                                                    -7.56
                                                                 112.84
       123.43
                  15 32 14 4704.59
22 45 19 3364.23
                                                                                                                                            -12.89
                                                                                                                                                            210.16
                                                                 215.82
                                                                                207.40
                                                    -7.57
        56.57
                                                                                                                                            -12.88
                                                                                                                                                            107.18
                                                    -7.56
                                                                  112.84
                                                                                207.39
       123.43
                                                                                                                                            -12.89
                                                                                                                                                            210.16
                                                    -7.57
                                                                 215.82
                                                                                207.40
                                   4704.59
        56.57
                   15 32 14
                                                                 112.84 207.39
                                                                                                                                            -12.88
                                                                                                                                                            107.18
                                                    -7.56
      123.43
                   22 45 19
                                  3364.23
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 2922.8 SGR 1772.2 SG3 63.9

RRT -.9524 RRF -.9041 RTF ..9908

SGB 3418.1 R23 -.2099 R13 -.9769
                                                                                                                          ST 2231.6 SR 1067.5 SS 761.8
    TOE 5.1418 TRA-3.1572 TC3 -.1468 BAU .3489
                                                                                                                        CRT -.9832 CRS .9726 CST -.9987
LSA 2633.6 MSA 187.4 SSA 1.1
    ROE-2.2453 RRA 2.5179 RC3 .0232 FAU .01177
FOE 1.3986 FRA -.6757 FC3 -.0580 BSP 10318
BOE 5.6107 BRA 4.0383 BC3 .1486 FSP -210
                                                                      SG1 3386.1 SG2 466.2 THA 149.35
                                                                                                                          EL1 2521.8 EL2 177.3 ALF 155.26
                                                                                                                                     ARRIVAL DATE MAY 5 1966
                                                                          FLIGHT TIME 126.00
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 380.761
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 27.926 GAL -8.89 AZL 75.79 HCA 186.52 SMA 129.54 ECC .20447 INC14.2052 V1 30.285
RP 108.87 LAP -1.60 LOP 284.41 VP 37.599 GAP 7.44 AZP 104.12 TAL 220.19 TAP 46.71 RCA 103.06 APO 156.03 V2 34.809
    RC 135.553 GL 50.65 GP -54.76 7AL 119.25 7AP 122.73 ETS 290.36 7AE 107.62 ETE 206.75 7AC 76.65 ETC 125.16 CLP-159.57
   PLANETOCENTRIC CONIC
    C3 76.661 VHL 8.756 DLA 32.66 RAL 303.84 RAD 6569.5 VEL 14.072 PTH 2.57 VHP 8.805 OPA -72.78 RAP 342.50 ECC 2.2616
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.00 16 50 45 4285.80 -11.95 185.07 194.59 59.38 18 2 10 3685.8 -15.93 178.34
                                                                                                  59.37 22 9 45
59.38 18 2 10
59.37 22 9 45
62.07 23 40 37
55.98 21 14 36
                                                                                                                               2849.6
                                                                                                                                             -15.91
                                                                                                                                                             116.26
                                                                  123.00
                                                                                194.58
                   21 12 15
                                  3449.59
                                                   -11.93
      107.00
                  16 50 45
                                                                                                                               3685.8
                                                                                                                                             -15.93
                                                                                                                                                             178.34
                                  4285.80
                                                   -11.95
                                                                  185.07
                                                                                194.59
        73.00
                  21 12 15 3449.59
22 48 3 3154.46
                                                                                                                              2849.5
                                                                                                                                             -15.91
                                                                                                                                                            116.26
                                                   -11.93
                                                                  123.00
                                                                                194.58
       107.00
                                                   -20.56
                                                                                199.61
                                                                                                                              2554.5
                                                                                                                                             -24.13
                                                                                                                                                             97.93
       110.00
                   20 14 7
                                                                                                                                                             125.23
                                                    -3.59
                                                                 131.50
                                                                                189.25
                                                                                                                              3028.9
                                                                                                                                              -8.03
                                   3628.93
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 3499.1 SGR 451.5 SG3 99.4 ST 2180.7 SR 151.8 SS 646.0 RRT -.5854 RRF -.2745 RTF .9386 CRT .1438 CRS -.3125 CST -.9850 SGB 3528.1 R23 -.3466 R13 -.9359 L5A 2271.9 M5A 184.2 SSA 1.5 SG1 3509.1 SG2 365.0 THA 175.63 EL1 2180.8 EL2 150.2 ALF .58
    TOE 3.1179 TRA-3.2971 TC3 -.7023 BAU .7204
    ROE .1121 RRA .5597 RC3 -.0280 FAU .02994
FOE 1.2749 FRA -.6763 FC3 -.3381 BSP 10859
BOE 3.1199 BRA 3.3460 BC3 .7029 FSP -332
```

SG1 3509.1 SG2 365.0 THA 175.63

```
LAUNCH DATE DEC 30 1965
                                                                             FLIGHT TIME 128.00
                                                                                                                                          ARRIVAL DATE MAY 7 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 386.528
     RL 147.11 LAL .00 LOL 98.09 VL 27.851 GAL -8.58 AZL 79.44 HCA 189.65 SMA 129.02 ECC .20361 INC10.5610 V1 30.285 RP 108.88 LAP -1.76 LOP 287.58 VP 37.538 GAP 7.61 AZP 100.42 TAL 218.52 TAP 48.16 RCA 102.75 APO 155.29 V2 34.804
     RC 137.863 GL 44.03 GP -42.53 7AL 124.53 7AP 132.65 ETS 299.51 7AE 116.04 ETE 207.05 7AC 70.39 ETC 134.28 CLP-156.84
   PLANETOCENTRIC CONIC
     C3 52.742 VHL 7.262 DLA 26.05 RAL 305.18 RAD 6568.9 VEL 13.195 PTH 2.41 VHP 7.195 DPA -60.44 RAP 333.46 ECC 1.8680
                                                                                                     60.11 19 27 1
75.29 1 21 21
56.22 19 45 31
       110.00
                    18 41 2
                                    3868.58
                                                       5.56
                                                                    144.03
                                                                                   179.45
                                                                                                                                   3268.6
                                                                                                                                                    1.08
                                                                                                                                                                  137.80
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                        SGT 3603.8 SGR 318.6 SG3 129.0
RRT -.1259 RRF .2870 RTF .9081
SGB 3617.8 R23 -.4054 R13 -.9078
                                                                                                                              ST 1953.2 SR 197.8 SS 611.1
CRT .7026 CRS -.8531 CST -.9706
     TOE 2.2631 TRA-2.9997 TC3-1.1644 BAU .8224
     ROE .2332 RRA .2750 RC3 -.0664 FAU .04136
FOE 1.2266 FRA -.6444 FC3 -.6788 B3P 11273
B0E 2.2751 BRA 3.0123 BC3 1.1663 FSP -429
                                                                                                                              LŜA 2046.6 MSA 196.6 SSA 2.5
EL1 1958.1 EL2 140.4 ALF 4.09
                                                                        SG1 3604.0 SG2 316.0 THA 179.36
                                                                            FLIGHT TIME 130.00
                                                                                                                                          ARRIVAL DATE MAY 9 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 392.305
     RL 147.11 LAL .00 LOL 98.09 VL 27.777 GAL -8.26 AZL 81.31 HCA 192.79 SHA 128.51 ECC .20292 INC 8.6929 VI 30.285
RP 108.90 LAP -1.92 LOP 290.74 VP 37.479 GAP 7.78 AZP 98.48 TAL 216.83 TAP 49.62 RCA 102.43 APO 154.58 V2 34.799
    RC 140.164 GL 39.54 GP -34.06 ZAL 127.31 ZAP 139.53 ETS 305.34 ZAE 120.94 ETE 204.35 ZAC 66.91 ETC 140.10 CLP-156.67
   PLANETOCENTRIC CONIC
     C3 42.590 VHL 6.526 OLA 21.84 RAL 306.91 RAD 6568.6 VEL 12.805 PTH
                                                                                                        2.33 VHP 6.561 DPA -51.66 RAP 331.15 ECC 1.7009
    90.00 22 1 1 3161.03 -26.59 108.00 190.59 79.88 22 53 42 2561.0 -27.71 99.51 90.00 16 26 27 4287.40 2.86 176.86 180.29 61.82 17 37 54 3687.4 -.93 170.23
                                                                                                              24 25 14
18 40 19
       100.00
                    23 37 45 2849.16
17 32 25 4074.50
                                                     -28.63
                                                                      85.44
                                                                                   190.98
                                                                                                     81.01
                                                                                                                                   2249.2
                                                                                                                                                  -29.57
                                                                                                                                                                   76.77
       100.00
                                                       4.67
                                                                    160.21
                                                                                   179.29
                                                                                                                                                                  153.67
                                                    -33.69
       110.00
                     1 21 59
                                    2535.33
                                                                      62.39
                                                                                   191.77
                                                                                                     83.83
                                                                                                                 2 4 15
                                                                                                                                   1935.3
                                                                                                                                                  -34.18
                                                                                                                                                                   53.18
                                                                                                     83.83 2 4 15
56.89 19 14 36
       110.00
                    18 8 35 3961.10
                                                     9.03
                                                                    148.94
                                                                                   176.61
                                                                                                                                  3361.1
                                                                                                                                                    4.61
                                                                                                                                                                  142.64
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 3698.9 SGR 274.4 SG3 148.0
RRT -.0027 RRF .4206 RTF .8910
SGB 3709.1 R23 -.4230 R13 -.8909
                                                                                                                              ST 1807.8 SR 197.8 SS 581.2
CRT .7436 CRS -.9051 CST -.9572
     TOE 1.8474 TRA-2.8059 TC3-1.5339 BAU .8741
    RDE .2168 RRA .1899 RC3 -.0633 FAU .04775
FDE 1.1517 FRA -.5848 FC3 -.9707 BSP 11626
                                                                                                                              LSA 1898.2 MSA 205.3 SSA 3.8
    BOE 1.8601 BRA 2.8123 BC3 1.5352 FSP -491
                                                                        SG1 3698.9 SG2 274.4 THA 179.99
                                                                                                                              EL1 1813.8 EL2 131.8 ALF 4.68
LAUNCH DATE DEC 30 1965
                                                                            FLIGHT TIME 132.00
                                                                                                                                         ARRIVAL DATE MAY 11 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 398.081
    RL 147.11 LAL .00 LOL 98.09 VL 27.704 GAL -7.94 A7L 82.45 HCA 195.94 SMA 128.00 ECC .20237 INC 7.5536 VI 30.285 RP 108.91 LAP -2.07 LOP 293.90 VP 37.421 GAP 7.95 A7P 97.27 TAL 215.13 TAP 51.07 RCA 102.10 APO 153.90 V2 34.795
    RC 142.456 GL
                         36.42 GP -28.08 7AL 128.62 7AP 144.41 ETS 309.83 7AE 123.88 ETE 201.40 7AC 65.28 ETC 144.52 CLP-157.18
   PLANETOCENTRIC CONIC
    C3 36.906 VHL 6.075 OLA 19.10 RAL 308.69 RAD 6568.4 VEL 12.581 PTH 2.28 VMP 6.279 DPA -45.27 RAP 330.82 ECC 1.6074
    C3 36.906 VAL 6.073 ULA 19.10 VAL 308.69 NAD 6568.4 VEL 12.581 PIH 2.28 VAP 6.279 OPA -45.27 NAP 330.82 ECC 1.6074

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 40 16 3006.90 -27.95 96.93 188.72 85.26 23 30 23 2406.9 -28.31 88.29
90.00 16 1 23 4369.18 5.47 181.44 178.93 62.17 17 14 12 3769.2 1.71 174.79
100.00 0 17 19 2706.64 -29.70 74.99 188.87 86.40 1 2 25 2106.6 -29.88 66.19
100.00 17 10 57 4144.67 7.01 164.10 178.09 60.87 18 20 2 3544.7 3.07 157.53
110.00 1 51 3 2413.39 -34.18 52.91 189.06 89.42 2 31 16 1813.4 -33.88 43.68
110.00 17 55 43 4010.69 10.86 151.61 175.76 57.39 19 0 34 3410.7 6.49 145.25
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                       SGT 3794.7 SGR 244.9 SG3 159.0
RRT -.0061 RRF .4094 RTF .8803
SGB 3802.6 R23 -.4148 R13 -.8803
                                                                                                                             ST 1715.4 SR 191.2 SS 555.4
CRT .7490 CRS -.9242 CST -.9451
    TDE 1.6084 TRA-2.6651 TC3-1.8446 BAU .9103
    RDE .1969 RRA .1515 RC3 -.0422 FAU .05083 FDE 1.0722 FRA -.5140 FC3-1.1925 BSP 11956
                                                                                                                             LSA 1800.7 MSA 212.0 SSA 5.0
ELI 1721.4 EL2 126.3 ALF 4.80
    BDE 1.6204 BRA 2.6694 BC3 1.8450 FSP -526
                                                                       5G1 3794.7 5G2 244.9 THA 179.98
LAUNCH DATE DEC 30 1965
                                                                            FLIGHT TIME 134.00
                                                                                                                                         ARRIVAL DATE MAY 13 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 403.853
   RL 147.11 LAL .00 LOL 98.09 VL 27.632 GAL -7.62 ATL 83.22 MCA 199.09 SMA 127.51 ECC .20194 INC 6.7828 V1 30.285
RP 108.92 LAP -2.21 LOP 297.06 VP 37.364 GAP 8.12 ATP 96.41 TAL 213.41 TAP 52.51 RCA 101.76 APO 153.26 V2 34.791
RC 144.737 GL 34.18 GP -23.73 TAL 129.03 TAP 148.04 ETS 313.45 TAE 125.72 ETE 198.79 TAC 64.82 ETC 148.04 CLP-157.94
  PLANETOCENTRIC CONIC
   C3 33.154 VHL 5.758 DLA 17.30 RAL 310.48 RAD 6568.3 VEL 12.431 PTH 2.25 VHP 6.153 DPA -40.44 RAP 331.37 ECC 1.5456 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                 2909.26
4412.69
                                                                                                                                                 -28.16
        90.00
                   23 6 7
                                                    -28.29
                                                                                  187.67
                                                                                                    88.81 23 54 36
62.46 17 3 22
                                                                    89.81
                                                                                                                                 2309.3
                                                                                                                                                                 81.15
                    15 49 50
        90.00
                                                      6.85
                                                                   143.90
                                                                                  174.67
                                                                                                                                  3412.7
                                                                                                                                                   3.11
                                                                                                                                                                 177.22
                     0 41 23 2614.71
17 1 11 4182.47
      100.00
                                                    -29.89
                                                                                  187.69
                                                                                                     89.99
                                                                                                                1 24 58
                                                                     68.17
                                                                                                                                  2014.7
                                                                                                                                                  -29.57
                                                                                                                                                                  59.37
      100.00
                    17 1 11
                                                      8.26
                                                                   166.22
                                                                                  177.91
                                                                                                     61.17
                                                                                                              18 10 53
                                                                                                                                  3582.5
                                                                                                                                                    4.35
                                                                                                                                                                 159.61
                                 2332.41
                     2 11 37
       110.00
                                                    -34.05
                                                                                                                2 50 29
                                                                     46.59
                                                                                  187.56
                                                                                                     93.16
                                                                                                                                  1732.4
                                                                                                                                                  -33.24
                                                                                                                                                                  37.44
                                                                                                    57.70
      110.00
                    17 47 26
                                   4037.54
                                                     11.84
                                                                   153.07
                                                                                  175.76
                                                                                                               18 54 44
                                                                                                                                  3437.5
                                                                                                                                                    7.50
                                                                                                                                                                 146.68
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       SCT 3888.2 SCR 228.1 SC3 164.7
RRT -.0489 RRF .3451 RTF .8726
SCB 3894.8 R23 -.3884 R13 -.8725
    TOE 1.4598 TRA-2.5484 TC3-2.1188 BAU .9392
                                                                                                                             ST 1658.4 SR 188.7 SS 535.7
CRT .7544 CRS -.9384 CST -.9343
   ROE .1853 RRA .1278 RC3 -.0151 FAU .05186
FOE 1.0021 FRA -.4390 FC3-1.3542 BSP 12236
                                                                                                                           LSA 1739.4 MSA 217.9 SSA 6.3
```

SG1 3888.2 SG2 227.9 THA 179.84

ELI 1664.5 EL2 123.4 ALF 4.93

BOE 1.4715 BRA 2.5516 BC3 2.1189 FSP -540

ARRIVAL DATE HAY 15 1966

```
FLIGHT TIME 136.00
LAUNCH DATE DEC 30 1965
                                                                                   DISTANCE 409.618
    RL 147.11 LAL .00 LOL 98.09 VL 27.560 GAL -7.29 ATL 83.78 HCA 202.25 SMA 127.03 ECC .20165 INC 6.2238 V1 30.285 RP 108.93 LAP -2.35 LOP 300.22 VP 37.309 GAP 8.29 ATP 95.76 TAL 211.68 TAP 53.93 RCA 101.41 APO 152.64 V2 34.788
   HELIOCENTRIC CONIC
                            32.51 GP -20.47 ZAL 128.84 ZAP 150.87 ETS 316.40 ZAE 126.91 ETE 196.60 ZAC 65.11 ETC 150.90 CLP-158.80
    RC 147.008 GL
   PLANETOCENTRIC CONIC
                                                                                                                 2.22 VHP 6.107 OPA -36.62 RAP 332.41 ECC 1.5004
    C3 30.404 VHL 5.514 DLA 16.12 RAL 312.29 RAD 6568.2 VEL 12.320 PTH
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             91.22 24 12 11
62.63 16 59 31
92.43 1 41 36
61.34 18 7 58
                                                                                        187.27
                                                                           85.00
                                                          -28.29
         90.00 23 24 48 2843.53
                                                                                                                                                                                  178.46
                                                                                                                                                3634.9
                                                                                                                                                                   3.82
         90.00 15 45 36 4434.85
100.00 0 59 4 2552.20
                                                            7.54
                                                                          185.16
                                                                                           178.96
                                                                                                                                                                                   54.78
                                                                                                                                                1952.2
                                                                                                                                                                 -29.15
                                                                                           187.22
                                                         -29.80
                                                                            63.52
                                                                                                                                               3601.4
1676.3
       100.00
                                                                                                                                                                                 160.66
                                                                                                                                                                  4.98
                     16 57 57
                                                             8.88
                                                                          167.28
                                                                                          178.25
                                      4201.41
       100.00
                                                                                                               95.72 3 5 11
57.85 18 53 45
                                                                                                                                                                                  33.19
                                                                                                                                                                - 32 . 60
                       2 27 15 2276.28
                                                         -33.76
                                                                           42.23 186.89
       110.00
                                                                                                                                                                  7.97
                                                                                                                                                                                  147.35
                                                                                                                                              3450.1
                                                                          153.76
                                                                                           176.21
                                       4050.10
                                                           12.30
                      17 46 15
       110.00
                                                                           MIO-COURSE EXECUTION ACCURACY
SGT 3982.3 SGR 221.4 SG3 167.6
RRT -.0938 RRF .2651 RTF .8672
SGB 3988.4 R25 -.3483 R13 -.8671
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 1624.2 SR 190.2 55 520.2
CRT .7650 CRS -.9514 CST -.9253
     TOE 1.3618 TRA-2.4454 TC3-2.3750 BAU .9654
    ROE .1799 RRA .1091 RC3 .0122 FAU .05184
FOE .9407 FRA -.3680 FC3-1.4761 BSP 12542
BOE 1.3736 BRA 2.4478 BC3 2.3750 FSP -548
                                                                                                                                          LSA 1701.6 MSA 222.3 SSA 7.6
ELI 1630.8 EL2 122.0 ALF 5.15
                                                                               5G1 3982.3 5G2 220.4 THA 179.70
                                                                                                                                                        APPIVAL DATE MAY 17 1966
                                                                                    FLIGHT TIME 138.00
LAUNCH DATE DEC 30 1965
                                                                                   DISTANCE 415.377
    RE 147.11 LAL .00 LOL 98.09 VL 27.490 GAL -6.94 AZL 84.20 MCA 205.41 SMA 126.56 ECC .20149 INC 5.7977 V1 30.285 RP 108.94 LAP -2.48 LOP 303.39 VP 37.255 GAP 8.46 AZP 95.24 TAL 209.93 TAP 55.34 RCA 101.06 APO 152.06 V2 34.786 RC 149.266 GL 31.25 GP -17.94 ZAL 128.21 ZAP 153.16 ETS 318.81 ZAE 127.73 ETE 194.79 ZAC 65.90 ETC 153.27 CLP-159.70
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 28.242 VHL 5.314 OLA 15.39 RAL 314.14 RAD 6568.1 VEL 12.232 PTH 2.20 VHP 6.105 OPA -33.50 RAP 333.74 ECC 1.4648

LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 23 39 5 2798.30 -28.18 81.70 187.36 92.87 24 25 43 2198.3 -27.49 73.10

90.00 15 46 4 4443.15 7.80 185.63 179.59 62.69 17 0 7 3843.2 4.08 178.93

100.00 1 12 46 2508.83 -29.63 60.31 187.26 94.11 1 54 35 1908.8 -28.75 51.62

100.00 16 59 0 4207.85 9.09 167.64 178.90 61.40 18 9 7 3607.9 5.20 161.01

110.00 2 39 46 2236.66 -33.45 39.18 186.81 97.50 3 17 2 1636.7 -32.05 30.23

110.00 17 48 30 4052.79 12.40 153.91 176.93 57.89 18 56 2 3452.8 8.07 147.49
    PLANETOCENTRIC CONIC
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 1604.7 SR 194.9 SS 507.5
CRT .7798 CR5 -.9632 CST -.9180
                                                                               SGT 4079.1 SGR 222.0 SG3 168.9
RRT -.1274 RRF .1879 RTF .8638
     TOE 1.2940 TRA-2.3504 TC3-2.6251 BAU .9913
      ROE .1784 RRA .0924 RC3 .0378 FAU .05130
                                                                                                                                           LSA 1679.3 MSA 225.3 SSA
                                                                                568 4085.1 R23 -.3007 R13 -.8637
     FOE .8861 FRA -.3033 FC3-1.5725 BSP 12925
BDE 1.3063 BRA 2.3522 BC3 2.6254 FSP -557
                                                                               SG1 4079.2 SG2 220.2 THA 179.60
                                                                                                                                         EL1 1612.0 EL2 121.4 ALF
                                                                                                                                                       ARRIVAL DATE MAY 19 1966
                                                                                    FLIGHT TIME 140.00
LAUNCH DATE DEC 30 1965
     RL 147.11 LAL .00 LOL 98.09 VL 27.420 GAL -6.60 AZL 84.54 MCA 208.57 SMA 126.10 ECC .20147 INC 5.4604 VI 30.285 RP 108.94 LAP -2.61 LOP 306.55 VP 37.202 GAP 8.63 AZP 94.80 TAL 208.17 TAP 56.73 RCA 100.69 APO 151.50 V2 34.785 RC 151.511 GL 30.26 GP -15.95 ZAL 127.24 ZAP 155.09 ETS 320.78 ZAE 128.30 ETE 193.28 ZAC 67.04 ETC 155.26 CLP-160.61
                                                                                   DISTANCE 421.127
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                  2.18 VHP 6.131 DPA -30.86 RAP 335.27 ECC 1.4355
     C3 26.460 VHL 5.144 DLA 14.98 RAL 316.04 RAD 6568.1 YEL 12.159 PTH
     LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         187.83
                                                                                                           93.99 24 36 33
62.68 17 3 55
                                                          -28.06
                                                                            79.45
                      23 50 26 2767.41
                                                                                                                                                                                  178.84
                                                                                                                                                3841.6
                                                                                                                                                                   4.03
                                                              7.76
                                                                           185.54
                                                                                            180.45
                      15 49 53 4441.62
                                                                                                                                                                                    49.45
                                                                                                                             2 5 8
                                                                                                                                                1678.9
                                                                                                                                                                 -28.43
                                                                                                                95.26
                                                          -29.47
                                                                             58.10
                                                                                            187.70
                        1 23 49 2478.93
                                                                                                                61.38 18 13 12
98.73 3 26 58
57.83 19 0 44
                                                                                                                                                3605.3
                                                                                                                                                                                  160.67
                                                                                                                                                                  5.12
                                                                          167.50
                                                                                            179.78
                                                              9.01
                      17 3 7 4205.34
2 50 9 2208.77
17 53 15 4048.27
        100.00
                                                                                                                                                                                   26.17
                                                                                                                                                1608.8
                                                                                                                                                                 -31.62
                                                                                            167.16
                                                          -33.18
                                                                             37.05
         110.00
                                                                                                                                                                                  147.25
                                                                                                                                                3448.3
                                                                                                                                                                    7.90
                                                                                            177.85
                                                                           153.66
                                                           12.23
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                             HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                           ST 1593.4 SR 201.5 55 495.2
CRT .7967 CRS -.9730 CST -.9125
                                                                               SCT 4183.3 SGR 227.2 SG3 169.5
RRT -.1467 RRF .1200 RTF .8628
SGB 4189.5 R23 -.2496 R13 -.8627
      TOE 1.2437 TRA-2.2621 TC3-2.8799 BAU 1.0190
     ROE .1793 RRA .0765 RC3 .0610 FAU .05063
FOE .8345 FRA -.2479 FC3-1.6566 83P 13440
BDE 1.2565 BRA 2.2634 BC3 2.8805 F5P -574
                                                                                                                                           LSA 1665.4 MSA 226.4 SSA 10.3
                                                                                                                                            EL1 1601.6 EL2 121.2 ALF 5.79
                                                                                 SG1 4183.4 SG2 224.7 THA 179.54
                                                                                                                                                         ARRIVAL DATE MAY 21 1966
                                                                                     FLIGHT TIME 142.00
 LAUNCH DATE DEC 30 1965
     RL 147.11 LAL .00 LOL 98.09 VL 27.351 GAL -6.24 AZL 84.81 MCA 211.72 SMA 125.65 ECC .20157 INC 5.1851 VI 30.285 RP 108.94 LAP -2.72 LOP 309.71 VP 37.151 GAP 8.79 AZP 94.41 TAL 206.39 TAP 58.11 RCA 100.32 APO 150.98 V2 34.784 RC 153.743 GL 29.47 GP -14.34 ZAL 126.00 ZAP 156.75 ETS 322.38 ZAE 128.73 ETE 192.04 ZAC 68.43 ETC 156.95 CLP-161.50
                                                                                    DISTANCE 426.875
    HELIOCENTRIC CONIC
      C3 24.942 VHL 4.994 DLA 14.82 RAL 318.D1 RAD 6568.D VEL 12.096 PTH 2.17 VMP 6.175 DPA -28.56 RAP 336.93 ECC 1.4105
LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     PLANETOCENTRIC CONIC
                                                                                                                0 3 37 2747.31
15 56 20 4432.52
                                                            -27.95
                                                                            77.99
           90.00
                                                                                                                                                                     3.74
                                                                                                                                                 3432.5
                                                                                             161.51
                                                             7.47
                                                                            185.03
           90.00
                                                                                                                                                                  -28.19
                      1 32 58 2459.19
17 9 41 4195.87
2 59 4 2189.78
18 0 4 4038.05
                                                                                                                                                 1859.2
                                                                                             188.46
                                                            -29.34
                                                                             56.65
         100.00
                                                                                                                                                                    4.80
                                                                                                                                                                                   160.35
                                                                                                                                                 3595.9
                                                                                             180.85
                                                               8.70
                                                                           166.97
          100.00
                                                                                                                                                                 -31.30
                                                                                             187.87
                                                                                                                                                 1589.8
                                                           -32.97
                                                                              35.61
          110.00
                                                                                                                                                                     7.52
                                                                                             178.96
                                                                                                                                                 3438.1
                                                      11.86
                                                                           153.10
          110.00
                                                                               MID-COURSE EXECUTION ACCURACY

SGT 4229.8 5GR 240.8 SG3 166.1

RRT -.1530 RRF .0914 RTF .8526

SGB 4236.7 R23 -.2249 R13 -.8525

SGB 4230.0 SG2 238.0 THA 179.50

SGB T DETERMINATION ACCURACY

ST 1625.1 SR 212.6 SS 507.3

CRT .8260 CRS -.9841 CST -.9099

LSA 1700.0 MSA 231.5 SSA 11.1

EL1 1634.7 EL2 119.1 ALF 6.20
                                                                                                                                            ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
       TOE 1.2497 TRA-2.1534 TC3-3.0737 BAU 1.0253
      ROE .1842 RRA .0643 RC3 .0867 FAU .04793
FOE .8263 FRA -.1568 FC3-1.6637 BSP 13041
```

BOE 1.2632 BRA 2.1344 BC3 3.0749 FSP -511

ARRIVAL DATE MAY 23 1966

LAUNCH DATE DEC 30 1965

HELIOCENTRIC CONIC DISTANCE 432.611 RL 147.11 LAL .00 LOL 98.09 VL 27.284 GAL -5.87 AZL 85.05 HCA 214.88 SMA 125.21 ECC .20184 INC 4.9549 VI 30.285 RP 108.94 LAP -2.83 LOP 312.87 VP 37.101 GAP 8.96 AZP 94.07 TAL 204.60 TAP 59.48 RCA 99.94 APO 150.48 V2 34.784 RC 155.962 GL 28.83 GP -13.01 ZAL 124.54 ZAP 158.23 ETS 323.68 ZAE 129.06 ETE 190.99 ZAC 70.01 ETC 158.40 CLP-162.39 PLANETOCENTRIC CONIC C3 23.627 VML 4.861 DLA 14.87 RAL 320.06 RAD 6568.0 VEL 12.042 PTH 2.15 VMP 6.232 DPA -26.52 RAP 338.70 ECC 1.3888 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 11 24 2735.57 16 4 53 4417.69 1 40 46 2447.35 17 18 12 4181.14 3 6 56 2177.72 18 8 31 4023.53 95.14 D 56 59 2135.6 189.65 90.00 -27.88 77.14 17 18 31 3817.7 3.27 177.50 7.01 184.18 182.75 62.49 90.00 1847.3 -28.04 47.18 96.47 2 21 33 100.00 -29.25 55.78 189.49 61.16 18 27 53 100.09 3 43 14 57.53 19 15 35 3581.1 4.30 159.54 6.21 166.14 182.10 100.00 1577.7 -31.10 100.09 110.00 -32.83 34.69 186.88 3423.5 6.97 152.31 180.23 110.00 11.33 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1636.1 SR 222.0 SS 501.7 CRT .8470 CRS -.9901 CST -.9084 SGT 4327.5 SGR 251.3 SG3 165.4 RRT -.1485 RRF .0543 RTF .8528 SGB 4334.8 R23 -.1834 R13 -.8527 TOE 1.2328 TRA-2.0375 TC3-3.3238 BAU 1.0504 RDE .1876 RRA .0497 RC3 .1058 FAU .04684 FDE .7886 FRA -.1064 FC3-1.7161 8SP 13511 LSA 1710.2 MSA 230.1 SSA 12.4 EL1 1646.9 EL2 117.2 ALF 6.59 SG1 4327.6 SG2 248.6 THA 179.50 BOE 1.2470 BRA 2.0381 BC3 3.3255 FSP -523 ARRIVAL DATE MAY 25 1966 FLIGHT TIME 146.00 LAUNCH DATE DEC 3D 1965 DISTANCE 438.339 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 27.217 GAL -5.50 AZL 85.24 MCA 218.04 SMA 124.78 ECC .20225 INC 4.7585 VI 30.285 RP 108.94 LAP -2.93 LOP 318.04 VP 37.033 GAP 9.13 AZP 93.75 TAL 202.79 TAP 60.83 RCA 99.55 APO 150.02 V2 34.785 RC 158.168 GL 28.30 GP -11.91 ZAL 122.86 ZAP 159.56 ETS 324.71 ZAE 129.32 ETE 190.11 ZAC 71.73 ETC 159.66 CLP-163.26 PLANETOCENTRIC CONIC C3 22.471 VHL 4.740 DLA 15.07 RAL 322.19 RAD 6567.9 VEL 11.994 PTH 2.14 VHP 6.298 DPA -24.66 RAP 340.54 ECC 1.3698 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2.14 VHP 6.298 DPA -24.66 RAP 340.54 ECC 1.3698 LNCH AZHTH LNCH TIME L-I TIME 0 18 1 2730.79 16 15 19 4398.03 1 47 32 2442.08 17 28 29 4161.98 3 14 2 2171.44 18 18 28 4005.38 2130.8 68.27 -27.85 76.79 190.94 95.31 1 3 31 -26.83 90.00 17 28 37 176.40 62.35 3798.0 184.17 90.00 6.39 183.07 46.80 96.67 2 28 14 61.00 18 37 51 100.36 3 50 13 57.33 19 25 14 2 28 14 1842.1 -27.98 190.78 100.00 -29.21 55.39 3562.0 3.66 158.48 183.52 7.58 165.07 100.00 25.45 1571.4 -30.98 190.16 110.00 -32.76 34.22 3405.4 6.29 10.67 161.66 110.00 151.33 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1659.6 SR 232.4 SS 501.0 CRT .8694 CRS -.9944 CST -.9087 \$67 4416.6 \$6R 263.7 \$63 164.0 RRT -.1371 RRF .0316 RTF .8522 \$6B 4424.5 R23 -.1502 R13 -.8521 TOE 1.2321 TRA-1.9319 TC3-3.5677 BAU 1.0725 ROE .1919 RRA .0359 RC3 .1236 FAU .04542 FOE .7604 FRA -.0537 FC3-1.7499 BSP 13875 BDE 1.2469 BRA 1.9322 BC3 3.5699 FSP -524 LSA 1734.1 MSA 228.1 SSA 13.6 EL1 1671.9 EL2 114.0 ALF 6.97 5G1 4416.8 5G2 261.2 THA 179.53 ARRIVAL DATE MAY 27 1966 FLIGHT TIME 148.00 LAUNCH DATE DEC 30 1965 DISTANCE 444.060 RL 147.11 LAL .00 LOL 98.09 VL 27.151 GAL -5.12 A7L 85.41 MCA 221.20 SMA 124.36 ECC .20282 INC 4.5879 V1 30.285 RP 108.94 LAP -3.02 LOP 319.20 VP 37.006 GAP 9.31 A7P 93.46 TAL 200.98 TAP 62.18 RCA 99.14 APO 149.59 V2 34.787 RC 160.359 GL 27.84 GP -10.98 TAL 120.99 TAP 160.77 ETS 325.51 TAE 129.55 ETE 189.36 TAC 73.57 ETC 160.76 CLP-164.12 PLANETOCENTRIC CONIC C3 21.450 VML 4.631 OLA 15.42 RAL 324.43 RAQ 6567.9 VEL 11.951 PTH 2.13 VMP 6.373 OPA -22.95 RAP 342.45 ECC 1.3530 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 23 44 2732.01 16 27 27 4374.31 1 53 31 2442.45 17 40 21 4139.10 3 20 34 2170.10 18 29 48 3984.22 2132.0 192.47 1 9 16 -26.84 68.36 95.27 -27.86 76.88 90.00 62.20 17 40 21 1.87 175.08 5.64 181.73 185.78 46.83 2 34 14 1842.5 -27.98 96.65 100.00 -29.21 55.42 192.31 2 34 14 18 49 20 157.22 60.83 3539.1 2.89 6.83 163.79 185.13 100.00 25.35 3 56 44 1570.1 -32.74 100.42 3 56 12 19 36 12 34.12 191.69 110.00 57.11 3384.2 143.86 9.89 150.18 183.27 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1694.4 SR 243.3 SS 503.8 CRT .8920 CRS -.9969 CST -.9108 SGT 4498.3 SGR 276.9 SG3 162.1 RRT -.1204 RRF .0199 RTF .8513 SGB 4506.8 R23 -.1236 R13 -.8512 TOE 1.2446 TRA-1.8167 TC3-3.8060 BAU 1.0922 ROE .1965 RRA .D229 RC3 .1396 FAU .D4382 FDE .7386 FRA -.D003 FC3-1.7684 BSP 14151 BDE 1.2600 BRA 1.8168 BC3 3.8085 FSP -518 LSA 1770.1 MSA 224.8 55A 14.7 EL1 1708.3 ELZ 109.1 ALF 7.33 SG1 4498.4 SG2 274.9 THA 179.57 ARRIVAL DATE MAY 29 1966 FLIGHT TIME 150.00 LAUNCH DATE DEC 30 1965 DISTANCE 449.771 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 27.086 GAL -4.72 A7L 85.56 MCA 224.36 SMA 123.95 ECC .20355 INC 4.4376 VI 30.285 RP 108.93 LAP -3.10 LOP 322.37 VP 36.960 GAP 9.48 A7P 93.18 TAL 199.15 TAP 63.51 RCA' 98.72 APO 149.19 V2 34.789 RC 162.536 GL 27.44 GP -10.19 ZAL 118.95 ZAP 161.90 ETS 326.10 ZAE 129.74 ETE 188.73 ZAC 75.49 ETC 161.73 CLP-164.96 PLANETOCENTRIC CONIC C3 20.547 VHL 4.533 DLA 15.89 RAL 326.78 RAD 6567.8 VEL 11.913 PTH 2.12 VHP 6.455 DPA -21.34 RAP 344.39 ECC 1.3382 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT'INJ 2 LONG 0 28 46 2738.55 16 41 10 4347.12 1 58 54 2447.83 17 53 42 4113.07 3 26 42 2173.13 1 14 24 2138.6 194.23 95.04 -26.91 66.83 -27.90 77.35 90.00 17 53 37 3747.1 .99 173.56 180.20 187.57 62.05 4.77 90.00 96.45 2 39 42 60.65 19 2 16 100.29 4 2 55 56.89 19 48 25 1847.8 -28.05 47.22 -29.25 55.81 194.08 100.00 3513.1 2.01 155.79 5.96 162.35 186.92 100.00 -32.78 34.35 193.47 100.29 1573.1 -31.01 25.57 110.00 18 42 24 9.01 148.91 185.06 3360.5 4.59 142.61 3960.54 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY ST 1737.8 SR 254.5 SS 508.4 CRT .9135 CRS -.9976 CST -.9143 DIFFERENTIAL CORRECTIONS SGT 4577.6 SGR 290.3 SG3 160.0 RRT -.1002 RRF .0153 RTF .8509 TOE 1.2662 TRA-1.6948 TC3-4.0427 BAU 1.1113 ROE .2013 RRA .0103 RC3 .1535 FAU .04218 FOE .7201 FRA .0509 FC3-1.7774 89F 14428 3509 4586.8 R23 -.1014 R13 -.8509 SG1 4577.6 SG2 288.9 THA 179.63 LSA 1815.1 MSA 220.1 55A 15.9 EL1 1753.3 EL2 102.6 ALF 7.65 BOE 1.2821 BRA 1.6948 BC3 4.0456 FSP -512

FLIGHT TIME 144.00

```
ARRIVAL DATE JUN 8 1966
                                                                            FLIGHT TIME 160.00
LAUNCH DATE DEC 30 1965
                                                                           DISTANCE 478.182
  HELIOCENTRIC CONIC
    RL 147.11 LAL .DD LOL 98.09 VL 26.776 GAL -2.59 AZL 86.13 HCA 240.17 SMA 122.05 ECC .21000 INC 3.8735 V1 30.285 RP 108.86 LAP -3.56 LOP 338.21 VP 36.755 GAP 10.43 AZP 91.93 TAL 189.85 TAP 70.03 RCA 96.42 APO 147.68 V2 34.811
    RC 173.196 GL 25.52 GP -7.54 ZAL 106.27 ZAP 166.63 ETS 326.35 ZAE 130.54 ETE 186.65 ZAC 86.00 ETC 165.24 CLP-168.92
   PLANETOCENTRIC CONIC
    C3 17.587 VML 4.194 DLA 19.45 RAL 340.48 RAD 6567.7 VEL 11.789 PTH 2.08 VMP 6.954 DPA -14.26 RAP 354.59 ECC 1.2894
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   LNCH TIME L-I TIME

0 47 13 2839.17

18 11 59 4173.17

2 20 43 2537.67

19 21 11 3949.91

3 55 11 2242.12

20 3 12 3818.23
                                                                                                                                                                  76.05
                                                                                                   91.38
                                                                                                                 1 34 32
                                                                                                                                 2239.2
                                                                                                                                                 -27.80
                                                                                  206.61
                                                     -28.29
                                                                    84.69
                                                                                                                                                                 163.84
                                                                                                              19 21 33
                                                                                                                                  3573.2
                                                                    170.48
                                                                                   199.90
                                                                                                     61.69
                                                       -.83
        90.00
                                                                                                     93.00 3 3 1
60.11 20 27 1
                                                                                                                                                                  53.72
                                                                                                                                  1937.7
                                                                                                                                                  -29.02
                                                     -29.76
                                                                     62.44
                                                                                   206.55
       100.00
                                                                                                                                  3349.9
                                                                                                                                                   -3.52
                                                                                                                                                                  146.83
                                                       .46
                                                                   153.36
                                                                                   199.18
       100.00
                                                                                                     97.25 4 32 33
55.99 21 6 50
                                                                                                                                  1642.1
                                                                                                                                                  -32.13
                                                                                                                                                                   30.64
                                                     -33.50
                                                                     39.60
                                                                                   206.16
       110.00
                                                                                                                                  3218.2
                                                                                                                                                                  135.18
                                                      3.64
                                                                    141.39
                                                                                   197.19
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4922.1 SGR 353.3 SG3 148.2
RRT .0225 RRF .0537 RTF .8551
SGB 4934.7 R23 .0344 R13 .8551
SGI 4922.1 SG2 353.2 THA .09
                                                                                                                              ST 2076.8 SR 310.6 SS 547.0
     TDE 1.4864 TRA -.9565 TC3-5.0838 BAU 1.1962
                                                                                                                              CRT .9868 CR5 -,9789 CST -.9429
    ROE .2269 RRA -.0420 RC3 .1887 FAU .03390
                                                                                                                              LSA 2162.3 MSA 180.9 SSA 21.3
EL1 2099.3 EL2 49.7 ALF 8.40
    FDE .6594 FRA .2871 FC3-1.6689 BSP 15579
    BOE 1.5036 BRA .9574 BC3 5.0873 FSP -475
                                                                                                                                          ARRIVAL DATE JUN 10 1966
LAUNCH DATE DEC 30 1965
                                                                            FLIGHT TIME 162.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 483.828
    RL 147.11 LAL .00 LOL 98.09 VL 26.717 GAL #2.13 AZL 86.22 HCA 243.34 SMA 121.70 ECC .21192 INC 3.7841 VI 30.285 RP 108.84 LAP -3.38 LOP 341.38 VP 36.718 GAP 10.65 AZP 91.70 TAL 187.97 TAP 71.31 RCA 95.91 APO 147.49 V2 34.817 RC 175.278 GL 25.06 GP -7.18 TAL 103.28 ZAP 167.45 ETS 325.86 ZAE 130.69 ETE 186.38 ZAC 88.22 ETC 165.74 CLP-169.68
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 17.302 VHL 4.160 DLA 20.32 RAL 343.64 RAD 6567.7 VEL 11.776 PTH 2.08 VHP 7.072 DPA -12.95 RAP 356.69 ECC 1.2848
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 50 5 2871.51 -28.32 87.05 209.83 90.19 1 37.56 2271.5 -27.99 78.40
90.00 18 34 23 4133.28 -2.11 168.26 203.12 61.76 19 43.16 3533.3 -5.87 161.60
100.00 2 24 37 2566.67 -29.84 64.59 209.80 91.87 3 7.24 1966.7 -29.26 55.84
100.00 19 42 32 3913.34 -.78 151.35 202.38 60.12 20 47.45 3313.5 -4.75 144.82
110.00 4 1 2 2265.04 -33.68 41.37 209.48 96.23 4 38.47 1665.0 -32.45 32.35
110.00 20 22 37 3787.75 2.48 139.79 200.34 55.90 21.25 44 3187.7 -2.01 133.59
                   2 24 37 2566.67
19 42 32 3913.34
4 1 2 2265.04
20 22 37 3787.75
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 4983.5 SGR 364.3 SG3 145.8
RRT .0479 RRF .0669 RTF .8578
                                                                                                                               ST 2161.2 SR 321.6 55 554.1
     TOE 1.5460 TRA -.7827 TC3-5.2366 BAU 1.2121
                                                                                                                               CRT .9929 CRS -.9721 CST -.9487
     ROE .2329 RRA -.0498 RC3 .1877 FAU .03235
FOE .6491 FRA .3298 FC3-1.6188 BSP 15821
                                                                       SGB 4996.7 R23 .0256 R13 .8578
SG1 4983.5 SG2 363.8 THA .20
                                                                                                                               LSA 2247.5 MSA 171.9 55A 22.4
                                                                                                                               EL1 2184.7 EL2 37.8 ALF 8.41
     BOE 1.5634 BRA .7843 BC3 5.2399 FSP -470
                                                                                                                                          ARRIVAL DATE JUN 12 1966
                                                                            FI IGHT TIME 164.00
LAUNCH DATE DEC 30 1965
                                                                            01STANCE 489.459
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 26.659 GAL -1.65 AZL 86.30 MCA 246.51 SMA 121.35 ECC .21409 INC 3.6995 V1 30.285 RP 108.82 LAP -3.39 LOP 344.55 VP 36.682 GAP 10.87 AZP 91.48 TAL 186.08 TAP 72.59 RCA 95.37 APO 147.33 V2 34.824 RC 177.341 GL 24.55 GP -6.86 ZAL 100.17 ZAP 168.23 ETS 325.18 ZAE 130.84 ETE 186.15 ZAC 90.47 ETC 166.19 CLP-170.42
   PLANETOCENTRIC CONIC
     C3 17.128 VHL 4.139 DLA 21.20 RAL 346.95 RAD 6567.7 VEL 11.769 PTH 2.08 VHP 7.198 DPA -11.68 RAP 358.80 ECC 1.2819
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ. RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               2307.6
                                                                                                                                                -28.15
                                                                                                                 1 41 15
                                                                                  213.30
                                                                                                   88.87
        90.00
                    0 52 48 2907.55
18 58 5 4092.55
                                                     -28.30
                                                                    89.69
                                                                                                     61.87 20 6 18
                                                                                                                                   3492.6
                                                                                                                                                   -7.16
                                                                                                                                                                  159.29
                                                                                   206.61
                                                      -3.42
                                                                    165.98
         90.00
                                                                                                     90.61
                                                                                                                 3 11 50
                                                                                                                                   1998.9
                                                                                                                                                  -29.48
                                                                                                                                                                   58.21
                                                     -29.89
                                                                     66.99
                                                                                   213.31
                      2 28 31
                                   2598.87
       100.00
                                                                                                     60.17 21 9 39
                                                                                                                                   3276.5
                                                                                                                                                   -5.99
                                                                                                                                                                  142.77
                   20 5 2 3876.47
                                                                                   205.84
                                                      -2.03
                                                                    149.33
       100.00
                                                                                                                                   1690.4
                                                                                                     95.07
                                                                                                               4 45 17
                                                                                                                                                 -32.78
                                                                                                                                                                   34.26
                                                                                   213.08
                    4 7 6 2290.45
20 42 57 3757.65
                                                     -33.85
                                                                     43.33
       110.00
                                                                                                     55.84 21 45 34
                                                                                                                                   3157.7
                                                                                                                                                   -3.16
                                                                                                                                                                  132.02
                                                      1.33
                                                                                   203.74
                                                                    138.22
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 2248.4 SR 332.7 SS 560.7
CRT .9964_CRS -.9646 CST -.9541
                                                                        SGT 5041.0 SGR 374.6 SG3 143.3
RRT .0732 RRF .0821 RTF .8608
SGB 5054.9 R23 .0187 R13 .8608
     TDE 1.6097 TRA -.5988 TC3-5.3561 BAU 1.2272
     RDE .2396 RRA -.0565 RC3 .1841 FAU .03080
FDE .6396 FRA .3720 FC3-1.5569 BSP 16040
BDE 1.6275 BRA .6015 BC3 5.3593 FSP .-463
                                                                                                                              LSA 2335.2 MSA 163.7 SSA 23.3
EL1 2272.7 EL2 27.9 ALF 8.39
                                                                        5G1 5041.1 5G2 373.6 THA
                                                                                                              .31
                                                                                                                                          ARRIVAL DATE JUN 14 1966
                                                                             FLIGHT TIME 166.00
LAUNCH DATE DEC 30 1965
                                                                            DISTANCE 495.074
     RL 147.11 LAL .00 LOL 98.09 VL 26.602 GAL -1.16 A7L 86.38 MCA 249.67 SMA 121.01 ECC .21651 INC 3.6188 V1 30.285 RP 108.79 LAP -3.39 LOP 347.73 VP 36.648 GAP 11.10 A7P 91.26 TAL 184.19 TAP 73.86 RCA 94.81 APO 147.22 V2 34.832 RC 179.585 GL 23.97 GP -6.58 TAL 96.94 ZAP 168.99 ETS 324.27 ZAE 130.99 ETE 185.95 ZAC 92.75 ETC 166.60 CLP-171.15
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 17.071 VHL 4.132 DLA 22.08 RAL 350.40 RAD 6567.7 VEL 11.767 PTH 2.08 VHP 7.332 DPA -10.42 RAP
                                                                                                                                                         .93 ECC 1.2809
                                                    INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                                 -28.27
                                                                                                                                  2347.1
                                                                                                                                                                    83.91
                                                                                                     87.43
                                                                                                                   1 44 31
                                                                     92.58
                                                                                   217.01
         90.00
                                                      -28.21
                       0 55 23 2947.10
                                                                                                                                                                   156.96
                                                                                                                                                    -8.44
                                                                     163.68
                                                                                    210.38
                                                                                                      62.05 20 30 32
                                                                                                                                   3451.5
                     19 23 0. 4051.45
                                                      -4.74
         90.00
                                                                                                                                                                    60.80
                                                                                                                                   2034.0
                                                                                                                                                   -29.67
                                                                      69.60
                                                                                    217.06
                                                                                                      89.23
                                                                                                                 3 16 24
                                                      -29.88
        100.00
                      2 32 30 2633.98
                                                                                                                                                                   140.74
                                                                                                                                                    -7.21
                                                                                                      60.27 21 32 34
                                                                                                                                   3239.8
                                                                     147.31
                                                                                    209.57
        100.00
                    20 28 35
                                    3839.81
                                                      -3.27
                                                                                                                                                                    36.35
                                                                                                      93.81
                                                                                                                  4 52 7
                                                                                                                                   1718.0
                                                                                                                                                   -33.09
                                                      -34.00
                                                                      45.47
                                                                                    216.93
                      4 13 29 2318.05
21 4 5 3728.50
        110.00
                                                                                                      55.82 22 6 13
                                                                                                                                                                   130.49
                                                                                                                                                    -4.27
                                                                                                                                   3128.5
                                                                     136.70
                                                                                    207.39
        110.00
                    21 4 5
                                                        .22
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2335.4 SR 343.9 55 566.4
                                                                         SGT 5093.1 SGR 384.3 SG3 140.6
RRT .0984 RRF .0988 RTF .8638
     TOE 1.6762 TRA -.4044 TC3-5.4351 BAU 1.2411
                                                                                                                              CRT .9975 CRS -.9567 CST -.9590
     RDE .2471 RRA -.0621 RC3 .1779 FAU .02924
FDE .6302 FRA .4138 FC3-1.4831 BSP 16254
                                                                                                                              LSA 2422.5 MSA 156.5 SSA 24.0
EL1 2360.5 EL2 24.0 ALF 8.36
                                                                       SGB 5107.6 R23 .0134 R13 .8638
SG1 5093.3 SG2 382.4 THA .43
```

BDE 1.6943 BRA .4091 BC3 5.4380 FSP -457

```
FLIGHT TIME 168.00
                                                                                                                                ARRIVAL CATE JUN 16 1966
LAUNCH DATE DEC 30 1965
                                                                      CISTANCE 500.672
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 17.139 VHL 4.140 CLA 22.94 RAL 353.98 RAD 6567.7 VEL 11.770 PTH 2.08 VHP 7.473 CPA -9.18 RAP
                                                                                                                                           3.07 ECC 1.2821
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                 0 57 56 2989.91
19 49 1 4010.48
2 36 38 2671.65
20 52 59 3803.96
4 20 15 2347.48
21 25 52 3700.90
                                                                                                         1 47 45
                                                                                                                      2389.9
        90.00
                                                                            220.94
                                                                                             85.87
                                                                                                                                       -28.32
                                                                                                                                                       87.04
                                                -28.04
                                                                95.70
        90.00
                                                  -6.04
                                                                161.37
                                                                              214.42
                                                                                              62.28
                                                                                                        20 55 51
                                                                                                                         3410.5
                                                                                                                                         -9.71
                                                                                                                                                       154.61
                                                                                              87.76 3 21 10
60.41 21 56 23
      100.00
                                                -29.82
                                                                72.40
                                                                              221.05
                                                                                                                         2071.7
                                                                                                                                        -29.81
                                                                                                                                                       63.59
       100.00
                                                  -4.48
                                                               145.34
                                                                             213.57
                                                                                                                         3204.0
                                                                                                                                         -8.39
                                                                                                                                                      138.73
                                                                                                                                     -33.39
                                                                                              92.46 4 59 22
55.83 22 27 33
                                                                                                                         1747.5
                                                                                                                                                       38.60
      110.00
                                                -34.11
                                                                 47.77
                                                                             221.04
       110.00
                                                   - .84
                                                               135.26
                                                                             211.30
                                                                                                                         3100.9
                                                                                                                                         -5.32
                                                                                                                                                       129.04
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5140.8 SGR 393.3 SG3 138.1
RRT .1244 RRF .1179 RTF .8676
SGB 5155.8 R23 .0094 R13 .8676
    TOE 1.7480 TRA -.1970 TC3-5.4667 BAU 1.2532
                                                                                                                     ST 2424.6 SR 355.1 SS 572.0 CRT .9966 CR5 -.9485 C5T -.9635
    RDE .2556 RRA -.0664 RC3 .1691 FAU .02771
    FOE .6222 FRA .4553 FC3-1.4000 BSP 16368
BDE 1.7665 BRA .2079 BC3 5.4693 FSP -448
                                                                                                                     LSA 2511.7 MSA 150.7 55A 24.5
                                                                   SG1 5141.0 SG2 390.3 THA
                                                                                                      .55
                                                                                                                   EL1 2450.3 EL2 29.1 ALF 8.30
                                                                       FLIGHT TIME 170.00
                                                                                                                                ARRIVAL CATE JUN 18 1966
LAUNCH DATE DEC 3D 1965
   HELIOCENTRIC CONIC
                                                                      DISTANCE 506.248
    RL 147.11 LAL .00 LOL 98.09 VL 26.490 GAL -.11 A7L 86.53 MCA 256.02 SMA 120.36 ECC .22221 INC 3.4664 V1 30.285 RP 108.74 LAP -3.36 LOP 354.08 VP 36.583 GAP 11.60 A7P 90.84 TAL 180.40 TAP 76.41 RCA 93.62 APO 147.11 V2 34.849 RC 183.413 GL 22.62 GP -6.09 ZAL 90.21 ZAP 170.42 ETS 321.70 ZAE 131.29 ETE 185.62 ZAC 97.36 ETC 167.28 CLP-172.59
   PLANETOCENTRIC CONIC
    C3 17.342 VHL 4.164 DLA 23.77 RAL 357.67 RAD 6567.7 VEL 11.778 PTH 2.08 VHP 7.624 DPA -7.95 RAP 5.21 ECC 1.2854 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 0 27 3035.62 -27.77 99.01 225.08 84.23 1 51 3 2435.6 -28.28 90.39
                  1 0 27 3035.62
20 15 56 3970.23
2 41 0 2711.44
21 18 4 3769.64
4 27 29 2378.32
21 48 5 3675.53
                                                                                                         21 22 6
                                                  -7.31
                                                                                              62.57
                                                                                                                          3370.2
                                                                                                                                         -10.93
                                                                                                                                                       152.29
                                                               159.09
                                                                              218.73
        90.00
                                                                              225.26
                                                                                                         3 26 12
                                                 -29.67
                                                                 75.35
                                                                                              86.22
                                                                                                                         2111.4
                                                                                                                                        -29.88
                                                                                                                                                        66.55
       100.00
                                                                                              60.59 22 20 54
                                                                                                                         3169.6
       100.00
                                                  -5.63
                                                               143.44
                                                                              217.81
                                                                                                                                          -9.51
                                                                                                                                                       136.80
                                                                 50.17
                                                                                              91.04
                                                                                                                         1778.3
                                                -34.17
                                                                              225.39
                                                                                                                                                        40.97
      110.00
                                                                                              55.86 22 49 20
                                                                                                                         3075.5
       110.00
                  21 48 5
                                 3675.53
                                                 -1.81
                                                               133.94
                                                                             215.44
                                                                                                                                         -6.28
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 5190.6 SGR 400.9 SG3 134.8
RRT .1479 RRF .1306 RTF .8761
    TOE 1.8094 TRA .0108 TC3-5.4684 BAU 1.2684
                                                                                                                     ST 2493.3 SR 365.4 SS 566.6
                                                                                                                      CRT .9939 CRS -.9403 CST -.9675
    RDE .2646 RRA -.0700 RC3 .1573 FAU .02647
FDE .6041 FRA .4848 FC3-1.3215 BSP 16769
BDE 1.8287 BRA .0708 BC3 5.4707 FSP -459
                                                                  SGB 5206.0 R23 .0002 R13 .8761
5G1 5190.9 SG2 396.5 THA .66
                                                                                                                     LSA 2578.6 MSA 144.3 55A 24.7
EL1 2519.6 EL2 39.7 ALF 8.29
                                                                                                                               ARRIVAL DATE JUN 20 1966
                                                                      FLIGHT TIME 172.00
LAUNCH DATE DEC 30 1965
                                                                     DISTANCE 511.802
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 26.435 GAL .44 A7L 86.61 HCA 259.19 SMA 120.05 ECC .22553 INC 3.3935 V1 30.285
RP 108.71 LAP -3.33 LOP 357.26 VP 36.552 GAP 11.87 A7P 90.64 TAL 178.50 TAP 77.69 RCA 92.97 APO 147.12 V2 34.858
RC 185.395 GL 21.84 GP -5.88 ZAL 86.75 ZAP 171.10 ETS 319.94 ZAE 131.44 ETE 185.48 ZAC 99.70 ETC 167.56 CLP-173.30
  PLANETOCENTRIC CONIC
    C3 17.694 VHL 4.206 DLA 24.55 RAL 1.46 RAD 6567.7 VEL 11.793 PTH 2.09 VMP 7.785 DPA -6.74 RAP 7.37 ECC 1.2912
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          82.52 1 54 26
62.90 21 49 5
84.62 3 31 36
                                                                                                                                     -28.14
                                                                          229.41
                                                                                                        1 54 26
                                                                                                                         2483.9
                                                -27.39
                                                              102.50
      90.00
                    1 3 2 3083.91
      90.00 20 43 34 3931.26
100.00 2 45 43 2752.86
100.00 21 43 34 3737.53
110.00 4 35 16 2410.12
110.00 22 10 31 3653.04
                                                                             223.27
                                                                                                                         3331.3
                                                                                                                                       -12.10
                                                               156.88
                                                  -8.53
                                                                                                                         2152.9
                                                                                                                                       -29.88
                                                -29.45
                                                                78.40
                                                                             229.68
                                                                                             60.80 22 45 52
89.57 5 15 26
55.91 23 11 24
                                                                             222.29
                                                                                                                         3137.5
                                                                                                                                      -10.54
                                                                                                                                                     134.98
                                                -6.70
                                                               141.66
                                                                          222.29
229.96
                                                                                                                         1810.1
                                                                                                                                     ~33.86
                                                                                                                                                       43.43
                                                -34.18
                                                                52.66
                                                                                                                         3053.0
                                                                                                                                         -7.12
                                             -2.67
                                                               132.76
                                                                             219.79
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 5224.8 SGR 409.0 SG3 132.8
RRT .1742 RRF .1583 RTF .8750
SGB 5240.8 R23 .0050 R13 .8750
                                                                                                                   ST 2577.4 SR 377.1 55 577.5
CRT .9898 CRS -.9311 CST -.9707
    TOE 1.8878 TRA .2517 TC3-5.3877 BAU 1.2749
    ROE .2758 RRA -.0707 RC3 .1453 FAU .02470
                                                                                                                    LSA 2664.1 MSA 144.9 55A 24.5
   FOE .6043 FRA .5394 FC3-1.2083 BSP 16661
BDE 1.9078 BRA .2614 BC3 5.3896 FSP -431
                                                                  SG1 5225.3 SG2 402.7 THA .79
                                                                      FLIGHT TIME 174.00
                                                                                                                                ARRIVAL DATE JUN 22 1966
LAUNCH DATE DEC 3D 1965
                                                                      DISTANCE 517.330
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 26.381 GAL 1.01 AZL 86.68 MCA 262.36 SMA 119.74 ECC .22919 INC 3.3221 V1 30.285 RP 108.68 LAP -3.29 LOP .44 VP 36.522 GAP 12.16 AZP 90.44 TAL 176.60 TAP 78.97 RCA 92.30 APO 147.18 V2 34.868 RC 187.357 GL 20.99 GP -5.69 ZAL 83.25 ZAP 171.75 ETS 317.81 ZAE 131.58 ETE 185.36 ZÁC 102.04 ETC 167.80 CLP-174.01
  PLANETOCENTRIC CONIC
                                                                                               2.09 VHP 7.957 DPA -5.55 RAP
    C3 18.209 VHL 4.267 DLA 25.26 RAL
                                                     5.32 RAD 6567.7 VEL 11.815 PTH
                                                                                                                                          9.54 ECC 1.2997
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 5 46 3134.17
21 11 38 3894.36
                                                                            233.90
                                                                                             80.79
                                                                                                         1 58 D
                                                                                                                        2534.2
                                                                                                                                       -27.89
                                                 -26.89
                                                               106.09
       90.00
                                                                                                                                                      147.85
                                                  -9.66
                                                               154.76
                                                                             228.04
                                                                                              63.25
                                                                                                        22 16 32
                                                                                                                         3294.4
                                                                                                                                       -13.18
        90.00
                 2 50 54 2795.22
22 9 11 3708.55
                                                -29.14
                                                                81.51
                                                                             234.26
                                                                                              83.01
                                                                                                         3 37 29
                                                                                                                         2195.2
                                                                                                                                       -29.80
                                                                                                                                                      72.77
      100.00
                                                                                              61.02 23 10 59
                                                 -7.66
                                                               140.04
                                                                             226.97
                                                                                                                         3108.5
                                                                                                                                       -11.47
                                                                                                                                                      133.32
      100.00
                               2442.35
3634.17
                                                                                              88.08 5 24 23
55.96 23 33 27
                                                                                                                                       -34.02
                    4 43 41
                                                 -34.14
                                                                55.17
                                                                             234.72
                                                                                                                         1842.4
                                                                                                                                                       45.93
      110.00
                 22 32 53
                                                               131.78
                                                                                                                                       -7.83
                                                -3.39
                                                                             224.34
                                                                                                                         3034.2
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                                                  ST 2629.2 SR 387.3 SS 574.0
CRT .9847 CRS -.9217 CST -.9732
LSA 2714.8 MSA 145.1 SSA 24.1
EL1 2656.7 EL2 66.7 ALF 8.26
    TOE 1.9488 TRA .4890 TC3-5.2838 BAU 1.2867
                                                                   SGT 5263.9 SGR 415.3 SG3 130.1
                                                                RRT .1972 RRF .1767 RTF .8793
SCB 5280.2 R23 .0023 R13 .8793
SGI 5264.5 SG2 407.1 THA .90
    ROE .2875 RRA -.0707 RC3 .1307 FAU .02331
FOE .5909 FRA .5800 FC3-1.1084 BSP 16908
    BOE 1.9699 BRA .4940 BC3 5.2854 FSP -427
```

ARRIVAL CATE JUN 24 1966

```
FLIGHT TIME 176.00
LAUNCH DATE DEC 30 1965
                                                                         DISTANCE 522.828
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 26.329 GAL 1.60 AZL 86.75 MCA 265.54 SHA 119.44 ECC .23324 INC 5.2517 VI 30.285 RP 108.65 LAP -3.24 LOP 3.62 VP 36.494 GAP 12.47 AZP 90.25 TAL 174.71 TAP 80.25 RCA 91.58 APO 147.30 V2 34.878 RC 189.297 GL 20.08 GP -5.52 TAL 79.75 ZAP 172.36 ETS 315.23 ZAE 131.73 ETE 185.26 TAC 104.40 ETC 168.01 CLP-174.71
   PLANETOCENTRIC CONIC
    C3 18.904 VHL 4.348 DLA 25.90 RAL 9.22 RAD 6567.8 VEL 11.844 PTH 2.10 VMP 8.140 DPA -4.37 RAP 11.71 ECC 1.3111
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2585.8
                  1 8 45 3185.79
21 39 47 3660.31
2 56 42 2837.77
22 34 32 3683.56
4 52 48 2474.51
22 54 55 3619.59
                                                                                                79.05 2 1 51
                                                                               238.52
                                                                 109.75
                                                   -26.28
                                                                                                                                                              145.83
                                                                                                             22 44 8
                                                                                                                               3260.3
                                                                                                                                               -14.16
                                                                                 232.99
                                                                                                   63.63
                                                   -10.70
                                                                  152.60
                                                                                                                                                               75.92
                                                                                                            3 44 0
                                                                                                                               2237.8
                                                                                                                                              -29.63
                                                                                 239.00
                                                                                                   81.43
       100.00
                                                   -28.75
                                                                   84.62
                                                                                                  61.23 23 35 55
86.60 5 34 3
56.02 23 55 14
                                                                                                                                                             131.89
                                                                                 231.82
                                                                                                                               3083.6
                                                                                                                                              -12.26
                                                                 138.64
                                                    -8.48
                                                                                                                                                               48.43
                                                                                                                               1874.5
                                                                                                                                              -34.13
                                                                                 239.65
                                                  -34.03
                                                                   57.68
      110.00
                                                                                                                                                              124.73
                                                                                 229.03
                                                                                                                               3019.6
                                                                                                                                               -8.38
                                                                 131.01
                                                  -3.94
      110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2675.9 SR 397.3 $5 571.5
CRT .9786 CRS -.9123 CST -.9756
                                                                      SGT 5295.2 SGR 421.0 SG3 127.4
RRT .2214 RRF .1987 RTF .8834
    TOE 2.0128 TRA .7450 TC3-5.1187 BAU 1.2940
    RDE .3006 RRA -.0690 RC3 .1155 FAU .02185
                                                                                                                           LSA 2761.0 MSA 147.2 SSA 23.4
                                                                      5GB 5311.9 R23 .0020 R13 .8834
5G1 5296.0 SG2 410.5 THA 1.01
    FOE .5803 FRA .6227 FC3-1.0006 BSP 16987
BDE 2.0351 BRA .7482 BC3 5.1200 FSP -417
                                                                                                                           EL1 2704.1 EL2 80.9 ALF 8.27
                                                                                                                                       ARRIVAL DATE JUN 26 1966
                                                                          FLIGHT TIME 178.00
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 528.293
  HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 26.277 GAL 2.22 AZL 86.82 HCA 268.72 SHA 119.15 ECC .23769 INC 3.1819 V1 30.285 RP 108.62 LAP -3.18 LOP 6.81 VP 36.467 GAP 12.80 AZP 90.07 TAL 172.82 TAP 81.54 RCA 90.83 APO 147.47 V2 34.889 RC 191.216 GL 19.12 GP -5.36 ZAL 76.26 ZAP 172.95 ETS 312.10 ZAE 131.87 ETE 185.17 ZAC 106.76 ETC 168.18 CLP-175.41
   PLANETOCENTRIC CONIC
    C3 19.799 VHL 4.450 DLA 26.44 RAL 13.14 RAD 6567.8 VEL 11.882 PTH 2.11 VMP 8.337 DPA -3.20 RAP 13.90 ECC 1.3258 LNCH AZMTH 'LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 12 11 3237.88
22 7 38 3830.13
3 3 18 2879.63
22 59 12 3663.60
5 2 42 2506.06
23 16 18 3609.94
                                                                                                                             2637.9
                                                                                                                                              -27.04 105.03
                                                                                                  77.37
                                                                                                               2 6 8
                                                    -25.55
                                                                  113.39
                                                                                 243.24
        90.00
                                                                                                   63.99 23 11 28
79.90 3 51 18
61.41 24 0 16
                                                                                                                                                               144.02
                                                                                                                                               -15.01
                                                                                                                                3230.1
                                                                  151.05
                                                                                 238.10
                                                    -11.61
        90.00
                                                                                                                                                                79.01
                                                                                 243.85
                                                                                                                                2279.6
                                                                                                                                               -29.39
                                                    -28.28
                                                                    87.64
       100.00
                                                                                                                                                               130.73
                                                                                                                                               -12.88
                                                                  137.52
                                                                                 236.80
                                                                                                                                3063.6
                                                    -9.13
       100.00
                                                                                                   85.16 5 44 28
56.06 24 16 28
                                                                                                                                                                50.90
                                                                                                                                1906.1
                                                                                                                                              -34.18
                                                                    60.13
                                                                                 244.71
                                                   -33.88
       110.00
                                                                                                                                3009.9
                                                                                                                                                -B.74
                                                                                                                                                               124.22
                                                                                  233.85
       110.00
                                                                  130.51
                                                    -4.31
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 2701.5 SR 406.4 SS 565.4
CRT .9716 CR5 -.9025 CST -.9776
    TOE 2.0680 TRA 1.0108 TC3-4.9169 BAU 1.3018
                                                                       SGT 5324.5 SGR 425.6 SG3 124.7
                                                                      RRT .2447 RRF .2196 RTF .8885
SGB 5341.5 R23 .0010 R13 .8885
SG1 5325.5 SG2 412.6 THA 1.13
    ROE .3148 RRA -.0659 RC3 .0995 FAU .02052
FDE .5672 FRA .6639 FC3 -.8975 BSP 17141
                                                                                                                          LSA 2785.6 MSA 150.8 SSA 22.5
EL1 2730.2 EL2 95.1 ALF 8.33
    BDE 2.0918 BRA 1.0129 BC3 4.9179 FSP -411
                                                                                                                                       ARRIVAL DATE JUN 28 1966
                                                                          FLIGHT TIME 180.00
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 533.719
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 25.225 GAL 2.87 AZL 86.89 HCA 271.90 SHA 118.86 ECC .24259 INC 3.1122 VI 30.285 RP 108.58 LAP -3.11 LOP 9.99 VP 36.441 GAP 13.15 AZP 89.90 TAL 170.95 TAP 82.84 RCA 90.03 APO 147.69 V2 34.900 RC 193.113 GL 18.11 GP -5.22 TAL 72.81 TAP 173.50 ETS 308.33 TAE 132.02 ETE 185.09 TAC 109.13 ETC 168.31 CLP-176.12
   PLANETOCENTRIC CONIC
    C3 20.920 VHL 4.574 DLA 26.89 RAL 17.05 RAD 6567.8 VEL 11.929 PTH 2.12 VMP 8.549 DPA -2.05 RAP 16.09 ECC 1.3443
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   75.77 2 11 7
64.32 23 38 5
78.47 3 59 34
                                                                                                                             2689.3
                                                                                                                                              -26.46 108.68
                                                                                 248.03
                                                                                                75.77
                                                                  116.93
                                                    -24.74
                    1 16 18 3289.28
22 34 40 3805.02
                                   3289.28
         90.00
                                                                                                                                               -15.71
                                                                                  243.30
                                                                                                                                3205.0
                                                                  149.58
                                                    -12.35
         90.00
                                                                                                                                               -29.08
                                                                                                                                2319.9
                                                    -27.77
                                                                    90.52
                                                                                  248.80
                    3 10 54
23 22 45
        100.00
                                   2919.86
                                                                                                   61.55 24 23 35
83.77 5 55 40
56.07 24 36 51
                                                                                                                                               -13.31
                                                                                                                                                              129.93
                                                                                                                                3049.7
                                                                   136.73
                                                                                  241.86
        100.00
                                   3649.68
                                                    -9.59
                                                                                                                                              -34.17
                                                                                                                                1936.6
                                                                    62.49
                                                                                  249.88
                     5 13 23 2536.56
23 36 45 3605.74
                                                   -33.68
       110.00
                                                                                                                                                 -8.89
                                                                                                                                3005.7
                                                                   130.29
                                                                                  238.74
                                                    -4.47
        110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5348.8 SGR 429.2 SG3 122.0

RRT .2675 RRF .2413 RTF .8934

SGB 5366.0 R23 .0008 R13 .8934

SGI 5350.0 SG2 413.5 THA 1.24
                                                                                                                            ST 2710.7 SR 414.4 SS 557.7
CRT .9639 CRS -.8922 CST -.9793
     TDE 2.1174 TRA 1.2912 TC3-4.6745 BAU 1.3076
    ROE .3302 RRA -.0610 RC3 .0837 FAU .01920
FDE .3537 FRA .7062 FC3 -.7946 B9P 17270
                                                                                                                            LSA 2793.9 MSA 156.1 55A 21.4
                                                                                                                            EL1 2740.0 EL2 109.2 ALF 8.40
     BOE 2.1430 BRA 1.2926 BC3 4.6752 FSP -404
                                                                                                                                       ARRIVAL DATE JUN 30 1966
                                                                           FLIGHT TIME 182.00
 LAUNCH DATE DEC 30 1965
                                                                           DISTANCE 539.1D1
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 26.175 GAL 3.55 AZL 86.96 HCA 275.08 SMA 118.58 ECC .24798 INC 3.0422 VI 30.285 RP 108.55 LAP -3.03 LOP 13.18 VP 36.416 GAP 13.53 AZP 89.73 TAL 169.08 TAP 84.16 RCA 89.17 APO 147.99 V2 34.912 RC 194.989 GL 17.08 GP -5.09 ZAL 69.42 ZAP 174.00 ETS 303.80 ZAE 132.15 ETE 185.02 ZAC 111.51 ETC 168.41 CLP-176.82
   PLANETOCENTRIC CONIC
                                                                                                                                     -.92 RAP 18.29 ECC 1.3669
     C3 22.296 VHL 4.722 DLA 27.23 RAL 20.91 RAD 6567.9 VEL 11.986 PTH 2.14 VHP 8.777 DPA
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                74.31 2 17 5
64.57 24 3 21
77.16 4 8 58
61.62 24 45 28
49 47 6 7 39
     LNCH AZHTH LNCH TIME L-I TIME
                                                                               252.88
                                                                                                                                               -25.80
                                                                                                                                                              112.13
                                                                                                                                2738.4
                                    3338.42
                                                                   120.27
                      1 21 30
                                                     -23.88
         90.00
                                                                                                                                 3186.6
                                                                                                                                                -16.21
                                                                                                                                                                141.39
                                                                    148.50
                                                                                  248.55
                    23 0 15
                                    3786.60
                                                     -12.89
         90.00
                                                                                                                                 2357.5
                                                                                                                                                -28.72
                                                                                                                                                                84.70
                                                                                253.83
                                                                     93.19
        100.00
                      3 19 41 2957.47
                                                     -27.23
                                                                                                                                                -13.53
                                                                                                                                                                129.52
                                                                                                                                 3042.8
                                                                   136.34
                                                                                  246.96
                    23 44 45
                                    3642.79
                                                     -9.81
        100.00
                                                                                                                                               -34.12
                                                                                                                                                                55.55
                                                                                                                                 1965.6
        110.00
                      5 24 54 2565.65
                                                     -33.44
                                                                     64.73
                                                                                  255.12
                                                                                                    56.07 24 56 9
                                                                                                                                 3007.4
                                                                                                                                                -8.83
                                                                                                                                                               124.08
                    23 56 2
                                    3607.37
                                                     -4.41
                                                                    130.37
                                                                                  243.67
        110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    SGT 5368.3 SGR 432.0 SG3 119.4 ST 2707.8 SR 421.3 SS 549.9 RRT .2909 RRF .2641 RTF .8983 CRT .9553 CRS -.8814 CST -.9809 SG6 5385.6 RZ3 .0013 RI3 .8983 LSA 2790.2 MSA 162.8 SSA 20.3 SG1 5369.8 SG2 413.2 THA 1.35 EL1 2737.6 EL2 123.2 ALF 8.47
     TOE 2.1636 TRA 1.5905 TC3-4.3934 BAU 1.3097
     ROE .3467 RRA -.0543 RC3 .0687 FAU .01786
FDE .5409 FRA .7512 FC3 -.6934 B5P 17297
     BOE 2.1912 BRA 1.5914 BC3 4.3940 FSP -395
```

```
ARRIVAL DATE JUL 2 1966
LAUNCH DATE DEC 30 1965
                                                                                  FLIGHT TIME 184.00
                                                                                 DISTANCE 544.432
   HELIOCENTRIC CONIC
     RL 147.11 LAL .00 LOL 98.09 VL 26.126 GAL 4.27 ATL 87.03 HCA 278.27 SMA 118.31 ECC .25392 INC 2.9714 VI 30.285
RP 108.51 LAP -2.94 LOP 16.37 VP 36.392 GAP 13.94 AZP 89.57 TAL 167.22 TAP 85.49 RCA 88.27 APO 148.35 V2 34.924
RC 196.842 GL 16.02 GP -4.97 TAL 66.12 ZAP 174.45 ETS 298.37 ZAE 132.28 ETE 184.96 ZAC 113.88 ETC 168.46 CLP-177.52
    PLANETOCENTRIC CONIC
     C3 23.961 VHL 4.895 OLA 27.48 RAL 24.69 RAD 6568.0 VEL 12.056 PTH 2.15 VHP 9.024 DPA
                                                                                                                                                   .19 RAP 20.50 ECC 1.3943
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 28 22 3383.15
23 23 34 3776.98
3 29 50 2991.57
                                                                                                                                                          -25.13
                                                         -23.02
                                                                        123.27
                                                                                       257.79
                                                                                                          73.04 2 24 45
                                                                                                                                         2783.2
                                                                                                                                                                          115.23
                                                                                                                                                                              140.81
                                                                                          253.79
                                                                                                             64.71
                                                                                                                        24 26 31
                                                                                                                                             3177.0
                                                                                                                                                              -16.48
         90.00
                                                         -13.17
                                                                          147.93
                                                                                                                       4 19 42
                                                                                          258.91
                                                                                                             76.01
                                                                                                                                             2391.6
                                                                                                                                                             -28.35
                                                                                                                                                                               87.17
       100.00
                                                         -26.69
                                                                          95.58
                      0 8 43 3643.79
5 37 10 2593.07
       100.00
                                                           -9.78
                                                                        136.40
                                                                                          252.04
                                                                                                             61.61
                                                                                                                         1 9 27
                                                                                                                                             3043.8
                                                                                                                                                             -13.50
                                                                                                                                                                              129.58
                                                                                                                        1 9 27
6 20 23
1 18 7
                                                                                         260.41
                                                                                                             81.26
                                                                                                                                             1993.1
                                                                                                                                                             -34.03
                                                                                                                                                                               57.69
       110.00
                                                        -33.18
                                                                           66.82
       110.00
                       0 17 52
                                      3615.05
                                                         -4.11
                                                                         130.78
                                                                                          248.59
                                                                                                             56.04
                                                                                                                                             3015.1
                                                                                                                                                             -8.55
                                                                                                                                                                              124.49
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             $67 5384.6 $6R 433.6 $63 116.8

RRT .3130 RRF .2859 RTF .9036

$68 5402.1 R23 .0014 R13 .9036
                                                                                                                                        ST 2683.7 SR 426.4 SS 539.5
CRT .9459 CRS -.8698 CST -.9822
     TDE 2.1984 TRA 1.9010 TC3-4.0963 BAU 1.3123
     RDE .3640 RRA -.0459 RC3 .0544 FAU .01663
                                                                             SCB 5402.1 R23 .0014 R13 .9036
SCI 5386.4 SCZ 411.7 THA 1.45
            .5263 FRA .7955 FC3 -.6009 BSP 17424
                                                                                                                                        LSA 2765.1 MSA 170.4 55A 19.1
                                                                                                                                        EL1 2713.9 EL2 136.9 ALF 8.57
    BDE 2.2284 BRA 1.9016 BC3 4.0966 FSP -389
LAUNCH DATE DEC 30 1965
                                                                                  FLIGHT TIME 186.00
                                                                                                                                                     ARRIVAL DATE JUL 4 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 549.702
    RL 147.11 LAL .00 LOL 98.09 VL 26.077 GAL 5.02 AZL 87.10 HCA 281.45 SMA 118.04 ECC .26045 INC 2.8994 VI 30.285
RP 108.47 LAP -2.84 LOP 19.56 VP 36.368 GAP 14.38 AZP 89.42 TAL 165.38 TAP 86.83 RCA 87.30 APO 148.78 VZ 34.936
RC 198.673 GL 14.95 GP -4.86 ZAL 62.92 ZAP 174.83 ETS 291.94 ZAE 132.40 ETE 184.91 ZAC 116.26 ETC 168.48 CLP-178.24
   PLANETOCENTRIC CONIC
    C3 25.957 VHL 5.095 OLA 27.63 RAL 28.37 RAO 6568.0 VEL 12.138 PTH 2.18 VMP 9.290 DPA 1.29 RAP 22.71 ECC 1.4272 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 32 3420.97 -22.25 125.77 262.75 72.02 2 34 33 2821.0 -24.50 117.83 90.00 23 43 46 3778.57 -13.13 148.02 258.95 64.68 24 46 45 3178.6 -16.43 140.90 100.00 3 41 27 3021.52 -26.18 97.66 264.02 75.03 4 31 49 2421.5 -27.98 89.32 100.00 0 26 28 3653.25 -9.47 136.93 257.06 61.51 1 27 22 3053.2 -13.20 130.13 110.00 5 50 9 2618.74 -32.90 68.77 265.72 80.13 6 33 48 2018.7 -33.91 59.68 110.00 0 34 16 3628.80 -3.59 131.50 253.47 55.98 1 34 44 3028.8 -8.03 125.22
    C3 25.957 VHL 5.095 DLA 27.63 RAL 28.37 RAD 6568.0 VEL 12.138 PTH 2.18 VHP 9.290 DPA
                                                                                                                                                 1.29 RAP 22.71 ECC 1.4272
                                                                             77.66 264.02 75.03 4 31 49
6.95 297.06 61.51 1 27 22
8.77 265.72 8D.13 6 33 48
1.50 253.47 55.98 1 34 44
MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             SGT 5396.0 SGR 434.2 SG3 114.2
RRT .3350 RRF .3079 RTF .9090
SGB 5413.4 R23 .0017 R13 .9090
SGI 5398.0 SG2 408.9 THA 1.55
     TOE 2.2262 TRA 2.2294 TC3-3.7808 BAU 1.3121
                                                                                                                                        ST 2646.1 SR 429.9 SS 528.8
CRT .9354 CRS -.8575 CST -.9834
    ROE .3821 RRA -.0357 RC3 .0415 FAU .01543
FOE .5116 FRA .8415 FC3 -.5145 BSP 17521
BOE 2.2588 BRA 2.2296 BC3 3.7810 FSP -382
                                                                                                                                       LSA 2726.5 MSA 178.7 S5A 18.0
EL1 2676.6 EL2 150.3 ALF 8.67
                                                                                                                                                   ARRIVAL DATE JUL 6 1966
                                                                                 FLIGHT TIME 188.00
LAUNCH DATE DEC 30 1965
                                                                                 01STANCE 554.903
   HELIOCENTRIC CONIC
    RL 147-11 LAL .00 LOL 98.09 VL 26.029 GAL 5.82 AZL 87.17 HCA 284.64 SMA 117.78 ECC .26765 INC 2.8258 VI 30.285 RP 108.43 LAP -2.73 LOP 22.75 VP 36.346 GAP 14.86 AZP 89.28 TAL 163.57 TAP 88.21 RCA 86.26 APO 149.30 V2 34.948 RC 200.481 GL 13.88 GP -4.76 ZAL 59.83 ZAP 175.13 ETS 284.48 ZAE 132.51 ETE 184.86 ZAC 118.63 ETC 168.46 CLP-178.95
   PLANETOCENTRIC CONIC
                                                                                                                                               2.36 RAP 24.93 ECC 1.4663
     C3 28.335 VHL 5.323 DLA 27.68 RAL 31.93 RAD 6568.1 VEL 12.236 PTH 2.20 VHP 9.580 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 49 36 3449.73 -21.63

0 4 1 3793.38 -12.70

3 54 30 3047.08 -25.72

0 41 48 3671.26 -8.88

6 3 43 2642.69 -32.60

0 49 4 3648.42 -2.84
                                                                                                                                            2849.7
                                                                                                                                                          -23.99
                                                                                                                                                                        119.78
                                                                                       267.78
                                                                                                            71.27
                                                                                                                        2 47 6
         90.00
                                                                        127.66
                                                                                                                        1 7 14
                                                                                                                                            3193.4
                                                                                                                                                             -16.03
                                                                                                                                                                              141.80
                                                                                         263.98
                                                                                                             64.48
         90.00
                                                                         148.89
                                                                                                                       4 45 17
1 42 59
6 47 46
                                                                                                                                                                               91,14
                                                                                                             74.22
                                                                                                                                            2447.1
                                                                                                                                                             -27.64
                                                                          99.41
                                                                                         269.16
       100.00
                                                                                                                                            3071.3
                                                                                                                                                            -12.64
                                                                                                                                                                             131.18
                                                                                                             61.34
       100.00
                                                                        137.95
                                                                                         261.99
                                                                                                             79.10
                                                                                                                                            2042.7
                                                                                                                                                           -33.76
       110.00
                                                                          70.58
                                                                                         271.03
                                                                                                                         1 49 52
                                                                                                                                            3048.4
                                                                                                                                                             -7.30
                                                                                                             55.92
                                                                        132.52
                                                                                         258.29
       110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            SGT 5403.6 SGR 433.6 SG3 111.7

RRT .3566 RRF .3299 RTF .9144

SGB 5421.0 R23 .0021 R13 .9144

SG1 5405.8 SG2 405.0 THA 1.65
                                                                                                                                       ST 2596.8 SR 431.6 SS 518.0
CRT .9238 CRS -.8443 CST -.9846
    TOE 2.2469 TRA 2.5762 TC3-3.4570 BAU 1.3096
    ROE .4009 RRA -.0237 RC3 .0301 FAU .01425
FOE .4970 FRA .8895 FC3 -.4355 BSP 17611
                                                                                                                                       LSA 2676.3 MSA 187.4 SSA 17.0
EL1 2627.4 EL2 163.3 ALF 8.76
    BOE 2.2824 BRA 2.5763 BC3 3.4572 FSP -375
                                                                                  FLIGHT TIME 190.00
                                                                                                                                                    ARRIVAL DATE JUL 8 1966
LAUNCH DATE DEC 30 1965
                                                                                 DISTANCE 560.022
   HELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 25.983 GAL 6.66 AZL 87.25 HCA 287.83 SMA 117.53 ECC .27559 INC 2.7499 V1 30.285 RP 108.39 LAP -2.62 LOP 25.94 VP 36.325 GAP 15.38 AZP 89.16 TAL 161.77 TAP 89.61 RCA 85.14 APO 149.91 V2 34.961 RC 202.264 GL 12.82 GP -4.67 ZAL 56.88 ZAP 175.32 ETS 276.07 ZAE 132.61 ETE 184.81 ZAC 120.99 ETC 168.39 CLP-179.68
   PLANETOCENTRIC CONIC
    C3 31.157 VHL 5.582 DLA 27.64 RAL 35.34 RAD 6568.2 VEL 12.350 PTH 2.23 VHP 9.896 DPA 3.42 RAP 27.15 ECC 1.5128 LNCH AZMIH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMIH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 4 35 3469.02

0 16 16 3821.64

4 8 51 3068.44

0 54 41 3697.45

6 17 44 2665.08

1 2 17 3673.58
                                                                                                             70.78
                                                                                                                                           2869.0
                                                                                                                                                             -23.63
         90.00
                                                         -21.20
                                                                                         272.87
                                                                                                                         3 2 24
                                                                                                                                                                            121.08
                                                                         128.91
                                                                                         266.82
                                                                                                             64.10
                                                                                                                        1 19 57
                                                                                                                                            3221.6
                                                                                                                                                                              143.51
                                                                         150.55
         90.00
                                                         -11.86
                                                                                         274.30
                                                                                                             73.55
                                                                                                                         4 59 59
                                                                                                                                            2468.4
                                                                                                                                                             -27.33
                                                                                                                                                                               92.65
                                                                         100.87
                                                       -25.32
       100.00
                                                                                                                        1 56 18
7 2 9
2 3 31
                                                                                                                                            3097.5
                                                                                         266.81
                                                                                                             61.11
                                                                                                                                                             -11.82
                                                                                                                                                                              132.69
                                                                         139.42
       100.00
                                                         -8.03
                                                                                                                                            2065.1
                                                                                                                                                                               63.26
                                                         -32.30
                                                                          72.26
                                                                                         276.31
                                                                                                             78.15
                                                                                                                                                             -33.59
       110.00
                                                                         133.84
                                                                                                                                            3073.6
                                                                                                                                                             -6.35
                                                                                                                                                                              127.60
                                                                                         263.03
                                                                                                             55.86
                                      3673.58
       110:00
                       1 2 17
                                                         -1.88
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 5406.1 SGR 432.2 SG3 109.3
                                                                                                                                       ST 2543.0 SR 431.4 SS 508.8
     TOE 2.2652 TRA 2.9470 TC3-3.1235 BAU 1.3011
                                                                            RDE .4203 RRA -.0096 RC3 .0206 FAU .01305
FDE .4841 FRA .9412 FC3 -.3627 BSP 17586
```

BOE 2.3039 BRA 2.9470 BC3 3.1235 FSP -365

ARRIVAL DATE JUL 10 1966

FLIGHT TIME 192.00 LAUNCH DATE DEC 30 1965 DISTANCE 565.044 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 25.937 GAL 7.56 A7L 87.33 MCA 291.03 SMA 117.28 ECC .28435 INC 2.6712 V1 30.285 RP 108.35 LAP -2.49 LOP 29.14 VP 36.305 GAP 15.95 A7P 80.04 TAL 160.01 TAP 91.04 RCA 83.93 APO 150.63 V2 34.974 RC 204.023 GL 11.77 GP -4.59 TAL 54.06 ZAP 175.39 ETS 267.00 ZAE 132.69 ETE 184.77 ZAC 123.34 ETC 168.28 CLP 179.57 PLANETOCENTRIC CONIC 4.44 RAP 29.38 ECC 1.5677 C3 34.495 VHL 5.873 DLA 27.53 RAL 38.59 RAD 6568.4 VEL 12.485 PTH 2.26 VHP 10.241 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.50 3 19 53 63.61 1 29 17 73.01 5 15 38 60.85 2 7 28 77.27 7 16 47 55.82 2 15 41 121.85 129.65 277.99 2880.5 -23.41 -20.94 90.00 2 21 53 3480.48 3261.5 -14.13 145.90 0 24 55 3861.48 4 24 11 3086.18 152.87 273.48 -10.67 90.00 2486.2 -27.06 93.90 102.08 279.43 100.00 -24.97 3131.0 -10.75 134.60 1 5 17 3731.00 6 32 1 2686.15 1 13 57 3703.80 141.29 271.48 100.00 -6.92 -33.42 64.88 2086.2 281.55 110.00 - 32 .00 73.82 3103.8 -5.21 129.19 267.66 -.73 135.41 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5406.1 SGR 429.4 SG3 1D6.9 RRT .3998 RRF .3746 RTF .9257 SGB 5423.1 R23 .D028 R13 .9257 SGI 5408.9 SG2 393.4 THA 1.83 ST 2478.7 SR 429.1 55 499.0 CRT .8971 CRS -.8159 CST -.9870 TOE 2.2743 TRA 3.3357 TC3-2.8025 BAU 1.2925 RCE .4399 RRA .0062 RC3 .0126 FAU .01196 FDE .4701 FRA .9939 FC3 -.3001 BSP 17661 BDE 2.3164 BRA 3.3357 BC3 2.8026 FSP -359 LSA 2556.4 MSA 204.9 SSA 15.1 EL1 2508.6 EL2 187.3 ALF 8.88 FLIGHT TIME 194.00 ARRIVAL DATE JUL 12 1966 LAUNCH DATE DEC 30 1965 DISTANCE 569.950 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 25.892 GAL 8.51 AZL 87.41 MCA 294.22 SMA 117.04 ECC .29405 INC 2.5890 V1 30.285 RP 108.31 LAP -2.36 LOP 52.34 VP 36.285 GAP 16.57 AZP 88.94 TAL 158.29 TAP 92.51 RCA 82.62 APO 151.45 V2 34.987 RC 205.757 GL 10.75 GP -4.51 ZAL 51.39 ZAP 175.34 ETS 257.68 ZAE 132.76 ETE 184.73 ZAC 125.68 ETC 168.11 CLP 178.82 PLANETOCENTRIC CONIC C3 38.443 VHL 6.200 DLA 27.35 RAL 41.68 RAD 6568.5 VEL 12.642 PTH 2.29 VHP 10.620 DPA 5.45 RAP 31.60 ECC 1.6327 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 40 34 3486.82 0 30 50 3909.88 70.34 3 38 40 2886.8 -23.29 122.28 -20.80 130.06 283.11 90.00 1 36 0 3309.9 -12.73 148.76 155.65 277.95 63.10 -9.19 90.00 4 40 12 3101.12 1 13 52 3770.82 6 46 25 2706.18 1 24 9 3738.52 5 31 54 2 16 43 7 31 31 2501.1 -26.82 94.95 -24.67 103.09 284.51 72.56 100.00 3170.8 60.59 -9.47 136.86 -5.59 143.51 276.01 100.00 76.45 7 31 31 2106.2 -33.22 66.41 -31.69 75.30 286.72 110.00 2 26 28 55.82 3138.5 -3.89 131.01 137.22 272.17 .60 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5400.2 SGR 425.6 SG3 104.6 RRT .4207 RRF .3964 RTF .9315 SGB 5416.9 R23 .0028 R13 .9315 SGI 5403.2 SG2 385.9 THA 1.91 ST 2410.1 SR 424.8 SS 490.6 CRT .8818 CRS -.8005 CST -.9881 TOE 2.2780 TRA 3.7481 TC3-2.4887 BAU 1.2791 ROE .4597 RRA .0239 RC3 .0063 FAU .01088 FOE .4570 FRA 1.0502 FC3 -.2449 BSP 17713 LSA 2486.8 MSA 213.0 SSA 14.3 ELI 2439.2 ELZ 198.0 ALF 8.89 BOE 2.3239 BRA 3.7482 BC3 2.4887 FSP -352 ARRIVAL DATE JUL 14 1966 FLIGHT TIME 196.00 LAUNCH DATE DEC 3D 1965 DISTANCE 574.718 HELIOCENTRIC CONIC RELIGUENINIC CONIC RL 147.11 LAL. .00 LOL 98.09 VL 25.848 GAL 9.54 AZL 87.50 HCA 297.42 SMA 116.80 ECC .30480 INC 2.5024 V1 30.285 RP 108.27 LAP -2.22 LOP 35.53 VP 36.267 GAP 17.26 AZP 88.85 TAL 156.61 TAP 94.03 RCA 81.20 APO 152.41 V2 35.000 RC 207.465 GL 9.76 GP -4.44 ZAL 48.87 ZAP 175.15 ETS 248.63 ZAE 132.80 ETE 184.69 ZAC 128.00 ETC 167.90 CLP 178.04 PLANETOCENTRIC CONIC C3 43.113 VHL 5.566 DLA 27.11 RAL 44.58 RAD 6568.6 VEL 12.825 PTH 2.33. VHP 11.037 DPA 8.42 RAP 33.82 ECC 1.7095 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 59 47 3490.50 -P0.72 130.30 288.18 70.25 3 57 58 2890.5 -23.22 122.52
90.00 0 34 47 3964.09 -7.50 158.75 282.26 62.62 1 40 51 3364.1 -11.11 151.93 58.75 282.26 62.62 1 40 51 03.96 289.54 72.17 5 48 27 45.99 280.39 60.36 2 24 18 76.72 291.81 75.67 7 46 10 39.24 276.56 55.87 2 35 57 MID-COURSE EXECUTION ACCURACY SGT 5390.4 SGR 420 5 655 4 56 33 3114.08 1 20 42 3815.73 7 0 45 2725.45 1 33 0 3777.13 95.65 2514.1 -26.61 -24.40 103.96 100.00 139.39 -8.00 -4.08 145.99 3215.7 100.00 2125.5 -33.02 3177.1 -2.42 67.88 -31.37 76.72 110.00 133.03 2.08 139.24 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2340.5 SR 418.6 SS 483.8 CRT .8652 CRS -.7845 CST -.9893 SCT 5390.4 SGR 420.6 SG3 102.3 RRT .4414 RRF .4181 RTF .9374 SGB 5406.8 R23 .0026 R13 .9374 SGI 5393.6 SG2 377.2 THA 1.98 TOE 2.2787 TRA 4.1877 TC3-2.1872 BAU 1.2607 RDE .4795 RRA .0434 RC3 .0016 FAU .00981 FDE .4449 FRA 1.1101 FC3 -.1970 BSP 17749 LSA 2416.3 MSA 220.3 SSA 13.5 EL1 2368.6 EL2 207.4 ALF 8.87 BOE 2.3286 BRA 4.1879 BC3 2.1872 FSP -346 ARRIVAL DATE JUL 16 1966 FLIGHT TIME 198.00 LAUNCH DATE DEC 30 1965 DISTANCE 579.321 HELIOCENTRIC CONIC RL 147.11 LAL .00 LOL 98.09 VL 25.805 GAL 10.64 AZL 87.59 MCA 300.62 SMA 116.58 ECC .31675 INC 2.4107 V1 30.285 RP 108.23 LAP -2.07 LOP 38.73 VP 36.249 GAP 18.02 AZP 88.77 TAL 154.99 TAP 95.61 RCA 79.65 APO 153.50 V2 35.014 RC 209.146 GL 8.80 GP -4.38 ZAL 46.51 ZAP 174.82 ETS 240.26 ZAE 132.81 ETE 184.65 ZAC 130.30 ETC 167.63 CLP 177.23 PLANETOCENTRIC CONIC 7.37 RAP 36.04 ECC 1.8006 C3 48.648 VHL 6.975 DLA 26.82 RAL 47.30 RAD 6568.8 VEL 13.039 PTH 2.38 VHP 11.498 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 18 57 3493.20 -20.65 130.47 293.17 70.19 4 17 10 2893.2 -23.17 122.70 90.00 0 37 19 4022.02 -5.68 162.02 286.41 62.21 1 44 21 3422.0 -9.35 155.27 6 5 0 2 30 27 8 0 37 2 44 13 2525.8 -26.41 96.67 5 12 55 3125.82 -24.15 104.74 294.47 71.83 3264.6 142.12 1 26 3 3864.64 -2.43 148.68 284.63 60.20 100.00 69.30 2144.2 -32.80 7 14 52 2744.19 1 40 34 3819.03 296.78 74.92 -31.05 78.08 110.00 55.99 3219.0 -.81 135.22 280.83 110.00 3.68 141.43 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5378.4 SGR 414.7 SG3 100.2 RRT .4624 RRF .4405 RTF .9432 SGB 5394.4 R23 .0026 R13 .9432 SGI 5381.9 SG2 367.5 THA 2.05 ST 2274.6 SR 410.7 55 479.7 CRT .8477 CRS -.7688 CST -.9906 TDE 2.2811 TRA 4.6610 TC3-1.8981 BAU 1.2345 RDE .4995 RRA .0650 RC3 -.0015 FAU .00870 FDE .4351 FRA 1.1757 FC3 -.1548 BSP 17683 BDE 2.3351 BRA 4.6614 BC3 1.8981 FSP -337 LSA 2349.8 MSA 226.3 SSA 12.8 EL1 2301.4 EL2 215.3 ALF 8.78

E

```
ARRIVAL CATE JUL 18 1966
                                                                                                                            FLIGHT TIME 200.00
LAUNCH DATE DEC 30 1965
                                                                                                                           DISTANCE 583.721
     HELIOCENTRIC CONIC
       RL 147.11 LAL .00 LOL 98.09 VL 25.763 GAL 11.83 A7L 87.69 HCA 303.82 SMA 116.36 ECC .33005 INC 2.3125 V1 30.285
RP 108.19 LAP -1.92 LOP 41.94 VP 36.232 GAP 18.86 A7P 88.71 TAL 153.43 TAP 97.26 RCA 77.95 APO 154.76 V2 35.027
RC 210.800 GL 7.87 GP -4.32 7AL 44.30 7AP 174.38 ETS 232.80 7AE 132.80 ETE 184.61 7AC 132.56 ETC 167.30 CLP 176.40
     PLANETOCENTRIC CONIC
       C3 55.225 VHL 7.431 DLA 26.48 RAL 49.83 RAD 6569.0 VEL 13.289 PTH 2.43 VMP 12.009 DPA 8.28 RAP 38.24 ECC 1.9089 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               The state of the s
                                                                                                                                                                                                                2895.9
                                                                                                                                                                70.12 4 35 55
61.91 1 46 51
                                                                                                                                   298.05
                                                                                                                                                                                                                                                                      122.88
                                                                                       -20.59
                                                                                                               130.65
                                                                                                                                                                                                                                              -23.11
                                                                                                                                                                                                                                                                        158.71
                                                                                        -3.75
                                                                                                               165.41
                                                                                                                                        290.42
                                                                                                                                                                                                                     3482.3
                                                                                                                                                                                                                                               -7.48
                                                                                                                105.48 299.30 71.51 6 21 19
151.53 288.72 60.11 2 35 24
79.41 301.65 74.20 8 14 42
143.77 284.96 56.19 2 51 23
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                                     2536.9
                                                                                                                                                                                                                                              -26.22
                                                                                                                                                                                                                                                                          97.43
                                                                                       -23.92
                                                                                                               105.48
            100.00
                                                                                          -.67
                                                                                                               151.53
                                                                                                                                                                                                                     3316.5
                                                                                                                                                                                                                                                -4.65
                                                                                                                                                                                                                                                                        144.99
                                                                                                                                                                                                                                                                         70.68
                                                                                      -30.71
                                                                                                                                                                                                                    2162.6
                                                                                                                                                                                                                                              -32.57
            110.00
                                                                                                               143.77
                                                                                                                                                                                                                                                                        137.55
                                                                                                                                                                                                                    3263.6
                                                                                                                                                                                                                                                    .89
                                                                                         5.37
                                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                     SCT 5360.4 SGR 407.5 SG3 98.1

RRT .4824 RRF .4618 RTF .9491

SGB 5375.9 R23 .0022 R13 .9491

SGI 5364.0 SG2 356.7 THA 2.11
                                                                                                                                                                                                            ST 2206.6 SR 400.9 S5 476.7
CRT .8289 CRS -.7524 CST -.9918
        TOE 2.2777 TRA 5.1632 TC3-1.6303 BAU 1.2037
       RDE .5192 RRA .0882 RC3 -.0036 FAU .00764
FDE .4252 FRA 1.2451 FC3 -.1198 8SP 17713
                                                                                                                                                                                                             LSA 2281.1 MSA 231.1 SSA 12.1
                                                                                                                                                                                                              EL1 2231.8 EL2 221.7 ALF 8.65
       BDE 2.3361 BRA 5.1640 BC3 1.6303 FSP -331
                                                                                                                             FLIGHT TIME 202.00
                                                                                                                                                                                                                                 ARRIVAL DATE JUL 20 1966
                                                                                                                            DISTANCE 587.874
     HELIOCENTRIC CONIC
                                        .00 LOL 98.09 VL 25.723 GAL 13.12 A7L 87.79 HCA 307.03 SMA 116.14 ECC .34491 INC 2.2067 V1 30.285
-1.76 LOP 45.14 VP 36.216 GAP 19.80 A7P 88.67 TAL 151.95 TAP 98.98 RCA 76.08 APO 156.20 V2 35.040
6.98 GP -4.26 ZAL 42.26 ZAP 173.83 ETS 226.31 ZAE 132.74 ETE 184.57 ZAC 134.79 ETC 166.91 CLP 175.53
       RL 147.11 LAL
     PLANETOCENTRIC CONIC
      PLANETOCENTRIC COMIC
C3 63.071 VHL 7.942 DLA 26.10 RAL 52.18 RAD 6569.2 VEL 13.580 PTH 2.48 VHP 12.579 DPA 9.16 RAP 40.42 ECC 2.0380
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 3 55 40 3499.18 -20.51 130.86 302.78 70.04 4 54 0 2899.2 -23.05 123.10
90.00 0 39 29 4143.84 -1.77 168.85 294.29 61.73 1 48 33 3545.8 -5.54 162.19
100.00 5 44 43 3147.64 -23.68 106.19 303.99 71.20 6 37 11 2547.6 -26.03 98.18
100.00 1 33 7 3970.62 1.16 154.49 292.66 60.13 2 39 18 3370.6 -2.82 147.97
110.00 7 42 0 2780.67 -30.37 80.71 306.37 73.50 8 28 21 2180.7 -32.33 72.04
110.00 1 52 20 3910.36 7.13 146.24 288.96 56.48 2 57 30 3310.4 2.68 139.99
                                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                     SCT 5338.6 SGR 399.1 SG3 96.1
RRT .5023 RRF .4831 RTF .9549
SGB 5353.5 R23 .0017 R13 .9549
SGI 5342.3 SG2 344.9 THA 2.16
                                                                                                                                                                                                              ST 2142.1 SR 389.5 S5 476.1
CRT .8094 CRS -.7361 CST -.9930
       TOE 2.2754 TRA 5.7033 TC3-1.3809 BAU 1.1644
       ROE .5386 RRA .1132 RC3 -.0045 FAU .00656
FOE .4171 FRA 1.3209 FC3 -.0900 BSP 17727
BOE 2.3382 BRA 5.7044 BC3 1.3809 FSP -325
                                                                                                                                                                                                              LSA 2216.3 MSA 234.3 SSA 11.5
EL1 2165.4 EL2 226.3 ALF 8.47
                                                                                                                                                                                                                               ARRIVAL DATE JUL 22 1966
                                                                                                                            FLIGHT TIME 204.00
LAUNCH DATE OFC 30 1965
                                                                                                                           DISTANCE 591.723
     HELLOCENTRIC CONIC
      RL 147.11 LAL .00 LOL 98.09 VL 25.683 GAL 14.54 AZL 87.91 HCA 310.24 5MA 115.94 ECC .36158 INC 2.0914 V1 30.285 RP 108.11 LAP -1.60 LOP 48.35 VP 36.201 GAP 20.86 AZP 88.65 TAL 150.57 TAP 100.81 RCA 74.02 APO 157.86 V2 35.053 RC 214.027 GL 6.12 GP -4.21 TAL 40.39 ZAP 173.17 ETS 220.75 ZAE 132.64 ETE 184.52 ZAC 136.97 ETC 166.45 CLP 174.61
     PLANETOCENTRIC CONIC
       C3 72.475 VHL 8.513 DLA 25.70 RAL 54.32 RAD 6569.4 VEL 13.922 PTH 2.54 VHP 13.218 DPA 10.00 RAP 42.58 ECC 2.1928-
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   31.11 307.36 69.95 5 11 14
72.32 298.01 61.68 1 49 33
06.89 308.52 70.91 6 52 27
57.54 296.45 60.25 2 42 16
81.98 310.93 72.82 8 41 27
48.81 292.83 56.87 3 2 39
MID-COURSE EXECUTION ACCURACY
                                 4 12 51 3503.16
0 39 27 4206.06
5 59 49 3158.30
1 35 10 4026.14
7 54 48 2798.53
1 56 40 3958.68
                                                                                  -20.42
                                                                                                                                                                                                              2903.2
                                                                                                                                                                                                                                         -22.97
                                                                                                                                                                                                                                                                      123.36
                                                                                                             131.11
             90.00
                                                                                                                                                                                                                     3606.1
                                                                                                                                                                                                                                              -3.55
                                                                                                                                                                                                                                                                       165.66
                                                                                                               172.32
                                                                                           .23
              90.00
                                                                                                                                                                                                                    2558.3
                                                                                                                                                                                                                                              -25.83
                                                                                                                                                                                                                                                                         98.91
                                                                                                               106.89
                                                                                    -23.45
            100.00
                                                                                                                                                                                                                    3426.1
                                                                                                                                                                                                                                                 -.94
                                                                                                                                                                                                                                                                       151.02
                                                                                         3.04
                                                                                                             157.54
            100.00
                                                                                                                                                                                                                                              -32.07
                                                                                                                                                                                                                                                                         73.37
                                                                                                                                                                                                                    2198.5
                                                                                      -30.02
                                                                                                                81.98
            110.00
                                                                                                                                                                                                                    3358.7
                                                                                                                                                                                                                                                                       142 52
                                                                                                                                                                                                                                             4.52
            110.00
                                                                                      8.94
                                                                                                               148.81
                                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                     SCT 5312.8 SGR 389.7 SG3 94.2
RRT .5219 RRF .5042 RTF .9605
SGB 5327.0 R23 .0011 R13 .9605
SGI 5316.7 SG2 332.2 THA 2.20
                                                                                                                                                                                                              ST 2081.5 SR 376.6 55 478.2
       TOE 2.2753 TRA 6.2863 TC3-1.1503 BAU 1.1146
                                                                                                                                                                                                            CRT .7895 CRS -.7202 CST -.9942
       RDE .5577 RRA .1399 RC3 -.0045 FAU .00542
FDE .4106 FRA 1.4039 FC3 -.0647 BSP 17720
BDE 2.3427 BRA 6.2879 BC3 1.1503 FSP -319
                                                                                                                                                                                                              LSA 2155.8 MSA 235.7 SSA 10.8
                                                                                                                                                                                                              EL1 2102.8 EL2 228.8 ALF 8.23
                                                                                                                                                                                                                                 ARRIVAL DATE JUL 24 1966
                                                                                                                            FLIGHT TIME 206.00
LAUNCH DATE DEC 30 1965
                                                                                                                            DISTANCE 595.193
     HELIOCENTRIC CONIC
       RL 147.11 LAL .00 LOL 98.09 VL 25.646 GAL 16.09 A7L 88.04 HCA 313.45 SMA 115.74 ECC .38032 INC 1.9645 V1 30.285 RP 108.07 LAP -1.43 LOP 51.56 VP 36.187 GAP 22.04 AZP 88.65 TAL 149.30 TAP 102.75 RCA 71.72 APO 159.76 V2 35.067 RC 215.599 GL 5.29 GP -4.16 TAL 38.68 ZAP 172.40 ETS 216.00 TAE 132.48 ETE 184.47 TAC 139.10 ETC 165.92 CLP 173.64
     PLANETOCENTRIC CONIC
       C3 83.813 VML 9.155 DLA 25.26 RAL 56.27 RAD 6569.6 VEL 14.323 PTH 2.61 VMP 13.938 DPA 10.79 RAP 44.70 ECC 2.3794 ENCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                                             -22.88
                                   4 29 5 3507.81
0 38 46 4268.39
                                                                                                                                                                                          5 27 33
                                                                                                                                                                                                                 2907.8
                                                                                                                                                                                                                                                                      123.67
                                                                                       -20.31
                                                                                                               131.41
                                                                                                                                       311.75
                                                                                                                                                                     69.84
              90.00
                                                                                                                                                                                       1 49 54
                                                                                                                                                                      61.76
                                                                                                                                                                                                                     3668.4
                                                                                                                                                                                                                                                -1.55
                                                                                                                                                                                                                                                                        169.17
                                                                                                               175.80
                                                                                                                                        301.58
                                                                                         2.24
              90.00
                                    6 14 12 3168.89
1 36 20 4082.53
                                                                                                                                                                      70.61
                                                                                                                                                                                         7 7 1
                                                                                                                                                                                                                     2568.9
                                                                                                                                                                                                                                               -25.64
                                                                                                                                                                                                                                                                          99.64
                                                                                      -23.21
                                                                                                               107.59
                                                                                                                                        312.87
            100.00
                                                                                                                                                                                      2 44 22
8 53 55
                                                                                                                                                                      60.48
                                                                                                                                                                                                                     3482.5
                                                                                                                                                                                                                                                    .97
                                                                                                                                                                                                                                                                        154.11
                                                                                          4.94
                                                                                                               160.65
                                                                                                                                        300.09
            100.00
                                   1 36 20
                                  8 6 58 2816.08
2 0 3 4008.11
                                                                                                                                                                                                                                                                         74.57
                                                                                                                                        315.29
                                                                                                                                                                     72.17
                                                                                                                                                                                                                    2216.1
                                                                                                                                                                                                                                              -31.81
                                                                                      -29.66
                                                                                                                  83.22
            110.00
                                                                                                                                                                                                                                                                        145.12
                                                                                                                                       296.54
                                                                                                                                                                    57.36
                                                                                                                                                                                       3 6 51
                                                                                                                                                                                                                    3408.1
                                                                                                                                                                                                                                                 6.39
                                                                                      10.77
                                                                                                               151.47
            110.00
                                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                   SCT 5285.4 SGR 379.3 SG3 92.4
RRT .5415 RRF .5255 RTF .9660
SGB 5299.0 R23 .0006 R13 .9660
SGI 5289.4 SG2 318.6 THA 2.23
                                                                                                                                                                                                            ST 2027.4 SR 362.6 55 483.9
CRT .7700 CRS -.7058 CST -.9952
        TOE 2.2835 TRA 6.9225 TC3 -.9370 BAU 1.0499
       ROE .5766 RRA .1683 RC3 -.0037 FAU .00415
FOE .4072 FRA 1.4964 FC3 -.0428 B5P 17599
                                                                                                                                                                                                            LSA 2102.6 MSA 235.0 SSA 10.2
EL1 2046.8 EL2 229.2 ALF 7.94
        BOE 2.3552 BRA 6.9246 BC3 .9370 FSP -311
```

```
FLIGHT TIME 208.00
                                                                                                                                 ARRIVAL DATE JUL 26 1966
LAUNCH DATE DEC 30 1965
                                                                       DISTANCE 598.187
   MELIOCENTRIC CONIC
    RL 147.11 LAL .00 LOL 98.09 VL 25.609 GAL 17.82 ATL 88.18 HCA 316.66 SMA 115.56 ECC .40147 INC 1.8233 V1 30.285 RP 108.03 LAP -1.25 LOP 54.77 VP 36.174 GAP 23.39 ATP 88.67 TAL 148.17 TAP 104.83 RCA 69.16 APO 161.95 V2 35.080
                          4.50 GP -4.12 TAL 37.16 TAP 171.54 ETS 211.93 TAE 132.26 ETE 184.41 TAC 141.16 ETC 165.32 CLP 172.60
    RC 217.144 Gt
   PLANETOCENTRIC CONIC
    C3 97.578 VHL 9.878 DLA 24.80 RAL 58.02 RAD 6569.9 VEL 14.796 PTH 2.67 VHP 14.752 DPA 11.55 RAP 46.77 ECC 2.6059
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 44 20 3512.95 -20.19 131.74 315.92 69.72 5 42 53 2912.9 -22.77 124.02
                   0 37 27 4330.42
6 27 49 3179.33
                                                                                                         1 49 37
7 20 48
        90.00
                                                   4.24
                                                                179.27
                                                                              304.98
                                                                                               61.98
                                                                                                                          3730.4
                                                                                                                                            .46
                                                                                                                                                        172.63
       100.00
                                                  -22.97
                                                                108.28
                                                                              317.01
                                                                                               70.33
                                                                                                                          2579.3
                                                                                                                                         -25.44
                                                                                                                                                       100.35
                                                                                                        2 45 38
9 5 40
                   1 36 39 4139.27
8 18 27 2833.17
2 2 30 4058.19
       100.00
                                                   6.83
                                                                163.80
                                                                              303.55
                                                                                               60.83
                                                                                                                          3539.3
                                                                                                                                          2.89
                                                                                                                                                        157.23
      110.00
                                                  -29.30
                                                                 84.42
                                                                              319.44
                                                                                               71.54
                                                                                                                          2233.2
                                                                                                                                         -31.53
                                                                                                                                                         75.93
                                                                  3 40

MID-COURSE EXECUTION ACCURACY

SGT 5251.2 SGP 300
      110.00
                                                  12.59
                                                                154.21
                                                                                                                          3458.2
                                                                                                                                         8.27
                                                                                                                                                        147.78
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 5251.2 SGR 367.6 SG3 90.6

RRT .5601 RRF .5457 RTF .9712

SGB 5264.0 R23 -.0001 R13 .9712

SGI 5255.2 SG2 304.3 THA 2.25
                                                                                                                      ST 1974.3 SR 347.2 SS 491.9
CRT .7503 CRS -.6914 CST -.9962
    TOE 2.2929 TRA 7.6088 TC3 -.7454 BAU .9725
    RDE .5950 RRA .1979 RC3 -.0025 FAU .00280
    FDE .4047 FRA 1.5977 FC3 -.0249 BSP 17593
                                                                                                                      LSA 2050.9 MSA 232.5 SSA 9.6
EL1 1991.7 EL2 227.5 ALF 7.62
    BOE 2.3688 BRA 7.6114 BC3 .7455 FSP
                                                      -305
LAUNCH DATE DEC 30 1965
                                                                        FLIGHT TIME 210.00
                                                                                                                                  ARRIVAL DATE JUL 28 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 600.575
   RL 147.11 LAL .00 LOL 98.09 VL 25.575 GAL 19.73 AZL 88.34 MCA 319.87 SMA 115.38 ECC .42544 INC 1.6641 V1 30.285 RP 107.99 LAP -1.07 LOP 57.98 VP 36.162 GAP 24.93 AZP 88.73 TAL 147.21 TAP 107.08 RCA 66.29 APO 164.47 V2 35.092 RC 218.662 GL 3.75 GP -4.08 ZAL 35.83 ZAP 170.56 ETS 208.43 ZAE 131.95 ETE 184.35 ZAC 143.13 ETC 164.64 CLP 171.48
   PLANETOCENTRIC CONIC
    C3 114.20 VHL 10.697 DLA 24.32 RAL 59.55 RAD 6570.2 VEL 15.354 PTH 2.75 VHP 15.680 DPA 12.25 RAP 48.78 ECC 2.8831 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         5 57 11
                                                                                                                        2918.3
                    4 58 33 3518.28
0 35 28 4391.80
                                                                                                                                        -22.67
       90.00
                                                  -20.07
                                                                132.08
                                                                                                                                                       124.37
                                                                              319.85
                                                                                               69.59
       90.00
                                                                                                          1 48 39
                                                 . 6.19
                                                                182.72
                                                                              308.19
                                                                                               62.31
                                                                                                                          3791.8
                                                                                                                                           2.44
                                                                                                                                                        176.05
                    6 40 33 3189.40
1 36 8 4195.92
                                                                                                         7 33 43
2 46 4
      100.00
                                                  -22.74
                                                                              320.90
                                                                108.93
                                                                                               70.05
                                                                                                                          2589.4
                                                                                                                                         -25.25
                                                                                                                                                        101.03
                    1 36 8
                                                   8.70
      100.00
                                                                166.97
                                                                              306.83
                                                                                               61.29
                                                                                                                          3595.9
                                                                                                                                           4.80
                                                                                                                                                        160.35
                                                                                                         9 16 40
      110.00
                     8 29 10 2849.60
                                                 -28.94
                                                                 85.56
                                                                              323.34
                                                                                               70.95
                                                                                                                          2249.6
                                                                                                                                         -31.26
                                                                                                                                                         77.13
                                                                  MID-COURSE EXECUTION ACCURACY
      110.00
                     2 4 1
                                                                                                                                         10.14
                                 4108.48
                                                  14.39
                                                                156.99
                                                                                                                          3508.5
                                                                                                                                                        150.47
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 5213.4 SGR 354.7 SG3 88.9
RRT .5780 RRF .5653 RTF .9760
SGB 5225.4 R23 -.0007 R13 .9760
    TOE 2.3118 TRA 8.3600 TC3 -.5718 BAU .8748
                                                                                                                      ST 1925.7 SR 330.8 SS 503.5
CRT .7315 CRS -.6784 CST -.9970
    ROE .6130 RRA .2285 RC3 -.0009 FAU .00126
    FOE .4051 FRA 1.7110 FC3 -.0096 BSP 17556
                                                                                                                      LSA 2004.8 MSA 228.0 SSA 9.0
                                                                    SG1 5217.4 SG2 289.2 THA 2.26
    BOE 2.3917 BRA 8.3631 BC3 .5718 FSP -300
                                                                                                                       ELI 1941.0 EL2 223.8 ALF 7.26
                                                                                                                                 ARRIVAL DATE JUL 30 1966
LAUNCH DATE DEC 3D 1965
                                                                       FLIGHT TIME 212.00
   HELIOCENTRIC CONIC
                                                                      DISTANCE 602.189
   RL 147.11 LAL .00 LOL 98.09 VL 25.544 GAL 21.89 AZL 88.52 HCA 323.09 SMA 115.22 ECC .45271 INC 1.4821 V1 30.285
RP 107.95 LAP -.89 LOP 61.19 VP 36.152 GAP 26.69 AZP 88.81 TAL 146.45 TAP 109.54 RCA 63.06 APO 167.38 V2 35.105
RC 220.152 GL 3.02 GP -4.03 ZAL 34.70 ZAP 169.46 ETS 205.38 ZAE 131.54 ETE 184.27 ZAC 145.00 ETC 1,63.90 CLP 170.26
   PLANETOCENTRIC CONIC
    C3 135.213 VHL 11.628 DLA 23.83 RAL 60.86 RAD 6570.5 VEL 16.017 PTH 2.82 VHP 16.745 DPA 12.91 RAP 50.71 ECC 3.2253
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                        6 10 25
                                                                                                                       2923.4
                                                                                                                                       -22.56
                   5 11 41 3523.42
0 32 45 4452.25
                                                              132.40
                                                                            323.49
                                                                                            69.47
                                                                                                                                                       124.71
       90.00
                                                -19.94
        90.00
                                                   8.09
                                                               186.15
                                                                              311.19
                                                                                               62.77
                                                                                                         1 46 57
                                                                                                                          3452.2
                                                                                                                                           4.37
                                                                                                                                                       179.44
                   6 52 22 3198.81
1 34 45 4252.07
8 39 3 2865.07
2 4 34 4158.60
                                                                                                        7 45 41
2 45 37
      100.00
                                                 -22.52
                                                               109.55
                                                                              324.52
                                                                                               69.80
                                                                                                                          2598.8
                                                                                                                                         -25.06
                                                                                                                                                       101.67
      100.00
                                                  10.52
                                                               170.15
                                                                              309.69
                                                                                               61.86
                                                                                                                          3652.1
                                                                                                                                         5.6A
                                                                                                                                                       163.47
                                                                                                        9 26 48
3 13 52
      110.00
                                                 -28.59
                                                                 86.63
                                                                              326.95
                                                                                               70.41
                                                                                                                          2265.1
                                                                                                                                        -30.99
                                                                                                                                                        78.25
      110.00
                                                  16.15
                                                               159.81
                                                                              306.64
                                                                                               59.45
                                                                                                                          345A.6
                                                                                                                                          11.97
                                                                                                                                                       155.10
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1880.6 SR 313.6 SS 519.2
CRT .7141 CRS -.6669 CST -.9977
                                                                   SGT 5171.3 SGR 340.8 SG3 87.3
RRT .5952 RRF .5841 RTF .9804
SGB 5182.5 R23 -.0014 R13 .9804
    TOE 2.3433 TRA 9.1844 TC3 -.4159 BAU .7519.
   RDE .6306 RRA .2597 RC3 .0009 FAU-.00055
FDE .4087 FRA 1.8384 FC3 .0035 BSP 17499
                                                                                                                      LSA 1963.5 MSA 221.5 SSA 8.4
   BOE 2.4267 BRA 9.1881 BC3 .4159 FSP -295
                                                                   SG1 5175.3 SG2 273.6 THA 2.25
                                                                                                                      ELI 1894.1 ELZ 218.0 ALF 6.88
LAUNCH DATE DEC 30 1965
                                                                       FLIGHT TIME 214.00
                                                                                                                                 ARRIVAL DATE AUG 1 1966
  HELIOCENTRIC CONIC
                                                                       DISTANCE 602.800
   RL 147.11 LAL .00 LOL 98.09 VL 25.514 GAL 24.33 AZL 88.73 HCA 326.31 SMA 115.07 ECC .48383 INC 1.2703 V1 30.285
RP 107.91 LAP -.70 LOP 64.41 VP 36.143 GAP 28.73 AZP 88.94 TAL 145.95 TAP 112.26 RCA 59.39 APO 170.74 V2 35.117
RC 221.615 GL 2.33 GP -3.99 ZAL 33.80 ZAP 168.22 ETS 202.69 ZAE 131.00 ETE 184.18 ZAC 146.75 ETC 163.09 CLP 168.91
  PLANETOCENTRIC CONIC
   C3 161.136 VHL 12.694 DLA 23.31 RAL 61.92 RAD 6570.8 VEL 16.807 PTH 2.90 VHP 17.973 DPA 13.51 RAP 52.53 ECC 3.6519
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -22.47 125.01
                   5 23 43 3527.92
                                                 -19.84
                                                                             326.81
                                                                                             69.37
                                                                                                        6 22 31
                                                                                                                         2927.9
       90.00
                                                               132.69
                                                                                                         1 44 23
7 56 38
                                                                                               63.34
                                                                                                                          3911.5
                                                                                                                                            6.26
                                                                                                                                                        182.77
                    0 29 11
                                 4511.50
                                                                189.54
                                                                              313.94
       90.00
                                                    9.92
                   7 3 11
                                 3207.20
                                                 -22.32
                                                                110.09
                                                                              327.81
                                                                                               69.58
                                                                                                                          2607.2
                                                                                                                                         -24.90
                                                                                                                                                        102.24
      100.00
                   1 32 24
      100.00
                                 4307.45
                                                                173.32
                                                                                                         2 44 11
                                                                                                                          3707.5
                                                                                                                                           8.50
                                                                                                                                                        166.56
                                                  12.28
                                                                              312.71
                                                                                               62.53
                   8 48 1 2879.24
2 4 4 4208.18
      110.00
                                                 -28.26
                                                                                                         9 36 D
                                                                              330.23
                                                                                                                          2279.2
                                                                                                                                         -30.73
                                                                                                                                                         79.28
                                                                 87.61
                                                                                               69.92
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                          13.76
                                                                                                                                                        155.93
      110.00
                                                  17.84
                                                                162.66
                                                                                                                          3608.2
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                                                     ST 1840.0 SR 295.7 SS 540.1
CRT .6988 CRS -.6576 CST -.9983
                                                                                       325.8 SG3 85.8
.6019 RTF .9844
    TOE 2.3956 TRAID.0964 TC3 -.2761 BAU .5947
   ROE .6483 RRA .2911 RC3 .0028 FAU-.00280
FDE .4171 FRA 1.9834 FC3 .0150 BSP 17324
BDE 2.4817 BRA10.1006 BC3 .2761 FSP -288
                                                                   RRT .6115 RRF
                                                                   SGB 5137.0 R23 -.0020 R13 .9843
SG1 5130.5 SG2 257.6 THA 2.23
                                                                                                                     LSA 1928.5 MSA 213.2 SSA
                                                                                                                                                            7.9
```

EL1 1851.7 EL2 210.2 ALF 6.49

```
ARRIVAL DATE AUG 3 1966
                                                                          FLIGHT TIME 216.00
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 602.100
  HELIOCENTRIC CONIC
   RL 147.11 LAL .00 LOL 98.09 VL 25.489 GAL 27.12 AZL 88.98 HCA 329.53 SHA 114.94 ECC .51945 INC 1.0194 V1 30.285 RP 107.87 LAP -.52 LOP 67.62 VP 36.137 GAP 31.12 AZP 89.12 TAL 145.77 TAP 115.30 RCA 55.23 APO 174.64 V2 35.130
                          1.66 GP -3.95 TAL 33.15 TAP 166.81 ETS 200.31 TAE 130.30 ETE 184.08 TAC 148.34 ETC 162.24 CLP 167.40
    RC 223.050 GL
   PLANETOCENTRIC CONIC
   C3 193.800 VHL 13.921 OLA 22.77 RAL 62.71 RAD 6571.1 VEL 17.752 PTH 2.99 VHP 19.399 DPA 14.05 RAP 54.20 ECC 4.1895
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2931.3
                                                                                                                                             -22.40
                                                                                               69.29 6 33 25
                                                                               329.75
                                                   -19.76
                                                                  132.90
                     5 34 34 3531.26
D 24 38 4569.36
        90.00
                                                                                                              1 40 47
8 6 29
                                                                                                                                                  8.08
                                                                                                                                3969.4
                                                                                  316.39
                                                                                                   64.01
                                                   11.66
        90.00
                                                                                                                                               -24.76
                                                                                                                                                              102.71
                                                                                                   69.40
                                                                                                                                2614.1
                    7 12 55 3214.12
1 28 58 4361.73
                                                                  110.54
                                                                                  330.72
                                                   -22.15
       100.00
                                                                                                              2 41 40
9 44 10
                                                                                                                                                10.27
                                                                                                                                3761.7
                                                                                                   63.30
                                                                  176.47
                                                                                  315.22
                                                   13.96
       100.00
                                                                                                                                                -30.49
                                                                                                                                2291.7
                     8 55 58 2891.71
2 2 24 4256.90
                                                    -27.97
                                                                    88.46
                                                                      9 44 10

9.51 312.21 61.32 3 13 21

MID-COURSE EXECUTION ACCURACY

SGT 5074 1 869 300
                                                                                  333.13
                                                                                                   69.49
       110.00
                                                                                                                                                15.48
                                                                                                                                3656.9
                                                                  165.51
       110.00
                                                    19.46
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 5074.1 SGR 309.5 SG3 84.4
RRT .6258 RRF .6176 RTF .9878
SGB 5083.6 R23 -.0026 R13 .9878
SGI 5077.8 SG2 241.2 THA 2.19
                                                                                                                            ST 1799.2 SR 277.3 SS 565.6
CRT .6851 CR5 -.6494 CST -.9988
    TDE 2.4645 TRA11.0974 TC3 -.1538 BAU .3985
    ROE .6656 RRA .3213 RC3 .0046 FAU-.00554
FDE .4292 FRA 2.1470 FC3 .0248 BSP 17255
                                                                                                                           LSA 1895.4 MSA 203.4 SSA 7.3
                                                                                                                            EL1 1809.3 EL2 200.9 ALF
    BOE 2.5528 BRAII.1020 BC3 .1538 FSP -284
                                                                                                                                        ARRIVAL DATE AUG 5 1966
                                                                           FLIGHT TIME 218.00
LAUNCH DATE DEC 3D 1965
                                                                           DISTANCE 599.676
    RL 147.11 LAL .00 LOL 98.09 VL 25.467 GAL 30.33 AZL 89.28 HCA 332.75 SHA 114.83 ECC .56026 INC .7152 V1 30.285 RP 107.84 LAP -.33 LOP 70.84 VP 36.133 GAP 33.92 AZP 89.36 TAL 145.99 TAP 118.74 RCA 50.49 APO 179.16 V2 35.141
  HELIOCENTRIC CONIC
                           1.03 GP -3.90 ZAL 32.79 ZAP 165.19 ETS 198.17 ZAE 129.41 ETE 183.96 ZAC 149.74 ETC 161.38 CLP 165.71
    RC 224.456 GL
   PLANETOCENTRIC CONIC
   C3 235.423 VHL 15.344 DLA 22.20 RAL 63.19 RAD 6571.4 VEL 18.888 PTH 3.07 VHP 21.068 DPA 14.53 RAP 55.69 ECC 4.8745 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 44 8 3532.85 -19.72 133.00 332.26 69.26 6 43 1 2932.8 -22.37 125.33 90.00 0 18 53 4625.68 13.32 196.20 318.49 64.78 1 35 59 4025.7 9.81 189.28
                                                                                                              8 15 6
2 37 50
                                                                                                                                                               103.04
                     7 21 27 3219.05
1 24 15 4414.71
                                                                                                                                 2619.0
                                                                                                                                                 -24.66
                                                                                  333.20
                                                                                                    69.28
                    7 21 27
                                                   -22.04
                                                                   110.86
       100.00
                                                                                                                                                               172.65
                                                                                                                                 3814.7
                                                                                                                                                 11.96
                                                     15.56
                                                                   179.59
                                                                                  317.39
                                                                                                    64.15
       100.00
                                                                                                                9 51 10
                                                                                                                                                                 80.91
                                                                                                              9 53 4...
3 11 9
                                                                                                                                2302.0
                                                                                                                                                -30.29
                     9 2 48 2902.01
1 59 24 4304.51
                                                   -27.72
                                                                    89.15
                                                                                  335.58
                                                                                                    69.14
                     9 2 48
       110.00
                                                                                                                               3704.5
                                                                                                                                               17.12
                                                                                                                                                               161.36
                                                                                                    62.38
                                                     20.99
                                                                   168.36
                                                                                  314.51
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RRT .6378 RRF .6308 RTF .9908
SGB 5024.2 R23 -.0031 R13 .9907
SGI 5019.2 SG2 224.7 THA 2.13
                                                                                                                            ST 1759.5 SR 258.5 SS 597.3
CRT .6736 CRS -.6431 CST -.9991
    TOE 2.5629 TRA12.2025 TC3 -.0468 BAU .1486
    ROE ,6830 RRA .3489 RC3 .0062 FAU-.00906
FOE .4477 FRA 2.3338 FC3 .0333 8SP 17145
BDE 2.6523 BRA12.2075 BC3 .0472 FSP -280
                                                                                                                            LSA 1866.1 MSA 192.3 SSA
                                                                                                                                                                    6.7
                                                                                                                            EL1 1768.2 EL2 190.1 ALF 5.72
                                                                                                                                       ARRIVAL DATE AUG 7 1966
                                                                           FLIGHT TIME 220.00
LAUNCH DATE DEC 30 1965
                                                                          DISTANCE 594.976
   RL 147.11 LAL .00 LOL 98.09 VL 25.451 GAL 34.07 AZL 89.66 MCA 335.97 SMA 114.75 ECC .60696 INC .3357 V1 30.285
RP 107.80 LAP -.14 LOP 74.07 VP 36.133 GAP 37.23 AZP 89.69 TAL 146.71 TAP 122.68 RCA 45.10 APO 184.39 V2 35.153
RC 225.834 GL .42 GP -3.85 ZAL 32.78 ZAP 163.32 ETS 196.23 ZAE 128.28 ETE 183.82 ZAC 130.90 ETC 160.56 CLP 163.76
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 289.056 VHL 17.002 DLA 21.60 RAL 63.31 RAD 6571.7 VEL 20.257 PTH 3.15 VHP 23.030 DPA 14.93 RAP 56.95 ECC 5.7571
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 52 21 3532.03 -19.74 132.95 334.26 69.27 6 51 13 2932.0 -22.38 125.28
                                                                                                              1 29 40
                                                                                                                                 4080.4
                                                                                                    65.63
                                                                   199.46
                                                                                  320.17
                     0 11 40
                                   4680.41
                                                     14.88
        90.00
                                                                                                              8 22 22
2 32 27
                                                                                                                                                -24.61
                                                                                                                                                              103.20
                     7 28 41 3221.39
                                                                                                    69.21
                                                                                                                                2621.4
                                                                   111.01
                                                                                  335.17
                                                   -21.98
       100.00
                                                                                                                                                13.56
                                                                                                    65.08
                                                                                                                                3866.3
                                                                                                                                                               175.64
                      1 18 1 4466.29
9 8 20 2909.61
1 54 51 4350.83
                                                                  182.68
                                                                                  319.13
                     1 18 1
                                                     17.06
       100.00
                                                                                                             9 56 50
3 7 22
                                                                                                                                2309.6
                                                                                                                                               -30.15
18.68
                                                                                                                                                                A1.45
                                                                                                    68.89
                                                                    89.67
                                                                                  337.51
                                                    -27.53
       110.00
                                                                                                                                                              164.05
                                                                                                                                3750.8
                                                                                                    63.50
                                                                   171.19
                                                                                  316.39
                                                     22.42
       110.00
                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RRT .6464 RRF .6404 RTF .9932
SGB 4957.3 R23 -.0036 R13 .9932
SGI 4952.9 SG2 208.2 THA 2.05
                                                                                                                            ST 1719.1 SR 239.6 SS 636.3
CRT .6645 CRS -.6385 CST -.9994
    TOE 2.6984 TRA13.4167 TC3 .0453 BAU .1775
    ROE .7008 RRA .3717 RC3 .0075 FAU-.01364
FDE .4740 FRA 2.5475 FC3 .0409 BSP 17002
                                                                                                                            LSA 1839.9 MSA 180.2 SSA 6.2
EL1 1726.6 EL2 178.3 ALF 5.35
    BOE 2.7879 BRAI3.4219 BC3 .0459 FSP -276
                                                                           FI IGHT TIME 70.00
                                                                                                                                        ARRIVAL DATE MAR 11 1966
LAUNCH DATE DEC 31 1965
                                                                           DISTANCE 211.459
    RL 147.10 LAL .00 LOL 99.11 VL 29.873 GAL -15.10 A7L 87.04 MCA 97.62 SMA 145.52 ECC .26073 INC 2.9555 V1 30.286 RP 107.90 LAP 2.93 LOP 196.74 VP 39.343 GAP -2.02 A7P 90.39 TAL 252.59 TAP 350.21 RCA 107.58 APO 183.46 V2 35.120 RC 71.643 GL 10.67 GP 11.44 7AL 164.85 7AP 69.50 ETS 353.51 ZAE 175.55 ETE 78.93 7AC 41.22 ETC 169.25 CLP -69.06
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 64.540 VHL 8.034 DLA -11.40 RAL 289.99 RAD 6569.2 VEL 13.634 PTH 2.49 VHP 4.576 DPA -9.77 RAP 308.14 ECC 2.0622
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 32 57 2143.21 -17.78 37.01 168.48 112.41 2 8 40 1543.2 -14.58 29.79 90.00 10 35 36 5510.91 28.31 255.67 177.24 89.64 12 7 27 4910.9 27.96 247.02
                                                                                                               3 20 12
                                                                                                                                 1299.3
                                                                                                                                                -15.89
                                                                                                                                                                 11.23
                                                                                   167.84
                                                                                                   113.35
                                   1899.34
                                                    -19.21
                                                                     18.44
       100.00
                     2 48 32
                                                                                                              13 29 52
                                                                                                                                 4630.0
                                                                                                                                                 29.40
                                                                                                                                                                226.21
                                                                                   177.22
                                                                                                    88.89
                                                                    234.98
       100.00
                    12 2 42
                                    5230.01
                                                    29.87
                                                                                                              4 12 32
14 46 54
                                                                                                                                                -19.33
                                                                                                                                                                356.25
                                                                                                   116.00
                                                                                                                                 1126.4
                   3 43 46 1726.40
13 23 58 4975.71
                                                                                   165.97
                                                                      3.45
       110.00
                                                    -23.D1
                                                                                                                                 4375.7
                                                                                                                                                 33.24
                                                                                                                                                               206.34
                                                                                   177.03
                                                                                                    86.81
                                                                    215.49
                                                     34.05
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 172.9 SR 382.4 55 162.1
CRT .1623 CRS .5659 CST -.7074
LSA 394.9 MSA 214.7 55A 19.3
                                                                       SGT 563.0 SGR 417.1 SG3 227.4
RRT -.2935 RRF -.4271 RTF .5686
SGB 700.7 R23 .1188 R13 -.6191
     TDE -. 0657 TRA -. 7625 TC3 -. 0520 BAU . 0689
     ROE - .5329 RRA .1947 RC3 .0606 FAU .10876
     FOE .2709 FRA-1.6247 FC3-1.4590 BSP 961
                                                                                                                             EL1 383.7 EL2 170.1 ALF 84.77
```

BOE .5369 BRA .7870 BC3 .0798 FSP

SG1 587.2 SG2 382.3 THA 158.02

ARRIVAL DATE MAR 13 1966

LAUNCH DATE DEC 31 1965

DISTANCE 217.959 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 29.846 GAL -14.93 A7L 87.12 MCA 100.84 SMA 145.26 ECC .25800 INC 2.8798 V1 30.286 RP 107.94 LAP 2.83 LOP 199.97 VP 39.311 GAP -1.39 A7P 90.54 TAL 252.35 TAP 353.19 RCA 107.79 APO 182.74 V2 35.108 RC 73.845 GL 10.51 GP 11.90 ZAL 164.85 ZAP 74.61 ETS 354.43 ZAE 174.27 ETE 115.60 ZAC 39.24 ETC 169.76 CLP -74.26 PLANETOCENTRIC CONIC C3 63.D31 VHL 7.939 CLA -11.54 RAL 290.15 RAO 6569.2 VEL 13.579 PTH 2.48 VHP 4.441 OPA -9.72 RAP 3D6.12 ECC 2.0373 LNCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -14.30 29.19 1533.1 168.25 112.61 2 10 14 90.00 1 34 41 2133.10 -17.51 36.39 89.59 12 6 58 113.56 3 21 41 88.83 13 29 27 116.24 4 13 51 86.72 14 46 39 246.92 4909.6 27.96 90.00 10 35 8 5509.62 28.31 255.57 177.03 10.64 1289.5 -15.60 167.61 100.00 2 50 11 1889.48 -18.94 17.83 4628.5 29.39 226.10 12 2 19 5228.47 3 45 14 1717.09 13 23 45 4973.64 177.00 29.87 234.87 100.00 1117.1 -19.02 355.70 165.73 -22.73 2.87 110.00 4373.6 33.21 206.18 176.81 34.04 215.33 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 186.4 SR 380.8 SS 164.9 CRT .0953 CRS .5589 CST -.7589 SGT 626.8 SGR 422.7 SG3 241.9 RRT -.3527 RRF -.4631 RTF .6422 TOE -.0549 TRA -.8242 TC3 -.0948 BAU .1004 RDE -.5240 RRA .2039 RC3 .0721 FAU .11452 SGB 756.0 R23 .1108 R13 -.6812 SG1 654.1 SG2 379.0 THA 159.44 LSA 393.3 MSA 227.8 55A 19.3 FDE .2723 FRA-1.6960 FC3-1.5729 BSP 1224 BDE .5269 BRA .8491 BC3 .1192 FSP -726 EL1 381.4 EL2 185.3 ALF 86.50 ARRIVAL DATE MAR 15 1966 FLIGHT TIME 74.00 LAUNCH DATE DEC 31 1965 DISTANCE 224.411 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 29.811 GAL -14.77 AZL 87.20 MCA 104.06 SMA 144.94 ECC .25534 INC 2.8026 V1 30.286 RP 107.98 LAP 2.72 LOP 203.19 VP 39.274 GAP -.80 AZP 90.68 TAL 251.99 TAP 356.05 RCA 107.93 APO 181.95 V2 35.095 10.35 GP 12.33 TAL 164.82 TAP 79.68 ETS 355.38 TAE 171.67 ETE 134.68 TAC 37.29 ETC 170.30 CLP -79.43 RC 76.070 GL PLANETOCENTRIC CONIC 2.47 VHP 4.337 DPA -9.66 RAP 304.14 ECC 2.0130 C3 61.550 VHL 7.845 DLA -11.67 RAL 290.37 RAD 6569.1 VEL 13.524 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZNTH LNCH TIME L-I TIME 1 36 42 2122.78 2 12 5 1522.8 -14.00 28.57 90.00 -17.24 35.75 168.08 112.82 89.55 12 6 41 27.95 246.84 176.87 4908.4 10 34 53 5508.44 28.31 255.49 90.00 113.78 3 23 27 88.77 13 29 15 116.49 4 15 27 86.62 14 46 37 2 52 8 1879.42 12 2 8 5227.03 3 47 0 1707.59 13 23 45 4971.63 1279.4 -15.30 10.04 -18.67 17.21 167.43 100.00 176.84 4627.0 29.38 225.99 29.87 234.76 100.00 -18.71 355.15 165.54 1107.6 -22.44 2.28 110.00 4371.6 33.19 206.03 34.04 215.17 176.65 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS \$6T 701.3 \$GR 427.8 \$G3 254.3 RRT -.4077 RRF -.4976 RTF .7008 \$GB 821.5 R23 .1053 R13 -.7307 ST 202.0 SR 378.0 SS 166.5 CRT .0358 CRS .5506 CST -.8020 TOE -.0446 TRA -.8904 TC3 -.1423 BAU .1360 RDE -.5134 RRA .2123 RC3 .0839 FAU .11923 FDE .2688 FRA-1.7470 FC3-1.6770 BSP 1517 BDE .5153 BRA .9153 BC3 .1652 FSP -773 LSA 390.7 MSA 241.5 SSA 19.4 SG1 731.0 SG2 374.7 THA 160.81 EL1 378.1 EL2 201.8 ALF 88.47 ARRIVAL DATE MAR 17 1966 FLIGHT TIME 76.00 LAUNCH DATE DEC 31 1965 DISTANCE 230.817 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 29.770 GAL -14.61 AZL 87.28 MCA 107.28 SMA 144.55 ECC .25274 INC 2.7232 VI 30.286
RP 108.02 LAP 2.60 LOP 206.41 VP 39.231 GAP -.24 AZP 90.81 TAL 251.52 TAP 358.79 RCA 108.02 APO 181.08 V2 35.082
RC 78.316 GL 10.17 GP 12.74 ZAL 164.75 ZAP 84.66 ETS 356.37 ZAE 168.64 ETE 144.36 ZAC 35.43 ETC 170.87 CLP -84.52 PLANETOCENTRIC CONIC C3 60.086 VHL 7.752 DLA -11.81 RAL 290.65 RAD 6569.1 VEL 13.470 PTH 2.46 VMP 4.262 DPA -9.59 RAP 302.24 ECC 1.9889 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 2 LONG 113.02 -13.70 27.94 167.96 2 14 13 1512.2 90.00 1 39 1 2112.16 10 34 49 5507.37 -16.96 35.10 89.51 12 6 36 176.77 4907.4 27.94 246.76 28.31 255.41 90.00 10 34 49 3 25 30 -14.99 9.43 167.31 113.99 1269.1 16.58 100.00 2 54 21 1869.08 -18.38 88.72 13 29 15 29.37 225.89 176.74 4625.7 100.00 12 2 9 5225.68 29.87 234.66 116.73 4 17 20 1097.8 -18.38 354.58 3 49 2 1697.84 13 23 58 4969.68 -22.15 1.68 165.41 110.00 116.73 4 17 20 86.54 14 46 47 4369.7 33.17 205.88 215.02 176.54 110.00 34.03 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 785.5 SGR 432.1 SG3 264.3 RRT -.4573 RRF -.5501 RTF .7462 SGB 896.5 R23 .1023 R13 -.7691 SG1 816.8 SG2 369.6 THA 162.10 ST 219.3 SR 373.7 SS 167.0 CRT -.0141 CRS .5403 CST -.8371 TOE -.0354 TRA -.9602 TC3 -.1941 BAU .1739 ROE -.5011 RRA .2196 RC3 .0958 FAU .12276 FOE .2600 FRA-1.7763 FC3-1.7687 BSP 1838 BOE .5023 BRA .9850 BC3 .2165 FSP -815 LSA 387.3 MSA 255.5 SSA 19.5 EL1 373.7 EL2 219.2 ALF 90.72 ARRIVAL DATE MAR 19 1966 FLIGHT TIME 78.00 LAUNCH DATE DEC 31 1965 DISTANCE 237.177 HELIOCENTRIC CONIC .00 LOL 99.11 VL 29.723 GAL -14.44 AZL 87.36 MCA 110.49 SMA 144.11 ECC .25019 INC 2.6410 V1 30.286 2.47 LOP 209.62 VP 39.184 GAP .29 AZP 90.93 TAL 250.94 TAP 1.43 RCA 108.05 APO 180.16 V2 35.069 9.97 GP 13.13 ZAL 164.65 ZAP 89.50 ETS 357.39 ZAE 165.51 ETE 149.95 ZAC 35.69 ETC 171.47 CLP -89.49 RL 147.10 LAL RP 108.06 LAP RC 80.581 GL PLANETOCENTRIC CONIC C3 58.632 VHL 7.657 OLA -11.96 RAL 290.99 RAO 6569.1 VEL 13.416 PTH 2.45 VHP 4.213 DPA -9.50 RAP 300.46 ECC 1.9649 UNCH AZMTH LNCH TIME L-I TIME 90.00 1 41 37 2101.14 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 167.89 113.23 2 16 38 1501.1 -13.38 27.29 -16.66 89.47 12 6 40 4906.4 27.94 246.69 5506.43 28.31 255.34 176.72 90.00 10 34 54 8.80 114.21 3 27 50 1258.4 -14.66 100.00 2 56 52 1858.36 -18.09 157.24 88.67 13 29 24 4624.4 29.36 225.80 100.00 12 2 20 5224.44 29.87 234.57 176.69 116.98 4 19 28 86.45 14 47 8 353.99 3 51 20 1687.74 -21.84 165.32 1087.7 -18.04 110.00 110.00 13 24 20 4967.83 34.02 214.87 176.48 4367.8 33.15 205.74 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 238.1 SR 368.5 SS 166.5 CRT -.0535 CRS .5363 CST -.8601 LSA 383.8 MSA 269.3 SSA 19.5 TOE -.0278 TRA-1.0324 TC3 -.2498 BAU .2131 SGT 877.7 SGR 435.5 SG3 271.1 RRT -.5003 RRF -.5608 RTF .7804 SGB 979.8 R23 .1025 R13 -.7983 ROE -.4875 RRA .2252 RC3 .1072 FAU .12478 FOE .2524 FRA-1.7780 FC3-1.8425 BSP 2178 BOE .4883 BRA 1.0566 BC3 .2718 FSP -837 SG1 909.8 SG2 363.8 THA 163.31 FLT 368.8 FLZ 237.5 ALF 93.39

FLIGHT TIME 72.00

```
FLIGHT TIME 80.00
                                                                                                                                 ARRIVAL DATE MAR 21 1966
LAUNCH DATE DEC 31 1965
  HELIOCENTRIC CONTC
                                                                       DISTANCE 243.494
   RL 147.10 LAL .00 LOL 99.11 VL 29.670 GAL -14.27 A7L 87.44 HCA 113.70 SMA 143.62 ECC .24767 INC 2.5553 V1 30.286 RP 108.10 LAP 2.34 LOP 212.83 VP 39.132 GAP .79 A7P 91.03 TAL 250.28 TAP 3.98 RCA 108.05 APO 179.19 V2 35.056 RC 82.862 GL 9.76 GP 13.50 7AL 164.51 ZAP 94.17 ETS 358.44 ZAE 162.41 ETE 153.55 7AC 32.12 ETC 172.10 CLP -94.29
   PLANETOCENTRIC CONIC
    C3 57.181 VHL 7.562 DLA -12.12 RAL 291.38 RAD 6569.0 VEL 13.362 PTH 2.44 VHP 4.188 CPA
                                                                                                                             -9.37 RAP 298.86 ECC 1.9411
    LNCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        -13.04
                                                                                                                        1489.6
        90.00
                     1 44 51
                                 2089.62
                                                  -16.35
                                                                33.72
                                                                             167.87
                                                                                             113.44 2 19 20
                                                                                              89.45 12 6 52
114.44 3 30 27
                                                                                                                           4905.7
                                                                                                                                         27.94
                                                                                                                                                        246.64
                   10 35 6 5505.69
                                                                255.28
                                                                              176.71
                                                  28.31
                                                                                                                          1247.2
                                                                                                                                         -14.33
                                                                                                                                                          8.14
       100.00
                     2 59 40
                                 1847.16
                                                  -17.77
                                                                 15.24
                                                                              167.21
                                                                                              114.44
                                                                                             88.63 13 29 41
117.23 4 21 53
86.37 14 47 37
                   12 2 38 5223.39
                                                                                                                          4623.4
                                                                                                                                         29.35
                                                                                                                                                        225.72
                                                  29.86
                                                                234.49
                                                                            176.68
                  3 53 56 1677.21
13 24 51 4966.10
                                                                                                                         1077.2
                                                                                                                                                        353.38
                                                  -21.51
                                                                   .42
                                                                              165.29
                                                                                                                                        -17.69
      110.00
                                                                                                                          4366.1
                                                                                                                                                        205.61
                                                                                                                                           33.14
                                                                214.74
                                                                             176.47
      110.00
                                                   34.01
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SCT 976.0 SGR 438.0 SG3 275.9

RRT -.5393 RRF -.5898 RTF .8063

SGB 1069.8 R23 .1037 R13 -.8205

SG1 1008.4 SG2 357.0 THA 164.39
                                                                                                                   ST 258.0 SR 361.6 SS 164.8
CRT -. 0840 CRS .5234 CST -. 8819
    TOE -.0221 TRA-1.1058 TC3 -.3086 BAU .2528
    RDE -.4719 RRA .2299 RC3 .1188 FAU .12581
                                                                                                                      LSA 37974 HSA 283.1 55A
    FOE .2356 FRA-1.7639 FC3-1.9048 BSP 2534
BDE .4724 BRA 1.1294 BC3 .3307 FSP -861
                                                                                                                                                           19.6
                                                                                                                      EL1 362.9 EL2 256.2 ALF 96.86
                                                                                                                                  ARRIVAL DATE MAR 23 1966
                                                                        FLIGHT TIME 82.00
                                                                       DISTANCE 249.771
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 29.613 GAL -14.10 A7L 87.53 HCA 116.91 SMA 143.09 ECC .24520 INC 2.4654 VI 30.286 RP 108.14 LAP 2.20 LOP 216.04 VP 39.077 GAP 1.27 A7P 91.12 TAL 249.53 TAP 6.44 RCA 108.01 APO 178.18 V2 35.043 RC 85.157 GL 9.53 GP 13.86 ZAL 164.34 ZAP 98.63 ETS 359.52 ZAE 159.41 ETE 156.01 ZAC 30.74 ETC 172.77 CLP -98.89
  PLANETOCENTRIC CONIC
    C3 55.730 VHL 7.465 DLA -12.30 RAL 291.82 RAD 6569.0 VEL 13.307 PTH 2.43 VMP 4.183 DPA -9.21 RAP 297.45 ECC 1.9172 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 47 44 2077.46
10 35 24 5505.21
                                                                             167.88
                                                  -16.02
                                                                 32.98
                                                                                             113.66
                                                                                                           2 22 21
                                                                                                                          1477.5
                                                                                                                                        -12.69
        90.00
                                                                                             89.43 12 7 9
114.67 3 33 22
88.60 13 30 5
117.49 4 24 34
86.30 14 48 14
                                                                              176.75
                                                                                                                           4905.2
                                                                                                                                           27.93
                                                                255.25
        90.00
                                                  28.31
                   3 2 46 1835.34
12 3 2 5222.57
                                                                              167.22
                                                                                                                           1235.3
                                                                                                                                         -13.97
                                                                 14.52
      100.00
                                                  -17.44
                                                                234.43
                                                                                                                           4622.6
                                                                                                                                          29.35
                                                                                                                                                        225.66
                                                  29.86
                                                                             176.72
      100.00
                   3 56 48 1666.13
13 25 30 4964.54
                                                                359.75
                                                                              165.29
                                                                                                                           1066.1
                                                                                                                                         -17.31
                                                                                                                                                        352.74
                                                  -21.15
      110.00
                                                                                                                           4364.5
                                                                                                                                          33.12
                                                                                                                                                        205.49
                                                                              176.50
                                                                214.62
      110.00
                                                  34.01
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 278.7 SR 353.6 SS 162.3
CRT -.1058 CRS .5159 CST -.8955
                                                                    SGT 1078.7 SGR 439.5 SG3 277.8
    TOE -.0183 TRA-1.1792 TC3 -.3701 BAU .2923
                                                                    RRT -.5732 RRF -.6171 RTF .8252
SGB 1164.8 R23 .1078 R13 -.8368
    ROE -.4551 RRA .2328 RC3 .1300 FAU .12547
FOE .2205 FRA-1.7260 FC3-1.9491 BSP 2896
ROF .4444 RRA 1.2019 BC3 .3923 FSP -866
                                                                                                                      LSA 376.1 MSA 295.4 SSA 19.6
                                                                    SG1 1111.0 SG2 349.6 THA 165.38
                                                                                                                      EL1 356.7 EL2 274.8 ALF 101.88
    BOE .4555 BRA 1.2019 BC3 .3923 FSP
                                                                       FLIGHT TIME 84.00
                                                                                                                                 ARRIVAL DATE MAR 25 1966
LAUNCH DATE DEC 31 1965
                                                                       01STANCE 256.008
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 29.551 GAL -13.93 A7L 87.63 HCA 120.11 SMA 142.53 ECC .24276 INC 2.3704 VI 30.286 RP 108.18 LAP 2.05 LOP 219.25 VP 39.018 GAP 1.72 A7P 91.19 TAL 248.71 TAP 8.82 RCA 107.93 APO 177.13 V2 35.030 RC 87.465 GL 9.27 GP 14.23 7AL 164.13 7AP 102.85 ETS .64 7AE 156.54 ETE 157.76 7AC 29.58 ETC 173.50 CLP-103.27
   PLANETOCENTRIC CONIC
    C3 54.276 VHL 7.367 DLA -12.49 RAL 292.31 RAD 6569.0 VEL 13.253 PTH 2.42 VHP 4.196 DPA -9.00 RAP 296.26 ECC 1.8933
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH' INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            113.89 2 25 42
89.42 12 7 29
                                                                            167.94
                  1 51 18
10 35 44
                                                                                                                        1464.5
                                                                                                                                                        25.13
                                                                                                          2 25 42
                                                                                                                                        -12.31
        90.00
                                                                32.20
                                 2064.51
                                                 -15.67
                                                                                                                          4905.1
                                                                                                                                         27.93
                                                                                                                                                       246.60
                                                                              176.83
                                                                255.24
        90.00
                                 5505.13
                                                  28.31
                                                                                                                          1222.8
                                                                                                                                         -13.58
                                                                                                                                                         6.71
                                                                                             114.91
                                                                                                           3 36 36
                                                                              167.27
       100.00
                    3 6 13
                                 1822.78
                                                 -17.08
                                                                 13.76
                                                                                             114.91 3 36 36
88.58 13 30 32
117.76 4 27 34
86.24 14 48 56
                                                                                                                                        29.35
                                                                                                                                                       225.63
                                                                              176.80
                                                                                                                          4622.1
                   12 3 30
                                  5222.10
                                                  29.86
                                                                234.39
       100.00
                                                                                                                                                       352.06
                   4 0 0 1654.37
13 26 13 4963.27
                                                                                                                          1054.4
                                                                                                                                         -16.91
                                              -20.79
                                                                359.04
                                                                              165.33
       110.00
                                                                                                                         4363.3
                                                                                                                                        33.11
                                                                                                                                                       205.39
                                                               214.52
                                                                              176.58
                                                  34.00
       110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 1184.9 SGR 440.0 SG3 277.9

RRT -.6044 RRF -.6435 RTF .8394

SGB 1263.9 R23 .1130 R13 -.8492

SGI 1217.0 SG2 341.3 THA 166.25
                                                                                                                     ST 300.1 SR 344.1 55 158.8
CRT -.1191 CRS .4989 CST -.9089
    TOE -.0174 TRA-1.2520 TC3 -.4341 BAU .3313
    ROE -.4365 RRA .2347 RC3 .1414 FAU .12432
                                                                                                                      LSA 374.2 MSA 305.4 SSA 19.7
    FOE .1976 FRA-1.6767 FC3-1.9829 BSP 3270
BOE .4368 BRA 1.2738 BC3 .4566 FSP -873
                                                                                                                      ELI 350.7 EL2 292.3 ALF 110.47
                                                                                                                                 ARRIVAL DATE MAR 27 1966
                                                                        FLIGHT TIME 86.00
LAUNCH DATE DEC 31 1965
                                                                       DISTANCE 262.208
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 29.486 GAL -13.75 AZL 87.73 HCA 123.32 SMA 141.95 ECC .24035 INC 2.2690 VI 30.286
RP 108.22 LAP 1.90 LOP 222.45 VP 38.957 GAP 2.15 AZP 91.25 TAL 247.81 TAP 11.12 RCA 107.83 APO 176.06 V2 35.016
RC 89.783 GL 8.98 GP 14.62 ZAL 163.89 ZAP 106.83 ETS 1.81 ZAE 153.84 ETE 159.02 ZAC 28.64 ETC 174.28 CLP-107.41
   PLANETOCENTRIC CONIC
    C3 52.818 VHL 7.268 DLA -12.70 RAL 292.85 RAD 6568.9 VEL 13.198 PTH 2.41 VHP 4.223 DPA -8.74 RAP 295.29 ECC 1.8692
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            1450.6
                                                                                                                                        -11.89
                                                                            168.03
                                                                                                                                                         24.32
                                                  -15.28
                    1 55 15 2050.59
                                                                 31.36
        90.00
                                                                                                                                                        246.63
                                                                                                                           4905.6
                                                                                                                                          27.93
                                                  28.31
                                                                255.28
                                                                              176.95
                  10 36 5
3 10 2
                                  5505.57
        90.00
                                                                                                                                                         5.93
                                                                                                                           1209.3
                                                                                                                                         -13.16
                                 1809.28
                                                  -16.69
                                                                 12.94
                                                                             167.36
       100.00
                                                                            176.92
165.40
                                                                                                                           4622.1
                                                                                                                                         29.35
                                                                                                                                                        225.63
                  12 3 58 5222.11
4 3 31 1641.78
                                                  29.86
                                                                234.40
       100.00
                                                  -20.39
                                                                358.28
                                                                                                                           1041.8
                                                                                                                                        -16.48
                                                                                                                                                        351.34
       110.00
                  13 26 59 4962.37
                                                                214.45
                                                                              176.70
                                                                                                                           4362.4
                                                                                                                                          33.10
                                                                                                                                                        205.33
                                                  34.00
      110.00
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SCT 1293.5 SCR 439.8 SC3 276.2 ST 321.9 SR 333.2 S5 154.6 RRT -.6532 RRF -.6693 RTF .8500 CRT -.1247 CRS .4776 CST -.9201 SCR 1366.3 R23 .1201 R13 -.8583 LSA 376.7 MSA 310.4 55A 19.7 SC1 1325.2 SC2 332.2 THA 167.02 EL1 348.2 EL2 305.7 ALF 127.26
    TOE -.0196 TRA-1.3233 TC3 -.5006 BAU .3696
    RDE -.4164 RRA .2354 RC3 .1530 FAU .12236
    BOE .4168 BRA 1.3441 BC3 .5234 FSP
```

ARRIVAL DATE HAR 29 1966

LAUNCH DATE DEC 31 1965

```
DISTANCE 268.373
   RL 147.10 LAL .00 LOL 99.11 VL 29.418 CAL -13.57 AZL 87.84 MCA 126.52 SMA 141.34 ECC .23799 INC 2.1599 VI 30.286 RP 108.26 LAP 1.74 LOP 225.65 VP 38.893 CAP 2.56 AZP 91.29 TAL 246.84 TAP 13.36 RCA 107.70 APO 174.98 V2 35.003 RC 92.112 GL 8.65 GP 15.03 ZAL 163.62 ZAP 110.56 ETS 3.03 ZAE 151.30 ETE 159.92 ZAC 27.94 ETC 175.15 CLP-111.32
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
    C3 51.352 VHL 7.166 DLA -12.94 RAL 293.43 RAD 6568.9 VEL 13.142 PTH 2.40 VHP 4.265 DPA -8.41 RAP 294.55 ECC 1.8451
    ENCH AZENTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZENTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             1435.5
                                                                                                                                           -11.44
                   1 59 38 2035.45
10 36 22 5506.74
                                                   -14.86
                                                                  30.45
                                                                              168.16
                                                                                             114.39
                                                                                                             2 33 33
       90.00
                                                                                                                                                            246.72
                                                                                                                                             27.94
                                                                                177.11
                                                                                                 89.48 12 8 9
                                                                                                                              4906.7
                                                  28.31
                                                                 255.36
        90.00
                                                                                                                              1194.6
                                                                                                                                             -12.71
                                                                   12.07
                                                                                167.48
                                                                                                115.43
                                                                                                             3 44 11
                   3 14 16 1794.64
12 4 25 5222.78
                                                  -16.26
      100.00
                                                                                                 88.61 13 31 28
118.35 4 34 34
86.18 14 50 27
                                                                                                                                                            225.68
                                                                                                                              4622.8
                                                                                                                                             29.35
                                                                                177.08
                                                                 234.45
      100.00
                                                  29.86
                                                                                                                                             -16.01
                                                                                                                                                            350.57
                                                                                               118.35
                                                                                                                              1028.2
                                                  -19.95
                                                                 357.47
                                                                                165.51
      110.00
                    4 7 25 1628.18
13 27 45 4962.01
                                                                                                                                              33.09
                                                                                                                                                            205.30
                                                                 214.42
                                                                                                                              4362.0
                                                                                176.86
                                                  34.00
      110.00
                   13 27 45
                                                                                                                         ORBIT DETERMINATION ACCURACY

ST 343.9 SR 321.4 S5 149.8

CRT -.1245 CRS .4601 CST -.9267

LSA 385.1 MSA 308.7 SSA 19.8

EL1 355.6 EL2 308.4 ALF 149.27
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 1402.9 SGR 438.8 SG3 272.5
RRT -.6590 RRF -.6947 RTF .8573
SGB 1470.0 R23 .1303 R13 -.8647
SG1 1434.1 SG2 322.9 THA 167.72
    TDE -.0245 TRA-1.3916 TC3 -.5688 BAU .4065
    RDE -.3954 RRA .2346 RC3 .1645 FAU .11950
   FDE .1489 FRA-1.5394 FC3-2.0147 BSP 4021
BDE .3961 BRA 1.4113 BC3 .5921 FSP -859
                                                                                                                                     ARRIVAL DATE MAR 31 1966
                                                                          FLIGHT TIME 90.00
LAUNCH DATE DEC 31 1965
                                                                         DISTANCE 274.505
  HELIOCENTRIC CONIC
                         .00 LOL 99.11 VL 29.347 GAL -13.38 AZL 87.96 MCA 129.72 SMA 140.71 ECC .23566 INC 2.0415 V1 30.286
1.57 LOP 228.85 VP 38.828 GAP 2.94 AZP 91.31 TAL 245.81 TAP 15.53 RCA 107.55 APO 173.87 V2 34.990
8.28 GP 15.50 ZAL 163.31 ZAP 114.03 ETS 4.33 ZAE 148.94 ETE 160.52 ZAC 27.47 ETC 176.11 CLP-115.00
    RL 147.10 LAL
    RP 108.31 LAP
    RC 94.449 GL
  PLANETOCENTRIC CONIC
    C3 49.881 VHL 7.063 DLA -13.21 RAL 294.07 RAD 6568.8 VEL 13.086 PTH 2.39 VMP 4.317 DPA -8.01 RAP 294.03 ECC 1.8209
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                              168.32
                                                                                                             2 38 11
                                                                                                                             1418.8
                                                                                                                                             -10.94
                                                                                                                                                              22.47
                                                   -14.39
                                                                                               114.65
                     2 4 32 2018.82
                                                                  29.45
       90.00
                                                                                                                                              27.95
                                                                                                                               4908.9
                                                                                 177.32
                                                                                                 89.56
                                                                                                             12 8 21
                   10 36 32
                                   5508.90
                                                   28.31
                                                                  255.52
        90.00
                                                                                                 115.71 3 48 38
88.67 13 31 50
                                                                                                             3 48 38
                                                                                                                                                               4.15
                                                                                                                              1178.6
                                                                                                                                              -12.20
                                                   -15.79
                                                                   11.11
                                                                                 167.64
                     3 19 D
                                   1778.58
      100.00
                                                                                                                                                             225.80
                                                                                                                                              29.36
                                                                                                                               4624.4
                                                                                177.29
       100.00
                   12 4 46
                                   5224.37
                                                   29.87
                                                                  234.56
                                                                                                                                                             349.73
                                                                                                 118.67 4 38 39
86.20 14 51 11
                                                                                                                              1013.3
                                                                                                                                             -15.49
                                 1613.33
                                                                                165.65
                    4 11 45
                                                   -19.47
                                                                  356.59
       110.00
                                                                                                                                               33.10
                                                                                                                              4362.4
                                   4962.39
                                                   34.00
                                                                 214.45
                                                                                177.07
                   13 28 29
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 366.3 SR 308.0 SS 144.4
CRT -.1169 CRS .4287 CST -.9354
LSA 398.2 MSA 301.6 SSA 19.8
                                                                      SGT 1513.8 SGR 437.6 SG3 268.0
RRT -.6841 RRF -.7203 RTF .8628
SGB 1575.8 R23 .1421 R13 -.8695
    TOE -.0336 TRA-1.4573 TC3 -.6395 BAU .4425
    ROE -.3727 RRA .2330 RC3 .1768 FAU .11632
FOE .1192 FRA-1.4605 FC3-2.0188 BSP 4405
BOE .3742 BRA 1.4759 BC3 .6635 FSP -849
                                                                                                                          EL1 371.8 EL2 301.4 ALF 163.08
                                                                      SG1 1544.4 SG2 312.9 THA 168.33
                                                                                                                                     ARRIVAL DATE APR 2 1966
                                                                         FLIGHT TIME 92.00
LAUNCH DATE DEC 31 1965
                                                                         DISTANCE 280.606
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 29.273 GAL -13.19 AZL 88.09 HCA 132.91 SHA 140.07 ECC .23339 INC 1.9117 V1 30.286 RP 108.35 LAP 1.40 LOP 232.04 VP 38.761 GAP 3.31 AZP 91.30 TAL 244.72 TAP 17.64 RCA 107.38 APO 172.77 V2 34.977 RC 96.794 GL 7.85 GP 16.02 ZAL 162.98 ZAP 117.25 ETS 5.72 ZAE 146.74 ETE 160.88 ZAC 27.22 ETC 177.18 CLP-118.45
   PLANETOCENTRIC CONIC
    C3 48.404 VHL 6.957 DLA -13.53 RAL 294.75 RAD 6568.8 VEL 13.029 PTH 2.38 VHP 4.379 DPA -7.51 RAP 293.73 ECC 1.7966
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                             -10.38
                                                                                                                              1400.3
                                                                  28.35 168.52
                                                                                             114.94
89.69
                                                                                                             2 43 23
                                                   -13.86
                     2 10 2 2000.31
        90.00
                                                                                                                                             27.97
                                                                                                                              4912.4
                                                                                                            12 8 21
                                                   28.32
                                                                  255.77
                                                                                 177.38
                   10 36 29
                                   5512.39
                                 5512.39
1760.75
        90.00
                                                                                                             3 53 38
                                                                                                                                                              3.13
                                                                                                                              1160.8
                                                                                                                                              -11.64
                                                  -15.26
                                                                   10.05
                                                                                167.83
                                                                                                116.02 3 53 38
88.78 13 32 2
                     3 24 17
       100.00
                                                                                                                              4627.2
                                                                                                                                             29.38
                                                                                                                                                             226.00
                                                                                 177.55
                                                   29.87
                                                                  234.77
                                   5227.18
                                                                                                119.01 4 40 1
12.04 14 51 50
                   12 4 55
       100.00
                                                                                                                                             -14.92
                                                                                                                                                             348.80
                                 1596.92
                                                                                                                               996.9
                                                                                 165.83
                                                  -18.93
                                                                  355.62
                    4 16 36
       110.00
                                                                                                                              4363.8
                                                                                                                                             33.11
                                                                                                                                                            205.43
                                                                                 177.34
                                                  34.00
                                                                 214.56
      110.00
                   13 29 6
                                   4963.78
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 1625.4 SGR 436.4 SG3 262.7
RRT -.7081 RRF -.7463 RTF ..8666
SGB 1683.0 R23 .1565 R13 -.8728
SG1 1655.6 SG2 302.6 THA 168.86
                                                                                                                          ST 389.2 SR 293.2 SS 138.8
CRT -.1027 CRS .3675 CST -.9442
    TDE -. 0470 TRA-1.5194 TC3 -. 7129 BAU .4774
    RDE -.3488 RRA .2304 RC3 .1900 FAU .11277
FDE .0868 FRA-1.3769 FC3-2.0169 BSP 4794
BDE .3519 BRA 1.5368 BC3 .7378 FSP -837
                                                                                                                          LSA 414.7 MSA 290.5 SSA 19.9
                                                                                                                           EL1 391.8 EL2 289.7 ALF 170.15
                                                                                                                                      ARRIVAL DATE APR 4 1966
                                                                          FLIGHT TIME 94.00
LAUNCH DATE DEC 31 1965
                                                                          DISTANCE 286.678
   HELIOCENTRIC CONIC
                           .00 LOL 99.11 VL 29.198 GAL -12.99 AZL 88.23 HCA 136.11 SMA 139.43 ECC .23116 INC 1.7679 V1 30.286 1.23 LOP 235.23 VP 38.692 GAP 3.66 AZP 91.27 TAL 243.58 TAP 19.69 RCA 107.20 APO 171.65 V2 34.964 7.36 GP 16.64 ZAL 162.61 ZAP 120.21 ETS 7.23 ZAE 144.69 ETE 161.02 ZAC 27.19 ETC 178.37 CLP-121.68
    RL 147.10 LAL
RP 108.39 LAP
    RC 99.145 GL
   PLANETOCENTRIC CONIC
                                                                                                    2.37 VHP 4.451 DPA -6.91 RAP 293.62 ECC 1.7722
    C3 46.921 VHL 6.850 DLA -13.90 RAL 295.49 RAD 6568.8 VEL 12.972 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 16 18 1979.44 -13.26 27.11 168.77 115.25 2 49 17 1379.4 -9.75 20.19 90.00 10 36 7 5517.68 28.32 256.16 177.89 89.89 12 8 4 4917.7 28.00 247.51
                   3 30 17 1740.71
12 4 48 5231.65
4 22 3 1578.58
13 29 32 4966.54
                                                                                                                               1140.7
                                                                                                                                              -11.00
                                                                                                                                                               1.98
                                                                                 168.07
                                                                                                 116.34
                                                   -14.66
                                                                    8.85
                                                                                                                               4631.7
                                                                                                                                               29.41
                                                                                                                                                             226.33
                                                                                 177.87
                                                                                                  88.95
                                                                                                             13 32 0
                                                                  235.10
                                                   29.88
       100.00
                                                                                                 119.37
                                                                                                             4 48 22
                                                                                                                               978.6
                                                                                                                                              -14.27
                                                                                                                                                             347.78
                                                   -18.32
                                                                  354.55
                                                                                 166.05
       110.00
                                                                                                  86.39
                                                                                                             14 52 18
                                                                                                                               4366.5
                                                                                                                                               33.14
                                                                                                                                                             205.64
                                                                                 177.68
                                                                  214.77
                                                   34.02
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 412.3 SR 277.5 55 132.9

CRT -.0834 CRS .3443 CST -.9510

LSA 433.1 HSA 276.8 SSA 20.0
                                                                      SGT 1736.0 SGR 435.3 SG3 256.0
RRT -.7302 RRF -.7723 RTF .8688
    TOE -.0642 TRA-1.5762 TC3 -.7882 BAU .5107
     ROE -.3241 RRA .2262 RC3 .2038 FAU .10872
                                                                      SGB 1789.7 R23 .1747 R13 -.8747
    FDE .0569 FRA-1.2855 FC3-2.0060 BSP 5158
BDF .3304 BRA 1.5924 BC3 .8141 FSP -813
                                                                      SG1 1765.7 SG2 292.4 THA 169.33
                                                                                                                         EL1 413.4 EL2 275.7 ALF 174.20
     BOE .3304 BRA 1.5924 BC3 .8141 FSP
```

FLIGHT TIME 88.00

ARRIVAL DATE APR 6 1966

LAUNCH DATE DEC 31 1965

```
HELIOCENTRIC CONIC
                                                                       DISTANCE 292.723
                        .00 LOL 99.11 VL 29.121 GAL -12.79 A7L 88.39 MCA 139.30 SMA 138.77 ECC .22898 INC 1.6064 V1 30.286 1.05 LOP 238.42 VP 38.622 GAP 3.99 A7P 91.22 TAL 242.40 TAP 21.69 RCA 106.99 APO 170.55 V2 34.951 6.78 GP 17.36 TAL 162.21 TAP 122.92 ETS 8.88 TAE 142.77 ETE 160.96 TAC 27.37 ETC 179.71 CLP-124.71
    RL 147.10 LAL
    RP 108.43 LAP
    RC 101.502 GL
   PLANETOCENTRIC CONIC
    C3 45.435 VHL 6.741 DLA -14.36 RAL 296.28 RAD 6568.7 VEL 12.915 PTH 2.35 VMP 4.530 DPA -6.17 RAP 293.69 ECC 1.7477
    ENCH AZMTH ENCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1355.6
                                                                             169.06
        90.00
                     2 23 29
                                 1955.56
                                                 -12.56
                                                                25.71
                                                                                             115.59 2 56 4
                                                                                                                                        -9.01
                                                                                                                                                        18.82
                  10 35 15 5525.42
3 37 9 1717.83
12 4 16 5238.38
4 28 15 1557.80
13 29 39 4971.17
                                                                                              90.17 12 7 21
116.70 4 5 47
                                                  28.32
                                                                256.73
                                                                              178.28
                                                                                                                          4925.4
                                                                                                                                         28.04
                                                                                                                                                        248.07
                                                  -13.97
                                                                 7.52
                                                                              168.35
                                                                                                                          1117.8
                                                                                                                                         -10.27
                                                                                                                                                           .68
                                                                                             89.22 13 31 34
119.77 4 54 13
86.60 14 52 31
                                                                                                                        4638.4
                                                                                                                                                       226.83
                                                  29.88
                                                                235.60
                                                                              178.27
                                                                                                                                         29.45
       100.00
                                                 -17.63
                                                                353.34
                                                                              166.31
                                                                                             119.77
                                                                                                                          957.8
                                                                                                                                        -13.53
                                                                                                                                                       346.62
       110.00
                                                                                                                                                       206.00
                                                                215.13
                                                                              178.09
                                                                                                               206.00
ST 436.6 SR 259.9 S5 127.4
CRT -.0564 CRS .2756 CST -.9611
LSA 454.1 MSA 260.3 CCA
                                                                                                                         4371.2
                                                                                                                                         33.19
      110.00
                                                  34.03
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 1847.8 SCR 435.1 SC3 249.4

RRT -.7520 RRF -.7991 RTF .8704

SCB 1898.4 R23 .1955 R13 -.8760
    TDE -.0879 TRA-1.6287 TC3 -.8672 BAU .5434
    RDE -.2978 RRA .2215 RC3 .2194 FAU .10468
    FDE .0197 FRA-1.1964 FC3-1.9945 BSP 5545
BDE .3105 BRA 1.6436 BC3 .8946 FSP -795
                                                                   SG1 1877.3 SG2 282.3 THA 169.72
                                                                                                                                 ARRIVAL DATE APR 8 1966
LAUNCH DATE DEC 31 1965
                                                                        FLIGHT TIME 98.00
                                                                       DISTANCE 298.742
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 29.043 GAL -12.58 A7L 88.58 HCA 142.48 SMA 138.11 ECC .22687 INC 1.4226 V1 30.286 RP 108.46 LAP .87 LOP 241.60 VP 38.552 GAP 4.31 AZP 91.13 TAL 241.16 TAP 23.65 RCA 106.78 APO 169.45 V2 34.939 RC 103.862 GL 6.09 GP 18.22 ZAL 161.78 ZAP 125.37 ETS 10.72 ZAE 140.97 ETE 160.69 ZAC 27.75 ETC 181.23 CLP-127.55
  PLANETOCENTRIC CONIC
    C3 43.949 VHL 6.629 DLA -14.91 RAL 297.14 RAD 6568.7 VEL 12.857 PTH 2.34 VHP 4.619 DPA -5.27 RAP 293.92 ECC 1.7233 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            115.96 3 3 59

90.57 12 5 59

117.09 4 13 19

89.60 13 30 35

120.21 5 0 57

86.93 14 52 19
                  2 31 51 1927.76
10 33 42 5536.48
                                                                            169.42
       90.00
                                                 -11.74
                                                                24.08
                                                                                                                         1327.8
                                                                                                                                          -8.15
                                                                                                                                                        17.24
                                                                257.54
                                                                                                                           4936.5
                                                                                                                                          28.09
                                                                                                                                                        248.88
                                                                              178.74
       90.00
                                                  28.31
                  3 45 8 1691.31
12 3 6 5248.17
4 35 23 1533.89
13 29 20 4978.35
                                                                                                                           1091.3
                                                                                                                                                        359.18
                                                                 5.98
                                                                              168.69
                                                                                                                                           -9.41
      100.00
                                                 -13.15
                                                                236.33
                                                                              178.75
                                                                                                                           4648.2
                                                                                                                                          29.51
                                                                                                                                                        227.55
                                                  29.89
      100.00
                                                                             166.62
                                                                                                                           933.9
                                                                                                                                        -12.67
                                                                                                                                                        345.30
                                                 -16.61
                                                                351.96
      110.00
                                                                                                                           4378.4
                                                                                                                                          33.26
                                                                215.69
                                                                              178.60
                                                  34.06
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 1959.6 SGR 436.1 SG3 242.3
RRT -.7725 RRF -.8260 RTF .8712
SGB 2007.6 R23 .2199 R13 -.8767
                                                                                                                      ST 462.4 SR 240.7 SS 122.7
CRT -.0227 CRS .1856 CST -.9715
    TOE -.1180 TRA-1.6750 TC3 -.9497 BAU .5751
    ROE - .2702 RRA .2155 RC3 .2368 FAU .10046
    FOE -.0206 FRA-1.1058 FC3-1.9789 BSP 5930
BOE .2948 BRA 1.6888 BC3 .9788 FSP -776
                                                                                                                      LSA 477.7 MSA 241.4 SSA 20.3
                                                                   5G1 1988.9 SG2 272.9 THA 170.06
                                                                                                                      EL1 462.4 EL2 240.7 ALF 179.07
                                                                       FLIGHT TIME 100.00
                                                                                                                                ARRIVAL DATE APR 10 1966
LAUNCH DATE DEC 31 1965
                                                                       DISTANCE 304.737
  HELIOCENTRIC CONIC
                         .00 LOL 99.11 VL 28.963 GAL -12.36 AZL 88.79 HCA 145.67 SMA 137.46 ECC .22481 INC 1.2103 VI 30.286 .68 LOP 244.79 VP 38.481 GAP 4.61 AZP 91.00 TAL 239.88 TAP 25.55 RCA 106.55 APO 168.36 VZ 34.926
   RL 147.10 LAL
RP 108.50 LAP
                         5.26 CP 19.27 TAL 161.31 TAP 127.56 ETS 12.80 TAE 139.25 ETE 160.21 TAC 28.33 ETC 182.94 CLP-130.22
    RC 106.225 GL
   PLANETOCENTRIC CONIC
    C3 42.465 VHL 6.517 DLA -15.58 RAL 298.06 RAD 6568.6 VEL 12.800 PTH
                                                                                                2.33 VHP 4.716 DPA -4.18 RAP 294.29 ECC 1.6989
    ENCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       -7.12
                                                                                                          3 13 23
                                                                                                                       1294.8
                                                                                                                                                        15.36
                                                 -10.75
                                                                22.16
                                                                            169.86
                                                                                            116.36
       90.00
                  2 41 48
10 31 9
                                 1894.78
                                                                                                                         4952.2
                                                               258.68
                                                                             179.32
                                                                                              91.15 12 3 41
                                                                                                                                          28.16
                                                                                                                                                       240.02
                                                 28.30
                                 5552.17
        90.00
                  3 54 34 1659.96
12 1 4 5262.21
                                                                                                          4 22 14
                                                                                                                         1060.0
                                                                                                                                          -8.39
                                                                                                                                                       357.41
                                                                 4.16
                                                                              169.12
                                                                                             117.51
      100.00
                                                 -12.17
                                                                           179.34
                                                                                                      13 28 46
                                                                                                                                        29.59
                                                               237.38
                                                                                                                                                       228.58
                                                                                              90.15
                                                                                                                         4662.2
      100.00
                                                 29.89
                                                                                             120.69 5 8 51
87.43 14 51 31
                   4 43 46 1505.89
13 28 22 4989.05
                                                                                                                                       -11.66
33.37
                                                                                                                                                       343.77
                                               -15.85
                                                                                                                           905.9
      110.00
                                                               350.37
                                                                            167.01
                                                               216.53
                                                                              179.23
                                                                                                                         4389.1
                                                                                                                                                       207.36
      110 00
                   13 28 22
                                                 34.10
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 490.2 SR 220.1 SS 118.9
CRT .0174 CRS .0788 CST -.9795
                                                                   5GT 2069.7 SGR 438.4 SG3 234.2
RRT -.7904 RRF -.8524 RTF .8710
SGB 2115.6 R23 .2489 R13 -.8765
    TOE -.1551 TRA-1.7132 TC3-1.0350 BAU .6053
   RDE -.2416 RRA .2076 RC3 .2558 FAU .09593
FDE -.0612 FRA-1.0098 FC3-1.9556 BSP 6287
                                                                                                                      LSA 503.9 MSA 220.4 SSA 20.5
                                                                   SG1 2099.0 SG2 264.8 THA 170.34
                                                                                                                      EL1 490.2 EL2 220.1 ALF
    BOE .2871 BRA 1.7257 BC3 1.0662 FSP -747
                                                                                                                                 ARRIVAL DATE APR 12 1966
                                                                       FLIGHT TIME 102.00
LAUNCH DATE DEC 31 1965
                                                                       OISTANCE 310.709
  HELIOCENTRIC CONIC
                         .00 LOL 99.11 VL 28.883 GAL -12.14 A7L 89.04 HCA 148.85 SMA 136.80 ECC .22282 INC .9603 V1 30.286 .50 LOP 247.97 VP 38.410 GAP 4.90 A7P 90.82 TAL 238.56 TAP 27.42 RCA 106.32 APO 167.28 V2 34.914 4.24 GP 20.54 ZAL 160.79 ZAP 129.45 ETS 15.18 ZAE 137.58 ETE 159.49 ZAC 29.11 ETC 184.89 CLP-132.73
   RL 147.10 LAL
    RP 108.54 LAP
    RC 108.588 GL
  PLANETOCENTRIC CONIC
    C3 40.992 VHL 6.402 DLA -16.43 RAL 299.08 RAD 6568.6 VEL 12.742 PTH 2.32 VMP 4.825 DPA -2.83 RAP 294.75 ECC 1.6746
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 53 54 1854.71
10 27 8 5574.42
                                                                                                                                        -5.85
                                                                            170.41
                                                                                            116.79
                                                                                                          3 24 49
                                                                                                                          1254.7
                                                                                                                                                        13.10
                                                                19.85
       90.00
                                                                                                        12 0 2
                                                                              180.03
                                                                                               91.96
                                                                                                                          4974.4
                                                                                                                                          28.23
                                                                                                                                                       251.65
                                                  28.25
                                                               260.31
       90.00
                    4 6 0 1622.10
                                                                                              117.98
                                                                                                         4 33 2
                                                                                                                          1022.1
                                                                                                                                         -7.14
                                                                                                                                                       355.30
      100.00
                                                  -10.97
                                                                 1.99
                                                                              169.65
                                                                                              117.98 4 33 2
90.93 13 25 46
                  11 57 43 5282.27
4 53 46 1472.42
-- 24 5004.71
                                                                              180.07
                                                                                                                          4682.3
                                                                                                                                         29.69
                                                                                                                                                       230.07
                                                  29.88
                                                                238.87
      100.00
                                                                                              121.23 5 18 19
88.15 14 49 51
                                                 -14.67
                                                                348.48
                                                                            167.49
                                                                                             121.23
                                                                                                                          872.4
                                                                                                                                        -10.43
                                                                                                                                                       341.95
      110.00
                  13 26 26
                                                  34.14
                                                               217.75
                                                                              180.03
                                                                                                                          4404.7
                                                                                                                                         33.51
                                                                                                                                                       208.56
                                                                                                              ORBIT DETERMINATION ACCURACY
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 522.8 SR 196.9 SS 118.8
CRT .0655 CRS -.0661 CST -.9837
LSA 535.9 MSA 196.4 SSA 20.9
                                                                  SGT 2181.3 SGR 443.4 SG3 226.2
RRT -.8067 RRF -.8784 RTF .8709
SGB 2225.9 R23 .2807 R13 -.8765
    TOE -. 2035 TRA-1.7439 TC3-1.1255 BAU .6353
    ROE -.2107 RRA .1987 RC3 .2780 FAU .09142
FOE -.1112 FRA -.9167 FC3-1.9307 BSP 6672
BOE .2930 BRA 1.7552 BC3 1.1593 FSP -724
```

FLIGHT TIME 96.00

SG1 2210.8 SG2 258.5 THA 170.56

EL1 523.0 EL2 196.4 ALF 1.65

```
ARRIVAL DATE APR 14 1966
                                                                               FLIGHT TIME 104.00
LAUNCH DATE DEC 31 1965
   HELIOCENTRIC CONTC
                                                                              DISTANCE 316.661
   R) 147.10 LAL .00 LOL 99.11 VL 28.803 GAL -11.91 AZL 89.34 HCA 152.03 SMA 136.15 ECC .22090 INC .6599 V1 30.286 RP 108.58 LAP .31 LOP 251.15 VP 38.339 GAP 5.17 AZP 90.58 TAL 237.21 TAP 29.24 RCA 106.07 APO 166.22 V2 34.903 RC 110.951 GL 2.96 GP 22.12 TAL 160.20 ZAP 131.03 ETS 17.93 ZAE 135.90 ETE 158.53 ZAC 30.08 ETC 187.14 CLP-135.12
   PLANETOCENTRIC CONIC
    C3 39.541 VHL 6.288 OLA -17.52 RAL 300.19 RAC 6568.5 VEL 12.685 PTH 2.30 VHP 4.949 DPA -1.18 RAP 295.29 ECC 1.6507
   C3 39.541 VHL 6.288 OLA -17.52 RAL 300.19 RAD 6568.5 VEL 12.685 PTH 2.30 VHP 4.949 DPA -1.18 RAP 295.29 ECC 1.6507 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 10 20 53 5606.28 28.16 262.64 180.92 93.13 11 54 20 5006.3 28.29 253.97 100.00 4 20 13 1575.08 -9.45 359.32 170.35 118.49 4 46 28 975.1 -5.58 352.68 100.00 11 52 26 5311.08 29.83 241.01 181.01 92.06 13 20 57 4711.1 29.79 232.20 110.00 5 6 4 1431.43 -13.21 346.20 168.13 121.82 5 29 55 831.4 -8.91 339.75 110.00 13 23 4 5027.50 34.17 219.33 181.06 89.20 14 46 51 4427.5 33.69 210.32
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 2292.8 SGR 451.5 SG3 217.6
RRT -.8200 RRF -.9032 RTF .8705
SGB 2336.9 R23 .3153 R13 -.8763
SGI 2322.9 SGZ 255.1 THA 170.71
                                                                                                                                   ST 562.6 SR 170.8 SS 124.1
CRT .1187 CR5 -.2289 CST -.9777
    TDE -.2657 TRA-1.7644 TC3-1.2205 BAU .6648
    RDE -.1774 RRA .1877 RC3 .3034 FAU .08671
                                                                                                                                   LSA 576.0 MSA 169.9 SSA 21.4
EL1 563.0 EL2 169.4 ALF 2.27
    FOE -.1686 FRA -.8218 FC3-1.8985 BSP 7059
BDF .3195 BRA 1.7744 BC3 1.2577 FSP -700
    BOE .3195 BRA 1.7744 BC3 1.2577 FSP
                                                                                                                                                ARRIVAL DATE APR 16 1966
                                                                               FLIGHT TIME 106.00
  HELIOCENTRIC CONIC
                                                                               DISTANCE 322.593
    RL 147.10 LAL .00 LOL 99.11 VL 28.722 GAL -11.67 AZL 89.71 HCA 155.21 SMA 135.50 ECC .21905 INC .2899 V1 30.286 RP 108.61 LAP .12 LOP 254.32 VP 38.268 GAP 5.43 AZP 90.26 TAL 235.81 TAP 31.02 RCA 105.82 APO 165.18 V2 34.892 RC 113.313 GL 1.32 GP 24.09 ZAL 159.49 ZAP 132.21 ETS 21.15 ZAE 134.16 ETE 157.26 ZAC 31.29 ETC 189.77 CLP-137.39
   PLANETOCENTRIC CONIC
    C3 38.134 VML 6.175 DLA -18.95 RAL 301.45 RAD 6568.5 VEL 12.629 PTH 2.29 VMP 5.094 DPA .89 RAP 295.85 ECC 1.6276 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 28 53 1739.72
10 11 8 5652.90
4 38 37 1514.67
11 44 4 5353.19
                                                                                                     117.74
                                                                                      172.16
                                                                                                                      3 57 52
                                                                                                                                       1139.7
                                                        -5.93
                                                                       13.31
        90.00
                                                                                                                    11 45 20
                                                                                                                                         5052.9
                                                                                                         94.81
        90.00
                                                        27.94
                                                                                      182.06
                                                                       266.03
                                                                                      171.32
                                                                                                                      5 3 52
                                                                                                                                          914.7
                                                                                                                                                           -3.55
                                                                                                        119.03
       100.00
                                                        -7.48
                                                                       355.93
                                                                                                         93.70 13 13 17
122.47 5 44 42
90.75 14 41 50
       100.00
                                                       29.68
                                                                       244.13
                                                                                       182.21
                                                                                                                                         779.7
                                                                                                                                                          -6.98
                                                                                                                                                                         336.99
       110.00
                    5 21 42 1379.67
13 17 29 5060.95
                                                     -11.34
                                                                       343.37
                                                                                       168.99
                                                                                                        122.47
                                                                                                                                                        33.90
                                                                                                                                        4460.9
                                                                       222.14
                                                                                       182.42
       110.00
                                                       34.18
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 2402.6 SGR 462.8 SG3 207.6
RRT -.8283 RRF -.9257 RTF .8696
SGB 2446.8 R23 .3517 R13 -.8757
                                                                                                                                    ST 613.8 SR 141.2 SS 136.3
CRT .1712 CRS -.3781 CST -.9616
    TOE -.3455 TRA-1.7709 TC3-1.3185 BAU .6932
    ROE -.1413 RRA .1734 RC3 .3320 FAU .D8154
FOE -.2318 FRA -.7206 FC3-1.8511 BSP 7418
BOE .3733 BRA 1.7793 BC3 1.3597 FSP -666
                                                                                                                                   LSA 628.2 MSA 141.8 SSA 22.0
Fil 614.3 EL2 139.0 ALF 2.38
                                                                           SG1 2433.3 SG2 256.0 THA 170.83
                                                                                                                                               ARRIVAL DATE APR 18 1966
                                                                               FLIGHT TIME 108.00
LAUNCH DATE DEC 31 1965
                                                                              DISTANCE 328.505
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 99.11 VL 28.640 GAL -11.43 AZL 90.18 HCA 158.39 5MA 134.86 ECC .21727 INC .1776 V1 30.286 RP 108.64 LAP -.07 LOP 257.50 VP 38.197 GAP 5.68 AZP 89.83 TAL 234.39 TAP 32.77 RCA 105.56 APO 164.16 V2 34.881
                           -.84 GP 26.61 TAL 158.58 TAP 132.90 ETS 24.95 TAE 132.25 ETE 155.65 TAC 32.77 ETC 192.90 CLP-139.58
    RC 115.673 GL
   PLANETOCENTRIC CONIC
    C3 36.816 VHL 6.068 DLA -20.86 RAL 302.91 RAD 6568.4 VEL 12.577 PTH 2.28 VHP 5.272 DPA
                                                                                                                                           3.51 RAP 296.37 ECC 1.6059
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     118.16
                                                                                                                     4 23 51
                                                                                                                                      1050.8
                                                                                                                                                            .69
                    3 56 20 1650.81
9 55 17 5724.03
                                                                                      173.68
        90.00
                                                       -3.10
                                                                        8.32
                                                                                                         97.34 11 30 41
                                                                                                                                        5124.0
                                                                      271.17
                                                                                      183.53
                                                        27.43
        90.00
                    5 3 46 1433.19
11 30 33 5416.88
                                                                                                        119.55
                                                                                                                     5 27 39
                                                                                                                                         833.2
                                                                                                                                                          -.79
                                                                                                                                                                        344.87
                                                                                      172.76
                                                        -4.76
                                                                      351.41
       100.00
                                                                                                         96.14 13 0 49
                                                                                                                                        4816.9
                                                                                                                                                         29.85
                                                                                                                                                                        240.07
                                                                      248.83
                                                                                      183.78
       100.00
                                                       29.31
                     5 42 32 1311.70
13 8 16 5111.14
                                                                                                       123.16 6 4 23
93.06 14 33 27
                                                                                                                                         711.7
                                                                                                                                                                        333.41
                                                                                      170.26
                                                        -8.83
                                                                      339.70
       110.00
                                                                                                                                        4511.1
                                                                                                                                                                        216.81
                                                        34.06
                                                                      226.06
                                                                                      184.23
       110.00
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 2513.9 SGR 479.7 SG3 196.8
RRT -.8324 RRF -.9455 RTF .8695
SGB 2559.3 R23 .3856 R13 -.876D
                                                                                                                                   ST 686.3 SR 105.9 SS 161.6
CRT .1966 CRS -.4755 CST -.9422
    TOE -.4534 TRA-1.7611 TC3-1.4200 BAU .7217
    RDE -.D994 RRA .1557 RC3 .3653 FAU .D7606
FDE -.3113 FRA -.6189 FC3-1.7885 BSP 7802
BDE .4641 BRA 1.7680 BC3 1.4662 FSP -634
                                                                                                                                   LSA 703.4 MSA 113.9 SSA 22.6
EL1 686.6 EL2 103.7 ALF 1.78
                                                                           SG1 2545.8 SG2 262.5 THA 170.88
                                                                               FLIGHT TIME 110.00
                                                                                                                                                ARRIVAL DATE APR 20 1966
LAUNCH DATE DEC 31 1965
   HELIOCENTRIC CONTC
                                                                              DISTANCE 334.400
    RL 147.10 LAL .00 LOL 99.11 VL 28.559 GAL -11.18 AZL 90.80 MCA 161.56 SMA 134.22 ECC .21557 INC .8037 VI 30.286 RP 108.68 LAP -.25 LOP 260.67 VP 38.127 GAP 5.92 AZP 89.24 TAL 232.93 TAP 34.48 RCA 105.29 APO 163.16 V2 34.870 RC 118.029 GL -3.77 GP 29.89 ZAL 157.30 ZAP 132.91 ETS 29.48 ZAE 130.01 ETE 153.62 ZAC 34.61 ETC 196.68 CLP-141.75
   PLANETOCENTRIC CONIC
    9 27 10 5842.04
5 41 15 1314.37
                                                        26.12
                                                                       279.56
                                                                                       185.36
                                                                                                        101.35
                                                                                                                    11 4 32
        90.00
                                                                                                                     6 3 9
                                                                                                                                         714.4
                                                                                                                                                           3.24
                                                                                                                                                                         334.35
                                                                       344.87
                                                                                       175.12
                                                                                                       119.88
                                                          -.75
       100.00
                                                                                                          99.97
                                                                                                                    12 39 4
                                                                                                                                         4919.9
                                                                                                                                                          29.41
                                                                                                                                                                         247.69
                                                       28.33
                                                                       256.32
                                                                                       185.83
                     11 7 4
                                    5519.90
       100.00
                                                                                                         123.82 6 32 30
96.64 14 19 5
                                                                                                        123.82
                                                                                                                                         617.2
                                                                                                                                                           - .80
                                                                                                                                                                         328.47
                      6 12 13 1217.25
                                                        -5.28
                                                                       334.69
                                                                                      172.30
       110.00
                                                        33.61
                                                                                       186.73
                                                                                                                                        4589.8
                                                                                                                                                         34.16
                                                                                                                                                                         222.95
                    12 52 35
                                     5189.79
                                                                       232.15
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 795.2 SR 64.2 SS 202.9
CRT .0769 CRS -.3947 CST -.9328
                                                                           SGT 2626.5 SGR 502.5 SG3 184.0
    TOE -.6038 TRA-1.7278 TC3-1.5198 BAU .7500
                                                                           RRT -.8299 RRF -.9614 RTF .8701
5GB 2674.1 R23 .4143 R13 -.8772
    RDE -. 0489 RRA .1319 RC3 .4025 FAU .06985
                                                                                                                                 LSA 817.6 MSA 93.1 SSA 21.4
EL1 795.2 EL2 64.0 ALF .36
    FDE -.4074 FRA -.5107 FC3-1.6948 BSP 8201
BDE .6058 BRA 1.7328 BC3 1.5722 FSP -596
                                                                           5G1 2659.7 SG2 276.8 THA 170.88
```

ARRIVAL DATE APR 30 1966

```
LAUNCH DATE DEC 31 1965
                                                                                                      DISTANCE 363.424
     RL 147.10 LAL .00 LOL 99.11 VL 28.158 GAL -9.79 A7L 114.19 MCA 177.14 SHA 131.20 ECC .20774 INC24.1850 V1 30.286 RP 108.81 LAP -1.17 LOP 276.51 VP 37.786 GAP 6.91 A7P 65.84 TAL 225.12 TAP 42.27 RCA 103.95 APO 158.46 V2 34.826 RC 129.747 GL -58.81 GP 74.87 7AL 110.98 7AP 104.30 ETS 96.74 7AE 90.57 ETE 174.29 7AC 60.80 ETC 265.83 CLP 161.14
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                             9.38 RAD 6570.9 VEL 17.261 PTH 2.95 VMP 17.851 DPA 50.99 RAP 269.99 ECC 3.9068
      C3 176.624 VHL 13.290 DLA -64.41 RAL
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             274.51
                                                                                                                                  153.98
                                                                                                                                                        6 59 D
                           6 21 33 2247.26
16 20 21 5823.35
6 21 33 2247.26
                                                                       10.02
                                                                                             70.26
          29.39
                                                                                                                                                                                                        17.20
                                                                                                                                                                                                                           261.98
                                                                                                                                                                                 5223.4
                                                                                                                                      153.98
                                                                                                                                                        17 57 25
                                                                                                                274.53
                                                                         10.03
                                                                                            265.22
          150.61
                                                                                                                                                                                                                             67.01
                                                                                                                                                                                1647.3
                                                                                                                                                                                                        17.19
                                                                                                                274.51
                                                                                                                                      153.98
                                                                                                                                                        5 59 D
                                                                                              70.26
           29.39
                                                                         10.02
                                                                                                                                                                                                        17.20
                                                                                                                                                                                                                         261.98
                                                                                                                                    153.98 17 57 25
153.98 6 59 0
153.98 17 57 25
                                                                                                                                                                                 5223.4
                                                                                                                274.53
                           16 20 21
                                               5823.35
                                                                         10.03
                                                                                            265.22
         150.61
                                                                                                                                                                                                        17.19
                                                                                                                                                                                                                             67.01
                                                                                                                                                                                1647.3
                                                                                                                274.51
                              6 21 33 2247.26
                                                                         10.02
                                                                                             70.26
           29.39
                                                                                                                                                                                                        17.20
                                                                                                                                                                                5223.4
                                                                                                                274.53
                           16 20 21
                                                                         10.03
                                                                                            265.22
                                                 5823.35
         150.61
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                              HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                           ST 2324.7 SR 1455.7 SS 776.9
                                                                                                 SGT 2814.9 SGR 1509.9 SG3 56.3
RRT .9365 RRF .8999 RTF .9956
SGB 3194.3 R23 -.1687 R13 .9855
      TDE-5.2748 TRA 1.6119 TC3 -.1525 BAU .3605
                                                                                                                                                                         CRT .9925 CRS -.9863 CST -.9991
      ROE-3.3638 RRA .4209 RC3 -.0061 FAU .00793
FDE-1.1313 FRA .4200 FC3 -.0389 BSP 8956
BDE 6.2561 BRA 1.6659 BC3 .1527 FSP -166
                                                                                                                                                                         LSA 2846.2 MSA 161.8 55A
                                                                                                                                                                          EL1 2738.7 EL2 151.0 ALF 31.97
                                                                                                  SG1 3159.2 SG2 471.9 THA 27.33
                                                                                                                                                                                           ARRIVAL DATE MAY 2 1966
                                                                                                        FLIGHT TIME 122.00
LAUNCH DATE OFC 31 1965
                                                                                                       DISTANCE 370.392
     RL 147.10 LAL .00 LOL 99.11 VL 28.079 GAL -9.74 AZL 22.59 MCA 181.46 SMA 130.63 ECC .20995 INC67.4077 V1 30.286 RP 108.84 LAP -1.34 LOP 279.67 VP 37.721 GAP 7.43 AZP 157.40 TAL 223.97 TAP 45.42 RCA 103.21 APO 158.06 V2 34.819 RC 132.074 GL 51.65 GP -60.35 ZAL 98.34 ZAP 97.04 ETS 188.65 ZAE 61.82 ETE 117.73 ZAC 89.06 ETC 27.83 CLP 104.34
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      C31061.433 VML 32.580 DLA 44.47 RAL 330.10 RAD 6573.0 VEL 34.391 PTH 3.51 VMP 38.778 DPA -58.22 RAP 162.09 ECC18.4685 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                           16 56 9 4903.38
0 32 24 3511.74
16 56 9 4903.38
0 32 24 3511.74
16 56 9 4903.38
                                                                                                                                      45.53 18 17 53
                                                                                                                 240.54
                                                                                           226.10
                                                                            .41
           54.15
                                                                                                                                                                                                         -5.17
                                                                                                                                                                                  2911.7
                                                                                                                                          45.53
                                                                                                                                                          1 30 56
                                                                                                                  240.52
                                                                               .43
                                                                                             118.51
          125.85
                                                                                                                                                                                                                            220.79
                                                                                                                                                                                  4303.4
                                                                                                                                                                                                        -5.19
                                                                                                                                          45.53
                                                                                                                                                        18 17 53
                                                                                                                  240.54
                                                                                             226.10
                                                                              .41
            54.15
                                                                                                                                                                                                                            113.20
                                                                                                                                                                                 2911.7
                                                                                                                                                                                                        -5.17
                                                                                                                                          45.53
                                                                                                                                                        1 30 56
                                                                                             118.51
                                                                                                                  240.52
                                                                              .43
                                                                                                                                          45.53 18 17 53
                                                                                                                                                                                                                            220.79
                                                                                                                                                                                  4303.4
                                                                                                                                                                                                        -5.19
                                                                                                                  240.54
                                                                                             226.10
                                                                              .41
            54.15
                                                                                                                                                                                                       -5.17
                                                                                                                                                                                 2911.7
                                                                                                                  240.52
                                                                                                                                          45.53
                                                                                                                                                         1 30 56
                                                                                             118.51
                             0 32 24 3511.74
                                                                              .43
          125.85
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 338.2 SR 2513.5 SS 1608.9
CRT .8743 CRS .9999 CST .8658
LSA 2998.9 HSA 166.5 SSA .6
                                                                                                  SGT 802.4 SGR 2839.0 SG3 45.7
RRT .7082 RRF -.9984 RTF -.6668
       TDE-1.5973 TRA 2.5417 TC3 -. 0638 BAU 2.6458
       RO-14.2420 RRA 2.8202 RC3 -.1752 FAU-.03746
       FOE 2.7245 FRA -.4275 FC3 .0306 BSP 9424
B0E14.3313 BRA 3.7965 BC3 .1865 FSP -156
                                                                                                  SGB 2950.2 R23 -.0966 R13 -.9953
                                                                                                                                                                        EL1 2531.0 EL2 163.1 ALF 83.26
                                                                                                  SG1 2897.5 SG2 555.1 THA 78.24
                                                                                                                                                                                           ARRIVAL DATE HAY 4 1966
                                                                                                        FLIGHT TIME 124.00
 LAUNCH DATE DEC 31 1965
                                                                                                       DISTANCE 375.601
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
       C3 150.842 VHL 12.282 DLA 41.15 RAL 305.33 RAD 6570.6 VEL 16.498 PTH 2.87 VHP 13.099 DPA -84.66 RAP 47.46 ECC 3.4825
       C3 150.842 VHL 12.282 OLA 41.15 RAL 305.33 RAD 6570.6 VEL 16.498 PTH 2.87 VHP 13.099 OPA -84.66 RAP 47.46 ECC 3.4825

LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO<sub>DC</sub>CST TIM INJ 2 LAT INJ 2 LONG 58.79 15 36 23 4652.35 -8.51 212.09 205.48 49.58 16 53 55 4052.4 -13.64 206.25 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 113.62 205.47 49.58 23 26 40 2763.7 -13.62 107.78 121.21 22 30 36 3363.71 -8.50 121.21 22 30 36 3363.71 -8.
                                                                                                   MID-COURSE EXECUTION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 2323.3 SR 753.9 S5 719.4
CRT -.9718 CRS .9504 CST -.9969
                                                                                                   SGT 3129.0 SGR 1404.0 SG3 67.4
RRT -.9413 RRF -.8620 RTF .9819
        TDE 4.7891 TRA-3.4271 TC3 -.2195 BAU .4464
       ROE-1.4037 RRA 2.0004 RC3 .0289 FAU .01488
FDE 1.3353 FRA -.6781 FC3 -.0854 BSP 10431
BDE 4.9912 BRA 3.9682 BC3 .2214 FSP -223
                                                                                                                                                                            LSA 2539.7 MSA 183.0 SSA 1.1
                                                                                                   5GB 3429.5 R23 -.2383 R13 -.9703
                                                                                                                                                                             EL1 2436.6 EL2 169.5 ALF 162.41
                                                                                                 SG1 3401.7 SG2 436.1 THA 156.70
                                                                                                                                                                                             ARRIVAL DATE MAY 6 1966
                                                                                                         FLIGHT TIME 126.00
  LAUNCH DATE DEC 31 1965
                                                                                                         DISTANCE 381.307
       RL 147.10 LAL .00 LOL 99.11 VL 27.924 GAL -9.00 AZL 76.26 MCA 187.09 SMA 129.52 ECC .20599 INC13.7410 V1 30.286 RP 108.87 LAP -1.68 LOP 286.00 VP 37.594 GAP 7.59 AZP 103.64 TAL 220.40 TAP 47.49 RCA 102.84 APO 156.20 V2 34.806 RC 136.709 GL 49.62 GP -53.08 ZAL 120.30 ZAP 124.26 ETS 291.11 ZAE 108.78 ETE 206.96 ZAC 75.96 ETC 127.16 CLP-159.58
      HELIOCENTRIC CONIC
      PLANETOCENTRIC CONIC
                                                                                                                                               2.55 VMP 8.645 DPA -70.90 RAP 341.39 ECC 2.2172
       C3 73.963 VHL 8.600 OLA 31.75 RAL 304.46 RAD 6569.4 VEL 13.975 PTH 2.55 VHP 8.645 DPA -70.90 RAP 341.39 ECC 2.2172
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
74.99 17 2 34 4236.09 -11.93 181.27 194.52 60.35 18 13 10 3636.1 -15.79 174.47
105.01 20 57 31 3482.64 -11.91 125.51 194.51 60.35 21 55 34 2882.6 -15.77 118.71
105.01 20 57 31 3482.64 -11.91 125.51 194.51 60.35 21 55 34 2882.6 -15.77 116.71
110.00 23 6 38 3082.29 -22.80 100.84 200.54 63.81 23 58 0 2482.3 -26.13 93.27
110.00 19 52 37 3684.43 -1.47 134.09 187.98 55.84 20 54 2 3084.4 -5.94 128.17
        C3 73.963 VHL 8.600 OLA 31.75 RAL 304.46 RAD 6569.4 VEL 13.975 PTH
                                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                        ST 2120.1 SR 156.2 65 628.1
CRT .2416 CRS -.4192 CST -.9823
       DIFFERENTIAL CORRECTIONS
                                                                                                    SGT 3511.2 SGR 435.9 SG3 100.5
RRT -.5607 RRF -.2288 RTF .9322
         TOE 2.9582 TRA-3.3205 TC3 -.7527 BAU .7448
        RDE .1364 RRA .5404 RC3 -.0289 FAU .03125
FDE 1.2395 FRA -.6701 FC3 -.3658 BSP 11117
                                                                                                  SCB 3538.1 R23 -.3617 R13 -.9296
SGI 3519.8 SGZ 360.0 THA 175.98
                                                                                                                                                                    LSA 2208.6 MSA 188.6 SSA 1.7
EL1 2120.4 EL2 151.5 ALF 1.02
        BOE 2.9613 BRA 3.3642 BC3 .7532 FSP -340
```

FLIGHT TIME 120.00

```
LAUNCH DATE DEC 31 1965
                                                                                 FLIGHT TIME 128.00
                                                                                                                                                 ARRIVAL DATE MAY 8 1966
    HELIOCENTRIC CONIC
                                                                                DISTANCE 387.064
     RL 147.10 LAL .00 LOL 99.11 VL 27.848 GAL -8.68 AZL 79.57 HCA 190.21 SMA 128.99 ECC .20508 INC10.4297 VI 30.286
RP 108.89 LAP -1.84 LOP 289.16 VP 37.533 GAP 7.76 AZP 100.27 TAL 218.71 TAP 48.93 RCA 102.53 APO 155.44 VZ 34.801
RC 139.015 GL 43.41 GP -41.66 ZAL 125.15 ZAP 133.59 ETS 299.42 ZAE 116.50 ETE 206.71 ZAC 70.39 ETC 135.54 CLP-157.35
    PLANETOCENTRIC CONIC
     C3 52.590 VHL 7.252 DLA 25.61 RAL 305.88 RAD 6568.9 VEL 13.189 PTH 2.41 VHP 7.220 DPA -59.30 RAP 334.06 ECC 1.8655
     LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                     20 54 10 3419.54
17 17 14 4134.47
22 40 44 3075.97
18 13 21 3953.27
                                                                                                        72.05 21 51 10
61.75 18 26 9
73.32 23 32 0
60.11 19 19 15
75 08 1 24 29
         90.00
                                                        -22.28
                                                                        125.68
                                                                                       193.58
                                                                                                                                      2819.5
                                                                                                                                                         -24.52
                                                                                                                                                                      117.73
         90.00
                                                        -2.08
                                                                        168.33
                                                                                        184.83
                                                                                                                                         3534.5
                                                                                                                                                          -5.84
                                                                                                                                                                          161.66
        100.00
                                                        -25.17
                                                                        101.39
                                                                                        194.57
                                                                                                                                         2476.0
                                                                                                                                                          -27.21
                                                                                                                                                                           93.18
                                                                                                                                       3353.3
        100.00
                                                           .57
                                                                        153.54
                                                                                        183.36
                                                                                                                                                          -3.41
                                                                                                                                                                          147.02
                       0 39 12 2717.67
        110.00
                                                      -31.50
                                                                         76.15
                                                                                                                    1 24 29
19 40 4
                                                                                       196.54
                                                                                                           75.98
                                                                                                                                         2117.7
                                                                                                                                                         -33.10
                                                                                                                                                                           67.20
        110.00
                     18 35 19
                                      3884.34
                                                         6.15
                                                                        144.86
                                                                                        179.90
                                                                                                           56.31
                                                                                                                                         3284.3
                                                                                                                                                           1.68
                                                                                                                                                                          138.63
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                            SGT 361D.0 SGR 317.3 SG3 126.9
RRT -.1725 RRF .2518 RTF .9027
SGB 3623.9 R23 -.4149 R13 -.9022
    TOE 2.2032 TRA-3.0325 TC3-1.1828 BAU .8326
                                                                                                                                    ST 1915.2 SR 193.8 SS 594.4
CRT .6805 CRS -.8435 CST -.9675
     ROE .2265 RRA .2823 RC3 -.0595 FAU .04137
    FOE 1.1872 FRA -.6267 FC3 -.6810 BSP 11301
BDE 2.2148 BRA 3.0456 BC3 1.1843 FSP -421
                                                                                                                                    LSA 2004.7 MSA 199.8 SSA 2.8
                                                                            SG1 3610.4 SG2 312.5 THA 179.13
                                                                                                                                    ELI 1919.8 EL2 141.6 ALF 3.96
LAUNCH DATE DEC 31 1965
                                                                                FLIGHT TIME 130.00
                                                                                                                                                 ARRIVAL DATE MAY 10 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 392.829
    RL 147.1D LAL .00 LOL 99.11 VL 27.772 GAL -8.36 AZL 81.34 MCA 193.36 SMA 128.46 ECC .20435 INC 8.6629 V1 30.286 RP 108.9D LAP -1.99 LOP 292.32 VP 37.472 GAP 7.93 AZP 98.43 TAL 217.01 TAP 50.37 RCA 102.21 APO 154.72 V2 34.797 RC 141.312 GL 39.15 GP -33.66 ZAL 127.73 ZAP 140.14 ETS 304.93 ZAE 121.08 ETE 204.06 ZAC 67.33 ETC 141.08 CLP-157.25
   PLANETOCENTRIC CONIC
    C3 42.967 VHL 6.555 DLA 21.65 RAL 307.61 RAD 6568.6 VEL 12.819 PTH
                                                                                                             2.33 VMP 6.633 DPA -50.96 RAP 332.11 ECC 1.7071
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 2 23 3154.26 -26.67 107.52 191.41 80.11 22 54 57 2554.3 -27.76 99.02
         90.00 22 2 23 3154.26
90.00 16 22 49 4298.62
                                                                                                          61.85 17 34 28
81.22 24 26 11
60.49 18 37 10
84.01 2 4 41
56.97 19 11 58
                                                          3.22
                                                                        177.49
                                                                                        181.04
                                                                                                                                          3698.6
                                                                                                                                                            -.57
                                                                                                                                                                          170.85
                    23 38 48 2843.39
17 29 6 4064.72
1 22 30 2531.24
       100.00
                                                        -28.69
                                                                         85.02
                                                                                        191.79
                                                                                                                                         2243.4
                                                                                                                                                          -29.60
                                                                                                                                                                            76.34
       100.00
                                                          5.01
                                                                       160.77
                                                                                        180.05
                                                                                                                                         3484.7
                                                                                                                                                            1.04
                                                                                                                                                                          154.23
       110.00
                                                       -33.72
                                                                         62.08
                                                                                       192.55
                                                                                                                                         1931.2
                                                                                                                                                          -34.18
                                                                                                                                                                          52.86
       110.00
                     18 5 49
                                     3969.64
                                                         9.35
                                                                       149.40
                                                                                       177.40
                                                                                                                                         3369.6
                                                                                                                                                            4.93
                                                                                                                                                                          143.09
   DIFFERENTIAL CORRECTIONS
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 3705.9 SGR 273.7 SG3 143.9
RRT -.0625 RRF .3729 RTF .8858
    TOE 1.8159 TRA-2.8459 TC3-1.5354 BAU .8825
                                                                                                                                    ST 1779.8 SR 194.5 SS 565.1
CRT .7234 CRS -.8976 CST -.9536
    ROE .2130 RRA .1995 RC3 -.0543 FAU .04708
    FDE 1.1126 FRA -.5643 FC3 -.9485 BSP 11652
BDE 1.8284 BRA 2.8528 BC3 1.5364 FSP -475
                                                                                                                                    LSA 1865.9 MSA 208.4 SSA 4.0
EL1 1785.4 EL2 133.8 ALF 4.55
                                                                           SG8 3716.0 R23 -.4294 R13 -.8856
                                                                           9G1 3705.9 SG2 273.2 THA 179.73
LAUNCH DATE DEC 31 1965
                                                                                FLIGHT TIME 132.00
                                                                                                                                                ARRIVAL DATE MAY 12 1966
   HELIOCENTRIC CONIC
                                                                               DISTANCE 398.594
    RL 147.10 LAL .00 LOL 99.11 VL 27.698 GAL -8.04 AZL 82.44 MCA 196.51 SMA 127.95 ECC .20376 INC 7.5606 V1 30.286 RP 108.92 LAP -2.14 LOP 295.48 VP 37.414 GAP 8.09 AZP 97.25 TAL 215.30 TAP 51.80 RCA 101.88 APO 154.02 V2 34.793 RC 143.598 GL 36.16 GP -27.95 ZAL 128.95 ZAP 144.85 ETS 309.21 ZAE 123.88 ETE 201.24 ZAC 65.95 EYC 145.32 CLP-157.76
   PLANETOCENTRIC CONIC
    C3 37.408 VML 6.116 DLA 19.04 RAL 309.39 RAD 6568.5 VEL 12.601 PTH 2.29 VHP 6.364 DPA -44.82 RAP 331.91 ECC 1.6156
    C3 37.408 VML 6.116 OLA 19.04 RAL 309.39 RAD 6568.5 VEL 12.601 PTH 2.29 VMP 6.364 OPA -44.82 RAP 331.91 ECC 1.6156

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 39 48 3007.80 -27.94 97.00 189.66 85.22 23 29 56 2407.8 -28.31 88.35

90.00 15 59 34 4375.10 5.66 181.78 179.82 62.21 17 12 30 3775.1 1.90 175.12

100.00 0 16 47 2707.76 -29.69 75.07 189.81 86.36 1 1 54 2107.8 -29.88 66.27

100.00 17 9 13 4150.38 7.20 164.42 178.98 60.91 18 18 23 3550.4 3.27 157.84

110.00 17 52 6 4015.99 11.06 151.90 176.65 57.45 18 59 2 3416.0 5 40
                     17 52 6
                                     4015.99
                                                                                                          57.45 18 59 2
                                                       11.06
                                                                       151.90
                                                                                       176.65
                                                                                                                                        3416.0
                                                                                                                                                          6.69
                                                                                                                                                                         145.54
   DIFFERENTIAL CORRECTIONS
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           $4T 3801.5 $4R 246.1 $63 153.9

RRT -.0610 RRF .3645 RTF .8751

$4B 3809.5 R23 -.4189 R13 -.8750
                                                                                                                                   ST 1692.8 SR 190.0 S5 540.3
CRT .7327 CR5 -.9196 CST -.9409
    TOE 1.5882 TRA-2.7069 TC3-1.8357 BAU .9182
    ROE .1964 RRA .1595 RC3 -.0339 FAU .04983
FOE 1.0362 FRA -.4939 FC3-1.1533 BBP 11977
BOE 1.6003 BRA 2.7116 BC3 1.8360 FSP -507
                                                                                                                                  LSA 1774.1 MSA 214.9 SSA 5.2
EL1 1698.6 EL2 128.9 ALF 4.73
                                                                           $61 3801.6 $62 245.6 THA 179.77
                                                                               FLIGHT TIME 134.00
LAUNCH DATE DEC 31 1965
                                                                                                                                                ARRIVAL DATE MAY 14 1966
                                                                               DISTANCE 404.355
    RL 147.10 LAL .00 LOL 99.11 VL 27.624 GAL -7.71 A7L 83.20 MCA 199.66 SMA 127.45 ECC .20330 INC 6.8040 V1 30.286 RP 108.93 LAP -2.28 LOP 298.64 VP 37.356 GAP 8.26 A7P 96.41 TAL 213.56 TAP 53.22 RCA 101.54 APO 153.36 V2 34.790 RC 145.874 GL 33.98 GP -23.75 ZAL 129.31 ZAP 148.39 ETS 312.68 ZAE 125.66 ETE 198.73 ZAC 65.63 ETC 148.72 CLP-158.50
   PLANETOCENTRIC CONIC
    C3 33.670 VHL 5.803 DLA 17.31 RAL 311.18 RAD 6568.3 VEL 12.452 PTH 2.25 VHP 6.242 DPA -40.11 RAP 332.52 ECC 1.5541
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    23 4 51 2913.65
15 48 49 4416.08
                                                                                                         88.65 23 53 24
62.48 17 2 25
                                                                                                                                        2313.6
        90.00
                                                       -28.29
                                                                       90.13
                                                                                      188.68
                                                                                                                                                         -28.18
                                                                                                                                                                          81.47
        90.00
                                                        6.96
                                                                      184.09
                                                                                       179.61
                                                                                                                                        3816.1
                                                                                                                                                           3.22
                      0 40 7 2619.07
                                                      -29.89
       100.00
                                                                        68.49
                                                                                       188.70
                                                                                                         89.82
                                                                                                                      1 23 47
                                                                                                                                        2019.1
                                                                                                                                                         -29.60
                                                                                                                                                                          59.70
                    17 0 9 4185.90
2 10 23 2336.68
17 46 23 4041.04
                                                                                                          61.20 18 9 55
       100.00
                                                        8.37
                                                                      166.41
                                                                                       178.85
                                                                                                                                        3585.9
                                                                                                                                                           4.46
                                                                                                                                                                         159.80
                                                                                                         110.00
                                                      -34.07
                                                                        46.92
                                                                                       188.59
                                                                                                                                        1736.7
                                                                                                                                                        -33.29
                                                                                                                                                                          37.77
                                                                      153.27
                                                                                       176.69
                                                                                                                                        3441.0
                                                                                                                                                           7.63
                                                                                                                                                                         146.86
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                           5GT 3893.7 SGR 231.0 SG3 159.2
RRT -.0939 RRF .3077 RTF .8672
                                                                                                                                ST 1639.2 SR 189.2 SS 521.8
CRT .7416 CRS -.9361 CST -.9297
LSA 1716.5 MSA 220.8 SSA 6.5
    TOE 1.4452 TRA-2.5890 TC3-2.1026 BAU .9465
    ROE .1869 RRA .1340 RC3 -.0082 FAU .05070
    FOE .9699 FRA -.4199 FC3-1.3037 BSP 12239
                                                                           SGB 3900.6 R23 -.3912 R13 -.8671
```

SG1 3893.8 SG2 230.0 THA 179.68

ELI 1645.3 ELZ 126.5 ALF 4.92

BOE 1.4572 BRA 2.5925 BC3 2.1026 FSP -519

ARRIVAL DATE MAY 16 1966

LAUNCH DATE DEC 31 1965

HELIOCENTRIC CONIC **DISTANCE 410.110** .DD LOL 99.11 VL 27.551 GAL -7.37 ATL 83.75 MCA 202.82 SMA 126.96 ECC .2D297 INC 6.2497 V1 30.286 -2.42 LOP 301.81 VP 37.300 GAP 8.43 ATP 95.76 TAL 211.82 TAP 54.63 RCA 101.19 APO 152.73 V2 34.787 RL 147.10 LAL .00 LOL 99.11 VL 27.551 GAL -7.37 A7L 83.75 MCA 202.82 SMA 126.96 ECC .20297 INC 6.2497 V1 30.286 RP 108.93 LAP -2.42 LOP 301.81 VP 37.300 GAP 8.43 A7P 95.76 TAL 211.82 TAP 54.63 RCA 101.19 APO 152.73 V2 34.787 RC 148.138 GL 32.35 GP -20.57 ZAL 129.09 ZAP 151.17 ETS 315.52 ZAE 126.84 ETE 196.62 ZAC 66.02 ETC 151.49 CLP-159.34 PLANETOCENTRIC CONIC C3 30.897 VML 5.559 DLA 16.18 RAL 312.99 RAD 6568.2 VEL 12.340 PTH 2.23 VMP 6.195 DPA -36.36 RAP 333.59 ECC 1.5085 LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23 23 7 2849.67 15 45 1 4436.79 0 57 26 2558.20 16 57 19 4203.50 2 25 43 2281.98 17 45 31 4052.48 90.99 24 10 37 2249.7 -27.86 -28.30 85.45 188.32 90.00 16 58 58 3836.8 3.88 185.27 179.92 62.64 90.00 7.61 1 40 4 1958.2 -29.20 55.22 188.27 92.20 100.00 -29.82 63.97 61.36 18 7 23 3603.5 160.77 100.00 8.95 167.40 179.20 5.05 3 3 45 -33.80 1682.0 -32.67 33.62 110.00 42.68 187.95 95.46 18 53 4 17 45 31 177.15 57.88 3452.5 8.06 147.47 110.00 4052.48 12.39 153.89 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 3988.0 SGR 225.3 SG3 162.0 RRT -.1280 RRF .2368 RTF .8618 SGB 3994.3 R23 -.3503 R13 -.8616 ST 1605.8 SR 191.9 55 506.9 CRT .7544 CRS -.9504 CST -.9203 TOE 1.3485 TRA-2.4853 TC3-2.3554 BAU .9730 ROE .1827 RRA .1137 RC3 .0176 FAU .05066 FDE .9110 FRA -.3511 FC3-1.4195 BSP 12559 BOE 1.3609 BRA 2.4879 BC3 2.3554 FSP -528 LSA 1679.8 MSA 225.2 SSA 7.8 SG1 3988.1 SG2 223.4 THA 179.58 EL1 1612.4 EL2 125.4 ALF 5.18 ARRIVAL DATE MAY 18 1966 LAUNCH DATE DEC 31 1965 FLIGHT TIME 138.00 DISTANCE 415.859 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 27.480 GAL -7.02 A7L 84.18 MCA 205.97 SMA 126.48 ECC .20278 INC 5.8239 V1 30.286 RP 108.94 LAP -2.55 LOP 304.97 VP 37.246 GAP 8.59 A7P 95.24 TAL 210.06 TAP 56.03 RCA 100.84 APO 152.13 V2 34.786 RC 150.390 GL 31.10 GP -18.10 7AL 128.45 7AP 153.43 ETS 317.84 7AE 127.65 ETE 194.86 7AC 66.88 ETC 153.79 CLP-160.22 PLANETOCENTRIC CONIC C3 28.701 VHL 5.357 DLA 15.47 RAL 314.85 RAD 6568.2 VEL 12.251 PTH 2.20 VHP 6.192 DPA -33.28 RAP 334.94 ECC 1.4723 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 37 11 2805.37 -28.21 82.22 188.42 92.62 24 23 56 2205.4 -27.55 73.61 16 59 48 3844.1 90.00 15 45 44 4444.15 7.84 185.69 180.55 62.70 4.12 178.98 1 10 56 2515.69 16 58 36 4209.06 -29.67 188.32 1 52 52 1915.7 52.11 100.00 60.81 93.85 -28.82 18 8 45 100.00 16 58 36 9.13 167.71 179.86 61.41 3609.1 5.24 161.08 3 15 27 18 55 32 2 38 4 2243.09 110.00 -33.50 39.68 187.89 97.21 1643.1 -32.15 30.71 17 47 58 4054.42 154.00 177.87 57.91 3454.4 110.00 12.46 8.13 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 1.2818 TRA-2.3888 TC3-2.6028 BAU .9988 9GT 4D84.5 SGR 226.4 SG3 163.3 RRT -.1517 RRF .1684 RTF .8584 ST 1587.0 SR 197.3 SS 494.8 CRT .7710 CRS -.9630 CST -.9127 ROE .1821 RRA .0958 RC3 .0419 FAU .05013 FOE .8590 FRA -.2885 FC3-1.5121 BSP 12939 SGB 4090.8 R23 -.3026 R13 -.8583 LSA 1658.4 MSA 228.2 SSA 9.1 BOE 1 2946 BRA 2.3907 8C3 2.6031 FSP -537 SG1 4084.6 SG2 223.7 THA 179.52 EL1 1594.3 EL2 125.1 ALF 5.51 FLIGHT TIME 140.00 ARRIVAL DATE MAY 20 1966 LAUNCH DATE DEC 31 1965 HELIOCENTRIC CONIC **DISTANCE 421.600** RL 147.10 LAL .00 LOL 99.11 VL 27.409 GAL -6.67 AZL 84.52 MCA 209.13 SMA 126.02 ECC .20273 INC 5.4848 V1 30.286
RP 108.94 LAP -2.67 LOP 308.13 VP 37.193 GAP 8.75 AZP 94.79 TAL 208.28 TAP 57.41 RCA 100.47 APO 151.57 V2 34.785 RC 152.629 GL 30.12 GP -16.14 TAL 127.48 TAP 155.34 ETS 319.75 TAE 128.24 ETE 193.40 TAC 68.08 ETC 155.72 CLP-161.10 PLANETOCENTRIC CONIC C3 26.883 VML 5.185 DLA 15.08 RAL 316.75 RAD 6568.1 VEL 12.176 PTH 2.19 VMP 6.215 DPA -30.65 RAP 336.48 ECC 1.4424 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 23 48 25 2774.95 90.00 15 49 43 4441.95 100.00 1 21 52 2486.23 100.00 17 2 52 4205.90 110.00 2 48 23 2215.57 93.72 24 34 40 62.68 17 3 45 2175.0 -28.09 80.00 188.89 71.43 7.77 185.56 181.41 3841.9 4.05 178.86 100.00 -29.51 58.64 188.77 94.98 2 3 19 1886.2 -28.51 49.98 18 12 58 3605.9 100.00 9.02 167.53 180.74 61.38 5.14 160.90 3 25 18 19 0 21 110.00 -33.25 37.57 188.25 98.43 1615.6 28.67 3449.3 147.30 17 52 52 12.27 153.72 178.80 57.84 7.94 110.00 4049.33 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4187.3 SGR 231.7 SG3 164.0 ST 1576.5 SR 204.5 \$5 483.6 TOE 1.2326 TRA-2.2977 TC3-2.8548 BAU 1.0263 ROE .1835 RRA .0791 RC3 .0640 FAU .04946 FDE .8103 FRA -.2340 FC3-1.5929 BSP 13441 BDE 1.2461 BRA 2.2990 BC3 2.8556 FSP -552 RRT -.1630 RRF .1085 RTF .8574 568 4193.8 R23 -.2521 R13 -.8573 CRT .7893 CRS -.9733 CST -.9070 LSA 1645.7 MSA 229.4 SSA 10.4 EL1 1584.8 EL2 124.9 ALF 5.88 SG1 4187.5 SG2 228.6 THA 179.48 ARRIVAL DATE MAY 22 1966 FLIGHT TIME 142.00 HELIOCENTRIC CONIC DISTANCE 427.338 RL 147.10 LAL .00 LOL 99.11 VL 27.339 GAL -6.31 AZL 84.79 MCA 212.29 SMA 125.56 ECC .20282 INC 5.2068 V1 30.286 RP 108.94 LAP -2.78 LOP 311.29 VP 37.141 GAP 8.92 AZP 94.41 TAL 206.48 TAP 58.77 RCA 100.10 APO 151.03 V2 34.784 RC 154.855 GL 29.34 GP -14.54 7AL 126.24 7AP 156.99 ETS 321.30 7AE 128.68 ETE 192.18 7AC 69.51 ETC 157.37 CLP-161.98 PLANETOCENTRIC CONIC C3 25.328 VHL 5.033 DLA 14.93 RAL 318.73 RAD 6568.0 VEL 12.112 PTH 2.17 VMP 6.257 DPA -28.36 RAP 338.16 ECC 1.4168 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ. RJ ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 1 33 2755.09 -28.00 78.55 189.67 94.44 0 47 28 2155.1 -27.09 70.00 17 10 10 90.00 15 56 17 4432.33 7.47 185.01 182.48 62.61 3832.3 3.74 178.32 100.00 1 30 58 2466.71 -29.39 57.20 189.53 95.73 2 12 5 1866.7 -28.28 48.57 17 9 33 4195.94 2 57 15 2196.75 61.29 18 19 29 100.00 8.70 166.97 181.81 3595.9 4.80 160.35 110.00 -33.05 36.14 188.96 99.26 3 33 51 1596.7 -31.42 27.29 19 7 5 3438.7 110.00 17 59 46 4038.66 11.88 153.14 179.90 57.71 7.54 146.74 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4232.7 SGR 245.2 SG3 160.8 RRT -.1629 RRF .0863 RTF .8469 ST 1607.5 SR 216.0 SS 495.7 CRT .8200 CRS -.9844 CST -.9045 TOE 1.2388 TRA-2.1664 TC3-3.0477 BAU 1.0324 RDE .1886 RRA .0660 RC3 .0885 FAU .04684 FOE .8030 FRA -.1453 FC3-1.6009 BSP 13032 SGB 4239.8 R23 -.2278 R13 -.8468 SG1 4232.9 SG2 241.9 THA 179.46 LSA 1679.7 MSA 234.4 SSA 11.3 EL1 1617.3 EL2 122.9 ALF 6.33

FLIGHT TIME 136.00

BOE 1.2531 BRA 2.1675 BC3 3.0490 FSP -492

```
ARRIVAL DATE MAY 24 1966
                                                                            FLIGHT TIME 144.00
LAUNCH DATE DEC 31 1965
                                                                           DISTANCE 433.065
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                      2.15 VHP 6.312 DPA -26.31 RAP 339.93 ECC 1.3946
    C3 23.979 VHL 4.897 DLA 14.99 RAL 320.78 RAD 6568.0 VEL 12.056 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                  69.17
                                                                    77.71
                                                                                  190.71
                                                                                                    94.86
                                                                                                                 0 55 D
                                                                                                                                 2143.4
                                                                                                                                                 -26.96
                    0 9 17 2743.44
16 4 57 4417.05
                                                    -27.93
        90.00
                                                                                                               17 18 34
                                                                                                                                  3817.1
                                                                                                                                                   3.25
                                                                                                                                                                 177.46
                                                                                   183.72
                                                                                                     62.49
                                                     6.99
                                                                    184.15
        90.00
                                                                                                                                                                  47.73
                                                                                   190.56
                                                                                                     96.18
                                                                                                                 2 19 39
                                                                                                                                  1854.9
                                                                                                                                                  -28.14
                    1 38 44 2454.94
17 18 11 4180.79
                                                                     56.34
                                                    -29.30
                                                                                                     61.15 18 27 51
                                                                                                                                  3580.8
                                                                                                                                                   4.29
                                                                                                                                                                 159.52
                                                                                   183.06
       100.00
                                                      8.20
                                                                   166.12
                                                                                                     99.78 3 41 30
57.54 19 15 22
                    3 5 6 2184.73
18 8 19 4023.76
                                                                     35.22
                                                                                                                                  1584.7
                                                                                                                                                 -31.22
                                                                                                                                                                  26.41
                                                                                   189.97
                                                   -32.92
                                                                                                                                3423.8
                                                                                                                                                   6.98
                                                                                                                                                                  145.95
                                                                                   181.17
                                                                   152.32
                                                     11.34
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1617.4 SR 225.6 SS 490.1
CRT .8415 CR5 -.9904 CST -.9029
                                                                       SGT 4330.9 SGR 255.4 SG3 160.3
RRT -.1541 RRF .0528 RTF .8474
SGB 4338.4 R23 -.1861 R13 -.8473
    TOE 1.2211 TRA-2.0689 TC3-3.2985 BAU 1.0580
    ROE .1921 RRA .0507 RC3 .1067 FAU .04581
                                                                                                                              LSA 1689.0 MSA 232.9 SSA 12.6
EL1 1628.6 EL2 121.0 ALF 6.73
    FOE .7663 FRA -.0970 FC3-1.6538 BSP 13522
BOE 1.2361 BRA 2.0695 BC3 3.3002 FSP -505
                                                                        SG1 4331.1 SG2 252.4 THA 179.48
                                                                                                                                          ARRIVAL DATE MAY 26 1966
                                                                            FLIGHT TIME 146.00
LAUNCH DATE DEC 31 1965
                                                                            DISTANCE 438.785
   RL 147.10 LAL .00 LOL 99.11 VL 27.203 GAL -5.56 A7L 85.23 HCA 218.61 SMA 124.69 ECC .20346 INC 4.7736 VI 30.286 RP 108.94 LAP -2.98 LOP 317.62 VP 37.042 GAP 9.25 A7P 93.73 TAL 202.86 TAP 61.47 RCA 99.32 APO 150.06 VZ 34.786 RC 159.265 GL 28.16 GP -12.13 TAL 123.08 TAP 159.78 ETS 323.54 TAE 129.30 ETE 190.29 TAC 72.86 ETC 160.01 CLP-163.70
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                       2.14 VHP 6.377 DPA -24.44 RAP 341.78 ECC 1.3751
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 15 53 2738.70 -27.90 77.36 192.00 95.03 1 131 2138.7 -26.91 68.84
                   16 15 29 4396.99
1 45 30 2449.68
17 28 33 4161.24
3 12 11 2178.43
18 18 21 4005.26
                                                                                                      62.35
                                                                                                                17 28 46
                                                       6.35
                                                                    183.01
                                                                                   185.14
        90.00
                                                                                                   96.38 2 26 19
60.99 18 37 54
100.06 3 48 30
57.33 19 25 6
                                                                                                                                                                   47.35
                                                                                                                                                   -28.07
                                                                                                                                   1849.7
                                                                     55.95
                                                                                   191.85
                                                     -29.27
       100.00
                                                                    165.03
                                                                                                                                                                  158.44
                                                                                                                                   3561.2
                                                                                                                                                     3.63
                                                                                    184.48
                                                       7.56
       100.00
                                                                                                                                                                   25.96
                                                                                                                                   1578.4
                                                                                                                                                  -31.11
                                                     -32.84
                                                                     34.75
                                                                                    191.24
       110.00
                                                                                                                                   3405.3
                                                                                                                                                                  144.97
                                                                                                                                                     6.28
                                                      10.66
                                                                    151.32
                                                                                    182.61
                                   4005.26
      110.00
                    18 18 21
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1640.2 SR 236.1 SS 489.5
CRT .8646 CRS -.9946 CST -.9033
                                                                        SGT 4419.6 SGR 267.5 SG3 159.1
RRT -.1393 RRF .0328 RTF .8470
SGB 4427.7 R23 -.1527 R13 -.8469
    TOE 1.2202 TRA-1.9611 TC3-3.5424 BAU 1.0800
    RDE .1964 RRA .0365 RC3 .1236 FAU .04445
                                                                                                                              LSA 1712.4 HSA 230.7 SSA 13.8
    FDE .7390 FRA -. 0460 FC3-1.6884 BSP 13886
                                                                                                                             EL1 1652.9 EL2 117.7 ALF
    BOE 1.2359 BRA 1.9614 BC3 3.5446 FSP -506
                                                                        SG1 4419.8 SG2 264.9 THA 179.52
                                                                                                                                         ARRIVAL DATE HAY 28 1966
                                                                            FLIGHT TIME 148.00
LAUNCH DATE DEC 31 1965
   RL 147.10 LAL .00 LOL 99.11 VL 27.136 GAL -5.17 AZL 85.40 MCA 221.77 SMA 124.26 ECC .204<u>02 INC</u> 4.5996 V1 30.286 RP 108.93 LAP -3.06 LOP 320.78 VP 36.995 GAP 9.42 AZP 93.43 TAL 201.03 TAP 62.80 RCA 98.91 APO 149.62 V2 34.788 RC 161.449 GL 27.70 GP -11.20 ZAL 121.21 ZAP 160.99 ETS 324.30 ZAE 129.54 ETE 189.55 ZAC 74.72 ETC 161.10 CLP-164.54
                                                                           DISTANCE 444.497
   HELTOCENTRIC CONIC
    C3 21.740 VML 4.663 DLA 15.55 RAL 325.18 RAD 6567.9 VEL 11.963 PTH 2.13 VMP 6.450 DPA -22.72 RAP 343.66 ECC 1.3578 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 0 21 36 2739.92 -27.91 77.45 193.53 94.99 1 7 16 2139.9 -26.93 68.92 100.00 16 27 43 4372.89 5.59 181.65 186.74 62.20 17 40 36 3772.9 1.83 175.00 100.00 1 51 29 2450.04 -29.27 55.98 193.37 96.37 2 32 19 1850.0 -28.08 47.37 100.00 17 40 31 4138.00 6.79 163.73 186.09 60.82 18 49 29 3538.0 2.85 157.16 110.00 3 18 44 2177.04 -32.83 34.64 192.77 100.12 3 55 1 1577.0 -31.08 25.85 110.00 18 29 45 3983.76 9.87 150.16 184.21 57.11 19 36 9 3383.8 5.47 143.83
   PLANE TOCENTRIC CONIC
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1674.1 SR 247.2 SS 492.5
CRT .8880 CRS -.9970 CST -.9057
                                                                        9GT 4500.7 SGR 280.5 SG3 157.3
RRT -.1201 RRF .0232 RTF .8462
SG8 4509.4 R23 -.1262 R13 -.8462
     TOE 1.2325 TRA-1.8434 TC3-3.7812 BAU 1.0997
    ROE .2010 RRA .0230 RC3 .1389 FAU .04289
FDE .7181 FRA .0059 FC3-1.7081 BSP 14166
                                                                                                                              L5A 1747.7 MSA 227.3 SSA 14.9
EL1 1688.5 EL2 112.7 ALF 7.50
                                                                        SG1 4500.8 SG2 278.5 THA 179.57
    BOE 1.2488 BRA 1.8436 BC3 3.7838 FSP -502
                                                                                                                                          ARRIVAL DATE MAY 30 1966
                                                                            FLIGHT TIME 150.00
LAUNCH DATE DEC 31 1965
                                                                           DISTANCE 450.201
    RL 147.10 LAL .00 LOL 99.11 VL 27.070 GAL -4.77 AZL 85.55 HCA 224.93 SHA 123.85 ECC .20474 INC 4.4459 VI 30.286 RP 108.92 LAP -3.14 LOP 323.95 VP 36.950 GAP 9.60 AZP 93.15 TAL 199.19 TAP 64.12 RCA 98.49 APO 149.21 V2 34.791 RC 163.619 GL 27.28 GP -10.41 ZAL 119.16 ZAP 162.10 ETS 324.85 ZAE 129.75 ETE 188.92 ZAC 76.66 ETC 162.05 CLP-165.36
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                       2.12 VHP 6.529 OPA -21.10 RAP 345.63 ECC 1.3425
     C3 20.810 VHL 4.562 DLA 16.02 RAL 327.54 RAD 6567.8 VEL 11.924 PTH
    LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 26 37 2746.45
16 41 32 4345.31
1 56 52 2455.39
17 53 58 4111.61
                                                                                                      94.75
                                                                                                                 1 12 23
                                                     -27.95
                                                                     77.93
        90.00
                                                                                                               17 53 58
                                                                                                                                   3745.3
                                                                                                                                                      .94
                                                                                                                                                                  173.46
                                                                                                      62.05
                                                       4.71
                                                                    180.10
                                                                                    188.54
         90.00
                                                                                                                2 37 48
                                                                                                                                   1855.4
                                                                                                                                                   -28.15
                                                                                                                                                                   47.76
                                                                                    195.14
                                                                                                      96.16
                                                     -29.31
                                                                     56.37
       100.00
                                                                                                                19 2 30
                                                                                                                                   3511.6
                                                                                                                                                    1.96
                                                                                                                                                                  155.71
                                                                                                      60.64
                                                                                    187.88
                                                       5.91
                                                                    162.26
       100.00
                                                                                                                                                                   26.07
                                                                                                      99.99
                                                                                                                 4 1 13
                                                                                                                                   1580.0
                                                                                                                                                  -31.14
                                  2180.01
3959.76
                                                    -32.86
                                                                      34.87
                                                                                    194.55
                      3 24 53
       110.00
                                                                                                      56.88
                                                                                                              19 48 26
                                                                                                                                   3359.8
                                                                                                                                                    4.56
                                                                                                                                                                  142.57
                                                                                    186.01
                                                                    148.87
                     18 42 27
                                                      8.98
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4579.4 SGR 293.6 SG3 155.5
RRT -.0981 RRF .0198 RTF .8460
                                                                                                                              ST 1716.5 SR 258.5 SS 497.1
CRT .9102 CRS -.9975 CST -.9096
     TOE 1.2539 TRA-1.7189 TC3-4.0190 BAU 1.1189
     ROE .2057 RRA .0101 RC3 .1522 FAU .04132
FOE .7003 FRA .0558 FC3-1.7191 BSP 14439
                                                                                                                               LSA 1791.8 MSA 222.3 SSA 16.1
                                                                       SGB 4588.8 R23 -.1037 R13 -.8460
                                                                       SG1 4579.5 SG2 292.2 THA 179.64
                                                                                                                           EL1 1732.6 EL2 106.1 ALF 7.83
     BOE 1.2706 BRA 1.7190 BC3 4.0219 FSP -497
```

ARRIVAL DATE JUN 1 1966

LAUNCH DATE DEC 31 1965

DISTANCE 455.897 RL 147.10 LAL .00 LOL 99.11 VL 27.006 GAL -4.36 AZL 85.69 MCA 228.09 SMA 123.45 ECC .20564 INC 4.3082 V1 30.286 RP 108.91 LAP -3.20 LOP 327.12 VP 36.905 GAP 9.78 AZP 92.88 TAL 197.34 TAP 65.43 RCA 98.06 APO 148.83 V2 34.794 RC 165.775 GL 26.90 GP -9.73 ZAL 116.94 ZAP 163.15 ETS 325.21 ZAE 129.94 ETE 188.38 ZAC 78.67 ETC 162.90 CLP-166.17 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.11 VMP 6.616 OPA -19.56 RAP 347.62 ECC 1.3290 C3 19.991 VHL 4.471 DLA 16.59 RAL 330.03 RAD 6567.8 VEL 11.890 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 197.28 94.34 1 17 2 0 31 4 2757.88 16 56 54 4314.70 78.76 -28.01 -.05 61.91 18 8 49 3714.7 190.55 178.39 3.73 90.00 1865.3 -28.27 197.14 2 1 48 2465.32 18 8 52 4082.49 57.10 -29.38 3482.5 154.11 .97 189.89 100.00 4.94 160.65 26.57 -31.26 1586.9 3 30 46 2186.93 18 56 23 3933.65 196.58 -32.94 35.39 110.00 141.20 3.56 3333.7 188.00 147.48 8.01 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1770.2 SR 269.8 55 504.5 CRT .9310 CRS -.9963 CST -.9148 SGT 4650.8 SGR 306.9 SG3 153.4 RRT -.0738 RRF .0234 RTF .8455 TOE 1.2863 TRA-1.5839 TC3-4.2476 BAU 1.1361 ROE .2105 RRA -.0019 RC3 .1635 FAU .03963 FDE .6870 FRA .1063 FC3-1.7162 BSP 14637 BOE 1.3034 BRA 1.5839 BC3 4.2508 FSP -487 LSA 1847.7 MSA 216.2 SSA 17.1 SGB 4660.9 R23 -. 0862 R13 -. 8454 EL1 1788.0 EL2 97.5 ALF 8.10 SG1 4650.8 SG2 306.1 THA 179.72 ARRIVAL DATE JUN 3 1966 FLIGHT TIME 154.00 DISTANCE 461.582 RL 147.10 LAL .00 LOL 99.11 VL 26.942 GAL -3.94 A7L 85.82 MCA 231.25 SMA 123.05 ECC .20673 INC 4.1836 V1 30.286 RP 108.90 LAP -3.26 LOP 330.28 VP 36.863 GAP 9.96 A7P 92.62 TAL 195.48 TAP 66.73 RCA 97.62 APO 148.49 V2 34.798 RC 167.915 GL 26.53 GP -9.13 7AL 114.55 ZAP 164.13 ETS 325.38 ZAE 130.12 ETE 187.92 ZAC 80.75 ETC 163.65 CLP-166.97 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 19.277 VHL 4.391 DLA 17.25 RAL 332.64 RAD 6567.8 VEL 11.860 PTH 2.10 VHP 6.708 DPA -18.09 RAP 349.64 ECC 1.3172
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.27 199.52 1 21 18 93.76 -28.09 79.92 0 35 4 2773.88 90.00 18 25 8 -1.13 3681.4 61.80 176.52 192.78 17 13 46 4281.44 2.67 90.00 95.24 2 47 41 60.34 19 32 41 49.49 1879.5 -28.43 2 6 22 2479.50 18 25 10 4051.06 3 36 29 2197.50 199.39 -29.47 58.14 100.00 -.10 152.39 3451.1 100.00 3.88 158.92 192.11 99.23 4 13 7 56.45 20 16 37 -31.43 1597.5 -33.06 36.19 198.86 110.00 2.50 146.00 190.20 3305.8 19 11 32 3905.83 6.96 110.00 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1828.6 SR 281.1 SS 511.0 CRT .9490 CRS -.9936 CST -.9207 SGT 4724.1 SGR 319.7 SG3 151.3 RRT -.0489 RRF .0281 RTF .8464 SGB 4734.9 R23 -.0698 R13 -.8464 TOE 1.3227 TRA-1.4439 TC3-4.4756 BAU 1.1543 ROE .2153 RRA -.0134 RC3 .1724 FAU .03805 LSA 1907.9 MSA 208.6 SSA 18.3 EL1 1848.0 EL2 87.7 ALF 8.32 FOE .6730 FRA .1526 FC3-1.7090 BSP 14911 BOE 1.3401 BRA 1.4439 BC3 4.4769 FSP -483 EL1 1848.0 EL2 87.7 ALF 5G1 4724.1 5G2 319.3 THA 179.81 ARRIVAL DATE JUN 5 1966 FLIGHT TIME 156.00 LAUNCH DATE DEC 31 1965 DISTANCE 467.257 RL 147.10 LAL .00 LOL 99.11 VL 26.880 GAL -3.51 AZL 85.93 MCA 234.41 SMA 122.67 ECC .20801 INC 4.0695 V1 30.286 RP 108.89 LAP -3.31 LOP 333.45 VP 36.821 GAP 10.15 AZP 92.37 TAL 193.61 TAP 68.02 RCA 97.15 APO 148.19 V2 34.803 RC 170.040 GL 26.15 GP -8.61 ZAL 111.99 ZAP 165.06 ETS 325.38 ZAE 130.28 ETE 187.51 ZAC 82.87 ETC 164.33 CLP-167.74 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 18.665 VHL 4.320 DLA 17.98 RAL 335.40 RAD 6567.8 VEL 11.834 PTH 2.10 VHP 6.807 DPA -16.67 RAP 351.69 ECC 1.3072 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1 25 16 -27.45 202.00 93.02 0 38 42 2794.26 17 32 7 4245.88 81.41 -28.17 -2.27 167.91 3645.9 195.24 61.72 18 42 53 174.54 1.52 50.81 -28.63 1897.7 201.89 94.54 2 52 17 59.48 2 10 39 2497.70 -29.5A 100.00 3417.7 -1.23 150.56 60.22 19 49 48 157.08 194.56 2.75 18 42 50 4017.67 98.61 4 19 0 56.26 20 32 27 28.37 1611.5 -31.66 3 42 8 2211.48 19 27 51 3876.65 37.26 201.40 -33.21 110.00 3276.7 1.39 138.23 192.63 144.46 5.86 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1895.6 SR 292.3 S5 518.8 CRT .9643 CRS -.9896 CST -.9271 SGT 4794.1 SGR 332.2 SG3 149.2 RRT -.0233 RRF .0364 RTF .8477 SGB 4805.6 R23 -.0563 R13 -.8477 TOE 1.3667 TRA-1.2950 TC3-4.6922 BAU 1.1717 RDE .2202 RRA -.0241 RC3 .1790 FAU .03646 FDE .6614 FRA .1979 FC3-1.6913 BSP 15162 BDE 1.3843 BRA 1.2952 BC3 4.6956 FSP -477 LSA 1976.8 MSA 200.0 SSA 19.4 EL1 1916.5 EL2 76.6 ALF 8.47 SG1 4794.1 SG2 332.1 THA 179.91 EL1 1916.5 EL2 ARRIVAL DATE JUN 7 1966 FLIGHT TIME 158.00 LAUNCH DATE DEC 31 1965 DISTANCE 472.921 RL 147.10 LAL .00 LOL 99.11 VL 26.818 GAL -3.07 A7L 86.04 HCA 237.57 SMA 122.30 ECC .20949 INC 3.9640 V1 30.286 RP 108.87 LAP -3.35 LOP 336.62 VP 36.781 GAP 10.34 A7P 92.13 TAL 191.73 TAP 69.31 RCA 96.68 APO 147.92 V2 34.808 RC 172.148 GL 25.75 GP -8.15 TAL 109.28 ZAP 165.94 ETS 325.20 ZAE 130.45 ETE 187.16 ZAC 85.04 ETC 164.94 CLP-168.51 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.09 VHP 6.912 DPA -15.29 RAP 353.75 ECC 1.2988 C3 18.157 VHL 4.261 DLA 18.77 RAL 338.29 RAD 6567.7 VEL 11.813 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2218.8 1 28 59 0 42 0 2818.83 17 51 55 4208.35 83.20 204.72 92.12 . 20 59 19 2 3 2 44 15 -28.24 90.00 -3.48 165.A1 3608.4 61.68 172.45 197.96 . 31 90.00 1919.7 -28.86 52.41 2 14 46 2519.74 19 1 51 3982.68 93.69 61.11 204.64 -29.68 100.00 60.14 20 8 13 3382.7 -2.42 148.64 155.16 197.26 1.57 100.00 97.85 4 24 56 1628.7 -31.93 29.54 -33.38 38.57 204.20 3 47 47 2228.67 110.00 20 49 25 56.10 3246.5 .24 136.65 195.29 3846.51 142.87 19 45 18 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1969.2 SR 303.4 SS 526.4 CRT .9767 CRS -.9844 CST -.9337 SGT 4861.0 SGR 344.2 SG3 147.0 RRT .0025 RRF .0466 RTF .8496 TOE 1.4164 TRA-1.1372 TC3-4.8938 BAU 1.1887 ROE .2253 RRA -.0338 RC3 .1830 FAU .03489 FOE .6503 FRA .2418 FC3-1.6638 BSP 15416 SGB 4873.1 R23 .0445 R13 .8496 - &G1 4861.0 SG2 344.2 THA .01 LSA 2051.8 MSA 190.7 SSA 20.5 EL1 1991.4 EL2 64.4 ALF 8.57 BOE 1.4342 BRA 1.1377 BC3 4.8972 FSP -472

FLIGHT TIME 152.00

```
LAUNCH DATE DEC 31 1965
                                                                                      FLIGHT TIME 160.00
                                                                                                                                                          ARRIVAL DATE JUN 9 1966
                                                                                     DISTANCE 478.574
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 99.11 VL 26.757 GAL -2.61 AZL 86.13 MCA 240.74 SMA 121.93 ECC .21120 INC 3.8657 VI 30.286 RP 108.85 LAP -3.37 LOP 339.80 VP 36.743 GAP 10.54 AZP 91.89 TAL 189.85 TAP 70.58 RCA 96.18 APO 147.68 VZ 34.814 RC 174.239 GL 25.32 GP -7.75 ZAL 106.42 ZAP 166.79 ETS 324.83 ZAE 130.61 ETE 186.86 ZAC 87.24 ETC 165.49 CLP-169.26
    PLANETOCENTRIC CONIC
     C3 17.752 VHL 4.213 DLA 19.60 RAL 341.34 RAD 6567.7 VEL 11.796 PTH 2.09 VHP 7.023 DPA -13.95 RAP 355.84 ECC 1.2921 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      0 45 4 2847.48
18 13 9 4169.19
                                                                                                                                              2247.5
                                                                             85.29
                                                                                                               91.07
          90.00
                                                           -28.30
                                                                                            207.70
                                                                                                                              1 32 32
                                                                                                                                                                                     76.66
                                                                                                                                                                  -27.85
                                                                                                                 61.70 19 22 38
          90.00
                                                             - . 96
                                                                            170.26
                                                                                             200.93
                                                                                                                                                  3569.2
                                                                                                                                                                    -4.73
                                                                                                                                                                                     163.62
                      2 18 44 2545.43
19 22 10 3946.47
                                                                                             207.65
                                                                                                                 92.69
        100.00
                                                           -29.7A
                                                                             63.02
                                                                                                                                                 1945.4
                                                                                                                                                                   -29.09
                                                                                                                 92.69 3 1 10
60.11 20 27 56
                                                                                                                              3 1 10
                                                                                                                                                                                      54.28
                                                                                                                                               3346.5
        100.00
                                                              . 34
                                                                            153.17
                                                                                             200.21
                                                                                                                                                                    -3.64
                                                                                                                                                                                    146.64
                                                       -33.55
                                                                                                                 96.95 4 31 1
55.98 21 7 27
        110.00
                       3 53 32 2248.86
20 3 52 3815.81
                                                                             40.12
                                                                                             207.27
                                                                                                                                                 1648.9
                                                                                                                                                                   -32.23
                                                                                                                                                                                     31.14
        110.00
                                                           3.55
                                                                            141.26
                                                                                             198.21
                                                                                                                                                 3215.8
                                                                                                                                                                     -.94
                                                                                                                                                                                    135.05
    DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 4919.5 SGR 355.8 SG3 144.6

RRT .0291 RRF .0607 RTF .8509

SGB 4932.3 R23 .0358 R13 .8509

SGI 4919.5 SG2 355.6 THA .12
     TOE 1.4748 TRA -.9668 TC3-5.0671 BAU 1.2033
                                                                                                                                            ST 2052.8 SR 314.6 55 535.8
CRT .9862 CRS -.9782 CST -.9403
     ROE .2309 RRA -.0425 RC3 .1847 FAU .03324
FOE .6421 FRA .2873 FC3-1.6213 89P 15576
BDE 1.4928 BRA .9677 BC3 5.0704 FSP -463
                                                                                                                                            LSA 2136.9 MSA 181.6 SSA 21.6
EL1 2076.1 EL2 51.5 ALF 8.60
                                                                                                                           .12
                                                                                     FLIGHT TIME 162.00
LAUNCH DATE DEC 31 1965
                                                                                                                                                          ARRIVAL DATE JUN 11 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 484.212
    RL 147.10 LAL .00 LOL 99.11 VL 26.697 GAL -2.14 A7L 86.23 MCA 243.91 SMA 121.57 ECC .21313 INC 3.7733 VI 30.286 RP 108.83 LAP -3.39 LOP 342.97 VP 36.706 GAP 10.75 AZP 91.66 TAL 187.95 TAP -71.86 RCA 95.66 APO 147.49 V2 34.821 RC 176.312 GL 24.85 GP -7.39 ZAL 103.41 ZAP 167.60 ETS 324.27 ZAE 130.77 ETE 186.59 ZAC 89.47 ETC 165.98 CLP-170.01
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 17.455 VHL 4.178 DLA 20.47 RAL 344.53 RAD 6567.7 VEL 11.783 PTH 2.08 VHP 7.141 DPA -12.63 RAP 357.94 ECC 1.2873
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 47 59 2880.05 -28.32 87.68 210.94 89.88 1 35 56 2280.1 -28.03 79.02
90.00 18 35 46 4128.79 -2.26 168.01 204.18 61.77 19 44 35 3528.8 -6.02 161.34
100.00 2 22 39 2574.59 -29.86 65.18 210.92 91.56 3 5 34 1974.6 -29.32 56.42
100.00 19 43 44 3999.49 -.91 151.14 203.43 60.12 20 48 53 3309.5 -4.88 144.60
110.00 3 59 26 2271.82 -33.73 41.89 210.62 95.92 4 37 18 1671.8 -32.54 32.86
110.00 20 23 27 3785.02 2.38 139.65 201.38 55.89 21 26 32 3185.0 -2.11 133.45
    DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 4980.1 SGR 366.7 SG3 142.3
RRT .0549 RRF .0748 RTF .8537
SGB 4993.6 R23 .0277 R13 .8537
     TOE 1.5351 TRA -. 7902 TC3-5.2209 BAU 1.2191
                                                                                                                                            ST 2137.7 SR 325.7 SS 543.5
CRT .9926 CRS -.9713 CST -.9466
     ROE .2369 RRA -.0502 RC3 .1834 FAU .03170
    FOE .6330 FRA .3293 FC3-1.5725 BSP 15799
BDE 1.5533 BRA .7918 BC3 5.2242 FSP -456
                                                                                                                                            LSA 2222.8 MSA 172.4 SSA 22.6
EL1 2162.0 EL2 39.1 ALF 8.60
                                                                                SG1 4980.2 SG2 366.1 THA
                                                                                                                         .23
                                                                                                                                                        ARRIVAL DATE JUN 13 1966
LAUNCH DATE DEC 31 1965
                                                                                    FLIGHT TIME 164.00
                                                                                    DISTANCE 489.836
    RL 147.10 LAL .00 LOL 99.11 VL 26.639 GAL -1.66 AZL 86.31 MCA 247.07 SMA 121.23 ECC .21531 INC 3.6857 V1 30.286
RP 108.81 LAP -3.39 LOP 346.14 VP 36.670 GAP 10.98 AZP 91.44 TAL 186.06 TAP 73.13 RCA 95.12 APO 147.33 VZ 34.828
RC 178.366 GL 24.32 GP -7.07 ZAL 100.28 ZAP 168.37 ETS 323.50 ZAE 130.92 ETE 186.36 ZAC 91.74 ETC 166.42 CLP-170.74
   PLANETOCENTRIC CONIC
    C3 17.271 VHL 4.156 DLA 21.35 RAL 347.87 RAD 6567.7 VEL 11.775 PTH 2.D8 VHP 7.267 DPA -11.34 RAP .05 ECC 1.2842
LNCH AZHTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                            2316.4
        90.00 0 50 37 2916.39
90.00 18 59 44 4087.55
100.00 2 26 35 2606.97
                                                                                        214.42
                                                                                                           88.55
                                                                                                                                                               -28.18
                                                          -28.28
                                                                            90.33
                                                                                                                             1 39 14
                                                                                                                                                                                    81.67
                                                                                                                61.89 20 7 51
                                                            -3.58
                                                                           165.70
                                                                                            207.71
                                                                                                                                                 3487.5
                                                                                                                                                                   -7.32
                                                                                                                                                                                   149.01
                                                                                                                                                2007.0
        100.00
                                                          -29.89
                                                                            67.59
                                                                                            214.44
                                                                                                                90.29
                                                                                                                             3 10 2
                                                                                                                                                                  -29.53
                                                                                                                                                                                    58.80
                      20 6 27
                                       3872.20
                                                            -2.18
                                                                           149.09
                                                                                            206.93
                                                                                                                60.18 21 10 59
                                                                                                                                                 3272.2
                                                                                                                                                                   -6.13
                                                                                                                                                                                   142.54
        100.00
                      4 5 34 2297.30
20 43 57 3754.64
                                                                                                                94.76 4 43 51
55.84 21 46 32
                                                         -33.89
                                                                             43.86
                                                                                            214.23
                                                                                                                                                1697.3
                                                                                                                                                                  -32.86
                                                                                                                                                                                    34.78
       110.00
                                                                           138.06
                                                                                            204.61
                                                                                                                                                3154.6
                                                                                                                                                                  -3.27
                                                                                                                                                                                   131.86
        110.00
                                                            1.22
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 5036.1 SGR 376.9 SG3 139.9
RRT .0805 RRF .0898 RTF .8569
SGB 5050.2 R23 .0205 R13 .8570
                                                                                                                                           ST 2224.2 SR 336.7 SS 550.0 CRT .9963 CRS -.9637 CST -.9523
     TDE 1.5986 TRA -.6032 TC3-5.3411 BAU 1.2339
    RDE .2435 RRA -.0568 RC3 .1795 FAU .03019
FDE .6234 FRA .3707 FC3-1.5133 BSP 16021
                                                                                                                                           LSA 2309.8 MSA 163.8 SSA 23.6
EL1 2249.3 EL2 28.7 ALF 8.58
                                                                                                                          .35
                                                                                SG1 5036.2 SG2 375.6 THA
    BDE 1.6170 BRA .6058 BC3 5.3441 FSP -451
                                                                                    FLIGHT TIME 166.00
                                                                                                                                                         ARRIVAL DATE JUN 15 1966
LAUNCH DATE DEC 31 1965
                                                                                   DISTANCE 495.444
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 99.11 VL 26.581 GAL -1.15 AZL 86.40 HCA 250.24 SMA 120.89 ECC .21776 INC 3.6020 V1 30.286 RP 108.78 LAP -3.39 LOP 349.32 VP 36.636 GAP 11.21 AZP 91.22 TAL 184.15 TAP 74.40 RCA 94.56 APO 147.21 V2 34.836 RC 180.400 GL 23.73 GP -6.78 ZAL 97.03 ZAP 169.12 ETS 322.51 ZAE 131.08 ETE 186.16 ZAC 94.02 ETC 166.81 CLP-171.46
   PLANETOCENTRIC CONIC
                                                                                                                  2.08 VMP 7.400 0PA -10.08 RAP 2.18 ECC 1.2832
    C3 17.207 VHL 4.148 OLA 22.23 RAL 351.36 RAD 6567.7 VEL 11.772 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      0 53 12 2956.30
19 24 55 4045.92
2 30 35 2642.31
         90.00
                                                          -2A .1A
                                                                           93.25
                                                                                           218.15
                                                                                                               87.09
                                                                                                                             1 42 29
                                                                                                                                                2356.3
                                                                                                                                                                 -28.29
                                                                                                                                                                                     84.58
                                                                                                                            20 32 21
                                                                                                                 62.08
                                                                                                                                                 3445.9
                                                                                                                                                                                    156.64
         90.00
                                                            -4.92
                                                                           163.37
                                                                                            211.51
                                                                                                                                                                    -8.51
                                                                                                                88.91
                                                                                                                              3 14 37
                                                                                                                                                 2042.3
                                                                                                                                                                  -29.71
       100.00
                                                          -29.87
                                                                             70.22
                                                                                            218.22
                                                                                                                                                                                     61.42
                      20 30 14 3835.14
4 12 1 2324.97
21 5 17 3725.25
                                                                                                                60.29 21 34 9
                                                                                                                                                 3235.1
                                                                           147.06
                                                                                            210.70
                                                                                                                                                                   -7.36
                                                                                                                                                                                    140.47
       100.00
                                                           -3.43
                                                                                                                             4 50 46
                                                                                                                93.50
                                                                                                                                                 1725.0
                                                                                                                                                                 -33.17
       110.00
                                                          -34.03
                                                                             46.01
                                                                                            218.12
                                                                                                                                                                                     36.88
                                                                                                                55.82 22 7 22
                                                                                                                                                 3125.3
                                                                                                                                                                    -4.39
       110.00
                                                             .09
                                                                           136.53
                                                                                            208.50
                                                                                                                                                                                    130.32
                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 5089.0 SGR 386.4 SG3 137.4
RRT .1056 RRF .1059 RTF .8605
SGB 5103.6 R23 .0145 R13 .8605
                                                                                                                                           ST 2310.3 SR 347.7 SS 555.1
CRT .9975 CRS -.9557 CST -.9574
     TOE 1.6646 TRA -.4063 TC3-5.4233 BAU 1.2482
                                                                                                                                     CRT .9975 CRS -.9557 C5. ...
LSA 2396.1 MSA 156.3 SSA 24.3
ELI 2336.2 EL2 24.3 ALF 8.54
    RDE .2509 RRA -.0622 RC3 .1729 FAU .02869
    FDE .6137 FRA .4114 FC3-1.4434 BSP 16245
                                                                                SG1 5089.1 SG2 384.2 THA .46
    BOE 1.6834 BRA .4111 BC3 5.4261 FSP
```

ARRIVAL DATE JUN 17 1966

LAUNCH DATE DEC 31 1965

DISTANCE 501.033 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 26.524 GAL -.64 AZL 86.48 MCA 253.41 SHA 120.55 ECC .22048 INC 3.5216 V1 30.286 RP 108.76 LAP -3.37 LOP 352.49 VP 36.602 GAP 11.45 AZP 91.01 TAL 182.25 TAP 75.66 RCA 93.97 APO 147.15 V2 34.845 RC 182.414 GL 23.08 GP -6.52 TAL 93.67 ZAP 169.83 ETS 321.25 ZAE 131.24 ETE 185.98 ZAC 96.33 ETC 167.17 CLP-172.18 PLANETOCENTRIC CONIC C3 17.271 VHL 4.156 DLA 23.10 RAL 354.97 RAD 6567.7 VEL 11.775 PTH 2.08 VHP 7.542 DPA -8.83 RAP LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 85.52 1 45 43 2399.5 -28.32 87.75 0 55 44 2999.52 19 51 14 4004.42 222.11 96.40 90.00 -27.99 62.32 20 57 58 3404.4 -9.89 154.26 -6.23 161.03 215.60 90.00 3 19 25 2080.2 -29.83 64.23 2 34 45 2680.24 20 54 53 3798.94 87.43 73.03 222.24 100.00 -29.79 3198.9 -8.55 138.45 60.44 21 58 12 100.00 -4.65 145.06 214.73 39.13 4 18 53 2354.48 21 27 15 3697.47 92.14 4 58 7 1754.5 -33.45 -34.12 48.31 222.26 55.83 22 28 53 3097.5 -.97 135.08 212.44 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2396.9 SR 358.7 SS 559.6 CRT .9966 CRS -.9471 CST -.9619 SGT 5134.0 SGR 395.2 SG3 134.9 RRT .1311 RRF .1238 RTF .8639 SGB 5149.2 R23 .0100 R13 .8640 TDE 1.7346 TRA -.1951 TC3-5.4545 BAU 1.2600 RDE .2593 RRA -.0661 RC3 .1640 FAU .02716 FDE .6046 FRA .4535 FC3-1.3613 BSP 16388 LSA 2482.7 M5A 150.6 5SA 24.8 EL1 2423.4 EL2 29.2 ALF SG1 5134.3 SG2 391.8 THA .58 BOE 1.7538 BRA .2060 BC3 5.4570 FSP -439 ARRIVAL DATE JUN 19 1966 FLIGHT TIME 170.00 LAUNCH DATE DEC 31 1965 DISTANCE 506.602 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 26.468 GAL -.10 A7L 86.56 MCA 256.58 SMA 120.23 ECC .22351 INC 3.4438 V1 30.286 RP 108.73 LAP -3.35 LOP 355.67 VP 36.570 GAP 11.71 A7P 90.80 TAL 180.34 TAP 76.93 RCA 93.36 APO 147.10 V2 34.854 RC 184.407 GL 22.35 GP -6.28 TAL 90.24 ZAP 170.52 ETS 319.71 ZAE 131.39 ETE 185.83 ZAC 98.65 ETC 167.48 CLP-172.89 PLANETOCENTRIC CONIC -7.60 RAP C3 17.474 WHL 4.180 DLA 23.93 RAL 358.70 RAD 6567.7 VEL 11.784 PTH 2.08 VMP 7.693 DPA -7.60 RAP 6.47 ECC 1.2876
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2.08 VHP 7.693 DPA 2445.7 91.12 83.87 1 49 D -28.26 90.00 226.28 0 58 14 3045.71 -27.70 99.74 20 18 28 3963.66 2 39 10 2720.28 62.62 21 24 32 3363.7 -11.13 151.90 90.00 -7.52 158.72 219.95 3 24 30 2120.3 -29.89 67.20 -29.63 76.00 226.48 85.87 100.00 60.63 22 22 57 90.71 5 5 58 55.87 22 50 51 143.14 219.02 3164.3 -9.68 136.50 100.00 21 20 13 3764.31 -5.81 -33.70 41.51 1785.4 4 26 13 2385.37 -34.18 50.72 226.64 110.00 3072.0 -6.41 127.51 110.00 21 49 39 3671.99 -1.94 133.75 216.62 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5187.0 SGR 402.9 SG3 132.3 RRT .1557 RRF .1388 RTF .8733 ST 2465.9 SR 369.3 SS 557.5 TOE 1.7963 TRA .0140 TC3-5.4607 BAU 1.2762 CRT .9940 CRS -.9393 CST -.9664 ROE .2684 RRA -.0695 RC3 .1515 FAU .02606 SGB 5202.7 R23 .0021 R13 .8733 SG1 5187.4 SG2 397.9 THA .70 LSA 2550.7 MSA 144.3 SSA 25.0 EL1 2493.1 EL2 39.9 ALF 8.47 FOE .5906 FRA .4829 FC3-1.2912 BSP 16844 BDE 1.8162 BRA .0709 BC3 5.4628 FSP -459 ARRIVAL DATE JUN 21 1966 FLIGHT TIME 172.00 LAUNCH DATE DEC 31 1965 015TANCE 512.148 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 26.413 GAL .46 AZL 86.63 MCA 259.76 SMA 119.91 ECC .22687 INC 3.3679 VI 30.286
RP 108.70 LAP -3.31 LOP 358.85 VP 36.540 GAP 11.98 AZP 90.60 TAL 178.44 TAP 78.20 RCA 92.71 APO 147.12 V2 34.863
RC 186.379 GL 21.56 GP -6.07 ZAL 86.75 ZAP 171.18 ETS 317.82 ZAE 131.55 ETE 185.69 ZAC 100.99 ETC 167.75 CLP-173.59 PLANETOCENTRIC CONIC C3 17.829 VML 4.222 DLA 24.70 RAL 2.52 RAD 6567.7 VEL 11.799 PTH 2.09 VMP 7.854 DPA -6.38 RAP 8 63 FCC 1.2934 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2494.5 1 0 48 3094.52 20 46 26 3924.18 2 43 56 2761.96 21 45 59 3731.97 4 34 8 2417.21 22 12 16 3649.49 -28.10 82.15 1 52 22 62.96 21 51 50 230.64 94.68 -27.29 103.26 90.00 224.55 3324.2 -12.30 149.60 156.47 90.00 -8.75 230.93 84.27 3 29 58 2162.0 -29.87 70.30 79.07 -29.39 100.00 22 48 11 3132.0 -10.72 134.66 223.54 60.84 141.35 100.00 -6.89 -33.90 43.97 231.24 89.24 5 14 25 1817.2 110.00 -34.18 53.21 55.92 23 13 6 3049.5 -7.26 126.32 221.02 -2.80 132.58 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5219.8 SGR 410.6 SG3 130.0 RRT .1808 RRF .1639 RTF .8725 SGB 5236.0 R23 .0053 R13 .8725 SGI 5220.4 SG2 403.8 THA .82 ST 2546.4 SR 380.5 SS 564.9 CRT .9899 CRS -.9296 CST -.9695 TOE 1.8720 TRA .2564 TC3-5.3807 BAU 1.2830 ROE .2795 RRA -.0699 RC3 .1396 FAU .02427 LSA 2631.9 MSA 144.7 9SA 24.9 EL1 2574.2 EL2 53.3 ALF 8.42 FOE .5870 FRA .5351 FC3-1.1787 BSP 16713 BOE 1.8928 BRA .2657 BC3 5.3825 FSP -423 ARRIVAL DATE JUN 23 1966 FLIGHT TIME 174.00 LAUNCH DATE DEC 31 1965 DISTANCE 517.667 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 99.11 VL 26.359 GAL 1.04 A7L 86.71 MCA 262.93 SMA 119.61 ECC .23057 INC 3.2935 VI 30.286
RP 108.67 LAP -3.27 LOP 2.03 VP 36.510 GAP 12.27 A7P 90.41 TAL 176.53 TAP 79.47 RCA 92.03 APO 147.18 V2 34.873
RC 188.330 GL 20.70 GP -5.88 ZAL 83.23 ZAP 171.81 ETS 315.54 ZAE 131.70 ETE 185.57 ZAC 103.35 ETC 167.98 CLP-174.29 PLANETOCENTRIC CONIC 2.09 VHP 8.027 DPA -5.18 RAP 10.80 ECC 1.3020 6.42 RAD 6567.7 VEL 11.821 PTH C3 18.351 VHL 4.284 DLA 25.41 RAL LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2545.4 -26.77 80.41 1 55 55 -27.82 98.38 1 3 30 3145.35 21 14 51 3886.80 106.89 235.16 90.00 147.40 63.33 22 19 37 3286.8 -13.40 -9.90 154.33 229.37 90.00 73.46 2 49 12 2804.54 82.66 3 35 57 2204.5 -29.77 -29.06 82.20 235.55 100.00 133.00 61.06 23 13 32 3102.9 -11.65 3702.85 -7.85 139.72 228.27 100.00 22 11 49 236.04 87.75 5 23 32 1849.4 -34.05 46.48 4 42 42 2449.44 -34.12 55.72 87.75 5 23 32 55.98 23 35 19 110.00 -7.96 125.33 3030.7 22 34 48 131.60 225.61 110.00 3630.72 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID=COURSE EXECUTION ACCURACY SGT 5252.7 SGR 417.0 SG3 127.4 ST 2606.4 SR 390.9 S5 564.4 RRT .2052 RRF .1852 RTF .8763 CRT .9846 CRS -.9202 CST -.9724 SG8 5269.3 R23 .0043 R13 .8763 LSA 2691.3 MSA 145.2 SSA 24.3 SG1 5253.4 SG2 408.1 THA .94 EL1 2634.7 EL2 67.5 ALF 8.41 ST 2606.4 SR 390.9 SS 564.4 CRT .9846 CRS -.9202 CST -.9724 TOE 1.9389 TRA .5036 TC3-5.2602 BAU 1.2909 ROE .2913 RRA -.0694 RC3 .1234 FAU .02278 FOE .5771 FRA .5778 FC3-1.0747 BSP 16796 BDE 1.9606 BRA .5084 BC3 5.2617 FSP -415

FLIGHT TIME 168.00

ARRIVAL DATE JUN 25 1966

```
FLIGHT TIME 176.00
LAUNCH DATE DEC 31 1965
     HELIOCENTRIC CONIC
                                                                                                                  *DISTANCE 523.156
      RL 147.10 LAL .00 LOL 99.11 VL 26.305 GAL 1.64 AZL 86.78 HCA 266.11 SMA 119.30 ECC .23467 INC 3.2201 V1 30.286
RP 108.63 LAP -3.21 LOP 5.22 VP 36.482 GAP 12.58 AZP 90.22 TAL 174.64 TAP 80.75 RCA 91.31 APO 147.30 VZ 34.884
RC 190.259 GL 19.78 GP -5.70 ZAL 79.69 ZAP 172.41 ETS 312.78 ZAE 131.86 ETE 185.47 ZAC 105.71 ETC 168.18 CLP-174.99
     PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
CS 19.037 VHL 4.365 OLA 26.03 RAL 10.37 RAD 6567.8 VEL 11.851 PTH 2.10 VHP 8.211 DPA -4.00 RAP 12.98 ECC 1.3136
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 6 28 3197.53 -26.12 110.57 239.81 78.67 1 59 46 2597.5 -27.43 102.14
90.00 21 43 20 3852.37 -10.94 152.34 234.37 63.72 22 47 32 3252.4 -14.39 145.35
100.00 2 55 8 2847.21 -28.65 853.00 240.31 81.08 3 42 35 2247.2 -29.58 76.62
100.00 22 37 21 3677.92 -8.67 138.32 233.17 61.28 23 38 39 3077.9 -12.43 131.56
110.00 4 52 1 2481.51 -34.00 58.22 241.01 86.28 5 33 22 1881.5 -34.15 48.98
110.00 22 56 57 3616.39 -4.06 130.85 230.35 56.03 23 57 14 3016.4 -8.50 124.56
          110.00
                                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            SGT 5285.8 SGR 422.4 SG3 124.8
RRT .2284 RRF .2053 RTF .8813
SGB 5302.7 R23 .0028 R13 .8813
SGI 5286.7 SG2 411.2 THA 1.05
     TOE 1.9971 TRA ..7588 TC3-5.1018 BAU 1.3001
ROE .3043 RRA -.0673 RC3 ..1100 FAU .02144
FOE .5645 FRA .6182 FC3 -.9741 BSP 16958
BDE 2.0202 BRA ..7618 BC3 5.1030 FSP -408
                                                                                                                                                                                              ST 2645.6 SR 400.5 SS 560.0 CRT .9784 CRS -.9105 CST -.9748
                                                                                                                                                                                              LSA 2729.7 MSA 147.2 SSA 23.6
                                                                                                                                                                                              EL1 2674.5 EL2 81.9 ALF 8.43
                                                                                                                                                                                                                ARRIVAL DATE JUN 27 1966
LAUNCH DATE DEC 31 1965
                                                                                                                   FLIGHT TIME 178.00
                                                                                                                  DISTANCE 528.611
    HELIOCENTRIC CONIC
      RL 147.10 LAL .00 LOL 99.11 VL 26.253 GAL 2.27 ATL 86.85 HCA 269.29 SMA 119.01 ECC .23918 INC 3.1472 V1 30.286
RP 108.60 LAP -3.15 LOP 8.40 VP 36.455 GAP 12.91 AZP 90.04 TAL 172.74 TAP 82.03 RCA 90.55 APO 147.47 V2 34.895
RC 192.167 GL 18.80 GP -5.55 ZAL 76.18 ZAP 172.98 ETS 309.48 ZAE 132.00 ETE 185.38 ZAC 108.08 ETC 168.34 CLP-175.69
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 19.968 VML 4.469 DLA 26.57 RAL 14.32 RAD 6567.8 VEL 11.889 PTH 2.11 VMP 8.409 DPA -2.83 RAP 15.17 ECC 1.3286
LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 9 54 3250.14 -25.37 114.24 244.55 76.98 2 4 4 2650.1 -26.91 105.91
90.00 22 11 28 3821.91 -11.85 150.57 239.53 64.09 23 15 10 3221.9 -15.24 143.53
100.00 3 1 54 2889.08 -28.17 88.32 245.20 79.56 3 50 3 2289.1 -29.32 79.71
100.00 23 2 9 3658.20 -9.31 137.21 238.20 61.47 24 3 8 3058.2 -13.05 130.42
110.00 5 2 7 2512.91 -33.84 60.66 246.11 84.85 5 44 0 1912.9 -34.18 51.43
110.00 23 18 25 3607.14 -4.41 130.36 235.21 56.07 24 18 33 3007.1 -8.84 124.07
                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                          HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                            RET .2515 RRF .2260 RTF .8665
SGB 5331.2 R23 .0018 R13 .8865
SGI 5315.2 SGZ 413.1 THA 1.16
                                                                                                                                                                                              ST 2669.7 SR 409.3 SS 553.7
CRT .9713 CR5 -.9004 CST -.9769
       TOE 2.0508 TRA 1.0282 TC3-4.8968 BAU 1.3075
      RDE .3185 RRA -.0639 RC3 .0942 FAU .02012
FOE .5514 FRA .6594 FC3 -.8724 BSP 17105
BOE 2.0754 BRA 1.0302 BC3 4.8977 FSP -402
                                                                                                                                                                                            LSA 2752.8 MSA 151.2 SSA 22.6
EL1 2699.1 EL2 96.3 ALF 8.48
                                                                                                                                                                                                              ARRIVAL DATE JUN 29 1966
                                                                                                                  FLIGHT TIME 180.00
LAUNCH DATE DEC 31 1965
                                                                                                                  DISTANCE 534.026
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 99.11 VL 26.202 GAL 2.93 AZL 86.93 MCA 272.47 SMA 118.72 ECC .24414 INC 3.0744 VI 30.286 RP 108.57 LAP -3.07 LOP 11.59 VP 36.428 GAP 13.27 AZP 89.87 TAL 170.86 TAP 83.33 RCA 89.74 APO 147.71 V2 34.906 RC 194.034 GL 17.78 GP -5.40 7AL 72.71 ZAP 173.50 ETS 305.52 ZAE 132.15 ETE 185.30 ZAC 110.46 ETC 168.46 CLP-176.38
     PLANETOCENTRIC CONIC
      C3 21.111 VHL 4.595 DLA 27.00 RAL 18.26 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 8.623 DPA -1.68 RAP 17.37 ECC 1.3474
     C3 21.111 VHL 4.595 DLA 27.00 RAL 18.26 RAD 6567.9 VEL 11.937 PTH 2.12 VHP 8.623 DPA -1.68 RAP 17.37 ECC 1.3474 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 114 4 3301.95 -24.53 117.80 249.37 75.38 2 9 6 2702.0 -26.30 109.58 90.00 22 38 44 3796.71 -12.60 149.09 244.78 64.43 23 42 1 3196.7 -15.94 142.01 100.00 3 9 43 2929.13 -27.64 91.18 250.19 78.14 3 58 32 2329.1 -29.00 82.64 100.00 23 25 46 3644.77 -9.75 136.45 243.30 61.60 24 26 31 3044.8 -13.47 129.64 110.00 5 13 3 2543.17 -33.63 63.00 251.32 83.48 5 55 26 1943.2 -34.17 53.80 110.00 23 38 55 3603.49 -4.55 130.17 240.14 56.08 24 38 59 3003.5 -8.98 123.87
                                                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                           MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                            ST 2676.7 SR 417.0 S5 546.1

CRT .9633 CRS -.8897 CST -.9786

LSA 2758.9 MSA 156.9 SSA 21.5

EL1 2706.7 EL2 110.7 ALF 8.55
                                                                                                           RET .2741 RRF .2474 RTF .8917
SGB 5355.2 R23 .0015 R13 .8917
SGI 5339.2 SG2 413.8 THA 1.27
       TOE 2.0980 TRA 1.3123 TC3-4.6521 BAU 1.3132
      ROE .3338 RRA -.0585 RC3 .0786 FAU .01883 FOE .5379 FRA .7019 FC3 -.7723 BSP 17231
      BOE 2.1244 BRA 1.3136 BC3 4.6528 FSP -396
                                                                                                                                                                                                               ARRIVAL DATE JUL 1 1966
                                                                                                                  FLIGHT TIME 182.00
LAUNCH DATE DEC 31 1965
                                                                                                                  DISTANCE 539.397
     HELIOCENTRIC CONIC
      RL 147.10 LAL .00 LOL 99.11 VL 26.151 GAL 3.62 AZL 87.00 HCA 275.65 SMA 118.44 ECC .24961 INC 3.0011 VI 30.286
RP 108.53 LAP -2.99 LOP 14.77 VP 36.403 GAP 13.65 AZP 89.70 TAL 168.98 TAP 84.64 RCA 88.88 APO 148.01 V2 34.918
RC 195.918 GL 16.74 GP -5.27 ZAL 69.30 ZAP 173.98 ETS 300.80 ZAE 132.29 ETE 185.23 ZAC 112.84 ETC 168.54 CLP-177.08
     PLANETOCENTRIC CONIC
      C3 22.515 VML 4.745 DLA 27.33 RAL 22.15 RAD 6567.9 VEL 11.996 PTH 2.14 VMP 8.853 DPA -.55 RAP 19.57 ECC 1.3705 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                                            -25.62
                                                                                                                                                                                                                                                   113.02
                                                                                                                            254.26
                                                                                                                                                        73.94
                                                                                                                                                                          2 15 15
                                                                                                                                                                                                   2751.2
                               1 19 24 3351.23
23 4 27 3778.54
             90.00
                                                                                                      121.14
                                                                               -23.64
                                                                                                                                                                                                                                                    140.90
                                                                                                                                                         64.68 24 7 25
                                                                                                                                                                                                     3178.5
                                                                                                      148.02
                                                                                                                              250.08
             90.00
                                                                              -13.13
                                                                                                                                                                           4 8 13
                                                                                                                                                                                                                                                      85.35
                                                                                                                              255.25
                                                                                                                                                         76.86
                                                                                                                                                                                                     2366.3
                                                                                                                                                                                                                            -28.63
                               3 18 47 2966.35
23 47 44 3638.66
                                                                              -27.09
                                                                                                        93.81
           100.00
                                                                                                                                                         61.66 24 48 23
                                                                                                                                                                                                                                                    129.28
                                                                                                                                                                                                     3038.7
                                                                                                                                                                                                                            -13.65
                                                                                -9.94
                                                                                                      136.11
                                                                                                                              248.44
           100.00
                                                                                                                                                                        6 7 41 1 2 13
                                                                                                                                                                                                     1971.9
                                                                                                                                                                                                                            -34.10
                                                                                                                                                                                                                                                     56.04
                                                                                                                             256.60
                                                                                                                                                         82.19
                                                                              -33.39
                                                                                                        65.21
           110.00
                               5 24 49 2571.94
                                                                                                                                                         56.07
                                                                                                                                                                                                     3005.8
                                                                                                                                                                                                                            -8.89
                                                                                                                                                                                                                                                   124.00
                                                                                                      130.29
                                                                                                                              245.10
           110.00
                                 0 2 7
                                                     3605.83
                                                                                -4.46
                                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                             ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                       SGT 5356.6 SGR 433.0 SG3 117.2

RRT .2971 RRF .2702 RTF .8967

SGB 5374.1 R23 .0023 R13 .8967

SGI 5358.2 SG2 413.3 THA 1.38
                                                                                                                                                                                             ST 2671.4 SR 423.5 SS 538.4
       TOE 2.1416 TRA 1.6153 TC3-4.3684 BAU 1.3151
      RDE .3503 RRA -.0513 RC3 .0639 FAU .01751
FDE .5253 FRA .7468 FC3 -.6731 BSP 17261
BDE 2.1700 BRA 1.6161 BC3 4.3689 FSP -387
                                                                                                                                                                                             CRT .9544 CRS -.8785 CST -.9803
                                                                                                                                                                                          LSA 2752.9 MSA 163.9 SSA 20.3
EL1 2701.9 EL2 125.0 ALF 8.62
```

ARRIVAL DATE JUL 3 1966

```
LAUNCH DATE DEC 31 1965
                                                                        DISTANCE 544.714
    RL 147.10 LAL .00 LOL 99.11 VL 26.101 GAL 4.34 AZL 87.07 HCA 278.84 SMA 118.17 ECC .25563 INC 2.9270 V1 30.286 RP 108.49 LAP -2.89 LOP 17.96 VP 36.379 GAP 14.06 AZP 89.55 TAL 167.12 TAP 85.96 RCA 87.96 APO 148.37 V2 34.930 RC 197.761 GL 15.67 GP -5.15 ZAL 65.98 ZAP 174.40 ETS 295.22 ZAE 132.42 ETE 185.17 ZAC 115.22 ETC 168.59 CLP-177.79
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 24.216 VML 4.921 DLA 27.56 RAL 25.96 RAD 6568.0 VEL 12.066 PTH 2.16 VMP 9.101 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                 124.10
                                                                               259.19
                                                                                                72.70
                   1 26 32 3395.58
23 27 43 3769.75
                                                  -22.77
                                                                                                                                                           140.36
                                                                                                                                            -16.67
                                                                                                           24 30 33
                                                                                                                             3169.7
                                                                                                 64.81
                                                                                255.36
                                                                 147.50
                                                  -13.38
        90.00
                                                                                                                                                            87.76
                                                                                                           4 19 18
                                                                                                                             2399.8
                                                                                260.37
                                                                                                 75.74
                                                                  96.15
                                                                    293.55 61.64 1 12 14

17.27 261.92 81.00 6 20 42

0.74 250.06 56.04 1 20 12

MID-COURSE EXECUTION ACCURACY

3GT 5371.8 SGR 434 2 2 2
       100.00
                   3 29 18
                                  2999.81
                                                  -26.55
                                                                                                                                            -13.59
                                                                                                                                                           129.41
                                                                                                                             3040.7
       100.00
                    0 11 34
                                  3640.75
                                                   -9.88
                                                                 136.23
                                                                                                                                                            58.15
                                                                                                                             1999.0
                    5 37 23
                                  2598.97
                                                  -33.12
                                                                   67.27
       110.00
                                                                                                                             3014.4
                                                                                                                                             -8.57
                                                                                                                                                           124.45
                                                                 130.74
       110.00
                                                   -4.14
                     D 19 58
                                  3614.35
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2644.5 SR 428.2 SS 527.7
CRT .9446 CRS -.8663 CST -.9816
                                                                     SGT 5371.8 SGR 434.3 SG3 114.7
RRT .3189 RRF .2914 RTF .9022
    TOE 2.1729 TRA 1.9298 TC3-4.0683 BAU 1.3172
    ROE .3675 RRA -.0425 RC3 .0500 FAU .01630
FDE .5102 FRA .7913 FC3 -.5827 BSP 17382
                                                                                                                         LSA 2725.0 MSA 171.9 SSA 19.1
                                                                     SGB 5389.3 R23 .0021 R13 .9023
SG1 5373.6 SG2 411.5 THA 1.49
                                                                                                                         EL1 2675,3 EL2 139.0 ALF 8.72
    BOE 2.2036 BRA 1.9303 BC3 4.0686 FSP -381
                                                                                                                                     ARRIVAL DATE JUL 5 1966
                                                                         FLIGHT TIME 186.00
                                                                         DISTANCE 549.970
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 99.11 VL 26.052 GAL 5.10 A7L 87.15 MCA 282.03 SMA 117.90 ECC .26226 INC 2.8516 V1 30.286 RP 108.45 LAP -2.79 LOP 21.15 VP 36.356 GAP 14.51 A7P 89.41 TAL 165.28 TAP 87.31 RCA 86.98 APO 148.82 V2 34.942 RC 199.580 GL 14.59 GP -5.04 ZAL 62.76 ZAP 174.74 ETS 288.70 ZAE 132.55 ETE 185.11 ZAC 117.59 ETC 168.59 CLP-178.49
   PLANETOCENTRIC CONIC
    C3 26.258 VHL 5.124 DLA 27.69 RAL 29.67 RAD 6568.1 VEL 12.150 PTH 2.18 VHP 9.371 DPA 1.66 RAP 24.01 ECC 1.4321
LNCH AZHTH LNCH TIME L-I TIME INJ L'AT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                71.72 2 33 25
                                                                               264.19
                                                   -22.01
                                                                 126.51
                     1 36 13 3432.24
        90.00
                                                                                                                                                            140.56
                                                                                                                              3173.0
                                                                                                                                             -16.58
                                                                                                  64,76
                                                                                                           24 50 28
                                                                  147.69
                                                                                 260.54
                    23 47 35 3773.00
                                                   -13.29
         90.00
                                                                                                           4 31 49
1 29 56
                                                                                                                                            -27.88
                                                                                                                                                             89.84
                                                                                                                              2428.9
                                                                                                  74.79
                                                                   98.17
                                                                                 265.52
                                                   -26.05
                     3 41 20
                                   3028.90
       100.00
                                                                                                                              3051.6
                                                                                                                                                            130.03
                                                                                258.60
                                                                                                  61.53
                    D 29 5 3651.56
5 50 39 2624.19
                                                    -9.53
                                                                  136.84
       100.00
                                                                                                                                                             60.10
                                                                                                           6 34 23
                                                                                                                              2024.2
                                                                                                                                            -33.88
                                                                                                  79.90
                                                   -32.83
                                                                   69.19
                                                                                 267.27
       110.00
                                                                                                                              3029.0
                                                                                                                                             -8.02
                                                                                                                                                            125.24
                                                                                                             1 36 44
                                                                  131.51
                                                                                 254.97
                                                                                                  55.98
                     0 36 15
                                  3629.04
                                                    -3.58
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2604.5 SR 431.2 55 517.0
CRT .9336 CR5 -.8532 CST -.9828
                                                                     SGT 5382.5 SGR 434.6 SG3 112.2
RRT .3404 RRF .3130 RTF .9079
SGB 5400.1 R23 .0022 R13 .9079
     TOE 2.1972 TRA 2.2620 TC3-3.7510 BAU 1.3168
     ROE .3855 RRA -.0318 RC3 .0375 FAU .01512
FDE .4954 FRA .8374 FC3 -.4986 83P 17482
BOE 2.2308 BRA 2.2622 BC3 3.7512 FSP -375
                                                                                                                         LSA 2684.0 MSA 180.5 SSA 18.0
ELI 2635.5 EL2 152.7 ALF 8.82
                                                                     SG1 5384.6 SG2 408.5 THA 1.58
                                                                                                                                    ARRIVAL DATE JUL 7 1966
                                                                         FLIGHT TIME 188.00
 LAUNCH DATE DEC 31 1965
     RL 147.10 LAL .00 LOL 99.11 VL 26.004 GAL 5.91 A7L 87.23 HCA 285.22 SMA 117.64 ECC .26957 INC 2.7742 VI 30.286 RP 108.41 LAP -2.68 LOP 24.35 VP 36.334 GAP 14.99 A7P 89.27 TAL 163.46 TAP 88.67 RCA 85.93 APO 149.35 V2 34.955 RC 201.376 GL 13.52 GP -4.94 TAL 59.66 ZAP 175.00 ETS 281.25 ZAE 132.66 ETE 185.06 ZAC 119.97 ETC 168.55 CLP-179.21
                                                                         DISTANCE 555.154
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                  2.73 RAP 26.23 ECC 1.4722
     C3 28.692 VHL 5.356 DLA 27.72 RAL 33.24 RAD 6568.2 VEL 12.250 PTH 2.20 VHP 9.664 DPA
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              71.03 2 46 41
64.52 1 10 23
74.02 4 45 44
61.34 1 48 16
                                                                             269.26
                                                    -21.43
                                                                 128.26
                      1 49 2 3459.03
                                                                                                                              3190.3
                                                                                                                                             -16.11
                                                                                                                                                            141.62
                                                   -12.79
                                                                  148.71
                                                                                 265.57
         90.00
                      0 7 13
                                   3790.31
                                                                                                                                                             91.59
                                                                                                                                             -27.55
                                                                                                                              2453.4
                                                                   99.85
                                                                                 270.70
                                                 -25-60
                      3 54 51 3053.45
        100.00
                                                                                                                                                            131.17
                                                                                                                                            -12.65
                                                                                                                              3071.1
                                                                                 263.55
                                                                  137.94
                                                    -8.89
        100.00
                     0 44 5
                                   3671.13
                                                                                                            6 48 38
                                                                                                                              2047.7
                                                                                                                                            -33.73
                                                                                                                                                             61.92
                                                                                                  78.89
                                                                                 272.61
                                                    -32.54
                                                                    70.95
                      6 4 31 2647.66
0 50 55 3649.69
        110.00
                                                                                                                                             -7.25
                                                                                                                                                            126.33
                                                                                                  55.92
                                                                                                             1 51 45
                                                                                                                              3049.7
                                                                                 259.82
                                                                  132.59
                                                     -2.79
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 2553.9 SR 432.4 55 506.4
CRT .9215 CRS -.8393 CST -.9840
                                                                      RRT .3618 RRF .3347 RTF .9136
SGB 5407.D R23 .D025 R13 .9136
SGI 5391.9 SG2 404.3 THA 1.68
      TOE 2.2149 TRA 2.6131 TC3-3.4251 BAU 1.3139
     RDE .4042 RRA -.0193 RC3 .0266 FAU .01398
FDE .4808 FRA .8858 FC3 -.4217 BSF 17557
BDE 2.2514 BRA 2.6132 BC3 3.4252 FSP -368
                                                                                                                          LSA 2632.4 MSA 189.6 SSA 17.0
EL1 2584.9 EL2 165.9 ALF 8.90
                                                                                                                                      ARRIVAL DATE JUL 9 1966
                                                                          FLIGHT TIME 190.00
 LAUNCH DATE DEC 31 1965
                                                                          01STANCE 560.254
     TELIOCENIMIC COMIC

RL 147.10 LAL .00 LOL 99.11 VL 25.957 GAL 6.76 A7L 87.31 MCA 288.41 SMA 117.38 ECC .27763 INC 2.6945 VI 30.286

RP 108.37 LAP -2.56 LOP 27.54 VP 36.312 GAP 15.52 A7P 89.15 TAL 161.66 TAP 90.07 RCA 84.79 APO 149.97 V2 34.968

RC 203.147 GL 12.45 GP -4.85 TAL 56.70 ZAP 175.15 ETS 273.01 ZAE 132.76 ETE 185.01 ZAC 122.33 ETC 168.47 CLP-179.94
    HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
                                                                                                                                  3.78 RAP 28.46 ECC 1.5198
                                                                                                     2.23 VHP 9.984 DPA
      C3 31.581 VHL 5.620 DLA 27.67 RAL 36.67 RAD 6568.3 VEL 12.367 PTH
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   70.61
                                   3475.93
                                                     -21.05
                                                                   129.36
                       2 4 53
         90.00
                                                                                                                                              -15.25
                                                                                                                                                             143.51
                                                                                                               1 22 24
                                                                                                                               3221.5
                                                                                                   64.10
                                                                                  270.41
                                                    -11.86
                                                                   150.54
                       0 18 42
                                   3821.54
         90.00
                                                                                                                                                              93.02
                                                                                                                                             -27.25
                                                                                                              5 0 53
                                                                                                                               2473.7
                                                                                 275.87
                                                                                                   73.39
                                                     -25.21
                                                                   101.23
                                                                                                             1 58 16
                       4 9 39
                                   3073.73
        100.00
                                                                                                                                                            132.77
                                                                                                                               3099.0
                                                                                                                                             -11.77
                                                                                 268.37
                                                                                                   61.10
                                                     -7.98
                                                                   139.50
                       0 56 37
                                   3698.97
        100.00
                                                                                                                                                              63.61
                                                                                                                                             -33.56
                                                                                                              7 3 17
                                                                                                                               2069.6
                                                                                                   77.96
                                                    -32.24
                                                                    72.59
                                                                                 277.92
                       6 18 48
                                   2669.57
        110.00
                                                                                                   55.86
                                                                                                              2 5 14
                                                                                                                               3075.9
                                                                                                                                               -6.26
                                                                                 264.57
                       1 3 58
                                                                   133.96
                                    3675.90
                                                      -1.79
                                                                                                                           ORBIT DETERMINATION ACCURACY
        110.00
                                                                      MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                       SGT 5392.3 SGR 432.2 SG3 107.5
RRT .3834 RRF .3573 RTF .9193
                                                                                                                           ST 2498.3 SR 431.7 SS 497.3
      TOE 2.2291 TRA 2.9888 TC3-3.0914 BAU 1.3053
                                                                                                                           CRT .9081 CRS -.8249 CST -.9853
      RDE .4234 RRA -.0047 RC3 .0176 FAU .01280
FDE .4677 FRA .9378 FC3 -.3508 BSP 17495
                                                                                                                           LSA 2575.9 MSA 198.7 SSA 16.0
                                                                      SGB 5409.6 R23 .0031 R13 .9193
SG1 5394.8 SG2 398.9 THA 1.77
                                                                                                                           EL1 2529.0 EL2 178.6 ALF 8.96
```

FLIGHT TIME 184.00

BOE 2.2590 BRA 2.9888 BC3 3.0915 FSP -359

```
LAUNCH DATE DEC 31 1965
                                                                          FLIGHT TIME 192.00
                                                                                                                                     ARRIVAL DATE JUL 11 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 565.254
     RL 147.10 LAL .00 LOL 99.11 VL 25.911 GAL 7.67 AZL 87.39 MCA 291.61 SMA 117.14 ECC .28654 INC 2.6116 V1 30.286
RP 108.33 LAP -2.43 LOP 30.74 VP 36.292 GAP 16.10 AZP 89.04 TAL 159.90 TAP 91.50 RCA 83.57 APO 150.70 VZ 34.981
RC 204.893 GL 11.41 GP -4.76 ZAL 53.88 ZAP 175.19 ETS 264.27 ZAE 132.84 ETE 184.97 ZAC 124.69 ETC 168.34 CLP 179.32
    PLANETOCENTRIC CONIC
     C3 35.005 VHL 5.916 DLA 27.54 RAL 39.93 RAD 6568.4 VEL 12.505 PTH 2.26 VHP 10.334 DPA
                                                                                                                                 4.80 RAP 30.69 ECC 1.5761
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     2 22 59 3485.15
D 26 37 3864.20
                                                                                                            3 21 5
        90.00
                                                   -20.84
                                                                  129.95
                                                                               279.58
                                                                                                  70.38
                                                                                                                              2885.1
                                                                                                                                             -23.32
                                                                                                                                                           122.16
        90.00
                                                   -10.58
                                                                  153.02
                                                                                 275.06
                                                                                                  63.58
                                                                                                 . 31 2
(2.88 5 16 56
60.82 2 9 6
77.10 7 18 10
55.82 2 17
                                                                                                                              3264.2
                                                                                                                                             -14.05
                                                                                                                                                            146.06
                     4 25 26 3090.44
1 6 52 3734.15
6 33 20 2690.18
       100.00
                                                   -24.88
                                                                  102.37
                                                                                 281.03
                                                                                                                              2490.4
                                                                                                                                             -26.99
                                                                                                                                                             94.20
       100.00
                                                    -6.81
                                                                 141.47
                                                                                273.05
                                                                                                                              3134.1
                                                                                                                                             -10.65
                                                                                                                                                            134.78
       110.00
                                                  -31.93
                                                                   74.12
                                                                                283.18
                                                                                                                              2090.2
                                                                                                                                            -33.3A
                                                                                                                                                            65.10
                     1 15 27 3707.18
       110.00
                                                                 135.59
                                                    - .60
                                                                                269.21
                                                                                                             2 17 14
                                                                                                                              3107.2
                                                                                                                                              -5.OA
                                                                                                                                                            129.37
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5389.7 SGR 429.1 SG3 105.2
RRT .4041 RRF .3786 RTF .9252
SGB 5406.8 R23 .0030 R13 .9252
    TOE 2.2335 TRA 3.3814 TC3-2.7685 BAU 1.2956
                                                                                                                          ST 2432.2 SR 428.8 SS 487.8
CRT .8932 CRS -.8091 CST -.9865
    RDE .4428 RRA .0115 RC3 .0101 FAU .01172
FDE .4535 FRA .9911 FC3 -.2899 BSP 17618
                                                                                                                        LSA 2508.8 HSA 207.6 SSA 15.1
EL1 2462.3 EL2 190.4 ALF 9.00
    BOE 2.2770 BRA 3.3814 BC3 2.7685 FSP -353
                                                                      SG1 5392.5 SG2 392.3 THA 1.85
LAUNCH DATE DEC 31 1965
                                                                          FLIGHT TIME 194.00
                                                                                                                                     ARRIVAL DATE JUL 13 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 570.135
    RL 147.10 LAL .00 LOL 99.11 VL 25.866 GAL 8.64 AZL 87.48 HCA 294.80 SMA 116.90 ECC .29640 INC 2.5250 V1 30.286
RP 108.29 LAP -2.29 LOP 33.93 VP 36.273 GAP 16.73 AZP 88.94 TAL 158.18 TAP 92.98 RCA 82.25 APO 151.54 V2 34.994
RC 206.614 GL 10.39 GP -4.68 ZAL 51.20 ZAP 175.10 ETS 255.43 ZAE 132.91 ETE 184.93 ZAC 127.03 ETC 168.16 CLP 178.57
   PLANETOCENTRIC CONIC
    C3 39.056 VHL 6.249 DLA 27.34 RAL 43.02 RAD 6568.5 VEL 12.666 PTH
                                                                                                    2.30 VHP 10.718 DPA
                                                                                                                                  5.80 RAP 32.92 FCC 1.6428
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                   2 42 19 3489.73
                                                   -20.73
                                                                 130.25
                                                                              284.73
                                                                                               70.27
                                                                                                            3 40 29
                                                                                                                             2889.7
                                                                                                                                            -23.24
                                                                                                                                                           122.47
        90.00
                     O 31 56
                                  3914.98
                                                    -9.03
                                                                                279.52
                                                                  155.95
                                                                                                  63.05
                                                                                                             1 37 11
                                                                                                                              3315.0
                                                                                                                                             -12.58
                                                                                                                                                            149.06
                    4 41 50 3104.45
1 15 6 3775.49
                                                                                                  72.46 5 33 34
60.56 2 18 1
76.30 7 33 7
      100.00
                                                  -24.60
                                                                                                                              2504.4
                                                                  103.31
                                                                                266.15
                                                                                                                                             -26.77
                                                                                                                                                             95.18
      100.00
                                                   -5.44
                                                                 143.76
                                                                                277.58
                                                                                                                              3175.5
                                                                                                                                               -9.32
                                                                                                                                                            137.13
                    6 47 57 2709.78
1 25 28 3742.92
      110.00
                                                  -31.63
                                                                  75.57
                                                                                288.37
                                                                                                                              2109.8
                                                                                                                                             -33.19
                                                                                                                                                             66.69
                                                     .77
      110.00
                                                                 137.45
                                                                                273.73
                                                                                                  55.82
                                                                                                             2 27 51
                                                                                                                              3142.9
                                                                                                                                              -3.72
                                                                                                                                                            131.24
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                   SGT 5383.0 SGR 425.0 SG3 103.0

RRT .4245 RRF .4000 RTF .9312

SGB 5399.8 R23 .0029 R13 .9312

SGI 5386.1 SG2 384.6 THA 1.93
                                                                                                                       ST 2362.9 SR 423.9 SS 479.7
CRT .8769 CRS -.7927 CST -.9877
    TOE 2.2329 TRA 3.7994 TC3-2.4541 BAU 1.2814
    RDE .4623 RRA .D296 RC3 .DD43 FAU .D1065
FDE .4403 FRA 1.0479 FC3 -.2362 BSP 17669
BDE 2.2803 BRA 3.7995 BC3 2.4541 FSP -347
                                                                                                                      LSA 2438.5 MSA 216.0 SSA 14.2
EL1 2392.2 EL2 201.3 ALF 9.01
LAUNCH DATE DEC 31 1965
                                                                        FLIGHT TIME 196.00
                                                                                                                                    ARRIVAL DATE JUL 15 1966
  HELIOCENTRIC CONIC
                                                                        OISTANCE 574.873
    RL 147.10 LAL .00 LOL 99.11 VL 25.822 GAL 9.68 AZL 87.57 HCA 298.00 SMA 116.66 ECC .30734 INC 2.4336 V1 30.286 RP 108.25 LAP -2.15 LOP 37.13 VP 36.254 GAP 17.43 AZP 88.86 TAL 156.50 TAP 94.50 RCA 80.81 APO 152.52 VZ 35.007 RC 208.309 GL 9.39 GP -4.61 ZAL 48.68 ZAP 174.88 ETS 246.91 ZAE 132.95 ETE 184.88 ZAC 129.35 ETC 167.92 CLP 177.79
   PLANETOCENTRIC CONIC
    C3 43.854 VHL 6.622 OLA 27.08 RAL 45.92 RAD 6568.7 VEL 12.854 PTH 2.34 VHP 11.141 DPA 6.76 RAP 35.15 ECC 1.7217
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 3 2 1 3492.13

90.00 0 35 24 3971.04

100.00 4 58 30 3116.63

100.00 1 21 36 3821.77

110.00 7 2 29 2728.67
                                                                            289.84
                                                  -20.68
                                                                130.40
                                                                                             70.21 4 0 13 2892.1
                                                                                                                                        -23.19 122.63
                                                   -7.29
                                                                 159.14
                                                                               283.82
                                                                                                 62.56
                                                                                                            1 41 35
                                                                                                                             3371.0
                                                                                                                                            -10.91
                                                                                                 72.10 5 50 26
60.34 2 25 18
75.54 7 47 57
      100.00
                                                  -24.35
                                                                 104.13
                                                                            291.19
                                                                                                                             2516.6
                                                                                                                                            -26.56
      100.00
                                                   -3.88
                                                                 146.32
                                                                               281.96
                                                                                                                             3221.8
                                                                                                                                             -7.80
                                                                                                                                                          139.73
                                                                             293.48
      110.00
                                                 -31.31
                                                                  76.95
                                                                                                                             2128.7
                                                                                                                                            -32.98
                                                                  MID-COURSE EXECUTION ACCURACY
      110.00
                    1 34 7
                                  3782.49
                                                    2.28
                                                                 139.52
                                                                                                                             3182.5
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                    SGT 5372.7 SGR 419.7 SG3 100.8
RRT .4448 RRF .4214 RTF .9372
SGB 5389.1 R23 .0027 R13 .9373
SG1 5376.0 SG2 375.7 THA 2.00
    TDE 2.2293 TRA 4.2450 TC3-2.1528 BAU 1.2622
                                                                                                                        ST 2293.3 SR 417.2 SS 473.3
   ROE .4819 RRA .D496 RC3 -.0000 FAU .DD960
FOE .4281 FRA 1.1089 FC3 -.1896 BSP 17701
BOE 2.2808 BRA 4.2453 BC3 2.1528 FSP -341
                                                                                                                       CRT .8593 CRS -.7757 CST -.9890
                                                                                                                        LSA 2367.9 MSA 223.4 SSA 13.5
EL1 2321.3 EL2 210.8 ALF 8.96
LAUNCH DATE DEC 31 1965
                                                                        FLIGHT TIME 198.00
                                                                                                                                    ARRIVAL DATE JUL 17 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 579.440
   RL 147.10 LAL .00 LOL 99.11 VL 25.779 GAL 10.81 AZL 87.66 MCA 301.20 SMA 116.43 ECC .31951 INC 2.3366 V1 30.286 RP 108.21 LAP -2.00 LOP 40.34 VP 36.236 GAP 18.20 AZP 88.79 TAL 154.88 TAP 96.08 RCA 79.23 APO 153.64 VZ 35.020 RC 209.976 GL 8.43 GP -4.55 ZAL 46.32 ZAP 174.54 ETS 239.04 ZAE 132.96 ETE 184.84 ZAC 131.64 ETC 167.63 CLP 176.98
  PLANETOCENTRIC CONIC
   C3 49.546 VHL 7.039 DLA 26.77 RAL 48.64 RAD 6568.8 VEL 13.073 PTH 2.39 VHP 11.610 DPA
                                                                                                                                 7.70 RAP 37.36 ECC 1.8154
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 21 30 3493.96
0 37 35 4030.40
5 15 6 3127.74
1 26 40 3871.85
7 16 46 2747.07
1 41 30 3825.28
       90.00
                                                  -20.64
                                                                130.52
                                                                              294.85
                                                                                             70.17
                                                                                                           4 19 44
                                                                                                                             2894.0
                                                                                                                                          -23.15
       90.00
                                                   -5.41
                                                                 162.49
                                                                               287.97
                                                                                                 62.16
                                                                                                           1 44 46
                                                                                                                             3430.4
                                                                                                                                             -9.09
      100.00
                                                  -24.11
                                                                 104.87
                                                                               296.14
                                                                                                 71.77
                                                                                                             6 7 14
                                                                                                                             2527.7
                                                                                                                                            -26.38
                                                                                                                                                            96.80
                                                                                                          2 31 12
8 2 33
                                                                 149.08
      100.00
                                                  -2.19
                                                                               286.20
                                                                                                 60.18
                                                                                                                             3271.9
                                                                                                                                             -6.14
      110.00
                                                 -30.99
                                                                 78.29
                                                                              298.47
                                                                                                 74.80
                                                                                                                             2147.1
                                                                                                                                           -32.77
                                                                                                                                                            69.52
                                                                 MID-COURSE EXECUTION ACCURACY
      110.00
                                                 3.91
                                                                141.76
                                                                                                                             3225.3
                                                                                                                                             - . 58
                                                                                                                                                          135.55
  DIFFFRENTIAL CORRECTIONS
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 5359.9 SGR 413.5 SG3 98.8

RRT .4653 RRF .4433 RTF .9453

SGB 5375.8 R23 .0026 R13 .9453

SGI 5363.3 SG2 365.8 THA 2.07
    TDE 2.2270 TRA 4.7245 TC3-1.8643 BAU 1.2349
                                                                                                                       5T 2227.6 SR 408.7 S5 469.6
CRT .8406 CRS -.7589 CST -.9903
   ROE .5016 RRA .0715 RC3 -.0028 FAU .00851
   FDE .4181 FRA 1.1754 FC3 -.1487 BSP 17635
BOE 2.2828 BRA 4.7250 BC3 1.8643 FSP -332
                                                                                                                       LSA 2301.5 MSA 229.5 SSA 12.7
                                                                                                                       ELI 2254.2 ELZ 218.8 ALF 8.85
```

```
LAUNCH DATE DEC 31 1965
                                                                          FLIGHT TIME 200.00
                                                                                                                                      ARRIVAL DATE JUL 19 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 583.797
    RL 147.10 LAL .00 LOL 99.11 VL 25.737 GAL 12.02 AZL 87.77 HCA 304.41 SMA 116.21 ECC .33306 INC 2.2328 V1 30.286 RP 108.17 LAP -1.84 LOP 43.54 VP 36.219 GAP 19.06 AZP 88.74 TAL 153.33 TAP 97.73 RCA 77.51 APO 154.92 V2 35.034 RC 211.617 GL 7.51 GP -4.49 ZAL 44.13 ZAP 174.09 ETS 232.02 ZAE 132.95 ETE 184.80 ZAC 133.91 ETC 167.28 CLP 176.15
   PLANETOCENTRIC CONIC
    C3 56.318 VHL 7.505 OLA 26.42 RAL 51.17 RAD 6569.0 VEL 13.330 PTH 2.44 VHP 12.130 DPA
                                                                                                                                    8.60 RAP 39.57 ECC 1.9269
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    3 40 26 3496.09
0 38 49 4091.74
                                                    -20.59
                                                                   130.66
                                                                                 299.74
                                                                                                   70.12
                                                                                                              4 38 42
                                                                                                                              2896.1
                                                                                                                                              -23.11
                                                                                                                                                             122.89
        90.00
                                                                     1 47 0
71.47 6 23 43
51.98 290.28 60.11 2 35 55
79.60 303.34 74.10 8 16 45
44.14 286.54 56.23 2 52 15
MID-COURSE EXECUTION ACCURACY
SGT 5341.2 SGR 405.9 SG3
                                                                                                             1 47 D
                                                                                                                                               -7.19
                                                                   165.94
                                                                                  291.98
                                                                                                   61.88
                                                                                                                                3491.7
                                                                                                                                                              159.25
        90.00
                                                     -3.45
                    5 31 25 3138.31
1 30 31 3924.76
                                                    -23.88
                                                                   105.57
                                                                                                                                2538.3
                                                                                                                                                               97.53
       100.00
                                                                                                                                3324.8
      100.00
                                                                   151.98
                                                      -.40
                     7 30 40
                                                                                                                                                               70.88
                                   2765.16
                                                   -30.66
                                                                    79.60
                                                                                                                                2165.2
                                                                                                                                               -32.54
      110.00
                      1 47 45
                                                                                                                               3270.7
      110.00
                                                    5.64
                                                                  144.14
                                   3870.67
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2160.5 SR 398.4 53 467.1
CRT .8206 CRS -.7413 CST -.9916
    TOE 2.2192 TRA 5.2336 TC3-1.5977 BAU 1.2029
    ROE .5209 RRA .0950 RC3 -.0044 FAU .00746
FOE .4081 FRA 1.2461 FC3 -.1147 BSP 17660
                                                                                                                           LSA 2233.7 MSA 234.3 SSA 12.0
EL1 2185.3 EL2 225.1 ALF 8.70
                                                                      SGB 5356.6 R23 .0021 R13 .9493
                                                                      SG1 5344.9 SG2 354.8 THA 2.12
    BOE 2.2795 BRA 5.2345 BC3 1.5977 FSP
                                                        -326
                                                                           FLIGHT TIME 202.00
                                                                                                                                       ARRIVAL DATE JUL 21 1966
LAUNCH DATE DEC 31 1965
                                                                          DISTANCE 587.898
  HELIOCENTRIC CONIC
                        .00 LOL 99.11 VL 25.696 GAL 13.34 AZL 87.88 MCA 307.61 SMA 116.00 ECC .34822 INC 2.1205 VI 30.286
-1.68 LOP 46.74 VP 36.203 GAP 20.02 AZP 88.71 TAL 151.85 TAP 99.47 RCA 75.61 APO 156.40 VZ 35.047
6.62 GP -4.43 ZAL 42.09 ZAP 173.52 ETS 225.88 ZAE 132.89 ETE 184.75 ZAC 136.13 ETC 166.85 CLP 175.27
   RL 147.10 LAL
RP 108.13 LAP
   RC 213.230 GL
  PLANETOCENTRIC CONIC
    C3 64.406 VHL 8.025 OLA 26.03 RAL 53.50 RAD 6569.2 VEL 13.629 PTH 2.49 VHP 12.711 OPA 9.46 RAP 41.76 ECC 2.0600 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00 3 58 34 3498.97

90.00 0 39 16 4154.15

100.00 5 47 13 3148.69

100.00 1 33 18 3979.66

110.00 7 44 5 2783.03
                                                    -20.52
                                                                  130.84
                                                                                 304.48
                                                                                                   70.05
                                                                                                              4 56 53
                                                                                                                             2899.0
                                                                                                                                              -23.05
                                                                                                                                                            123.09
                                                                                                                1 48 30
                                                                                                                                3554.2
                                                     -1.44
                                                                   169.42
                                                                    303.67 71.18 6 39 42

154.99 294.22 60.14 2 39 37

80.88 308.06 73.41 8 30 28

46.65 290.54 56.54 2 58 13

MIO-COURSE EXECUTION ACCURACY

3GT 5318.6 SGR 397.2
                                                                                  295.84
                                                                                                   61.72
                                                                                                                                                -5.21
                                                                                                                                                               162.77
                                                                                                                                2548.7
                                                                                                                                               -26.01
                                                                                                                                                                98.25
      100.00
                                                    -23.66
                                                                   106.26
                                                                                                                                3379.7
                                                                                                                                                               148.47
                                                      1.47
                                                                   154.99
                                                                                                                                                -2.52
                                                                                                                                2183.0
                                                                                                                                               -32.29
                                                                                                                                                               72.22
                                                   -30.32
      110.00
                      1 52 55
                                   3918.09
                                                                   146.65
                                                                                                                                3318.1
                                                                                                                                                 2.97
                                                                                                                                                               140.39
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      SGT 5518.6 SGR 397.2 SG3 94.9
RRT .5042 RRF .4850 RTF .9552
SGB 5353.4 R23 .0016 R13 .9552
                                                                                                                           ST 2097.0 SR 386.5 SS 467.2
CRT .7998 CRS -.7240 CST -.9928
    TOE 2.2122 TRA 5.7814 TC3-1.3496 BAU 1.1621
    ROE .5399 RRA .1202 RC3 -.0051 FAU .00638
    FOE .3997 FRA 1.3232 FC3 -.0858 83P 17669
BOE 2.2771 BRA 5.7827 BC3 1.3496 FSP -320
                                                                                                                           LSA 2170.0 MSA 237.4 SSA 11.4
                                                                                                                           EL1 2120.0 EL2 229.5 ALF 8.49
                                                                      SG1 5322.4 SG2 342.8 THA 2.17
                                                                                                                                      ARRIVAL DATE JUL 23 1966
                                                                          FLIGHT TIME 204.00
LAUNCH DATE DEC 31 1965
   HELIOCENTRIC CONIC
                                                                          DISTANCE 591.683
    RL 147.10 LAL .00 LOL 99.11 VL 25.657 GAL 14.78 AZL 88.00 HCA 310.82 SMA 115.80 ECC .36523 INC 1.9980 V1 30.286 RP 108.09 LAP -1.51 LOP 49.95 VP 36.188 GAP 21.09 AZP 88.69 TAL 150.48 TAP 101.30 RCA 73.51 APO 158.09 V2 35.060 RC 214.816 GL 5.77 GP -4.38 ZAL 40.23 ZAP 172.85 ETS 220.57 ZAE 132.78 ETE 184.70 ZAC 138.31 ETC 166.36 CLP 174.35
   PLANETOCENTRIC CONIC
    C3 74.114 VHL 8.609 DLA 25.61 RAL 55.63 RAD 6569.4 VEL 13.981 PTH 2.55 VMP 13.363 DPA 10.29 RAP 43.92 ECC 2.2197
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               69.96 5 14 11
61.69 1 49 20
70.88 6 55 2
60.28 2 42 25
       90.00 4 15 48 3502.70
90.00 0 39 3 4216.98
100.00 6 2 23 3159.07
                                                                                                                            2902.7
                                                                                                                                                          123.33
                                                                 131.08
                                                                                                                                            -22.98
                                                   -20.43
                                                                              309.06
                                                                   172.93
                                                                                 299.55
                                                                                                                                3617.0
                                                                                                                                               -3.20
                                                                                                                                                              166.30
                                                       .59
                                                    -23.43
                                                                  106.95
                                                                                 310.20
                                                                                                                                2559.1
                                                                                                                                               -25.82
                                                                                                                                                               98.96
       100.00
                                                                                                                                3435.8
                                                                                                                                                 -.61
                                                                                                                                                              151.55
                    1 35 9
                                   4035.85
                                                      3.37
                                                                  158.08
                                                                                 298.01
       100.00
                                                                    49.26 294.40 56.94 3 3 13

MID-COURSE EXECUTION ACCURACY
SGT 5292.2 SGR 387 4
                                                                                                                                2200.7
                                                                                                                                               -32.04
                                                                                                                                                               73.53
      110.00
                    7 56 56 2800.68
                                                   -29.97
                                                                   82.13
                                                                                                                                3367.0
                                                                                                                                               4.83
                                                                                                                                                              142.95
                                   3967.00
                                                      9.25
                                                                  149.26
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      5GT 5292.2 5GR 387.4 SG3 93.0
RRT .5232 RRF .5056 RTF .9609
SGB 5306.3 R23 .0011 R13 .9609
                                                                                                                           ST 2037.9 SR 373.2 SS 469.9
CRT .7786 CRS -.7072 CST -.9940
    TOE 2.2074 TRA 6.3734 TC3-1.1205 BAU 1.1103
    ROE .5587 RRA .1470 RC3 -.0048 FAU .00524
FOE .3931 FRA 1.4079 FC3 -.0612 BSP 17656
BOE 2.2770 BRA 6.3751 BC3 1.1205 FSP -314
                                                                                                                           LSA 2111.0 MSA 238.6 SSA 10.7
EL1 2058.8 EL2 231.8 ALF 8.22
                                                                      SG1 5296.1 SG2 329.9 THA 2.20
                                                                           FLIGHT TIME 206.00
                                                                                                                                       ARRIVAL DATE JUL 25 1966
LAUNCH DATE DEC 31 1965
                                                                          DISTANCE 595.073
  HELIOCENTRIC CONIC
    RL 147.10 LAL
RP 108.05 LAP
                        .DD LOL 99.11 VL 25.619 GAL 16.36 A7L 88.14 HCA 314.03 SMA 115.60 ECC .38437 INC 1.8630 V1 30.286 -1.34 LOP 53.16 VP 36.174 GAP 22.31 A7P 88.70 TAL 149.23 TAP 103.26 RCA 71.17 APO 160.04 V2 35.073 4.95 GP -4.33 ZAL 38.54 ZAP 172.09 ETS 215.99 ZAE 132.61 ETE 184.65 ZAC 140.42 ETC 165.79 CLP 173.37
    RC 216.375 GL
   PLANETOCENTRIC CONIC
    C3 85.837 VHL 9.265 DLA 25.17 RAL 57.56 RAD 6569.7 VEL 14.394 PTH
                                                                                                     2.62 VHP 14.098 OPA 11.07 RAP 46.04 ECC 2.4127
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               2907.2
                     4 32 2
                                   3507.19
                                                    -20.33
                                                                  131.37
                                                                                 313.43
                                                                                                  69.85
                                                                                                               5 30 30
                                                                                                                                              -22.89
                                                                                                                                                             123.63
        90.00
                                                                                                                                3679.8
                                                                                                                                                               169.80
        90.00
                    D 38 13
                                   4279.75
                                                      2.61
                                                                   176.43
                                                                                  303.11
                                                                                                   61.79
                                                                                                               1 49 33
                                                                                                                                                -1.18
                                                                                                                                               -25.63
                                                                                                                                                                99.67
       100.00
                     6 16 48 3169.43
                                                    -23.20
                                                                   107.63
                                                                                  314.54
                                                                                                   70.60
                                                                                                                7 9 38
                                                                                                                                2569.4
                    1 36 9
                                                                                                              2 44 21
8 56 5
                                                                                                                                3492.7
                                                                                                                                                              154.67
       100.00
                                   4092.74
                                                     5.28
                                                                   161.22
                                                                                  301.63
                                                                                                   60.54
                                                                                                                                                 1.32
      110.00
                                   2818.04
                                                  -29.62
                                                                    83.36
                                                                                 316.96
                                                                                                   72.10
                                                                                                                                2218.0
                                                                                                                                               -31.77
                                                                                                                                                               74.81
                                                                                                                                                              145.58
                    2 0 19
                                                                                                               3 7 16
                                                                                                                                                  6.72
      110.00
                                  4016.90
                                                   11.09
                                                                  151.95
                                                                                 298.11
                                                                                                   57.46
                                                                                                                                3416.9
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ST 1985.2 SR 358.7 SS 476.1
CRT .7578 CRS -.6918 CST -.9952
                                                                     SGT 5263.6 SGR 376.6 SG3 91.3
RRT .5422 RRF .5263 RTF .9665
    TOE 2.2104 TRA 7.0184 TC3 -.9093 BAU 1.0435
    ROE .5772 RRA .1754 RC3 -.0038 FAU .00397
                                                                                                                          LSA 2059.1 MSA 237.6 SSA 10.1
EL1 2003.9 EL2 231.9 ALF 7.90
                                                                     SGB 5277.0 R23 .0005 R13 .9665
SG1 5267.6 SG2 316.2 THA 2.23
    FOE .3893 FRA 1.5022 FC3 -.0400 BSP 17545
```

BOE 2.2845 BRA 7.0206 BC3 .9093 FSP -307

ARRIVAL DATE JUL 27 1966

```
FLIGHT TIME 208.00
LAUNCH DATE DEC 31 1965
                                                                       DISTANCE 597.966
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 99.11 VL 25.583 GAL 18.12 ATL 88.29 HCA 317.25 SMA 115.42 ECC .40599 INC 1.7123 V1 30.286 RP 108.01 LAP -1.16 LOP 56.37 VP 36.161 GAP 23.69 ATP 88.74 TAL 148.11 TAP 105.36 RCA 68.56 APO 162.27 V2 35.086 RC 217.906 GL 4.18 GP -4.29 ZAL 37.04 ZAP 171.21 ETS 212.03 ZAE 132.38 ETE 184.59 ZAC 142.47 ETC 165.14 CLP 172.32
   PLANETOCENTRIC CONIC
                                                                                                  2.69 VHP 14.931 OPA 11.81 RAP 48.11 ECC 2.6473
    C3 100.092 VHL 10.005 DLA 24.70 RAL 59.28 RAD 6569.9 VEL 14.681 PTH
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                              317.59
                                                                                               69.73
                                                                                                           5 45 47
                                                                                                                           2912.2
                                                                                                                                         -22.79
                                                                                                                                                        123.97
                                                 -20.21
                                                                131.69
                    4 47 15 3512.22
0 36 46 4342.06
                                                                                                           1 49 8
                                                                                                                            3742.1
                                                                                                                                             .83
                                                                                                                                                         173.28
                                                                               306.49
                                                                                                62.03
                                                                179.92
                    0 36 46
                                                   4.61
                                                                               318.66
                                                                                                70.32
                                                                                                            7 23 23
                                                                                                                            2579.7
                                                                                                                                           -25.44
                                                                                                                                                         100.37
                                                                108.30
                    6 30 23 3179.68
                                                 -22.96
                                                                                                                            3549.8
                                                                                                60.91 2 45 29
                                                                                                                                            3.25
                                                                                                                                                         157.81
                                                                               305.09
      100.00
                    1 36 19
                                4149.83
                                                    7.18
                                                                164.39
                                                                                                         9 7 49
3 10 24
                                                                                                                           2235.0
                                                                                                                                          -31.50
                                                                                                                                                          76.06
                    8 20 34 2834.95
2 2 37 4067.33
                                                                               321.09
                                                                                                71.48
                                                 -29.26
                                                                 84.54
                                                                                                58.07
                                                                                                                           3467.3
                                                                                                                                            8.61
                                                                                                                                                         148.25
                                                                154.71
                                                                               301.65
                                                  12.92
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 3228.9 SGR 364.5 SG3 89.6
RRT .5601 RRF .5459 RTF .9717
SGB 5241.6 R23 -.0002 R13 .9717
SGI 5232.9 SG2 301.7 THA 2.24
                                                                                                                        ST 1934.1 SR 343.0 SS 484.8
CRT .7369 CRS -.6766 CST -.9962
    TOE 2.2152 TRA 7.7163 TC3 -.7195 BAU .9628
   ROE .5951 RRA .2048 RC3 -.0025 FAU .00261
FDE .3867 FRA 1.6058 FC3 -.0226 85P 17526
BDE 2.2938 BRA 7.7191 BC3 .7195 FSP -302
                                                                                                                        LSA 2009.5 MSA 234.7 SSA 9.5
EL1 1950.8 EL2 229.9 ALF 7.55
                                                                                                                                   ARRIVAL DATE JUL 29 1966
                                                                        FLIGHT TIME 210.00
LAUNCH DATE DEC 31 1965
                                                                        DISTANCE 600.227
  HELIOCENTRIC CONIC
                         .00 LOL 99.11 VL 25.549 GAL 20.08 AZL 88.46 HCA 320.46 SMA 115.24 ECC .43051 INC 1.5420 VI 30.286
-.98 LOP 59.58 VP 36.149 GAP 25.26 AZP 88.81 TAL 147.18 TAP 107.64 RCA 65.63 APO 164.86 VZ 35.099
3.41 GP -4.24 ZAL 35.73 ZAP 170.23 ETS 208.59 ZAE 132.06 ETE 184.51 ZAC 144.43 ETC 164.42 CLP 171.19
    RL 147.10 LAL
RP 107.97 LAP
    #C 219.410 GL
   PLANETOCENTRIC CONIC
    C3 117.566 VHL 10.843 DLA 24.21 RAL 60.79 RAD 6570.2 VEL 15.456 PTH 2.76 VHP 15.881 DPA 12.50 RAP 50.11 ECC 2.9348
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            6 0 0
                                                                               321.48
                                                                                                69.61
                    5 1 22 3517.47
                                                                132.03
                                                  -20.09
       90.00
                                                                                                                                                          176.71
                                                                                                 62.39
                                                                                                                            3803.6
                                                                                                                                             2.81
                                                    6.56
                                                                 163.39
                                                                               309.69
       90.00
                    0 34 40
                               4403.58
                   6 43 4 3189.59
1 35 39 4206.69
8 31 14 2851.19
2 3 59
                                                                                                          7 36 13
2 45 46
9 18 45
3 12 36
                                                                                                                            2589.6
                                                                                                                                                          101.05
                                                                                                70.05
                                                                                                                                           -25.24
                                                  -22.73
                                                                 108.95
                                                                               322.53
      100.00
                                                                                                                                                          160.95
                                                                                                                            3606.7
                                                                               308.35
                                                                                                 61.39
                                                                                                                                             5.16
                                                    9.05
                                                                167.58
      100.00
                                                                                                                                                           77.24
                                                                                                                                           -31.23
                                                                               324.96
                                                                                                70.90
                                                                                                                            2251.2
                                                  -28.90
                                                                  85.67
      110.00
                                                                                                                                            10.48
                                                   14.72
                                                                157.52
                                                                               305.01
                                                                                                58.80
                                                                                                                            3517.9
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1887.2 SR 326.3 55 497.2
CRT .7171 CRS -.6629 CST -.9970
                                                                     SGT 5190.2 SGR 351.2 SG3 88.0
RRT .5773 RRF .5648 RTF .9765
SGB 5202.1 R23 -.0008 R13 .9765
    TOE 2.2292 TRA 8.4798 TC3 -.5480 BAU .8613
    RDE .6127 RRA .2350 RC3 -.0008 FAU .00104
                                                                                                                         LSA 1965.3 MSA 229.8 SSA 8.9
    FOE .3867 FRA 1.7218 FC3 -.0077 BSP 17487
                                                                                                                        EL1 1901.8 EL2 225.7 ALF
    BOE 2.3119 BRA 8.4831 BC3 .5480 FSP -297
                                                                     SG1 5194.2 SG2 286.6 THA 2.24
                                                                                                                                  ARRIVAL DATE JUL 31 1966
                                                                        FLIGHT TIME 212.00
LAUNCH DATE DEC 31 1965
    RL 147.10 LAL .00 LOL 99.11 VL 25.518 GAL 22.29 AZL 88.65 MCA 323.68 SMA 115.08 ECC .45843 INC 1.3468 VI 30.286 RP 107.93 LAP -.80 LOP 62.80 VP 36.139 GAP 27.07 AZP 88.91 TAL 146.46 TAP 110.14 RCA 62.33 APO 167.84 VZ 35.111 RC 220.887 GL 2.70 GP -4.20 TAL 34.63 ZAP 169.11 ETS 205.57 ZAE 131.63 ETE 184.43 ZAC 146.28 ETC 163.62 CLP 169.95
                                                                        DISTANCE 601.677
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INL 2 LAT INJ 2 LONG 90.00 5 14 23 3522.53 -19.96 132.35 325.09 69.49 6 13 5 2922.5 -22.58 124.65
    C3 139.180 VHL 11.797 DLA 23.71 RAL 62.07 RAD 6570.5 VEL 16.140 PTH 2.84 VHP 16.972 DPA 13.14 RAP 52.03 ECC 3.2906
                                 4464.02
                                                                 186.82
                     0 31 49
        90.00
                   0 31 49 4464.02
6 54 46 3198.85
                                                                                                          7 48 5
2 45 10
                                                                                                                                           -25.06
                                                                                                                                                          101.68
                                                                                                69.80
                                                                                                                            2598.9
                                                  -22.52
                                                                 109.55
                                                                               326.11
       100.00
                                                                                                                                            7.04
                                                                                                                                                         164.07
                                                                                                                            3662.9
                                                                 170.76
                                                                               311.38
                                                                                                61.98
                    1 34 7
                                  4262.94
                                                   10.87
       100.00
                                                                                                          9 28 47
3 13 50
                                                                                                                                                          78.35
                                                                                                                            2266.5
                                                                                                                                           -30.96
                                                                                                70.36
                                                                  86.73
                                                                               328.53
                                                  -28.56
                     8 41 1 2866.46
      110.00
                                                                                                                            3568.1
                                                                                                                                          12.32
                                                                                                                                                         153.71
                     2 4 22
                                                                 160.36
                                                                               308.16
                                                                                                59.62
                                                   16.47
                                 4168.09
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1843.8 SR 308.8 S5 513.8
CRT .6986 CRS -.6507 CST -.9977
                                                                    SGT 5147.3 SGR 336.8 SG3 86.5
RRT .5936 RRF .5827 RTF .9809
SGB 5158.3 R23 -.0014 R13 .9809
    TOE 2.2558 TRA 9.3182 TC3 -.3942 BAU .7335
    RDE .6299 RRA .2656 RC3 .0011 FAU-.00082
FDE .3900 FRA 1.8322 FC3 .0051 BSP 17429
BOE 2.3421 BRA 9.3220 BC3 .3942 FSP -292
                                                                                                                        LSA 1925.9 HSA 222.9 55A
                                                                                                                                                              8.3
                                                                     561 5151.2 562 270.8 THA 2.23
                                                                                                                        EL1 1856.6 EL2 219.4 ALF
                                                                                                                                                              6.77
                                                                                                                                   ARRIVAL DATE AUG 2 1966
                                                                         FLIGHT TIME 214.00
LAUNCH DATE DEC 31 1965
                                                                        DISTANCE 602.075
                         .00 LOL 99.11 VL 25.489 GAL 24.79 AZL 88.88 MCA 326.90 SMA 114.94 ECC .49030 INC 1.1189 VI 30.286
-.61 LOP 66.02 VP 36.131 GAP 29.17 AZP 89.06 TAL 146.00 TAP 112.90 RCA 58.58 APO 171.29 VZ 35.124
2.01 GP -4.16 ZAL 33.77 ZAP 167.85 ETS 202.90 ZAE 131.07 ETE 184.34 ZAC 148.00 ETC 162.76 CLP 168.58
   HELIOCENTRIC CONIC
    RL 147.10 LAL
RP 107.89 LAP
    RC 222.336 GL
   PLANETOCENTRIC CONIC
    C3 166.183 VHL 12.891 DLA 23.18 RAL 63.09 RAD 6570.8 VEL 16.956 PTH 2.92 VHP 18.233 DPA 13.73 RAP 53.83 ECC 3.7350 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           6 25 1
                                                                                                                            2926.9
                                                                               324.36
                                                                                                 69.39
                                                  -19.86
                                                                132.63
                     5 26 14
                                  3526.94
        90.00
                                                                                                                             3923.1
                                                                                                                                             6.63
                                                                                                                                                          183.43
                                                                                                 63.47
                                                                                                             1 43 31
                    0 28 8 4523.13
                                                                                315.38
                                                   10.27
                                                                 190.21
        90.00
                                                                                                                             2607.1
                                                                                                                                            -24.90
                                                                                                                                                          102.23
                    7 5 26 3207.08
1 31 37 4318.23
                                                                                329.35
                                                                                                 69.59
                                                                                                           7 58 53
                                                   -22.32
                                                                 110.08
       100.00
                                                                                                           2 43 35
                                                                                                                             3718.2
                                                                                                                                             8.86
                                                                                                                                                          167.17
                                                                                                 62.67
                                                                                314.16
                                                   12.62
                                                                173.94
       100.00
                                                                                                           9 37 51
                                                                                                                             2280.4
                                                                                                 69.88
                                                                                                                                           -30.71
                                                                                                                                                           79.36
                                                  -28.23
                                                                  87.69
                                                                                331.76
                    8 49 51 2880.42
       110.00
                                                                                                 60.53
                                                                                                             3 13 59
                                                                                                                             3617.6
                                                                                                                                            14.10
                                                                                                                                                          156.45
                                                                                311.05
                                 4217.65
                                                                 163.21
                                                   18.16
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    SGT 5101.6 SGR 321.3 SG3 85.0
RRT .6088 RRF .5995 RTF .9848
SGB 5111.7 R23 -.0020 R13 .9848
                                                                                                                        ST 1804.7 SR 290.8 SS 535.4
CRT .6825 CRS -.6408 CST -.9983
     TOE 2.3031 TRAID.2458 TC3 -.2566 BAU .5700
     ROE .6471 RRA .2959 RC3 .0030 FAU-.00314
FOE .3980 FRA 2.0008 FC3 .0163 85P 17257
                                                                                                                         LSA 1892.7 MSA 214.1 55A 7.8
                                                                    SG1 5105.3 SG2 254.7 THA 2.20
                                                                                                                      ELI 1815.7 EL2 211.2 ALF 6.36
```

BOE 2.3923 BRA10.2501 BC3 .2566 FSP -285

ARRIVAL DATE AUG 4 1966

LAUNCH DATE DEC 31 1965 RL 147.10 LAL .00 LOL 99.11 VL 25.464 GAL 27.66 A7L 89.15 MCA 330.12 SMA 114.81 ECC .52680 INC .8476 V1 30.286 RP 107.86 LAP -.42 LOP 69.23 VP 36.125 GAP 31.62 A7P 89.26 TAL 145.88 TAP 116.00 RCA 54.33 APO 175.29 V2 35.135 RC 223.756 GL 1.35 GP -4.11 7AL 33.16 ZAP 166.42 ETS 200.52 ZAE 130.34 ETE 184.23 ZAC 149.56 ETC 161.86 CLP 167.04 DISTANCE 601.097 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 200.283 VML 14.152 DLA 22.64 RAL 63.83 RAD 6571.1 VEL 17.933 PTH 3.00 VHP 19.700 DPA 14.25 RAP 55.48 ECC 4.2962 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -19.78 132.63 331.24 5 36 51 0 23 26 3530.17 90.00 3980.7 8.43 186.70 1 39 47 317.76 64.16 12.00 193.56 4560.71 8 8 32 2 40 53 9 45 50 102.69 -24.76 2613.8 110.52 332.20 69.41 7 14 58 3213.81 1 28 0 4372.30 -22.16 3772.3 10.61 170.23 177.09 316.63 63.46 14.28 100.00 80.24 -30.46 2292.6 334.59 69.46 8 57 38 2892.65 2 1 50 4266.23 -27.94 88.52 110.00 3 12 57 3666.2 15.80 159.18 61.52 313.65 166.07 19.76 110.00 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1765.4 SR 272.2 SS 561.9 CRT .6681 CRS -.6321 CST -.9988 SGT 5048.3 SGR 304.5 SG3 83.7 RRT .6219 RRF .6139 RTF .9883 SGB 5057.5 R23 -.0026 R13 .9883 TDE 2.3680 TRAI1.2648 TC3 -.1364 BAU .3654 ROE .6640 RRA .3245 RC3 .0048 FAU-.00598 FDE .4099 FRA 2.1886 FC3 .0259 BSP 17175 BDE 2.4593 BRA11.2695 BC3 .1365 FSP -281 LSA 1861.4 MSA 203.9 SSA 7.2 EL1 1774.9 EL2 201.5 ALF 5.96 SG1 5051.8 SG2 238.3 THA 2.15 ARRIVAL DATE AUG 6 1966 FLIGHT TIME 218.00 LAUNCH DATE DEC 31 1965 DISTANCE 598.307 .DD LOL 99.11 VL 25.443 GAL 30.96 AZL 89.48 HCA 333.34 SHA 114.70 ECC .56863 INC .5181 VI 30.286
-.23 LOP 72.45 VP 36.121 GAP 34.50 AZP 89.54 TAL 146.17 TAP 119.52 RCA 49.48 APO 179.92 VZ 35.147
.72 GP -4.06 ZAL 32.86 ZAP 164.77 ETS 198.36 ZAE 129.41 ETE 184.10 ZAC 150.92 ETC 160.95 CLP 165.31 HELIOCENTRIC CONIC RL 147.10 LAL RP 107.82 LAP RC 225.148 GL PLANETOCENTRIC CONIC C3 243.831 VHL 15.615 DLA 22.07 RAL 64.26 RAD 6571.4 VEL 19.109 PTH 3.08 VHP 21.417 DPA 14.71 RAP 56.94 ECC 5.0128
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -19.75 132.93 333.67 3531.62 90.00 5 46 10 189.91 10.15 1 34 48 4036.6 319.83 64.94 13.64 196.85 90.00 0 17 31 4636.64 103.01 8 16 54 2618.5 -24.67 64.29 334.61 -22.05 110.82 3218.53 100.00 7 23 16 173.24 2 36 51 3825.0 12.28 64.33 1 23 6 4424.96 9 4 14 2902.67 180.20 318.74 100.00 15.86 2302.7 -30.28 80.96 9 52 36 69.12 89.20 336.97 -27.70 110.00 3713.6 17.43 161.89 3 10 32 21.27 168.91 315.89 62.59 110.00 4313.59 1 58 38 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RRT .6322 RRF .6255 RTF .9911 SGB 4996.5 R23 -.0031 R13 .9911 SGI 4991.6 SG2 .221.7 THA 2.08 ST 1726.6 SR 253.3 SS 594.6 CRT .6559 CRS -.6252 CST -.9991 TDE 2.4618 TRA12.3877 TC3 -.0318 BAU .1057 MOE .6810 RRA .3499 RC3 .0064 FAU-.00964 FDE .4279 FRA 2.3602 FC3 .0342 B3P 17077 B0E 2.5542 BRA12.3927 BC3 .0324 FSP -277 6.6 LSA 1833.5 MSA 192.4 SSA EL1 1734.7 EL2 190.3 ALF 5.56 ARRIVAL DATE AUG 8 1966 FLIGHT TIME 220.00 LAUNCH DATE DEC 31 1965 **DISTANCE 593.126** RL 147.10 LAL .00 LOL 99.11 VL 25.428 CAL 34.81 AZL 89.90 HCA 336.57 SMA 114.63 ECC .61645 INC .1063 VI 30.286 RP 107.79 LAP -.04 LOP 75.68 VP 36.121 GAP 37.93 AZP 89.90 TAL 146.98 TAP 123.55 RCA 43.96 APO 185.29 VZ 35.158 HELIOCENTRIC CONIC .13 CP -4.01 ZAL 32.90 ZAP 162.85 ETS 196.39 ZAE 128.23 ETE 183.94 ZAC 152.04 ETC 160.09 CLP 163.32 RC 226.511 GL PLANETOCENTRIC CONIC C3 300.061 VHL 17.322 DLA 21.47 RAL 64.31 RAD 6571.7 VEL 20.527 PTH 3.17 VMP 23.439 DPA 15.09 RAP 58.16 ECC 5.9382 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 54 2 3530.64 0 10 6 4690.86 7 30 11 3220.63 1 16 38 4476.09 9 9 29 2909.95 1 53 49 4359.54 335.58 69.31 -19.77 132.86 90.00 11.78 65.80 1 28 16 4090.9 321.43 15.18 200.09 90.00 -24.63 8 23 52 2620.6 69.23 -22.00 110.96 336.48 100.00 13.87 176.21 2 31 14 3876.1 65.27 183.27 320.40 17.34 100.00 -30.14 9 57 59 2310.0 68.88 89.69 338.81 -27.52 110.00 18.97 63.72 3759.5 3 6 29 171.73 317.69 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS RRT .6387 RRF .6329 RTF .9935 SGB 4927.9 R23 -.0036 R13 .9935 SGI 4923.6 SG2 205.3 THA 1.99 ST 1686.9 SR 234.4 SS 634.7 CRT .6462 CRS -.6201 CST -.9994 TOE 2.5940 TRA13.6202 TC3 .0581 BAU .2351
RDE .6985 RRA .3695 RC3 .0076 FAU-.01445
FDE .4542 FRA 2.5793 FC3 .0417 B3P 16926
BDE 2.6864 BRA13.6253 BC3 .0586 FSP -274 LSA 1808.5 MSA 180.0 SSA 6.1 EL1 1693.7 EL2 178.1 ALF ARRIVAL DATE MAR 12 1966 FLIGHT TIME 70.00 LAUNCH DATE JAN 1 1966 RL 147.10 LAL .00 LOL 100.13 VL 29.986 GAL -15.38 AZL 87.09 MCA 98.21 SMA 146.60 ECC .26530 INC 2.9099 V1 30.287 RP 107.92 LAP 2.88 LOP 198.36 VP 39.423 GAP -1.65 AZP 90.42 TAL 253.91 TAP 352.13 RCA 107.71 APO 185.50 V2 35.114 RC 72.741 GL 10.32 GP 11.94 ZAL 165.60 ZAP 72.85 ETS 354.03 ZAE 174.69 ETE 107.34 ZAC 39.42 ETC 169.81 CLP -72.46 DISTANCE 212.620 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC 2.51 VHP 4.590 OPA -9.64 RAP 306.30 ECC 2.1046 C3 67.119 VML 8.193 DLA -11.71 RAL 29D.32 RAD 6569.3 VEL 13.729 PTM 2.51 VMP 4.590 DPA -9.64 RAP 306.30 ECC 2.1046

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 10 30 27 5530.49 28.31 257.10 178.45 90.35 12 2 38 4930.5 28.06 248.44

100.00 2 48 17 1899.11 -19.21 18.43 168.75 113.36 3 19 56 1299.1 -15.88 11.21

100.00 11 57 44 5249.01 29.89 236.39 178.45 89.63 13 25 13 4649.0 29.52 227.61 C3 67.119 VML 8.193 DLA -11.71 RAL 290.32 RAD 6569.3 VEL 13.729 PTH 166.86 115.98 1727.43 4993.46 3.52 3 45 6 -23.04 110.00 14 42 37 207.70 4393.5 33.41 216.87 178.33 87.63 13 19 24 34 . 1 1 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 180.0 SR 380.7 SS 153.2 CRT .1306 CRS .5241 CST -.7615 SCT 596.7 SGR 418.9 SG3 223.1 RRT - 3248 RRF - 4388 RTF .6139 SGB 729.0 R23 .1065 R13 -.6554 TOE -.0626 TRA -.8147 TC3 -.0761 BAU .0899 ROE -.5407 RRA .2032 RC3 .0652 FAU .10926 LSA 390.2 MSA 219.4 SSA 19.0 FDE .2341 FRA-1.6005 FC3-1.4093 BSP 1110 BDE .5443 BRA .8396 BC3 .1002 FSP -663 EL1 381.6 EL2 178.0 ALF 85.48 SG1 622.2 SG2 379.9 THA 159.02

FLIGHT TIME 216.00

```
LAUNCH DATE JAN 1 1966
                                                                                                       FLIGHT TIME 72.00
                                                                                                                                                                                         ARRIVAL DATE MAR 14 1966
      HELIOCENTRIC CONIC
                                                                                                       DISTANCE 219.091
        RL 147.10 LAL .00 LOL 100.13 VL 29.951 GAL -15.21 AZL 87.17 MCA 101.43 SMA 146.26 ECC .26244 INC 2.8308 V1 30.287 RP 107.96 LAP 2.77 LOP 201.58 VP 39.385 GAP -1.04 AZP 90.56 TAL 253.58 TAP 355.01 RCA 107.88 APO 184.65 V2 35.101 RC 74.954 GL 10.16 GP 12.37 ZAL 165.59 ZAP 77.92 ETS 354.98 ZAE 172.37 ETE 130.16 ZAC 37.48 ETC 170.35 CLP -77.63
      PLANETOCENTRIC CONIC
        C3 65.508 VML 8.094 DLA -11.84 RAL 290.52 RAD 6569.2 VEL 13.670 PTH 2.50 VMP 4.472 DPA -9.59 RAP 304.32 ECC 2.0781
        LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 34 50 2132.01 -17.48 36.32 169.20 112.64 2 10 22 1532.0 -14.26 29.12
                                                                                                                               112.64 2 10 22
90.31 12 2 16
113.58 3 21 38
89.57 13 24 56
116.22 4 13 26
87.53 14 42 31
             90.00
                            10 30 7
                                                5529.26
                                                                          28.32
                                                                                            257.01
                                                                                                                 178.27
                                                                                                                                                                                4929.3
                                                                                                                                                                                                     28.06
                                                                                                                                                                                                                         248.35
                           2 50 9 1888.99
           100.00
                                                                        -18.93
                                                                                             17.80
                                                                                                                 168.55
                                                                                                                                                                               1289.0
4647.5 29...
-19.05
                                                                                                                                                                                1289.0
                                                                                                                                                                                                                          10.61
                          11 57 29 5247.51
3 44 48 1717.87
13 19 20 4991.39
                                                                                                          178.27
166.65
           100.00
                                                                        29.89
                                                                                            236.28
                                                                                                                                                                                                   29.51
                                                                                                                                                                                                                         227.50
                                                                       -22.76
           110.00
                                                                                               2.92
                                                                                                                                                                              1117.9
                                                                                                                                                                                                                         355.75
           110.00
                                                                        34.10
                                                                                            216.71
                                                                                                                 178.14
                                                                                                                                                                                                     33.39
                                                                                                                                                                                                                         207.54
                                                                                               MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                           SGT 665.2 SGR 424.1 SG3 235.6

RRT -.3792 RRF -.4726 RTF .6759

SGB 789.0 R23 .1013 R13 -.7080

SG1 693.3 SG2 376.6 THA 160.41
                                                                                                                                                                      ST 194.4 SR 378.6 SS 155.2

CRT .0721 CRS .5147 CST -.8045

LSA 388.0 MSA 233.0 SSA 19.1

EL1 379.0 EL2 193.7 ALF 87.13
        TOE -.0529 TRA -.8788 TC3 -.1190 BAU .1238
       RDE -.5309 RRA .2116 RC3 .0763 FAU .11425
       FOE .2312 FRA-1.6562 FC3-1.5099 BSP 1384
 LAUNCH DATE JAN 1 1966
                                                                                                       FLIGHT TIME 74.00
                                                                                                                                                                                         ARRIVAL DATE MAR 16 1966
     HELIOCENTRIC CONIC
                                                                                                      DISTANCE 225.514
      RL 147.10 LAL .00 LOL 100.13 VL 29.908 GAL -15.04 AZL 87.25 HCA 104.65 SHA 145.85 ECC .25964 INC 2.7499 V1 30.287 RP 108.00 LAP 2.66 LOP 204.80 VP 39.341 GAP -.46 AZP 90.70 TAL 253.14 TAP 357.79 RCA 107.98 APO 183.72 V2 35.089
       RC 77.191 GL
                                      9.98 GP 12.78 7AL 165.54 7AP 82.91 ETS 355.97 7AE 169.46 ETE 141.69 7AC 35.60 ETC 170.92 CLP -82.73
     PLANETOCENTRIC CONIC
      C3 63.923 VHL 7.995 DLA -11.99 RAL 290.79 RAD 6569.2 VEL 13.612 PTH 2.49 VHP 4.383 DPA -9.52 RAP 302.41 ECC 2.0520 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 4 2121.37 -17.20 35.67 169.06 112.84 2 12.25 1521.4 -13.96 28.49 90.00 10 29 39 5528.13 28.32 256.93 178.15 90.27 12 2 7 4928.1 28.05 248.27 100.00 2 52 18 1878.63 -18.65 17.16 168.41 113.79 3 23.37 1278.6 -15.27 10.00 100.00 11 57 26 5246.10 29.89 236.18 178.15 89.52 13 24.52 4646.1 29.50 227.40 110.00 3 46 45 1708.11 -22.46 2.32 166.50 116.47 4 15 13 1108.1 -18.72 355.18 110.00 13 19 28 4989.39 34.10 216.55 178.02 87.44 14 42 38 4389.4 33.37 207.39 DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                              SGT 743.7 SGR 428.7 SG3 245.6

RRT -.4279 RRF -.5048 RTF ..7247

SGB 858.4 R23 .0993 R13 -.7495

SG1 773.4 SG2 372.6 THA 161.77
       TOE -.0444 TRA -.9471 TC3 -.1664 BAU .1605
                                                                                                                                                                      ST 210.7 SR 375.5 SS 156.2

CRT .0230 CRS .5103 CST -.8352

LSA 385.3 MSA 246.9 SSA 19.2
       ROE -.5196 RRA .2187 RC3 .0872 FAU .11794
      FOE .2281 FRA-1.6872 FC3-1.5973 BSP 1687
BOE .5215 BRA .9720 BC3 .1878 FSP -743
                                                                                                                                                                       EL1 375.5 EL2 210.6 ALF 88.92
LAUNCH DATE JAN 1 1966
                                                                                                     FLIGHT TIME 76.00
                                                                                                                                                                                       ARRIVAL DATE MAR 18 1966
    HELIOCENTRIC CONIC
                                                                                                     DISTANCE 231.889
      RL 147.10 LAL .00 LOL 100.13 VL 29.860 GAL -14.87 AZL 87.33 HCA 107.86 SMA 145.39 ECC .25689 INC 2.6666 V1 30.287 RP 108.04 LAP 2.54 LOP 208.01 VP 39.293 GAP .09 AZP 90.82 TAL 252.59 TAP .46 RCA 108.04 APO 182.74 V2 35.076 RC 79.446 GL 9.79 GP 13.16 ZAL 165.46 ZAP 87.78 ETS 356.99 ZAE 166.38 ETE 148.20 ZAC 33.84 ETC 171.52 CLP -87.72
     RL 147.10 LAL
    PLANETOCENTRIC CONIC
      C3 62.357 VHL 7.897 OLA -12.13 RAL 291.11 RAD 6569.2 VEL 13.554 PTH 2.48 VHP 4.323 OPA -9.43 RAP 300.62 ECC 2.0262
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 10 30 1 5527.12 28.32 256.85 178.08 90.23 12 2 8 4927.1 28.05 248.20 100.00 2 54 44 1867.96 -18.35 16.51 168.32 114.02 3 25 52 1268.0 -14.95 9.36 100.00 11 57 33 5244.80 29.89 236.08 178.08 89.47 13 24 58 4644.8 29.49 227.30 110.00 3 48 59 1698.05 -22.15 1.70 166.40 116.72 4 17 17 1098.1 -18.59 354.59 110.00 13 19 47 4987.47 34.09 218.40 177.94 87.35 14 42 55 4387.5 33.55 207.24
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                               SGT 830.2 SGR 432.3 SG3 253.3

RRT -.4717 RRF -.5351 RTF .7622

SGB 936.0 R23 .0988 R13 -.7815

SG1 860.8 SG2 367.7 THA 163.01
      TOE -.0371 TRA-1.0179 TC3 -.2173 BAU .1987
                                                                                                                                                                       ST 228.5 SR 371.0 SS 156.2
CRT -.0178 CRS .5023 CST -.8612
      ROE -.5066 RRA .2248 RC3 .0981 FAU .12048
     LSA 381.5 MSA 261.3 SSA 19.3
                                                                                                                                                                       EL1 371.0 EL2 228.4 ALF 91.01
LAUNCH DATE JAN 1 1966
                                                                                                     FLIGHT TIME 78.00
                                                                                                                                                                                       ARRIVAL DATE MAR 20 1966
   HELIOCENTRIC CONIC
                                                                                                     DISTANCE 238.221
     RL 147.10 LAL .00 LOL 100.13 VL 29.805 GAL -14.70 AZL 87.42 MCA 111.08 SHA 144.88 ECC .25418 INC 2.5804 V1 30.287 RP 108.08 LAP 2.41 LOP 211.23 VP 39.240 GAP .61 AZP 90.93 TAL 251.95 TAP 3.03 RCA 108.05 APO 181.70 V2 35.063 RC 81.719 GL 9.58 GP 13.53 ZAL 165.34 ZAP 92.49 ETS 358.04 ZAE 163.29 ETE 152.31 ZAC 32.23 ETC 172.14 CLP -92.56
   PLANETOCENTRIC CONIC
     C3 60.802 VHL 7.798 DLA -12.29 RAL 291.48 RAO 6569.1 VEL 13.497 PTM 2.47 VHP 4.286 DPA -9.32 RAP 298.97 ECC 2.0007
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 42 24 2099.00 -16.61 34.29 168.93 113.27 2 17 23 1499.0 -13.32 27.16 90.00 10 30 11 5526.28 28.32 256.79 178.06 90.20 12 2 17 4926.3 28.04 248.14 100.00 2 57 27 1856.87 -18.04 15.83 168.27 114.24 3 28 23 1256.9 -14.62 8.71 100.00 11 57 49 5243.65 29.89 236.00 178.05 89.42 13 25 12 4643.6 29.49 227.21 110.00 3 51 29 1667.65 -21.83 1.06 166.34 116.98 4 19 37 1087.6 -18.04 353.98 110.00 13 20 16 4985.66 34.09 216.26 177.91 87.27 14 43 21 4385.7 33.33 207.10
                                                                                                                                   90.20 12 2 17
114.24 3 28 23
89.42 13 25 12
116.98 4 19 37
87.27 14 43 21
                                                                                          MID-COURSE EXECUTION ACCURACY
SGT 923.0 SGR 435.0 SG3 259.2 ST 247.4 SR 364.9 SS 155.0
RRT -.5117 RRF -.5637 RTF .7908 CRT -.0500 CRS .4846 CST -.8859
SGB 1020.4 R23 .0991 R13 -.8061 LSA 376.4 MSA 276.2 SSA 19.4
SG1 954.2 SG2 361.5 THA 164.10 EL1 365.2 EL2 246.8 ALF 97.57
   DIFFERENTIAL CORRECTIONS
     TOE -.0313 TRA-1.0903 TC3 -.2714 BAU .2378
     ROE -.4914 RRA .2299 RC3 .1091 FAU .12210
FOE .2025 FRA-1.6959 FC3-1.7385 BSP .2347
BOE .4924 BRA 1.1143 BC3 .2925 FSP -803
```

```
ARRIVAL DATE MAR 22 1966
                                                                          FLIGHT TIME 80.00
LAUNCH DATE JAN 1 1966
                                                                          DISTANCE 244.509
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 29.746 GAL -14.53 AZL 87.51 HCA 114.29 SHA 144.32 ECC .25152 INC 2.4904 V1 30.287 RP 108.12 LAP 2.27 LOP 214.44 VP 39.183 GAP 1.11 AZP 91.02 TAL 251.22 TAP 5.51 RCA 108.02 APO 180.62 V2 35.050 RC 84.008 GL 9.35 GP 13.88 ZAL 165.19 ZAP 97.00 ETS 359.12 ZAE 160.28 ETE 155.10 ZAC 30.81 ETC 172.80 CLP -97.21
                                                                                                     2.46 VMP 4.272 DPA -9.18 RAP 297.52 ECC 1.9751
    C3 59.252 VHL 7.698 OLA -12.46 RAL 291.90 RAD 6569.1 VEL 13.439 PTH
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               INJ Azni...
113.49 2 20...
90.18 12 2 32
3 31 12
                                                                                                                             1487.0
                   1 45 30 2087.05
10 30 27 5525.66
3 0 27 1845.25
11 58 11 5242.69
                                                                                 168.93
                                                                   33.57
                                                    -16.28
                                                                                                                                                              248.09
                                                                                                                               4925.7
                                                                                                                                               28.04
                                                                                 176.08
                                                     28.32
                                                                  256.74
        90.00
                                                                                                                                                                8.03
                                                                                                                               1245.3
                                                                                                                                               -14.27
                                                                                 168.27
       100.00
                                                   -17.72
                                                                   15.12
                                                                                                 89.38 13 25 34
117.24 4 22 12
87.19 14 43 56
                                                                                                                                                              227.14
                                                                                                                               4642.7
                                                                                                                                              29.48
                                                                                 178.07
       100.00
                                                    29.89
                                                                  235.93
                                                                                                                                                              353.35
                   3 54 16 1676.72
13 20 52 4983.98
                                                                                                                               1076.7
                                                                                                                                              -17.67
                                                                                 166.32
                                                -21.50
                                                                      . 39
       110.00
                                                                                                                                              33.32
                                                                                                                                                              206.97
                                                                                                                              4384.0
                                                                                 177.92
                                                    34.08
                                                                  216.13
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL TORRECTIONS
                                                                                                                           ST 267.3 SR 357.8 SS 153.0
CRT -.0728 CRS .4757 CST -.9002
                                                                      SCT 1021.1 SGR 436.7 SG3 262.0

RRT -.5461 RRF -.5908 RTF .8120

SGB 1110.5 R23 .1028 R13 -.8244
    TOE -.0277 TRA-1.1635 TC3 -.3284 BAU .2769
    ROE -.4792 RRA .2332 RC3 .1197 FAU .12226
FOE .1891 FRA-1.6671 FC3-1.7863 BSP 2694
BOE .4761 BRA 1.1867 BC3 .3495 FSP -812
                                                                                                                           LSA 371.7 MSA 290.4 55A
                                                                                                                                                                 19.4
                                                                                                                           EL1 359.0 EL2 265.7 ALF 96.92
                                                                      SG1 1052.3 SG2 355.0 THA 165.12
                                                                                                                                       ARRIVAL DATE MAR 24 1966
                                                                           FLIGHT TIME 82.00
                                                                          01STANCE 250.756
   HELIOCENTRIC CONIC
                        .00 LOL 100.13 VL 29.683 GAL -14.35 AZL 87.60 HCA 117.49 SMA 143.73 ECC .24889 INC 2.3959 V1 30.287
2.13 LOP 217.64 VP 39.123 GAP 1.57 AZP 91.11 TAL 250.41 TAP 7.91 RCA 107.96 APO 179.50 V2 35.036
9.11 GP 14.23 ZAL 165.00 ZAP 101.29 ETS .23 ZAE 157.39 ETE 157.09 ZAC 29.59 ETC 173.50 CLP-101.65
    RL 147.10 LAL
RP 108.16 LAP
   PLANETOCENTRIC CONIC
                                                                                                      2.45 VHP 4.276 OPA -9.00 RAP 296.27 ECC 1.9496
    C3 57.703 VHL 7.596 DLA -12.64 RAL 292.38 RAD 6569.1 VEL 13.381 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 48 56 2074.40 -15.94 32.80 168.97 113.72 2 23 31 1474.4 -12.60 25.71
                  1 48 56 2074.40
10 30 47 5525.36
3 3 46 1832.97
11 58 38 5242.02
3 57 20 1665.22
13 21 34 4982.54
                                                                                                  90.17 12 2 52
114.72 3 34 19
89.36 13 26 0
117.51 4 25 5
87.13 14 44 36
                                                                                                                                                               248.07
                                                                                                                                4925.4
                                                                                                                                                28.04
                                                     28.32
                                                                   256.72
                                                                                  178.14
         90.00
                                                                                                                                               -13.49
                                                                                                                                                                 7.31
                                                                                                                                1233.0
                                                                                  168.30
                                                    -17.37
                                                                    14.37
        100.00
                                                                                                                                                               227.09
                                                                                178.13
166.35
                                                                                                                                4642.0
                                                                                                                                               29.48
                                                    29.89
                                                                   235.88
        100.00
                                                                                                                                              -17.28
                                                                                                                                                               352.68
                                                                                                 117.51
                                                                                                                                1065.2
                                                                   359.69
                                                    -21.14
        110.00
                                                                   216.02
                                                                                  177.98
                                                                                                                                4382.5
                                                                                                                                                33.30
                                                     34.08
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 1123.0 SGR 437.3 SG3 263.2 ST 288.0 SR 349.2 S5 190.2 RRT -.5776 RRF -.6168 RTF .8279 CRT -.0876 CRS .4579 CST -.9139 SGB 1205.2 R23 .1075 R13 -.8383 LSA 367.3 MSA 303.6 SSA 19.5 SG1 1154.0 SG2 347.4 THA 166.03 EL1 351.9 EL2 284.7 ALF 102.16
                                                                                                                            ST 288.0 SR 349.2 SS 150.2
CRT -. 0876 CRS .4579 CST -. 9139
LSA 367.3 MSA 303.6 SSA 19.5
     TOE -.0267 TRA-1.2365 TC3 -.3879 BAU .3157
    ROE -.4572 RRA .2354 RC3 .1304 FAU .12158
FOE .1690 FRA-1.6262 FC3-1.8242 BSP 3056
BOE .4580 BRA 1.2587 BC3 .4092 FSP -822
                                                                                                                                       ARRIVAL DATE MAR 26 1966
                                                                           FLIGHT TIME 84.00
 LAUNCH DATE JAN 1 1966
                                                                          DISTANCE 256.965
    HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 29.615 GAL -14.17 AZL 87.70 MCA 120.70 SHA 143.11 ECC .24630 INC 2.2957 VI 30.287 RP 108.20 LAP 1.97 LOP 220.85 VP 39.060 GAP 2.02 AZP 91.17 TAL 249.53 TAP 10.23 RCA 107.86 APO 178.36 V2 35.023 RC 88.623 GL 8.83 GP 14.60 ZAL 164.78 ZAP 105.34 ETS 1.38 ZAE 154.66 ETE 158.52 ZAC 28.59 ETC 174.25 CLP-105.87
    PLANETOCENTRIC CONIC
     C3 56.153 YML 7.494 DLA -12.84 RAL 292.90 RAD 6569.0 YEL 13.323 PTH 2.43 YMP 4.296 DPA -8.77 RAP 295.24 ECC 1.9241
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              113.96 2 27 4

90.17 12 3 14

114.97 3 37 45

89.35 13 26 29

117.80 4 28 16

87.07 14 45 21
                                                                                                                             1460.9
                                                                                                                                             -12.20
                                                                               169.05
                                                                    31.98
                                                     -15.57
                       1 52 43 2060.90
         90.00
                                                                                                                                               28.04
                                                                   256.73
                                                                                  178.24
                                                                                                                                4925.5
                     10 31 9 5525.50
3 7 26 1819.88
                                                     28.32
         90.00
                                                                                                                                               -13.49
                                                                   13.58
                                                                                168.37
                                                                                                                                1219.9
                                                     -17.00
        100.00
                                                                                                                                4641.7
                                                                                                                                               29.48
                                                                                  178.23
                                                                   235.86
                                                     29.89
        100.00
                    11 59 8 5241.75
                                                                                                                                                               351.98
                                                                                                                                1053.0
                                                                                                                                               -16.67
                    4 0 43 1653.00
13 22 20 4981.40
                                                                                  166.41
                                                     -20.75
                                                                   358.96
        110.00
                                                                                                                                                 33.29
                                                                                                                                4341.4
                                                                   215.93
                                                                                  178.08
                                                    34.07
        110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                            $T 309.2 SR 339.2 S5 146.7
CRT -.0950 CRS .4362 CST -.9254
                                                                        SGT 1227.7 SGR 437.1 SG3 262.5
     TOE -.0284 TRA-1.3083 TC3 -.4496 BAU .3538
                                                                       RRT -.6064 RRF -.6421 RTF .8398
SGB 1303.2 R23 .1139 R13 -.8487
SG1 1258.3 SG2 339.1 THA 166.85
     ROE -.4376 RRA .2364 RC3 .1411 FAU .12006
                                                                                                                            LSA 365.8 MSA 313.1 SSA 19.5
     FOE .1462 FRA-1.5726 FC3-1.8509 BSP 3423
BDE .4385 BRA 1.3295 BC3 .4712 FSP -825
                                                                                                                             EL1 345.4 EL2 302.4 ALF 112.85
                                                                                                                                        ARRIVAL DATE MAR 28 1966
                                                                            FLIGHT TIME 86.00
 LAUNCH DATE JAN 1 1966
                                                                            DISTANCE 263.137
    HELIOCENTRIC CONIC
                           .00 LOL 100.13 VL 29.545 GAL -13.99 AZL 87.81 HCA 123.90 SHA 142.47 ECC .24375 INC 2.1887 V1 30.287
1.82 LOP 224.05 VP 38.995 GAP 2.44 AZP 91.22 TAL 248.58 TAP 12.48 RCA 107.74 APO 177.20 V2 35.010
8.52 GP 14.98 ZAL 164.53 ZAP 109.14 ETS 2.58 ZAE 152.09 ETE 159.57 ZAC 27.82 ETC 175.07 CLP-109.85
     RL 147.10 LAL
     RP 108.24 LAP
     RC 90.946 GL
    PLANETOCENTRIC CONIC
                                                                                                                                    -8.48 RAP 294.44 ECC 1.8986
     C3 54.601 VHL 7.389 DLA -13.06 RAL 293.46 RAD 6569.0 VEL 13.265 PTH 2.42 VMP 4.330 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 114.20
                                                                                                                              1446.3
                                                                                                                2 31 1
                                   2046.33
                                                     -15.16
                                                                    31.10
                                                                                 169.16
                       1 56 55
         90.00
                                                                                                   90.20 12 3 35
                                                                                                                                 4926.2
                                                                                                                                                 28.04
                                                                                                                                                                248.13
                                   5526.25
                                                                    256.79
                                                                                   178.38
                     10 31 29
                                                     28.32
         90.00
                                  1805.79
5242 0
                                                                                                                3 41 34
                                                                                                                                 1205.8
                                                                                                                                                 -13.05
                                                                                                                                                                 5.73
                                                                     12.73
                                                                                   168.48
                                                                                                   115.23
                                                     -16.59
                       3 11 28
        100.00
                                                                                                                                 4642.0
                                                                                                                                                 29.48
                                                                                                                                                                227.10
                                                                                                   89.36 13 26 58
                                                                                   178.37
                     11 59 36
                                     5242.03
                                                     29.89
                                                                    235.88
        100.00
                                                                                                                4 31 46
                                                                                                                                1039.9
                                  1639.88
4980.71
                                                                                                   118.09 4 31 46
87.04 14 46 8
                                                                    358.17
                                                                                   166.50
                      4 4 27
                                                     -20.33
        110.00
                                                                                                                                 4380.7
                                                                                                                                                 33.29
                                                                                                                                                                206.72
                                                                   215.88
                                                                                  178.22
                     13 23 7
        110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      SGT 1334.3 SGR 436.1 SG3 260.3

RRT -.6332 RRF -.6672 RTF .8486

SGB 1403.8 R23 .1224 R13 -.8563

SG1 1364.4 SG2 330.1 THA 167.57
                                                                                                                             ST 331.0 SR 328.0 SS 142.7
CRT -.0955 CRS .4095 CST -.9351
      TOE -.0334 TRA-1.3784 TC3 -.5135 BAU .3909
                                                                                                                       RDE -.4166 RRA .2362 RC3 .1520 FAU .11782
     FOE .1212 FRA-1.5090 FC3-1.8681 BSP 3797
      BOE .4179 BRA 1.3985 BC3 .5355 FSP
                                                          -824
```

Ē

```
LAUNCH DATE JAN 1 1966
                                                                            FLIGHT TIME 88.00
                                                                                                                                         ARRIVAL DATE MAR 30 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 269.275
                          .00 LOL 100.13 VL 29.471 GAL -13.80 A7L 87.93 MCA 127.10 SMA 141.81 ECC .24124 INC 2.0734 V1 30.287 1.65 LOP 227.25 VP 38.927 GAP 2.83 AZP 91.25 TAL 247.56 TAP 14.66 RCA 107.60 APO 176.02 V2 34.996 8.17 GP 15.40 ZAL 164.25 ZAP 112.70 ETS 3.84 ZAE 149.69 ETE 160.30 ZAC 27.28 ETC 175.97 CLP-113.59
    RL 147.10 LAL
     RP 108.29 LAP
     RC 93.279 GL
   PLANETOCENTRIC CONIC
     C3 53.045 VHL 7.283 DLA -13.32 RAL 294.08 RAD 6568.9 VEL 13.206 PTH 2.41 VHP 4.377 DPA -8.12 RAP 293.86 ECC 1.8730
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                 114.47 2 35 24
90.26 12 3 51
115.51 3 45 48
                                                                                 169.31
        90.00
                     2 1 34 2030,46
                                                     -14.72
                                                                    30.15
                                                                                                                                 1430.5
                                                                                                                                                -11.29
                                                                                                                                                                 23.14
        90.00
                     10 31 44 5527.82
                                                     28.32
                                                                    256.90
                                                                                   178.56
                                                                                                                                  4927.8
                                                                                                                                                  28.05
                                                                                                                                                                 248.25
       100.00
                      3 15 57 1790.45
                                                    -16.14
                                                                     11.61
                                                                                   168.62
                                                                                                                                  1190.5
                                                                                                                                                  -12.58
                                                                                                                                                                  4.84
                                                                                                  89.40 13 27 24
118.40 4 35 40
87.04 14 46 54
                                                                                178.56
                   12 0 1 5243.07
4 8 34 1625.66
13 23 54 4980.62
                                                                                                                                  4643.1
       100.00
                                                    29.89
                                                                    235.95
                                                                                                                                                 29.48
                                                                                                                                                                 227.17
       110.00
                                                    -19.87
                                                                    357.32
                                                                                  166.62
                                                                                                                                  1025.7
                                                                                                                                                 -15.92
                                                                                                                                                                 350.42
                                                    34.07
       110.00
                                                                    215.87
                                                                                  178.40
                                                                                                                                  4380.6
                                                                                                                                                  33.28
                                                                                                                                                                206.72
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 1441.5 SGR 434.5 SG3 256.3

RRT -.6575 RRF -.6921 RTF .6545

SGB 1505.6 R23 .1339 R13 -.8615

SGI 1471.0 SG2 320.8 THA 168.22
                                                                                                                           ST 352.9 SR 315.8 SS 138.2

CRT -,0901 CRS .3856 CST -.9411

LSA 383.2 MSA 310.1 SSA 19.6

EL1 357.9 EL2 310.1 ALF 160.52
     TOE -.0412 TRA-1.4453 TC3 -.5792 BAU .4267
    ROE -. 3947 RRA .2345 RC3 .1630 FAU .11482
    FOE .0989 FRA-1.4331 FC3-1.8739 BSP 4158
BOE .3989 BRA 1.4642 BC3 .6017 FSP -808
                                                                            FLIGHT TIME 90.00
                                                                                                                                         ARRIVA: DATE APR 1 1966
LAUNCH DATE JAN 1 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 275.381
    RL 147.10 LAL .00 LOL 100.13 VL 29.395 GAL -13.60 AZL 88.05 MCA 130.30 SMA 141.14 ECC .23877 INC 1.9480 V1 30.287 RP 108.33 LAP 1.49 LOP 230.44 VP 38.858 GAP 3.21 AZP 91.26 TAL 246.49 TAP 16.79 RCA 107.44 APO 174.84 V2 34.983 RC 95.621 GL 7.78 GP 15.88 ZAL 163.93 ZAP 116.00 ETS 5.18 ZAE 147.45 ETE 160.77 ZAC 26.97 ETC 176.96 CLP-117.11
   PLANETOCENTRIC CONIC
    C3 51.85 VHL 7.175 DLA -13.61 RAL 294.74 RAD 6568.9 VEL 13.147 PTH 2.40 VHP 4.433 DPA -7.68 RAP 293.50 ECC 1.8473 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 114.75 2.40.18
90.36 12 3 59
115.80 3 50 30
89.48 13 27 43
118.73 4 39 59
87.07 14 47 37
                                                                                 169.49
        90:00
                   2012.97
10 31 49 5530.50
                      2 6 45 2012.97
                                                    -14.22
                                                                    29.10
                                                                                                                                 1413.0
                                                                                                                                                -10.77
                                                                    257.10
                                                                                   178.79
                                                                                                                                                   28.06
        90.00
                                                      28.31
                                                                                                                                  4930.5
                  3 20 57 1773.58
12 0 16 5245.13
                                                                                   168.79
       100.00
                                                    -15.64
                                                                    10.81
                                                                                                                                  1173.6
                                                                                                                                                  -12.05
                                                                                   178.79
       100.00
                                                    29.89
                                                                    236.11
                                                                                                                                  4645.1
                                                                                                                                                 29.50
                     4 13 8 1610.14
13 24 36 4981.37
                                                                                   166.78
                                                                                                                                  1010.1
                                                                                                                                                 -15.38
33.29
       110.00
                                                    -19.37
                                                                    356.40
                                                      34.07
                                                                    215.93
                                                                                   178.64
                                                                                                                                  4381.4
       110.00
                                                                     HID-COURSE EXECUTION ACCUMALY

5GT 1550.1 SGR 432.7 SG3 251.8

RRT -.6815 RRF -.7177 RTF .8590

SGB 1609.4 R23 .1470 R13 -.8654
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 375.5 SR 302.0 SS 133.5

CRT -.0782 CRS .3457 CST -.9494

LSA 399.6 MSA 299.9 SSA 19.7
    TOE -. 0534 TRA-1.5094 TC3 -. 6474 BAU .4616
    RDE -.3712 RRA .2322 RC3 .1749 FAU .11159
    FOE .0703 FRA-1.3562 FC3-1.8764 B9P 4534
                                                                                                                             EL1 377.5 EL2 299.4 ALF 170.20
                                                                           FLIGHT TIME 92.00
                                                                                                                                        ARRIVAL DATE APR 3 1966
LAUNCH DATE JAN I 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 281.456
                          .00 LOL 100.13 VL 29.317 GAL -13.41 AZL 88.19 HCA 133.49 SMA 140.45 ECC .23636 INC 1.8103 V1 30.287 1.31 LOP 233.64 VP 38.788 GAP 3.57 AZP 91.25 TAL 248.36 TAP 18.85 RCA 107.25 APO 173.65 V2 34.970
    RL 147.10 LAL
    RP 108.37 LAP
                         7.33 CP 16.43 TAL 163.58 TAP 119.05 ETS 6.62 TAE 145.37 ETE 161.03 TAC 26.87 ETC 178.06 CLP-120.41
    RC 97.969 GL
   PLANETOCENTRIC CONIC
    C3 49.923 VHL 7.066 DLA -13.95 RAL 295.45 RAO 6568.8 VEL 13.088 PTH 2.39 VHP 4.499 DPA -7.15 RAP 293.33 ECC 1.8216
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                              169.71
                                                                                                115.05 2 45 49
90.51 12 3 53
                                                                                                                                             -10.17
                                                                                                                              1393.5
                   2 12 35 1993.45
10 31 39 5534.68
3 26 33 1754.81
        90.00
                                                   -13.66
                                                                   27.94
                                                                                                                2 45 49
                                                                                                                                                                 21.00
        90.00
                                                     28.31
                                                                   257.41
                                                                                  179.07
                                                                                                                                 4934.7
                                                                                                                                                 28.GA
                                                                                                                                                                248.75
                                                                                                  116.12 3 55 48
89.61 13 27 51
       100.00
                                                   -15.08
                                                                    9.70
                                                                                169.01
179.08
                                                                                                                                 1154.8
                                                                                                                                                -11.45
                                                                                                                                                                 2.79
       100.00
                   12 0 22
                                   5248.56
                                                     29.89
                                                                   236.36
                                                                                                                                 4648.6
                                                                                                                                                 29.52
                                                                                                                                                                227.58
                                                                                                  119.09 4 44 48
87.16 14 48 13
                                                                                166.98
       110.00
                   4 18 15 1592.88
13 25 9 4983.25
                                                -18.80
                                                                   355.38
                                                                                                                                  992.9
                                                                                                                                                -14.78
                                                                                                                                                                348.57
       110.00
                                  4983.25
                                                     34.08
                                                                   216.08
                                                                                  178.94
                                                                                                                                 4383.3
                                                                                                                                                 33.31
                                                                                                                                                                206.92
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 1659.2 SCR 431.0 SC3 246.6

RRT -.7046 RRF -.7437 RTF .8621

SGB 1714.3 R23 .1629 R13 -.8681

SGI 1687.7 SG2 300.7 THA 169.28
                                                                                                                           ST 398.7 SR 286.8 SS 128.7

CRT -.0602 CRS .2949 CST -.9578

LSA 418.7 MSA 286.5 SSA 19.8
    TDE -.0699 TRA-1.5696 TC3 -.7182 BAU .4954
    RDE -.3444 RRA .2288 RC3 .1877 FAU .10805
FDE .0396 FRA-1.2754 FC3-1.8738 BSP 4910
BDE .3534 BRA 1.5861 BC3 .7423 FSP -786
                                                                                                                            FL1 399.4 FL2 285.7 ALF 174.91
LAUNCH DATE JAN 1 1966
                                                                           FLIGHT TIME 94.00
                                                                                                                                        ARRIVAL DATE APR 5 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 287.504
                          .00 LOL 100.13 VL 29.238 GAL -13.20 A7L 88.34 HCA 136.68 SMA 139.76 ECC .23401 INC 1.6574 V1 30.287
1.14 LOP 236.83 VP 38.716 GAP 3.91 A7P 91.21 TAL 244.18 TAP 20.87 RCA 107.06 APO 172.47 V2 34.957
6.80 GP 17.07 7AL 163.20 ZAP 121.85 ETS 8.19 ZAE 143.43 ETE 161.07 ZAC 26.99 ETC 179.29 CLP-123.50
    RL 147.10 LAL
    RP 108.41 LAP
    RC 100.323 GL
  PLANETOCENTRIC CONIC
    C3 48.359 VHL 6.954 DLA -14.35 RAL 296.21 RAD 6568.8 VEL 13.028 PTH 2.38 VHP 4.573 DPA -6.50 RAP 293.36 ECC 1.7959
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 19 14 1971.37 -13.02 26.64 169.98 115.37 2 52 5 1371.4 -9.50 19.73
                  2 19 14 1971.37
10 31 6 5540.87
3 32 55 1733.63
12 0 6 5253.84
4 24 1 1573.57
13 25 29 4986.66
```

179.41

169.26

179.42

179.30

MID-COURSE EXECUTION ACCURACY

SGT 1767.7 SGR 429.5 SG3 240.4 RRT -.7261 RRF -.7701 RTF .8637 SGB 1819.1 R23 .1826 R13 -.8694 SGI 1795.7 SG2 290.7 THA 169.72

179.42 167.21

28.31

-14.45

29.89

-18.16

34.09

90.00

100.00

100.00

110.00

110.00

DIFFFRENTIAL CORRECTIONS

TOE -.0907 TRA-1.6244 TC3 -.7911 BAU .5277 RDE --3208 RRA .2239 RC3 .2012 FAU .10411

FDE .0106 FRA-1.1882 FC3-1.8639 BSP 5268 BDE .3334 BRA 1.6397 BC3 .8163 FSP -763

257.86

236.75

354.25

216.34

8.45

90.74 12 3 27 116.46 4 1 48

89.82 13 27 40

87.32 14 48 36

4 50 14

116.46

119.47

4940.9

1133.6

4653.8

973.6

4386.7

28.11

-10.78

29.55

33.34

-14.09

ST 422.4 SR 270.6 SS 123.7 CRT -.0368 CRS .2393 CST -.9645

LSA 439.4 MSA 271.1 SSA 1979 EL1 422.6 EL2 270.3 ALF 177.72

ORBIT DETERMINATION ACCURACY

249.20

227.97

207.18

347.50

1.58

```
ARRIVAL DATE APR 7 1966
                                                                      FLIGHT TIME 96.00
LAUNCH DATE JAN 1 1966
                                                                      DISTANCE 293.524
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 29.157 GAL -12.99 AZL 88.51 HCA 139.87 SHA 139.07 ECC .23171 INC 1.4853 V1 30.287 RP 108.44 LAP .96 LOP 240.01 VP 38.643 GAP 4.24 AZP 91.14 TAL 242.96 TAP 22.83 RCA 106.85 APO 171.29 V2 34.945
                       6.18 GP 17.84 TAL 182.79 TAP 124.40 ETS 9.92 TAE 141.61 ETE 160.92 TAC 27.30 ETC 180.66 CLP-126.40
   PLANETOCENTRIC CONIC
                                                                                                2.36 VHP 4.656 DPA -5.71 RAP 293.54 ECC 1.7701
    C3 46.795 VHL 6.841 DLA -14.84 RAL 297.03 RAD 6568.7 VEL 12.968 PTH
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 26 53 1946.00
10 30 0 5549.78
3 40 13 1709.39
11 59 21 5261.63
4 30 34 1551.63
13 25 28 4992.15
                                                                                                                       1346.0
                                                                                            115.72
                                                                             170.30
                                                                                                        2 59 19
                                                               25.15
                                                 -12.28
                                                                                                                                                      249.85
                                                                                                                                        28.15
                                                                                                       12 2 30
                                                                                                                         4949.8
                                                                             179.83
                                                                                              91.06
                                                  28.30
                                                               258.51
        90.00
                                                                                                                                        -10.00
                                                                             169.57
                                                                                             116.83
                                                                                                        4 8 42
                                                                                                                         1109.4
                                                                 7.03
      100.00
                                                -13.71
                                                                                                                                                      228.54
                                                                                              90.13 13 27 2
                                                                                                                                        29.59
                                                                                                                         4661.6
                                                                             179.85
       100.00
                                                  29.89
                                                               237.33
                                                                                                                                                      346.28
                                                                                             119.89 4 56 26
87.57 14 48 40
                                                                                                                                        -13.31
                                                                                                                          951.6
                                                                             167.50
                                                                                            119.69
                                               -17.42
                                                               352.98
      110.00
                                                                                                                                                      207.60
                                                                                                                         4392.1
                                                                                                                                        33.39
                                                                             179.75
                                                 34.11
                                                               216.77
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 447.8 SR 252.6 SS 119.7

CRT -.0064 CRS .1572 CST -.9732

LSA 462.7 MSA 253.1 SSA 20.1

EL1 447.8 EL2 252.6 ALF 179.70
                                                                   SGT 1877.3 SGR 429.0 SG3 234.2
RRT -.7473 RRF -.7973 RTF .8648
SGB 1925.7 R23 .2050 R13 -.8704
    TOE -.1179 TRA-1.6746 TC3 -.8677 BAU .5595
    RDE - . 2937 RRA . 2183 RC3 . 2165 FAU . 10018
    FOE -.0250 FRA-1.1037 FC3-1.8534 BSP 5645
BDE .3165 BRA 1.6887 BC3 .8943 FSP -746
                                                                   SG1 1905.1 SG2 280.9 THA 170.09
                                                                                                                                ARRIVAL DATE APR 9 1966
                                                                       FLIGHT TIME 98.00
                                                                       DISTANCE 299.520
   HELIOCENTRIC CONIC
                         .00 LOL 100.13 VL 29.075 GAL -12.77 A7L 88.71 MCA 143.06 SMA 138.38 ECC .22947 INC 1.2890 V1 30.287 .77 LOP 243.20 VP 38.570 GAP 4.55 A7P 91.03 TAL 241.69 TAP 24.75 RCA 106.62 APO 170.13 V2 34.932 5.44 GP 18.75 ZAL 162.34 ZAP 126.69 ETS 11.85 ZAE 139.89 ETE 160.58 ZAC 27.81 ETC 182.20 CLP-129.13
    RL 147.10 LAL
RP 108.48 LAD
         108.48 LAP
    RC 105.043 GL
   PLANETOCENTRIC CONIC
    C3 45.236 VHL 6.726 DLA -15.43 RAL 297.92 RAD 6568.7 VEL 12.907 PTH 2.35 VHP 4.747 DPA -4.75 RAP 293.88 ECC 1.7445 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                 -11.40
                                                                                            116.10 3 7 46
                                                                            170.69
                                                                23.42
                     2 35 50 1916.36
        90.00
                                                                                                                                                       250.77
                  10 28 6 5562.41
3 48 43 1681.16
11 57 54 5272.84
4 38 10 1526.30
13 24 57 5000.47
                                                                                                                                          28.19
                                                                                                        12 0 49
                                                                                                                          4962.4
                                                               259.43
                                                                              180.33
                                                                                              91.52
                                                  28.28
                                                                                              -9.08
                                                                                                                                                       358.61
                                                                                                                          1081.2
                                                                              169.95
                                                                                             117.23
                                                                 5.39
                                                  -12.83
                                                                                                                                                       229.37
                                                                                                                                         29.65
                                                                                                                          4672.8
                                                  29.89
                                                                238.17
                                                                              180.36
       100.00
                                                                                                                                                       344.88
                                                                                                                                       -12.40
                                                                                             120.34
                                                                                                                           926.3
                                                  -16.55
                                                                351.53
                                                                              167.84
       110.00
                                                                                                                                          33.47
                                                                217.42
                                                                              180.30
                                                                                                                          4400.5
                                                  34.13
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 475.2 SR 232.9 SS 116.9
CRT .0306 CRS .0530 CST -.9804
LSA 488.9 MSA 233.0 SSA 20.3
EL1 475.3 EL2 232.8 ALF 1.13
                                                                  SGT 1987.1 SGR 429.8 SG3 227.5
RRT -.7672 RRF -.8247 RTF .8653
     TOE -.1522 TRA-1.7184 TC3 -.9478 BAU .5903
     RDE -.2651 RRA .2115 RC3 .2336 FAU .09611
                                                                   SGB 2033.0 R23 .2310 R13 -.8708
    FOE -.0640 FRA-1.0179 FC3-1.8393 BSP 6024
BOE .3057 BRA 1.7314 BC3 .9762 FSP -728
                                                                   SG1 2014.8 SG2 271.9 THA 170.40
                                                                                                                                ARRIVAL DATE APR 11 1966
                                                                       FLIGHT TIME 100.00
LAUNCH DATE JAN 1 1966
                                                                       01STANCE 305.492
    RL 147.10 LAL .00 LOL 100.13 VL 28.992 GAL -12.55 A7L 88.94 HCA 146.24 SMA 137.69 ECC .22730 INC 1.0615 V1 30.287 RP 108.52 LAP .59 LOP 246.38 VP 38.497 GAP 4.84 A7P 90.88 TAL 240.38 TAP 26.62 RCA 106.39 APO 168.98 V2 34.920 RC 107.406 GL 4.55 GP 19.86 TAL 161.84 ZAP 128.72 ETS 14.04 ZAE 138.24 ETE 160.02 ZAC 28.51 ETC 183.95 CLP-131.69
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
    C3 43.685 VHL 6.609 DLA -16.16 RAL 298.88 RAD 6568.7 VEL 12.847 PTH 2.34 VHP 4.847 DPA -3.58 RAP 294.33 ECC 1.7189
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         INJ A7MIN

116.51 3 17 52

92.18 11 58 4

117.67 4 26 18

91.19 13 23 35

120.85 5 12 2

88.52 14 47 13
                                                                                                                                       -6.69
                                                                                                                      1281.0
                   2 46 31 1881.01
10 25 4 5580.21
3 58 50 1647.66
                                                                21.37
                                                  -10.33
                                                                                                                                                       252.07
                                                                                                                          4980.2
                                                                260.73
                                                                              180.94
                                                  28.24
         90.00
                                                                                                                                          -7.99
                                                                                                                                                       356.72
                                                                                                                         1047.7
                                                                 3.46
                                                                            170.41
                                                  -11.78
       100.00
                                                                                                                                                       230.55
                                                                             181.00
                                                                                                                          4688.8
                                                                239.35
                                                  29.87
                                                                                                                                       -11.31
       100.00
                   11 55 26 5288.80
                                                                                                                                                       343.26
                                                                                                                          896.5
                   4 47 5 1496.52
13 23 41 5012.70
                                                                349.84
                                                                             168.26
       110.00
                                                  -15.52
                                                                                                                          4412.7
                                                                                                                                         33.57
                                                                218.37
                                                                              180.99
                                                  34.15
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 505.5 SR 211.7 SS 115.7
CRT .0738 CRS -.0661 CST -.9833
                                                                    SGT 2095.4 SGR 431.9 SG3 220.0
RRT -.7844 RRF -.8517 RTF .8649
SGB 2139.4 R23 .2617 R13 -.8704
     TDE -.1941 TRA-1.7539 TC3-1.0308 BAU .6198
                                                                                                                     LSA 518.4 M5A 211.0 S5A 20.5
                                                                                                                      EL1 505.8 EL2 211.0 ALF
                                                                    SGI 2123.0 SG2 264.4 THA 170.67
     BDE .3053 BRA 1.7656 BC3 1.0613 FSP
                                                                                                                                 ARRIVAL DATE APR 13 1966
                                                                        FLIGHT TIME 102.00
 LAUNCH DATE JAN I 1966
                                                                        DISTANCE 311.443
                         .00 LOL 100.13 VL 28.908 GAL -12.32 AZL 89.21 HCA 149.42 SMA 137.00 ECC .22520 INC .7929 V1. 30.287 .40 LOP 249.56 VP 38.423 GAP 5.12 AZP 90.68 TAL 239.03 TAP 28.45 RCA 106.15 APO 167.85 VZ 34.909 3.45 GP 21.21 ZAL 161.28 ZAP 130.46 ETS 16.54 ZAE 136.62 ETE 159.23 ZAC 29.40 ETC 185.94 CLP-134.11
    HELIOCENTRIC CONIC
     RL 147.10 LAL
        108.56 LAP
     RC 109.770 GL
    PLANETOCENTRIC CONIC
     C3 42.153 VHL 6.493 DLA -17.08 RAL 299.93 RAD 6568.6 VEL 12.787 PTH 2.33 VHP 4.960 DPA
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                           1237.8
                                                                                                                                          -5.32
                                                                                                                                                        12.15
                                                                                                           3 30 14
                                                                 18.88
                                                                             171.79
                                                                                             116.96
                                  1837.83
                                                    -9.01
                      2 59 36
         90.00
                                                                                               93.09 11 53 47
                                                                                                                                          28.29
                                                                                                                                                        253.91
                                                                                                                           5005.4
                                                   28.16
                                                                262.57
                                                                              181.71
                                 5605.40
                    10 20 21
         90.00
                                                                                                                                          -6.64
                                                                                                           4 37 56
                                                                                                                                                        354.45
                                                                                                                           1006.9
                                                                  1.13
                                                                              171.01
                                                                                              118.15
                                  1606.95
                                                   -10.48
                    4 11 9 1606.95
11 51 30 5311.50
        100.00
                                                                                              92.07 13.20 1
121.40 5 22 10
69.34 14 45 10
                                                                                                                                          29.80
                                                                                                                                                        232.23
                                                                                                                           4711.5
                                                                 241.04
                                                                              181.79
                                                   29.83
        100.00
                                                                                                                           860.8
                                                                                                                                       -10.00
                                                                                                                                                       *341.32
                                 1460.77
5030.45
                                                  -14.26
                                                                347.83
                                                                              168.79
        110.00
                      4 57 49
                                                                                                                          4430.5
                                                                                                                                          33.71
                                                                                                                                                        210.55
                    13 21 19
                                                                219.76
                                                                              181.86
        110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    SGT 2205.7 SGR 436.8 SG3 212.5
RRT -.7999 RRF -.8784 RTF .8646
                                                                                                                       ST 541.7 SR 187.7 SS 119.1
CRT .1241 CRS -.2136 CST -.9793
     TOE -. 2485 TRA-1.7816 TC3-1.1191 BAU .6494
                                                                                                                 CRT .1241 the LSA 554.7 MSA 186.3 SSA ELL 542.3 EL2 186.1 ALF 2.79
     ROE - . 2036 RRA . 1926 RC3 . 2743 FAU . 08738
                                                                   SGB 2248.5 R23 .2950 R13 -.8703
SG1 2233.6 SG2 258.8 THA 170.88
     FOE -.1532 FRA -.8392 FC3-1.7946 BSP 6760
     BOE .3213 BRA 1.7919 BC3 1.1523 FSP -680
```

```
LAUNCH DATE JAN 1 1966
                                                                                      FLIGHT TIME 104.00
                                                                                                                                                          ARRIVAL DATE APR 15 1966
                                                                                     DISTANCE 317,374
    HELIOCENTRIC CONIC
     RL 147.10 LAL
RP 108.59 LAP
                              .00 LOL 100.13 VL 28.825 GAL -12.08 AZL 89.53 MCA 152.60 SMA 136.32 ECC .22318 INC .4685 V1 30.287
.22 LOP 252.73 VP 38.350 GAP 5.38 AZP 90.42 TAL 237.64 TAP 30.25 RCA 105.90 APO 166.74 V2 34.897
                             2.07 GP 22.88 TAL 160.63 TAP 131.86 ETS 19.44 TAE 134.97 ETE 158.19 TAC 30.49 ETC 188.23 CLP-136.41
     RC 112.133 GL
    PLANETOCENTRIC CONIC
     C3 40.654 VHL 6.376 DLA -18.25 RAL 301.09 RAD 6568.6 VEL 12.729 PTH 2.31 VHP 5.089 DPA -.38 RAP 295.46 ECC 1.6691 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      NCM TIME L-1 13 HE
3 16 10 1783,44
10 13 5 5641.51
4 26 37 1556.10
11 45 19 5344.09
5 11 6 1416.75
13 17 20 5056.20
                                                                                                            117.43
                                                                                                                              3 45 54
                                                                                                                                                                -3.58
                                                             -7.31
                                                                                            172.61
          90.00
                                                                             15.78
                                                                                                                                                 1183.4
                                                                                                                                                                                        9.09
                                                                                                                 94.40 11 47 7
                                                                            265.20
          90.00
                                                            28.00
                                                                                             182.56
                                                                                                                                                  5041.5
                                                                                                                                                                     28.32
                                                                                                                                                                                     256.55
                                                                                                                                                956.1
4744.1
                                                                                                                              4 52 33
        100.00
                                                            -8.84
                                                                            358.25
                                                                                             171.79
                                                                                                               118.67
                                                                                                                                                                     -4.94
                                                                                                                                                                                     351.63
                                                                                                               93.34 13 14 23
122.01 5 34 43
90.53 14 41 36
                                                          29.72
                                                                                             182.80
        100.00
                                                                            243.46
                                                                                                                                                                    29.87
                                                                                                                                                                                    234.65
                                                                                             169.50
        110.00
                                                      34.18
                                                          -12.69
                                                                            345.39
                                                                                                                                                  816.8
                                                                                                                                                                     -8.37
                                                                                                                                                                                     334.96
                                                                                                                                                4456.2
                                                                           221.77
                                                                                             182.97
        110.00
                                                                                                                                                                     33.67
                                                                                                                                                                                     212.54
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                SGT 2315.7 SGR 444.8 SG3 204.3
RRT -.8121 RRF -.9035 RTF .8643
SGB 2358.1 R23 .3307 R13 -.8701
     TOE -.3176 TRA-1.7981 TC3-1.2114 BAU .6782
                                                                                                                                             ST 586.6 SR 160.6 SS 128.5
CRT .1772 CRS -.3621 CST -.9657
     ROE -.1690 RRA .1802 RC3 .2993 FAU .08280
FOE -.2099 FRA -.7493 FC3-1.7631 83P 7140
BOE .3597 BRA 1.8071 BC3 1.2478 FSP -657
                                                                                                                                             LSA 600.4 MSA 159.5 SSA 21.5
EL1 587.4 EL2 157.9 ALF 2.99
                                                                                SG1 2344.1 SG2 256.4 THA 171.03
LAUNCH DATE JAN 1 1966
                                                                                     FLIGHT TIME 106.00
                                                                                                                                                          ARRIVAL DATE APR 17 1966
   HELIOCENTRIC CONIC
                                                                                     DISTANCE 323.286
                              .00 LOL 100.13 VL 28.741 GAL -11.84 AZL 89.93 MCA 155.78 SMA 135.65 ECC .22123 INC .0629 V1 30.287 .03 LOP 255.91 VP 38.277 GAP 5.64 AZP 90.06 TAL 236.22 TAP 32.00 RCA 105.64 APO 165.66 V2 34.886 .30 GP 24.99 ZAL 159.84 ZAP 132.85 ETS 22.83 ZAE 133.23 ETE 156.84 ZAC 31.82 ETC 190.92 CLP-138.62
    RL 147.10 LAL
RP 108.63 LAP
     RC 114.493 GL
   PLANETOCENTRIC CONIC
                                                                                                                    2.30 VHP 5.243 DPA
     C3 39.217 VHL 6.262 DLA -19.80 RAL 302.41 RAD 6568.5 VEL 12.672 PTH
    C3 39.217 VML 6.262 OLA -19.80 RAL 302.41 RAO 6568.5 VEL 12.672 PTH 2.30 VMP 5.243 OPA 1.83 RAP 296.05 ECC 1.6454 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJRT ASC INJATMH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 38 6 1712.07 -5.06 11.75 173.78 117.90 4 6 38 1112.1 -1.28 5.11 90.00 10 1 41 5694.71 27.66 269.06 183.88 96.51 11 36 36 5094.7 28.25 260.44 100.00 4 46 53 1490.09 -6.66 354.56 172.90 119.21 5 11 43 890.1 -2.72 347.99 100.00 11 35 35 5391.92 29.48 246.99 184.09 95.19 13 5 27 4791.9 29.89 238.21 110.00 5 28 8 1360.78 -10.65 342.34 170.49 122.68 5 50 49 760.8 -6.26 335.99 110.00 13 10 49 5093.99 34.12 224.72 184.45 92.27 14 35 43 4494.0 34.06 215.47
                                                                                                                                                      .1.83 RAP 296.05 ECC 1.6454
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
     TOE -.4060 TRA-1.7993 TC3-1.3059 BAU .7058
                                                                                SGT 2423.7 SGR 455.9 SG3 194.8
RRT -.8188 RRF -.9262 RTF .8634
                                                                                                                                             5T 644.9 SR 129.9 SS 145.3
CRT .2256 CR5 -.4826 CST -.9474
     ROE -.1313 RRA .1640 RC3 .3272 FAU .07772
     FOE -.2730 FRA -.6528 FC3-1.7157 BSP 7486
BOE .4267 BRA 1.8067 BC3 1.3462 FSP -624
                                                                                                                                             LSA 660.2 MSA 132.1 SSA 22.0
EL1 645.6 EL2 126.4 ALF 2.70
                                                                                SGB 2466.2 R23 .3676 R13 -.8696
                                                                                SG1 2452.6 SG2 258.6 THA 171.14
LAUNCH DATE JAN 1 1966
                                                                                    FLIGHT TIME 108.00
                                                                                                                                                         ARRIVAL DATE APR 19 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 329.179
    RL 147.10 LAL .00 LOL 100.13 VL 28.657 GAL -11.59 AZL 90.45 HCA 156.95 SMA 134.98 ECC .21937 INC .4463 V1 30.287 RP 108.66 LAP -.16 LOP 259.08 VP 38.204 GAP 5.88 AZP 89.58 TAL 234.77 TAP 33.72 RCA 105.37 APO 164.59 V2 34.875 RC 116.852 GL -2.04 GP 27.67 ZAL 158.80 ZAP 133.30 ETS 26.83 ZAE 131.29 ETE 155.14 ZAC 33.42 ETC 194.12 CLP-140.76
   PLANETOCENTRIC CONIC
     C3 37.899 VHL 6.156 DLA -21.88 RAL 303.95 RAD 6568.5 VEL 12.620 PTH 2.29 VHP 5.434 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 90.00 4 9 10 1612.36 -1.86 6.17 175.57 118.26 4 36 3 1012.4 1.93 359.54 90.00 9 42 53 5777.15 26.91 274.97 185.43 99.18 11 19 10 5177.2 27.90 266.45 100.00 5 15 5 1399.63 -3.63 349.56 174.59 119.69 5 38 24 799.6 .35 343.03
                                                                                                          118.26 4 36 3

99.18 11 19 10

119.69 5 38 24

97.96 12 50 44

123.37 6 12 36

94.88 14 25 55
                                                                                       174.59
                                                                                       185.77
171.96
                                                          28.91
                                                                                                                                                                   29.71
       100.00
                     11 19 39
                                      5465.11
                                                                           252.36
                                                                                                                                                 4865.1
                        5 51 10 1286.53
                                                                                                                                                  686.5
       110.00
                                                            -7.89
                                                                           338.36
                                                                                                                                                                    -3.45
                                                                                                                                                 4551.0
                                                                                                                                                                   34.18
       110.00
                      13 0 4
                                       5150.97
                                                          33.87
                                                                           229.15
                                                                                            186.42
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ST 728.3 SR 93.0 S5 175.2
CRT .2343 CRS -.5360 CST -.9327
     TOE -.5263 TRA-1.7829 TC3-1.4029 BAU .7338
                                                                                SGT 2533.9 SGR 472.5 SG3 184.3
                                                                               RRT -.8207 RRF -.9459 RTF .8635
SGB 2577.6 R23 .4012 R13 -.8701
     ROE -. 0872 RRA .1439 RC3 .3594 FAU .07229
    FDE -.3524 FRA -.5551 FC3-1.6512 BSP 7868
BDE .5335 BRA 1.7887 BC3 1.4482 FSP -593
                                                                                                                                           LSA 746.8 MSA 106.8 SSA 22.1
                                                                                SG1 2563.8 SG2 266.8 THA 171.20
                                                                                                                                          EL1 728.6 EL2 90.3 ALF 1.74
                                                                                    FLIGHT TIME 110.00
                                                                                                                                                         ARRIVAL DATE APR 21 1966
                                                                                    DISTANCE 335.055
    RL 147.10 LAL .00 LOL 100.13 VL 28.573 GAL -11.34 AZL 91.13 HCA 162.12 SMA 134.33 ECC .21758 INC 1.1338 V1 30.287 RP 108.69 LAP -.35 LOP 262.25 VP 38.132 GAP 6.11 AZP 88.92 TAL 233.29 TAP 35.41 RCA 105.10 APO 163.55 V2 34.865 RC 119.206 GL -5.24 GP 31.19 ZAL 157.29 ZAP 133.02 ETS 31.56 ZAE 128.95 ETE 153.04 ZAC 35.42 ETC 197.99 CLP-142.89
    RP 108.69 LAP -.35 LOI
RC 119.206 GL -5.24 GP
   PLANETOCENTRIC CONIC
    C3 36.826 VHL 6.068 DLA -24.76 RAL 305.83 RAD 6568.4 VEL 12.578 PTH 2.28 VMP 5.688 DPA
     LNCH AZMTH. LNCH TIME. L-I TIME. INJ. LAT. INJ. LONG. INJ. RT ASC. INJ. AZMTH. INJ. TIME. PO CST. TIM. INJ. 2 LAT. INJ. 2 LONG
                                                                                                          118.15 5 23 35
103.83 9 18 16
119.88 6 19 45
102.34 12 24 11
123.98 6 44 25
98.94 14 8 52
        90.00
                       4 59 21
                                      1454.79
                                                            3.22
                                                                           357.38
                                                                                          178.70
                                                                                                                                                 854.8
                                                                                                                                                                    6.96
                                                                                                                                                                                   350.70
                                                                                                                                                                    26.61
        90.00
                       9 7 44
                                       632.16
                                                           24.96
                                                                           307.08
                                                                                            187.23
                                                                                                                                                   32.2
                                                                                                                                                                                    298.80
                        5 58 41
                                      1263.19
                                                              .99
                                                                           342.06
                                                                                            177.46
                                                                                                                                                   663.2
                                                                                                                                                                    4.96
       100.00
                                                                                                                                                                                    335.52
                    10 51 4 5587.03
6 24 44 1181.51
12 41 31 5241.47
                                                                                                                                                4987.0
                                                           27.44
                                                                                            187.87
                                                                                                                                                                    28.87
                                                                           261.12
                                                                                                                                                                                    252.60
                                                           -3.92
                                                                           332.82
                                                                                            174.40
                                                                                                                                                 581.5
                                                                                                                                                                      .57
                                                                                                                                                                                    326.61
       110.00
                                                         33.13
                                                                           236.11
                                                                                           189.11
                                                                                                                                                4641.5
                                                                                                                                                                   34.01
                                                                                                                                                                                   226.98
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                             SGT 2645.7 SGR 494.8 SG3 171.8

RRT -.8155 RRF -.9612 RTF .8647

SGB 2691.6 R23 .4282 R13 -.8718

SGI 2676.6 SG2 283.1 THA 171.23
                                                                                                                                         ST 853.4 SR 50.4 55 221.5

CRT .0078 CRS -.3327 CST -.9308

LSA 878.2 MSA 91.3 SSA 19.8

EL1 853.4 EL2 50.4 ALF .03
    TOE -.6951 TRA-1.7402 TC3-1.4956 BAU .7615
     RDE -.0337 RRA .1167 RC3 .3944 FAU .06609
    FDE -.4494 FRA -.4512 FC3-1.5536 BSP 8266
BDE .6959 BRA 1.7441 BC3 1.5468 FSP -556
```

ARRIVAL DATE APR 23 1966

FLIGHT TIME 112.00 LAUNCH DATE JAN 1 1966 DISTANCE 340.912 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 28.489 GAL -11.07 A7L 92.10 HCA 165.28 SMA 133.68 ECC .21587 INC 2.1036 V1 30.287 RP 108.72 LAP -.53 LOP 265.42 VP 38.061 GAP 6.33 A7P 87.96 TAL 231.77 TAP 37.06 RCA 104.82 APO 162.54 V2 34.856 RC 121.557 GL -9.81 GP 35.89 ZAL 154.84 ZAP 131.67 ETS 37.15 ZAE 125.94 ETE 150.52 ZAC 37.99 ETC 202.76 CLP-145.14 PLANETOCENTRIC CONIC C3 36.297 VHL 6.025 DLA -28.92 RAL 308.31 RAD 6568.4 VEL 12.557 PTH 2.28 VMP 6.059 DPA 12.99 RAP 296.95 ECC 1.5974 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 186.75 114.34 6 42 34 604.6 83.87 6 22 30 1204.60 16.12 345.63 875.02 114.33 8 18 56 275.0 19.28 186.76 8 4 21 16.13 321.48 96.13 7 47 8 383.1 14.01 183.81 118.21 100.00 7 30 45 983.14 10.31 326.50 110.64 11 16 27 124.10 7 38 1 24.73 271.77 5259.8 189.37 9 38 48 5859.76 22.12 279.60 100.00 6.96 317.79 7 21 7 1013.41 12 4 54 5402.25 413.4 110.00 2.50 324.04 179.06 105.63 13 34 56 4802.3 32.63 239.31 110.00 30.79 248.05 192.54 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1047.0 SR 44.0 SS 287.9 CRT -.9491 CRS .8733 CST -.9421 LSA 1082.6 MSA 93.5 SSA 13.6 EL1 1047.8 EL2 13.9 ALF 177.71 SGT 2752.1 SGR 520.7 SG3 155.6 RRT -.7988 RRF -.9702 RTF .8672 SGB 2800.9 R23 .4464 R13 -.8749 TOE -.9421 TRA-1.6525 TC3-1.5632 BAU .7862 ROE .0346 RRA .0763 RC3 .4258 FAU .05848 FDE -.5642 FRA -.3346 FC3-1.3949 BSP 8589 BDE .9428 BRA 1.6543 BC3 1.6201 FSP -503 561 2783.8 562 309.7 THA 171.30 ARRIVAL DATE APR 25 1966 FLIGHT TIME 114.00 LAUNCH DATE JAN 1 1966 HELIOCENTRIC CONIC DISTANCE 346.750 RL 147.10 LAL .00 LOL 100.13 VL 28.406 GAL -10.80 AZL 93.59 MCA 168.44 SMA 133.05 ECC .21424 INC 3.5900 V1 30.287 RP 108.75 LAP -.72 LOP 268.59 VP 37.990 GAP 6.54 AZP 86.48 TAL 230.23 TAP 38.67 RCA 104.54 APO 161.55 V2 34.846 RC 123.903 GL -16.66 GP 42.35 ZAL 150.51 ZAP 128.69 ETS 43.74 ZAE 121.71 ETE 147.73 ZAC 41.48 ETC 208.77 CLP-147.77 PLANETOCENTRIC CONIC C3 37.147 VHL 6.095 DLA -35.16 RAL 312.00 RAD 6568.4 VEL 12.590 PTH 2.28 VHP 6.668 DPA 19.44 RAP 296.25 ECC 1.6113 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 48 4 1553.40 10 8 12 5825.96 192.52 120.10 5 13 57 953.4 22.97 13.61 66.22 19.11 11 45 18 5226.0 22.98 120.09 192.53 111.78 19.13 275.52 120.10 5 13 57 953.4 22.97 6.52 4 48 4 1553.40 10 8 12 5825.96 13.61 192.52 68.22 19.11 120.09 11 45 18 120.10 5 13 57 120.09 11 45 18 5226.0 22.98 192.53 111.78 19.13 275.52 953.4 22.97 6.52 68.22 4 48 4 10 8 12 1553.40 19.11 13.61 192.52 5226.0 22.98 192.53 111.78 5825.96 19.13 275.52 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 2866.7 SGR 548.8 SG3 135.4 RRT -.7661 RRF -.9684 RTF .8752 SGB 2918.8 R23 .4477 R13 -.8834 ST 1371.0 SR 123.4 SS 386.8 CRT -.9373 CRS .9954 CST -.9616 TOE-1.3501 TRA-1.4940 TC3-1.5686 BAU .8089 MOE .1301 RRA .0140 RC3 .4387 FAU .04919 FOE -.7086 FRA -.2093 FC3-1.1465 BSP 9003 BOE 1.3564 BRA 1.4940 BC3 1.6288 FSP -441 LSA 1425.6 MSA 110.0 SSA SG1 2897.9 SG2 348.9 THA 171.53 ELI 1375.9 ELZ 42.9 ALF 175.17 ARRIVAL DATE APR 27 1966 FLIGHT TIME 116.00 LAUNCH DATE JAN 1 1966 DISTANCE 352.562 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 28.324 GAL -10.52 AZL 96.17 HCA 171.58 SMA 132.43 ECC .21267 INC 6.1671 V1 30.287 RP 108.78 LAP -.90 LOP 271.76 VP 37.920 GAP 6.74 AZP 83.90 TAL 228.66 TAP 40.24 RCA 104.26 APO 160.59 V2 34.838 RC 126.245 GL -27.40 GP 51.46 ZAL 142.44 ZAP 123.26 ETS 51.69 ZAE 115.31 ETE 145.40 ZAC 46.48 ETC 216.68 CLP-151.68 PLANETOCENTRIC CONIC C3 42.276 VML 6.502 DLA -44.80 RAL 318.71 RAD 6568.6 VEL 12.792 PTH 2.33 VHP 7.842 DPA 28.31 RAP 293.91 ECC 1.6958 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 36 33 1178.9 4 6 54 1778.94 11 42 53 5665.76 204.42 129.97 53.71 22.20 34.90 129.96 13 17 18 5065.8 257.90 204.44 22.21 264.37 4 6 54 1778.94 11 42 53 5665.76 4 6 54 1778.94 11 42 53 5665.76 129.97 4 36 33 1178.9 27.19 28.43 204.42 22.20 34.90 53.71 129.96 13 17 18 5065.8 27.20 257.90 22.21 264.37 204.44 126.29 1178.9 27.19 28.43 129.97 4 36 33 129.96 13 17 18 22.20 34.90 204.42 53.71 27.20 5065.8 22.21 264.37 204.44 126.29 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2982.3 SCR 558.9 SC3 109.2 RRT -.6877 RRF -.9328 RTF .8944 SGB 3034.2 R23 .4220 R13 -.9019 ST 1917.8 SR 227.1 SS 525.9 CRT -.9248 CRS .9815 CST -.9804 TOE-2.1180 TRA-1.1745 TC3-1.3934 BAU .8167 ROE .2539 RRA -.0960 RC3 .3831 FAU .03735 FOE -.8797 FRA -.0672 FC3 -.7648 8SP 9386 BOE 2.1332 BRA 1.1784 BC3 1.4451 FSP -358 LSA 1997.3 MSA 129.9 SSA 3.3 SG1 3007.4 SG2 402.4 THA 172.52 EL1 1929.3 EL2 85.9 ALF 173.74 ARRIVAL DATE APR 29 1966 FLIGHT TIME 118.00 LAUNCH DATE JAN 1 1966 DISTANCE 358.326 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 28.242 GAL -10.23 AZL 101.75 HCA 174.68 SMA 131.82 ECC .21109 INC11.7450 VI 30.287 RP 108.80 LAP -1.08 LOP 274.92 VP 37.852 GAP 6.92 AZP 78.30 TAL 227.05 TAP 41.73 RCA 103.99 APO 159.64 VZ 34.830 RC 128.581 GL -43.96 GP 64.26 ZAL 127.81 ZAP 114.32 ETS 63.82 ZAE 104.89 ETE 147.49 ZAC 53.64 ETC 229.71 CLP-161.49 PLANETOCENTRIC CONIC C3 66.431 VHL 8.150 DLA -58.27 RAL 335.68 RAD 6569.3 VEL 13.703 PTH 2.50 VHP 10.736 OPA 40.34 RAP 287.12 ECC 2.0933 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 27.46 231.99 4 54 45 20.92 57.90 145.73 1414.2 53.25 4 21 11 2014.16 36.69 232.01 145.73 15 18 17 5053.8 27.47 256.96 5653.81 20.94 261.61 143.31 13 44 3 27.46 53.25 4 21 11 231.99 145.73 1414.2 57.90 36.69 2014.16 20.92 15 18 17 5053.8 27.47 256.96 232.01 145.73 261.61 13 44 3 5653.81 20.94 143.31 1414.2 27.46 4 21 11 53.25 20.92 57.90 231.99 2014.16 36.69 232.01 5053.8 27.47 256.96 13 44 3 20.94 261.61 143.31 5653.81 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3098.3 SGR 479.6 SG3 78.5 RRT -.2872 RRF -.5927 RTF .9403 ST 2744.8 SR 145.8 SS 701.6 CRT -.5713 CRS .6616 CST -.9934 TOE-3.8983 TRA -.3755 TC3 -.8317 BAU .7537 ROE .1275 RRA - .2861 RC3 .1688 FAU .02274 FDE-1.0738 FRA .1129 FC3 -.2964 BSP SGB 3135.2 R23 .3305 R13 -.9426 LSA 2833.2 MSA 142.3 SSA 1.3 9660 -252 SG1 3101.4 SG2 458.9 THA 177.40 EL1 2746.1 EL2 119.6 ALF 178.26 BOE 3.9003 BRA .4720 BC3 .8486 FSP

ARRIVAL DATE MAY 1 1966

```
FLIGHT TIME 120.00
LAUNCH DATE JAN 1 1966
                                                                       DISTANCE 363.897
   RL 147.10 LAL .00 LOL 100.13 VL 28.161 GAL -9.89 AZL 121.63 HCA 177.60 SHA 131.22 ECC .20909 INC31.6254 V1 30.287 RP 108.82 LAP -1.26 LOP 278.09 VP 37.784 GAP 7.04 AZP 58.40 TAL 225.34 TAP 42.94 RCA 103.78 APO 158.65 V2 34.822 RC 130.911 GL -60.52 GP 74.24 TAL 106.76 ZAP 101.70 ETS 120.33 ZAE 84.67 ETE 196.16 ZAC 62.17 ETC 289.61 CLP 138.29
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 279.247 VML 18.711 DLA -62.09 RAL 18.73 RAD 6571.6 VEL 20.014 PTH 3.14 VMP 22.213 DPA 52.29 RAP 261.10 ECC 5.5957
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1703.1
                                                                                           151.93 7 39 49
                                                                                                                                                         66.72
                                                                           285.62
                                                                                                                                          12.86
                    7 1 25 2303.14
                                                   5.82
                                                                70.16
       32.12
                                                                              285.65
                                                                                              151.93
                                                                                                        16 57 28
                                                                                                                            12.7
                                                                                                                                          12.87
                                                                                                                                                        286.95
                   16 47 16
                                                    5.83
                                                                290.38
                                   612.69
      147.88
                                                                                                        7 39 49
16 57 28
                                                                                                                                                         66.72
                                                                 70.16
                                                                              285.62
                                                                                              151.93
                                                                                                                           1703.1
                                                                                                                                          12.86
                   7 1 25 2303.14
                                                    5.82
       32.12
                                                    5.83
                                                                290.38
                                                                              285.65
                                                                                              151.93
                                                                                                                            12.7
                                                                                                                                          12.87
                                                                                                                                                        286.95
                  16 47 16
      147.68
                                   612.69
                                                                                                        7 39 49
16 57 28
                                                                                                                           1703.1
                                                                                                                                          12.86
                                                                                                                                                         66.72
                                                                 70.16
                                                                              285.62
                                                                                              151.93
                    7 1 25 2303.14
                                                    5.82
       32.12
                                                                                                                                                        286.95
                                                                                              151.93
                                                                                                                            12.7
                                                                                                                                          12.87
                                  612.69
                                                    5.83
                                                                290.38
                                                                              285.65
      147.88
                  16 47 16
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 1968.9 SGR 2467.5 SG3 50.9
RRT .9376 RRF .9625 RTF .9967
                                                                                                                       ST 1288.1 SR 2106.6 55 797.4
    TOE-3.5014 TRA 2.1248 TC3 -.0346 BAU .1873
                                                                                                                       CRT .9840 CRS -.9916 CST -.9988
   ROE-6.0311 RRA 1.8304 RC3 .0363 FAU .00168
FOE-1.1495 FRA .5983 FC3 -.0052 BSP 9180
BOE 6.9738 BRA 2.8044 BC3 .0502 FSP -156
                                                                                                                       LSA 2586.7 MSA 205.6 SSA
                                                                    SGB 3156.7 R23 -.1376 R13 .9905
                                                                                                                       EL1 2461.5 EL2 196.1 ALF 58.74
                                                                    SG1 3109.6 SG2 543.3 THA 51.82
                                                                        FLIGHT TIME 122.00
                                                                                                                                  ARRIVAL DATE MAY 3 1966
LAUNCH DATE JAN 1 1966
                                                                       DISTANCE 370.755
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 28.080 GAL -9.82 A7L 38.12 HCA 181.82 SMA 130.63 ECC .21098 INC51.8802 V1 30.287 RP 108.85 LAP -1.43 LOP 281.25 VP 37.718 GAP 7.53 A2P 141.87 TAL 224.12 TAP 45.93 RCA 103.07 APO 158.19 V2 34.816 RC 133.236 GL 57.18 GP -68.18 ZAL 100.61 ZAP 99.16 ETS 197.36 ZAE 71.12 ETE 125.31 ZAC 89.46 ETC 36.82 CLP 115.36
   PLANETOCENTRIC CONIC
    C3 671.006 VHL 25.904 DLA 47.27 RAL 321.94 RAD 6572.6 VEL 28.148 PTH
                                                                                                  3.42 VHP 30.301 OPA -67.00 RAP 154.01 ECC12.0431
   C3 871.006 VML 25.904 DLA 47.27 RAL 321.94 RAD 0572.8 VEL 201.40 FIN 3.42 VII 301.00 FIN 11 TIME PO C$T TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH INJ TIME PO C$T TIM INJ 2 LAT INJ 2 LONG 40.43 18 5 58 4914.17 -.79 228.34 231.23 42.74 17 27 52 4314.2 -6.65 223.30
                   16 5 58
                                                                                                                           2852.2
                                                                                                                                                         109.13
                    0 9 37 3452.21
                                                                114.17
                                                                              231.21
                                                                                                42.74
                                                                                                         1 7 9
                                                                                                                                           -6.64
                                                     -.77
      129.57
                                                                                               42.74 17 27 52
42.74 1 7 9
42.74 17 27 52
                                                                                                                           4314.2
                                                                                                                                                         223.30
                                                                              231.23
                                                                                                                                           -6.65
                   16 5 58
                                  4914.17
                                                     -.79
                                                                228.34
        50.43
                                                                                                                           2852.2
                                                                                                                                          -6.64
                                                                                                                                                         109.13
                                                     -.77
                                                                114.17
                                                                              231.21
                    0 9 37 3452.21
       129.57
                                                                                                                                                        223.30
                                                                                                                           4314.2
                                                                                                                                           -6.65
                                                    -.79
                                                                228.34
                                                                              231.23
                   16 5 58
                                  4914.17
        50.43
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                                                         109.13
                    0 9 37
                                3452.21
                                                                114.17
                                                                                                                           2852.2
                                                                                                                                           -6.64
       129.57
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 599.0 SGR 3086.1 SG3 47.2
RRT .1319 RRF -.9952 RTF -.0354
                                                                                                                       5T 276.6 SR 2688.2 SS 1307.3
CRT -.7319 CRS .9995 CST -.7532
    TOE 1.0323 TRA 1.5959 TC3 -.0366 BAU 1.4598
    RO-12.0174 RRA 4.0973 RC3 -.1586 FAU-.01815
                                                                    SGB 3143.7 R23 -.1017 R13 -.9947
                                                                                                                       LSA 2996.0 MSA 190.5 55A
    FDE 2.2419 FRA - 6003 FC3 .0234 BSP 8689
BDE12.0617 BRA 4.3971 BC3 .1627 FSP -141
                                                                                                                       EL1 2695.9 EL2 188.0 ALF 94.33
                                                                    SG1 3087.1 SG2 593.5 THA 88.48
                                                                                                                                 ARRIVAL DATE MAY 5 1966
                                                                       FLIGHT TIME 124.00
LAUNCH DATE JAN 1 1966
                                                                      DISTANCE 376.145
   HELIOCENTRIC CONIC
   RL 147.1D LAL .0D LOL 100.13 VL 28.000 GAL -9.43 A7L 69.54 HCA 184.57 SHA 130.06 ECC .20871 INC20.4642 VI 30.287 RP 108.87 LAP -1.60 LOP 284.42 VP 37.653 GAP 7.59 A7P 110.40 TAL 222.31 TAP 46.88 RCA 102.92 APO 157.21 V2 34.809 RC 135.553 GL 56.68 GP -66.16 7AL 113.29 7AP 113.51 ETS 273.00 7AE 97.60 ETE 195.72 7AC 83.12 ETC 110.48 CLP-170.62
   PLANETOCENTRIC CONIC
    C3 133.574 VHL 11.557 OLA 39.68 RAL 305.32 RAD 6570.4 VEL 15.966 PTH 2.82 VHP 12.208 OPA -83.23 RAP 20.65 ECC 3.1983
    LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.96 15 42 11 4602.48 -9.22 208.43 204.06 51.24 16 58 54 4002.5 -14.16 202.43
                   15 42 11 4602.48
22 16 54 3358.56
                                                                                               51.23 23 13 2
51.24 16 58 54
                                                                                                                           2768.6
                                                                                                                                         -14.15
                                                                                                                                                        108.62
                                                                              204.04
                                                   -9.20
                                                                114.63
       119.04
                                                                                                                           4002.5
                                                                                                                                         -14.16
                                                                                                                                                        202.43
                                                                208.43
                                                                              204.06
                   15 42 11
                                  4602.48
                                                   -9.22
        60.96
                                                                                                        23 13 2
                                                                                                                           2768.6
                                                                                                                                         -14.15
                                                                                                                                                        108.62
                                                                                               51.23
                   22 16 54
                                3368.56
                                                   -9.20
                                                                114.63
                                                                              204.04
       119.04
                   22 10 .
15 42 11 460c.
44 3368.56
                                                                                               51.24 16 58 54
51.23 23 13 2
                                                                                                                           4002.5
                                                                                                                                                        202.43
                                                   -9.22
                                                                208.43
                                                                              204.06
        60.96
                                                                                                                           2768.6
                                                                                                                                                        108.62
                                                                114.63
                                                                              204.04
                                                   -9.20
       119.04
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2298.2 SR 543.0 SS 686.2

CRT -.9496 CRS .9131 CST -.9949

LSA 2452.3 MSA 183.0 SSA 1.2
                                                                    SGT 3243.4 SGR 1146.1 SG3 70.5
RRT -.9234 RRF -.8122 RTF ..9732
SGB 3440.0 R23 -.2646 R13 -.9633
    TOE 4.4229 TRA-3.5608 TC3 -.2907 BAU .5216
    RDE -.8896 RRA 1.6393 RC3 .0283 FAU .01756
FDE 1.2852 FRA -.6789 FC3 -.1138 BSP 10642
                                                                                                                       EL1 2355.6 EL2 166.1 ALF 167.29
                                                                    SG1 3414.5 SG2 417.9 THA 161.64
    BOE 4.5115 BRA 3.9200 BC3 .2921 FSP
                                                                                                                                  ARRIVAL DATE MAY 7 1966
                                                                        FLIGHT TIME 126.00
LAUNCH DATE JAN 1 1966
                                                                       DISTANCE 381.850
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 27.922 GAL -9.11 AZL 76.66 HCA 187.65 SMA 129.50 ECC .20751 INC13.3364 VI 30.287 RP 108.88 LAP -1.76 LOP 287.58 VP 37.589 GAP 7.75 AZP 103.22 TAL 220.61 TAP 48.26 RCA 102.63 APO 156.37 V2 34.804 RC 137.863 GL 48.64 GP -51.53 TAL 121.29 ZAP 125.69 ETS 291.70 ZAE 109.83 ETE 207.04 ZAC 75.41 ETC 129.02 CLP-159.69
   PLANETOCENTRIC CONIC
    C3 71.782 VHL 8.472 OLA 30.92 RAL 305.11 RAD 6569.4 VEL 13.897 PTH 2.54 VHP 8.522 OPA -69.11 RAP 340.74 ECC 2.1814
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              61.24 18 25 15
61.23 21 40 34
                                                                                                                                                        170.45
                                                                             194.58
                                                                                                                           3584.2
        77.04 17 15 30
                                  4184.15
                                                  -11.87
                                                                177.32
                                                                                                                                                        121.48
                                                                                                                           2920.6
                   20 41 54
                                 3520.55
                                                  -11.86
                                                                128.34
                                                                              194.57
       102.96
                                                                                               61.24 18 25 15
61.23 21 40 34
65.33 24 10 56
55.82 20 38 11
                                                                                                                           3584.2
                                                                                                                                         -15.62
                                                                                                                                                         170.46
                                                  -11.87
                                                                177.32
                                                                              194.58
                   17 15 30
                                  4184.15
        77.04
                                                                                                                           2920.6
                                                                                                                                                        121.48
                                                  -11.86
                                                                128.34
                                                                              194.57
                   20 41 54
                                  3520.55
       102.96
                                                                                                                                                         89.51
                                                                                                                           2425.9
                                                                                                                                         -27.56
                                3025.87
                                                                              201.22
                                                  -24.45
                                                                 97.29
       110.00
                   23 20 31
                                                                                                                                                        130.40
                                                                                                                           3126.8
                                                                                                                                         -4.33
                                                     .15
                                                                               187.21
                   19 36 4
                                  3726.83
                                                                136.61
       110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 3514.3 SGR 424.0 SG3 101.0
RRT -.5443 RRF -.1932 RTF .9256
SGB 3539.7 R23 -.3764 R13 -.9231
                                                                                                                       ST 2070.7 SR 159.3 SS 612.1
     TOE 2.8313 TRA-3.3300 TC3 -.7903 BAU .7589
    ROE .1506 RRA .5183 RC3 -.0293 FAU .03217
FOE 1.2073 FRA -.6570 FC3 -.3880 BSP 10992
BDE 2.8353 BRA 3.3701 BC3 .7908 FSP -337
                                                                                                                      CRT .2985 CRS -.4840 CST -.9796
                                                                                                                      LSA 2156.6 MSA 191.9 SSA 1.8
                                                                    5G1 3521.9 5G2 354.9 THA 176.20
                                                                                                                       ELI 2071.2 ELZ. 152.0 ALF
```

```
ARRIVAL DATE MAY 9 1966
                                                                                     FLIGHT TIME 128.00
LAUNCH DATE JAN 1 1966
                                                                                    CISTANCE 387.596
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 27.844 GAL -8.79 AZL 79.69 MCA 190.78 SMA 128.96 ECC .20656 INC10.3058 V1 30.287 RP 108.90 LAP -1.92 LOP 290.74 VP 37.527 GAP 7.91 AZP 100.13 TAL 218.90 TAP 49.68 RCA 102.32 APO 155.59 V2 34.799 RC 140.164 GL 42.80 GP -40.83 ZAL 125.76 ZAP 134.50 ETS 299.32 ZAE 116.94 ETE 206.37 ZAC 70.45 ETC 136.77 CLP-157.86
   PLANETOCENTRIC CONIC
     C3 52.48T VHL 7.245 DLA 25.19 RAL 306.59 RAD 6568.9 VEL 13.185 PTH 2.41 VHP 7.250 OPA -58.18 RAP 334.71 ECC 1.8638
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             72.81 21 57 40
61.71 18 17 26
74.01 23 36 53
60.13 19 12 10
76.62 1 27 22
56.40 19 34 59
                                                                                                                                              2791.5
                                                                                                                                                                  -24.99
                                                                           123.83
                                                                                          194.35
         90.00
                    21 1 9 3391.53
                                                           -22.85
                                                                                                                                                   3561.5
                                                                                                                                                                     -4.98
                                                                                                                                                                                      163.19
                                                                            169.83
                                                                                              185.15
                      17 8 5
          90.00
                                        4161.52
                                                            -1.20
                                                                                                                                                                                       91.60
                                                                                             195.25
                                                                                                                                                   2453.5
                                                                                                                                                                    -27.54
                       22 45 59
                                                           -25.60
                                                                             99.86
        100.00
                                        3053.53
                                                                                              183.75
                                                                                                                                                   3374.8
                                                                                                                                                                     -2.68
                                                                                                                                                                                     148.20
                                                              1.30
                                                                            154.72
        100.00
                      18 5 55
                                        3974.75
                                                                                                                                                   2101.8
                                                                                                                                                                   -33.27
                                                                                                                                                                                       66.08
                                                                                             197.08
                        0 42 20 2701.83
                                                           -31.75
                                                                              74.98
        110.00
                                                                                                                                                   3299.2
                                                                                                                                                                     2.25
                                                                                                                                                                                     139.40
                                                                                              180.40
                                                                            145.65
        110.00
                      18 30 0 3899.22
                                                              6.71
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SGT 3615.0 SGR 316.7 SG3 124.7
RRT - 2170 RRF .2179 RTF .8971
SGB 3628.9 R23 - .4241 R13 - .8964
                                                                                                                                              ST 1879.0 SR 190.4 SS 578.4
CRT ,6586 CRS -.8344 CST -.9642
     TOE 2.1469 TRA-3.0638 TC3-1.1986 BAU .8419
     ROE .2208 RRA .2895 RC3 -.0526 FAU .04128
                                                                                                                                              LSA 1964.7 MSA 203.0 SSA 2.9
     FOE 1.1494 FRA -.6079 FC3 -.6809 B5P 11296
B0E 2.1582 BRA 3.0775 BC3 1.1997 FSP -411
                                                                                                                                              EL1 1883.2 EL2 143.0 ALF 3.84
                                                                                 SG1 3615.7 SG2 309.1 THA 178.90
                                                                                                                                                           ARRIVAL DATE MAY 11 1966
                                                                                      FLIGHT TIME 130.00
                                                                                     DISTANCE 393.351
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 27.767 GAL -8.46 AZL 81.37 HCA 193.92 SMA 128.42 ECC .20579 INC 8.6299 V1 30.287 RP 108.91 LAP -2.07 LOP 293.90 VP 37.466 GAP 8.07 AZP 98.38 TAL 217.18 TAP 51.11 RCA 101.99 APO 154.85 V2 34.795
     RC 142.456 GL 38.76 GP -33.26 ZAL 128.15 ZAP 140.74 ETS 304.52 ZAE 121.23 ETE 203.78 ZAC 67.78 ETC 142.05 CLP-157.81
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 43.336 VML 6.583 DLA 21.45 RAL 308.33 RAD 6568.6 VEL 12.834 PTH 2.34 VMP 6.705 DPA -50.25 RAP 333.08 ECC 1.7132
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 3 45 3147.53 -26.74 107.04 192.24 80.33 22 56 13 2547.5 -27.81 98.54
90.00 16 19 17 4309.64 3.57 178.10 181.80 61.89 17 31 7 3709.6 -.22 171.47
100.00 23 39 52 2837.63 -28.75 84.61 192.60 81.43 24 27 10 2237.6 -29.63 75.91
100.00 17 25 52 4094.78 5.35 161.33 180.82 60.55 18 34 7 3494.8 1.39 154.79
110.00 1 23 3 2527.12 -33.75 61.76 193.34 84.20 2 5 10 1927.1 -34.18 52.54
110.00 18 3 6 3978.05 9.66 149.85 178.19 57.05 19 9.24 3378.0 5.25 143.53
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 3713.1 SGR 273.9 SG3 140.0
RRT -.1188 RRF .3272 RTF .8804
SGB 3723.2 R23 -.4354 R13 -.8801
                                                                                                                                              ST 1751.3 SR 191.8 $5 549.5
CRT .7032 CRS -.8905 CST -.9496
     TOE 1.7829 TRA-2.8855 TC3-1.5376 BAU .8912
     ROE .2099 RRA .2086 RC3 -.0457 FAU .04642
                                                                                                                                              LSA 1833.3 MSA 211.5 SSA 4.2
     FDE 1.0748 FRA -.5441 FC3 -.9274 BSP 11692
                                                                                                                                             EL1 1756.5 EL2 136.0 ALF 4.43
                                                                                  SG1 3713.3 SG2 272.0 THA 179.50
     BDE 1.7952 BRA 2.8930 BC3 1.5382 FSP -461
                                                                                                                                                           ARRIVAL DATE MAY 13 1966
                                                                                      FLIGHT TIME 132.00
LAUNCH DATE JAN 1 1966
                                                                                     01STANCE 399.104
   HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 100.13 VL 27.691 GAL -8.13 AZL 82.44 MCA 197.07 SMA 127.90 ECC .20515 INC 7.5625 V1 30.287

RP 108.92 LAP -2.21 LOP 297.06 VP 37.406 GAP 8.24 AZP 97.23 TAL 215.45 TAP 52.53 RCA 101.66 APO 154.14 V2 34.791

RC 144.737 GL 35.88 GP -27.79 ZAL 129.28 ZAP 145.29 ETS 308.62 ZAE 123.90 ETE 201.07 ZAC 66.62 ETC 146.13 CLP-158.32
    PLANETOCENTRIC CONIC
     C3 37.893 VHL 6.156 DLA 18.97 RAL 310.10 RAD 6568.5 VEL 12.620 PTH 2.29 VMP 6.449 DPA -44.33 RAP 333.00 ECC 1.6236
     C3 37.893 VHL 6.156 DLA 18.97 RAL 310.10 RAD 6568.5 VEL 12.620 PTH 2.29 VHP 6.449 DPA -44.33 RAP 333.00 ECC 1.6236
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 39 28 3008.24 -27.94 97.03 190.60 85.21 23 29 36 2408.2 -28.31 88.38
90.00 15 57 44 4381.18 5.85 182.12 180.71 62.25 17 10 45 3781.2 2.09 173.46
100.00 0 16 22 2708.44 -29.69 75.12 190.74 86.33 1 1 31 2108.4 -29.88 66.32
100.00 17 7 27 4156.21 7.39 164.75 179.88 60.95 18 16 43 3556.2 3.46 158.16
110.00 1 49 50 2416.05 -34.18 53.12 190.95 89.29 2 30 6 1816.1 -33.90 43.89
110.00 17 50 29 4021.37 11.25 152.19 177.55 57.51 18 57 30 3421.4 6.89 145.82

DISFERSIVIAL CORRECTIONS
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ST 1669.5 SR 189.3 35 525.7
                                                                                 SGT 3808.1 SGR 247.9 SG3 149.1
RRT -.1126 RRF .3218 RTF .8697
SGB 3816.2 R23 -.4229 R13 -.8695
     TOE 1.5660 TRA-2.7475 TC3-1.8280 BAU .9261
                                                                                                                                             CRT .7164 CRS -.9154 CST -.9364
     ROE .1963 RRA .1671 RC3 -.0260 FAU .04888
FOE 1.0015 FRA -.4738 FC3-1.1168 BSP 12000
                                                                                                                                             LSA 1746.9 MSA 218.0 SSA 5.4
EL1 1675.0 EL2 131.6 ALF 4.67
     BOE 1.5782 BRA 2.7525 BC3 1.8281 FSP -490
                                                                                 SG1 3808.2 SG2 246.3 THA 179.58
                                                                                                                                                            ARRIVAL DATE MAY 15 1966
                                                                                       FLIGHT TIME 134.00
LAUNCH DATE JAN 1 1966
                                                                                      DISTANCE 404.855
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 100.13 VL 27.616 GAL -7.79 AZL 83.18 HCA 200.23 SMA 127.39 ECC .20466 INC 6.8197 V1 30.287 RP 108.93 LAP -2.35 LOP 300.22 VP 37.348 GAP 8.40 AZP 96.40 TAL 213.71 TAP 53.93 RCA 101.32 APO 153.46 V2 34.788 RC 147.008 GL 33.77 GP -23.74 ZAL 129.60 ZAP 148.74 ETS 311.94 ZAE 125.62 ETE 198.67 ZAC 66.46 ETC 149.40 CLP-159.05
    PLANETOCENTRIC CONIC
     C3 34.170 VHL 5.845 DLA 17.32 RAL 311.89 RAD 6568.3 VEL 12.472 PTH 2.26 VMP 6.329 DPA -39.75 RAP 333.67 ECC 1.5623
                                                         INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.28 90.41 189.68 88.51 23 52 22 2317.5 -28.19 81.75 7.07 184.30 180.55 62.51 17 1 25 3819.7 3.33 177.61
     UNCH AZMTH LNCH TIME L-I TIME
90.00 23 3 44 2917.45
                       15 47 45
                                         4419.71
          90.00
                                                                                                                                                    2022.9
                                                                                                                                                                      -29.62
                                                                                                                                                                                         59.98
                                                                                                                                 1 22 44
                                                                               68.77
                                                                                              189.71
                                                                                                                   89.67
                        0 39 1
                                        2622.86
                                                             -29.89
         100.00
                                                                                                                   61.23 18 8 55
                                                                                                                                                                         4.59
                       16 59 5
                                                                             166.61
                                                                                              179.79
                                                                                                                                                    3589.5
         100.00
                                         4189.53
                                                               8.49
                                                                                                                  92.78 2 40 .
-- 79 18 52 44
                                                                                                                                                    1740.5
                                                                                                                                                                                         38.06
                        2 9 17 2340.47
17 45 19 4044.69
                                                            -34.08
                                                                               47.22
                                                                                              189.61
         110.00
                                                                                                                                                    3444.7
                                                                                                                                                                        7.76
                                                                                                                                                                                       147.06
                                                                             153.47
         110.00
                                                            12.10
                                                                                               177.62
                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                               ST 1618.5 SR 189.9 SS 508.0
CRT .7286 CRS -.9340 CST -.9247
                                                                                  SCT 3899.9 SCR 234.2 SC3 154.0
RRT -.1360 RRF .2724 RTF .8617
SCB 3906.9 R23 -.3936 R13 -.8615
      TOE 1.4277 TRA-2.6293 TC3-2.0888 BAU
                                                                 .9542
      RDE .1867 RRA .1399 RC3 -.0016 FAU .04963
                                                                                                                                              LSA 1692.2 MSA 223.7 SSA 6.7
      FOE .9362 FRA -.4015 FC3-1.2575 BSP 12260
                                                                                  SG1 3900.0 SG2 232.0 THA 179.53
                                                                                                                                               EL1 1624.5 EL2 129.6 ALF 4.92
      BOE 1.4401 BRA 2.6330 BC3 2.0888 FSP -501
```

```
FLIGHT TIME 136.00
                                                                                                                                                       ARRIVAL DATE MAY 17 1966
LAUNCH DATE JAN 1 1966
                                                                                   DISTANCE 410.599
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 27.542 GAL -7.45 AZL 83.73 HCA 203.38 SMA 126.90 ECC .20430 INC 6.2704 VI 30.287 RP 108.94 LAP -2.48 LOP 303.39 VP 37.292 GAP 8.56 AZP 93.76 TAL 211.95 TAP 55.33 RCA 100.97 APO 152.82 VZ 34.786 RC 149.266 GL 32.17 GP -20.65 ZAL 129.35 ZAP 151.47 ETS 314.67 ZAE 126.78 ETE 196.63 ZAC 66.94 ETC 152.08 CLP-159.87
    PLANETOCENTRIC CONIC
     C3 31.377 VHL 5.602 OLA 16.23 RAL 313.71 RAD 6568.2 VEL 12.359 PTH 2.23 VHP 6.282 DPA -36.08 RAP 334.77 ECC 1.5164
    C3 31.377 VHL 5.602 OLA 16.23 RAL 313.71 RAD 6568.2 VEL 12.359 PTM 2.23 VMP 6.282 DPA -36.08 RAP 334.77 ECC 1.5164 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 21 37 2855.25 -28.31 85.86 189.35 90.79 24 9 12 2255.2 -27.90 77.22 90.00 15 44 23 4438.98 7.67 185.39 180.88 62.66 16 58 22 3859.0 3.95 178.69 100.00 0 55 58 2563.65 -29.83 64.37 189.31 91.99 1 38 41 1965.6 -29.24 55.61 100.00 16 56 39 4205.80 9.02 167.53 180.16 61.38 18 6 44 3605.8 5.15 160.90 110.00 2 24 19 2287.17 -33.83 43.08 189.01 95.22 3 2 26 1687.2 -32.74 34.01 110.00 17 44 46 4055.03 12.48 154.03 178.10 57.91 18 52 21 3455.0 8.15 147.61
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.3331 TRA-2.5247 TC3-2.3381 BAU .9808
RDE .1857 RRA .1181 RC3 .0228 FAU .04956
FDE .8820 FRA -.3349 FC3-1.3675 B3P 12588
BDE 1.3459 BRA 2.5275 BC3 2.3382 FSP -509
                                                                               SGT 3994.2 SGR 229.3 SG3 156.7
RRT -.1599 RRF .2101 RTF .8564
SGB 4000.8 R23 -.3519 R13 -.8562
                                                                                                                                           ST 1586.3 SR 193.6 55 493.8
CRT .7437 CRS -.9496 CST -.9148
                                                                                                                                          LSA 1657.0 MSA 228.2 55A 8.0
ELI 1592.9 EL2 128.9 ALF 5.22
                                                                                SG1 3994.4 SG2 226.3 THA 179.47
                                                                                                                                                        ARRIVAL DATE MAY 19 1966
                                                                                    FLIGHT TIME 134.00
LAUNCH DATE JAN 1 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 416.338
    RL 147.10 LAL .00 LOL 100.13 VL 27.469 GAL -7.10 A7L 84.15 MCA 206.54 SMA 126.41 ECC .20409 INC 5.8453 VL 30.287 RP 108.94 LAP -2.61 LOP 306.55 VP 37.237 GAP 8.72 A7P 95.23 TAL 210.17 TAP 56.71 RCA 100.61 APO 152.21 VZ 34.785 RC 151.511 GL 30.94 GP -18.24 ZAL 128.70 ZAP 153.70 ETS 316.91 ZAE 127.59 ETE 194.92 ZAC 67.87 ETC 154.31 CLP-160.72
   PLANETOCENTRIC CONIC
    C3 29.149 VHL 5.399 DLA 15.54 RAL 315.57 RAD 6568.2 VEL 12.269 PTH 2.21 VHP 6.277 DPA -33.02 RAP 336.14 ECC 1.4797 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                               92.38 24 22 19
62.71 16 59 27
                    23 35 27 2811.88
15 45 21 4445.38
                                                          -28.23
                                                                            82.69
                                                                                           189.47
                                                                                                                                                2211.9
                                                                                                                                                                  -27.60
         90.00
                                                                           185.76
                                                            7.87
                                                                                            181.52
                                                                                                                                                3845.4
                                                                                                                                                                   4.16
         90.00
                    1 9 16 2522.02
16 58 10 4210.47
                                                                                            189.38
                                                                                                                93.60
                                                                                                                              1 51 18
                                                                                                                                                1922.0
                                                                                                                                                                  -28.88
                                                                                                                                                                                    52.57
                                                          -29.69
                                                                             61.28
        100.00
                                                                                                                61.43 18 8 20
96.94 3 13 59
57.93 18 55 1
                                                                           167.79
                                                                                            180.82
                                                                                                                                                3610.5
                                                                                                                                                                    5.29
                                                                                                                                                                                   161.16
                                                            9.17
       100.00
                      2 36 30 2249.06
17 47 25 4056.20
                                                          -33.55
                                                                                           188.96
                                                                                                                                                1649.1
                                                                                                                                                                 -32.23
                                                                                                                                                                                    31.15
        110.00
                                                                             40.14
                                                                           154.10
                                                                                            178.83
                                                                                                                                                3456.2
                                                                                                                                                                    6.19
        110.00
                                                          12.52
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SGT 4089.1 SGR 230.8 SG3 157.9

RRT -.1745 RRF .1505 RTF .8528

SGB 4095.6 R23 -.3045 R13 -.8527
                                                                                                                                           ST 1568.8 SR 199.9 55 482.7
CRT .7622 CRS -.9629 CST -.9070
     TOE 1.2683 TRA-2.4254 TC3-2.5817 BAU 1.0063
    ROE .1858 RRA .0991 RC3 .0459 FAU .04900
FOE .8331 FRA -.2732 FC3-1.4554 BSP 12945
                                                                                                                                         LSA 1637.2 MSA 231.2 SSA 9.3
                                                                                SG1 4089.3 SG2 227.2 THA 179.43
                                                                                                                                           EL1 1576.2 EL2 128.8 ALF 5.58
     BOE 1.2818 BRA 2.4274 BC3 2.5821 FSP -517
                                                                                                                                                       ARRIVAL DATE MAY 21 1966
                                                                                   FLIGHT TIME 140.00
LAUNCH DATE JAN 1 1966
                                                                                  DISTANCE 422.070
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 YL 27.397 GAL -6.74 AZL 84.50 MCA 209.69 SMA 125.94 ECC .20401 INC 5.5048 YL 30.287 RP 108.94 LAP -2.72 LOP 309.71 YP 37.183 GAP 8.88 AZP 94.79 TAL 208.38 TAP 58.07 RCA 100.25 APO 151.63 YZ 34.784 RC 153.743 GL 29.97 GP -16.30 ZAL 127.72 ZAP 155.59 ETS 318.75 ZAE 128.19 ETE 193.50 ZAC 69.11 ETC 156.19 CLP-161.58
   PLANETOCENTRIC CONIC
    C3 27.295 VHL 5.225 DLA 15.17 RAL 317.48 RAD 6568.1 VEL 12.193 PTH 2.19 VMP 6.299 DPA -30.41 RAP 337.69 ECC 1.4492
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                           93.47 24 32 55
62.69 17 3 34
94.72 2 1 38
61.39 18 12 43
98.15 3 23 45
57.86 18 59 58
                                                                                        189.95
                                                                                                                                                             -27.34
                                                                                                                                             2182.0
                                                                                                                                                                                  71.93
                                                                           80.51
         90.00
                      23 46 33 2781.99
                                                          -28.12
                                                                           185.59
                                                                                          182.38
                                                                                                                                                3842.5
                                                                                                                                                                   4.06
                                                                                                                                                                                 178.89
                     15 49 31
                                      4442.49
                                                            7.78
         90.00
                                                                                                                                                1893.0
                                                                                                                                                                -28.58
                                                                                                                                                                                   50.47
                       1 20 5 2495.05
                                                          -29.55
                                                                            59.14
                                                                                          189.83
       100.00
                      17 2 36 4206.66
                                                          9.05
                                                                          167.58
                                                                                          181.70
                                                                                                                                                3606.7
                                                                                                                                                                  5.16
                                                                                                                                                                                 160.95
       100.00
                                                                                        189.33
                       2 46 43 2221.95
17 52 27 4050.53
                                                          -33.31
                                                                            38.06
                                                                                                                                                1621.9
                                                                                                                                                                -31.83
                                                                                                                                                                                   29.14
       110.00
                                                                                                                                               3450.5
                                                                                                                                                                 7.98
                                                                                                                                                                                 147.37
                     17 52 27
                                                                           153.78
                                                                                           179.76
                                                          12.32
       110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SGT 4189.3 SGR 236.3 SG3 158.6
RRT -.1785 RRF .0982 RTF .8516
SGB 4196.0 R23 -.2548 R13 -.8514
                                                                                                                                         ST 1559.6 SR 207.7 55 472.6
CRT .7821 CRS -.9737 CST -.9011
     TOE 1.2210 TRA-2.3310 TC3-2.8297 BAU 1.0329
    ROE .1876 RRA .0815 RC3 .0670 FAU .04830
FOE .7876 FRA -.2193 FC3-1.5318 BSP 13414
                                                                                                                                         LSA 1626.2 MSA 232.6 S5A 10.6
EL1 1568.1 EL2 128.7 ALF 5.99
                                                                               SG1 4189.5 SG2 232.5 THA 179.42
     BOE 1.2354 BRA 2.3324 BC3 2.8304 FSP
                                                             -530
                                                                                    FLIGHT TIME 142.00
                                                                                                                                                       ARRIVAL DATE MAY 23 1966
LAUNCH DATE JAN 1 1966
                                                                                   DISTANCE 427.799
   HELIOCENTRIC CONIC
    RU 147.10 LAL .00 LOL 100.13 VL 27.327 GAL -6.37 AZL 84.78 HCA 212.85 SMA 125.48 ECC .20408 INC 5.2244 V1 30.287 RP 108.94 LAP -2.83 LOP 312.87 VP 37.131 GAP 9.04 AZP 94.39 TAL 206.57 TAP 59.43 RCA 99.87 APO 151.08 V2 34.784 RC 155.982 GL 29.19 GP -14.73 ZAL 126.47 ZAP 157.23 ETS 320.25 ZAE 128.64 ETE 192.31 ZAC 70.58 ETC 157.79 CLP-162.44
   PLANETOCENTRIC CONIC
    C3 25.706 VHL 5.070 DLA 15.04 RAL 319.46 RAD 6568.0 VEL 12.128 PTH 2.17 VMP 6.339 DPA -28.13 RAP 339.37 ECC 1.4231
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CET TIM INJ Z LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                                          94.18 24 41 43
62.61 17 10 6
95.46 2 10 20
61.29 18 19 21
98.97 3 32 16
51.72 19 6 47
                                                                                                                                                              -27.16
                                                          -28.03
         90.00 23 55 40
                                    2762.40
                                                                           79.08 190.73
                                                                                                                                               2162.4
                                                                                                                                                                                  70.53
                                       4432.33
                                                            7.47
                                                                           185.01
                                                                                           183.44
                                                                                                                                                3832.3
                                                                                                                                                                  3.74
                                                                                                                                                                                  174.32
                      15 56 13
         90.00
                                                                                           190.59
                                                                                                                                                1873.8
                                                                                                                                                                 -28.37
                                                                                                                                                                                   49.08
                                      2473.77
                                                          -29.43
                                                                            57.72
                       1 29 6
        100.00
                                                             8.71
                                                                                           182.78
                                                                                                                                                3596.2
                                                                                                                                                                   4.81
                                                                                                                                                                                  160.37
                      17 9 25
                                        4196.18
                                                                           166.99
        100.00
                       2 55 32
                                     2203.32
                                                          -33.12
                                                                            36.63
                                                                                           190.05
                                                                                                                                                1603.3
                                                                                                                                                                 -31.53
                                                                                                                                                                                   27.77
        110.00
                       17 59 28
                                       4039.40
                                                                           153.18
                                                                                           180.86
                                                                                                                                                3439.4
                                                                                                                                                                   7.57
                                                                                                                                                                                  146.78
        110.00
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                          ST 1589.2 SR 219.4 55 484.3
                                                                                SGT 4235.4 SGR 249.4 SG3 155.7
     TOE 1.2267 TRA-2.1984 TC3-3.0235 BAU 1.0395
                                                                                                                                        CRT .8139 CRS -.9848 CST -.8987
LSA 1656.9 MSA 237.3 SSA 11.5
EL1 1599.3 EL2 126.7 ALF 6.45
    ROE .1930 RRA .0676 RC3 .0904 FAU .04579
FOE .7803 FRA -.1339 FC3-1.5423 BSP 13026
BDE 1.2418 BRA 2.1994 BC3 3.0248 FSP -473
                                                                              RRT -.1723 RRF .0814 RTF .8411
SGB 4242.7 R23 -.2303 R13 -.8410
```

SG1 4235.6 SG2 245.7 THA 179.42

```
ARRIVAL DATE MAY 25 1966
                                                                                              FLIGHT TIME 144.00
LAUNCH DATE JAN 1 1966
                                                                                             DISTANCE 433.517
     HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 24.323 YML 4.932 DLA 15.10 RAL 321.53 RAO 6568.0 VEL 12.071 PTH 2.16 VMP 6.392 DPA -26.07 RAP 341.15 ECC 1.4003
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           94.59 0 53 9
                                                                                                                                                               2150.9
                                                                                                                                                                                                        69.71
                          0 7 18 2750.89
                                                                 -27.97
                                                                                     78.25
                                                                                                     191.77
          90.00
                                                                                                                                         17 18 36
                                                                                                                                                                                       3.23
                                                                                                                                                                                                       177.44
                                                                                                                                                                 3816.6
                                                                                                       184.69
                                                                                                                             62.49
                         16 5 0 4416.60
                                                                    6.97
                                                                                    184.12
          90.00
                                                                                                                                                                                     -28.23
                                                                                                                                                                                                         48.24
                                                                                                                                          2 17 52
                                                                                                                                                                 1862.1
                                                                                      56.86
                                                                                                       191.63
                                                                                                                             95.91
                                                                 -29.36
                          1 36 50 2462.12
         100.00
                                                                                                                            61.15 18 27 49
99.50 3 39 53
57.54 19 15 10
                                                                                                                                                                                      4.29
                                                                                                                                                                                                       159.51
                                                                                                                                                                 3580.6
                                                                                                      184.02
                                                                                    166.11
                                                                    8.20
         100.00
                          17 18 8
                                            4180.60
                                                                                                                                                                                    -31.33
                                                                                                                                                                 1591.4
                                                                                      35.73
                                                                                                      191.05
                                                                 -32.99
         110.00
                         3 3 22
18 8 6
                                            2191.38
                                                                                                                                                                                       6.99
                                                                                                                                                                                                        145.97
                                                                                                                                                                 3424.1
                                                                                    152.34
                                                                                                      182.12
                                                                 11.35
         110.00
                                            4024.11
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                        MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                        SGT 4334.8 SGR 259.4 SG3 155.5
RRT -.1596 RRF .0509 RTF .0420
SGB 4342.6 R23 -.1881 R13 -.8419
                                                                                                                                                           ST 1597.7 SR 229.1 55 478.5
CRT .8358 CRS -.9907 CST -.8970
      TOE 1.2078 TRA-2.0998 TC3-3.2755 BAU 1.0657
     ROE .1966 RRA .0516 RC3 .1076 FAU .04485
FDE .7442 FRA -.0880 FC3-1.5962 BSP 13545
                                                                                                                                                           LSA 1666.9 MSA 235.7 SSA 12.8
                                                                                                                                                           EL1 1609.2 EL2 124.9 ALF 6.88
                                                                                         5G1 4335.0 5G2 256.0 THA 179.45
     BOE 1.2237 BRA 2.1004 BC3 3.2772 FSP
                                                                       -489
                                                                                                                                                                          ARRIVAL DATE MAY 27 1966
                                                                                              FLIGHT TIME 146.00
LAUNCH DATE JAN 1 1966
                                                                                              DISTANCE 439.229
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 100.13 VL 27.188 GAL -5.61 AZL 85.21 MCA 219.17 SMA 124.59 ECC .20468 INC 4.7852 VI 30.287

RP 108.94 LAP -3.02 LOP 319.20 VP 37.032 GAP 9.37 AZP 93.71 TAL 202.93 TAP 62.10 RCA 99.09 APO 150.09 V2 34.787

RC 160.359 GL 28.01 GP -12.34 ZAL 123.31 ZAP 159.99 ETS 322.39 ZAE 129.29 ETE 190.45 ZAC 74.00 ETC 160.38 CLP-164.13
    PLANETOCENTRIC CONIC
     C3 Z3.104 VML 4.807 OLA 15.32 RAL 323.68 RAD 6567.9 VEL 12.020 PTH 2.15 VMP 6.455 OPA -24.20 RAP 343.00 ECC 1.3802 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 13 52 Z746.22 -27.95 77.91 193.06 94.76 0 59 38 2146.2 -26.99 69.37 90.00 16 15 38 4396.12 6.33 182.96 186.11 62.34 17 28 54 3796.1 2.57 176.29
                                                                                                                                           2 24 32
                                                                                                                                                                  1856.9
                                                                                                                                                                                     -28.16
                                                                                                                                                                                                          47.87
                                                                                                       192.91
                                                                                                                              96.10
                                                                   -29.32
                                                                                      56.48
         100.00
                           1 43 35 2456.92
                                                                                                                                        2 24 32
18 37 57
                                                                                                                                                                  3560.7
                                                                                                                                                                                       3.61
                                                                                                                                                                                                         158.41
                                                                                    164.99
                                                                                                       185.45
                                                                                                                              60.99
         100.00
                         17 28 36
                                             4160.65
                                                                     7.54
                                          2185.09
                                                                                                                             99.77 3 46 52
57.33 19 24 58
                                                                                                                                                                  1585.1
                                                                                                                                                                                     -31.22
                                                                                                                                                                                                         26.44
                                                                  -32.92
                                                                                      35.25
                                                                                                       192.32
                           3 10 27
         110.00
                                                                                                                                                                  3405.2
                                                                                                                                                                                        6.28
                                             4005.24
                                                                   10.66
                                                                                     151.32
                                                                                                       183.56
         110.00
                         18 18 13
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 4421.6 SGR 271.2 SG3 154.4
RRT -.1415 RRF .0340 RTF .8416
SGB 4429.9 R23 -.1551 R13 -.8415
                                                                                                                                                            ST 1620.5 SR 239.9 SS 478.3
      TOE 1.2076 TRA-1.9885 TC3-3.5181 BAU 1.0873
                                                                                                                                                            CRT .8599 CRS -.9949 CST -.8977
      RDE .2009 RRA .0369 RC3 .1237 FAU .04351
                                                                                                                                                            LSA 1690.5 MSA 233.3 SSA 14.0
EL1 1633.7 EL2 121.5 ALF 7.29
      FOE .7184 FRA -.0379 FC3-1.6302 BSP 13888
BOE 1.2242 BRA 1.9889 BC3 3.5202 FSP -490
                                                                                         SG1 4421.7 SG2 268.5 THA 179.50
                                                                                                                                                                          ARRIVAL DATE MAY 29 1966
                                                                                              FLIGHT TIME 148.00
LAUNCH DATE JAN 1 1966
                                                                                              DISTANCE 444.933
     RL 147.10 LAL .00 LOL 100.13 VL 27.121 GAL -5.22 ATL 85.39 MCA 222.33 SMA 124.16 ECC .20523 INC 4.6080 VI 30.287 RP 108.93 LAP -3.10 LOP 322.37 VP 36.985 GAP 9.54 ATP 93.41 TAL 201.09 TAP 63.42 RCA 98.68 APO 149.64 V2 34.789 RC 162.536 GL 27.54 GP -11.41 TAL 121.43 TAP 161.19 ETS 323.10 TAE 129.54 ETE 189.73 TAC 75.87 ETC 161.44 CLP-164.95
    HELTOCENTRIC CONIC
     PLANE TOCENTRIC CONIC
      C3 22.024 VML 4.693 DLA 15.67 RAL 325.94 RAD 6567.9 VEL 11.975 PTH 2.13 VMP 6.526 DPA -22.46 RAP 344.91 ECC 1.3625
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                              2147.5
                                                                                                                             94.71 1 5 22
62.19 17 40 49
                                                                                                                                                                                   -27.01
                                                                  -27.95
                                                                                                    194.59
                          0 19 35 2747.47
16 27 58 4371.62
1 49 33 2457.29
                                                                                    78.00
           90.00
                                                                                                                                                                  3771.6
                                                                                                                                                                                                        174.93
                                                                     5.55
                                                                                    181.58
                                                                                                       187.71
            90.00
                                                                                                                             96.09 2 30 31
60.81 18 49 37
                                                                                                                                                                                                         47.89
                                                                                                                                                                  1857.3
                                                                                                                                                                                     -28.17
                                                                  -29.32
                                                                                      56.51
                                                                                                       194,44
          100.00
                                                                                                                                                                  3537.0
                                                                                                                                                                                                        157.11
                                                                                                       187.06
                                                                     6.76
                                                                                    163.68
                                             4137.03
          100.00
                          17 40 40
                                                                                                                                            3 53 24
                                                                                                                                                                  1583.7
                                                                                                                                                                                     -31.20
                                                                                                                                                                                                         26.34
                         3 17 0 2183.67
18 29 43 3983.41
                                                                                                       193.85
                                                                                                                              99.83
                                                                  -32.90
                                                                                       35.14
          110.00
                                                                                                                                         19 36 6
                                                                                                                                                                  3383.4
                                                                                                                                                                                                        143.82
                                                                                                       185.17
                                                                                                                              57.10
                                                                     9.86
                                                                                     150.14
          110.00
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                            ST 1653.7 SR 251.1 SS 481.4
CRT .8840 CRS -.9971 CST -.9004
                                                                                          SGT 4502.6 SGR 284.0 SG3 152.9
RRT -.1198 RRF .0262 RTF .8411
SGB 4511.6 R23 -.1283 R13 -.8410
       TOE 1.2199 TRA-1.8688 TC3-3.7578 BAU 1.1072
      ROE .2055 RRA .0230 RC3 .1383 FAU .04201
FOE .6983 FRA .0124 FC3-1.6515 BSP 14166
BOE 1.2371 BRA 1.8689 BC3 3.7603 FSP -486
                                                                                                                                                            LSA 1725.3 MSA 229.7 SSA 15.1
EL1 1668.6 EL2 116.3 ALF 7.68
                                                                                          SG1 4502.7 SG2 281.9 THA 179.57
                                                                                                                                                                           ARRIVAL DATE MAY 31 1966
                                                                                                FLIGHT TIME 150.00
 LAUNCH DATE JAN 1 1966
                                                                                              DISTANCE 450.629
     HELIOCENTRIC CONIC
      RL 147.10 LAL .00 LOL 100.13 VL 27.054 GAL -4.81 AZL 85.55 HCA 225.49 SHA 123.75 ECC .20594 INC 4.4510 V1 30.287 RP 108.92 LAP -3.17 LOP 325.53 VP 36.939 GAP 9.71 AZP 93.12 TAL 199.23 TAP 64.72 RCA 98.26 APO 149.23 V2 34.792 RC 164.699 GL 27.12 GP -10.62 ZAL 119.37 ZAP 162.30 ETS 323.61 ZAE 129.76 ETE 189.11 ZAC 77.83 ETC 162.37 CLP-165.76
     PLANETOCENTRIC CONIC
       C3 21.067 VHL 4.590 DLA 16.15 RAL 328.32 RAD 6567.9 VEL 11.935 PTH 2.12 VMP 6.604 DPA -20.83 RAP 346.87 ECC 1.3467
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              94.48
                                                                                                                                              1 10 29
                                                                                                                                                                  2154.0
                                            2754.03
                                                                   -27.99
                                                                                      78.48
                                                                                                      196.35
                            0 24 35
            90.00
                                                                                                                              62.04 17 54 18
95.89 2 35 59
60.64 19 2 44
99.70 3 59 37
56.87 19 48 29
                                                                                                                                                                   3743.6
                                                                                                                                                                                          .88
                                                                                                                                                                                                         173.36
                                                                                      180.01
                                                                                                        189.52
                          16 41 54
                                              4343.64
                                                                     4.66
            90.00
                                                                                                                                                                                      -28.23
                                                                                                                                                                                                          48.28
                                                                                                                                                                   1862.6
                                                                   -29.36
                                                                                       56.90
                                                                                                        196.21
                             1 54 57
                                            2462.64
          100.00
                                                                                                                                                                   3510.3
                                                                                                                                                                                        1.91
                                                                                                                                                                                                         155.64
                          17 54 14
                                                                     5.87
                                                                                      162.19
                                                                                                        188.86
                                              4110.26
          100.00
                                                                                                                                                                   1586.6
                                                                                                                                                                                      -31.25
                                                                                                                                                                                                          26.55
                                                                   -32.94
                                                                                       35.36
                                                                                                        195.63
          110.00
                             3 23 10
                                            2186.60
                                                                                                                                                    THE STATE OF THE S
                                                                                      148.83
                                                                                                        186.97
          110.00
                          18 42 30
                                             3959.07
                                                                    8.96
                                                                                         MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                         SGT 4579.7 SGR 296.9 SG3 151.1
RRT -.0960 RRF .0245 RTF .8409
       TOE 1.2416 TRA-1.7413 TC3-3.9952 BAU 1.1260
       RDE .2101 RRA .0099 RC3 .1509 FAU .04046
FDE .6814 FRA .0612 FC3-1.6627 BSP 14432
                                                                                         3G8 4589.3 R23 -.1060 R13 -.8409
```

BDE 1.2593 BRA 1.7413 BC3 3.9980 FSP -481

3G1 4579.8 SG2 295.5 THA 179.64

```
FLIGHT TIME 152.00
                                                                                                                                       ARRIVAL DATE JUN 2 1966
LAUNCH DATE JAN 1 1966
                                                                          DISTANCE 456.316
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.989 GAL -4.40 A7L 85.69 MCA 228.65 SMA 123.34 ECC .20684 INC 4.6102 V1 30.287 RP 108.91 LAP -3.23 LOP 328.70 VP 36.894 GAP 9.89 AZP 92.85 TAL 197.37 TAP 66.02 RCA 97.83 APQ 148.85 V2 34.796 RC 166.847 GL 26.73 GP -9.94 ZAL 117.14 ZAP 163.34 ETS 323.92 ZAE 129.97 ETE 188.57 ZAC 79.86 ETC 163.20 CLP-166.55
   PLANETOCENTRIC CONTC
    C3 20.224 VML 4.497 DLA 16.72 RAL 330.82 RAD 6567.8 VEL 11.900 PTH 2.11 VMP 6.689 DPA -19.28 RAP 348.86 ECC 1.3328 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 29 2 2765.48
16 57 24 4312.63
1 59 52 2472.57
18 9 15 4080.77
3 29 4 2193.47
                                                                               198.34
                                                                                                                             2165.5
                                                                   79.31
                                                                                                  94.06
                                                                                                              1 15 8
        90.00
                                                    -28.05
                                                                                                                                              -27.19
                                                                                                                                                               70.75
                                                                                                   61.90 18 9 16
        90.00
                                                     3.67
                                                                   176.27
                                                                                 191.53
                                                                                                                                3712.6
                                                                                                                                                 -.12
                                                                                                                                                              171.64
                                                                                                   95.51 2 41 5
60.47 19 17 16
99.40 4 5 38
56.65 20 2 5
                                                                    57.63
                                                                                                                                               -28.35
       100.00
                                                   -29.43
                                                                                 198.21
                                                                                                                                1872.6
                                                                                                                                                                48.00
       100.00
                                                     4.58
                                                                  160.56
                                                                                 190.86
                                                                                                                                3480.8
                                                                                                                                                  .91
                                                                                                                                                              154.02
                                                                               197.66
       110.00
                                                   -33.02
                                                                    35.69
                                                                                                                               1593.5
                                                                                                                                               -31.37
                                                                                                                                                                27.05
                                   3932.63
       110.00
                    18 56 32
                                                     7.97
                                                                  147.42
                                                                                  188.96
                                                                                                                                3332.6
                                                                                                                                                 3.53
                                                                                                                                                              141.15
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SCT 4651.4 SCR 310.0 SC3 149.2

RRT -.0703 RRF .0286 RTF .8407

SCB 4661.7 R23 -.0882 R13 -.8406

SCI 4651.4 SC2 309.2 THA 179.73
    TOE 1.2736 TRA-1.6042 TC3-4.2261 BAU 1.1435
                                                                                                                            ST 1748.1 SR 273.8 SS 493.5
CRT .9284 CRS -.9961 CST -.9103
    RDE .2149 RRA -.0024 RC3 .1616 FAU .03884
FDE .6684 FRA .1101 FC3-1.6625 B3P 14642
BDE 1.2916 BRA 1.6042 BC3 4.2292 FSP -473
                                                                                                                          LSA 1823.8 MSA 218.1 SSA 17.4
                                                                                                                           EL1 1766.5 EL2 100.7 ALF 8.30
LAUNCH DATE JAN 1 1966
                                                                           FLIGHT TIME 154.00
                                                                                                                                       ARRIVAL DATE JUN 4 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 461.994
    RL 147.10 LAL .00 LOL 100.13 VL 26.924 GAL -3.97 AZL 85.82 HCA 231.81 SMA 122.94 ECC .20792 INC 4.1824 V1 30.287 RP 108.89 LAP -3.29 LOP 331.87 VP 36.851 GAP 10.07 AZP 92.59 TAL 195.50 TAP 67.31 RCA 97.38 APO 148.50 V2 34.800 RC 168.980 GL 26.34 GP -9.34 ZAL 114.73 ZAP 164.31 ETS 324.05 ZAE 130.16 ETE 188.11 ZAC 81.95 ETC 163.94 CLP-167.34
   PLANETOCENTRIC CONIC
    C3 19.488 VHL 4.415 DLA 17.38 RAL 333.45 RAD 6567.8 VEL 11.869 PTH 2.11 VHP 6.781 DPA -17.80 RAP 35D.88 ECC 1.32D7
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 33 2 2781.54 -28.12 80.48 200.58 93.48 1 19 24 2181.5 -27.34 71.9D
        90.00
                   17 14 24
                                   4278.95
                                                      2.59
                                                                   176.39
                                                                                  193.77
                                                                                                   61.79
                                                                                                             18 25 43
                                                                                                                                3679.P
                                                                                                                                                 -1.21
                                                                                                                                                               169.76
                                                                                                               2 45 54
                     2 4 27 2486.77
                                                    -29.52
                                                                    58.68
                                                                                  200.47
                                                                                                   94.96
                                                                                                                                1886.8
                                                                                                                                                -28.51
                                                                                                                                                                50.02
                                                                                                   60.33 19 33 10
98.94 4 11 33
56.44 20 16 52
                   18 25 41 4048.96
3 34 49 2204.01
19 11 48 3904.48
       100.00
                                                      3.61
                                                                  158.80
                                                                                  193.09
                                                                                                                                3449.0
                                                                                                                                                  -.17
                                                                                                                                                              152.27
                                                    -33.13
                                                                    36.69
                                                                                 199.95
                                                                                                                                1604.0
                                                                                                                                                -31.54
                                                                                                                                                               27.82
       110.00
                                                      6.91
                                                                  145.93
                                                                                 191.18
                                                                                                                                3304.5
                                                                                                                                                  2.45
                                                                                                                                                              139.68
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 4723.7 SGR 322.6 SG3 147.3
RRT -.0443 RRF .0342 RTF .8417
                                                                                                                            ST 1806.2 SR 285.0 55 500.3
CRT .9470 CRS -.9933 CST -.9167
    TOE 1.3105 TRA-1.4612 TC3-4.4549 BAU 1.1615
    ROE .2195 RRA -.0140 RC3 .1699 FAU .03729
    FOE .6553 FRA .1555 FC3-1.6567 8SP 14903
BOE 1.3287 BRA 1.4613 BC3 4.4582 FSP -468
                                                                                                                         LSA 1883.9 MSA 210.2 55A 18.5
EL1 1826.3 EL2 90.6 ALF 8.52
                                                                       SG8 4734.7 R23 -.0718 R13 -.8417
                                                                       SG1 4723.7 SG2 322.3 THA 179.83
                                                                                                                                      ARRIVAL DATE JUN 6 1966
                                                                          FLIGHT TIME 156.00
LAUNCH DATE JAN 1 1966
   HELIOCENTRIC CONIC
                                                                          01STANCE 467.662
    RL 147.10 LAL .00 LOL 100.13 VL 26.861 GAL -3.54 AZL 85.93 HCA 234.98 SMA 122.56 ECC .20920 INC 4.0652 V1 30.287 RP 108.88 LAP -3.33 LOP 335.04 VP 36.810 GAP 10.26 AZP 92.34 TAL 193.62 TAP 68.59 RCA 96.92 APO 148.19 V2 34.805 RC 171.096 GL 25.96 GP -8.82 ZAL 112.16 ZAP 163.23 ETS 323.99 ZAE 130.33 ETE 187.71 ZAC 84.09 ETC 164.60 CLP-168.10
   PLANETOCENTRIC CONIC
    C3 18.838 VHL 4.343 DLA 18.11 RAL 336.23 RAD 6567.8 VEL 11.842 PTH 2.10 VHP 6.878 DPA -16.37 RAP 352.93 ECC 1.3104
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              92.74 1 23 22
61.72 18 43 37
94.26 2 50 30
60.22 19 50 25
98.33 4 17 28
56.25 20 32 49
                                                                              203.07
        90.00
                                                                                                                          2202.0
                                                                                                                                          -27.52
                     0 36 40 2802.00
                                                   -28.20
                                                                  81.97
                   17 32 54
                                   4242.95
                                                      1.43
                                                                  174.38
                                                                                 196.25
                                                                                                                               3643.0
                                                                                                                                               -2.37
                                                                                                                                                             167.75
        90.00
      100.00
                    2 8 45 2505.02
                                                   -29.62
                                                                   60.03
                                                                              202.97
                                                                                                                               1905.0
                                                                                                                                              -28.71
                                                                                                                                                              51.34
                  18 43 30
                                                                                                                               3415.2
                                  4015.17
                                                     2.67
                                                                  156.94
                                                                                 195.56
                                                                                                                                               -1.31
                                                                                                                                                             150.42
      100.00
                    3 40 30 2217.98
                                                   -33.27
                                                                   37.75
                                                                                202.50
                                                                                                                               1618.0
                                                                                                                                              -31.77
                                                                                                                                                              28.85
      110.00
                                                                                                                               3275.0
      110.00
                   19 28 14
                                   3874.97
                                                     5.80
                                                                  144.37
                                                                                 193.62
                                                                                                                                               1.33
                                                                                                                                                              138.14
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 4792.6 SGR 334.9 SG3 145.3
RRT -.0180 RRF .0429 RTF .8431
                                                                                                                          ST 1872.4 SR 296.2 SS 508.0
    TOE 1.3544 TRA-1.3096 TC3-4.6728 BAU 1.1789
    ROE .2244 RRA -.0247 RC3 .1760 FAU .03574
FOE .6440 FRA .1999 FC3-1.6406 BSP 15160
BOE 1.3729 BRA 1.3099 BC3 4.6761 FSP --464
                                                                                                                         CRT .9629 CR5 -.9891 CST -.9236
                                                                      SGB 4804.3 R23 -.0582 R13 -.8431
                                                                                                                          LSA 1952.1 MSA 201.3 SSA 19.6
                                                                      SG1 4792.6 SG2 334.9 THA 179.93
                                                                                                                          EL1 1894.0 EL2 79.1 ALF 8.68
                                                                          FLIGHT TIME 158.00
                                                                                                                                      ARRIVAL DATE JUN 8 1966
LAUNCH DATE JAN 1 1966
  HELIOCENTRIC CONIC
                                                                         DISTANCE 473.318
   RL 147.10 LAL .00 LOL 100.13 VL 26.799 GAL -3.09 AZL 86.04 MCA 238.14 SMA 122.18 ECC .21069 INC 3.9567 V1 30.287 RP 108.86 LAP -3.36 LOP 338.21 VP 36.770 GAP 10.45 AZP 92.09 TAL 191.73 TAP 69.87 RCA 96.44 APO 147.92 VZ 34.811 RC 173.196 GL 25.55 GP -8.36 ZAL 109.44 ZAP 166.10 ETS 323.75 ZAE 130.51 ETE 187.36 ZAC 86.27 ETC 165.20 CLP-168.86
  PLANETOCENTRIC CONIC
    C3 18.332 VHL 4.282 OLA 18.91 RAL 339.15 RAD 6567.7 VEL 11.820 PTH
                                                                                                    2.09 VHP 6.982 DPA -14.98 RAP 354.99 ECC 1.3017
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                     0 39 58
                                  2826.71
                                                   -28.26
                                                                  83.77
                                                                               205.81
                                                                                               91.84
                                                                                                              1 27 5
                                                                                                                               2226.7
                                                                                                                                             -27.71
                                                                                                                                                              75.15
                  17 52 53 4204.97
                                                      .20
                                                                  172.26
                                                                                198.98
                                                                                                   61.68 19 2 58
                                                                                                                                3605.0
                                                                                                                                               -3.59
                                                                                                                                                              165.62
        90.00
                                  2527.14
                                                   -29.72
                                                                   61.66
                                                                                205.73
                                                                                                   93.41
                                                                                                              2 54 59
                                                                                                                                1927.1
                                                                                                                                              -28.93
                                                                                                                                                               52.95
      100.00
                     2 12 52
                                                                             198.27
                  19 2 40 3979.78
                                                                  155.00
                                                                                                   60.14 20 9 0
                                                                                                                                3379.8
                                                                                                                                               -2.51
      100.00
                                                    1.47
                                                                                                                                                              148.48
                  3 46 11 2235.17
19 45 50 3844.51
                                                   -33.44
                                                                   39.07
                                                                                205.31
                                                                                                   97.56
                                                                                                              4 23 27
                                                                                                                                1635.2
                                                                                                                                              -32.03
                                                                                                                                                               30.12
      110.00
                                                                                                   56.10 20 49 55
                                                                  142.76
                                                                                196.30
                                                                                                                               3244.5
                                                                                                                                                 .16
      110.00
                                                                                                                                                             136.55
                                                                    MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                    9GT 4859.2 SGR 346.7 SG3 143.3

RRT .0084 RRF .0533 RTF .8452

SGB 4871.6 R23 .0462 R13 .8452

SG1 4859.2 SG2 346.7 THA .03
                                                                                                                         ST 1945.4 SR 307.3 SS 515.7
CRT .9757 CRS -.9838 CST -.9306
    TOE 1.4042 TRA-1.1493 TC3-4.8767 BAU 1.1960
    RDE .2294 RRA -.0345 RC3 .1795 FAU .03422
                                                                                                                         LSA 2026.7 MSA 191.7 SSA 20.8
EL1 1968.4 EL2 66.6 ALF 8.77
    FOE .6334 FRA .2429 FC3-1.6160 89P 15410
    BDE 1.4228 BRA 1.1498 BC3 4.8800 FSP
                                                      -459
```

```
ARRIVAL DATE JUN 10 1966
                                                                        FLIGHT TIME 160.00
LAUNCH DATE JAN 1 1966
                                                                        DISTANCE 478.963
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 26.738 GAL -2.63 AZL 86.14 MCA 241.31 SMA 121.81 ECC .21241 INC 3.8554 V1 30.287 RP 108.84 LAP -3.38 LOP 341.38 VP 36.731 GAP 10.65 AZP 91.85 TAL 189.83 TAP 71.14 RCA 95.94 APO 147.68 V2 34.817 RC 175.278 GL 25.11 GP -7.95 ZAL 106.56 ZAP 166.94 ETS 323.32 ZAE 130.68 ETE 187.06 ZAC 88.48 ETC 165.74 CLP-169.60
   PLANETOCENTRIC CONIC
    C3 17.913 VML 4.232 DLA 19.75 RAL 342.22 RAD 6567.7 VEL 11.802 PTH 2.09 VMP 7.093 DPA -13.63 RAP 357.08 ECC 1.2948 LNCH AZWITH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZWITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                              208.80
                                                                                             90.78
                                                                                                          1 30 37
                   0 43 2 2855.54
18 14 19 4165.34
2 16 52 2552.96
                                                                85.88
        90.00
                                                  -26.31
                                                                                                                                            -4.86
                                                                                                61.70
                                                                                                          19 23 45
                                                                                                                            3565.3
                                                                170.05
                                                                               201.98
                                                  -1.08
        90.00
                                                                                                                                           -29.15
                                                                                                                                                           54.83
                                                                                                                            1953.0
                                                                                                92.40 2 59 25
                                                                               208.75
                                                                  63.58
       100.00
                                                  -29.80
                  19 23 10 3943.16
3 51 58 2255.39
20 4 33 3813.49
                                                                                                         20 28 53
                                                                                                                                                          146.46
                                                                               201.25
                                                                                                60.11
                                                                                                                           3343.2
                                                                                                                                           -3.75
                                                                152.99
                                                    .23
      100.00
                                                                                                                                                           31.63
                                                                                                96.66 4 29 34
55.97 21 8 6
                                                                                                                                          -32.32
                                                                                                                           1655.4
                                                                               208.40
                                                 -33.61
                                                                  40.62
      110.00
                                                                                                                                                          134.93
                                                                               199.23
                                                                                                                            3213.5
                                                                                                                                            -1.03
                                                                141.14
                                                   3.46
      110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2028.7 SR 318.5 S5 525.1
CRT .9856 CRS -.9775 CST -.9378
                                                                    SGT 4917.5 SGR 358.2 SG3 141.1
    TOE 1.4628 TRA -.9765 TC3-5.0520 BAU 1.2106
                                                                    RRT .0355 RRF .0677 RTF .8470
    ROE .2348 RRA -.0431 RC3 ,1807 FAU .03260
                                                                                                                        LSA 2111.6 MSA 182.1 SSA 21.9
    FOE .6255 FRA .2870 FC3-1.5756 BSP 15576
BOE 1.4815 BRA .9775 BC3 5.0552 FSP -451
                                                                    SGB 4930.5 R23 .0375 R13 .8470
                                                                                                                        EL1 2052.8 EL2 53.2 ALF 8.80
                                                                    SG1 4917.5 SG2 358.0 THA .15
                                                                                                                                   ARRIVAL DATE JUN 12 1966
                                                                        FLIGHT TIME 162.00
LAUNCH DATE JAN 1 1966
                                                                        DISTANCE 484.594
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.677 GAL -2.15 AZL 86.24 HCA 244.47 SHA 121.45 ECC .21435 INC 3.7600 V1 30.287 RP 108.82 LAP -3.39 LOP 344.55 VP 36.694 GAP 10.86 AZP 91.62 TAL 187.93 TAP 72.40 RCA 95.42 APO 147.48 V2 34.824 RC 177.341 GL 24.62 GP -7.59 ZAL 103.53 ZAP 167.74 ETS 322.68 ZAE 130.85 ETE 186.80 ZAC 90.73 ETC 166.22 CLP-170.34
   PLANETOCENTRIC CONIC
    C3 17.604 VHL 4.196 DLA 20.62 RAL 345.44 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 7.211 DPA -12.30 RAP 359.18 ECC 1.2897 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   LNCH TIME L-I TIME
0 45 53 2888.35
18 37 10 4124.44
2 20 48 2582.27
19 44 56 3905.76
3 57 56 2278.40
20 24 18 3782.40
                                                                                                                                          -28.07
                                                                                                                          2288.4
                                                                                               89.58
                                                                                                            1 34 1
                                                   -28.31
                                                                 88.28
                                                                              212.05
        90.00
                                                                                                         19 45 55
3 3 50
                                                                                                                                                          161.10
                                                                                                                                             -6.15
                                                                                                                             3524.4
                                                                 167.77
                                                                               205.26
                                                                                                 61.78
                                                    -2.40
        90.00
                                                                                                                                           -29.37
                                                                                                                                                            56.98
                                                                  65.75
                                                                               212.04
                                                                                                 91.26
                                                                                                            3 3 50
                                                                                                                             1982.3
                                                   -29.87
       100.00
                                                                                                 60.12 20 50 2
                                                                                                                                            -5.01
                                                                                                                                                          144.40
                                                                 150.94
                                                                               204.50
                                                                                                                             3305.8
                                                   -1.04
       100.00
                                                                                                                                                           33.35
                                                                                                 95.62 4 35 54
55.88 21 27 20
                                                                                                                            1678.4
                                                                                                                                           -32.63
                                                   -33.77
                                                                   42.40
                                                                               211.76
       110.00
                                                                                                                            3182.4
                                                                                                                                            -2.21
                                                                                                                                                           133.31
                                                                 139.51
                                                                               202.43
                                                   2.28
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 2112.1 SR 329.5 SS 532.3
                                                                    SCT 4976.7 SGR 369.0 SC3 138.9

RRT .0615 RRF .0813 RTF .8499

SGB 4990.4 R23 .0288 R13 .8499

SG1 4976.8 SG2 368.2 THA .26
    TOE 1.5225 TRA -.7968 TC3-5.2073 BAU 1.2263
    ROE .2407 RRA -.0507 RC3 .1791 FAU .03111
FOE .6161 FRA .3286 FC3-1.5297 BSP 15808
                                                                                                                         CRT .9923 CRS -.9704 CST -.9443
                                                                                                                        LSA 2196.1 MSA 172.6 SSA 22.9
EL1 2137.3 EL2 40.4 ALF 8.80
    BOE 1.5414 BRA .7984 BC5 5.2104 FSP -446
                                                                                                                                   ARRIVAL DATE JUN 14 1966
                                                                        FLIGHT TIME 164.00
LAUNCH DATE JAN I 1966
                                                                        DISTANCE 490.211
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.618 GAL -1.66 AZL 86.33 HCA 247.64 SHA 121.10 ECC .21655 INC 3.6695 V1 30.287 RP 108.79 LAP -3.39 LOP 347.73 VP 36.658 GAP 11.08 AZP 91.40 TAL 186.03 TAP 73.67 RCA 94.88 APO 147.32 V2 34.832 RC 179.385 GL 24.09 GP -7.26 ZAL 100.37 ZAP 168.50 ETS 321.83 ZAE 131.01 ETE 186.57 ZAC 93.00 ETC 166.65 CLP-171.06
   PLANETOCENTRIC CONIC
    C3 17.411 VHL 4.173 DLA 21.50 RAL 348.81 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 7.336 DPA -11.00 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                          -28.21
                                                                                                                         2325.0
                   0 48 34 2924.99
19 1 23 4082.70
                                                                                                88.23
                                                                                                           1 37 19
                                                                  90.96
                                                                               215.56
                                                   -28.27
        90.00
                                                                                                                                             -7.47
                                                                                                                                                          158.74
                                                                                                                             3482.7
                                                                 165.43
                                                                               208.82
                                                                                                 61.91
                                                                                                          20 9 26
                                                   -3.74
        90.00
                                                                                                                                           -29.57
                                                                                                                                                            59.38
                                                                                                          3 8 20
                                                                                                                            2014.8
                                                                                                 89.98
                                                                  68.17
                                                                               215.59
                    2 24 45 2614.85
20 7 53 3868.07
                                                   -29.89
       100.00
                                                                                                60.19 21 12 21
94.46 4 42 32
55.83 21 47 31
                                                                                                                                            -6.27
                                                                                                                                                          142.31
                                                                                                                             3268.1
                                                    -2.32
                                                                 148.87
                                                                               208.03
       100.00
                                 2303.93
                                                                                                                            1703.9
                                                                                                                                           -32.94
                                                                                                                                                           35.28
                                               -33.93
                                                                  44.38
                                                                               215.40
                     4 4 8
       110.00
                                                                                                                                             -3.38
                                                                                                                             3151.7
                                                                 137.91
                                                                               205.89
                    20 45 D
                                  3751.75
                                                   1.11
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5032.8 SGZ 377.6 THA .38
                                                                                                                         ST 2198.6 SR 340.5 SS 538.8
CRT .9961 CRS -.9628 CST -.9504
     TOE 1.5862 TRA -.6073 TC3-5.3294 BAU 1.2412
    ROE .2473 RRA -.0572 RC3 .1747 FAU .02963
FOE .6069 FRA .3688 FC3-1.4732 BSP 16022
                                                                                                                         LSA 2283.1 MSA 163.7 SSA 23.9
                                                                                                                         EL1 2224.6 EL2 29.6 ALF 8.77
     BOE 1.6053 BRA .6100 BC3 5.3323 FSP -441
                                                                                                                                    ARRIVAL DATE JUN 16 1966
                                                                         FLIGHT TIME 166.00
 LAUNCH DATE JAN 1 1966
                                                                         DISTANCE 495.811
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.560 GAL -1.15 AZL 86.42 MCA 250.81 SHA 120.76 ECC .21902 INC 3.5829 VIL 30.287 RP 108.77 LAP -3.38 LOP 350.91 VP 36.624 GAP 11.31 AZP 91.18 TAL 184.71 TAP 74.92 RCA 94.31 APO 147.21 V2 34.840 RC 181.409 GL 23.48 GP -6.97 ZAL 97.10 ZAP 169.23 ETS 320.74 ZAE 131.18 ETE 186.37 ZAC 95.30 ETC 167.03 CLP-171.78
    PLANETOCENTRIC CONIC
     C3 17.341 VHL 4.164 DLA 22.38 RAL 352.32 RAD 6567.7 VEL 11.778 PTH 2.08 VHP 7.469 DPA -9.73 RAP
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     90.00 D 51 9 2965.25
                                                                                                86.76 1 40 34
62.11 20 34 12
88.59 3 12 58
60.30 21 35 44
4 49 32
                                                                                                                                           -28.30
                                                                                                                                                           85.24
                                                                              219.31
                                                                                                                            2365.2
                                                    -28.15
                                                                  93.90
                                                                                                                              3440.6
                                                                                                                                             -8.78
                                                                                                                                                           156.33
                                                     -5.09
                                                                  163.07
                                                                                212.66
                    19 26 51
                                   4040.56
         90.00
                                                                                                                             2050.4
                                                                                                                                            -29.74
                                                                                                                                                            62.02
                     2 28 47
                                                   -29.86
                                                                   70.82
                                                                                219.39
        100.00
                                   2650.41
                                                                                                                                             -7.51
                                                                                                                                                           140.22
                                                                                                                             3230.6
                                                    -3.58
                                                                  146.81
                                                                                211.83
        100.00
                   20 31 54
                                   3830.63
                                                                                                 93.19 4 49 32
55.82 22 8 32
                                                                                                                                            -33.24
                                                                                                                                                            37.39
                                                                                                                             1731.7
        110.00
                     4 10 40 2331.68
                                                   -34.05
                                                                   46.53
                                                                                219.31
                                                                                                                                            -4.51
                                                                                                                                                           130.15
                                                                                                                             3122.1
                   21 6 30
                                   3722.13
                                                     -.03
                                                                  136.37
                                                                                209.61
        110.00
                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                    SGT 5084.5 SGR 388.4 SG3 134.4
RRT .1128 RRF .1126 RTF .8573
SGB 5099.3 R23 .0155 R13 .8573
SGI 5084.7 SG2 385.9 THA .50
                                                                                                                         ST 2284.6 SR 351.5 SS 544.2
     TOE 1.6522 TRA -.4072 TC3-5.4121 BAU 1.2553
                                                                                                                         CRT .9975 CRS -.9546 CST -.9558
     RDE .2546 RRA -. 0623 RC3 .1678 FAU .02817
                                                                                                                       LSA 2369.4 MSA 156.1 SSA 24.7
EL1 2311.3 EL2 24.7 ALF 8.73
     FOE .5978 FRA .4094 FC3-1.4064 BSP 16246
     BDE 1.6717 BRA .4120 BC3 5.4147 FSP -437
```

```
ARRIVAL DATE JUN 18 1966
                                                                           FLIGHT TIME 168.00
LAUNCH DATE JAN 1 1966
                                                                          DISTANCE 501.393
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.502 GAL -.63 AZL 86.50 MCA 253.98 SMA 120.42 ECC .22177 INC 3.4996 V1 30.287
RP 108.74 LAP -3.36 LOP 354.08 VP 36.590 GAP 11.56 AZP 90.97 TAL 182.20 TAP 76.18 RCA 93.72 APO 147.13 V2 34.849
RC 183.413 GL 22.82 GP -6.71 ZAL 93.72 ZAP 169.94 ETS 319.38 ZAE 131.34 ETE 186.19 ZAC 97.61 ETC 167.38 CLP-172.48
   PLANETOCENTRIC CONIC
     C3 17.402 VHL 4.172 DLA 25.25 RAL 355.97 RAD 6567.7 VEL 11.781 PTH 2.08 VHP 7.611 DPA -8.47 RAP
                                                                                                                                                    5.57 ECC 1.2864
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                 85.19
                                                                                                               1 43 48
                                                                                                                              2408.9
                                                                                                                                               -28.31
                                                                                                                                                                88.43
        90.00
                     0 53 39 3008.89
                                                    -27.94
                                                                    97.08
                                                                                 223.30
                    19 53 28 3998.54
2 32 59 2688.59
20 56 48 3794.08
4 17 37 2361.26
21 28 40 3694.18
                                                                                                               21 0 6
                                                     -6.42
                                                                    160.70
                                                                                  216.79
                                                                                                    62.36
                                                                                                                                 3398.5
                                                                                                                                                 -10.07
                                                                                                                                                                153.92
         90.00
                                                                                                              3 17 48
                                                    -29.76
                                                                    73.65
                                                                                  223.44
                                                                                                    87.10
                                                                                                                                 2088.6
                                                                                                                                                -29.85
                                                                                                                                                                 64.85
       100.00
                                                                                                              22 0 3
       100.00
                                                     -4.81
                                                                   144.79
                                                                                  215.91
                                                                                                    60.46
                                                                                                                                 3194.1
                                                                                                                                                 -8.71
                                                                                                                                                               138.17
                                                                                                    91.83 4 56 58
55.83 22 30 14
                                                                                                                                               . - 33, 51
                                                   -34.14
                                                                    48.84
                                                                                  223.49
                                                                                                                                 1761.3
                                                                                                                                                                 39.65
       110.00
                                                     -1.09
                                                                   134.91
                                                                                  213.60
                                                                                                                                 3094.2
                                                                                                                                                 -5.57
                                                                                                                                                               128.68
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5128.1 SGR 397.2 SG3 132.0
RRT .1387 RRF .1316 RTF .8609
SGB 5143.5 R23 .0116 R13 .8609
    TOE 1.7235 TRA -.1926 TC3-5.4415 BAU 1.2665
                                                                                                                             ST 2372.7 SR 362.5 55 549.6
CRT .9966 CR5 -.9460 CST -.9607
    ROE .2630 RRA -.0660 RC3 .1587 FAU .02664
                                                                                                                             LSA 2457.7 MSA 150.2 SSA 25.1
           .5900 FRA .4509 FC3-1.3254 8SP 16330
    BDE 1.7435 BRA .2036 BC3 5.4438 FSP -426
                                                                       SG1 5128.4 SG2 393.4 THA .62
                                                                                                                             EL1 2400.1 EL2 29.3 ALF 8.66
LAUNCH DATE JAN 1 1966
                                                                           FLIGHT TIME 170.00
                                                                                                                                        ARRIVAL DATE JUN 20 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 506.953
    RL 147.10 LAL .00 LOL 100.13 VL 26.446 GAL -.08 AZL 86.58 HCA 257.15 SMA 120.10 ECC .22483 INC 3.4189 V1 30.287 RP 108.71 LAP -3.33 LOP 357.26 VP 36.558 GAP 11.82 AZP 90.76 TAL 180.29 TAP 77.44 RCA 93.10 APO 147.10 V2 34.858 RC 185.395 GL 22.08 GP -6.47 ZAL 90.26 ZAP 170.61 ETS 317.71 ZĀĒ 131.50 ETE 186.03 ZAC 99.95 ETC 167.68 CLP-173.19
   PLANETOCENTRIC CONIC
    C3 17.805 VHL 4.196 DLA 24.07 RAL 359.74 RAD 6567.7 VEL 11.789 PTH 2.08 VHP 7.762 DPA -7.23 RAP 7.73 ECC 1.2897 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 56 9 3055.54
20 21 1 3957.28
2 37 27 2728.88
21 22 23 3759.17
4 25 4 2392.20
21 51 15 3668.62
                                                                                                                               2455.5
                                                                                227.50
                                                                                                   83.52
                                                                                                               1 47 4
                                                                                                                                               -28.24
        90.00
                                                    -27.63
                                                                  100.45
                                                                                                                                                                91.84
                                                                                  221.18
                                                                                                              21 26 58
                                                                                                                                 3357.3
                                                                                                                                                                151.53
        90.00
                                                     -7.72
                                                                   158.36
                                                                                                    62.67
                                                                                                                                                 -11.32
                                                                                                               3 22 56
                                                   -29.59
       100.00
                                                                    76.63
                                                                                  227.71
                                                                                                    85.54
                                                                                                                                 2128.9
                                                                                                                                                 -29.89
                                                                                                                                                                 67.84
                                                                                  220.24
                                                                                                    60.66 22 25 2
90.40 5 4 57
                                                                                                                                 3159.2
                                                                                                                                                  -9.85
                                                                                                                                                                136.20
       100.00
                                                     -5.98
                                                                   142.86
       110.00
                                                   -34.18
                                                                    51.26
                                                                                  227.90
                                                                                                                                 1792.2
                                                                                                                                                 -33.75
                                                                                                                                                                 42.04
                                                                                                    55.87 22 52 24
       110.00
                                                    -2.07
                                                                   133.58
                                                                                  217.82
                                                                                                                                 3068.6
                                                                                                                                                  -6.54
                                                                                                                                                                127.34
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5185.4 SGR 404.1 SG3 129.6
RRT .1626 RRF .1408 RTF .8726
                                                                                                                             ST 2436.2 SR 372.4 SS 542.4
CRT .9940 CRS -.9374 CST -.9650
    TOE 1.7812 TRA .0201 TC3-5.4572 BAU 1.2849
    ROE .2718 RRA -.0692 RC3 .1454 FAU .02578 FDE .5706 FRA .4785 FC3-1.2675 89P 16852 80E 1.8018 BRA .0720 BC3 5.4591 FSP -453
                                                                       SGB 5201.1 R23 -.0020 R13 .8726
SG1 5185.8 SG2 398.7 THA .73
                                                                                                                            LSA 2519.3 M5A 143.6 55A 25.3
EL1 2464.2 EL2 40.2 ALF 8.64
                                                                          FLIGHT TIME 172.00
                                                                                                                                       ARRIVAL DATE JUN 22 1966
LAUNCH DATE JAN 1 1966
                                                                         DISTANCE 512.491
  HELIOCENTRIC CONTC
    RL 147.10 LAL .00 LOL 100.13 VL 26.390 GAL .48 AZL 86.66 HCA 260.33 SMA 119.78 ECC .22822 INC 3.3401 VI 30.287

RP 108.68 LAP -3.29 LOP .44 VP 36.528 GAP 12.09 AZP 90.56 TAL 178.37 TAP 78.70 RCA 92.44 APO 147.12 V2 34.868

RC 187.357 GL 21.27 GP -6.26 ZAL 86.74 ZAP 171.26 ETS 315.69 ZAE 131.66 ETE 185.90 ZAC 102.29 ETC 167.94 CLP-173.88
   PLANETOCENTRIC CONIC
                                                        3.61 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 7.924 DPA -6.01 RAP 9.89 ECC 1.2956
    C3 17.964 VHL 4.238 OLA 24.84 RAL
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 58 41 3104.86
20 49 19 3917.34
2 42 18 2770.79
                                                                                                                            2504.9
                                                                                                                                             -28.05
                                                                  104.00
                                                                               231.88
                                                                                                81.79
                                                                                                               1 50 26
                                                                                                                                                               95.44
                                                   -27.20
        90.00
                                                     -8.96
                                                                  156.08
                                                                                  225.83
                                                                                                   63.03
                                                                                                             21 54 36
                                                                                                                                 3317.3
                                                                                                                                                -12.51
                                                                                                                                                               149.20
        90.00
                                                   -29.33
                                                                    79.72
                                                                                 232.19
                                                                                                   83.94 3 28 29
                                                                                                                                2170.8
                                                                                                                                               -29.86
                                                                                                                                                               70.96
       100.00
                   21 48 23 3726.64
4 33 8 2424.06
                                                                                                   60.88 22 50 30
                                                   -7.06
                                                                  141.05
                                                                                 224.81
                                                                                                                                3126.6
                                                                                                                                               -10.89
                                                                                                                                                               134.36
       100.00
                                                                                                   88.92 5 13 32
55.93 23 14 49
                                                   -34.17
                                                                    53.74
                                                                                232.54
                                                                                                                                1824.1
                                                                                                                                                                44.51
      110.00
                                                                  132.40
                                                                                                                                3046.1
                                                                                                                                                -7.38
                                   3646.13 -2.93
                                                                                 222.26
                   22 14 3
      110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.8580 TRA .2658 TC3-5.3657 BAU 1.2890
                                                                      $6T 5210.8 $6R 412.3 $63 127.3

RRT .1876 RRF .1706 RTF .8693

$6B 5227.1 R23 .0066 R13 .8693
                                                                                                                            ST 2518.2 SR 384.0 SS 553.8
CRT .9899 CRS -.9280 CST -.9684
    FOE .2831 RRA -.0890 RC3 .1342 FAU .02378
FOE .5715 FRA .5326 FC3-1.1458 83P 16679
BDE 1.8795 BRA .2746 BC3 5.3673 FSP -414
                                                                                                                            LSA 2602.7 MSA 144.6 SSA 25.1
                                                                       561 5211.4 562 404.9 THA
                                                                                                                            EL1 2546.8 EL2 53.9 ALF 8.59
                                                                                                            .86
                                                                           FLIGHT TIME 174.00
LAUNCH DATE JAN 1 1966
                                                                                                                                        ARRIVAL DATE JUN 24 1966
                                                                          01STANCE 518.001
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 26.336 GAL 1.07 A7L 86.74 MCA 263.50 SMA 119.47 ECC .23197 INC 3.2628 V1 30.287 RP 108.65 LAP -3.24 LOP 3.62 VP 36.498 GAP 12.38 AZP 90.37 TAL 176.46 TAP 79.97 RCA 91.76 APO 147.18 V2 34.878 RC 189.297 GL 20.40 GP -6.06 ZAL 83.19 ZAP 171.87 ETS 313.26 ZAE 131.82 ETE 185.78 ZAC 104.65 ETC 168.16 CLP-174.58
   PLANETOCENTRIC CONIC
    C3 18.493 VHL 4.300 DLA 25.55 RAL
                                                        .7.54 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 8.097 DPA -4.81 RAP 12.06 ECC 1.3043
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 1 23 3156.21 -26.64 107.66 236.43 80.04 1 53 59 2556.2 -27.75 99.16
                    21 18 2
                                 3879.56
                                                    -10.12
                                                                  153.91
                                                                                  230.70
                                                                                                    63.41
                                                                                                              22 22 42
                                                                                                                                 3279.6
                                                                                                                                                -13.61
                                                                                                                                                               146.97
        90.00
                    2 47 40 2813.54
22 14 26 3697.47
4 41 52 2456.25
22 36 44 3627.52
                                                   -28.98
                                                                    82.85
                                                                                 236.84
                                                                                                   82.33
                                                                                                               3 34 34
                                                                                                                                 2213.5
                                                                                                                                                -29.74
                                                                                                                                                                74.13
       100.00
                                                                                                    61.11 23 16 3
                                                                                                                                 3097.5
                   22 14 26
                                                     -8.03
                                                                  139.42
                                                                                 229.59
                                                                                                                                               -11.82
                                                                                                                                                               132.69
       100.00
                                                                                                   87.44 5 22 48
55.99 23 37 11
                                                                                                                                1856.3
                                                                                                                                               -34.08
                                                   -34.10
                                                                    56.26
                                                                                 237.38
                                                                                                                                                                47.01
       110.00
                                                                                                                                3027.5
                                                                                                                                               -8.08
                    22 36 44
                                                                                  226.90
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                     SCT 5246.0 SGR 418.4 SG3 124.7

RRT .2111 RRF .1900 RTF .8742

SGB 5262.6 R23 .0044 R13 .8742

SGI 5246.7 SG2 408.9 THA .97
                                                                                                                            ST 2571.9 SR 394.0 SS 551.2
CRT .9846 CRS -.9184 CST -.9714
    TOE 1.9201 TRA .5119 TC3-5.2520 BAU 1.2988
                                                                                                                        CRT .9846 CRS -.9184 L31 ....
LSA 2655.6 MSA 144.9 SSA 24.6
EL1 2601.0 EL2 68.2 ALF 8.58
    RDE .2948 RRA -.0683 RC3 .1198 FAU .02239
FDE .5596 FRA .5724 FC3-1.0484 BSP 16845
BDE 1.9426 BRA .5165 BC3 5.2534 FSP -408
```

ARRIVAL DATE JUN 26 1966

LAUNCH DATE JAN 1 1966

```
DISTANCE 523.481
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 26.282 GAL 1.68 A7L 86.81 MCA 266.68 SMA 119.17 ECC .23611 INC 3.1864 V1 30.287 RP 108.62 LAP -3.18 LOP 6.81 VP 36.470 GAP 12.69 A7P 90.18 TAL 174.56 TAP 81.24 RCA 91.03 APO 147.31 V2 34.889 RC 191.216 GL 19.46 GP -5.89 TAL 79.63 TAP 172.45 ETS 310.35 TAE 131.98 ETE 185.68 TAC 107.02 ETC 168.35 CLP-173.27
  PLANETOCENTRIC CONIC
                                                                                              2.10 VHP 8.282 DPA -3.62 RAP 14.25 ECC 1.3162
   C3 19.211 VHL 4.383 DLA 26.16 RAL 11.52 RAD 6567.8 VEL 11.857 PTH
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM- INJ 2 LAT INJ 2 LONG
                                                                          241.11
                                                                                                                                   -27.32
                                                                                                                                                  102.96
                   1 4 21 3208.93
21 46 50 3844.78
                                                             111.37
                                                                                            78.30
                                                                                                       1 57 50
                                                                                                                      2608.9
                                                -25.97
       90.00
                                                                                                                                                    144.90
                                                                                                      22 50 55
                                                                                                                       3244.8
                                                                                                                                     -14.60
                                                             151.90
                                                                           235.77
                                                                                             63.81
       90.00
                  21 46 50
                                                -11.17
                                                                                                                                                     77.29
                                                                            241.64
                                                                                            80.74
                                                                                                       3 41 20
                                                                                                                       2256.3
                                                                                                                                     -29.53
                                                               85.96
                                               -28.55
      100.00
                   2 53 43 2856.31
                                                                                                                       3072.6
                                                                                            61.33 23 41 21
85.97 5 32 50
56.04 23 59 13
                                                                                                                                                   131.26
                                                                                                                                    -12.60
                                                                           234.54
                                                              138.03
      100.00
                  22 40 9
                               3672.63
                                                -8.84
                                                                                                                       1888.2
                                                                                                                                     -34.16
                                                                                                                                                     49.51
                  4 51 22 2488.23
22 59 0 3613.47
                                                               58.75
                                                                           242.38
                                               -33.97
      110.00
                                                                                                                                                    124.41
                                                                                                                      3013.5
                                                                                                                                      -8.60
                                                             130.69
                                                                           231.68
                                                -4.17
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 RRT .2351 RRF .2117 RTF .8769
SGB 5293.0 R23 .0040 R13 .8769
SG1 5277.0 SG2 411.9 THA 1.09
                                                                                                                   ST 2615.3 SR 403.6 SS 548.8
CRT .9782 CRS -.9085 CST -.9740
    TOE 1.9812 TRA .7747 TC3-5.0833 BAU 1.3058
   ROE .3079 RRA -.0658 RC3 .1046 FAU .02100
FOE .5492 FRA .6147 FC3 -.9466 BSP 16924
                                                                                                                   LSA 2698.4 MSA 147.5 SSA 23.8
EL1 2645.0 EL2 82.9 ALF 8.59
    BOE 2.0050 BRA .7775 BC3 5.0844 FSP -399
                                                                                                                              ARRIVAL DATE JUN 28 1966
                                                                      FLIGHT TIME 178.00
LAUNCH DATE JAN 1 1966
                                                                     DISTANCE 528.925
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 26.229 GAL 2.31 AZL 86.89 HCA 269.86 SHA 118.87 ECC .24068 INC 3.1105 VI 30.287 RP 108.58 LAP '-3.11 LOP 9.99 VP 36.442 GAP 13.03 AZP 90.01 TAL 172.65 TAP 82.52 RCA 90.26 APO 147.48 V2 34.900 RC 193.113 GL 18.47 GP -5.73 ZAL 76.09 ZAP 173.00 ETS 306.88 ZAE 132.14 ETE 185.59 ZAC 109.40 ETC 168.50 CLP-175.96
  PLANETOCENTRIC CONIC
   C3 20.140 VHL 4.488 DLA 26.68 RAL 15.52 RAD 6567.8 VEL 11.896 PTH 2.11 VHP 8.482 DPA -2.46 RAP 16.44 ECC 1.3314
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                    106.75
                                                                                          76.61
                                                                                                       2 2 10
                                                -25.18
                                                             115.06
                                                                          245.88
                   1 7 48 3262.01
       90.00
                  22 15 15 3814.11
3 0 40 2898.12
                                                                                                                                                    143.06
                                                                                                       23 18 49
                                                                                                                        3214.1
                                                                                                                                      -15.46
                                                -12.08
                                                              150.11
                                                                            240.97
                                                                                             64.20
       90.00
                                                                                                                                                      80.37
                                                                                             79.23
                                                                                                       3 48 58
                                                                                                                        2298.1
                                                                                                                                      -29.25
                                                                            246.57
                                               -28.06
                                                                88.97
      100.00
                 23 5 4 3653.23
5 1 41 2519.45
23 20 32 3604.66
                                                                                                                                                    130.13
                                                                                             61.52 24 5 57
                                                                                                                        3053.2
                                                                                                                                      -13.20
                                                -9.47
                                                              136.93
                                                                            239.61
      100.00
                                                                                             84.55 5 43 41
56.08 24 20 37
                                                                                                                        1919.4
                                                                                                                                      -34.18
                                                                                                                                                      51.94
                                               -33.80
                                                                61.17
                                                                            247.52
      110.00
                                                              130.23
                                                                            236.58
                                                                                                                        3004.7
                                                                                                                                       -8.93
                                                                                                                                                     123.93
                                                 -4.51
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 2636.4 SR 412.1 SS 542.3
CRT .9709 CRS -.8981 CST -.9761
                                                                  SGT 5303.9 SGR 428.1 SG3 119.9
RRT .2578 RRF .2321 RTF .8847
    TOE 2.0322 TRA 1.0468 TC3-4.8771 BAU 1.3134
   ROE .3221 RRA -.0618 RC3 .0889 FAU .01974
FOE .5359 FRA .6552 FC3 -.8486 BSP 17078
BOE 2.0576 BRA 1.0487 BC3 4.8779 FSP -395
                                                                  SGB 5321.2 R23 .0027 R13 .8847
SG1 5305.1 SG2 413.5 THA 1.20
                                                                                                                    LSA 2718.6 MSA 151.7 SSA 22.7
                                                                                                                  EL1 2666.6 EL2 97.6 ALF 8.64
                                                                                                                             ARRIVAL DATE JUN 30 1966
                                                                      FLIGHT TIME 180.00
LAUNCH DATE JAN 1 1966
                                                                     DISTANCE 534.330
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 26.177 GAL 2.98 AZL 86.97 MCA 273.05 SHA 118.58 ECC .24571 INC 3.0345 V1 30.287 RP 108.55 LAP -3.03 LOP 13.18 VP 36.416 GAP 13.39 AZP 89.84 TAL 170.76 TAP 83.81 RCA 89.45 APO 147.72 V2 34.912 RC 194.989 GL 17.45 GP -5.58 ZAL 72.60 ZAP 173.49 ETS 302.75 ZAE 132.29 ETE 185.50 ZAC 111.78 ETC 168.61 CLP-176.65
   PLANETOCENTRIC CONIC
    C3 21.305 VHL 4.616 DLA 27.10 RAL 19.49 RAD 6567.9 VEL 11.945 PTH 2.13 VHP 8.697 DPA -1.31 RAP 18.64 ECC 1.3506 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    2714.1
                                                                         250.73
                                                                                         75.02 2 7 16
                  1 12 2 3314.13
22 42 43 3788.94
3 8 44 2937.93
                                                -24.31
                                                             118.63
       90.00
                                                                                                                                                   141.53
                                                              148.63
                                                                            246.28
                                                                                             64.54
                                                                                                      23 45 52
                                                                                                                        SIAA.9
                                                                                                                                      -16.15
                                                -12.83
        90.00
                                                                                                                                                     83.28
                                                                            251.59
                                                                                             77.83
                                                                                                       3 57 42
                                                                                                                       2337.9
                                                                                                                                      -28.92
                                                                91.80
                                               -27.52
      100.00
                                                                                                                                                   129.38
                                                                                             61.65 24 29 23
                                                                                                                        3040.4
                                                                                                                                     -13.60
                                                                            244.76
                 23 28 42 3640.36
5 12 52 2549.45
23 41 3 3601.62
                                                              136.21
      100.00
                                                 -9.89
                                                                                                                                 -34.16
                                                                                             83.19 5 55 22
56.09 24 41 5
                                                                                                                                                     54.29
                                                                                                                        1949.4
                                               -33.58
                                                                63.48
                                                                            252.77
      110.00
                                                                                                                                      -9.05
                                                                                                                        3001.6
                                                              130.07
                                                                            241.55
      110.00
                                                -4.62
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 2641.1 SR 419.4 55 534.3
                                                                  SGT 5326.4 SGR 431.3 SG3 117.4
    TOE 2.0770 TRA 1.3344 TC3-4.6290 BAU 1.3187
                                                                                                                    CRT .9626 CRS -.8869 CST -.9779
                                                                  RRT .2802 RRF .2530 RTF .8900
SGB 5343.9 R23 .0022 R13 .8900
SGI 5327.8 SGZ 414.0 THA 1.31
    RDE .3373 RRA -.0560 RC3 .0736 FAU .01846
FOE .5221 FRA .6978 FC3 -.7503 BSP 17205
BOE 2.1043 BRA 1.3356 BC3 4.6296 FSP -388
                                                                                                                   LSA 2722.4 MSA 157.7 SSA 21.5
EL1 2671.8 EL2 112.3 ALF 8.71
                                                                                                                               ARRIVAL DATE JUL 2 1966
                                                                      FLIGHT TIME 182.00
LAUNCH DATE JAN 1 1966
                                                                      DISTANCE 539.688
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                             -.17 RAP 20.86 ECC 1.3742
    C3 22.739 VHL 4.769 DLA 27.42 RAL 23.41 RAD 6567.9 VEL 12.005 PTH 2.14 VMP 8.928 DPA
    LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      2763.4
                                                                                                                                      -25.43
                  1 17 32 3363.40
23 8 30 3771.18
                                                               121.95
                                                                            255.64
                                                                                            73.59
                                                                                                        2 13 35
                                                 -23.41
        90.00
                                                                                                                                       -16.63
                                                                                                                                                     140.45
                                                                                                      24 11 21
                                                                                                                         3171.2
                                                              147.59
                                                                             251.62
                                                                                             64.79
                                                 -13.34
        90.00
                                                                                                                        2374.7
                                                                                                                                       -28.54
                                                                                                                                                      85.95
                                                                94.39
                                                                             256.69
                                                                                             76.58
                                                                                                       4 7 42
                    3 18 7 2974.67
                                                 -26.96
       100.00
                                                                                             61.70 24 51 11
                                                                                                                         3035.1
                                                                                                                                       -13.76
                                                                                                                                                     129.08
                  23 50 36 3635.14
                                                               135.91
                                                                             249.93
                                                 -10.06
       100.00
                                                                                                       6 7 53
                                                                                                                        1977.9
                                                                                                                                                      56.50
                                                -33.33
                                                                65.66
                                                                             258.09
                                                                                             81.93
                   5 24 55
                                 2577.87
       110.00
                                                                                                        1 4 18
                                                                                                                        3004.7
                                                                                                                                                     123.94
                                                               130.23
                                                                            246.55
                                                                                             56.08
       110.00
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 5344.5 SGR 433.7 SG3 115.1
RRT .3028 RRF .2753 RTF .8953
SGB 5362.0 R23 .0027 R13 .8953
SGI 5346.1 SG2 413.3 THW 1.42
                                                                                                                   ST 2633.0 SR 425.5 55 526.3
CRT .9534 CRS -.8752 CST -.9795
    TOE 2.1175 TRA 1.6409 TC3-4.3431 BAU 1.3204
    ROE .3538 RRA -.0483 RC3 .0592 FAU .01717 FDE .5092 FRA .7426 FC3 -.6537 BSP 17234
                                                                                                                   LSA 2713.5 MSA 165.1 SSA 20.3
                                                                                                                 EL1 2664.1 EL2 126.9 ALF 8.78
    BDE 2.1468 BRA 1.6416 BC3 4.3435 FSP -380
```

FLIGHT TIME 176.00

EL1 2483.0 EL2 181.8 ALF 9.10

ARRIVAL DATE JUL 12 1966

LAUNCH DATE JAN 1 1966

DISTANCE 565.458 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 25.886 GAL 7.79 AZL 87.45 MCA 292.19 SMA 117:00 ECC .28876 INC 2.5498 VI 30.287 RP 108.31 LAP -2.36 LOP 32.34 VP 36.280 GAP 16.25 AZP 89.04 TAL 159.78 TAP 91.97 RCA 83.21 APO 150.78 V2 34.987 RC 205.757 GL 11.04 GP -4.93 ZAL 53.69 ZAP 174.98 ETS 261.78 ZAE 133.00 ETE 185.17 ZAC 126.03 ETC 168.40 CLP 179.07 PLANETOCENTRIC CONIC C3 35.531 VHL 5.961 DLA 27.54 RAL 41.28 RAD 6568.4 VEL 12.526 PTH 2.27 VMP 10.427 OPA 5.15 RAP 32.00 ECC 1.5847 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2 24 35 3488.43 0 27 55 3868.46 281.18 70.30 3 22 43 2888.4 -23.26 122.38 -20.76 130.16 90.00 1 32 23 3268.5 -13.93 146.31 276.63 63.53 153.27 90.00 -10.45 282.65 72.77 5 18 31 2493.9 -26.93 94.44 102.60 -24.81 100.00 4 26 57 3093.93 1 8 13 3738.20 60.80 2 10 32 135.01 3138.2 -10.42 274.62 141.69 100.00 -6.66 7 19 43 2093.8 -33.34 65.47 -31.88 74.39 284.82 76.96 110.00 6 34 49 2693.78 55.82 2 18 42 3111.1 -4.93 129.58 135.79 270.76 1 16 51 110.00 3711.11 -.45 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2385.2 SR 428.3 SS 476.7 CRT .8889 CRS -.8017 CST -.9860 \$61 5373.2 \$GR 428.7 \$G\$ 103.5 RRT .4080 RRF .3823 RTF .9248 \$G8 5390.3 R23 .0032 R13 .9248 TOE 2.1911 TRA 3.4292 TC3-2.7332 BAU 1.2983 ROE .4455 RRA .0168 RC3 .0077 FAU .01148 FDE .4371 FRA .9887 FC3 -.2798 BSP 17562 BDE 2.2359 BRA 3.4293 BC3 2.7332 FSP -347 LSA 2460.7 MSA 210.6 SSA 15.0 EL1 2415.5 EL2 193.7 ALF 9.13 SG1 5376.1 SG2 391.2 THA 1.87 ARRIVAL DATE JUL 14 1966 FLIGHT TIME 194.00 LAUNCH DATE JAN I 1966 DISTANCE 570.313 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 25.840 GAL 8.78 A7L 87.54 MCA 295.38 SMA 116.75 ECC .29880 INC 2.4586 V1 30.287 RP 108.27 LAP -2.22 LOP 35.53 VP 36.260 GAP 16.89 A7P 88.95 TAL 158.06 TAP 93.44 RCA 81.87 APO 151.64 V2 35.000 RC 207.465 GL 10.01 GP -4.86 TAL 51.01 TAP 174.86 ETS 253.38 TAE 133.06 ETE 185.12 TAC 128.38 ETC 168.20 CLP 178.32 PLANETOCENTRIC CONIC 1 38 1 3321.4 -12.39 149.44 0 32 39 3921.44 -8.83 156.32 281.09 62.99 90.00 5 35 31 2507.0 -26.72 95.36 -24.54 103.46 287.79 72.38 4 43 44 3107.04 100.00 60.53 2 19 8 3181.0 -9.14 137.44 100.00 1 16 7 3781.03 -5.25 144.07 279.15 6 49 39 2712.97 7 34 52 2113.0 -33.15 66.93 -31.58 75.80 290.03 76.17 110.00 137.71 275.30 55.83 2 29 8 3147.9 -3.53 131.50 1 26 40 3747.86 .96 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 5366.1 SGR 424.3 SG3 101.4 RRT .4280 RRF .4053 RTF .9310 SGB 5382.9 R23 .0031 R13 .9310 SGI 5369.2 SGZ 383.2 TMA 1.95 ST 2315.6 SR 422.9 SS 469.0 CRT .8716 CRS -.7842 CST -.9873 TOE 2.1865 TRA 3.8523 TC3-2.4192 BAU 1.2837 ROE .4648 RRA .0354 RC3 .0023 FAU .01044 FOE .4237 FRA 1.0462 FC3 -.2276 BSP 17620 BOE 2.2354 BRA 3.8525 BC3 2.4192 FSP -342 LSA 2390.1 MSA 219.1 SSA 14.2 EL1 2345.0 EL2 204.7 ALF 9.11 ARRIVAL DATE JUL 16 1966 FLIGHT TIME 196.00 LAUNCH DATE JAN 1 1966 DISTANCE 575.020 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 100.13 VL 25.796 GAL 9.84 AZL 87.64 MCA 298.58 SMA 116.52 ECC .30993 INC 2.3624 VI 30.287 RP 108.23 LAP -2.07 LOP 38.74 VP 36.241 GAP 17.60 AZP 88.87 TAL 156.38 TAP 94.97 RCA 80.41 APO 152.63 V2 35.014 RC 209.146 GL 9.02 GP -4.78 ZAL 48.50 ZAP 174.62 ETS 245.34 ZAE 133.10 ETE 185.08 ZAC 130.69 ETC 167.94 CLP 177.54 PLANETOCENTRIC CONIC C3 44.621 VHL 6.680 DLA 27.04 RAL 47.27 RAD 6568.7 VEL 12.884 PTH 2.35 VHF 11.247 DPA 7.10 RAP 36.47 ECC 1.7343 LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZETH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2892.7 -20.66 70.20 4 2 49 130.44 291.51 3 4 36 3492.70 90.00 152.60 -10.66 -7.03 159.60 285.38 62.50 1 42 2 3370.2 3979.15 90.00 0 35 43 96.16 -26.53 5 0 41 3118.50 104.25 292.86 72.04 5 52 40 2518.5 -24.31 100.00 140.11 263.53 60.31 2 26 8 3228.6 -7.58 -3.65 146.70 3828.62 100.00 1 22 19 7 49 53 7 4 22 2731.49 1 35 8 3788.39 -32.95 68.34 75.42 2131.5 -31.27 77.16 295.15 110.00 ery.70 55.90 2 38 16

HID-COURSE EXECUTION ACCURACY
SGT 5355.1 850 133.62 \$188.4 -1.99 139.83 110.00 2.51 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2246.1 SR 415.6 SS 463.0 TOE 2.1785 TRA 4.3039 TC3-2.1179 BAU 1.2634 SGT 5355.1 SGR 418.7 SG3 99.4 CRT .8527 CRS -.7660 CST -.9886 ROE .4841 RRA .0557 RC3 -.0016 FAU .00940 FDE .4114 FRA 1.1080 FC3 -.1823 B3P 17647 BDE 2.2316 BRA 4.3043 BC3 2.1179 FSP -335 RRT .4479 RRF .4243 RTF .9372 SGB 5371.5 R23 .0026 R13 .9372 SG1 5358.4 SG2 374.1 THA 2.02 LSA 2319.6 MSA 226.7 SSA 13.4 ARRIVAL DATE JUL 18 1966 FLIGHT TIME 198.00 LAUNCH DATE JAN 1 1966 HELIOCENTRIC CONIC DISTANCE 579.550 RL 147.10 LAL .00 LOL 100.13 VL 25.753 GAL 10.98 AZL 87.74 MCA 301.79 SMA 116.29 ECC .32232 INC 2.2601 V1 30.287 RP 108.19 LAP -1.92 LOP 41.94 VP 36.223 GAP 18.39 AZP 88.81 TAL 154.77 TAP 96.55 RCA 78.81 APO 153.78 V2 35.027 RC 210.800 GL 8.07 GP -4.72 ZAL 46.14 ZAP 174.26 ETS 237.94 ZAE 133.11 ETE 185.03 ZAC 132.99 ETC 167.62 CLP 176.73 PLANETOCENTRIC CONIC 8.02 RAP 38.69 ECC 1.8307 C3 50.476 VHL 7.105 DLA 26.72 RAL 49.98 RAD 6568.9 VEL 13.109 PTH 2.39 VHP 11.724 OPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 22 36 2893.8 -23.16 -20.64 130.51 296.54 70.17 3 24 22 3493.81 90.00 -8.80 156.29 1 44 55 3439.8 -5.11 163.02 289.53 62.11 0 37 35 4039.82 90.00 3129.03 3879.83 6 9 40 2529.0 -26.35 104.95 297.83 71.74 5 17 31 -24.08 100.00 2 31 47 3279.8 -5.88 142.96 1 27 7 287.76 60.16 -1.92 149.51 100.00 -32.74 2749.58 3832.05 8 4 37 7 18 47 300.16 74.70 2149.6 -30.95 78.47 110.00 -.32 2 46 12 3232.0 142.11 283.98 56.04 110.00 1 42 20 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2180.3 SR 406.6 SS 459.7 CRT .8328 CRS -.7481 CST -.9900 LSA 2253.2 MSA 232.9 SSA 12.6 EL1 2206.9 EL2 222.4 ALF 8.92 SGT 5341.3 SGR 412.1 SG3 97.4
RRT .4678 RRF .4457 RTF .9434
SGB 5357.1 R23 .0026 R13 .9434
SGI 5344.8 SG2 364.0 THA 2.08 TOE 2.1711 TRA 4.7895 TC3-1.8305 BAU 1.2352 RDE .5035 RRA .0780 RC3 -.0039 FAU .00832 FDE .4011 FRA 1.1754 FC3 -.1427 89P 17584 BDE 2.2287 BRA 4.7901 BC3 1.8305 FSP -328

FLIGHT TIME 192.00

```
FLIGHT TIME 200.00
                                                                                                                                            ARRIVAL DATE JUL 20 1966
LAUNCH CATE JAN 1 1966
                                                                             DISTANCE 583.863
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 25.711 GAL 12.21 A7L 87.85 MCA 304.99 SMA 116.07 ECC .33614 INC 2.1503 VI 30.287 RP 108.15 LAP -1.76 LOP 45.14 VP 36.206 GAP 19.26 A7P 88.77 TAL 153.22 TAP 98.21 RCA 77.06 APO 155.09 V2 35.040 RC 212.427 GL 7.15 GP -4.66 ZAL 43.95 ZAP 173.79 ETS 231.30 ZAE 133.09 ETE 184.99 ZAC 135.25 ETC 167.24 CLP 175.89
   PLANETOCENTRIC CONIC
     C3 57.451 VHL 7.580 DLA 26.35 RAL 52.50 RAO 6569.0 VEL 13.372 PTH 2.44 VHP 12.253 DPA
                                                                                                                                         8.91 RAP 40.90 ECC 1.9455
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 43 27 3495.50
0 38 34 4102.12
5 33 59 3139.16
1 30 43 3933.68
7 32 48 2767.41
1 48 24 3878.21
                                                                                                                                   2895.5
                                                                                                                 4 41 43
         90.00
                                                      -20.60
                                                                     130.62
                                                                                    301.44
                                                                                                      70.13
                                                                                                                                                    -23.12
                                                                                                                                                                    122.85
                                                       -3.12
                                                                      166.52
                                                                                     293.53
                                                                                                       61.84
                                                                                                                  1 46 56
6 26 18
                                                                                                                                     3502.1
                                                                                                                                                      -6.86
                                                                                                                                                                     159.84
                                                      -23.87
                                                                      105.63
                                                                                     302.67
                                                                                                       71.45
                                                                                                                                     2539.2
                                                                                                                                                     -26.18
                                                                                                                                                                      97.59
                                                                        79.76 305.03 74.01 2 36 17
79.76 305.03 74.01 8 18 55
44.54 288.11 56.27 2 53 2
MID-COURSE EXECUTION ACCURACY
                                                        -.09
                                                                     152.47
                                                                                                                                     3333.7
                                                                                                                                                      -4.07
                                                                                                                                                                     145.94
                                                      -30.62
                                                                      79.76
                                                                                                                                     2167.4
                                                                                                                                                    - 32 . 51
                                                                                                                                                                      71.05
                                                                      144.54
                                                                                                                                     3278.2
                                                                                                                                                      1.45
                                                                                                                                                                     134.31
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 5321.7 SGR 404.2 SG3 95.5

RRT .4869 RRF .4662 RTF .9495

SGB 5337.0 R23 .0021 R13 .9495

SGI 5325.3 SG2 352.8 THA 2.13
                                                                                                                                 ST 2114.4 SR 395.8 SS 457.8 CRT .8115 CR5 -.7294 CST -.9913
    TOE 2.1588 TRA 5.3054 TC3-1.5648 BAU 1.2019
    ROE .5224 RRA .1017 RC3 -.0053 FAU .00729
FOE .3909 FRA 1.2473 FC3 -.1098 BSP 17610
                                                                                                                                 LSA 2186.4 MSA- 237.6 SSA 12.0
EL1 2139.0 EL2 228.6 ALF 8.74
    BOE 2.2211 BRA 5.3064 BC3 1.5648 FSP -322
                                                                                                                                             ARRIVAL DATE JUL 22 1966
                                                                              FLIGHT TIME 202.00
LAUNCH DATE JAN 1 1966
                                                                             DISTANCE 587.909
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 25.670 GAL 13.55 AZL 87.97 HCA 308.20 SMA 115.86 ECC .35160 INC 2.0315 VI 30.287 RP 108.11 LAP -1.60 LOP 48.35 VP 36.190 GAP 20.24 AZP 88.74 TAL 151.76 TAP 99.96 RCA 75.12 APO 156.60 VZ 35.053 RC 214.027 GL 6.26 GP -4.60 ZAL 41.93 ZAP 173.22 ETS 225.46 ZAE 133.03 ETE 184.94 ZAC 137.47 ETC 166.78 CLP 175.01
   PLANETOCENTRIC CONIC
    C3 65.792 VHL 8.111 DLA 25.95 RAL 54.82 RAD 6569.3 VEL 13.680 PTH 2.50 VHP 12.846 DPA 9.77 RAP 43.10 ECC 2.0828
LNCH AZMTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 1 41 3498.10
0 38 50 4165.24
                                                                                    306.19
                                                                                                      70.07 4 59 59
                                                                                                                                     2898.1
                                                                                                                                                    -23.07
                                                                                                                                                                     123.03
        90.00
                                                     -20.54
                                                                     130.79
                                                                                     297.38
                                                                                                                    1 48 15
                                                                                                                                      3565.2
                                                                                                                                                                      163,40
        90.00
                                                       -1.08
                                                                      170.04
                                                                                                        61.70
                                                                                                                                                       -4.86
                    5 49 54 3149.23
1 33 18 3989.35
7 46 17 2785.05
1 53 24 3926.29
                                                                                                                  6 42 23
2 39 48
                                                                                     307.37
                                                                                                                    6 42 23
                                                                                                                                      2549.2
                                                                                                                                                      -26.00
                                                                                                                                                                       98.29
       100.00
                                                      -23.65
                                                                      106.30
                                                                                                        71.16
                                                                                                                                                                      149.00
                                                                     155.52
                                                                                     295.78
                                                                                                        60.16
                                                                                                                                      3389.3
       100.00
                                                        1.79
                                                                                                                                                      -2.19
                                                                                                                 8 32 42
2 58 50
                                                                                                                                                                       72.37
                                                                                                                                     2185.1
                                                                                                                                                    -32.27
       110.00
                                                      -30.28
                                                                       81.02
                                                                                     309.75
                                                                                                        73.33
                                                                                                                                                                      140.82
                                                                                     292.12
                                                                                                       56.60
                                                                                                                                      3326.3
                                                                                                                                                        3.28
       110.00
                                                       7.73
                                                                      147.08
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 5298.4 SGR 395.2 SG3 93.7
RRT .5057 RRF .4866 RTF .9555
SGB 5313.1 R23 .0016 R13 .9555
SG1 5302.1 SG2 340.7 THA 2.17
                                                                                                                                 ST 2052.4 SR 383.4 55 458.5
CRT .7893 CRS -.7111 CST -.9927
    TOE 2.1470 TRA 5.8613 TC3-1.3180 BAU 1.1593
    RDE .5411 RRA .1271 RC3 -.0056 FAU .00621
FDE .3824 FRA 1.3259 FC3 -.0817 BSP 17608
                                                                                                                                        .7893 CRS -.7111 CST -.9927
                                                                                                                                 LSA 2124.0 MSA 240.6 55A 11.3
                                                                                                                                EL1 2074.9 EL2 232.9 ALF 8.50
    BDE 2.2142 BRA 5.8626 BC3 1.3180 FSP -316
                                                                             FLIGHT TIME 204.00
                                                                                                                                            ARRIVAL DATE JUL 24 1966
LAUNCH DATE JAN 1 1966
                                                                             DISTANCE 591.627
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 25.631 GAL 15.02 A7L 88.10 HCA 311.41 SMA 115.66 ECC .36895 INC 1.9016 VI 30.287
RP 108.07 LAP -1.43 LOP 51.56 VP 36.175 GAP 21.34 A7P 88.74 TAL 150.39 TAP 101.80 RCA 72.98 APO 158.33 V2 35.067
RC 215.599 GL 5.41 GP -4.55 TAL 40.08 TAP 172.55 ETS 220.38 TAE 132.92 ETE 184.89 TAC 139.64 ETC 166.25 CLP 174.09
   PLANETOCENTRIC CONIC
    C3 75.818 VHL 8.707 QLA 25.52 RAL 56.94 RAD 6569.5 VEL 14.042 PTH
                                                                                                         2.56 VHP 13.510 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INT LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                5 17 18
1 48 57
6 57 46
2 42 25
                    4 18 56 3501.67

0 38 28 4228.60

6 5 7 3159.36

1 34 59 4046.13
                                                                                     310.76
                                                                                                      69.98
                                                                                                                                    2901.7
                                                                                                                                                    -23.00
                                                                     131.01
        90.00
                                                      -20.46
                                                                                                       61.70
                                                                                                                                     3628.6
                                                                                                                                                      -2.63
                                                                                                                                                                     166.95
                                                                                     301.09
                                                                     173.58
        90.00
                                                       .96
                                                                                                       70.88
                                                                                                                                     2559.4
                                                                                                                                                     -25.82
                                                                                                                                                                      98.98
                                                                                     311.89
       100.00
                                                     -23.42
                                                                     106.96
                                                                                                       60.32
                                                                                                                                     3445.1
       100.00
                                                       3.71
                                                                     158.65
                                                                                     299.56
                                                                                                                 8 45 52
                                                                                                                                     2202.5
       110.00
                                                                                     314.29
                                                                                                       72.67
                     7 59 10 2802.51
                                                     -29.94
                                                                      82.26
                                                                     149.73
                                                                                     295.97
                                                                                                       57.03
                                                                                                                    3 3 41
                                                                                                                                     3375.7
                                                                                                                                                       5.16
       110.00
                      1 57 25
                                    3975.75
                                                       9.57
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         RRT .5241 RRF .5067 RTF .9614
SGB 5285.3 R23 .0009 R13 .9614
SG1 5275.1 SG2 327.6 THA 2.20
                                                                                                                                 ST 1994.9 SR 369.7 SS 461.8
CRT .7667 CRS -.6932 CST -.9939
    TDE 2.1376 TRA 6.4620 TC3-1.0906 BAU 1.1055
    RDE .5595 RRA .1540 RC3 -.0051 FAU .00507
FDE .3756 FRA 1.4123 FC3 -.0579 BSP 17591
BDE 2.2096 BRA 6.4639 BC3 1.0906 FSP -310
                                                                                                                                LSA 2066.7 MSA 241.5 55A 10.7
                                                                                                                                 FL1 2015.2 EL2 234.9 ALF
                                                                             FLIGHT TIME 206.00
                                                                                                                                             ARRIVAL DATE JUL 26 1966
LAUNCH DATE JAN 1 1966
                                                                             DISTANCE 594.934
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 100.13 VL 25.593 GAL 16.64 A7L 88.24 HCA 314.62 SMA 115.46 ECC .38850 INC 1.7581 V1 30.287 RP 108.03 LAP -1.25 LOP 54.77 VP 36.161 GAP 22.58 A7P 88.76 TAL 149.15 TAP 103.78 RCA 70.60 APO 160.32 V2 35.080 RC 217.144 GL 4.60 GP -4.50 ZAL 38.41 ZAP 171.77 ETS 215.95 ZAE 132.74 ETE 184.83 ZAC 141.74 ETC 165.64 CLP 173.10
   PLANETOCENTRIC CONIC
    C3 87.944 VHL 9.378 DLA 25.06 RAL 58.85 RAD 6569.7 VEL 14.467 PTH 2.63 VHP 14.261 DPA 11.35 RAP 47.38 ECC 2.4473
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 35 9 3506.07 -20.35 131.30 315.12 69.88 5 33 35 2906.1 -22.91 123.56
                                                                                                                                      3691.7
                                                                                                                                                                     170.47
                                                        3.00
                                                                     177.10
                                                                                     304.63
                                                                                                        61.83
                                                                                                                    1 49 2
                                                                                                                                                       -.79
        90.00
                     0 37 31
                                    4291.72
                                                                                                                  7 12 21
2 44 13
8 58 21
                     6 19 32
                                                                                                                                                      -25.63
                                                                     107.63
                                    3169.55
                                                      -23.19
                                                                                     316.22
                                                                                                        70.59
                                                                                                                                      2569.5
                                                                                                                                                                      99.68
       100.00
                     1 35 49 4103.47
8 11 21 2819.70
29 4026.09
                                                                                                                                     3503.5
                                                        5.64
                                                                     161.81
                                                                                     303.18
                                                                                                       60.60
                                                                                                                                                       1.68
                                                                                                                                                                     155.26
       100.00
                                                      -29.58
                                                                                     318.63
                                                                                                       72.03
                                                                                                                                     2219.7
                                                                                                                                                    -31.75
                                                                                                                                                                      74.94
       110.00
                                                      11.43
                                                                     152.45
                                                                                     299.68
                                                                                                       57.56
                                                                                                                   3 7 35
                                                                                                                                     3426.1
                                                                                                                                                       7.07
                                                                                                                                                                     146.07
       110.00
                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5241.9 SGR 373.8 SG3 90.3 ST 1943.9 SR 354.8 S5 468.7

RRT .5424 RRF .5268 RTF .9670 CRT .7446 CR5 -.6769 CST -.9951

SGB 5255.2 R23 .0004 R13 .9670 LSA 2016.5 MSA 240.2 SSA 10.0

SGI 5245.8 SG2 313.8 THA 2.22 EL1 1962.0 EL2 234.6 ALF 7.85
     TOE 2.1355 TRA 7.1171 TC3 -.8813 BAU 1.0362
    ROE .5776 RRA .1823 RC3 -.0039 FAU .00379
    FOE .3715 FRA 1.5086 FC3 -.0373 BSP 17478
BOE 2.2123 BRA 7.1194 BC3 .8813 FSP -303
```

ARRIVAL DATE JUL 28 1966

LAUNCH DATE JAN 1 1966

```
DISTANCE 597.722
   RL 147.10 LAL .00 LOL 100.13 VL 25.557 GAL 18.44 AZL 88.40 HCA 317.84 SHA 115.28 ECC .41061 INC 1.5976 V1 30.287 RP 107.99 LAP -1.07 LOP 57.98 VP 36.148 GAP 23.99 AZP 88.82 TAL 148.06 TAP 105.90 RCA 67.94 APO 162.61 V2 35.092 RC 218.662 GL 3.82 GP -4.45 ZAL 36.92 ZAP 170.89 ETS 212.10 ZAE 132.50 ETE 184.76 ZAC 143.78 ETC 164.95 CLP 172.04
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONTC
   C3 102.713 VML 10.135 DLA 24.59 RAL 60.55 RAD 6570.0 VEL 14.968 PTH 2.70 VMP 15.113 CPA 12.07 RAP 49.45 ECC 2.6904
   LNCH AZMTH LNCH TIME LEI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -22.81
                                                                                                                         2911.0
                    4 50 17 3511.05
0 35 57 4354.23
                                                 -20.24
                                                               131.62
                                                                             319.25
                                                                                             69.76
                                                                                                         5 48 48
       90.00
                                                                                                                                          1.22
                                                                                              62.09
                                                                                                         1 48 31
                                                                                                                          3754.2
                                                               180.60
                                                                             308.01
                                                  5.00
       90.00
                                                                                                                                                       100.37
                                                                                                                                         -25.44
                    6 33 4 3179.65
1 35 51 4160.86
                                                               108.30
                                                                              320.32
                                                                                              70.32
                                                                                                         7 26 4
                                                                                                                          2579.7
                                                 -22.96
      100.00
                                                                                                                                                       158.42
                                                                                                      2 45 11
                                                                                                                                          3.62
                                                                                              60.99
                                                                                                                          3560.9
                                                               165.01
                                                                             306.62
      100.00
                                                   7.55
                                                                                                                                        -31.48
                                                                                                                          2236.4
                                                                                              71.42
                                                                                                          9 10 2
                                                 -29.22
                                                                84.65
                                                                             322.73
      110.00
                    8 22 46 2836.44
                                                                                                                                           8.96
                                                                                                                                                       148.77
                                                                                                                         3476.8
                                                                                              58.20
                                                                                                        3 10 35
                                                               155.23
                                                                             303.21
                    2 2 38
                                                 13.26
      110.00
                                4076.84
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1894.6 SR 338.7 S5 478.1
CRT .7225 CR5 -.6609 CST -.9962
                                                                   SGT 5206.3 SGR 361.2 SG3 88.6
RRT .5596 RRF .5457 RTF .9722
   TOE 2.1353 TRA 7.8258 TC3 -.6936 BAU .9524
   ROE .5951 RRA .2114 RC3 -.0024 FAU .00241
FOE .3685 FRA 1.6144 FC3 -.0203 BSP 17462
                                                                   SGB 5218.8 R23 -.0002 R13 .9722
SG1 5210.3 SG2 299.1 THA 2.23
                                                                                                                     LSA 1968.9 MSA 236.9 SSA
                                                                                                                                                            9.4
                                                                                                                      EL1 1910.6 EL2 232.2 ALF 7.47
   BOE 2.2166 BRA 7.8287 BC3 .6936 FSP -298
                                                                                                                                 ARRIVAL DATE JUL 30 1966
                                                                       FLIGHT TIME 210.00
LAUNCH DATE JAN 1 1966
                                                                      DISTANCE 599.850
  HELIOCENTRIC CONIC
                        .00 LOL 100.13 VL 25.523 GAL 20.44 AZL 88.58 MCA 321.05 SMA 115.11 ECC .43570 INC 1.4157 V1 30.287
-.89 LOP 61.19 VP 36.136 GAP 25.60 AZP 88.90 TAL 147.15 TAP 108.21 RCA 64.95 APO 165.26 V2 35.105
3.08 GP -4.41 ZAL 35.64 ZAP 169.89 ETS 208.73 ZAE 132.16 ETE 184.68 ZAC 145.72 ETC 164.17 CLP 170.89
   RL 147.10 LAL
   RP 107.95 LAP
   RC 220.152 GL
  PLANETOCENTRIC CONIC
   C3 120.849 VHL 10.993 DLA 24.09 RAL 62.03 RAD 6570.3 VEL 15.562 PTH 2.77 VHP 16.087 DPA 12.75 RAP 51.44 ECC 2.9889
   LNCM AZMTH LNCH TIME LTI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2916.3
                                                                                                         6 2 54
                                                                                                                                         -22.71
                                                              131.95
                                                                            323.12
                                                                                             69.64
                    5 4 18 3516.26
                                                 -20.11
       90.00
                                                                                                                                           3.21
                                                                                                                                                        177.39
                                                                                                                           3815.8
                                                                              311.18
                                                                                               62.48
                                                                                                          1 47 19
       90.00
                    0 33 43
                                 4415.81
                                                    6.95
                                                                184.08
                                                                                                        7 38 49
2 45 20
                                                                                                                                                        101.04
                                                                                                                          2589.4
                                                                                                                                         -25.25
                                                                              324.16
                                                                                               70.05
                                3189.43
                                                  -22.74
                                                                108.94
      100.00
                    6 45 40
                                                                                                                                                        161.57
                                                                                                                           3617.9
                                                                                                                                           5.54
                                                                              309.86
                                                                                               61.50
      100.00
                   1 35 2
                                 4217.87
                                                    9.41
                                                                168.21
                                                                                                         9 20 54
                                                                                                                                                         77.34
                                                                                                                          2252.5
                                                                                                                                         -31.21
                    8 33 21 2852.51
                                                  -28.87
                                                                 85.76
                                                                              326.57
                                                                                               70.85
      110.00
                                                                                                                                          10.84
                    2 3 50
                                 4127.56
                                                  15.06
                                                               158.06
                                                                              306.55
                                                                                               58.95
                                                                                                          3 12 38
                                                                                                                          3527.6
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1849.7 SR 321.7 SS 491.3
                                                                   SGT 5167.0 SGR 347.5 SG3 87.1
RRT .5761 RRF .5638 RTF .9770
SGB 5178.7 R23 -.0009 R13 .9770
    TOE 2.1444 TRA 8.6023 TC3 -.5242 BAU .8469
                                                                                                                      CRT .7015 CRS -.6463 CST -.9970
    RDE .6122 RRA .2412 RC3 -.0006 FAU .00081
                                                                                                                      LSA 1926.8 MSA 231.5 SSA 8.8
          .3683 FRA 1.7332 FC3 -.0058 BSP 17414
    FDE
                                                                                                                      FL1 1863.6 EL2 227.6 ALF
                                                                                                                                                          7.06
    BOE 2.2301 BRA 8.6057 BC3 .5242 FSP -293
                                                                   SG1 5170.9 SG2 283.9 THA 2.23
                                                                                                                                 ARRIVAL DATE AUG 1 1966
                                                                       FLIGHT TIME 212.00
LAUNCH DATE JAN 1 1966
                                                                       DISTANCE 601.129
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 100.13 VL 25.492 GAL 22.70 A7L 88.79 HCA 324.27 SMA 114.95 ECC .46428 INC 1.2067 VI 30.287 RP 107.91 LAP -.70 LOP 64.41 VP 36.126 GAP 27.46 A7P 89.02 TAL 146.47 TAP 110.74 RCA 61.58 APO 168.31 V2 35.117 RC 221.615 GL 2.37 GP -4.36 TAL 34.57 TAP 168.76 ETS 205.74 TAE 131.71 ETE 184.59 TAC 147.55 ETC 163.32 CLP 169.63
   PLANETOCENTRIC CONIC
    C3 143.327 VHL 11.972 DLA 23.58 RAL 63.27 RAD 6570.6 VEL 16.268 PTH 2.85 VHP 17.206 DPA 13.37 RAP 53.35 ECC 3.3588
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 17 9 3521.28 -19.99 132.27 326.69 69.52 6 15 50 2921.3 -22.60 124.57 90.00 0 30 46 4476.17 8.83 187.51 314.13 62.99 1 45 22 3876.2 5.14 180.78 100.00 6 57 15 3198.56 -22.52 109.53 327.69 69.81 7 50 33 2598.6 -25.07 101.66 100.00 1 33 22 4274.13 11.22 171.40 312.87 62.11 2 44 36 3674.1 7.41 164.70
                    8 43 2 2867.60
2 4 4 4177 85
                                                                                                          9 30 49
                                                                                                                          2267.6
                                                                                                                                         -30.94
                                                                                                                                                        78.44
                                                                 86.81
                                                                              330.10
                                                                                               70.32
      110.00
                                                 -28.53
                                                                                               59.79
                                                                                                          3 13 42
                                                                                                                          3577.9
                                                                                                                                        12.67
                                                                                                                                                       154.25
                                                                160.91
                                                                              309.67
                                                  16.81
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5123.2 SGR 332.7 SG3 85.6

RRT .5914 RRF .5808 RTF .9814

SGB 5134.0 R23 -.0015 R13 .9814

SG1 5127.0 SG2 288 0 TH4 3 3
                                                                                                                      ST 1808.1 SR 304.0 SS 508.7
    TDE 2.1661 TRA 9.4550 TC3 -.3726 BAU .7140
                                                                                                                      CRT .6821 CRS -.6334 CST -.9978
    RDE .6290 RRA .2710 RC3 .0013 FAU-.00110
FDE .3712 FRA 1.8668 FC3 .0067 BSP 17353
                                                                                                                      LSA 1889.5 MSA 224.2 SSA
                                                                                                                                                            8.3
                                                                                                                                                            6.64
                                                                    SG1 5127.0 SG2 268.0 THA 2.21
                                                                                                                      ELI 1820.2 ELZ 220.8 ALF
    BDE 2.2556 BRA 9.4589 BC3 .3726 FSP -289
                                                                                                                                 ARRIVAL DATE AUG 3 1966
                                                                        ELIGHT TIME 214.00
LAUNCH DATE JAN 1 1965
                                                                       DISTANCE 601.304
   HELIOCENTRIC CONIC
                         .00 LOL 100.13 VL 25.463 GAL 25.27 AZL 89.04 HCA 327.49 SMA 114.80 ECC .49694 INC .9618 V1 30.287
-.52 LOP 67.62 VP 36.118 GAP 29.61 AZP 89.19 TAL 146.06 TAP 113.55 RCA 57.75 APO 171.85 V2 35.130
1.69 GP -4.32 ZAL 33.74 ZAP 167.48 ETS 203.08 ZAE 131.13 ETE 184.49 ZAC 149.25 ETC 162.40 CLP 168.24
    RL 147.10 LAL
RP 107.87 LAP
   PLANETOCENTRIC CONIC
                                                                                                2.93 VHP 18.500 DPA 13.93 RAP 55.13 ECC 3.8219
    C3 171.469 VHL 13.095 OLA 23.05 RAL 64.25 RAD 6570.9 VEL 17.111 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       124.85
                                                                                                         6 27 34
                                                                                                                          2925.6
                                                                                                                                          -22.51
                                                                              329.90
                                                                                               69.42
        90.00
                     5 28 49 3525.63
                                                  -19.89
                                                               132.54
                                                                                                                           3935.1
                                                                                                                                           7.00
                                                                                                                                                        184.10
                                                                                               63.60
                                                                                                          1 42 33
                                                                190.90
                                                                               316.81
        90.00
                     0 26 58 4535.08
                                                  10.63
                                                                                                                           2606.6
                                                                                                                                          -24.91
                                                                                                                                                        102.20
                                                                110.06
                                                                               330.88
                                                                                               69.60
       100.00
                     7 7 44
                                  3206.65
                                                  -22.33
                                                                                                          2 42 52
                                                                                                                           3729.3
                                                                                                                                           9.22
                                                                                                                                                        167.79
                                                                174.58
                                                                               315.61
                                                                                               62.83
                                                  12.96
       100.00
                    1 30 43
                                  4329.29
                                                                                                         9 39 44
                                                                               333.28
                                                                                               69.84
                                                                                                                           2281.3
                                                                                                                                          -30.69
                                                                                                                                                         79.41
                                                                 87.75
       110.00
                     8 51 43 2881.35
                                                  -28.21
                                                                                               60.72
                                                                                                          3 13 41
                                                                                                                           3627.4
                                                                                                                                         14.44
                                                                                                                                                        156.99
                                                                163.78
                                                                              312.53
      110.00
                    2 3 14
                                 4227.36
                                                 18.48
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5076.5 SGR 316.7 SG3 84.3 ST 1770.5 SR 285.8 SS 531.2 RRT .6056 RRF .5965 RTF .9953 CRT .6651 CRS -.6230 CST -.9984 SGB 5086.4 R23 -.0021 R13 .9853 LSA 1858.0 MSA 215.0 SSA 7.7 SGI 5080.1 SG2 251.8 THA 2.17 EL1 1780.8 EL2 212.2 ALF 6.22
    TOE 2.2083 TRA10.3986 TC3 -.2373 BAU .5439
    ROE .6458 RRA .3002 RC3 .0032 FAU-.00349
FOE .3788 FRA 2.0191 FC3 .0176 BSP 17180
BOE 2.3008 BRA10.4030 BC3 .2373 FSP -282
```

FIRST TIME 208.00

```
LAUNCH DATE JAN I 1966
                                                                     FLIGHT TIME 216.00
                                                                                                                            ARRIVAL DATE AUG 5 1966
   HELIOCENTRIC CONIC
                                                                     DISTANCE 600.034
                        .00 LOL 100.13 VL 25.439 GAL 28.21 AZL 89.33 HCA 330.71 SMA 114.68 ECC .53434 INC .6694 V1 30.287
-.33 LOP 70.84 VP 36.112 GAP 32.14 AZP 89.42 TAL 146.00 TAP 116.71 RCA 53.40 APO 175.95 V2 35.141
1.04 GP -4.27 ZAL 33.18 ZAP 166.02 ETS 200.69 ZAE 130.37 ETE 184.37 ZAC 150.77 ETC 161.44 CLP 166.68
    RL 147.10 LAL
    RP 107.84 LAP
    RC 224.456 GL
   PLANETOCENTRIC CONIC
    C3 207.084 VHL 14.390 OLA 22.51 RAL 64.95 RAD 6571.2 VEL 18.122 PTH 3.02 VHP 20.009 DPA 14.44 RAP 56.76 ECC 4.4081
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    5 39 12 3528.77
                                                -19.82
                                                             132.74
                                                                          332.72
                                                                                          69.35
                                                                                                      6 3A O
                                                                                                                   2928.8
                                                                                                                                   -22.45
                                                                                                                                                 125.06
        90.00
                    0 22 8
                                 4592.33
                                                12.35
                                                             194.24
                                                                           319.17
                                                                                           64.31
                                                                                                      1 38 40
                                                                                                                      3992.3
                                                                                                                                     8.79
                                                                                                                                                 187.36
                   7 17 3 3213.22
1 26 57 4383.11
8 59 18 2893.34
                                                                                                                                                 102.65
       100.00
                                                -22.18
                                                             110.48
                                                                           333.67
                                                                                           69.43
                                                                                                      8 10 37
                                                                                                                      2613.2
                                                                                                                                   -24.78
                                                                                                    2 40 0
9 47 32
       100.00
                                                 14.61
                                                             177.72
                                                                           318.03
                                                                                           63.63
                                                                                                                     3783.1
                                                                                                                                    10.95
                                                                                                                                                 170.84
       110.00
                                                -27.93
                                                              88.57
                                                                           336.05
                                                                                           69.44
                                                                                                                     2293.3
                                                                                                                                   -30.46
                                                                                                                                                   80.29
      110.00
                    2 1 11 4275.76
                                                 20.07
                                                             166.63
                                                                           315.08
                                                                                           61.73
                                                                                                     3 12 27
                                                                                                                    3675.8
                                                                                                                                   16.13
                                                                                                                                                 159.72
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                 SCT 5021.9 SCR 299.3 SC3 83.0

RRT .6172 RRF .6095 RTF .9887

SCB 5030.8 R23 -.0026 R13 .9887

SCI 5025.3 SC2 235.4 THA 2.11
                                                                                                               ST 1732.5 SR 267.1 SS 558.6
CRT .6499 CRS -.6137 CST -.9988
    TOE 2.2686 TRA11.4347 TC3 -.1194 BAU .3308
    RDE .6623 RRA .3270 RC3 .0050 FAU-.00645
    FOE .3903 FRA 2.1911 FC3 .0269 BSP 17103
BOE 2.3633 BRA11.4394 BC3 .1195 FSP -279
                                                                                                                  LSA 1828.5 MSA 204.3 SSA
                                                                                                                                                     7.1
                                                                                                                  EL1 1741.3 EL2 202.0 ALF
LAUNCH DATE JAN 1 1966
                                                                     FLIGHT TIME 218.00
                                                                                                                            ARRIVAL DATE AUG 7 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 596.859
                         .00 LOL 100.13 VL 25.419 GAL 31.61 A7L 89.69 HCA 333.94 SMA 114.58 ECC .57719 INC .3107 V1 30.287
-.14 LOP 74.07 VP 36.109 GAP 35.11 A7P 89.72 TAL 146.37 TAP 120.31 RCA 48.44 APO 180.71 V2 35.153
-42 GP -4.22 TAL 32.93 TAP 164.34 ETS 198.52 TAE 129.41 ETE 184.23 TAC 152.10 ETC 160.48 CLP 164.90
    RL 147.10 LAL
RP 107.80 LAP
    RC 225.834 GL
   PLANETOCENTRIC CONIC
    C3 252.665 VHL 15.895 DLA 21.94 RAL 65.31 RAD 6571.5 VEL 19.339 PTH 3.10 VHP 21.777 DPA 14.88 RAP 58.19 ECC 5.1582 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
        90.00
                    5 48 13 3530.12
0 16 3 4647.79
                                                -19.78
                                                             132.83
                                                                          335.07
                                                                                          69.32
                                                                                                      6 47 3
1 33 30
                                                                                                                     2930.1
                                                                                                                                   -22.42
                                                                                                                                                125.15
                    0 16 3
        90.00
                                                                                           65.11
                                                 13.96
                                                             197.51
                                                                           321.15
                                                                                                                      4047.8
                                                                                                                                    10.49
                                                                                                                                                  190.55
                  7 25 5 3217.75
1 21 51 4435.39
9 5 39 2903.10
1 57 46 4322.81
      100.00
                                                -22.07
                                                             110.77
                                                                                                      A 1A 43
                                                                           335.99
                                                                                           69.31
                                                                                                                      2617.A
                                                                                                                                    -24.58
                                                                                                                                                  102.95
                                                                                                      2 35 47
      100.00
                                                                           320.07
                                                16.17
                                                             180.82
                                                                                           64.51
                                                                                                                      3835.4
                                                                                                                                    12.60
                                                                                                                                                 173.84
      110.00
                                                                           338.35
                                                                                                      9 54 3
                                                -27.69
                                                              89.23
                                                                                           69.11
                                                                                                                      2303.1
                                                                                                                                   -30.27
                                                                                                                                                   80.99
      110.00
                                                21.56
                                                             169.47
                                                                           317.26
                                                                                           62.81
                                                                                                      3 9 49
                                                                                                                      3722.8
                                                                                                                                    17.74
                                                                                                                                                  162.42
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 4961.1 SGR 280.7 SG3 81.7
RRT .6259 RRF .6194 RTF .9915
SGB 4969.0 R23 -.0031 R13 .9915
                                                                                                                  ST 1695.0 SR 248.1 55 592.4
    TOE 2.3593 TRAI2.5772 TC3 -.0169 BAU .D611
    ROE .6790 RRA .3500 RC3 .0065 FAU-.01027
FOE .4082 FRA 2.3878 FC3 .0352 BSP 16981
                                                                                                                  CRT .6371 CRS -.6064 CST -.9992
                                                                                                                  LSA 1802.3 MSA 192.4 SSA 6.5
    BOE 2.4551 BRA12.5821 BC3 .0181 FSP -275
                                                                 SG1 4964.2 SG2 218.8 THA 2.03
                                                                                                                 EL1 1702.4 EL2 190.4 ALF 5.40
                                                                    FLIGHT TIME 220.00
                                                                                                                           ARRIVAL DATE AUG 9 1966
LAUNCH DATE JAN 1 1966
  HELIOCENTRIC CONIC
                                                                   OISTANCE 591.172
                         .00 LOL 100.13 VL 25.404 GAL 35.58 AZL 90.14 HCA 337.16 SMA 114.50 ECC .62616 INC .1374 V1 30.287 .05 LOP 77.29 VP 36.110 GAP 38.64 AZP 90.13 TAL 147.28 TAP 124.44 RCA 42.81 APO 186.20 V2 35.164 -.16 GP -4.16 ZAL 33.04 ZAP 162.38 ETS 196.52 ZAE 128.17 ETE 184.06 ZAC 133.16 ETC 159.58 CLP 162.86
    RL 147.10 LAL
        107.77 LAP
    RC 227.182 GL
                        -.16 GP
   PLANETOCENTRIC CONIC
    C3 311.642 VHL 17.653 DLA 21.34 RAL 65.30 RAD 6571.8 VEL 20.807 PTH
                                                                                            3.18 VMP 23.861 OPA 15.25 RAP 59.36 ECC 6.1288
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     6 34 33
                  5 55 44 3528.99
O 8 25 4701.44
                                               -19.81
                                                             132.76
                                                                          336.88
                                                                                          69.34
                                                                                                                    2929.0
                                                                                                                                  -22.45
       90.00
                                               15.47
                                                             200.72
                                                                          322.67
                                                                                           65.98
                                                                                                    1 26 46
                                                                                                                                   12.10
       90.00
                  7 31 40 3219.65
1 15 10 4486.02
                                                                          337.77
                                               -22.02
                                                             110.90
                                                                                          69.26
                                                                                                    8 25 20
                                                                                                                    2619.6
                                                                                                                                   -24.65
                                                                                                                                                103.08
      100.00
                                                             183.88
                                                                          321.66
                                                                                          65.46
                                                                                                    2 29 56
                                                                                                                    3886.0
                                                                                                                                   14.17
                                                                                                                                                176.79
      100.00
                                               17.63
                                                              89.70
                                                                                                      9 59 7
                                                                                                                    2310.1
                                                                                                                                   -30.14
                                                                                                                                                  81.48
      110.00
                   9 10 37 2910.08
                                               -27.52
                                                                          340.09
                                                                                          68.88
      110.00
                   1 52 42
                                               22.95
                                                             172.28
                                                                          318.98
                                                                                          63.94
                                                                                                     3 5 30
                                                                                                                    3768.3
                                                                                                                                  19.26
                               4368.35
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                SGT 4891.8 SGR 260.9 SG3 80.6
RRT .6300 RRF .6244 RTF .9938
SGB 4898.8 R23 -.0036 R13 .9938
                                                                                                                 ST 1655.9 SR 229.2 SS 633.7
CRT .6268 CRS -.6007 CST -.9994
    TOE 2.4891 TRA13.8277 TC3 .0708 BAU .2967
   RDE .6961 RRA .3661 RC3 .0076 FAU-.01531
FDE .4344 FRA 2.6124 FC3 .0425 BSP 16812
                                                                                                                LSA 1778.7 MSA 179.6 SSA 6.0
    BOE 2.5846 BRA13.8326 BC3 .0712 FSP
                                                                SG1 4894.6 SG2 202.5 THA
                                                                                                  1.93
                                                                                                                 EL1 1662.2 EL2 177.9 ALF
                                                                                                                                                   5.02
                                                   -272
LAUNCH DATE JAN 2 1966
                                                                    FLIGHT TIME 70.00
                                                                                                                           ARRIVAL DATE MAR 13 1966
  HELIOCENTRIC CONIC
                                                                    DISTANCE 213.791
                       .00 LOL 101.15 VL 30.098 GAL -15.67 AZL 87.14 MCA 98.81 SMA 147.70 ECC .27004 INC 2.8622 V1 30.287 2.83 LOP 199.97 VP 39.503 GAP -1.28 AZP 90.44 TAL 255.17 TAP 353.98 RCA 107.82 APO 187.59 V2 35.108 9.98 GP 12.39 ZAL 166.33 ZAP 76.17 ETS 354.58 ZAE 173.01 ETE 125.07 ZAC 37.65 ETC 170.38 CLP -75.83
   RL 147.10 LAL
       107.94 LAP
   RC 73.845 GL
  PLANETOCENTRIC CONIC
   C3 69.775 VHL 8.353 OLA -12.00 RAL 290.69 RAD 6569.3 VEL 13.825 PTH
                                                                                            2.52 VMP 4.618 OPA -9.53 RAP 304.49 ECC 2.1483
   LNCH A7MTH LNCH TIME L-I TIME INJ LAT 90.00 1 32 54 2141.67 -17.73
                                                          INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        112.44
                                                              36.92
                                                                          170.34
                                                                                                     2 8 36
                                                                                                                   1541.7
                                                                                                                                 -14.54
                                                                                                                                                 29.70
                                                                          179.68
                                                                                          91.06
                                                                                                    11 58 1
                                                                                                                     4949.7
       90.00
                  10 25 31
                               5549.65
                                                28.30
                                                             258.50
                                                                                                                                    28.15
                                                                                                                                                 249.84
                                                                                         113.36
                                                                                                    3 19 47
                                                                                                                     1299.0
      100.00
                  2 48
                               1898.97
                                               -19.20
                                                              18.42
                                                                          169.69
                                                                                                                                   -15.88
                                                                                                                                                  11.20
                                                             237.78
                                                                          179.70
                                                                                          90.36
                                                                                                    13 20 46
                                                                                                                     4667.6
      100.00
                  11 52 59
                               5267.59
                                                29.89
                                                                                                                                    29.62
                                                                                                                                                 228.98
                   3 42 34 1728.52
                                               -23.07
                                                              3.58
                                                                          167.78
                                                                                         115.95
                                                                                                    4 11 22
                                                                                                                     1128.5
                                                                                                                                  -19.40
                                                                                                                                                 356.38
                                                                                                   14 36 33
                                                                                                                                   33.56
                  13 15 2
                                5010.80
                                                34.15
                                                             218.22
                                                                          179.65
                                                                                          88.43
                                                                                                                     4410.8
                                                                                                                                                209.03
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                              ST 187.3 SR 378.6 SS 144.4
CRT .1067 CR5 .4777 CST -.8080
                                                                SGT 631.9 SGR 420.1 SG3 217.7
RRT -.3512 RRF -.4477 RTF .6500
    TOE -.0608 TRA -.8679 TC3 -.0986 BAU .1123
    RDE - .5481 RRA .2106 RC3 .0690 FAU .10923
   FOE .1964 FRA-1.5641 FC3-1.3553 BSP 1261
BDE .5515 BRA .8931 BC3 .1204 FSP -651
                                                                5GB 758.8 R23 .0968 R13 -.6842
                                                                                                                LSA 385.7 MSA 224.0 55A 18.8
                                                                SG1 658.1 SG2 377.6 THA 160.04
                                                                                                               EL1 379.3 EL2 185.9 ALF 86.02
```

ARRIVAL DATE MAR 15 1966

LAUNCH DATE JAN 2 1966

RL 147.10 LAL .00 LOL 101.15 VL 30.055 GAL -15.49 AZL 87.22 HCA 102.02 SMA 147.27 ECC .26702 INC 2.7796 V1 30.287 RP 107.98 LAP 2.72 LOP 203.19 VP 39.458 GAP -.68 AZP 90.58 TAL 254.75 TAP 356.78 RCA 107.95 APO 186.59 V2 35.095 RC 76.070 GL 9.80 GP 12.80 ZAL 166.30 ZAP 81.17 ETS 355.57 ZAE 170.25 ETE 138.75 ZAC 35.78 ETC 170.95 CLP -80.94 DISTANCE 220.231 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 68.053 VHL 8.249 DLA -12.14 RAL 290.94 RAC 6569.3 VEL 13.763 PTH 2.51 VHP 4.516 DPA -9.47 RAP 302.58 ECC 2.1200 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 112.66 2 10 35 91.01 11 57 47 1531.0 170.18 1 35 4 2131.01 -17.46 36.26 90.00 249.75 28.14 4948.5 179.54 10 25 19 5548.46 2 50 13 1888.59 28.30 258.41 5548.46 90.00 1288.6 -15.57 10.59 3 21 41 -18.92 17.78 169.52 113.58 100.00 90.30 13 20 38 228.87 29.89 237.67 179.56 4666.1 5266.12 100.00 11 52 52 116.20 4 13 6 88.33 14 38 35 1118.7 355.80 -19.07 167.61 -22.78 2.97 1718.73 110.00 3 44 27 4408.7 33.54 179.50 34.15 218.06 110.00 5008.74 13 15 7 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 202.6 SR 376.3 SS 145.8 CRT .0579 CRS .4724 CST -.8388 SGT 704.6 SGR 424.9 SG3 228.0 RRT -.3996 RRF -.4794 RTF .7021 SGB 822.8 R23 .0948 R13 -.7287 TOE -. 0528 TRA -. 9343 TC3 -. 1416 BAU .1477 RDE -.5376 RRA .2179 RC3 .0793 FAU .11324 LSA 383.3 MSA 237.9 55A 18.9 FOE .1940 FRA-1.6009 FC3-1.4406 BSP 1545 BOE .5402 BRA .9594 BC3 .1623 FSP -684 EL1 376.6 EL2 202.1 ALF 87.49 SG1 732.6 SG2 374.6 THA 161.43 ARRIVAL DATE MAR 17 1966 FLIGHT TIME 74.00 LAUNCH DATE JAN 2 1966 DISTANCE 226.623 HELTOCENTRIC CONIC .00 LOL 101.15 VL 30.004 GAL -15.31 AZL 87.30 HCA 105.24 SMA 146.78 ECC .26407 INC 2.6951 V1 30.287 2.60 LOP 206.41 VP 39.409 GAP -.11 AZP 90.71 TAL 254.23 TAP 359.47 RCA 108.02 APO 185.54 V2 35.082 RL 147.10 LAL RP 108.02 LAP 9.62 GP 13.18 TAL 166.24 TAP 86.06 ETS 356.59 TAE 167.23 ETE 146.32 TAC 34.00 ETC 171.54 CLP -85.95 RC 78.316 GL PLANETOCENTRIC CONIC -9.39 RAP 300.77 ECC 2.0922 C3 66.362 VHL 8.146 DLA -12.29 RAL 291.24 RAD 6569.3 VEL 13.701 PTH LJ 66.362 VML 8.146 ULA -12.29 KAL 291.24 KAD 6569.3 VEL 13.7U1 PTH 2.5U VMP 4.442 DPA -9.39 KAP 300.77 ECC 2.0922 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 37 31 2120.08 -17.17 35.59 170.07 112.87 2 12 51 1520.1 -13.92 28.41 90.00 10 25 17 5547.39 28.30 258.33 179.45 90.97 11 57 45 4947.4 28.14 249.67 2.50 VHP 4.442 DPA 1277.9 9.96 2 52 34 1877.94 11 52 55 5264.76 3 23 52 17.12 169.41 113.61 -18.63 100.00 228.77 13 20 40 4664.8 29.61 237.57 179.47 90.25 11 52 55 29.89 100.00 4 15 5 1108.7 355.21 -22.48 2.35 167.48 116.46 1708.70 110.00 3 46 36 14 38 49 4406.8 33.52 208.72 179.40 88.24 13 15 22 5006.76 217.91 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 785.2 SGR 428.8 SG3 237.1 RRT -.4456 RRF -.5092 RTF .7433 ST 219.2 SR 372.2 SS 146.1 CRT .0154 CRS .4487 CST -.8735 TOE -.0455 TRA-1.0033 TC3 -.1880 BAU .1849 ROE - .5246 RRA .2249 RC3 .0900 FAU .11662 FOE .1778 FRA-1.6286 FC3-1.5213 BSP 1850 SGB 894.6 R23 .0923 R13 - .7639 SG1 814.5 SG2 370.1 THA 162.63 LSA 379.0 MSA 252.9 SSA 19.0 EL1 372.2 EL2 219.2 ALF 89.21 BDE .5266 BRA 1.0282 BC3 .2084 FSP ARRIVAL DATE MAR 19 1965 FLIGHT TIME 76.00 LAUNCH DATE JAN 2 1966 DISTANCE 232.968 RL 147.10 LAL .00 LOL 101.15 VL 29.948 GAL -15.13 AZL 87.39 HCA 108.45 SMA 146.24 ECC .25115 INC 2.6079 VI 30.287 RP 108.06 LAP 2.47 LOP 209.62 VP 39.354 GAP .43 AZP 90.83 TAL 253.62 TAP 2.07 RCA 108.05 APO 184.42 V2 35.069 RC 80.581 GL 9.41 GP 13.54 TAL 166.14 TAP 90.80 ETS 357.64 TAE 164.16 ETE 151.01 TAC 32.35 ETC 172.16 CLP -90.82 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 64.687 VML 8.043 DLA -12.44 RAL 291.60 RAD 6569.2 VEL 13.640 PTH 2.49 VMP 4.394 DPA -9.29 RAP 299.10 ECC 2.0646 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.09 2 15 23 1508.8 -13.60 1 40 14 2108.77 10 25 25 5546.44 34.89 170.02 -16.87 90.00 11 57 51 4946.4 28.13 249.60 28.30 258.27 179.41 90.94 90.00 1266.9 -14.92 9.31 3 26 18 169.35 114.04 1866.95 -18.33 16.45 100.00 2 55 11 228.68 4663.5 29.60 11 53 9 90.20 13 20 52 5263.50 29.89 237.47 179.42 100.00 4 17 19 1098.4 354.61 -22.16 1.72 167.41 116.72 3 49 1 1698.36 110.00 88.15 14 39 13 208.57 4404.9 217.76 179.35 34.14 13 15 48 5004.86 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 873.1 SGR 431.7 SG3 242.8 RRT -.4840 RRF -.5375 RTF .7742 SGB 974.0 R23 .0945 R13 -.7906 SGI 902.9 SGZ 363.3 THA 163.82 ST 237.3 SR 367.5 SS 145.5 CRT -: 0164 CRS .4444 CST -: 8902 TOE -.0403 TRA-1.0750 TC3 -.2379 BAU .2232 TOE -.5109 RRA .2296 RC3 .1000 FAU .11826 FDE .1712 FRA-1.6237 FC3-1.5827 BSP 2171 RDF .5125 BRA 1.0993 BC3 .2581 FSP -747 LSA 374.8 MSA 267.7 SSA 19.1 EL1 367.5 EL2 237.2 ALF 91.04 BOE .5125 BRA 1.0993 BC3 .2581 FSP ARRIVAL DATE MAR 21 1966 FLIGHT TIME 78.00 LAUNCH DATE JAN 2 1966 DISTANCE 239.268 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 29.887 GAL -14.96 AZL 87.48 HCA 111.66 SHA 145.65 ECC .25828 INC 2.5176 V1 30.287 RP 108.10 LAP 2.34 LOP 212.83 VP 39.296 GAP .94 AZP 90.93 TAL 252.91 TAP 4.57 RCA 108.03 APO 183.27 V2 35.056 RC 82.862 GL 9.19 GP 13.89 ZAL 166.01 ZAP 95.36 ETS 358.71 ZAE 161.15 ETE 154.16 ZAC 30.88 ETC 172.80 CLP -95.52 PLANETOCENTRIC CONIC C3 63.026 VHL 7.939 DLA -12.60 RAL 292.00 RAD 6569.2 VEL 13.579 PTH 2.48 VHP 4.369 DPA -9.16 RAP 297.60 ECC 2.0372 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 113.31 1497.0 -13.26 2 18 11 1 43 14 2096.99 170.00 -16.55 34.17 11 58 5 4945.7 28.13 249.55 90.91 179.41 90.00 10 25 39 5545.69 28.30 258.21 1255.5 -14.58 8.63 3 29 1 114.27 1855.50 -18.01 15.75 169.33 100.00 2 58 5 13 21 12 29.59 228.60 4662.4 11 53 29 5262.42 29.89 237.39 179.43 90.16 100.00 1087.6 -18.04 353.98 116.98 4 19 50 3 51 42 1687.60 167.38 116.98 4 19 50 88.07 14 39 45 -21.83 1.06 208.44 4403.1 33.49 179.35 13 16 22 5003.08 34.14 217.62 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 256.4 SR 361.0 55 144.1 CRT -.0406 CRS .4273 CST -.9081 SGT 966.5 SGR 433.6 SG3 246.9 TOE -.0368 TRA-1.1477 TC3 -.2906 BAU .2619 RRT -.5195 RRF -.5642 RTF .7980 SGB 1059.3 R23 .0969 R13 -.8112 RDE -.4950 RRA .2334 RC3 .1101 FAU .11906 FDE .1552 FRA-1.6073 FC3-1.6355 BSP 2510 BDE .4964 BRA 1.1712 BC3 .3108 FSP -768 LSA 369.3 MSA 283.1 SSA 19.2 EL1 361.3 EL2 256.0 ALF 93.32 SG1 996.5 SG2 359.4 THA 164.87

FI 16HT TIME 72.00

```
FLIGHT TIME 80.00
LAUNCH DATE JAN 2 1966
                                                                                                                                                          ARRIVAL CATE MAR 23 1966
                                                                                     CISTANCE 245.526
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 101.15 VL 29.822 GAL -14.78 A7L 87.58 HCA 114.87 SMA 145.02 ECC .25544 INC 2.4232 V1 30.287 RP 108.14 LAP 2.20 LOP 216.04 VP 39.234 GAP 1.42 A7P 91.02 TAL 252.12 TAP 6.99 RCA 107.98 APO 182.07 V2 35.043 RC 85.157 GL 8.95 GP 14.23 ZAL 165.84 ZAP 99.71 ETS 359.81 ZAE 158.25 ETE 156.39 ZAC 29.61 ETC 173.48 CLP-100.02
    PLANETOCENTRIC CONIC
     C3 61.371 VHL 7.834 DLA -12.78 RAL 292.46 RAD 6569.1 VEL 13.518 PTH 2.47 VMP 4.364 DPA -9.00 RAP 296.30 ECC 2.0100
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                            1 46 33 2084.61
10 25 59 5545.20
                                                                                                                                              1484.6
                                                                                                                                                                 -12.90
          90.00
                                                            -16.22
                                                                             33.42
                                                                                          170.02
                                                                                                                              2 21 18
                                                                                                                                                                                     26.31
                                                            28.30
                                                                            258.17
                                                                                             179.45
                                                                                                                                                  4945.2
          90.00
                                                                                                                                                                    28.13
                                                                                                                                                                                     249.51
                                                                                                                114.51 3 32 1
90.12 13 21 37
117.25 4 22 36
88.00 14 40 24
                       3 1 18 1843.47
        100.00
                                                           -17.67
                                                                             15.01
                                                                                             169.35
                                                                                                                114.51
                                                                                                                                                  1243.5
                                                                                                                                                                   -14.21
                                                                                                                                                                                      7.92
        100.00
                      11 53 55
                                        5261.57
                                                            29.89
                                                                            237.33
                                                                                             179.47
                                                                                                                                                  4661.6
                                                                                                                                                                   29.59
                                                                                                                                                                                     228.54
                       3 54 40 1676.33
13 17 3 5001.47
                                                           -21.48
                                                                                             167.38
                                                                                                                117.25
                                                                                                                                                  1076.3
        110.00
                                                                                . 37
                                                                                                                                                                   -17.66
                                                                                                                                                                                     353.33
                                                                            217.50
                                                            34.13
                                                                                             179.39
                                                                                                                                                  4401.5
        110.00
                                                                                                                                                                   33.48
                                                                                                                                                                                     208.31
    CIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                                            ST 276.3 SR 353.6 SS 141.9

CRT -.0568 CRS .4156 CST -.9192

LSA 363.7 MSA 298.1 SSA 19.2
     TOE -.0356 TRA-1.2205 TC3 -.3457 BAU .3002
                                                                                 SGT 1063.9 5GR 434.4 SG3 248.5
                                                                                RRT -.5505 RRF -.5897 RTF .8155
     ROE -.4779 RRA .2356 RC3 .1199 FAU .11865
                                                                                SGB 1149.1 R23 .1019 R13 -.8265
     FCE .1414 FRA-1.5705 FC3-1.6738 BSP 2850
BDE .4793 BRA 1.2430 BC3 .3659 FSP -771
                                                                                 SG1 1093.6 SG2 352.8 THA 165.83
                                                                                                                                             EL1 354.5 EL2 275.2 ALF 96.42
                                                                                     FLIGHT TIME 82.00
                                                                                                                                                          ARRIVAL DATE MAR 25 1966
LAUNCH DATE JAN 2 1966
                                                                                     CISTANCE 251.744
   HELIOCENTRIC CONIC
                            .00 LOL 101.15 VL 29.752 GAL -14.60 ATL 87.68 MCA 118.08 SMA 144.37 ECC .25265 INC 2.3239 V1 30.287 2.05 LOP 219.25 VP 39.170 GAP 1.88 ATP 91.09 TAL 251.25 TAP 9.33 RCA 107.89 APO 180.84 V2 35.030
     RL 147.10 LAL
     RP 108.18 LAP
                              8.69 GP 14.57 7AL 165.65 7AP 103.83 ETS .95 7AE 155.48 ETE 158.01 7AC 28.56 ETC 174.20 CLP-104.30
          87.465 GL
   PLANETOCENTRIC CONIC
     C3 59.721 VHL 7.728 OLA -12.97 RAL 292.96 RAO 6569.1 VEL 13.457 PTH
                                                                                                                   2.46 VHP 4.376 DPA -8.80 RAP 295.21 ECC 1.9829
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00
                       1 50 12 2071.48
                                                           -15.86
                                                                            32.62
                                                                                            170.08
                                                                                                               113.77
                                                                                                                              2 24 43
                                                                                                                                               1471.5
                                                                                                                                                                  -12.51
                                                                                                                                                                                      25.54
         90.00
                      10 26 21
                                        5545.08
                                                           28.30
                                                                            258.17
                                                                                             179.54
                                                                                                                 90.89
                                                                                                                           11 58 46
                                                                                                                                                  4945.1
                                                                                                                                                                   28.13
                                                                                                                                                                                     249.50
       100.00
                        3 4 49
                                        1830.73
                                                           -17.31
                                                                             14.24
                                                                                             169.40
                                                                                                                114.76
                                                                                                                              3 35 19
                                                                                                                                                  1230.7
                                                                                                                                                                   -13.82
                                                                                                                                                                                       7.18
                      11 54 25
                                                                                                                90.10 13 22 6
       100.00
                                        5261.05
                                                           29.89
                                                                            237.29
                                                                                             179.55
                                                                                                                                                  4661.1
                                                                                                                                                                   29.59
                                                                                                                                                                                     228.50
       110.00
                       3 57 55
                                       1664.42
                                                           -21.11
                                                                            359.65
                                                                                             167.43
                                                                                                               117.53
                                                                                                                            4 25 39
                                                                                                                                                  1064.4
                                                                                                                                                                   -17.26
                                                                                                                                                                                     352.64
                                                                                                                           14 41 8
       110.00
                      13 17 48
                                        5000.13
                                                           34.13
                                                                            217.39
                                                                                             179.47
                                                                                                                87.94
                                                                                                                                                  4400.1
                                                                                                                                                                   33.47
                                                                                                                                                                                     208.21
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 1164.5 SGR 434.2 SG3 248.8

RRT -.5794 RRF -.6146 RTF .8288

SGB 1242.9 R23 .1078 R13 -.8381

SG1 1194.0 SG2 345.2 THA 166.67
     TOE -.0370 TRA-1.2927 TC3 -.4030 BAU .3381
                                                                                                                                            5T 296.9 SR 344.6 55 139.2
CRT -.0657 CRS .3932 CST -.9307
     RDE -.4589 RRA .2369 RC3 .1299 FAU .11756
    FDE .1211 FRA-1.5249 FC3-1.7042 BSP 3205
BDE .4604 BRA 1.3143 BC3 .4234 FSP -778
                                                                                                                                            LSA 358.6 MSA 311.9 SSA 19.3
EL1 346.6 EL2 294.5 ALF 101.87
                                                                                    FLIGHT TIME 84.00
                                                                                                                                                         ARRIVAL DATE HAR 27 1966
LAUNCH DATE JAN 2 1966
                                                                                    DISTANCE 257.924
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 29.679 GAL -14.41 A7L 87.78 HCA 121.28 SMA 143.69 ECC .24990 INC 2.2185 VI 30.287 RP 108.22 LAP 1.90 LOP 222.45 VP 39.102 GAP 2.31 A7P 91.15 TAL 250.32 TAP 11.60 RCA 107.78 APO 179.60 V2 35.016 RC 89.783 GL 8.40 GP 14.92 TAL 165.41 TAP 107.71 ETS 2.13 TAE 152.88 ETE 159.20 TAC 27.73 ETC 174.98 CLP-108.35
   PLANETOCENTRIC CONIC
    C3 58.072 VHL 7.620 DLA -13.18 RAL 293.51 RAD 6569.1 VEL 13.395 PTH 2.45 VHP 4.403 DPA -8.54 RAP 294.35 ECC 1.9557
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                         170.18
                       1 54 12 2057.42
                                                          -15.47
                                                                             31.77
                                                                                                            114.02 2 28 30
                                                                                                                                              1457.4 -12.10 24.72
         90.00
                                                                                            179.66
                                                                                                                90.90
                                                                                                                           11 59 9
                                                                                                                                                 4945.5
                                                                                                                                                                   28.13
                      10 26 43 5545.46
3 8 41 1817.12
                                                           28.30
                                                                           258.19
         90.00
                                                                                            169.49
                                                                                                               115.02
                                                                                                                             3 38 58
                                                                                                                                                1217.1
                                                                                                                                                                  -13.40
                                                                             13.42
                                                          -16.92
       100.00
                      11 54 55
                                                                           237.29
                                                                                            179.67
                                                                                                                90.10 13 22 36
                                                                                                                                                 4661.0
                                                                                                                                                                   29.59
       100.00
                                       5260.99
                                                          29.89
                                                                                            167.50
                      4 1 29 1651.73
13 18 36 4999.15
                                                          -20.71
                                                                                                               117.82
                                                                                                                             4 29 1
                                                                                                                                                 1051.7
                                                                                                                                                                  -16.82
                                                                                                                                                                                   351.91
                                                                           358.88
       110.00
                                                                                                                87.89 14 41 56
                                                                                            179.59
                                                                                                                                                 4399.1
                                                                                                                                                                    33.46
                                                                           217.31
       110.00
                                                           34.13
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 1267.5 SGR 433.3 SG3 247.5
RRT -.6061 RRF -.6391 RTF .8387
                                                                                                                                            ST 318.1 SR 334.3 SS 135.8
CRT -.0678 CRS .3664 CST -.9403
     TOF -. 0414 TRA-1.3636 TC3 -. 4625 BAU . 3752
    ROE -.4385 RRA .2370 RC3 .1400 FAU .11573
    FOE .0991 FRA-1.4684 FC3-1.7253 BSP 3567
BDE .4404 BRA 1.3840 BC3 .4832 FSP -779
                                                                                SGB 1339.5 R23 .1155 R13 -.8468
                                                                                                                                            LSA 358.6 MSA 320.0 SSA 19.4
                                                                                                                                            EL1 339.7 EL2 312.3 ALF 116.92
                                                                                SG1 1296.5 SG2 336.9 THA 167.43
                                                                                    FLIGHT TIME 86.00
                                                                                                                                                         ARRIVAL DATE MAR 29 1966
LAUNCH DATE JAN 2 1966
                                                                                    DISTANCE 264.067
   HELIOCENTRIC CONIC
                             .00 LOL 101.15 VL 29.603 GAL -14.22 AZL -87.89 MCA 124.48 SMA 142.99 ECC .24719 INC Z.1058 V1 30.287 1.74 LOP 225.65 VP 39.033 GAP 2.72 AZP 91.19 TAL 249.32 TAP 13.80 RCA 107.65 APO 178.34 V2 35.003 8.07 GP 15.31 ZAL 165.15 ZAP 111.34 ETS 3.36 ZAE 150.44 ETE 160.06 ZAC 27.12 ETC 175.82 CLP-112.16
    RL 147.10 LAL
    RP 108.26 LAP
    RC 92.112 GL
   PLANETOCENTRIC CONIC
    C3 56.422 VHL 7.511 DLA -13.42 RAL 294.11 RAD 6569.0 VEL 13.333 PTH
                                                                                                                  2.44 VHP 4.443 DPA -8.23 RAP 293.70 ECC 1.9286
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2 32 40
                        1 58 38
                                       2042.22
                                                          -15.05
                                                                             30.85
                                                                                            170.31
                                                                                                              114.27
                                                                                                                                                1442.2
         90.00
         90.00
                      10 27 2
                                     5546.53
                                                          28.30
                                                                           258.27
                                                                                            179.82
                                                                                                                90.94
                                                                                                                            11 59/29
                                                                                                                                                 4946.5
                        3 12 57
                                       1802.42
                                                                             12.53
                                                                                            169.62
                                                                                                               115.29
                                                                                                                              3 43 .0
                                                                                                                                                 1202.4
                                                                                                                                                                   -12.95
       100.00
                                                          -16.49
                                                                                                                90.12 13 23 5
                                     5261.56
                                                          29.89
                                                                           237.33
                                                                                            179.84
       100.00
                      11 55 24
                                                                                                               118.13 4 32 43
87.87 14 42 44
                        4 5 25
                                      1638.08
                                                         -20.27
                                                                           358.06
                                                                                            167.61
                                                                                                                                                 1038.1
                                                                                                                                                                  -16.35
                                                                                                                                                                                    351.13
       110.00
                                     4998.66
                                                                                                                                                                  33.45
       110.00
                      13 19 25
                                                        34.12
                                                                           217.28
                                                                                            179.75
                                                                                                                                               4398.7
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ST 339.7 SR 323.0 SS 132.0 CRT -.0643 CRS .3424 CST -.9464 LSA 368.4 MSA 317.8 SSA 19.4 EL1 344.7 E12 344.
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               SGT 1371.4 SGR 431.5 SG3 244.5
RRT -.6305 RRF -.6634 RTF .8456
SGB 1437.7 R23 .1260 R13 -.8528
     TOE -.0485 TRA-1.4318 TC3 -.5237 BAU .4109
     RDE - .4170 RRA .2357 RC3 .1501 FAU .11311
    FDE .0793 FRA-1.3999 FC3-1.7356 BSP 3916
BDE .4198 BRA 1.4510 BC3 .5447 FSP -767
                                                                                SG1 1399.8 SG2 328.1 THA 168.12
                                                                                                                                            EL1 344.7 EL2 317.6 ALF 154.05
```

ARRIVAL CATE MAR 31 1966

LAUNCH DATE JAN 2 1966

```
DISTANCE 270.178
   RE 147.10 LAL .00 LOL 101.15 VE 29,524 GAE -14.02 ATE 88.02 MCA 127.68 SMA 142.28 ECC .24453 INC 1.9841 VI 30.287 RP 108.51 LAP 1.57 LOP 228.85 VP 38.961 GAP 3.11 ATP 91.21 TAL 248.26 TAP 15.94 RCA 107.49 APO 177.07 V2 34.990 RC 94.449 GE 7.70 GP 15.75 TAL 164.85 ZAP 114.72 ETS 4.66 ZAE 148.17 ETE 160.64 ZAC 26.74 ETC 176.75 CLP-115.75
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
   C3 54.772 VHL 7.401 CLA -13.68 RAL 294.75 RAD 6569.0 VEL 13.271 PTH 2.42 VHP 4.494 DPA -7.84 RAP 293.28 ECC 1.9014
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 2 3 32 2025.60 -14.58 29.86 170.48 114.55 2 37 18 1425.6 -11.15 22.86
                                                                                           114.55 2 37 18
91.02 11 59 43
                                                                                                                            4948.5
                                                                                                                                                         249.76
                    10 27 14 5548.52
3 17 41 1786.39
                                                                258.42
                                                                              180.02
                   10 27 14
                                                  28.30
       90.00
                                                                                              115.58 3 47 27
90.18 13 23 30
118.45 4 36 49
87.88 14 43 30
                                                                                                           3 47 27
                                                                                                                            1186.4
                                                                                                                                           -12.45
                                                                                                                                                           4.60
                                                 -16.02
                                                                 11.57
                                                                              169.78
      100.00
                                                                                                                            4663.0
                                                                                                                                                         228.64
                                                  29.89
                                                                237.43
                                                                              180.04
                   11 55 47
                                 5262.98
      100.00
                                                                                                                                                         350.29
                                                                                                                            1023.3
                                                                                                                                           -15.84
                    4 9 46 1623.26
13 20 11 4998.87
                                                                357.18
                                                                              167.76
                                                 -19.79
      110.00
                                                                                                                                           33.45
                                                                                                                                                         208.11
                                                                                                                            4398.9
                                                                217.29
                                                                              179.96
                  13 20 11
                                                  34.13
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 361.9 SR 310.1 S5 128.0
CRT -.0541 CRS .3030 CST -.9542
                                                                   SCT 1477.0 SGR 429.4 SG3 240.9

RRT -.6544 RRF -.6684 RTF .8508

SGB 1538.2 R23 .1380 R13 -.8573

SGI 1504.8 SG2 318.7 THA 168.72
    TDF -.0597 TRA-1.4976 TC3 -.5873 BAU .4459
    RDE - .3939 RRA .2336 RC3 .1609 FAU .11023
                                                                                                                       LSA 384.5 MSA 308.7 SSA 19.5
    FDE .0537 FRA-1.3293 FC3-1.7423 BSP 4280
BDE .3984 BRA 1.5157 BC3 .6089 FSP -759
                                                                                                                        EL1 363.3 EL2 308.4 ALF 170.39
                                                                                                                                   ARRIVAL DATE APR 2 1966
                                                                        FLIGHT TIME 90.00
LAUNCH DATE JAN 2 1966
                                                                        DISTANCE 276.256
  HELTOCENTRIC CONIC
                          .00 LOL 101.15 VL 29.443 GAL -13.82 AZL 88.15 HCA 130.88 SHA 141.56 ECC .24193 INC 1.8516 V1 30.287 1.40 LOP 232.04 VP 38.888 GAP 3.48 AZP 91.21 TAL 247.14 TAP 18.01 RCA 107.31 APO 175.80 V2 34.977 7.28 GP 16.24 ZAL 164.52 ZAP 117.85 ETS 6.04 ZAE 146.06 ETE 161.00 ZAC 26.58 ETC 177.77 CLP-119.12
    RL 147.10 LAL
    RP 108.35 LAP
    RC 95.794 GL
   PLANETOCENTRIC CONIC
                                                                                                                               -7.37 RAP 293.06 ECC 1.8743
                                                                                                  2.41 VHP 4.554 DPA
    C3 53.122 VHL 7.288 OLA -13.99 RAL 295.43 RAD 6568.9 VEL 13.209 PTH
    LNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                           1407.2
                                                                                                                                                          21.60
                                                                                             114.84
                                                                                                            2 42 28
                                                  -14.06
                                                                 28.76
                                                                              170.68
        90.00
                     2 9 1
                                 2007.24
                                                                                                          11 59 46
                                                                                                                            4951.8
                                                                                                                                            28.15
                                                                                                                                                          249.99
                   10 27 14
                                                  28.30
                                                                 258.65
                                                                               180.28
                                                                                                91.13
                                  5551.76
        90.00
                                                                                                            3 52 26
                                                                                                                                           -11.89
                                                                                                                            1168.7
                                                                  10.52
                                                                               169.97
                                                                                               115.88
                     3 22 57
                                 1768.71
                                                   -15.50
       100.00
                                                                                                90.28 13 23 45
                                                                                                                            4665.5
                                                                                                                                            29.61
                                                                                                                                                          228.83
                   11 56 U 5265.53
                                                   29.89
                                                                 237.62
                                                                               180.30
       100.00
                                                                                                                            1007.0
                                                                                                           4 41 22
                                                                                                                                                          349.37
                                                                                               118.80
                   4 14 35 1606.98
13 20 51 5000.01
                                                  -19.26
                                                                 356.21
                                                                               167.93
       110.00
                                                                                               87.93 14 44 11
                                                                                                                            4400.0
                                                                                                                                                          208.20
                                                                217.38
                                                                              180.22
                                                   34.13
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 1583.5 SGR 427.2 SG3 236.6
RRT -.6775 RRF -.7140 RTF .8544
SGB 1640.1 R23 .1525 R13 -.8605
SG1 1610.8 SG2 308.8 TMA 169.24
                                                                                                                        ST 384.8 SR 295.9 SS 124.0
CRT -.0380 CRS .2539 CST -.9618
    TOE -.0750 TRA-1.5601 TC3 -.6532 BAU .4798
    RDE -.3695 RRA .2305 RC3 .1725 FAU .10701
                                                                                                                        LSA 403.8 MSA 296.0 SSA 19.6
    FOE .0263 FRA-1.2552 FC3-1.7440 B5P 4651
BDE .5770 BRA 1.5771 BC3 .6756 FSP -750
                                                                                                                        ELI 385.2 EL2 295.4 ALF 175.93
                                                                                                                                  ARRIVAL DATE APR 4 1966
                                                                        FLIGHT TIME 92.00
LAUNCH DATE JAN 2 1966
                                                                       OISTANCE 282.305
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 29.361 GAL -13.62 A7L 88.29 HCA 134.07 SHA 140.83 ECC .23938 INC 1.7058 V1 30.287 RP 108.39 LAP 1.23 LOP 235.23 VP 38.814 GAP 3.83 A7P 91.19 TAL 245.97 TAP 20.04 RCA 107.12 APO 174.54 V2 34.964 RC 99.145 GL 6.80 GP 16.81 7AL 164.16 7AP 120.74 ETS 7.53 7AE 144.09 ETE 181.16 7AC 26.62 ETC 178.90 CLP-122.28
   PLANETOCENTRIC CONIC
    C3 51.473 VHL 7.174 DLA -14.36 RAL 296.17 RAD 6568.9 VEL 13.147 PTH 2.40 VHP 4.623 DPA -6.80 RAP 293.03 ECC 1.8471
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          20.61
                    2 15 12 1986.69
10 26 56 5556.67
3 28 52 1748.97
11 55 57 5269.62
                                                                             170.92
                                                                                                           2 48 18
                                                                                                                         1386.7
                                                                                            115.15
                                                  -13.47
                                                                 27.54
        90.00
                                                                                                91.31 11 59 33
                                                                                                                            4956.7
                                                                                                                                            28.17
                                                                                                                                                          250.35
                                                  28.29
                                                                 259.01
                                                                               180.58
                    10 26 56
        90.00
                                                                                                           3 58 1
                                                                                                                           1149.0
                                                                                                                                          -11.27
                                                                                                                                                           2.45
                                                                                               116.21
                                                                  9.35
                                                                               170.21
                                                  -14.91
       100.00
                                                                                                90.44 13 23 46
                                                                                                                                                          229.13
                                                                                                                            4669.6
                                                                                                                                            29.63
                    11 55 57
                                                  29.89
                                                                 237.93
                                                                               180.61
       100.00
                                                                                                           4 46 27
                                                                                                                            988.9
                                                                                                                                                          348.35
                                                                                               119.17
                    4 19 58 1588.94
13 21 21 5002.41
                                                   -18.67
                                                                 355.15
                                                                               168.15
       110.00
                                                                                                88.04 14 44 43
                                                                                                                                                          208.39
                                                                                                                            4402.4
                                                                                                                                            33.49
                                                                 217.57
                                                                               180.54
                                                   34.13
                    13 21 21
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 1690.7 SGR 425.1 SG3 231.7

RRT -.7000 RRF -.7404 RTF .8569

SGB 1743.3 R23 .1697 R13 -.8627

.SG1 1717.5 SG2 298.8 THA 169.70
                                                                                                                        ST 408.6 SR 280.4 SS 120.2
CRT -.0162 CRS .1926 CST -.9692
    TDE -. 0949 TRA-1.6186 TC3 -. 7217 BAU .5127
    ROE -.3439 RRA .2264 RC3 .1850 FAU .10355
FOE -.0030 FRA-1.1784 FC3-1.7417 BSP 5023
BOE .3567 BRA 1.6343 BC3 .7450 FSP -738
                                                                                                                        LSA 425.1 MSA 280.9 SSA 19.7
                                                                                                                        ELI 408.6 EL2 280.3 ALF 178.79
    BOE .3567 BRA 1.6343 BC3 .7450 FSP
                                                                                                                                   ARRIVAL DATE APR 6 1966
                                                                         FLIGHT TIME 94.00
LAUNCH DATE JAN 2 1966
                                                                         OISTANCE 288.327
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 29.277 GAL -13.41 AZL 88.46 HCA 137.26 SMA 140.10 ECC .23688 INC 1.5434 VI 30.287 RP 108.43 LAP 1.05 LOP 238.42 VP 38.739 GAP 4.16 AZP 91.13 TAL 244.76 TAP 22.01 RCA 106.91 APO 173.29 V2 34.951 RC 101.502 GL 6.24 GP 17.49 ZAL 163.77 ZAP 123.39 ETS 9.17 ZAE 142.25 ETE 161.12 ZAC 26.87 ETC 180.15 CLP-125.24
   PLANETOCENTRIC CONIC
    C3 49.825 VHL 7.059 DLA -14.79 RAL 296.96 RAD 6568.8 VEL 13.084 PTH 2.39 VHP 4.700 DPA -6.10 RAP 293.18 ECC 1.8200
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              115.48
                                                                                                            2 54 57
                                                                                                                           1363.4
                                                                                                                                            -9.25
                                                                                                                                                           19.27
                                                                               171.21
                     2 22 14 1963.36
                                                   -12.79
                                                                  26.17
                                                                                                                             4963.8
                                                                                                                                             28.20
                                                                                                                                                          250.87
                                                                                                 91.58
                                                                                                           11 58 56
                                                                                180.95
                    10 26 12
                                   5563.80
                                                   28.28
                                                                 259.53
                                                                                                                             1126.6
                                                                                                                                            -10.55
                                                                                                                                                            1.18
                                                                                                116.57
                                                                                170.48
                     3 35 36
                                  1726.63
                                                  -14.23
                                                                   8.04
                                                                                                 90.68 13 23 27
                                                                                                                             4675.8
                                                                                                                                            29.66
                                                                                                                                                          229.59
                    11 55 31
                                   5275.76
                                                   29.89
                                                                 238.38
                                                                                180.98
       100.00
                                                                                                                             968.7
                                                                                                                                            -13.92
                                                                                                                                                          347.22
                                                                                                119.57
                                                                                                            4 52 11
                                                                                168.40
                     4 26 2
                                   1568.65
                                                  -17.99
                                                                 353.97
       110.00
                                                                                                88.23 14 45 1
                    13 21 34
                                                                                                                            4406.5
                                                                                                                                            33.52
                                                                                                                                                          208.70
                                                                                180.93
                                                                 217.89
       110.00
                                   5006.51
                                                   34.14
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 433.1 SR 263.8 SS 116.3
CRT .0103 CRS .1267 CST -.9747
                                                                     SGT 1796.8 SGR 423.1 SG3 225.8
RRT -.7208 RRF -.7672 RTF .8579
SGB 1845.9 R23 .1910 R13 -.8635
     TOE -.1188 TRA-1.6712 TC3 -.7922 BAU .5440
     ROE - .3175 RRA .2207 RC3 .1982 FAU .09970
                                                                                                                       LSA 447.8 MSA 264.3 SSA 19.9
    FOE -.0305 FRA-1.0952 FC3-1.7324 BSP 5366
BDE .3390 BRA 1.6857 BC3 .8166 FSP -715
                                                                                                                        EL1 433.1 EL2 263.8 ALF
                                                                     SG1 1823.2 SG2 289.1 THA 170.12
```

FLIGHT TIME 88.00

```
FLIGHT TIME 96.00
                                                                                                                                                                             ARRIVAL DATE APR 8 1966
LAUNCH DATE JAN 2 1966
    HELIOCENTRIC CONIC
                                                                                               DISTANCE 294.323
     RL 147.10 LAL .00 LOL 101.15 VL 29.192 GAL -13.19 A7L 88.64 HCA 140.45 SMA 139.37 ECC .23446 INC 1.3604 V1 30.287 RP 108.46 LAP .87 LOP 241.60 VP 38.664 GAP 4.48 A7P 91.05 TAL 243.49 TAP 23.94 RCA 106.69 APO 172.04 VZ 34.939 RC 103.862 GL 5.58 GP 18.29 ZAL 163.33 ZAP 125.79 ETS 10.97 ZAE 140.52 ETE 160.89 ZAC 27.31 ETC 181.55 CLP-128.02
    PLANETOCENTRIC CONIC
     C3 48.183 VHL 6.941 CLA -15.31 RAL 297.81 RAD 6568.8 VEL 13.021 PTH 2.38 VHP 4.784 CPA -5.25 RAP 293.47 ECC 1.7930 LNCH AZNTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               1336.5
                         2 30 22 1936.46
10 24 50 5573.96
                                                                                                      171.56
                                                                                                                          115.84 3 2 38
91.95 11 57 44
                                                                                                                                                                                    -8.42
                                                                                                                                                                                                            17.73
                                                                   -11.99
                                                                                      24.59
                                                                                      260.28
                                                                                                         181.39
                                                                                                                                                                    4974.0
                                                                                                                                                                                          28.23
                                                                                                                                                                                                            251.61
                                                                    28.26
                                                                                                                             116.95 4 11 42
91.03 13 22 37
120.00 4 58 44
88.53 14 44 57
                                                                                                                                                                                         -9.73
                          3 43 21
                                             1700.97
                                                                   -13.45
                                                                                       6.54
                                                                                                         170.82
                                                                                                                                                                    1101.0
                                                                                                                                                                                                            359.72
         100.00
                         11 54 32
                                             5284.68
                                                                    29.88
                                                                                      239.05
                                                                                                         181.44
                                                                                                                                                                    4684.7
                                                                                                                                                                                        29.70
                                                                                                                                                                                                           230.25
                         4 32 58 1545.52
13 21 24 5012.90
                                                                  -17.21
                                                                                                        168.71
                                                                                                                                                                      945.5
                                                                                                                                                                                      -13.09
                                                                                      352.63
                                                                                                                                                                                                            345.94
                                                                                      218.39
                                                                                                         181.42
                                                                                                                                                                    4412.9
                                                                                                                                                                                                           209.19
         110.00
                                                                   34.16
                                                                                                                                                                                       33.57
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           SGT 1904.6 SGR 422.3 SG3 219.9
RRT -.7415 RRF -.7950 RTF .8586
                                                                                                                                                              ST 459.8 SR 245.4 SS 113.9
CRT .0441 CRS .0320 CST -.9806
      TOE -.1500 TRA-1.7192 TC3 -.8666 BAU
                                                                         .5749
     ROE -.2895 RRA .2143 RC3 .2132 FAU .09590
                                                                                           SCB 1950.9 R23 .2150 R13 -.8641
SCI 1930.7 SC2 279.5 THA 170.46
                                                                                                                                                              LSA 473.4 MSA 245.2 SSA 20.0
EL1 460.0 EL2 245.0 ALF 1.88
     FOE -.0650 FRA-1.0153 FC3-1.7231 BSP 5741
BDE .3260 BRA 1.7326 BC3 .8924 FSP -700
                                                                                                FLIGHT TIME 98.00
                                                                                                                                                                              ARRIVAL DATE APR 10 1966
   HELIOCENTRIC CONIC
                                                                                                DISTANCE 300.296
     RL 147.10 LAL
RP 108.50 LAP
                                   .00 LOL 101.15 VL 29.106 GAL -12.97 ATL 88.85 HCA 143.63 SMA 138.64 ECC .23210 INC 1.1510 VI 30.287 .68 LOP 244.79 VP 38.588 GAP 4.78 ATP 90.93 TAL 242.19 TAP 25.82 RCA 106.46 APO 170.82 VZ 34.926
                                  4.79 GP 19.26 ZAL 162.86 ZAP 127.93 ETS 13.00 ZAE 138.88 ETE 160.47 ZAC 27.94 ETC 183.12 CLP-130.63
    PLANETOCENTRIC CONIC
     C3 46.551 VHL 6.823 DLA -15.94 RAL 298.72 RAD 6568.7 VEL 12.958 PTH
                                                                                                                                   2.36 VHP 4.878 DPA
                                                                                                                                                                        -4.23 RAP 293.90 ECC 1.7661
     UNITED THE LET TIME IN LAT IN LONG IN RT ASC IN AZMITH IN TIME PO CST THE IN LAT IN LONG PO CST THE IN LAT IN LONG PO CST THE PO CST THE IN LAT IN LONG PO CST THE PO CST THE IN LAT IN LONG PO CST THE PO CST THE IN LAT IN LONG PO CST THE IN LAT IN LATE PO CST THE PO CST THE IN LATE PO CST THE PO CST THE IN LATE PO CST THE PO 
                           2 39 55 1904.90
                        10 22 34 5588.26

5 52 25 1670.99

11 52 46 5297.40

4 41 1 1518.73

13 20 39 5022.42
          90.00
                                                                   28.22
                                                                                     261.32
                                                                                                         181.93
                                                                                                                              92.47 11 55 43
                                                                                                                                                                     AGRA . S
                                                                                                                                                                                          28.26
                                                                                                                                                                                                            252.55
         100.00
                                                                  -12.52
                                                                                       4.80
                                                                                                         171.23
                                                                                                                              117.37
                                                                                                                                             4 20 16
                                                                                                                                                                     1071.0
                                                                                                                                                                                          -8.75
                                                                                                                                                                                                            358.03
                                                                                                                             91.52 13 21 3
120.48 5 6 20
88.96 14 44 21
        100.00
                                                                   29.86
                                                                                     239.99
                                                                                                        181.99
                                                                                                                                                                    4697.4
                                                                                                                                                                                      29.75
                                                                                                                                                                                                            231.19
        110.00
                                                                  -16.29
                                                                                     351.10
                                                                                                        169.08
                                                                                                                                                                     91A.7
                                                                                                                                                                                      -12.12
                                                                                                                                                                                                            344.47
        110.00
                                                                   34.17
                                                                                     219.13
                                                                                                         182.01
                                                                                                                                                                    4422.4
                                                                                                                                                                                        33.65
                                                                                                                                                                                                           209.93
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 2012.8 SGR 422.9 SG3 213.8

RRT -.7608 RRF -.8231 RTF .8589

SG8 2056.7 R23 .2427 R13 -.8644

SG1 2038.8 SG2 270.9 THA 170.75
                                                                                                                                                              ST 489.3 SR 225.2 SS 113.4
CRT .0840 CRS -.0823 CST -.9830
      TOE -.1886 TRA-1.7608 TC3 -.9446 BAU .6051
     RDE -.2600 RRA .2066 RC3 .2301 FAU .09199
     FDE -.1031 FRA -.9346 FC3-1.7107 BSP 6114
BDE .3213 BRA 1.7729 BC3 .9722 FSP -683
                                                                                                                                                              LSA 502.3 MSA 224.2 SSA 20.3
EL1 489.8 EL2 224.2 ALF 2.80
                                                                                               FLIGHT TIME 100.00
                                                                                                                                                                            ARRIVAL DATE APR 12 1966
LAUNCH DATE JAN 2 1966
                                                                                               DISTANCE 306.246
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 29.020 GAL -12.74 A7L 89.09 HCA 146.82 SMA 137.92 ECC .22982 INC .9075 V1 30.287 RP 108.54 LAP .50 LOP 247.97 VP 38.512 GAP 5.07 A7P 90.76 TAL 240.85 TAP 27.67 RCA 106.22 APO 169.61 V2 34.914 RC 108.588 GL 3.84 GP 20.43 7AL 162.33 7AP 129.81 ETS 15.29 7AE 137.29 ETE 159.83 7AC 28.75 ETC 184.89 CLP-133.10
    PLANETOCENTRIC CONIC
     C3 44.934 VHL 6.703 DLA -16.72 RAL 299.72 RAD 6568.7 VEL 12.896 PTH 2.35 VHP 4.981 DPA -2.99 RAP 294.43 ECC 1.7395
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                               1267.1
                        2 51 24 1867.07
10 19 1 5608.33
4 3 15 1635.23
                                                                                     20.56
                                                                                                    172.52
                                                                                                                          116.66 3 22 31
                                                                  -9.90
          90.00
                                                                                                                                          11 52 29
4 30 30
                                                                                                                              93.20
                                                                                                                                                                    5008.3
                                                                                                                                                                                        28.30
                                                                   28.15
                                                                                     262.79
                                                                                                        182.58
          90.00
                                                                                                       171.74
                                                                                                                             117.83
                                                                                                                                                                   1035.2
                                                                                                                                                                                         -7.58
                                                                                                                                                                                                          356.03
                                                                                      2.74
         100.00
                                                                  -11.39
                                                                                                                                           13 18 27
5 15 19
                        11 49 51 5315.40
4 50 32 1487.11
                                                                                                        182.67
                                                                                                                              92.23
                                                                                                                                                                    4715.4
                                                                                                                                                                                        29.81
                                                                                                                                                                                                          232.52
                                                                                     241.33
                                                                 29.82
        100.00
                                                                                     349.31
                                                                                                       169.54
                                                                                                                             121.00
                                                                                                                                                                    887.1
                                                                                                                                                                                       -10.97
        110.00
                                                                -15.19
                                                                                                                                           14 43 0
                                                                                                        182.76
                                                                                                                              89.61
                                                                                                                                                                    4436.3
        110.00
                         13 19 4
                                            5036.28
                                                                 34.18
                                                                                     220.21
                                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                                                              ORBIT CETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                          SGT 2119.4 SGR 424.7 SG3 206.8
RRT -.7773 RRF -.8507 RTF .8583
SGB 2161.5 R23 .2750 R13 -.8638
                                                                                                                                                             ST 522.2 SR 203.3 SS 114.7
CRT .1296 CRS -.2064 CST -.9798
     TOE - .2352 TRAFT.7933 TC3-1.0254 BAU .6338
    ROE -.2295 RRA .1968 RC3 .2486 FAU .08777
FDE -.1422 FRA -.8490 FC3-1.6910 BSP 6458
BDE .3288 BRA 1.8040 BC3 1.0551 FSP -658
                                                                                                                                                             LSA 535.0 MSA 201.4 SSA 20.6
EL1 523.0 EL2 201.3 ALF 3.39
                                                                                          SG1 2145.3 SG2 263.9 THA 171.01
                                                                                               FLIGHT TIME 102.00
                                                                                                                                                                             ARRIVAL DATE APR 14 1966
LAUNCH DATE JAN 2 1966
                                                                                               DISTANCE 312.175
   HELIOCENTRIC CONIC
                                .00 LOL 101.15 VL 28.933 GAL -12.50 AZL 89.38 HCA 150.00 SMA 137.20 ECC .22761 INC .6193 V1 30.287 .31 LOP 251.15 VP 38.436 GAP 5.34 AZP 90.54 TAL 239.47 TAP 29.47 RCA 105.97 APO 168.43 V2 34.903 Z.66 GP 21.87 ZAL 161.73 ZAP 131.39 ETS 17.92 ZAE 135.71 ETE 158.97 ZAC 29.75 ETC 186.91 CLP-135.43
    RL 147.10 LAL
RP 108.58 LAP
    RC 110.951 GL
   PLANETOCENTRIC CONIC
     C3 43.344 VHL 6.584 DLA -17.71 RAL 300.81 RAD 6568.6 VEL 12.834 PTH
                                                                                                                                 2.34 VHP 5.098 DPA -1.46 RAP 295.03 ECC 1.7133
     ENCH ATHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        3 5 33 1820.56
10 13 33 5636.71
                                                                                                                                               3 35 54
                                                                                                                                                                   1220.6
                                                                    -8.47
                                                                                      17.90
                                                                                                       173.21
                                                                                                                            117.12
          90.00
                                                                                                                                          11 47 30
                                                                                                                                                                                         28.32
                                                                    28.03
                                                                                     264.85
                                                                                                        183.40
                                                                                                                              94.23
                                                                                                                                                                    5036.7
          90.00
                                                                    -9.99
                                                                                         .26
                                                                                                        172.40
                                                                                                                             118.32
                                                                                                                                               4 43 3
                                                                                                                                                                     991.5
                                                                                                                                                                                         -6.13
                                                                                                                                                                                                           353.60
                                           1591.55
        100.00
                           4 16 32
                                                                                                                              93.22 13 14 17
121.57 5 26 11
90.53 14 40 31
                                                                   29.73
                                                                                     243.22
                                                                                                        183.52
                                                                                                                                                                    4741.0
                                                                                                                                                                                         29.86
        100.00
                         11 45 16
                                             5340.95
                                                                  -13.84
                                                                                                        170.13
                                                                                                                            121.57
                                                                                                                                                                     849.0
                                                                                                                                                                                         -9.57
                                                                                                                                                                                                           340.69
        110.00
                           5 2 2
                                             1448.99
                                                                                     347.18
                                                                  34.18
                                                                                     221.78
                                                                                                                                                                  4456.3
                                                                                                                                                                                       33.88
                         13 16 15
                                             5056.28
                                                                                                       183.70
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                        SCT 2228.2 SGR 429.5 SG3 199.8
RRT -.7919 RRF -.8780 RTF .8580
SGB 2269.2 R23 .3097 R13 -.8636
                                                                                                                                                             ST 562.4 SR 178.6 SS 121.4
CRT .1810 CRS -.3454 CST -.9688
     TOE -.2956 TRA-1.8177 TC3-1.1113 BAU .6627
     ROE -.1964 RRA .1855 RC3 .2701 FAU .08354
FOE -.1908 FRA -.7660 FC3-1.6687 BSP 6837
BDE .3549 BRA 1.8271 BC3 1.1436 FSP -638
                                                                                                                                                           LSA 575.7 MSA 176.3 SSA 21.0
EL1 563.4 EL2 175.4 ALF 3.64
                                                                                          SG1 2254.4 SG2 259.2 THA 171.20
```

ARRIVAL DATE APR 16 1966

LAUNCH DATE JAN 2 1966 FLIGHT TIME 104.00 DISTANCE 318.084 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 28.846 GAL -12.26 A7L 89.73 HCA 153.17 SNA 136.49 ECC .22548 INC .2699 VI 30.287 RP 108.61 LAP .12 LOP 254.32 VP 38.361 GAP 5.60 A7P 90.24 TAL 238.06 TAP 31.23 RCA 105.71 APO 167.27 V2 34.892 RC 113.313 GL 1.18 GP 23.65 7AL 161.02 7AP 132.61 ETS 20.97 7AE 134.08 ETE 157.85 7AC 30.96 ETC 189.25 CLP-137.66 PLANETOCENTRIC CONIC .42 RAP 295.67 ECC 1.6879 C3 41.800 VHL 6.465 DLA -18.98 RAL 302.02 RAD 6568.6 VEL 12.774 PTM 2.32 VMP 5.233 OPA ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -2.88 174.14 117.59 3 53 1 1161.5 3 23 39 1761.46 10 5 8 5677.53 -6.62 14.54 90.00 11 39 45 5077.5 28.28 259.18 184.42 95.70 27.78 267.81 118.85 4 58 58 936.5 -4.28 340.55 4 33 21 1536.53 11 38 7 5377.69 173.29 100.00 1536.53 -8.20 357.16 94.64 13 7 45 122.20 5 39 44 91.87 14 36 21 4777.7 29.89 237.15 29.56 245.94 184.60 100.00 801.8 -7.81 334.16 122.20 5 16 22 1401.77 13 11 36 5085.22 170.92 110.00 -12.14 344.57 34.14 4485.2 34.02 214.79 184.91 110.00 224.04 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 612.9 SR 150.6 55 134.7 CRT .2336 CRS -.4730 CST -.9516 SGT 2337.1 SGR 437.3 SG3 192.0 RRT -.8028 RRF -.9036 RTF .8577 TOE -.3722 TRA-1.8301 TC3-1.2010 BAU .6911 RDE -.1605 RRA .1715 RC3 .2947 FAU .07909 FDE -.2473 FRA -.6806 FC3-1.6380 BSP 7215 BOE .4053 BRA 1.8381 BC3 1.2366 FSP -617 LSA 627.4 MSA 149.8 SSA 21.5 EL1 614.0 EL2 146.2 ALF 3.48 SGB 2377.7 R23 .3464 R13 -.8635 SG1 2363.7 SG2 257.8 THA 171.35 BOE .4053 BRA 1.8381 BC3 1.2366 FSP ARRIVAL DATE APR 18 1966 FLIGHT TIME 106.00 LAUNCH DATE JAN 2 1966 HELIOCENTRIC CONIC **DISTANCE 323.976** RL 147.10 LAL .00 LOL 101.15 VL 28.759 GAL -12.01 AZL 90.17 HCA 156.35 SMA 135.79 ECC .22343 INC .1653 V1 30.287 RP 108.64 LAP -.07 LOP 257.50 VP 38.285 GAP 5.84 AZP 89.85 TAL 236.61 TAP 32.96 RCA 105.45 APO 166.13 V2 34.881 RC 115.673 GL -.73 GP 25.88 TAL 160.13 ZAP 133.41 ETS 24.54 ZAE 132.33 ETE 156.43 ZAC 32.39 ETC 191.99 CLP-139.80 PLANETOCENTRIC CONIC C3 40.340 VHL 6.351 DLA -20.65 RAL 303.40 RAD 6568.6 VEL 12.716 PTH 2.31 VHP 5.396 DPA 2.77 RAP 296.28 ECC 1.6639 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 16 2 1082.9 -.34 3.48 3 47 59 1682.86 9 51 50 5738.18 175.48 118.04 10.11 -4.12 11 27 28 28.10 263.61 185.71 5138.2 97.84 90.00 27.30 272.19 -1.85 346.58 4 55 41 1464.34 11 26 48 5431.93 119.37 5 20 6 864.3 174.56 100.00 -5.80 353.13 96.71 12 57 20 4831.9 122.88 5 57 19 741.3 93.82 14 29 29 4527.8 29.82 241.18 185.99 11 26 48 29.20 249.93 100.00 -5.53 334.96 122.88 5 34 58 1341.27 13 4 2 5127.77 -9.93 341.29 172.05 110.00 34.15 218.11 186.50 33.99 227.35 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 678.7 SR 118.7 SS 155.3 CRT .2773 CRS -.5649 CST -.9350 SGT 2443.0 SGR 448.2 SG3 182.9 RRT -.8077 RRF -.9264 RTF .8569 SGB 2483.8 R23 .3837 R13 -.8631 TOE -.4697 TRA-1.8253 TC3-1.2917 BAU .7179 ROE -.1212 RRA .1533 RC3 .3218 FAU .07409 LSA 695.0 MSA 123.6 SSA 21.9 EL1 679.5 EL2 113.9 ALF 2.86 FOE -.3103 FRA -.5882 FC3-1.5901 BSP 7543 BOE .4851 BRA 1.8317 BC3 1.3312 FSP -584 5G1 2470.0 SG2 261.4 THA 171.47 ARRIVAL DATE APR 20 1966 FLIGHT TIME 108.00 LAUNCH DATE JAN 2 1966 DISTANCE 329.849 RL 147.10 LAL .00 LOL 101.15 VL 28.673 GAL -11.75 AZL 90.73 HCA 159.52 SMA 135.10 ECC .22147 INC .7275 V1 30.287 RP 108.68 LAP -.25 LOP 260.67 VP 38.211 GAP 6.08 AZP 89.32 TAL 235.14 TAP 34.65 RCA 105.18 APO 165.02 V2 34.870 RC 118.029 GL -3.27 GP 28.75 TAL 158.93 TAP 133.62 ETS 28.72 TAE 130.34 ETE 154.65 TAC 34.12 ETC 195.26 CLP-141.90 PLANETOCENTRIC CONIC C3 39.037 VHL 6.248 DLA -22.91 RAL 305.03 RAO 6568.5 VEL 12.665 PTH 2.30 VHP 5.601 DPA 5.74 RAP 296.81 ECC 1.6425 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 118.31 4 49 35 101.09 11 6 38 357.19 4 49 35 970.2 177.60 4 23 25 1570.23 9 29 23 5834.22 3.82 - .50 270.57 27.49 187.31 5234.2 26.22 279.01 90.00 341.05 1.57 119.80 5 50 12 763.5 347.57 176.54 5 27 28 1363.50 -2.41 100.00 247.42 256.06 187.75 99.83 12 39 58 4916.2 29.44 28.37 11 8 2 5516.19 100.00 330.71 336.95 173.76 123.56 6 21 27 660.1 -2.44 6 0 27 1260.08 12 51 32 5192.37 -6.90 110.00 96.76 14 18 4 223.15 4592.4 34.16 188.64 232.35 33.59 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 774.2 SR 80.2 55 189.6 CRT .2640 CRS -.5762 CST -.9267 SGT 2553.5 SGR 464.7 SG3 172.8 TOE -.6040 TRA-1.8025 TC3-1.3845 BAU .7457 ROE -.0750 RRA .1307 RC3 .3527 FAU .06873 FDE -.3906 FRA -.4954 FC3-1.5241 BSP 7940 BDE .6087 BRA 1.8073 BC3 1.4288 FSP -556 RRT -.8074 RRF -.9460 RTF .8575 SGB 2595.4 R23 .4164 R13 -.8641 LSA 794.3 MSA 101.4 SSA 21.4 EL1 774.5 EL2 77.3 ALF 1.58 SG1 2581.2 SG2 271.2 THA 171.55 ARRIVAL DATE APR 22 1966 FLIGHT TIME 110.00 LAUNCH DATE JAN 2 1966 **DISTANCE 335.706** HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 28.586 GAL -11.49 AZL 91.48 MCA 162.68 SMA 134.42 ECC .21960 INC 1.4835 V1 30.287 RP 108.71 LAP -.44 LOP 263.84 VP 38.137 GAP 6.31 AZP 88.58 TAL 233.63 TAP 36.31 RCA 104.91 APO 163.94 V2 34.860 RC 120.382 GL -6.75 GP 32.50 ZAL 157.15 ZAP 133.04 ETS 33.65 ZAE 127.90 ETE 152.48 ZAC 36.26 ETC 199.22 CLP-144.02 PLANETOCENTRIC CONIC C3 38.053 VHL 6.169 DLA -26.04 RAL 307.05 RAD 6568.5 VEL 12.626 PTH 2.29 VHP 5.881 OPA 9.59 RAP 297.12 ECC 1.6262 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.79 5 48 5 106.57 8 55 56 778.4 5 25 6 1378.39 181.54 5.66 353.09 90.00 25.35 125.1 725.12 23.30 313.38 188.92 8 43 51 90.00 6.93 332.25 604.1 180.06 119.76 6 39 8 2.99 338.82 1204.13 100.00 6 19 4 104.87 12 6 57 28.02 189.83 5062.7 26.23 265.41 5662.65 10 32 34 100.00 124.11 6 57 40 101.33 13 57 48 2.05 324.59 542.8 330.79 176.68 6 38 37 1142.79 -2.45 110.00 4696.8 33.69 32.47 240.29 191.49 12 29 31 5296.75 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2664.D SGR 486.2 SG3 160.5 RRT -.7986 RRF -.9604 RTF .8594 SGB 2708.0 R23 .4417 R13 -.8665 ST 916.1 SR 38.2 SS 240.1 TOE -. 7926 TRA-1.7494 TC3-1.4689 BAU .7725 CRT -.1392 CRS -.1811 CST -.9313 ROE -.0186 RRA .0998 RC3 .3849 FAU .06250 FDE -.4879 FRA -.3957 FC3-1.4219 BSP 8329 BDE .7928 BRA 1.7522 BC3 1.5185 FSP -519 LSA 943.3 MSA 91.3 SSA 17.9 EL1 916.2 EL2 37.8 ALF 179.67

SG1 2692.5 SG2 289.6 THA 171.61

Hilds .

```
LAUNCH DATE JAN 2 1966
                                                                    FLIGHT TIME 112.00
                                                                                                                         ARRIVAL CATE APR 24 1966
   HELIOCENTRIC CONIC
                                                                   DISTANCE 341.544
    RL 147.10 LAL .00 LOL 101.15 VL 28.500 GAL -11.22 AZL 92.56 MCA 165.84 SMA 133.76 ECC .21781 INC 2.5645 V1 30.287 RP 108.74 LAP -.63 LOP 267.01 VP 38.064 GAP 6.52 AZP 87.51 TAL 232.09 TAP 37.94 RCA 104.63 APO 162.89 V2 34.851 RC 122.731 GL -11.74 GP 37.52 ZAL 154.24 ZAP 131.29 ETS 39.44 ZAE 124.68 ETE 149.93 ZAC 39.02 ETC 204.13 CLP-146.30
   PLANETOCENTRIC CONIC
    C3 37.780 VHL 6.147 DLA -30.58 RAL 309.78 RAO 6568.5 VEL 12.615 PTH 2.29 VHP 6.300 DPA 14.67 RAP 297.01 ECC 1.6218
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       116.01 6 1 15
116.00 9 4 27
                   5 38 34 1361.47
                                                16.68
                                                            357.54
                                                                        189.29
                                                                                                                    761.5
        77.94
                                                                                                                                 20.04
                                                                                                                                              350.30
                                                16.70
                                                                          189.29
                    8 52 9
                                738.40
                                                            311.62
                                                                                                                     138.4
                                                                                                                                  20.06
       77.94
                    5 38 34 1361.47
                                                16.68
                                                            357.54
                                                                          189.29
                                                                                        116.01
                                                                                                    6 1 15
                                                                                                                     761.5
                                                                                                                                  20.04
                                                                                                                                               350.30
                                                                                                  9 4 27
8 2 51
                                                16.70
                                                                          189.29
      102.06
                    8 52 9
                                738.40
                                                            311.62
                                                                                        116.00
                                                                                                                     138.4
      110.00
                   7 47 8
                                 942.77
                                                 5.19
                                                            320.34
                                                                         182.57
                                                                                         123.83
                                                                                                                     342.8
                                                                                                                                               314.02
                                                                                        109.03 13 14 18
                 11 42 45 5493.14
      110.00
                                                28.95
                                                            254.48
                                                                          194.79
                                                                                                                  4893.1
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                ST 1135.9 SR 55.1 SS 311.3
CRT -.9624 CRS ..9663 CST -.9463
    TOE-1.0735 TRA-1.6456 TC3-1.5217 BAU .7961
                                                                SGT 2770.4 SGR 510.3 SG3 144.5
                                                                RRT -.7762 RRF -.9670 RTF .8633
SGB 2817.1 R23 .4567 R13 -.8709
    RDE .0537 RRA .0537 RC3 .4104 FAU .05482
    FDE -.6036 FRA -.2836 FC3-1.2562 BSP 8658
                                                                                                               LSA 1175.0 MSA 97.7 SSA 11.5
ELI 1137.1 EL2 15.0 ALF 177.33
    BOE 1.0749 BRA 1.6465 BC3 1.5761 FSP
                                                                5G1 2799.0 SG2 318.5 THA 171.76
                                                  -467
                                                                    FLIGHT TIME 114.00
                                                                                                                          ARRIVAL DATE APR 26 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 347,362
   RL 147.10 LAL .00 LOL 101.15 VL 28.415 GAL -10.94 AZL 94.25 HCA 169.00 SMA 133.11 ECC .21609 INC 4.2503 V1 30.287 RP 108.76 LAP -.81 LOP 270.18 VP 37.992 GAP 6.72 AZP 85.83 TAL 230.53 TAP 39.53 RCA 104.34 APO 161.87 V2 34.842 RC 125.075 GL -19.25 GP 44.44 ZAL 149.13 ZAP 127.78 ETS 46.23 ZAE 120.11 ETE 147.23 ZAC 42.77 ETC 210.34 CLP-149.10
   PLANETOCENTRIC CONIC
    C3 39.347 VHL 6.273 DLA -37.39 RAL 313.98 RAD 6568.5 VEL 12.677 PTH 2.30 VMP 7.005 DPA 21.52 RAP 296.03 ECC 1.6475
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                 1027.9
                  4 31 51 1627.86
10 32 21 5780.57
                                                                       196.08
       64.49
                                               19.67
                                                                                      122.46
                                                             19.94
                                                                                                   4 58 58
                                                                                                                                  23.60
                                                                                                                                               12.99
                                                                                                   12 8 41
      115.51
                                               19.68
                                                            272.23
                                                                          196.09
                                                                                        122.45
                                                                                                                    5180.6
                                                                                                                                  23.82
                                                                                                                                               265.28
                  4 31 51 1627.88
10 32 21 5780.57
                                                                                                    4 58 58
       64.49
                                               19.67
                                                             19.94
                                                                          196.08
                                                                                        122.46
                                                                                                                    1027.9
                                                                                                                                  23.80
                                                                                                                                                12.99
      115.51
                                               19.68
                                                            272.23
                                                                         196.09
                                                                                                                    5180.6
                                                                                                                                  23.82
                                                                                                                                               265.28
       64.49
                   4 31 51 1627.88
                                               19.67
                                                             19.94
                                                                         196.08
                                                                                                                   1027.9
                                                                                                                                  23.80
                                                                                                                                                12.99
      115.51
                  10 32 21
                               5780.57
                                               19.68
                                                            272.23
                                                                         196.09
                                                                                                                    5180.6
                                                                                                                                  23.82
                                                                                                                                               265.28
                                                               MID-COURSE EXECUTION ACCURACY
SGT 2884.D SGR 533.6 SG3 124.3
RRT -.7320 RRF -.9584 RTF .8741
SGB 2933.D R23 .4526 R13 -.8819
  DIFFERENTIAL CORRECTIONS
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                                                ST 1499.3 SR 140.3 SS 415.3
CRT -.9236 CRS .9904 CST -.9663
    TOE-1.5453 TRA-1.4568 TC3-1.4955 BAU .8158
   RDE .1525 RRA -.0186 RC3 .4102 FAU .04538
FDE -.7475 FRA -.1626 FC3 -.9985 BSP 9060
BDE 1.5528 BRA 1.4570 BC3 1.5508 FSP -405
                                                                                                               LSA 1557.8 MSA 115.1 55A 6.0
                                                                SG1 2910.8 SG2 360.2 THA 172.17
                                                                                                                EL1 1504.9 EL2 53.6 ALF 175.05
                                                                   FLIGHT TIME 116.00
                                                                                                                         ARRIVAL DATE APR 28 1966
LAUNCH DATE JAN 2 1966
  HELIOCENTRIC CONIC
                                                                   DISTANCE 353.152
   RL 147.10 LAL .00 LOL 101.15 VL 28.330 GAL -10.66 AZL 97.26 HCA 172.13 SMA 132.47 ECC .21443 INC 7.2597 VI 30.287 RP 108.79 LAP -.99 LOP 273.34 VP 37.921 GAP 6.91 AZP 82.81 TAL 228.94 TAP 41.06 RCA 104.06 APO 160.87 V2 34.834
   RC 127.413 GL -30.94 GP 54.13 7AL 139.82 7AP 121.67 ETS 54.58 7AE 113.11 ETE 145.45 7AC 48.07 ETC 218.74 CLP-153.65
   PLANETOCENTRIC CONIC
    C3 46.842 VHL 6.844 OLA -47.72 RAL 322.03 RAO 6568.8 VEL 12.969 PTH 2.36 VHP 8.417 OPA 30.89 RAP 293.08 ECC 1.7709
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                   4 2 10 1840.49
12 6 14 5655.79
                                                                                      133.41
                                                                                                                                27.54
                                                                        210.26
                                                                                                   4 32 51
                                                                                                                  1240.5
                                                                                                                                               34.55
                                               22.17
                                                            40.67
       49.84
                                                                                        133.40 13 40 30
                  12 6 14
                                               22.18
                                                            263.40
                                                                         210.27
                                                                                                                   5055.8
                                                                                                                                  27.55
                                                                                                                                              257.27
      130.16
                   4 2 10 1840.<del>4</del>9
12 6 14 5655.79
                                                                                        133.41
                                                                                                   4 32 51
                                                                                                                   1240.5
                                                                                                                                  27.54
                                                                                                                                               34.55
                                               22.17
                                                             40.67
                                                                        210.26
       49.84
                                                                                        133.40 13 40 30
                                                                                                                   5055.8
                  12 6 14
                                               22.18
                                                           263.40
                                                                        210.27
                                                                                                                                  27.55
                                                                                                                                              257.27
      130.16
                                                                                       133.41 4 32 51
133.40 13 40 30
                                                             40.67
                                                                         210.26
                                                                                                                   1240.5
                                                                                                                                  27.54
                                                                                                                                               34.55
                  4 2 10 1840.49
12 6 14 5655.79
                                               22.17
       49.84
                                                                                                                   5055.8
                                                                                                                                 27.55
                                                                                                                                              257.27
                                                            263.40
                                                                         210.27
                                               22.18
      130.16
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 2995.1 SGR 530.5 SG3 98.7

RRT -.6154 RRF -.8920 RTF .8989

SGB 3041.7 R23 .4161 R13 -.9054
                                                                                                               ST 2099.6 SR 223.8 SS 558.7
CRT -.9055 CRS .9667 CST -.9839
    TDE-2.4617 TRA-1.0672 TC3-1.2570 BAU .8135
   RDE .2588 RRA -.1459 RC3 .3279 FAU .03343
FDE -.9172 FRA -.0235 FC3 -.6178 BSP 9383
                                                                                                               L5A 2180.1 MSA 133.5 SSA 2.7
EL1 2109.4 EL2 94.5 ALF 174.48
    BOE 2.4753 BRA 1.0771 BC3 1.2990 FSP
                                                               SG1 3013.2 SG2 415.6 THA 173.66
LAUNCH DATE JAN 2 1966
                                                                   FLIGHT TIME 118.00
                                                                                                                         ARRIVAL DATE APR 30 1966
   HELIOCENTRIC CONIC
                                                                   DISTANCE 358.882
   RL 147.10 LAL .00 LOL 101.15 VL 28.246 GAL -10.35 A7L 104.15 HCA 175.21 SHA 131.84 ECC .21272 INC14.1534 V1 30.287 RP 108.81 LAP -1.17 LOP 276.51 VP 37.851 GAP 7.08 A7P 75.89 TAL 227.30 TAP 42.51 RCA 103.80 APO 159.89 V2 34.826 RC 129.747 GL -48.22 GP 67.39 ZAL 123.78 ZAP 112.01 ETS 69.22 ZAE 101.62 ETE 150.62 ZAC 55.45 ETC 234.50 CLP-167.10
   PLANETOCENTRIC CONIC
    C3 83.007 VHL 9.111 DLA -60.80 RAL 343.49 RAD 6569.6 VEL 14.295 PTH 2.60 VHP 12.095 CPA 43.21 RAP 284.36 ECC 2.3661
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     149.05
                                                                                                                               25.29
                                                                                                                  1480.5
                    4 40 39 2080.50
                                               18.48
                                                            62.48
                                                                         242.71
                                                                                                   5 15 19
                                                                                                                                               58.35
      146.35
                  14 18 58
                               5691.31
                                                18.49
                                                            262.43
                                                                         242.72
                                                                                        149.04
                                                                                                   15 53 49
                                                                                                                   5091.3
                                                                                                                                  25.30
                                                                                                                                              258.31
                                               18.48
                                                             62.48
                                                                         242.71
                                                                                        149.05
                                                                                                   5 15 19
                                                                                                                   1480.5
                                                                                                                                  25.29
                                                                                                                                               58.35
                  4 40 39
       33.65
                                                18.49
                                                            262.43
                                                                         242.72
                                                                                        149.04
                                                                                                   15 53 49
                                                                                                                   5091.3
                                                                                                                                  25.30
                                                                                                                                              258.31
      146.35
                  14 18 58
                               5691.31
                             2080 ...
5691 .31
                                                                                                                                                58.35
                    4 40 39
                                               18.48
                                                             62.48
                                                                         242.71
                                                                                        149.05
                                                                                                   5 15 19
                                                                                                                   1480.5
                                                                                                                                  25.29
       33.65
                                                                                                                                               258.31
                                                                                                   15 53 49
      146.35
                  14 18 58
                                                18.49
                                                            262.43
                                                                         242.72
                                                                                        149.04
                                                                                                                   5091.3
                                                                                                                                  25.30
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                               SGT 3110.1 SGR 467.6 SG3 70.4
RRT .1563 RRF -.1405 RTF .9550
SGB 3145.0 R23 -.2968 R13 .9540
                                                                                                              ST 2887.3 SR 186.2 SS 731.9
CRT .7499 CRS -.6816 CST -.9952
    TOE-4,5908 TRA -.0435 TC3 -.6339 BAU
                                                  .7111
    ROE -.2210 RRA -.3201 RC3 .0936 FAU .01907
                                                                                                               LSA 2981.1 MSA 142.0 SSA 1.2
    FDE-1.1088 FRA .1665 FC3 -.1989 BSP 9843
BDE 4.5961 BRA .3230 BC3 .6408 FSP -227
                                                                SG1 3110.9 SG2 461.8 THA 1.38
                                                                                                             EL1 2890.7 EL2 123.0 ALF 2.77
```

```
ARRIVAL DATE MAY 2 1966
                                                                     FLIGHT TIME 120.00
                                                                     DISTANCE 364.309
   RL 147.10 LAL .00 LOL 101.15 VL 28.163 GAL -9.98 AZL 132.26 HCA 178.00 5MA 131.23 ECC .21027 INC42.2609 VI 30.287 RP 108.84 LAP -1.34 LOP 279.67 VP 37.782 GAP 7.16 AZP 47.76 TAL 225.53 TAP 43.53 RCA 103.64 APO 158.83 V2 34.819 RC 132.074 GL -59.68 GP 70.13 ZAL 103.03 ZAP 99.31 ETS 144.36 ZAE 77.45 ETE 218.50 ZAC 62.96 ETC 314.41 CLP 118.42
   PLANETOCENTRIC CONIC
    C3 466.915 VHL 21.608 DLA -57.70 RAL 24.39 RAD 6572.3 VEL 24.253 PTH 3.32 VHP 28.363 DPA 51.63 RAP 249.94 ECC 8.6842
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    7 33 22 2332.64
16 52 36 691.37
                                                                                                                     1732.6
                                                                                                                                       9.20
                                                 2.46
                                                              68.24
                                                                           292.82
                                                                                         147.66
                                                                                                     8 12 15
       37.38
                                                                                                                                                   291.02
                                                                            292.84
                                                                                           147.66
                                                                                                     17 4 7
                                                                                                                        91.4
                                                                                                                                       9.21
                                                  2.47
                                                              294.93
                  16 52 36
      142.62
                                                                                                                                                    64.33
                    7 33 22 2332.64
                                                  2.46
                                                               68.24
                                                                            292.82
                                                                                           147.66
                                                                                                      8 12 15
                                                                                                                       1732.6
                                                                                                                                       9.20
       37.38
                                                                                                                                                   291.02
                                                                                           147.66 17 4 7
                                                                            292.84
                                                                                                                        91.4
                                                                                                                                       9.21
                                                  2.47
                                                              294.93
                  16 52 36
                                  691.37
      142.62
                                                                                          147.66 8 12 15
147.66 17 4 7
                                                                                                                                                    64.33
                                                                                                                       1732.6
                                                                                                                                       9.20
                                                                            292.82
                   7 33 22 2332.64
                                                  2.46
                                                               68.24
       37.38
                                                                                                                                                   291.02
                                                                                                                                       9.21
                                                              294.93
                                                                           292.84
                                                                                                                        91.4
                  16 52 36
                                 691.37
      142.62
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 922.6 SGR 2931.5 SG3 47.4
RRT .7539 RRF .9870 RTF .8496
                                                                                                                   ST 293.9 SR 2163.1 SS 865.5
CRT .6018 CR5 -.9954 CST -.6757
    TOE -.3937 TRA 1.8457 TC3 -.0094 BAU .7007
   ROE-7.8339 RRA 4.0535 RC3 .1119 FAU-.00805
FDE-1.2375 FRA .8774 FC3 .0149 BSP 9016
BDE 7.8438 BRA 4.4540 BC3 .1123 FSP -147
                                                                                                                   LSA 2335.6 MSA 244.2 55A
                                                                 SGB 3073.2 R23 -.1128 R13 .9936
                                                                                                                   EL1 2170.4 EL2 233.9 ALF 85.27
                                                                 SG1 3016.2 SG2 589.1 THA 76.11
                                                                                                                             ARRIVAL DATE MAY 4 1966
                                                                     FLIGHT TIME 122.00
LAUNCH DATE JAN 2 1966
                                                                     DISTANCE 371.201
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 101.15 VL 28.080 GAL -9.91 AZL 48.04 MCA 182.26 SMA 130.65 ECC .21227 INC41.9604 VI 30.287 RP 108.86 LAP -1.51 LOP 282.83 VP 37.715 GAP 7.66 AZP 131.94 TAL 224.29 TAP 46.55 RCA 102.90 APO 158.36 VZ 34.812 RC 134.395 GL 59.60 GP -72.18 ZAL 103.00 ZAP 101.50 ETS 209.81 ZAE 77.83 ETE 137.22 ZAC 88.97 ETC 49.75 CLP 130.66
   PLANETOCENTRIC CONIC
   C3 459.766 VHL 21.442 DLA 47.59 RAL 316.38 RAD 6572.3 VEL 24.105 PTH 3.31 VHP 24.654 DPA -73.35 RAP 145.63 ECC 8.5666 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           42.45 16 59 50
42.45 24 38 4
                                                                                                                      4289.4
                                                                                                                                     -8.11
                                                                                                                                                   222.49
       50.00 15 38 21 4889.40
                                                 -2.22
                                                              227.52
                                                                           224.36
                 23 41 4 3419.97
15 38 21 4889.40
23 41 4 3419.97
15 38 21 4889.40
23 41 4 3419.97
                                                                                                                                                   107.60
                                                                                                                       2820.0
                                                              112.63
                                                                            224.34
                                                                                                                                       -8.09
      130.00
                                                  -2.21
                                                                                            42.45 16 59 50
42.45 24 38 4
                                                                                                                       4289.4
                                                                                                                                      -8.11
                                                                                                                                                   222.49
                                                              227.52
                                                                            224.36
                                                  -2.22
                                                                                                                       2820.0
                                                                                                                                                   107.60
                                                                                                                                      -8.09
                                                  -2.21
                                                              112.63
                                                                            224.34
                                                                                            42.45 16 59 50
42.45 24 38 4
                                                                                                                                                   222.49
                                                 -2.22
                                                              227.52
                                                                            224.36
                                                                                                                       4289.4
                                                                                                                                      -8.11
                                                                                                                       2820.0
                                                                                                                                                   107.60
                                                                                                                                       -8.09
      130.00
                                                 -2.21
                                                              112.63
                                                                            224.34
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 837.7 SR 2535.2 S5 1077.1
CRT -.9649 CR5 .9982 CST -.9789
LSA 2871.3 HSA 212.3 SSA 1.0
                                                                 SGT 849.3 SGR 3119.1 SG3 49.1
RRT -.6791 RRF -.9871 RTF .7862
SGB 3232.6 R23 -.1211 R13 -.9923
    TOE 3.1314 TRA .3304 TC3 -.0150 BAU .7133
    RDE-9.2617 RRA 4.6263 RC3 -.1151 FAU-.00642
    FDE 1.8685 FRA -.6729 FC3 .0121 8SP 10118
                                                                  SG1 3174.0 SG2 612.6 THA 100.89
                                                                                                                   EL1 2661.8 EL2 209.5 ALF 107.80
    BDE 9.7768 BRA 4.6381 BC3 .1160 FSP -165
                                                                                                                             ARRIVAL DATE MAY 6 1966
                                                                     FLIGHT TIME 124.00
LAUNCH DATE JAN 2 1966
                                                                     DISTANCE 376.687
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 27.999 GAL -9.54 AZL 70.87 HCA 185.13 SHA 130.05 ECC .21026 INC19.1347 V1 30.287 RP 108.87 LAP -1.68 LOP 286.00 VP 37.649 GAP 7.75 AZP 109.06 TAL 222.51 TAP 47.64 RCA 102.70 APO 157.39 V2 34.806
    RC 136.709 GL 55.36 GP -63.85 TAL 114.90 TAP 115.56 ETS 276.76 TAE 99.70 ETE 198.98 TAC 81.94 ETC 115.35 CLP-168.27
   PLANETOCENTRIC CONIC
    C3 121.023 VHL 11.001 0LA 38.30 RAL 305.54 RAO 6570.3 VEL 15.568 PTH 2.77 VHP 11.533 DPA -81.13 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            52.77 17 5 1
52.77 23 0 7
                                                                                                                                                  198.70
       63.05 15.49 7 4554.64
116.95 22 3.49 3378.00
                                                                                                                       3954.6
                                                                                                                                    -14.51
                                                                            203.00
                                                 -9.74
                                                              204.86
                                                                                                                                     -14.49
                                                                                                                       2778.0
                                                                                                                                                   109.68
                                                                            202.99
       116.95
                                                  -9.72
                                                              115.43
                                                                                            52.77 17 5 1
52.77 23 0 7
                                                                                                                                     -14.51
                                                                                                                                                   198.70
                                                                                                                       3954.6
                  15 49 7 4554.64
22 3 49 3378.00
                                                                            203.00
        63.05
                                                 -9.74
                                                              204.86
                                                                                            52.77 17 5 1
52.77 23 7
                                                                                                                                     -14.49
                                                                                                                                                   109.68
                                                                            202.99
                                                                                                                       2778.0
                                                 -9.72
                                                              115.63
       116.95
                                                                                                                                                   198.70
                                                                                                                       3954.6
                                                                                                                                     -14.51
                   15 49 7 4554.64
22 3 49 3378.00
                                                                            203.00
                                                 -9.74
                                                              204.86
        63.05
                                                                                                                                    -14.49
                                                                                                      23 0 7
                                                                            202.99
                                                                                                                      2778.0
                                                                                                                                                   109.68
                                                 -9.72
                                                              115.83
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 2250.6 SR 403.2 55 659.1
CRT -.9102 CRS .8533 CST -.9926
                                                                 SGT 3310.6 SGR 967.1 SG3 73.2
RRT -.9008 RRF -.7568 RTF .9647
    TDE 4.0924 TRA-3.6284 TC3 -.3573 BAU .5794
    RDE -.5645 RRA 1.3858 RC3 .0247 FAU .01986
FDE 1.2431 FRA -.6769 FC3 -.1421 BSP 10801
BDE 4.1312 BRA 3.8841 BC3 .3581 FSP -247
                                                                  5GB 3448.9 R23 -.2888 R13 -.9560
                                                                                                                  LSA 2372.4 MSA 185.1 SSA
                                                                                                                                                       1.2
                                                                  5G1 3425.0 SG2 405.9 THA 165.04
                                                                                                                   EL1 2280.5 EL2 164.8 ALF 170.69
                                                                                                                              ARRIVAL DATE MAY 8 1966
                                                                      FLIGHT TIME 126.00
LAUNCH DATE JAN 2 1966
   HELIOCENTRIC CONIC
                                                                      DISTANCE 382.389
    RL 147.10 LAL .00 LOL 101.15 VL 27.919 GAL -9.22 AZL 77.02 MCA 188.22 SMA 129.48 ECC .20903 INC12.9797 V1 30.287 RP 108.89 LAP -1.84 LOP 289.16 VP 37.584 GAP 7.90 AZP 102.85 TAL 220.80 TAP 49.01 RCA 102.41 APO 156.54 V2 34.801 RC 139.015 GL 47.72 GP -50.08 ZAL 122.22 ZAP 127.05 ETS 292.17 ZAE 110.78 ETE 207.03 ZAC 74.96 ETC 130.77 CLP-159.87
   PLANETOCENTRIC CONIC
    C3 69.999 VHL 8.367 DLA 30.15 RAL 305.79 RAD 6569.3 VEL 13.833 PTH 2.53 VHP 8.427 DPA -67.42 RAP 340.42 ECC 2.1520
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    -15.44
                                                                                            62.05 18 38 58
                                                                                                                       3527.8
                                                                                                                                                   166.14
                                                              173.05
                                                                           194.74
       79.20
                   17 30 10
                                 4127.79
                                                 -11.79
                                                                                             62.05 21 24 11
62.05 18 38 58
                                                                                                                        2965.0
                                                                                                                                      -15.42
                                                                                                                                                    124.72
                                                                            194.74
                   20 24 46
                                 3565.04
                                                -11.77
                                                               131.63
      100.80
                   17 30 10
                                                                                                                        3527.8
                                                                                                                                     -15.44
                                                                                                                                                    166.14
                                                -11.79
                                                               173.05
                                                                            194.74
        79.20
                                 4127.79
                                                                                            62.05 21 24 11
66.69 24 21 17
                   20 24 46
23 31 38
                                                                                                                       2965.0
                                                                                                                                     -15.42
                                                                                                                                                    124.72
                                                -11.77
                                                               131.63
                                                                            194.74
                                 3565.04
       100.40
                                                -25.74
                                                                94.28
                                                                            201.79
                                                                                                                       2379.1
                                                                                                                                     -28.67
                                                                                                                                                    86.32
       110.00
                                 2979.10
                                                               138.43
                                                                            186.75
                                                                                             55.85 20 25 9
                                                                                                                       3161.7
                                                                                                                                      -3.00
                                                                                                                                                    132.23
                   19 22 28
                                                  1.49
                                 3761.74
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2019.1 SR 162.5 SS 595.5
CRT .3338 CRS -.5287 CST -.9766
                                                                 SGT 3521.7 SGR 415.6 SG3 101.3
RRT -.5366 RRF -.1689 RTF .9190
     TDE 2.7089 TRA-3.3498 TC3 -.8288 BAU .7761
     ROE .1609 RRA .5025 RC3 -.0283 FAU .03304
                                                                                                                   LSA 2102.2 MSA 195.7 SSA 2.0
                                                                 SGB 3546.1 R23 -.3901 R13 -.9166
    FOE 1.1728 FRA -.6448 FC3 -.4087 BSP 11072
```

BOE 2.7137 BRA 3.3873 BC3 .8293 FSP -339

SG1 3528.8 SG2 350.0 THA 176.34

EL1 2019.8 EL2 153.1 ALF 1.55

```
FLIGHT TIME 128.00
                                                                                                                                                        ARRIVAL DATE MAY 10 1966
 LAUNCH DATE JAN Z 1966
    HELIOCENTRIC CONIC
                                                                                    DISTANCE 388.125
     RL 147.10 LAL .00 LOL 101.15 VL 27.839 GAL -8.89 A7L 79.81 MCA 191.35 SMA 128.92 ECC .20805 INC10.1878 V1 3D.287 RP 108.90 LAP -1.99 LOP 292.32 VP 37.521 GAP 8.06 A7P 99.99 TAL 219.08 TAP 50.42 RCA 102.10 APO 155.74 V2 34.797 RC 141.312 GL 42.21 GP -40.03 7AL 126.35 7AP 135.37 ETS 299.20 7AE 117.36 ETE 206.05 7AC 70.58 ETC 137.99 CLP-158.35
    PLANETOCENTRIC CONIC
                                                                                                                  2.41 VHP 7.284 DPA -57.10 RAP 335.41 ECC 1.8628
      C3 52.428 VHL 7.241 DLA 24.79 RAL 307.32 RAD 6568.9 VEL 13.183 PTH
     LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 7 18 3366.52 -23.35 122.16 195.11 73.50 22 3 24 2766.5 -25.39 114.09 90.00 16 59 50 4185.96 -.41 171.20 185.53 61.69 18 9 36 3586.0 -4.20 164.56
                      21 7 18 3366.52
16 59 50 4185.96
22 50 43 3033.07
17 59 6 3994.64
0 45 13 2687.15
18 25 1 3913.33
                                                                                                                 74.66 23 41 16
        100.00
                                                           -25.97
                                                                             98.45
                                                                                             195.93
                                                                                                                                                 2433.1
                                                                                                                                                                  -27.83
                                                                                                                                                                                     90.14
                                                                                                               60.17 19 5 41
77.23 1 30 0
56.50 19 30 15
                                                                                                                                                3394.6
2087.1
        100.00
                                                             1.97
                                                                           155.81
                                                                                            184.20
                                                                                                                                                                   -2.01
                                                                                                                                                                                   149.29
                                                                                         197.65
        110.00
                                                          -31.98
                                                                             73.90
                                                                                                                                                                  -33.41
                                                                                                                                                                                     64.96
       110.00
                                                            7.24
                                                                           146.40
                                                                                            180.94
                                                                                                                                                3313.3
                                                                                                                                                                     2.79
                                                                                                                                                                                   140.14
                                                                              MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                SGT 3622.4 SGR 317.0 SG3 122.5
RRY -.2596 RRF .1850 RTF .8914
SGB 3636.2 R23 -.4329 R13 -.8905
                                                                                                                                           ST 1841.4 SR 187.8 SS 562.3
CRT .6363 CRS -.8258 CST -.9605
     TOE 2.0888 TRA-3.0977 TC3-1.2158 BAU .8528
     ROE .2162 RRA .2965 RC3 -.0458 FAU .04121
FOE 1.1115 FRA -.5896 FC3 -.6805 BSP 11367
                                                                                                                                           LSA 1923.4 MSA 206.5 SSA 3.1
EL1 1845.3 EL2 144.6 ALF 3.74
                                                                                SG1 3623.3 SG2 306.0 THA 178.69
     BOE 2.0999 BRA 3.1119 BC3 1.2166 FSP -404
                                                                                     FLIGHT TIME 130.00
                                                                                                                                                         ARRIVAL DATE MAY 12 1966
LAUNCH DATE JAN 2 1966
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 393.868
     RL 147.10 LAL .00 LOL 101.15 VL 27.761 GAL -8.56 AZL 81.41 HCA 194.49 SHA 128.38 ECC .20723 INC 8.5938 V1 30.287 RP 108.92 LAP -2.14 LOP 295.48 VP 37.460 GAP 8.22 AZP 98.32 TAL 217.35 TAP 51.83 RCA 101.77 APO 154.98 V2 34.793 RC 143.598 GL 38.36 GP -32.86 ZAL 128.57 ZAP 141.34 ETS 304.14 ZAE 121.38 ETE 203.52 ZAC 68.25 ETC 143.03 CLP-158.36
    PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 43.695 VML 6.610 DLA 21.26 RAL 309.05 RAD 6568.7 VEL 12.848 PTH 2.34 VMP 6.776 DPA -49.53 RAP 334.05 ECC 1.7191

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 5 8 3140.88 -26.82 106.57 193.07 80.56 22 57 29 2540.9 -27.85 98.05

90.00 16 15 51 4520.46 3.92 178.71 182.58 61.93 17 27 51 3720.5 .13 172.07

100.00 23 40 57 2831.91 -28.80 84.19 193.42 81.64 24 28 9 2231.9 -29.66 75.49

100.00 17 22 43 4104.66 5.68 161.88 181.61 60.60 18 31 8 3504.7 1.72 155.33

110.00 1 23 37 2523.00 -33.77 61.44 194.13 84.39 2 5 40 1923.0 -34.18 52.22

110.00 18 0 28 3986.34 9.97 150.30 178.99 57.13 19 6 54 3386.3 5.57 143.97
    DIFFERENTIAL CORRECTIONS
                                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                SGT 3717.1 SGR 274.9 SG3 136.2
RRT -.1704 RRF .2851 RTF .8747
SGB 3727.2 R23 -.4415 R13 -.8743
                                                                                                                                             ST 1724.5 SR 189.7 55 534.7
     TOE 1.7519 TRA-2.9210 TC3-1.5372 BAU .8983
     ROE .2074 RRA .2171 RC3 -.0377 FAU .04574
FDE 1.0392 FRA -.5228 FC3 -.9063 BSP 11660
                                                                                                                                             CRT .6838 CR5 -.8840 CST -.9454
                                                                                                                                           LSA 1802.7 MSA 214.4 55A 4.4
     BOE 1.7641 BRA 2.9291 BC3 1.5377 FSP -446
                                                                                SG1 3717.4 SG2 270.8 THA 179.27
                                                                                                                                           EL1 1729.4 EL2 138.0 ALF 4.33
                                                                                    FLIGHT TIME 132.00
                                                                                                                                                       ARRIVAL DATE MAY 14 1966
LAUNCH DATE JAN 2 1966
                                                                                   DISTANCE 399.611
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 27.683 GAL -8.22 AZL 82.44 MCA 197.64 SMA 127.85 ECC .20656 INC 7.5593 VI 30.287 RP 108.93 LAP -2.28 LOP 298.64 VP 37.399 GAP 8.38 AZP 97.21 TAL 215.60 TAP 53.24 RCA 101.44 APO 154.26 V2 34.790
     RC 145.874 GL 35.59 GP -27.63 ZAL 129.61 ZAP 145.73 ETS 308.04 ZAE 123.93 ETE 200.91 ZAC 67.32 ETC 146.94 CLP-158.87
    PLANETOCENTRIC CONIC
     C3 38.363 VHL 6.194 DLA 18.90 RAL 310.83 RAD 6568.5 VEL 12.638 PTH
                                                                                                                 2.29 VHP 6.532 OPA -43.83 RAP 334.08 ECC 1.6314
     LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              85.21 23 29 24
62.28 17 9 0
86.32 1 1 13
61.00 18 15 2
89.26 2 29 39
57.57 18 55 59
                     22 39 15 3008.27
15 55 52 4387.37
0 16 5 2708.74
17 5 40 4162.14
         90.00
                                                                                          191.53
                                                                            97.03
                                                                                                                                                2408.3
                                                                                                                                                               -28.31
                                                          -27.94
                                                                                                                                                3787.4
                                                                                                                                                                   2.29
                                                                                                                                                                                   175.80
                                                                           182.47
                                                                                            181.61
                                                            6.05
         90.00
                                                                             75.15
                                                                                            191.68
                                                                                                                                                2108.7
                                                                                                                                                                 -29.88
                                                                                                                                                                                    66.35
        100.00
                                                         -29.69
                                                                                                                                               3562.1
                                                                                            180.77
        100.00
                                                             7.59
                                                                           165.08
                       1 49 22 2416.84
17 48 52 4026.80
                                                                                            191.88
                                                                                                                                               1816.8
                                                                                                                                                                                    43.95
                                                          -34.18
                                                                             53.18
        110.00
                      17 48 52
                                                         11.45
                                                                          152.49
                                                                                            178.45
                                                                                                                                                3426.8
        110.00
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                               SCT 3813.9 SCR 250.2 SC3 144.5
RRT -.1604 RRF .2819 RTF .8641
SCB 3822.1 R23 -.4266 R13 -.8638
     TOE 1.5425 TRA-2.7865 TC3-1.8207 BAU .9338
                                                                                                                                            ST 1645.8 SR 188.8 55 511.5
                                                                                                                                        CRT .7003 CRS -.9116 CST -.9315
LSA 1719.6 MSA 221.0 55A 5.7
    ROE .1965 RRA .1743 RC3 -.0185 FAU .04796
FOE .9680 FRA -.4539 FC3-1.0824 BSP 12016
     BOE 1.5550 BRA 2.7919 BC3 1.8208 FSP -473
                                                                                SGI 3814.1 SG2 247.0 THA 179.39
                                                                                                                                           FLI 1651.2 FLZ 134.4 ALF
                                                                                    FLIGHT TIME 134.00
                                                                                                                                                        ARRIVAL DATE MAY 16 1966
LAUNCH DATE JAN 2 1966
                                                                                    DISTANCE 405.351
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 27.607 GAL -7.88 AZL 83.17 MCA 200.79 SMA 127.33 ECC .20603 INC 6.8303 V1 30.287 RP 108.93 LAP -2.42 LOP 301.81 VP 37.341 GAP 8.54 AZP 96.39 TAL 213.84 TAP 54.63 RCA 101.10 APO 153.56 V2 34.787 RC 148.138 GL 33.54 GP -23.72 ZAL 129.89 ZAP 149.09 ETS 311.23 ZAE 125.60 ETE 198.60 ZAC 67.29 ETC 150.10 CLP-159.58
   PLANETOCENTRIC CONIC
    C3 34.654 VHL 5.887 DLA 17.31 RAL 312.62 RAD 6568.4 VEL 12.491 PTH 2.26 VHP 6.416 DPA -39.37 RAP 334.81 ECC 1.5703
    LNCH AZMITH LNCH TIME L-I TIME INJLAT INJLONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 2 46 2920.73 -28.27 90.65 190.68 88.39 23 51 27 2320.7 -28.20 81.99
                                                                                                             88.39 23 51 27
                    15 46 39
                                                                                                                62.54 17 0 23
                                                                                                                                                 3823.5
                                                                                                                                                                   3.46
                                                                                                                                                                                   177.83
                                        4423.54
                                                             7.19
                                                                           184.52
                                                                                            181.49
         90.00
                                                                                                                89.54 1 21 49
61.27 18 7 53
                                                                                                                                                                                    60.22
                                                                                                                                                 2026.2
        100.00
                        0 38 3 2626.16
                                                           -29.89
                                                                             69.02
                                                                                            190.71
                                                                                                                                                                  -29.63
                     16 58 0 4193.34
2 8 18 2343.81
                                                                                                                                                3593.3
                                                                                                                                                                   4.71
                                                            8.61
                                                                           166.83
                                                                                            180.73
                                                                                                                                                                                   160.21
        100.00
                                                                                                                92.63 2 47 22
57.83 18 51 43
                                                          -34.09
                                                                             47.48
                                                                                            190.62
                                                                                                                                                1743.8
                                                                                                                                                                -33.35
                                                                                                                                                                                    38.32
        110.00
                      17 44 14
                                                           12.24
                                                                           153.67
                                                                                            178.56
                                                                                                                                                3448.5
                                                                                                                                                                   7.91
                                                                                                                                                                                   147.26
                                        4048.46
        110.00
                                                                               MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 3905.9 SGR 237.6 SG3 149.1 ST 1597.2 SR 190.9 SS 494.6 RRT -.1749 RRF .2395 RTF .8561 CRT .7156 CRS -.9322 CST -.9193 SGB 3913.1 R23 -.3959 R13 -.8558 LSA 1667.6 MSA 226.8 SSA 6.9 SG1 3906.1 SG2 234.0 THA 179.39 EL1 1603.1 EL2 132.8 ALF 4.92
   DIFFERENTIAL CORRECTIONS
     TOE 1.4087 TRA-2.6683 TC3-2.0764 BAU .9620
    ROE .1907 RRA .1455 RC3 .0046 FAU .04861
    FDE .9078 FRA -.3833 FC3-1.2143 BSF 12282
BDE 1.4215 BRA 2.6723 BC3 2.0764 FSP -483
```

JPL TM 33-99

```
ARRIVAL DATE MAY 18 1966
                                                                       FLIGHT TIME 136.00
LAUNCH DATE JAN 2 1966
   RL 147.10 LAL .00 LOL 101.15 VL 27.532 GAL -7.53 A7L 83.71 HCA 203.95 SMA 126.83 ECC .20564 INC 6.2860 V1 30.287 RP 108.94 LAP -2.55 LOP 304.97 VP 37.284 GAP 8.69 A7P 95.75 TAL 212.07 TAP 56.01 RCA 100.75 APO 152.91 V2 34.786 RC 150.390 GL 31.98 GP -20.71 7AL 129.62 7AP 151.77 ETS 313.86 7AE 126.74 ETE 196.63 7AC 67.87 ETC 152.69 CLP-160.38
                                                                       DISTANCE 411.085
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                2.23 VHP 6.369 OPA -35.76 RAP 335.94 ECC 1.5241
    C3 31.844 VHL 5.643 DLA 16.26 RAL 314.44 RAD 6568.3 VEL 12.378 PTH
   LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             90.61 24 7 55
                                                                                                                          2260.3
                  23 20 15 2860.25
15 43 42 4441.38
                                                                             190.38
                                                  -28.31
                                                                86.23
       90.00
                                                                                                                           3841.4
                                                                                                                                           4.03
                                                                                                                                                        178.83
                                                                                                         16 57 43
                                                                                               62.68
                                                                185.53
                                                                              181.84
        90.00
                                                                                                                                                         55.98
                                                                                                                                         -29.28
                                                                                                          1 37 26
                                                                                                                           1968.6
                    0 54 38 2568.57
                                                                                               91.79
                                                  -29.84
                                                                 64.74
                                                                              190.35
      100.00
                                                                                               61.40 18 6 4
95.01 3 1 15
                                                                                                                           3608.3
                                                                                                                                           5.22
                                                                                                                                                        161.04
                                                                167.67
                                                                              181.11
                                                    9.10
                   16 55 56 4208.30
      100.00
                                                                                                                                                         34.37
                                                                                                                                         -32.80
                                                                                                                           1691.9
                                                                              190.07
                  2 23 3 2291.92
17 44 0 4057.71
                                                  -33.86
                                                                 43.44
      110.00
                                                                                                        18 51 38
                                                                                                                           3457.7
                                                                                                                                           8.25
                                                                                                                                                        147.75
                                                                                               57.95
                                                                154.18
                                                                              179.05
                                                  12.58
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1567.1 SR 195.6 SS 481.4
CRT .7333 CRS -.9491 CST -.9091
                                                                   SGT 3998.6 SGR 233.4 SG3 151.6
RRT -.1892 RRF .1858 RTF .8505
SGB 4005.4 R23 -.3537 R13 -.8503
    TOE 1.3174 TRA-2.5614 TC3-2.3208 BAU .9881
    ROE .1888 RRA .1224 RC3 .0278 FAU .04848
FOE .8547 FRA -.3178 FC3-1.3180 BSP 12587
                                                                                                                       LSA 1634.7 MSA 231.3 SSA 8.2
                                                                                                                       EL1 1573.7 EL2 132.4 ALF 5.27
                                                                    5G1 3998.8 SG2 229.2 THA 179.36
    BOE 1.3308 BRA 2.5643 BC3 2.3210 FSP -490
                                                                                                                                  ARRIVAL DATE MAY 20 1966
                                                                        FLIGHT TIME 138.00
LAUNCH DATE JAN 2 1966
                                                                       DISTANCE 416.814
    RL 147.10 LAL .00 LOL 101.15 VL 27.458 GAL -7.17 AZL 84.14 HCA 207.10 SMA 126.34 ECC .20540 INC 5.8621 V1 30.287 RP 108.94 LAP -2.67 LOP 308.13 VP 37.228 GAP 8.85 AZP 95.22 TAL 210.28 TAP 57.38 RCA 100.39 APO 152.28 V2 34.785
   HELIOCENTRIC CONIC
                        30.77 GP -18.35 ZAL 128.95 ZAP 153.97 ETS 316.02 ZAE 127.55 ETE 194.98 ZAC 68.86 ETC 154.85 CLP-161.21
    RC 152.629 GI
    C3 29.586 VHL 5.439 DLA 15.61 RAL 316.30 RAD 6568.2 VEL 12.287 PTH 2.21 VHP 6.363 OPA -32.74 RAP 337.33 ECC 1.4869 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 33 51 2817.88 -28.24 83.13 190.52 92.16 24 20 49 2217.9 -27.64 74.51 90.00 15 44 57 4446.82 7.92 185.84 182.49 62.72 16 59 3 3846.8 4.20 179.13
   PLANETOCENTRIC CONIC
                                                                                                93.38 1 49 51
61.44 18 7 54
                                                                                                           1 49 51
                                                   -29.72
                                                                  61.72
                                                                               190.44
                     1 7 43 2527.86
       100.00
                                                                                                                            3612.1
                                                                                                                                            5.34
                                                                                                                                                         161.25
                                                                              181.79
                                                    9.23
                                                                167.88
       100.00
                   16 57 42
                                  4212.07
                                                                                                96.70 3 12 36
57.95 18 54 29
                                                                                                                                          -32.31
                                                                                                                                                          31.57
                                                                                                                           1654.6
                    2 35 4 2254.59
                                                  -33.60
                                                                 40.56
                                                                               190.04
       110.00
                                                                                                                                            8.27
                                                                                                                                                         147.77
                                                                                                                           3458.1
                                                                 154.20
                                  4058.11
                                                   12.59
                                                                               179.78
                   17 46 51
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4094.1 SGR 235.2 SG3 152.9
RRT -.1960 RRF .1336 RTF .8471
SGB 4100.8 R23 -.3061 R13 -.8469
                                                                                                                       ST 1549.4 SR 202.5 SS 470.7
CRT .7531 CRS -.9631 CST -.9008
     TOE 1.2528 TRA-2.4612 TC3-2.5630 BAU 1.0140
     RDE .1895 RRA .1023 RC3 .0498 FAU .04793
                                                                                                                       LSA 1615.0 MSA 234.4 SSA
                                                                                                                                                             9.5
    FDE .8078 FRA -.2582 FC3-1.4027 BSP 12965
BDE 1.2670 BRA 2.4633 BC3 2.5635 FSP -498
                                                                                                                       ELI 1556.9 EL2 132.6 ALF
                                                                                                                                                             5.66
                                                                    SG1 4094.3 SG2 230.6 THA 179.35
                                                                                                                                  ARRIVAL DATE MAY 22 1966
                                                                        FLIGHT TIME 140.00
LAUNCH DATE JAN 2 1966
    RL 147.1D LAL .00 LOL 101.15 VL 27.385 GAL -6.81 AZL 84.48 MCA 210.26 SMA 125.86 ECC .20530 INC 5.5206 VI 30.287 RP 108.94 LAP -2.78 LOP 311.29 VP 37.174 GAP 9.01 AZP 94.77 TAL 208.47 TAP 58.73 RCA 100.02 APO 151.69 V2 34.784 RC 154.855 GL 29.81 GP -16.45 ZAL 127.96 ZAP 155.84 ETS 317.78 ZAE 128.15 ETE 193.59 ZAC 70.15 ETC 156.67 CLP-162.05
                                                                        DISTANCE 422.536
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 27.699 VHL 5.263 DLA 15.25 RAL 318.22 RAD 6568.1 VEL 12.210 PTH 2.19 VMP 6.383 DPA -30.15 RAP 338.90 ECC 1.4559
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                93.23 24 31 18
62.69 17 3 20
                                                                            191.01
                                                                                                                          2188.5
        90.00 23 44 50 2768.53
90.00 15 49 17 4443.26
                                                                 80.99
                                                   -28.15
                                                                                                                                                         178.93
                                                                                                                            3843.3
                                                                                                                                            4.09
                                                     7.81
                                                                 185.64
                                                                               183.36
                                                                                               94.48 2 U -
61.40 18 12 26
97.89 3 22 19
57.87 18 59 33
                                                                                                                                                          50.93
                                                                                                                           1899.4
                                                                                                                                          -28.65
                     1 18 25 2499.39
                                                   -29.59
                                                                  59.61
                                                                               190.90
        100.00
                                                                                                                                                         161.00
                                                                                                                           3607.6
                                                                                                                                           5.19
                                                                 167.63
                                                                               182.67
                                                     9.08
                                  4207.63
        100.00
                    17 2 18
                                                                                                                           1627.9
                                                                                                                                          -31.92
                                                                                                                                                         29.58
                                                                  38.51
                                                                               190.42
                     2 45 11 2227.90
                                                   -33.37
        110.00
                                                                                                                           3451.9
                                                                                                                                                         147.44
                                                                                                                                            8.03
                                                                 153.86
                                                                               180.71
                                                   12.36
                                  4051.89
        110.00
                    17 52 1
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                     HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1533.3 SR 209.9 SS 456.0
CRT .7714 CRS -.9732 CST -.8945
                                                                    SGT 4206.8 SGR 239.2 SG3 154.4
RRT -.1928 RRF .0820 RTF .8486
SGB 4213.6 R23 -.2508 R13 -.8484
SG1 4207.1 SG2 234.7 THA 179.37
     TDE 1.1967 TRA-2.3740 TC3-2.8221 BAU 1.0454
     RDE .1911 RRA .0828 RC3 .0686 FAU .04767
FOE .7554 FRA -.2152 FC3-1.4900 BSP 13654
                                                                                                                        LSA 1596.3 MSA 234.3 SSA 10.9
EL1 1541.9 EL2 132.8 ALF 6.07
     BOE 1.2119 BRA 2.3754 BC3 2.8230 FSP -531
                                                                                                                                   ARRIVAL DATE MAY 24 1966
                                                                         FLIGHT TIME 142.00
 LAUNCH DATE JAN 2 1966
                                                                        DISTANCE 428.257
     RL 147.10 LAL .00 LOL 101.15 VL 27.314 GAL -6.44 A7L 84.76 HCA 213.42 SNA 125.39 ECC .20534 INC 5.2382 V1 30.287 RP 108.94 LAP -2.88 LOP 314.46 VP 37.122 GAP 9.17 A7P 94.38 TAL 206.65 TAP 60.07 RCA 99.64 APO 151.14 V2 34.785 RC 157.087 GL 29.03 GP -14.90 7AL 126.70 7AP 157.46 ETS 319.22 7AE 128.61 ETE 192.43 7AC 71.66 ETC 158.23 CLP-162.89
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                   2.18 VHP 6.420 DPA -27.87 RAP 340.59 ECC 1.4291
     C3 26.075 VHL 5.106 DLA 15.13 RAL 320.21 RAD 6568.1 VEL 12.143 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 93.93 24 40 1
                                                                                                                            2169.3
                                                                              191.79
                                  2769.28
                                                   -28.07
                                                                  79.59
                     23 53 52
         90.00
                                                                                                 62.61 17 10 1
                                                                                                                                             3.74
                                                                                                                                                          178.33
                                                                                                                             3432.5
                                                                 185.02
                                                                                184.42
                                  4432.50
                                                     7.47
                    15 56 8
         90.00
                                                                                                                                                           49.56
                                                                                                                                           -28.44
                    1 27 22 2480.43
17 9 15 4196.58
2 53 57 2209.51
17 59 9 4040.26
                                                                                                            2 8 42
                                                                                                                             1880.4
                                                                               191.66
                                                                                                 95.21
                                                   -29.48
                                                                   58.21
        100.00
                                                                                                                                                          160.39
                                                                                                 61.29 18 19 12
                                                                                                                            3596.6
                                                                                                                                             4.82
                                                                                183.75
                                                     8.72
                                                                 167.01
        100.00
                                                                                                 98.70 3 30 46
57.73 19 6 30
                                                                                                                                           -31.63
                                                                                                                            1609.5
                                                   -33.19
                                                                               191.13
                                                                   37.11
        110.00
                                                                                                                                             7.60
                                                                                                                             3440.3
                                                                                181.82
                                                   11.94
                                                                 153.22
        110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1570.7 SR 222.8 55 473.7
                                                                     SGT 4237.0 SGR 253.8 SG3 150.9
RRT -.1814 RRF .0773 RTF .8349
     TOE 1.2138 TRA-2.2284 TC3-3.0002 BAU 1.0464
                                                                                                                         CRT .8077 CR5 -.9854 CST -.8925
     ROE .1974 RRA .0691 RC3 .0923 FAU .04476
FOE .7590 FRA -.1216 FC3-1.4860 BSP 13004
                                                                                                                        LSA 1638.1 MSA 240.5 SSA 11.7
                                                                     SGB 4244.6 R23 -. 2332 R13 -. 8347
                                                                                                                        EL1 1581.1 EL2 130.5 ALF 6.58
                                                                     SG1 4237.3 SG2 249.5 THA 179.38
```

BOE 1.2298 BRA 2.2295 BC3 3.0017 FSP -454

```
-27.11
        3.22
                  177.42
                  48.73
       -28.31
                 159.50
        4.28
       -31.44
                  27.36
        7.01
                 145.99
 ARRIVAL DATE MAY 28 1966
      -27.07
                  69.88
        2.55
                 176.26
                  48.36
        3.60
                 158.38
       -31.33
        6.28
ARRIVAL DATE MAY 30 1966
    -27.08
                 69.98
       1.75
                174.86
      -28.25
                 48.39
       2.79
                157.06
     -31.31
                 26.80
                143.80
       5.45
ARRIVAL DATE JUN 1 1966
```

```
LAUNCH DATE JAN 2 1966
                                                                            FLIGHT TIME 144.00
                                                                                                                                         ARRIVAL DATE MAY 26 1966
    HELIOCENTRIC CONIC
                                                                            DISTANCE 433.966
     RL 147.10 LAL .00 LOL 101.15 VL 27.243 GAL -6.06 A7L 85.00 MCA 216.57 SMA 124.93 ECC .20555 INC 4.9993 V1 30.287 RP 108.94 LAP -2.98 LOP 317.62 VP 37.071 GAP 9.33 A7P 94.02 TAL 204.83 TAP 61.40 RCA 99.25 APO 150.61 V2 34.786 RC 159.265 GL 28.39 GP -13.61 7AL 125.22 7AP 158.90 ETS 320.37 7AE 128.98 ETE 191.45 7AC 73.33 ETC 159.58 CLP-163.72
    PLANETOCENTRIC CONIC
     C3 24.660 VHL 4.966 DLA 15.20 RAL 322.28 RAD 6568.0 VEL 12.085 PTH 2.16 VMP 6.471 DPA -25.82 RAP 342.37 ECC 1.4058
     LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     0 5 26 2757.94
16 5 1 4416.30
         90.00
                                                     -28.01
                                                                    78.76
                                                                                  192.83
                                                                                                   94.34
                                                                                                                0 51 24
                                                                                                                                2157.9
         90.00
                                                      6.96
                                                                    184.11
                                                                                   185.66
                                                                                                              17 18 38
                                                                                                     62.48
                                                                                                                                  3816.3
                    1 35 3 2468.93
17 18 5 4180.55
3 1 45 2197.68
18 7 53 4024.56
        100.00
                                                     -29.40
                                                                     57.36
                                                                                   192.69
                                                                                                    95.65
                                                                                                                2 16 12
                                                                                                                                  1868.9
                                                                                                    61.15 18 27 46
99.22 3 38 22
57.54 19 14 58
        100.00
                                                      8.20
                                                                    166.11
                                                                                   184.99
                                                                                                                                 3580.5
       110.00
                                                  ~ -33.06
                                                                     36.21
                                                                                   192.14
                                                                                                                                 1597.7
       110.00
                                                                    152.37
                                                                                  183.08
                                                   11.37
                                                                                                                                 3424.6
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
     TDE 1.1935 TRA-2.1290 TC3-3.2538 BAU 1.0733
                                                                       SGT 4338.0 SGR 263.3 SG3 150.8
RRT -.1649 RRF .0492 RTF .8364
SGB 4346.0 R23 -.1901 R13 -.8363
                                                                                                                             ST 1577.6 SR 232.7 SS 467.3
CRT .8300 CRS -.9911 CST -.8908
    RDE .2010 RRA .0524 RC3 .1085 FAU .04391
FDE .7229 FRA -.0786 FC3-1.5415 BSP 13558
                                                                                                                             LSA 1644.5 MSA 238.6 SSA 13.0
    BOE 1.2103 BRA 2.1296 BC3 3.2556 FSP -473
                                                                        SG1 4338.3 SG2 259.7 THA 179.42
                                                                                                                             ELI 1589.5 ELZ 128.8 ALF 7.03
LAUNCH DATE JAN 2 1966
                                                                            FLIGHT TIME 146.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 439.669
    RL 147.10 LAL .00 LOL 101.15 VL 27.173 GAL -5.67 AZL 85.21 MCA 219.73 SMA 124.49 ECC .20591 INC 4.7934 V1 30.287 RP 108.93 LAP -3.06 LOP 320.78 VP 37.022 GAP 9.49 AZP 93.69 TAL 202.99 TAP 62.72 RCA 98.86 APO 150.13 V2 34.788 RC 161.449 GL 27.84 GP -12.53 ZAL 123.53 ZAP 160.20 ETS 321.27 ZAE 129.29 ETE 190.61 ZAC 75.13 ETC 160.75 CLP-164.55
   PLANETOCENTRIC CONIC
    C3 23.410 VHL 4.838 DLA 15.43 RAL 324.45 RAD 6568.0 VEL 12.033 PTH 2.15 VHP 6.532 DPA -23.94 RAP 344.23 ECC 1.3853 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   O 11 59 2753.37
16 15 46 4395.39
1 41 46 2463.80
17 28 40 4160.19
3 8 49 2191.43
18 18 6 4005.33
        90.00
                                                    -27.99
                                                                    78.43
                                                                                 194.12
                                                                                                  94.50 0 57 52
                                                                                                                               2153.4
        90.00
                                                       6.30
                                                                    182.92
                                                                                   187.08
                                                                                                    62.34
                                                                                                              17 29 1
                                                                                                                                  3795.4
       100.00
                                                    -29.37
                                                                    56.99
                                                                                   193.98
                                                                                                    95.84
                                                                                                               2 22 50
                                                                                                                                  1863.8
       100.00
                                                      7.52
                                                                                                              18 38 D
                                                                   164.97
                                                                                  186.42
                                                                                                    60.99
                                                                                                                                  3560.2
       110.00
                                                                                                    99.49 3 45 21
57.33 19 24 51
                                                    -32.99
                                                                     35.73
                                                                                  193.41
                                                                                                                                 1591.4
       110.00
                                                    10.67
                                                                   151.32
                                                                                  184.52
                                                                                                                                 3405.3
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
    TOE 1.1933 TRA-2.0156 TC3-3.4967 BAU 1.0951
                                                                       SGT 4424.6 SGR 274.9 SG3 149.9
RRT -.1438 RRF .0347 RTF .8362
SGB 4433.1 R23 -.1571 R13 -.8362
                                                                                                                             ST 1599.6 SR 243.6 S5 467.3
CRT .8548 CRS -.9951 CST -.8917
    ROE .2053 RRA .0372 RC3 .1238 FAU .04262
FOE .6980 FRA -.0301 FC3-1.5760 BSP 13906
BOE 1.2108 BRA 2.0160 BC3 3.4989 FSP -475
                                                                                                                             LSA 1667.5 MSA 236.1 SSA 14.2
                                                                       5G1 4424.8 SG2 272.0 THA 179.49
                                                                                                                           ELI 1613.2 EL2 125.3 ALF
LAUNCH DATE JAN 2 1966
                                                                           FLIGHT TIME 148.00
   HELIOCENTRIC CONIC
                                                                          DISTANCE 445.365
    RL 147.10 LAL ..OD LOL 101.15 VL 27.105 GAL -5.27 AZL 85.39 HCA 222.89 SMA 124.06 ECC .20645 INC 4.6132 V1 30.287 RP 108.92 LAP -3.14 LOP 323.95 VP 36.974 GAP 9.66 AZP 93.38 TAL 201.13 TAP 64.03 RCA 98.45 APO 149.67 V2 34.791 RC 163.619 GL 27.37 GP -11.61 ZAL 121.64 ZAP 161.39 ETS 321.94 ZAE 129.55 ETE 189.90 ZAC 77.03 ETC 161.78 CLP-165.35
   PLANETOCENTRIC CONIC
    C3 22.302 VHL 4.723 DLA 15.79 RAL 326.72 RAD 6567.9 VEL 11.987 PTH 2.14 VHP 6.602 DPA -22.19 RAP 346.14 ECC 1.3670
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    0 17 40 2754.68
16 28 13 4370.48
                                                                               195.65
        90.00
                                                                    78.52
                                                                                                   94.45 1 3 35
62.18 17 41 3
                                                    -27.99
                                                                                                               1 3 35
                                                                                                                                2154.7
        90.00
                                                     5.51
                                                                   181.52
                                                                                  188.69
                                                                                                                                3770.5
                     1 47 44 2464.21
17 40 50 4136.18
       100.00
                                                   -29.37
                                                                    57.02
                                                                                  195.51
                                                                                                   95.83
                                                                                                              2 28 49
                                                                                                                                1864.2
                                                                                                   60.81 18 49 46
       100.00
                   17 40 50
                                                     6.73
                                                                   163.63
                                                                                 188.03
                                                                                                                                3536.2
                                                                                                   99.55 3 51 53
57.10 19 36 4
                     3 15 23 2190.01
       110.00
                                                  -32.98
                                                                                 194.94
                                                                    35.62
                                                                                                                                1590.0
       110.00
                   18 29 41
                                   3983.14
                                                    9.85
                                                                  150.12
                                                                                 186.13
                                                                                                              19 36 4
                                                                                                                                3383.1
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
    TOE 1.2053 TRA-1.8935 TC3-3.7366 BAU 1.1149
                                                                      SGT 4504.8 SGR 287.4 SG3 148.5
RRT -.1201 RRF .0288 RTF .8358
SGB 4514.0 R23 -.1305 R13 -.8357
                                                                                                                            ST 1631.8 SR 254.9 SS 470.5
CRT .8796 CRS -.9972 CST -.8946
    ROE .2099 RRA .0229 RC3 .1377 FAU .04116
FOE .6787 FRA .0189 FC3-1.5978 BSP 14188
                                                                                                                           LSA 1701.4 MSA 232.3 SSA 15.3
    BOE 1.2235 BRA 1.8937 BC3 3.7391 FSP -472
                                                                       5G1 4505.0 SG2 285.3 THA 179.56
                                                                                                                            EL1 1647.2 EL2 120.1 ALF 7.86
LAUNCH DATE JAN 2 1966
                                                                           FLIGHT TIME 150.00
  HELIOCENTRIC CONIC
                                                                          DISTANCE 451.053
   RL 147.10 LAL .00 LOL 101.15 VL 27.038 GAL -4.86 A7L 85.55 MCA 226.05 SMA 123.64 ECC .20715 INC 4.4532 V1 30.287 RP 108.91 LAP -3.20 LOP 327.12 VP 36.928 GAP 9.83 A7P 93.09 TAL 199.27 TAP 65.32 RCA 98.03 APO 149.25 V2 34.794 RC 165.775 GL 26.94 GP -10.82 7AL 119.58 7AP 162.49 ETS 322.40 7AE 129.79 ETE 189.28 7AC 79.01 ETC 162.70 CLP-166.15
  PLANETOCENTRIC CONIC
   C3 21.319 VML 4.617 OLA 16.27 RAL 329.11 RAO 6567.9 VEL 11.946 PTH
                                                                                                     2.13 VMP 6.679 DPA -20.55 RAP 348.10 ECC 1.3509
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 22 40 2761.28 -28.03 79.00 197.41 94.22 1 8 42 2161.3 -27.15 70.45
                                                                                                   62.03 17 54 38
95.62 2 34 17
        90.00
                    16 42 16
                                  4342.10
                                                      4.61
                                                                   179.92
                                                                                 190.50
                                                                                                                                 3742.1
                                                                                                                                                   .83
                                                                                                                                                               173.28
                                                                    57.41
      100.00
                     1 53 8
                                  2469.58
                                                    -29.41
                                                                                 197.28
                                                                                                   95.62
                                                                                                              2 34 17
                                                                                                                                1869.6
                                                                                                                                                -28.32
                                                                                                                                                                48.78
                                                                                                   60.63 19 2 59
99.43 3 58 6
      100.00
                    17 54 30
                                  4109.03
                                                     5.83
                                                                  162.12
                                                                                 189.84
                                                                                                                                 3509.0
                                                                                                                                                 1.87
                                                                                                                                                               155.57
      110.00
                    3 21 33 2192.91
                                                    -33.01
                                                                                 196.72
                                                                    35.84
                                                                                                                                1592.9
                                                                                                                                               -31.36
                                                                                                                                                                27.01
      110.00
                   18 42 34
                                   3958.47
                                                    8.93
                                                                  148.80
                                                                                 187.94
                                                                                                   56.87
                                                                                                              19 48 32
                                                                                                                                3358.5
                                                                                                                                                 4.51
                                                                                                                                                               142.50
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 4581.4 SGR 300.1 SG3 147.0
RRT -.0944 RRF .0283 RTF .8357
                                                                                                                         ST 1673.0 SR 266.2 SS 475.4
CRT .9034 CRS -.9974 CST -.8992
    TOE 1.2273 TRA-1.7633 TC3-3.9751 BAU 1.1338
   ROE .2145 RRA .0095 RC3 .1496 FAU .03966
FOE .6626 FRA .0667 FC3-1.6104 BSP 14447
BOE 1.2459 BRA 1.7633 BC3 3.9779 FSP -467
                                                                                                                         LSA 1744.8 MSA 226.9 SSA 16.5
ELI 1690.3 EL2 113.0 ALF 8.22
                                                                      SGB 4591.3 R23 -.1080 R13 -.8357
```

SG1 4581.5 SG2 298.8 THA 179.64

ARRIVAL DATE JUN 3 1966

FLIGHT TIME 152.00 LAUNCH DATE JAN 2 1966 **DISTANCE 456.733** HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 26.972 GAL -4.44 AZL 85.69 MCA 229.22 SMA 123.23 ECC .20804 INC 4.3092 V1 30.287 RP 108.90 LAP -3.26 LOP 330.28 VP 36.883 GAP 10.00 AZP 92.82 TAL 197.40 TAP 66.61 RCA 97.59 APO 148.87 V2 34.798 RC 167.915 GL 26.54 GP -10.13 ZAL 117.33 ZAP 163.52 ETS 322.66 ZAE 130.00 ETE 188.76 ZAC 81.06 ETC 163.51 CLP-166.93 PLANETOCENTRIC CONIC C3 20.452 VHL 4.522 DLA 16.84 RAL 331.63 RAD 6567.8 VEL 11.909 PTH 2.12 VHP 6.763 DPA -18.99 RAP 350.09 ECC 1.3366 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2172.8 79.84 199.41 93.80 1 13 20 -27.26 71.27 0 27 7 2772.79 16 57 53 4310.67 -28.08 90.00 18 9 44 3710.7 - . 1 A 171.53 192.53 61.89 178.16 90.00 3.60 1 58 3 2479.54 18 9 38 4079.16 199.29 95.24 2 39 23 1879.5 -28.43 49.49 58.14 100.00 -29.47 95.24 2 39 25 60.46 19 17 37 99.13 4 4 8 56.64 20 2 14 3479.2 .86 153.93 191.85 160.47 100.00 4.83 1599.8 -31.47 27.51 36.36 198.75 110.00 3 27 29 2199.77 18 56 43 3931.69 -33.09 3331.7 3.49 141.10 189.94 147.37 110.00 7.93 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1725.5 SR 277.7 55 483.0 CRT .9257 CR5 -.9959 CST -.9055 SCT 4651.1 SGR 313.0 SG3 145.2 RRT -.0672 RRF .0337 RTF .8355 SCB 4661.6 R23 -.0903 R13 -.8355 TOE 1.2602 TRA-1.6230 TC3-4.2054 BAU 1.1507 ROE .2192 RRA -.0030 RC3 .1597 FAU .03805 LSA 1799.7 MSA 220.2 SSA 17.6 EL1 1744.6 EL2 103.9 ALF 8.50 .6505 FRA .1146 FC3-1.6107 BSP 14642 5G1 4651.2 5G2 312.3 THA 179.74 BOE 1.2791 BRA 1.6230 BC3 4.2085 FSP -459 ARRIVAL DATE JUN 5 1966 FLIGHT TIME 154.00 LAUNCH DATE JAN 2 1966 DISTANCE 462.403 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 26.906 GAL -4.01 AZL 85.82 MCA 232.38 SMA 122.83 ECC .20912 INC 4.1784 VI 30.287 RP 108.89 LAP -3.31 LOP 333.45 VP 36.840 GAP 10.18 AZP 92.55 TAL 195.51 TAP 67.89 RCA 97.14 APO 148.51 V2 34.803 RC 170.040 GL 26.15 GP -9.54 ZAL 114.92 ZAP 164.48 ETS 322.73 ZAE 130.20 ETE 188.30 ZAC 83.16 ETC 164.23 CLP-167.70 PLANETOCENTRIC CONIC C3 19.695 VHL 4.438 DLA 17.51 RAL 334.28 RAD 6567.8 VEL 11.878 PTH 2.11 VHP 6.853 DPA -17.50 RAP 352.12 ECC 1.3241 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME 72.43 201.66 93.21 1 17 36 2188.9 -27.41 0 31 7 2788.92 -28.15 81.02 90.00 61.79 18 26 19 94.69 2 44 12 60.32 19 33 39 98.67 4 10 5 56.43 20 17 8 3676.6 -1.28 169.62 4275.58 2.51 176.25 194.78 90.00 17 15 2 1893.8 -2A.59 50.52 2 2 38 2493.77 201.54 -29.56 59.19 100.00 18 26 12 4046.96 3 33 15 2210.29 152.16 3447.0 -.24 3.74 158.69 194.09 100.00 1610.3 -31.64 28.28 -33.20 37.17 201.04 110.00 145.86 192.16 3303.2 2.40 139.61 3903.21 6.86 110.00 19 12 5 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1782.5 SR 289.0 SS 489.7 CRT .9449 CRS -.9929 CST -.9123 SGT 4723.2 SGR 325.5 SG3 143.5 RRT -.0403 RRF .0399 RTF .8368 TOE 1.2968 TRA-1.4777 TC3-4.4362 BAU 1.1689 RDE .2237 RRA -.0147 RC3 .1675 FAU .03655 FOE .6378 FRA .1589 FC3-1.6067 BSP 14908 BDE 1.3160 BRA 1.4777 BC3 4.4393 FSP -455 LSA 1858.8 MSA 212.0 SSA 18.7 SCB 4734.4 R23 -.0738 R13 -.8367 EL1 1803.3 EL2 93.5 ALF 8.73 5G1 4723.2 SG2 325.2 THA 179.84 ARRIVAL DATE JUN 7 1966 FLIGHT TIME 156.00 LAUNCH DATE JAN 2 1966 DISTANCE 468.063 RL 147.10 LAL .00 LOL 101.15 VL 26.842 GAL -3.56 A7L 85.94 MCA 235.54 SMA 122.44 ECC .21041 INC 4.0583 VI 30.287 RP 108.87 LAP -3.35 LOP 336.62 VP 36.798 GAP 10.37 A7P 92.30 TAL 193.62 TAP 69.16 RCA 96.68 APO 148.20 V2 34.808 RC 172.148 GL 25.75 GP -9.01 TAL 112.33 TAP 165.39 ETS 322.62 TAE 130.39 ETE 187.90 TAC 85.31 ETC 164.88 CLP-168.46 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 19.046 VHL 4.364 DLA 18.24 RAL 337.07 RAD 6567.8 VEL 11.850 PTH 2.10 VHP 6.950 OPA -16.05 RAP 354.16 ECC 1.3134 LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 92.46 1 21 34 61.71 18 44 22 2 48 50 2209.5 -27.58 204.15 82.52 0 34 44 2809.48 -28.22 90.00 3640.1 17 33 42 4240.15 1.33 174.22 197.27 90.00 -28.78 1912.1 51.85 2 48 50 2 6 57 2512.09 60.55 204.06 93.99 100.00 93.99 2 48 50 60.21 19 51 3 3412.8 -1.40 150.29 156.81 196.57 18 44 10 4012.78 2.59 100.00 29.31 4 16 2 -31.86 2224.25 1624.3 203.60 98.05 3 38 57 -33.33 38.23 110.00 20 33 13 3273.4 1.26 144.28 194.62 56.24 3873.38 19 28 39 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1847.7 SR 300.1 SS 497.1 CRT .9613 CRS -.9885 CST -.9197 SCT 4791.9 SCR 337.6 SC3 141.7 RRT -.0132 RRF .0486 RTF .8385 SCB 4803.8 R23 -.0597 R13 -.8385 SCI 4791.9 SC2 337.6 THA 179.95 TOE 1.3406 TRA-1.3237 TC3-4.6562 BAU 1.1864 RDE .2284 RRA -.0255 RC3 .1730 FAU .03505 LSA 1926.1 MSA 202.7 SSA 19.9 FDE .6266 FRA .2020 FC3-1.5932 BSP 15163 BDE 1.3599 BRA 1.3239 BC3 4.6594 FSP -451 FL1 1870.1 EL2 81.7 ALF 8.89 ARRIVAL DATE JUN 9 1966 FLIGHT TIME 158.00 LAUNCH DATE JAN 2 1966 DISTANCE 473.712 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 26.779 GAL -3.11 AZL 86.05 HCA 238.71 SMA 122.06 ECC .21190 INC 3.9468 V1 30.287 RP 108.85 LAP -3.37 LOP 339.80 VP 36.758 GAP 10.56 AZP 92.05 TAL 191.72 TAP 70.43 RCA 96.19 APO 147.92 V2 34.814 RC 174.239 GL 25.33 GP -8.55 ZAL 109.59 ZAP 166.26 ETS 322.31 ZAE 130.57 ETE 187.56 ZAC 87.50 ETC 165.46 CLP-169.20 PLANETOCENTRIC CONIC C3 18.504 VHL 4.302 DLA 19.04 RAL 340.01 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 7.053 DPA -14.65 RAP 356.23 ECC 1.3045 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2234.3 -27.76 75.70 91.56 1 25 17 2834.34 -28.28 84.33 206.90 90.00 0 38 3 -3.69 165.44 19 3 54 3601.7 200.02 61.68 17 53 52 4201.71 .09 172.08 90.00 -28.99 53.47 206.83 93.13 2 53 20 1934.3 2534.30 -29.74 62.19 2 11 5 3377.0 -2.61 148.32 60.14 20 9 47 3976.98 199.31 19 3 30 1.38 154.84 3 44 41 2241.46 19 46 24 3842.59 4 22 3 1641.5 -32.12 30.59 97.28 -33.49 39.55 206.43 20 50 26 3242.6 .09 136.45 197.32 56.09 4.57 142.66 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4857.5 SGR 349.3 SG3 139.8 RRT .0139 RRF .0593 RTF .8409 ST 1920.4 SR 311.2 SS 504.8 CRT .9747 CRS -.9831 CST -.9273 TOE 1.3907 TRA-1.1606 TC3-4.8610 BAU 1.2033 RDE .2333 RRA -.0352 RC3 .1760 FAU .03356 LSA 2000.5 MSA 192.7 SSA 21.1 FDE .6164 FRA .2440 FC3-1.5701 BSP 15415 BDE 1.4102 BRA 1.1612 BC3 4.8642 FSP -448 SGB 4870.1 R23 .0476 R13 .8409 SG1 4857.5 SG2 349.2 THA EL1 1944.2 EL2 68.7 ALF 8.99 .06

SG8 5089.8 R23 .0179 R13 .8531

SG1 5075.0 SG2 387.8 THA .53

LSA 2347.6 MSA 156.1 SSA 25.0 EL1 2291.1 EL2 25.0 ALF 8.90

ROE .2584 RRA -.0623 RC3 .1631 FAU .02754 FDE .5839 FRA .4095 FC3-1.3645 BSP 16147

BOE 1.6634 BRA .4078 BC3 5.3948 FSP -423

ARRIVAL DATE JUN 19 1966

```
LAUNCH DATE JAN 2 1966
                                                                       DISTANCE 501.750
   HELIOCENTRIC CONIC
   RL 147.1D LAL .0D LOL 101.15 VL 26.48D GAL -.62 AZL 86.52 MCA 254.55 SMA 120.29 ECC .22307 INC 3.4754 V1 30.287 RP 108.73 LAP -3.35 LOP 355.67 VP 36.578 GAP 11.67 AZP 90.93 TAL 182.15 TAP 76.7D RCA 93.46 APO 147.13 V2 34.854 RC 184.407 GL 22.54 GP -6.89 ZAL 93.76 ZAP 170.03 ETS 317.51 ZAE 131.44 ETE 186.39 ZAC 98.90 ETC 167.59 CLP-172.78
   PLANETOCENTRIC CONIC
    C3 17.531 VHL 4.187 DLA 23.39 RAL 357.00 RAD 5567.7 VEL 11.786 PTH 2.08 VHP 7.680 DPA -8.11 RAP
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -28.30
                                                                                               84.86
                                                                                                            1 42 0
                                                                                                                            2418.0
                                                                                                                                                           89.10
                   0 51 42 3018.01
19 55 42 3992.86
                                                                 97.74
                                                                               224.49
                                                  -27.88
        90.00
                                                                                                 62.40 21 2 15
                                                                                                                                                           153.59
                                                                                                                             3392.9
                                                                                                                                            -10.24
                                                   -6.60
                                                                 160.38
                                                                               217.99
                                                                                                 86.79
                                                                                                             3 16 18
                                                                                                                             2096.7
                                                                                                                                            -29.86
                                                                                                                                                            65.45
                    2 31 21
                                  2696.69
                                                   -29.74
                                                                  74.25
                                                                               224.65
                                                                                                         22 1 54
                                                                                                                                                           137.91
                                                                                                                             3189.4
       100.00
                   20 58 44
                                  3789.41
                                                   -4.97
                                                                 144.53
                                                                               217.10
                                                                                                 60.49
                                                                                                 91.52 4 35 5
7 44 22 31 37
                                                                                                                                                            40.16
                   4 16 28 2367.82
21 30 6 3691.04
                                                                                                                             1767.8
                                                                                                                                            -33.57
                                  2367.82
                                                  -34.15
                                                                  49.35
                                                                               224.72
                                                                                                                             3091.0
                                                                                                                                            -5.69
                                                                                                                                                           128.52
                                                   -1.21
                                                                 134.75
                                                                               214.76
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 5121.1 SGR 399.1 SG3 129.1
RRT .1451 RRF .1376 RTF .8573
SGB 5136.6 R23 .0125 R13 .8573
SGI 5121.4 SG2 394.8 THA .65
                                                                                                                         ST 2345.7 SR 366.1 SS 538.3
CRT .9967 CRS -.9445 CST -.9592
    TOE 1.7102 TRA -.1882 TC3-5.4292 BAU 1.2730
    ROE .2666 RRA -.0657 RC3 .1556 FAU .02611
FOE .5739 FRA .4494 FC3-1.2893 BSP 16326
BOE 1.7308 BRA .1994 BC3 5.4314 FSP -417
                                                                                                                         LSA 2429.6 MSA 150.0 SSA 25.5
EL1 2373.9 EL2 29.6 ALF 8.84
                                                                                                                                     ARRIVAL DATE JUN 21 1966
LAUNCH DATE JAN 2 1966
                                                                         FLIGHT TIME 170.00
                                                                         DISTANCE 507.303
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 26.423 GAL -.07 AZL 86.61 HCA 257.72 SMA 119.97 ECC .22616 INC 3.3919 VI 30.287 RP 108.70 LAP -3.31 LOP 358.85 VP 36.546 GAP 11.93 AZP 90.72 TAL 180.23 TAP 77.95 RCA 92.83 APO 147.10 V2 34.863 RC 186.379 GL 21.79 GP -6.65 ZAL 90.27 ZAP 170.69 ETS 315.72 ZAE 131.61 ETE 186.24 ZAC 101.24 ETC 167.88 CLP-173.48
   PLANETOCENTRIC CONIC
                                                                                                   2.09 VHP 7.831 DPA
                                                                                                                                 -6.86 RAP
                                                          .80 RAO 6567.7 VEL 11.795 PTH
    C3 17.735 VHL 4.211 DLA 24.21 RAL
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               83.18
                                                                                                             1 45 16
                                                                               228.72
                                                                                                                          2465.1
                                                                                                                                           -28.21
        90.00
                     0 54 11 3065.11
                                                   -27.55
                                                                 101.14
                                                                                                 62.72 21 29 25
85.22 3 21 30
60.69 22 27 8
90.09 5 4 2
55.88 22 53 58
                  20 23 34 3951.12
2 35 53 2737.22
21 24 33 3754.24
4 24 3 2398.81
21 52 53 3665.42
                                                                                                                                                            151.17
                                                                                222.43
                                                                                                                              3351.1
        90.00
                                                   -7.91
                                                                 158.01
                                                                                                                              2137.2
                                                                                                                                            -29.89
                                                                                                                                                             68.46
                                                                  77.25
                                                                                228.95
       100.00
                                                   -29.54
                                                                                                                                            -10.01
                                                                                                                                                            135.93
       100.00
                                                                                221.48
                                                                                                                              3154.2
                                                   -6.14
                                                                 142.59
                                                                                                                                           -33.79
                                                                                                                                                            42.55
                                                                                                                              1798.8
                                                   -34.18
                                                                                229.17
       110.00
                                                                   51.77
                                                                                                                              3065.4
                                                                                                                                             -6.66
                                                                                                                                                            127.17
       110.00
                                                   -2.19
                                                                 133.41
                                                                                219.03
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 5173.3 SGR 406.5 SG3 126.5
RRT .1733 RRF .1526 RTF .8732
SGB 5189.3 R23 .0004 R13 .8732
SGI 5173.8 SG2 400.3 THA .78
                                                                                                                         ST 2420.8 SR 376.3 SS 534.2
CRT .9941 CRS -.9381 CST -.9653
    TOE 1.7765 TRA .0192 TC3-5.4306 BAU 1.2880
    ROE .2756 RRA -.0694 RC3 .1399 FAU .02528
                                                                                                                        LSA 2503.4 MSA 141.0 SSA 25.5
EL1 2449.6 EL2 40.3 ALF 8.79
    FOE .5592 FRA .4662 FC3-1.2341 BSP 16726
BOE 1.7977 BRA .0720 BC3 5.4324 FSP -444
                                                                                                                                    ARRIVAL DATE JUN 23 1966
                                                                         FLIGHT TIME 172.00
LAUNCH DATE JAN 2 1966
                                                                         DISTANCE 512.831
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 26.367 GAL .50 AZL 86.69 MCA 260.90 SMA 119.65 ECC .22959 INC 3.3102 VI 30.287

RP 108.67 LAP -5.27 LOP 2.03 VP 36.516 GAP 12.20 AZP 90.52 TAL 178.31 TAP 79.20 RCA 92.18 APO 147.12 VZ 34.873

RC 188.330 GL 20.97 GP -6.44 ZAL 86.73 ZAP 171.32 ETS 313.57 ZAE 131.78 ETE 186.10 ZAC 103.59 ETC 168.13 CLP-174.17
   PLANETOCENTRIC CONIC
    C3 18.098 VHL 4.254 DLA 24.98 RAL 4.70 RAD 6567.7 VEL 11.810 PTH 2.09 VMP 7.993 DPA -5.64 RAP 11.15 ECC 1.2978
    LNCH ATHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -28.00
                                                                                             81.45 1 48 38
63.09 21 57 22
                                                                                                                          2514.9
                                                                              233.14
                                                                                                                                                            96.17
                                                                 104.72
                     0 56 43 3114.91
                                                   -27.10
        90.00
                                                                                227.13
                                                                                                                             3310.8
                                                                                                                                            -12.70
                                                                                                                                                           148.81
                    20 52 11
                                                                 155.70
        90.00
                                  3910.76
                                                    -9.16
                                                                                                          3 27 8
22 52 49
                                                                                233.46
                                                                                                 83.61
                                                                                                                             2179.3
                                                                                                                                            -29.84
                                                                                                                                                            71.59
                                                                  80.35
       100.00
                     2 40 48 2779.34
                                                   -29.26
                                                                                                                              3121.6
                                                                                                                                            -11.05
                                                                                                                                                           134.07
                                                                                226.10
                                                                                                 60.92
                                                                 140.77
       100.00
                    21 50 47 3721.57
                                                   -7.23
                                                                                                                              1830.7
                                                                                                 88.62 5 12 45
55.94 23 16 33
                                                                                                                                                            45.02
                                                                                                                                           -33.97
                   4 32 15 2430.68
22 15 50 3642.99
                                                                   54.26
                                                                                233.85
       110.00
                                                   -34.16
                                                                                                                                                           125.98
                                                                                                                             3043.0
                                                                                                                                             -7.50
                                                                                223.52
       110.00
                                                   -3.05
                                                                 132.24
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 5202.0 SGR 414.0 SG3 124.6

RRT .1941 RRF .1777 RTF .8658

SGB 5218.4 R23 .0087 R13 .8658

SGI 5202.6 SG2 406.1 THA .89
                                                                                                                          ST 2490.6 SR 387.4 9S 543.4
     TOE 1.8442 TRA .2761 TC3-5.3504 BAU 1.2949
                                                                                                                          CRT .9898 CRS -.9263 CST -.9673
    ROE .2867 RRA -.0681 RC3 .1290 FAU .02325
FOE .5568 FRA .5303 FC3-1.1122 BSP 16633
BOE 1.8664 BRA .2843 BC3 5.3519 FSP -402
                                                                                                                         LSA 2574.3 MSA 144.6 SSA 25.5
EL1 2520.0 EL2 54.5 ALF 8.76
                                                                                                                                     APRIVAL DATE JUN 25 1966
                                                                          FLIGHT TIME 174.00
LAUNCH DATE JAN 2 1966
                                                                          DISTANCE 518.332
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 26.312 GAL 1.10 AZL 86.77 HCA 264.08 SMA 119.34 ECC .23339 INC 3.2300 V1 30.287 RP 108.63 LAP -3.21 LOP 5.22 VP 36.886 GAP 12.49 AZP 90.33 TAL 176.39 TAP 80.46 RCA 91.48 APO 147.19 V2 34.884 RC 190.259 GL 20.08 GP -6.24 ZAL 83.15 ZAP 171.92 ETS 311.00 ZAE 131.95 ETE 185.98 ZAC 105.96 ETC 168.34 CLP-174.86
   PLANETOCENTRIC CONIC
                                                       8.68 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 8.167 OPA -4.43 RAP 13.33 ECC 1.3067
    C3 18.635 VML 4.317 DLA 25.67 RAL
LNCH AZMTH LNCH TIME L-I TIME IN
                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -27.67
                                                                                                                                                             99.93
                                                                               237.71
                                                                                                 79.69
                                                                                                             1 52 12
                                                                                                                              2566.8
                                   3166.76
                                                    -26.52
                                                                  108.40
                     0 59 25
        90.00
                                                                                                                              3272.6
                                                                                                                                             -13.81
                                                                                                                                                            146.56
                                                                                 232.06
                                                                                                  63.49
                                                                                                          22 25 46
                                   3872.62
                                                    -10.33
                                                                 153.51
        90.00
                   21 21 13
                                                                                                                              2222.2
                                                                                                                                             -29.70
                                                                                                                                                             74.77
                                                                                 238.15
                                                                                                  82.00
                                                                                                              3 33 19
                                   2822.23
                                                    -28.90
                                                                   83.49
                      2 46 17
       100.00
                                                                                                                                            -11.98
                                                                                                                                                            132.39
                                                                                                  61.15 23 18 34
                                                                                                                              3092.4
                                                                                 230.92
                    22 17 2
                                  3692.38
                                                    -8.19
                                                                  139.14
       100.00
                   4 41 9 2462.81
22 38 39 3624.56
                                                                                                 87.14 5 22 12
56.00 23 39 3
                                                                                                                                            -34.10
                                                                                238.73
                                                                                                                              1862.8
                                                   -34.08
                                                                   56.77
       110.00
                                                                                                                                               -8.19
                                                                                                                              3024.5
                                                                                228.20
       110.00
                                                                  131.27
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ST 2542.0 9R 397.2 SS 540.6
                                                                     SGT 5238.0 SGR 420.0 SG3 122.2
RRT .2177 RRF .1966 RTF .8716
     TOE 1.9045 TRA .5246 TC3-5.2378 BAU 1.3052
                                                                                                                         CRT .9844 CRS -.9166 CST -.9704
     RDE .2984 RRA -.0670 RC3 .1143 FAU .D2197
                                                                                                                         LSA 2624.9 MSA 144.9 SSA 24.9
EL1 2571.9 EL2 69.0 ALF 8.75
    FDE .5449 FRA .5692 FC3-1.0205 BSP 16830
BDE 1.9278 BRA .5288 BC3 5.2390 FSP -399
                                                                    SGB 5254.8 R23 .0058 R13 .8716
SG1 5238.8 SG2 409.8 THA 1.01
```

FLIGHT TIME 168.00

```
ARRIVAL DATE JUN 27 1966
                                                                            FLIGHT TIME 176.00
LAUNCH DATE JAN 2 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 523.803
    RL 147.10 LAL .00 LOL 101.15 VL 26.258 GAL 1.72 AZL 86.85 MCA 267.25 SMA 119.03 ECC .23758 INC 3.1506 V1 30.287
RP 108.60 LAP -3.15 LOP 8.40 VP 36.457 GAP 12.81 AZP 90.15 TAL 174.47 TAP 81.73 RCA 90.75 APO 147.31 V2 34.895
RC 192.167 GL 19.13 GP -6.06 TAL 79.56 TAP 172.48 ETS 307.94 TAE 132.11 ETE 185.88 TAC 108.34 ETC 168.52 CLP-175.54
   PLANETOCENTRIC CONIC
    C3 19.366 VHL 4.401 DLA 26.28 RAL 12.70 RAD 6567.8 VEL 11.864 PTH 2.10 VHP 8.354 DPA -3.25 RAP 15.52 ECC 1.3187
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                77.94 1 56 4
63.90 22 54 16
                                                                                                                                               -21.22
                     1 2 24 3219.95
21 50 18 3837.57
                                                                                242.42
                                                                                                                 1 56 4
                                                     -25.81
                                                                    112.14
                                                                                                                                  2619.9
                                                                                                                                                                103.75
                                                     -11.39
                                                                    151.48
                                                                                   237.17
                                                                                                                                  3237.6
                                                                                                                                                 -14.80
                                                                                                                                                                 144.47
        90.00
                                                                                                    80.43 3 40 14
61.37 23 44 2
85.68 5 32 26
56.05 24 1 12
                     2 52 29 2865.04
                                                     -28.45
                                                                     86.59
                                                                                   242.99
                                                                                                                                  2265.0
                                                                                                                                                 -29.48
                                                                                                                                                                  77.94
       100.00
                   22 42 54
                                   3667.71
                                                      -9.00
                                                                    137.75
                                                                                   235.92
                                                                                                                                  3067.7
                                                                                                                                                 -12.75
                                                                                                                                                                 130.97
                                                    -33.94
                                                                     59.25
                                                                                   243.77
                                                                                                                                  1894.7
                                                                                                                                                 -34.17
                                                                                                                                                                   50.01
                      4 50 51 2494.67
                                                                    130.55
                                                                                   233.03
                                                                                                                                  3010.8
                                                                                                                                                  -8.70
                                                                                                                                                                 124.27
                   23 1 1
                                   3610.85
                                                     -4.27
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SCT 5267.0 SCR 425.2 SC3 120.0
RRT .2414 RRF .2176 RTF .8769
SCB 5284.2 R23 .DQ47 R13 .8769
SCI 5268.0 SC2 412.5 THA 1.12
                                                                                                                           ST 2583.3 SR 406.5 SS 537.5
CRT .9779 CR5 -.9064 CST -.9731
    TDE 1.9638 TRA .7905 TC3-5.0668 BAU 1.3121
    ROE .3115 RRA -.0641 RC3 .0992 FAU .02062
FOE .5339 FRA .6109 FC3 -.9216 BSP 16907
BOE 1.9883 BRA .7931 BC3 5.0677 FSP -392
                                                                                                                             LSA 2665.6 MSA 147.7 SSA 23.9
EL1 2613.8 EL2 84.1 ALF 8.76
                                                                            FLIGHT TIME 178.00
                                                                                                                                          ARRIVAL DATE JUN 29 1966
LAUNCH DATE JAN 2 1966
                                                                           DISTANCE 529.237
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 26.205 GAL 2.36 AZL 86.93 HCA 270.44 SMA 118.73 ECC .24221 INC 3.0716 V1 30.287 RP 108.57 LAP -3.07 LOP 11.59 VP 36.430 GAP 13.14 AZP 89.98 TAL 172.56 TAP 83.00 RCA 89.98 APO 147.49 V2 34.906 RC 194.054 GL 18.14 GP -5.90 ZAL 76.00 ZAP 173.00 ETS 304.30 ZAE 132.27 ETE 185.79 ZAC 110.72 ETC 168.66 CLP-176.23
   PLANETOCENTRIC CONIC
                                                                                                       2.12 VHP 8.554 DPA
                                                                                                                                     -2.08 RAP 17.71 ECC 1.3343
    C3 20.313 VHL 4.507 OLA 26.79 RAL 16.73 RAO 6567.8 VEL 11.904 PTH
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 5 53 3273.43 -25.00 115.84 247.22 76.25 2 0 27 2673.4 -26.65 107.56
                                                                                                     64.29 23 22 25
        90.00
                   22 18 58
                                   3806.79
                                                     -12.30
                                                                    149.68
                                                                                   242.43
                                                                                                                                  3206.8
                                                                                                                                                 -15.66
                                                                                                                                                                 142.62
                                 2906.74
                                                                                                                                  2306.7
       100.00
                     2 59 38
                                                    -27.94
                                                                     89.59
                                                                                   247.95
                                                                                                     78.93
                                                                                                                 3 48 5
                                                                                                                                                  -29.19
                                                                                                                                                                   81.00
                                                                                                     61.56 24 8 43
                  23 7 54 3648.71
5 1 25 2525.68
                                                                    136.68
                                                                                   241.03
                                                                                                                                  3048.7
                                                                                                                                                 -13.34
                                                                                                                                                                 129.87
       100.00
                                                     -9.62
                                                                                                                                1925.7
                                                                                                                 5 43 31
                                                                                                                                                 -34.18
                                                    -33.76
                                                                                   248.95
                                                                                                     84.27
                                                                                                                                                                  52.43
       110.00
                                                                     61.65
                                                                                                     56.09 24 22 40
                                                                                   237.97
       110.00
                   23 22 37
                                   3602.53
                                                     -4.59
                                                                    130.12
                                                                                                                                  3002.5
                                                                                                                                                   -9.01
                                                                                                                                                                 123.82
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5293.1 SGR 429.2 SG3 117.6
RRT .2638 RRF .2376 RTF .8824
SGB 5310.5 R23 .0035 R13 .8824
SGI 5294.3 SG2 413.9 THA 1.23
    TOE 2.0128 TRA 1.0670 TC3-4.8561 BAU 1.3190
                                                                                                                              ST 2602.4 SR 414.7 SS 530.7
CRT .9703 CRS -.8954 CST -.9752
    FOE .5256 RRA -.0597 RC3 .0838 FAU .01934
FOE .5203 FRA .6520 FC3 -.8242 BSP 17043
BOE 2.0390 BRA 1.0686 BC3 4.8568 FSP -386
                                                                                                                             LSA 2683.7 MSA 152.4 SSA 22.8
EL1 2633.4 EL2 99.1 ALF 8.80
                                                                                                                                        ARRIVAL DATE JUL 1 1966
                                                                           FLIGHT TIME 180.00
LAUNCH DATE JAN 2 1966
                                                                           DISTANCE 534.630
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 101.15 VL 26.153 CAL 3.04 AZL 87.01 MCA 273.62 SMA 118.45 ECC .24731 INC 2.9925 V1 30.287 RP 108.53 LAP -2.99 LOP 14.77 VP 36.404 CAP 13.50 AZP 89.81 TAL 170.67 TAP 84.29 RCA 89.15 APO 147.74 V2 34.918 RC 195.918 GL 17.10 CP -5.76 ZAL 72.48 ZAP 173.47 ETS 300.02 ZAE 132.42 ETE 185.71 ZAC 113.11 ETC 168.76 CLP-176.92
   PLANETOCENTRIC CONIC
    C3 21.503 VHL 4.637 OLA 27.20 RAL 20.74 RAO 6567.9 VEL 11.953 PTH 2.13 VHP 8.771 OPA
                                                                                                                                     -.93 RAP 19.92 ECC 1.3539
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                               74.68 2 5 40
64.64 23 49 38
77.55 3 57 4
61.69 24 32 10
82.93 5 55 27
56.10 24 43 9
                                                                              252.10
                                                                                                                                                            111.25
                                                                                                                                             -25.98
                                                                                                                              2725.8
                     1 10 14 3325.76
                                                    -24.11
                                                                   119.42
        90.00
                                                    -13.03
                                                                   148.21
                                                                                  247.78
                                                                                                                                  3181.8
                                                                                                                                                 -16.35
                                                                                                                                                                141.10
                   22 46 36 3781.77
        90.00
                                                                    92.39
                                                                                253.01
                                                                                                                                  2346.2
                                                                                                                                                 -28.84
                                                                                                                                                                  83.89
                     3 7 58 2946.23
                                                   -27.40
       100.00
                                                                                                                                  3036.5
                                                                                                                                                 -13.72
                                                                                                                                                                129.16
                                                                                  246.22
                   23 31 33
                                   3636.53
                                                   -10.01
                                                                   135.99
       100.00
                                  2555.39
                                                                                  254.23
                                                                                                                                  1955.4
                                                                                                                                                -34.15
                                                                                                                                                                  54.75
                                                   -33.53
                                                                     63.94
       110.00
                     5 12 52
                                                                                                                                  3000.1
                                                                   129.99
                                                                                  242.98
                                                                                                                                                 -9.10
                                                                                                                                                                 123.69
       110.00
                   23 43 9
                                   3600.14
                                                    -4.68
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                       SGT 5315.4 SGR 432.3 SG3 115.2
RRT .2860 RRF .2583 RTF .8882
SGB 5332.9 R23 .0028 R13 .8882
                                                                                                                             ST 2604.8 SR 421.7 55 522.8
    TOE 2.0552 TRA 1.3580 TC3-4.6057 BAU 1.3242
    TOE 2.0552 TRA 1.3580 103-4.007 DRA 1.3680 RC3 .0687 FAU .01811 FDE .5066 FRA .6943 FC3 -.7290 BSP 17173
                                                                                                                            CRT .9618 CRS -.8838 CST -.9771
                                                                                                                            LSA 2685.2 MSA 158.7 SSA 21.6
                                                                       SG1 5316.8 SG2 414.1 THA 1.34
                                                                                                                            EL1 2636.2 EL2 114.1 ALF
                                                                                                                                                                   8.87
                                                                                                                                         ARRIVAL DATE JUL 3 1966
                                                                            FLIGHT TIME 182.00
LAUNCH DATE JAN 2 1966
                                                                          01STANCE 539.976
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 26.102 GAL 3.74 ATL 87.09 MCA 276.80 SMA 118.16 ECC .25293 INC 2.9128 V1 30.287
RP 108.49 LAP -2.89 LOP 17.96 VP 36.379 GAP 13.89 ATP 89.65 TAL 168.78 TAP 85.59 RCA 88.28 APO 148.05 V2 34.930
RC 197.761 GL 16.03 GP -5.62 ZAL 69.03 ZAP 173.89 ETS 295.01 ZAE 132.57 ETE 185.64 ZAC 115.50 ETC 168.82 CLP-177.61
   PLANE TOCENTRIC CONIC
    C3 22.968 VHL 4.793 DLA 27.50 RAL 24.69 RAD 6567.9 VEL 12.014 PTH 2.14 VMP 9.005 DPA .20 RAP 22.14 ECC 1.3780 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                    73.27 2 12 12
64.89 24 15 8
4 7 24
                                                                                 257.05
                                                                                                                                 2774.8
                                                                                                                                                -25.26
                                                                                                                                                                114.55
                                    3374.85
                                                    -23.18
                                                                    122.72
        90.00
                      1 15 57
                                                                                                                                                                 140.05
                                                                                  253.16
                                                                                                                                  3164.6
                                                                                                                                                 -16.81
                  23 12 24
                                   3764.61
                                                    -13.53
                                                                   147.20
        90.00
                                                                                                     76.32
                                                                                                                                  2382.4
                                                                                                                                                 -28.45
                                                                                                                                                                  86.51
                                  2982.41
                                                    -26.84
                                                                     94.94
                                                                                  258.14
                      3 17 41
       100.00
                                                                                                     61.73 24 53 53
                                                                                                                                  3032.3
                                                                                                                                                 -13.85
                                                                                                                                                                 128.91
                  23 53 21
                                   3632.28
                                                    -10.15
                                                                   135.75
                                                                                  251.43
       100.00
                                 2583.43
                                                                                                               6 8 14
                                                                                259.59
248.01
                                                                                                     81.68
                                                                                                                                  1983.4
                                                                                                                                                 -34.07
                                                                                                                                                                  56.94
                     5 25 11
                                                    -33.28
                                                                     66.09
       110.00
                                                                                                                                  3004.0
                                                                                                    56.08
                                                                                                                                                 -8.96
                                                                                                                                                                123.90
                     0 6 16
                                   3604.03
                                                                   130.20
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                           ST 2593.9 SR 427.4 SS 514.7

CRT .9522 CRS -.8716 CST -.9788

LSA 2673.6 MSA 166.4 SSA 20.3

EL1 2625.7 EL2 128.9 ALF 8.94
                                                                      SGT 5332.2 SGR 434.5 SG3 113.0
RRT .3083 RRF .2804 RTF .8938
    TOE 2.0925 TRA 1.6675 TC3-4.3171 BAU 1.3257
    RDE .3572 RRA -.0453 RC3 .0546 FAU .01684
FDE .4935 FRA .7387 FC3 -.6348 BSP 17203
                                                                      SGB 5349.9 R23 .0033 R13 .8938
SG1 5333.9 SG2 413.2 THA 1.45
    BDE 2.1228 BRA 1.6682 BC3 4.3175 FSP -372
```

ARRIVAL DATE JUL 5 1966

```
LAUNCH DATE JAN 2 1966
                                                                       DISTANCE 545.267
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 101.15 VL 26.051 GAL 4.49 A7L 87.17 HCA 279.99 SMA 117.89 ECC .25912 INC 2.8319 VI 30.287 RP 108.45 LAP -2.79 LOP 21.15 VP 36.354 GAP 14.31 A7P 89.51 TAL 166.91 TAP 86.90 RCA 87.34 APO 148.43 V2 34.942 RC 199.580 GL 14.95 GP -5.50 ZAL 65.67 ZAP 174.25 ETS 289.22 ZAE 132.71 ETE 185.57 ZAC 117.88 ETC 168.83 CLP-178.30
   PLANETOCENTRIC CONIC
                                                                                                                              1.31 RAP 24.36 ECC 1.4073
    C3 24.746 VHL 4.975 DLA 27.69 RAL 28.55 RAD 6568.0 VEL 12.088 PTH
                                                                                                 2.16 VHP 9.259 OPA
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             262.05
                                                                                             72.10
                                                                                                          2 20 49
                                                                                                                        2817.8
                    1 23 51 3417.76
                                                               125.56
                                                 -22.31
                                                                                                       24 37 57
                                                                                                                          3158.2
                                                                                                                                         -16.98
                                                                                                                                                        139.66
                                                                                               64.98
                                  3758.20
                                                 -13.72
                                                               146.82
                                                                              258.50
                  23 35 19
                                                                                                       4 19 14
1 17 24
6 21 49
1 24 11
                   3 29 0 3014.35
0 16 47 3636.84
                                                                                               75.26
                                                                                                                          2414.4
                                                                                                                                         -28.07
                                                                                                                                                         88.80
                                                                              263.33
                                                                 97.16
                                                 -26.31
                                                                                                                           3036.8
                                                                                                                                         -13.71
                                                                                                                                                       129.18
                                                                                               61.68
      100.00
                                                 -10.00
                                                                136.00
                                                                             256.60
                                                                                                                           2009.6
                                                                                                                                         -33.95
                                                                                                                                                         58.97
                                                                                               80.53
                    5 38 20
                                  2609.60
                                                 -33.00
                                                                 64.04
                                                                              264.98
                                                                                                                           3014.4
                                                                                                                                         -8.57
                                                                                                                                                       124.45
                                                                                               56.04
                                                                              253.03
                                                  -4.14
                                                                130.74
      110.00
                    0 23 57
                                  3614.36
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 5345.9 SGR 435.4 SG3 110.6
RRT .3295 RRF .3011 RTF .8998
SGB 5363.6 R23 .0030 R13 .8998
                                                                                                                      ST 2562.8 SR 431.2 55 504.2
CRT .9415 CRS -.8580 CST -.9802
    TOE 2.1179 TRA 1.9899 TC3-4.0115 BAU 1.3272
    ROE .3742 RRA -.0355 RC3 .0415 FAU .01568
FOE .4784 FRA .7834 FC3 -.5485 BSP 17313
BOE 2.1507 BRA 1.9902 BC3 4.0117 FSP -367
                                                                                                                      LSA 2641.4 MSA 175.2 SSA 19.1
EL1 2594.8 EL2 143.6 ALF 9.03
                                                                   5G1 5347.9 5G2 411.0 THA 1.55
                                                                                                                                  ARRIVAL DATE JUL 7 1966
                                                                        FLIGHT TIME 186.00
LAUNCH DATE JAN 2 1966
                                                                       DISTANCE 550.492
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 101.15 VL 26.002 GAL 5.27 AZL 87.25 HCA 283.18 SHA 117.62 ECC .26595 INC 2.7494 VI 30.287 RP 108.41 LAP -2.68 LOP 24.35 VP 36.331 GAP 14.77 AZP 89.37 TAL 165.06 TAP 88.24 RCA 86.34 APO 148.90 V2 34.955 RC 201.376 GL 13.86 GP -5.39 TAL 62.43 ZAP 174.52 ETS 282.65 ZAE 132.84 ETE 185.51 ZAC 120.27 ETC 168.81 CLP-179.00
   PLANETOCENTRIC CONIC
    C3 26.884 VHL 5.185 DLA 27.78 RAL 32.30 RAD 6568.1 VEL 12.176 PTH 2.19 VHP 9.534 DPA 2.40 RAP 26.59 ECC 1.4424
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                               2.40 RAP 26.59 ECC 1.4424
                                                                                                                        2851.2
                                                                                             71.23 2 32 22
                                                                127.76
                                                                            267.14
       90.00
                    1 34 50 3451.24
                                                  -21.60
                                                                                               3165.7
                                                                                                                                          -16.78
                                                                                                                                                        140.12
                                                                147.26
                                                                              263.72
        90.00
                   23 54 14
                                  3765.68
                                                  -13.50
                                                                                                                           2441.5
                                                                                                                                         -27.71
                                                                                                                                                         90.74
                                                  -25.82
                                                                 99.03
                                                                              268.56
       100.00
                    3 41 56
                                  3041.52
                                                                                                                           3050.6
                                                                                                                                         -13.28
                                                                                                                                                         129.98
                    0 33 45 3650.63
5 52 11 2633.86
0 39 59 3631.05
                                                  -9.56
                                                                136.79
                                                                              261.68
       100.00
                                                                                                                           2033.9
                                                                                                                                        -33.82
                                                                                                                                                         60.85
                                                  -32.71
                                                                 59.92
                                                                              270.39
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           3031.1
                                                                                                                                          -7.95
                                                                                                                                                         125.34
       110.00
                                                  -3.50
                                                                131.61
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2518.8 SR 433.3 SS 493.7
CRT .9294 CRS -.8435 CST -.9815
                                                                    SGT 5354.9 SGR 435.3 SG3 108.4
RRT .3504 RRF .3222 RTF .9058
SGB 5372.6 R23 .0031 R13 .9058
    TDE 2.1354 TRA 2.3306 TC3-3.6889 BAU 1.3259
    ROE .3920 RRA -.0238 RC3 .0299 FAU .01453
FOE .4634 FRA .8302 FC3 -.4680 83P 17400
BOE 2.1711 BRA 2.3307 BC3 3.6890 FSP -361
                                                                                                                       LSA 2596.4 MSA 184.6 SSA 17.9
                                                                    5G1 5357.1 SG2 407.5 THA 1.64
                                                                                                                       EL1 2550.9 EL2 157.9 ALF 9.12
                                                                                                                                 ARRIVAL DATE JUL 9 1966
                                                                        FLIGHT TIME 188.00
LAUNCH DATE JAN 2 1966
                                                                       01STANCE 555.642
    RL 147.10 LAL .00 LOL 101.15 VL 25.953 GAL 6.10 AZL 87.34 MCA 286.37 SMA 117.36 ECC .27349 INC 2.6646 V1 30.287 RP 108.37 LAP -2.56 LOP 27.54 VP 36.309 GAP 15.27 AZP 89.25 TAL 163.23 TAP 89.60 RCA 85.26 APO 149.45 V2 34.968 RC 203.147 GL 12.78 GP -5.28 ZAL 59.31 ZAP 174.71 ETS 275.36 ZAE 132.96 ETE 185.46 ZAC 122.65 ETC 168.74 CLP-179.71
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                                              3.46 RAP 28.83 ECC 1.4844
     C3 29.436 VML 5.426 DLA 27.78 RAL 35.91 RAD 6568.2 VEL 12.280 PTH 2.21 VMP 9.834 DPA
     LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       -23.55
                                                                                           70.67 2 47 17
64.54 1 15 33
                                                                                                                        2873.3
                                                                            272.31
                                                  -21.11
                                                                129.19
                     1 49 23 3473.34
        90.00
                                                                                                                           3188.8
                                                                                                                                          -16.15
                                                                 148.63
                                                                               268.75
                                  3788.82
                                                   -12.83
        90.00
                     0 12 24
                                                                                                                                                          92.33
                                                                                                                                         -27.39
                                                                100.56
                                                                               273.81
                                                                                                73.69
                                                                                                         4 47 28
                                                                                                                           2463.9
                                                  -25.40
                                  3063.88
       100.00
                     3 56 24
                                                                                                                                                        131.31
                                                                                                61.32
                                                                                                                           3073.5
                                                                                                                                         -12.57
                                                                 138.08
                                                                               266.66
                                                    -8.81
       100.00
                    0 48 4
                                  3673.51
                                                                    2.80 262.88 55.91 1 55 14
MID-COURSE EXECUTION ACCURACY
SGT 535K 4 479
                                                                                                                           2056.3
                                                                                                                                         -33.66
                                                                                                                                                         62.59
                                                  -32.42
                                                                  71.60
       110.00
                      6 6 37
                                  2656.34
                                                                                                                                           -7.09
                     0 54 20 3653.82
                                                                                                                           3053.8
                                                                 132.80
                                                   -2.64
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2463.8 SR 433.3 S5 483.3
CRT .9158 CRS -.8278 CST -.9828
                                                                     SGT 5356.4 SGR 434.0 SG3 106.1
     TOE 2.1447 TRA 2.6907 TC3-3.3543 BAU 1.3200
                                                                     RRT .3710 RRF .3430 RTF .9122
SGB 5374.0 R23 .0028 R13 .9122
SG1 5358.9 SG2 402.9 THA 1.73
     ROE .41D3 RRA -.0104 RC3 .0200 FAU .01343
FDE .4484 FRA .8792 FC3 -.3950 B9P 17485
BOE 2.1836 BRA 2.6907 BC3 3.3543 FSP -356
                                                                                                                       LSA 2540.3 MSA 194.5 SSA 16.8
                                                                                                                       EL1 2495.7 EL2 171.8 ALF
                                                                                                                                   ARRIVAL DATE JUL 11 1966
                                                                         FLIGHT TIME 190.00
 LAUNCH DATE JAN 2 1966
                                                                        DISTANCE 560.703
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 25.906 GAL 6.98 AZL 87.42 MCA 289.57 SMA 117.10 ECC .28181 INC 2.5769 V1 30.287 PP 108.33 LAP -2.43 LOP 30.74 VP 36.287 GAP 15.81 AZP 89.14 TAL 161.43 TAP 91.00 RCA 84.10 APO 150.10 V2 34.981 RC 204.893 GL 11.71 GP -5.19 ZAL 56.33 ZAP 174.79 ETS 267.55 ZAE 133.06 ETE 185.41 ZAC 125.02 ETC 168.62 CLP 179.56
    PLANETOCENTRIC CONIC
                                                                                                                                4.50 RAP 31.07 ECC 1.5344
                                                                                                  2.24 VHP 10.162 OPA
     C3 32.472 VHL 5.698 DLA 27.69 RAL 39.36 RAD 6568.3 VEL 12.403 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           3 5 7
                                                                                                                            2885.3
                                                                                                                                                       122.17
                     2 7 2
                                  3485.26
                                                   -20.84
                                                                 129.96
                                                                              277.55
                                                                                                70.34
         90.00
                                                                                                                            3226.2
                                                                                                                                           -15.12
                                                                                                                                                         143.79
                                                                                                 64.04
                                                                                                            1 26 2
                                 3826.21
                                                   -11.72
                                                                 150.82
                                                                               273.57
         90.00
                     4 12 8 3081.97
0 59 51 3704.73
6 21 27 2677.27
                                                                                                 73.13
                                                                                                            5 3 30
                                                                                                                            2482.0
                                                                                                                                                          93.60
                                                   -25.05
                                                                 101.79
                                                                               279.06
       100.00
                                                                                                           2 1 36
                                                                                                                            3104.7
                                                                                                                                          -11.59
                                                                                                                                                         133.10
                                                   -7.79
                                                                 139.83
                                                                               271.50
                                                                                                 61.05
       100.00
                                                                                                                            2077.3
                                                                                                                                                          64.20
                                                  -32.13
                                                                  73.17
                                                                               281.15
                                                                                                 77.64
        110.00
                                                                                                            2 8 24
                                                                                                                            3082.2
                                                                                                                                           -6.02
                                                                                                                                                         128.05
                                                                                                 55.85
                      1 7 2 3682.19
                                                                 134.29
                                                                               257.66
       110.00
                                                  -1.55
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2406.2 SR 431.5 SS 474.6
CRT .9009 CRS -.8114 CST -.9841
                                                                    SGT 5361.0 SGR 431.8 SG3 104.1
RRT .3919 RRF .3649 RTF .9181
     TOE 2.1520 TRA 3.0750 TC3-3.0226 BAU 1.3122
     ROE .4292 RRA .0051 RC3 .0119 FAU .01229
FDE .4350 FRA .9320 FC3 -.3277 BSP 17462
                                                                    SGB 5378.4 R23 .0035 R13 .9181
SGI 5363.7 SG2 397.1 THA 1.82
                                                                                                                       LSA 2481.8 MSA 204.2 SSA 15.9
                                                                                                                     EL1 2437.6 EL2 184.8 ALF 9.23
     BOE 2.1944 BRA 3.0750 BC3 3.0226 FSP -347
```

FLIGHT TIME 184.00

```
FLIGHT TIME 192.00
                                                                                                                                              ARRIVAL DATE JUL 13 1966
LAUNCH DATE JAN 2 1966
                                                                              DISTANCE 565.657
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 25.859 GAL 7.92 AZL 87.51 HCA 292.77 SMA 116.85 ECC .29102 INC 2.4857 VI 30.287 RP 108.29 LAP -2.29 LOP 33.93 VP 36.267 GAP 16.40 AZP 89.04 TAL 159.67 TAP 92.43 RCA 82.85 APO 150.86 V2 34.994 RC 206.614 GL 10.66 GP -5.10 ZAL 53.50 ZAP 174.76 ETS 259.49 ZAE 133.15 ETE 185.36 ZAC 127.38 ETC 168.45 CLP 178.82
    PLANETOCENTRIC CONIC
    C3 36.074 VHL 6.006 DLA 27.52 RAL 42.63 RAD 6568.4 VEL 12.548 PTH 2.27 VHP 10.522 DPA 5.50 RAP 33.32 ECC 1.5937 LNCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                   282.82
                                                                                                                                    2890.3
                     2 26 39 3490.32
0 28 48 3874.24
                                                                                                        70.26 3 24 49
        90.00
                                                      -20.72
                                                                      130.29
                                                                                                                                                       -23.22
                                                                                                                                                                      122.51
         90.00
                                                      -10.28
                                                                      153.60
                                                                                      278.20
                                                                                                         63.47
                                                                                                                    1 33 22
                                                                                                                                       3274.2
                                                                                                                                                       -13.76
                                                                                                                                                                       146.66
                      4 28 46 3096.65
1 9 22 3743.14
                                                                                                        72.69 5 20 22
60.76 2 11 45
       100.00
                                                      -24.76
                                                                      102.78
                                                                                      284.28
                                                                                                                                       2496.6
                                                                                                                                                       -26.89
                                                                                                                                                                        94.53
       100.00
                                                       -6.51
                                                                      141.97
                                                                       74.62 286.47 76.82 7 21 26
136.03 272.32 55.82 2 20 4
MID-COURSE EXECUTION ACCURACY
                                                                                      276.18
                                                                                                                                       3143.1
                                                                                                                                                       -10.36
                                                                                                                                                                      135.30
       110.00
                      6 36 29 2696.97
                                                     -31.83
                                                                                                                                       2097.0
                                                                                                                                                      -33.31
                                                                                                                                                                         65.71
       110.00
                      1 18 8
                                     3715.59
                                                        - .28
                                                                      136.03
                                                                                                                                       3115.6
                                                                                                                                                        -4.76
                                                                                                                                                                       129.81
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                         SCT 5356.8 SGR 428.2 SG3 101.9
RRT .4116 RRF .3855 RTF .9244
SG8 5373.9 R23 .0034 R13 .9244
SG1 5359.7 SG2 390.0 THA 1.89
                                                                                                                                ST 2337.4 SR 427.5 SS 465.7
CRT .8841 CR5 -.7936 CST -.9854
    TDE 2.1469 TRA 3.4776 TC3-2.6985 BAU 1.3014
    RDE .4481 RRA .0222 RC3 .0053 FAU .01125
FDE .4206 FRA .9865 FC3 -.2700 BSP 17529
BDE 2.1932 BRA 3.4777 BC3 2.6985 FSP -342
                                                                                                                                 LSA 2411.9 MSA 213.7 SSA 14.9
                                                                                                                                 EL1 2368.0 EL2 197.2 ALF 9.25
LAUNCH DATE JAN 2 1966
                                                                               FLIGHT TIME 194.00
                                                                                                                                              ARRIVAL DATE JUL 15 1966
   HELIOCENTRIC CONIC
                                                                              DISTANCE 570.485
    RL 147.10 LAL .00 LOL 101.15 VL 25.814 GAL 8.92 AZL 87.61 HCA 295.97 SNA 116.61 ECC .30123 INC 2.3899 V1 30.287 RP 108.25 LAP -2.15 LOP 37.13 VP 36.247 GAP 17.06 AZP 88.95 TAL 157.94 TAP 93.91 RCA 81.49 APO 151.74 V2 35.007 RC 208.309 GL 9.64 GP -5.02 ZAL 50.82 ZAP 174.62 ETS 251.51 ZAE 133.21 ETE 185.32 ZAC 129.72 ETC 168.23 CLP 178.07
   PLANETOCENTRIC CONIC
    C3 40.346 VHL 6.352 OLA 27.29 RAL 45.73 RAD 6568.6 VEL 12.717 PTH 2.31 VHP 10.918 OPA 6.48 RAP 35.56 ECC 1.6640 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 2 47 5 3491.89 -20.68 130.39 288.05 70.22 3 45 17 2891.9 -23.19 122.61
                                                                                                        70.22
                      0 33 2 3929.22
        90.00
                                                        -8.59
                                                                      156.76
                                                                                      282.64
                                                                                                                     1 38 31
                   3929.22
4 45 53 3108.92
1 16 55 3787.43
6 51 31 2715.75
1 27 46 3753.36
                                                                                                         62.91
                                                                                                                                       3329.2
                                                                                                                                                       -12.16
                                                                                                                                                                       149.90
       100.00
                                                       -24.51
                                                                      103.61
                                                                                      289.45
                                                                                                         72.32
                                                                                                                    5 37 42
                                                                                                                                       2508.9
                                                                                                                                                                         95.49
                                                                                                                                                       -26.69
       100.00
                                                       -5.04
                                                                      144.42
                                                                                      280.72
                                                                                                        60.50 2 20 2
76.06 7 36 47
                                                                                                                                       3187.4
                                                                                                                                                         -8.93
                                                                                                                                                                       137.80
       110.00
                                                      -31.53
                                                                       76.01
                                                                                     291.70
                                                                                                                                       2115.7
                                                                                                                                                       -33.12
                                                                                                                                                                         57.14
       110.00
                                                                      138.00
                                                                                     276.87
                                                                                                        55.83
                                                                                                                    2 30 19
                                                        1.17
                                                                                                                                       3153.4
                                                                                                                                                         -3.32
                                                                                                                                                                       131.79
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                        SGT 5348.8 SGR 423.4 SG3 99.9
RRT .4312 RRF .4062 RTF .9308
                                                                                                                                  ST 2267.7 SR 421.6 SS 458.4
CRT .8657 CRS -.7749 CST -.9868
     TOE 2.1380 TRA 3.9065 TC3-2.3836 BAU 1.2857
    TOE 2.1380 IRA 3.9067 IC3 .0004 FAU .01022
FOE .4071 FRA 1.0448 FC3 -.2193 BSP 17576
FOE 2.1885 BRA 3.9067 BC3 2.3836 FSP -336
                                                                          SGB 5365.5 R23 .0031 R13 .9308
SG1 5351.9 SG2 381.8 THA 1.96
                                                                                                                                  L5A 2341.1 MSA 222.5 SSA 14.1
EL1 2297.1 EL2 208.4 ALF 9.22
                                                                              FLIGHT TIME 196.00
                                                                                                                                             ARRIVAL DATE JUL 17 1966
LAUNCH DATE JAN 2 1966
  HELIOCENTRIC CONIC
                                                                             DISTANCE 575.160
    RL 147.10 LAL .00 LOL 101.15 VL 25.770 GAL 9.99 AZL 87.71 HCA 299.17 SMA 116.38 ECC .31257 INC 2.2887 V1 30.287 RP 108.21 LAP -2.00 LOP 40.34 VP 36.228 GAP 17.78 AZP 88.88 TAL 156.27 TAP 95.43 RCA 80.00 APO 152.75 V2 35.020 RC 209.976 GL 8.65 GP -4.95 ZAL 48.31 ZAP 174.36 ETS 243.91 ZAE 133.25 ETE 185.27 ZAC 132.04 ETC 167.95 CLP 177.29
   PLANETOCENTRIC CONIC
    C3 45.415 VHL 6.739 DLA 26.99 RAL 48.63 RAD 6568.7 VEL 12.914 PTH 2.35 VHP 11.355 DPA
                                                                                                                                         7.43 RAP 37.80 ECC 1.7474
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 7 32 3492.29 -20.67 130.41 293.20 70.21 4 5 44 2892.3 -23.19 122.64
                    0 35 43 3968.46
5 3 7 3119.70
                                                        -6.74
                                                                      160.13
                                                                                     286.93
                                                                                                        62.43
                                                                                                                    1 42 11
                                                                                                                                      3388.5
                                                                                                                                                      -10.36
                                                                                                                                                                      153.34
        90.00
                                                                                                                  5 55 6
2 26 46
7 51 58
2 39 16
       100.00
                                                      -24.28
                                                                      104.33
                                                                                   294.54
                                                                                                        72.01
                                                                                                                                      2519.7
                                                                                                                                                      -26.51
                                                                                                                                                                       96.24
                    1 22 49 3836.29
7 6 24 2733.92
                                                                                     285.10
                                                                                                                                      3236.3
                                                       -3.39
                                                                      147.12
                                                                                                        60.28
                                                                                                                                                       -7.32
                                                                                                                                                                      140.54
       100.00
                                                                                                                                      2133.9
       110.00
                                                      -31.22
                                                                       77.34
                                                                                    296.83
                                                                                                        75.33
                                                                                                                                                      -32.92
                                                                                                                                                                       68.52
                      1 36 2
                                     3794.83
                                                       2.75
                                                                      140.16
                                                                                     281.28
                                                                                                        55.91
                                                                                                                                      3194.8
                                                                                                                                                      -1.74
                                                                                                                                                                      133.96
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                         SCT 5336.8 SGR 417.6 SG3 97.9
RRT .4505 RRF .4268 RTF .9371
SCB 5353.1 R23 .0028 R13 .9372
SGI 5340.1 SG2 372.5 THA 2.03
                                                                                                                                 ST 2198.4 SR 413.7 55 452.9
    TOE 2.1255 TRA 4.3638 TC3-2.0826 BAU 1.2645
    RDE .4862 RRA .0618 RC3 -.0030 FAU .00920
FDE .3947 FRA 1.1074 FC3 -.1753 BSP 17595
BDE 2.1804 BRA 4.3642 BC3 2.0826 FSP -330
                                                                                                                                CRT .8456 CRS -.7556 CST -.9882
                                                                                                                                LSA 2270.8 MSA 230.2 SSA 13.3
                                                                                                                                EL1 2226.4 EL2 218.1 ALF
                                                                              FLIGHT TIME 198.00
                                                                                                                                              ARRIVAL DATE JUL 19 1966
LAUNCH DATE JAN 2 1966
                                                                              DISTANCE 579.651
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 101.15 VL 25.726 GAL 11.15 A7L 87.82 MCA 302.37 SMA 116.15 ECC .32518 INC 2.1810 V1 30.287 RP 108.17 LAP -1.84 LOP 43.54 VP 36.211 GAP 18.58 A7P 88.83 TAL 154.65 TAP 97.03 RCA 78.38 APO 153.92 V2 35.034 RC 211.617 GL 7.70 GP -4.88 ZAL 45.95 ZAP 173.98 ETS 236.92 ZAE 133.26 ETE 185.22 ZAC 134.33 ETC 167.60 CLP 176.48
   PLANETOCENTRIC CONIC
    C3 51.441 VHL 7.172 DLA 26.65 RAL 51.33 RAD 6568.9 VEL 13.145 PTH 2.40 VHP 11.839 DPA
                                                                                                                                         8.35 RAP 40.03 ECC 1.8466
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      3 27 31 3492.83
0 37 19 4050.21
                                                                     130.45
                                                                                    298.25
                                                                                                        70.20
                                                                                                                    4 25 43
                                                                                                                                      2892.8
                                                                                                                                                     -23.17
                                                                                                                                                                     122.68
        90.00
                                                      -20.66
                     0 37 19
                                                                                                                                      3450.2
                                                                                     291.07
                                                                                                        62.06
                                                                                                                   1 44 49
                                                                                                                                                       -8.48
                                                       -4.78
                                                                      163.61
                                                                                                                                                                     156.89
        90.00
                    5 20 9 3129.72
1 27 22 3868.56
7 20 57 2751.72
1 43 3 3839.33
                                                                                                        71.72
                                                                                                                    6 12 19
                                                                                                                                      2529.7
                                                                                                                                                      -26.34
                                                                                                                                                                        96.94
                                                      -24.07
                                                                      105.00
                                                                                     299.52
       100.00
                                                                                                                   2 32 11
                                                                                     289.33
                                                                                                                                      3288.6
       100.00
                                                       -1.62
                                                                      149.99
                                                                                                        60.15
                                                                                                                                                       -5.58
                                                                                                                                                                     143.45
                                                     -30.91
                                                                       78.63
                                                                                     301.85
                                                                                                        74.62
                                                                                                                    8 6 49
                                                                                                                                      2151.7
                                                                                                                                                     -32.71
                                                                                                                                                                        69.87
       110.00
                                                                                                                                                        -.04
                                                                      142.49
                                                                                     285.55
                                                                                                        56.07
                                                                                                                    2 47 2
                                                                                                                                      3239.3
       110.00
                                                                                                                                                                      136.28
  DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                       SGT 5322.3 SGR 410.6 SG3 96.1
RRT .4700 RRF .4478 RTF .9435
SGB 5338.2 R23 .0026 R13 .9435
SGI 5325.9 SG2 362.2 THA 2.09
                                                                                                                                ST 2133.5 SR 404.2 55 450.1
CRT .8243 CRS -.7364 CST -.9897
    TOE 2.1134 TRA 4.8557 TC3-1.7964 BAU 1.2354
    RDE .5052 RRA .0844 RC3 -.0050 FAU .00814 FDE .3841 FRA 1.1758 FC3 -.1369 BSP 17539
                                                                                                                                LSA 2204.9 MSA 236.4 55A 12.6
    BDE 2.1729 BRA 4.8564 BC3 1.7964 FSP -323
                                                                                                                                ELI 2159.6 ELZ 226.1 ALF 8.98
```

ARRIVAL DATE JUL 21 1966

FLIGHT TIME 200.00 LAUNCH DATE JAN 2 1966 DISTANCE 583.918 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 25.684 GAL 12.41 AZL 87.93 HCA 305.58 SMA 115.93 ECC .33927 INC 2.0652 V1 30.287 RP 108.13 LAP -1.68 LOP 46.74 VP 36.193 GAP 19.47 AZP 88.80 TAL 153.11 TAP 98.69 RCA 76.60 APO 155.26 V2 35.047 RC 213.230 GL 6.78 GP -4.82 ZAL 43.77 ZAP 173.50 ETS 230.63 ZAE 133.24 ETE 185.17 ZAC 136.59 ETC 167.19 CLP 175.64 PLANETOCENTRIC CONIC C3 58.627 VML 7.657 DLA 26.27 RAL 53.84 RAD 6569.1 VEL 13.416 PTH 2.45 VMP 12.379 DPA 9.22 RAP 42.24 ECC 1.9649 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 70.16 4 44 57 61.81 1 46 39 4 44 57 2894.2 -23.15 130.53 303.16 -20.63 90.00 3 46 43 3494.19 3513.3 160.47 -2.76 167.15 295.07 90.00 0 38 6 4113.34 71.44 6 29 4 60.11 2 36 29 2539.5 -26.17 97.61 304.37 5 36 45 3139.48 -23.86 105.65 3343.3 -3.75 146.47 2 36 29 73.94 8 21 13 73.94 8 21 13 8 21 13 9 36.32 2 53 43 MID-COURSE EXECUTION ACCURACY SCT 53D2.1 SGR 402.4 SCT 100.00 1 30 45 3943.29 .23 153.00 293.41 7 35 3 2769.30 1 48 56 3886.23 -32.48 2169.3 71.19 110.00 -30.59 79.89 1.76 3286.2 110.00 144.96 6.22 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2068.6 SR 392.9 SS 448.8 CRT .8015 CRS -.7166 CST -.9911 TOE 2.0964 TRA 5.3791 TC3-1.5317 BAU 1.2005 RRT .4886 RRF .4679 RTF .9498 SGB 5317.3 R23 .0021 R13 .9498 SGI 5305.7 SG2 350.8 THA 2.13 RDE .5238 RRA .1084 RC3 -.0060 FAU .00711 FDE .3739 FRA 1.2490 FC3 -.1049 BSP 17553 BDE 2.1608 BRA 5.3802 BC3 1.5317 FSP -318 LSA 2139.3 MSA 241.1 SSA 11.9 EL1 2092.8 EL2 232.2 ALF 8.76 ARRIVAL DATE JUL 23 1966 FLIGHT TIME 202.00 HELIOCENTRIC CONIC DISTANCE 587.908 RL 147.10 LAL .00 LOL 101.15 VL 25.643 GAL 13.77 AZL 88.06 HCA 308.79 SMA 115.72 ECC .35504 INC 1.9396 V1 30.287 RP 108.09 LAP -1.51 LOP 49.95 VP 36.177 GAP 20.46 AZP 88.78 TAL 151.66 TAP 100.44 RCA 74.63 APO 156.80 V2 35.060 RC 214.816 GL 5.90 GP -4.77 ZAL 41.76 ZAP 172.92 ETS 225.07 ZAE 133.17 ETE 185.12 ZAC 138.80 ETC 166.70 CLP 174.76 2.51 VHP 12.982 OPA 10.06 RAP 44.44 ECC 2.1065 C3 67.232 VHL 8.200 DLA 25.86 RAL 56.14 RAD 6569.3 VEL 13.733 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 5 0 3496.61 -20.57 130.69 307.90 70.10 5 3 16 2896.6 -23.10 122.93 1 47 50 3577.1 0 38 13 4177.08 -.70 170.70 298.92 61.69 90.00 5 52 44 3149.27 1 33 9 3999.65 7 48 36 2786.74 1 53 47 3934.95 6 45 13 2549.3 -26.00 98.29 -23.65 106.30 309.07 71.16 100.00 297.34 60.18 2 39 49 3399.7 -1.84 149.57 2.14 156.09 100.00 8 35 3 2186.7 72.49 73.27 -30.25 81.14 311.44 110.00 8.06 3334.9 3.61 56.67 2 59 22 147.54 293.69 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2008.1 SR 380.1 SS 450.0 CRT .7779 CRS -.6971 CST -.9925 TOE 2.0798 TRA 5.9427 TC3-1.2864 BAU 1.1563 RDE .5421 RRA .1339 RC3 -.0060 FAU .00604 FOE .3651 FRA 1.3290 FC3 -.0777 BSP 17555 BOE 2.1493 BRA 5.9442 BC3 1.2864 FSP -312 LSA 2078.4 MSA 243.8 SSA 11.2 EL1 2030.1 EL2 236.3 ALF 8.49 ARRIVAL DATE JUL 25 1966 FLIGHT TIME 204.00 LAUNCH DATE JAN 2 1966 DISTANCE 591.557 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 25.604 GAL 15.27 AZL 88.20 HCA 312.00 SHA 115.52 ECC .37276 INC 1.8020 VI 30.287 RP 108.05 LAP -1.34 LOP 53.16 VP 36.162 GAP 21.58 AZP 88.79 TAL 150.31 TAP 102.30 RCA 72.46 APO 158.58 V2 35.073 RC 216.375 GL 5.06 GP -4.71 ZAL 39.93 ZAP 172.24 ETS 220.18 ZAE 133.05 ETE 185.07 ZAC 140.97 ETC 166.13 CLP 173.82 PLANETOCENTRIC CONIC C3 77.591 VML 8.809 DLA 25.41 RAL 58.24 RAD 6569.5 VEL 14.105 PTH 2.57 VMP 13.661 DPA 10.86 RAP 46.60 ECC 2.2769 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 22 14 3500.10 -20.49 130.91 312.46 70.02 5 20 34 2900.1 -23.03 125.16 1 48 24 61.71 3640.9 -2.43 4240.86 302.62 D 37 43 1.36 174.26 7 0 38 70.88 2559.2 -25.82 98.97 313.59 106.95 6 7 58 3159.21 -23.43 100.00 3457.0 .10 152.71 60.36 301.11 1 34 40 4056.98 4.08 159.24 2204.0 -31.99 73.78 72.61 8 48 14 315.98 8 1 30 2804.03 -29.91 82.37 3384.9 5.51 143.90 57.12 3 4 3 9.91 297.55 1 57 38 3984.93 150.22 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5250.1 SGR 382.4 SG3 90.8 RRT .5247 RRF .5073 RTF .9618 SGB 5264.0 R23 .0009 R13 .9618 SGI 5254.0 SG2 325.3 THA 2.20 ST 1952.6 SR 366.0 SS 454.1 CRT .7539 CRS -.6783 CST -.9938 TOE 2.0657 TRA 6.5526 TC3-1.0607 BAU 1.1003 ROE .5601 RRA .1608 RC3 -.0053 FAU .00489 FOE .3581 FRA 1.4172 FC3 -.0545 BSP 17530 BDE 2.1403 BRA 6.5545 BC3 1.0607 FSP -307 LSA 2023.1 MSA 244.4 SSA 10.6 EL1 1972.3 EL2 238.0 ALF 8.16 ARRIVAL DATE JUL 27 1966 FLIGHT TIME 206.00 LAUNCH DATE JAN 2 1966 DISTANCE 594.777 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 101.15 VL 25.566 GAL 16.93 AZL 88.35 HCA 315.21 SMA 115.32 ECC .39273 INC 1.6498 VI 30.287 PP 108.01 LAP -1.16 LOP 56.37 VP 36.148 GAP 22.85 AZP 88.83 TAL 149.08 TAP 104.29 RCA 70.03 APO 160.61 V2 35.086 RC 217.906 GL 4.25 GP -4.66 ZAL 38.27 ZAP 171.45 ETS 215.90 ZAE 132.87 ETE 185.00 ZAC 143.06 ETC 165.47 CLP 172.83 PLANETOCENTRIC CONIC C3 90.137 VHL 9.494 DLA 24.95 RAL 60.13 RAD 6569.8 VEL 14.542 PTH 2.64 VHP 14.428 DPA 11.62 RAP 48.72 ECC 2.4834 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -22.94 69.92 5 36 48 2904.5 123.45 -20.39 131.19 316.81 4 38 24 3504.47 0 36 39 4304.25 90.00 3704.3 171.17 1 48 23 -.39 177.80 306.16 61.87 0 36 39 3.40 90.00 7 15 11 2569.3 -25.63 99.66 107.62 317.90 70.60 6 22 22 3169.26 -23.20 100.00 155.88 2 43 56 3514.7 2.06 304.72 60.66 100.00 1 35 22 6.01 162.44 71.98 9 0 41 2221.1 -31.73 75.04 -29.55 83.57 320.30 8 13 40 2821.06 110.00 146.58 57.68 3 7 49 3435.7 7.43 2 0 33 11.78 152.97 301.24 4035.66 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1903.2 SR 350.7 SS 461.6 CRT .7304 CRS -.6609 CST -.9951 SGT 5219.9 SGR 370.8 SG3 89.3 RRT .5423 RRF .5268 RTF .9675 TOE 2.0583 TRA 7.2173 TC3 -.8536 BAU 1.0287 ROE .5778 RRA .1890 RC3 -.0039 FAU .00361 FDE .3536 FRA 1.5154 FC3 -.0347 BSP 17423 SGB 5233.0 R23 .0003 R13 .9675 SGI 5223.8 SGZ 311.3 THA 2.21 LSA 1974.7 MSA 242.8 SSA 9.9 EL1 1920.7 EL2 237.4 ALF 7.79 BOE 2.1379 BRA 7.2198 BC3 .8536 FSP -300

```
LAUNCH DATE JAN 2 1966
                                                                      FLIGHT TIME 208.00
                                                                                                                               ARRIVAL DATE JUL 29 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 597.456
                        .00 LOL 101.15 VL 25.530 GAL 18.76 AZL 88.52 MCA 318.42 SMA 115.14 ECC .41533 INC 1.4792 V1 30.287
-.98 LOP 59.58 VP 36.135 GAP 24.30 AZP 88.89 TAL 148.02 TAP 106.44 RCA 67.32 APO 162.96 V2 35.099
3.48 GP -4.62 ZAL 36.81 ZAP 170.56 ETS 212.15 ZAE 132.61 ETE 184.93 ZAC 145.08 ETC 164.73 CLP 171.76
   RL 147.10 LAL
RP 107.97 LAP
   RC 219.410 GL
  PLANETOCENTRIC CONIC
   C3 105.445 VHL 10.269 DLA 24.46 RAL 61.81 RAD 6570.0 VEL 15.059 PTM 2.71 VMP 15.300 DPA 12.32 RAP 50.78 ECC 2.7354 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             69.8D
                    4 53 26 3509.45
0 34 59 4366.89
                                                 -20.27
                                                                            320.92
                                                                                                        5 51 55
                                                                                                                        2909.5
       90.00
                                                              131.51
                                                                             309.52
                                                                                             62.16
                                                                                                        1 47 46
                                                                                                                         3766.9
                                                                                                                                         1.63
                                                  5.40
                                                              181.32
       90.00
                                                                             321.97
                                                                                             70.33
                                                                                                        7 28 50
                                                                                                                         2579.2
                                                                                                                                       -25.44
                                                -22.97
                                                              108.27
      100.00
                    6 35 51 3179.25
                                                                                                      2 44 47
                                                                                             61.08
                                                                                                                         3572.3
                                                                                                                                         4.01
                                                                                                                                                   159.05
                                                              165.65
                                                                             308.14
      100.00
                   1 35 15 4172.32
                                                  7.92
                   8 25 2 2837.65
2 2 33 4086.69
                                                -29.20
                                                                84.73
                                                                             324.38
                                                                                             71.38
                                                                                                         9 12 20
                                                                                                                        2237.6
                                                                                                                                      -31.46
      110.00
                                                                                                      9 16 ac
3 10 40
                                                              155.78
                                                                             304.76
                                                                                             58.34
                                                                                                                        3486.7
                                                                                                                                         9.33
      110.00
                                                 13.62
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  SGT 5183.6 SGR 357.8 SG3 87.7
RRT .5587 RRF .5450 RTF .9727
SG8 5195.9 R23 -.0003 R13 .9727
   TOE 2.0529 TRA 7.9376 TC3 -.6679 BAU .9416
                                                                                                                     ST 1856.0 SR 334.3 SS 471.8
   ROE .5949 RRA .2178 RC3 -.0023 FAU .00221
FOE .3503 FRA 1.6237 FC3 -.0181 BSP 17400
                                                                                                                     CRT .7070 CRS -.6440 CST -.9961
                                                                                                                     LSA 1929.2 MSA 239.1 55A
                                                                  SG1 5187.5 SG2 296.5 THA 2.22
                                                                                                                    EL1 1871.2 EL2 234.5 ALF
                                                                                                                                                        7.37
   BOE 2.1373 BRA 7.9406 BC3 .6679 FSP
                                                     -295
                                                                      FLIGHT TIME 210.00
                                                                                                                               ARRIVAL DATE JUL 31 1966
LAUNCH DATE JAN 2 1966
                                                                      DISTANCE 599.444
  HELIOCENTRIC CONIC
                        .00 LOL 101.15 VL 25.497 GAL 20.81 AZL 88.71 HCA 321.64 SMA 114.97 ECC .44101 INC 1.2854 V1 30.287
-.80 LOP 62.80 VP 36.123 GAP 25.95 AZP 88.99 TAL 147.14 TAP 108.78 RCA 64.27 APO 165.67 VZ 35.111
2.75 GP -4.57 ZAL 35.55 ZAP 169.55 ETS 208.83 ZAE 132.26 ETE 184.85 ZAC 147.01 ETC 163.89 CLP 170.59
   RL 147.10 LAL
       107.93 LAP
   RC 220.887 GL
  PLANETOCENTRIC CONIC
   C3 124.277 VHL 11.148 DLA 23.96 RAL 63.26 RAD 6570.3 VEL 15.672 PTH
                                                                                               2.79 VHP 16.297 OPA 12.98 RAP 52.77 ECC 3.0453
   UNCH AZMTH LNCH TIME L-I TIME
90.00 5 7 19 3514.66
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                     -22.74
                                                                           324.75
                                                                                            69.68 6 5 53
                                                                                                                         2914.7
                                                -20.15
                                                              131.85
                                                                                                        1 46 28
                                                                                                                         3828.5
       90.00
                   0 32 39
                                4428.46
                                                   7.34
                                                               184.79
                                                                             312.67
                                                                                              62.58
                                                                                                                                         3.61
                                                                                                                                                      178.10
                  6 48 20 3188.93
1 34 19 4229.43
8 35 32 2853.56
2 3 36 4137.56
                                                                                                      7 41 29
                                                                                              70.07
                                                 -22.75
                                                               108.90
                                                                             325.78
                                                                                                                         2588.9
                                                                                                                                        -25.26
                                                                                                                                                      101.00
                                                   9.79
                                                                            311.36
                                                                                                         2 44 48
                                                                                                                         3629.4
                                                              168.86
                                                                                             61.61
                                                                                                                                         5.92
                                                                                                                                                     162.21
                                                                                                      9 23 6
                                                -28.85
                                                                                             70.81
                                                                                                                         2253.6
                                                                                                                                       -31.19
                                                                85.84
                                                                            328.18
                                                                                                                                                      . 77 . 42
                                                 15.42
                                                               158.62
                                                                             308.08
                                                                                              59.11
                                                                                                        3 12 34
                                                                                                                         3537.6
                                                                                                                                       11.21
                                                                                                                                                      152.05
                                                                  MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  SGT 5143.3 SGR 343.7 SG3 86.2
RRT .5743 RRF .5623 RTF .9776
                                                                                                                     ST 1812.9 SR 317.1 S5 485.7
CRT .6848 CRS -.6286 CST -.9971
    TOE 2.0568 TRA 8.7265 TC3 -.5008 BAU .8321
    RDE .6116 RRA .2470 RC3 -.0004 FAU .00058
                                                                  SGB 5154.7 R23 -.0010 R13 .9776
SG1 5147.1 SG2 281.1 THA 2.20
          .3497 FRA 1.7451 FC3 -.0040 BSP 17358
                                                                                                                     LSA 1889.1 MSA 233.2 SSA 8.7
   BOE 2.1458 BRA 8.7299 BC3 .5008 FSP
                                                                                                                     EL1 1826.1 EL2 229.4 ALF
                                                                                                                              ARRIVAL DATE AUG 2 1966
                                                                      FLIGHT TIME 212.00
LAUNCH DATE JAN 2 1966
  HELIOCENTRIC CONIC
                                                                     DISTANCE 600.543
   RL 147.10 LAL .00 LOL 101.15 VL 25.466 GAL 23.13 A7L 88.94 HCA 324.86 SMA 114.81 ECC .47027 INC 1.0617 V1 30.287 RP 107.89 LAP -.61 LOP 66.02 VP 36.113 GAP 27.86 A7P 89.13 TAL 146.49 TAP 111.35 RCA 60.82 APO 168.80 V2 35.124 RC 222.336 GL 2.05 GP -4.52 ZAL 34.52 ZAP 168.41 ETS 205.88 ZAE 131.80 ETE 184.75 ZAC 148.82 ETC 162.98 CLP 169.32
  PLANETOCENTRIC CONIC
   C3 147.664 VHL 12.152 DLA 23.45 RAL 64.46 RAD 6570.6 VEL 16.401 PTH 2.87 VHP 17.445 DPA 13.59 RAP 54.67 ECC 3.4302
   ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          328.28
                                                                                                                     2919.7
                                                                                                                                                  124.46
       90.00 5 20 0 3519.68
90.00 0 29 36 4488.69
                                                                                                                                    -22.64
                                                -20.03
                                                              132.17
                                                                                             69.56 6 18 39
                                                  9.22
                                                              188.23
                                                                            315.59
                                                                                             63.11
                                                                                                        1 44 25
                                                                                                                        3888.7
                                                                                                                                        5.54
                                                                                                                                                    181.48
                    6 59 47 3197.96
                                                -22.54
                                                              109.49
                                                                            329.27
                                                                                             69.83
                                                                                                      7 53 5
2 43 56
                                                                                                                        2598.0
                                                                                                                                      -25.08
                                                                                                                                                    101.62
                    1 32 30
                                4285.64
                                                 11.59
                                                              172.06
                                                                            314.34
                                                                                             62.25
                                                                                                                        3665.6
                                                                                                                                        7.70
                                                                                                                                                    165.34
      100.00
                                                                                                       9 32 54
                    8 45 5 2868.48
2 3 41 4187.88
                                               -28.51
                                                               86.87
                                                                            331.67
                                                                                             70.29
                                                                                                                        2268.5
                                                                                                                                      -30.92
                                                                                                                                                      78.50
                                                                                                        3 13 29
                                                              161.49
                                                                            311.18
                                                                                             59.97
                                                                                                                        3487.4
                                                                                                                                       13.03
                                                                                                                                                     154.80
      110.00
                                                 17.15
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SCT 5098.9 SGR 328.3 SG3 84.8

RRT .5887 RRF .5784 RTF .9820

SGB 5109.4 R23 -.0016 R13 .9820

SGI 5102.5 SG2 265.2 THA 2.18
                                                                                                                   ST 1773.4 SR 299.2 SS 503.9

CRT .6644 CRS -.6151 CST -.9978

LSA 1854.0 MSA 225.4 SSA 8.2
    TOE 2.0737 TRA 9.5942 TC3 -.3514 BAU
                                                    .6937
   RDE .6280 RRA .2759 RC3 .0015 FAU-.00139
FDE .3522 FRA 1.8821 FC3 .0081 BSP 17288
BDE 2.1667 BRA 9.5982 BC3 .3514 FSP -286
                                                                                                                    FL1 1784.6 FL2 222.2 ALF
                                                                                                                                                        6.50
                                                                      FLIGHT TIME 214.00
                                                                                                                               ARRIVAL DATE AUG 4 1966
LAUNCH DATE JAN 2 1966
                                                                      DISTANCE 600.485
  HELIOCENTRIC CONIC
                        .00 LOL 101.15 VL 25.438 GAL 25.76 AZL 89.20 HCA 328.08 SMA 114.67 ECC .50373 INC .7988 V1 30.287
-.42 LOP 69.23 VP 36.105 GAP 30.07 AZP 89.32 TAL 146.13 TAP 114.21 RCA 56.91 APO 172.43 V2 35.135
1.38 GP -4.48 ZAL 33.72 ZAP 167.11 ETS 203.23 ZAE 131.19 ETE 184.64 ZAC 150.49 ETC 162.00 CLP 167.90
   RL 147.10 LAL
   RC 223.756 GL
  PLANETOCENTRIC CONIC
                                                                                               2.95 VHP 18.775 DPA 14.13 RAP 56.43 ECC 3.9131
   C3 177.006 VHL 13.304 DLA 22.91 RAL 65.40 RAD 6570.9 VEL 17.272 PTH
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                           331.44
                                                                                                         6 30 10
                                                                                                                        2924.0
                                                                                                                                                  124.75
      90.00
                   5 31 26 3524.01
                                                -19.93
                                                              132.44
                                                                                             69.46
                                                                                                                                     -22.55
                                                                                                                         3947.3
                                                              191.61
                                                                            318.23
                                                                                             63.74
                                                                                                         1 41 28
                                                                                                                                         7.39
                                                                                                                                                     184.80
       90.00
                   0 25 41
                                4547.32
                                                11.00
                                                                                             69.62
                                                                                                         8 3 31
                                                                                                                        2605.9
                                                                                                                                       -24.92
                                                                                                                                                     102.16
      100.00
                   7 10 5
                                3205.93
                                                -22.35
                                                              110.01
                                                                            332.41
                  1 29 43 4340.63
8 53 37 2882.03
2 2 40 4237.29
                                                                            317.05
                                                                                             62.99
                                                                                                         2 42 3
                                                                                                                        3740.6
                                                                                                                                         9.58
                                                                                                                                                     168.43
                                                              175.24
      100.00
                                                13.31
                                                                                             69.82
                                                                                                         9 41 39
                                                                                                                        2282.0
                                                                                                                                      -30.68
                                                                            334.79
      110.00
                                                -28.19
                                                               87.80
                                                                                             60.92
                                                                                                        3 13 18
                                                                                                                        3637.3
                                                                                                                                        14.79
                                                              164.36
                                                                            314.00
                                                                                                                                                     157.55
      110.00
                                                 18.81
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 5051.0 SGR 311.9 SG3 83.5
RRT .6017 RRF .5929 RTF .9858
                                                                                                                   ST 1737.3 SR 280.8 S5 527.3
CRT .6466 CRS -.6041 CST -.9984
    TOE 2.1111 TRAID.5537 TC3 -.2183 BAU .5167
   ROE .6444 RRA .3038 RC3 .0035 FAU-.00386
FOE .3594 FRA 2.0380 FC3 .0189 BSP 17116
BOE 2.2072 BRA10.5581 BC3 .2183 FSP -280
                                                                SGB 5060.6 R23 -. D021 R13 .9858
SG1 5054.5 SG2 248.9 THA 2.13
                                                                                                                   LSA 1824.4 MSA 215.7 SSA
                                                                                                                                                         7.6
                                                                                                                  ELI 1746.9 ELZ 213.0 ALF 6.06
```

ARRIVAL DATE AUG 6 1966

```
FLIGHT TIME 216.00
LAUNCH DATE JAN 2 1966
                                                                        DISTANCE 598.907
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 101.15 VL 25.414 GAL 28.78 AZL 89.52 MCA 331.30 SMA 114.55 ECC .54206 INC .4840 V1 30.287 RP 107.82 LAP -.23 LOP 72.45 VP 36.100 GAP 32.67 AZP 88.58 TAL 146.13 TAP 117.44 RCA 52.46 APO 176.64 V2 35.147 RC 225.148 GL .74 GP -4.43 ZAL 33.21 ZAP 165.62 ETS 200.84 ZAE 130.40 ETE 184.51 ZAC 151.98 ETC 160.97 CLP 166.30
   PLANETOCENTRIC CONTC
    C3 214.220 VHL 14.636 DLA 22.37 RAL 66.05 RAD 6571.2 VEL 18.318 PTH 3.03 VHP 20.327 DPA 14.62 RAP 58.04 ECC 4.5255
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           6 40 21
                                                                                                                          2927.1
                    5 41 33 3527.10
0 20 43 4604.17
                                                                 132.64
                                                                               334.18
                                                                                                69.39
                                                                                                                                          -22.48
                                                                                                                                                         124.95
                                                  -19.86
        90.00
                                                                                                         1 37 27
8 12 42
2 39 1
9 49 13
3 11 52
                                                                                                                             4004.2
                                                                                                                                             9.15
                                                                                                                                                          188.04
                                                                 194.93
                                                                               320.54
                                                                                                64.47
        90.00
                                                  12.69
                                                                               335.13
                                                                                                69.45
                                                                                                                             2612.4
                                                                                                                                            -24.79
                                                                                                                                                          102.59
                                                                 110.43
                    7 19 10 3212.36
                                                  -22.20
       100.00
                                                                                                                            3794.1
                                                                                                                                           11.30
                                                                                                                                                          171.47
                                                                               319.42
                                                                                                63.81
                                                                 178.37
       100.00
                    1 25 47
                                  4394.14
                                                   14.94
                                                                                                                                                           80.32
                    9 0 59 2893.80
2 0 27 4285.46
                                                                  88.60
                                                                                                                            2293.8
                                                                                                                                            -30.45
                                                 -27.92
                                                                               337.49
                                                                                                69.42
       110.00
                                                                                                                                                          160.27
                                                                                                                            3685.5
                                                                                                                                            16.47
                                                                               316.50
                                                                                                61.94
                                                                 167.21
       110.00
                                                   20.38
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 1700.7 SR 261.9 SS 555.7
CRT .6305 CRS -.5942 CST -.9989
                                                                    SCT 4995.3 SGR 294.0 SG3 82.3
RRT .6118 RRF .6044 RTF .9891
SGB 5003.9 R23 -.0026 R13 .9891
    TOE 2.1666 TRAI1.6075 TC3 -.1027 BAU .2945
    ROE .6605 RRA .3288 RC3 .0052 FAU-.00693
FOE .3705 FRA 2.2145 FC3 .0280 BSP 17036
BOE 2.2651 BRA11.6122 BC3 .1028 FSP -277
                                                                                                                        LSA 1796.6 MSA 204.6 SSA 7.0
                                                                                                                         EL1 1708.8 EL2 202.3 ALF 5.63
                                                                     SG1 4998.5 SG2 232.4 THA 2.07
                                                                                                                                    ARRIVAL DATE AUG 8 1966
                                                                         FLIGHT TIME 218.00
LAUNCH DATE JAN 2 1966
                                                                        DISTANCE 595.328
  HELIOCENTRIC CONIC
                         .00 LOL 101.15 VL 25.394 GAL 32.28 AZL 89.90 HCA 334.53 SMA 114.45 ECC .58597 INC .0982 VI 30.287
-.04 LOP 75.68 VP 36.097 GAP 35.74 AZP 89.91 TAL 146.58 TAP 121.11 RCA 47.39 APO 181.52 VZ 35.158
.13 GP -4.38 ZAL 33.01 ZAP 163.90 ETS 198.65 ZAE 129.39 ETE 184.36 ZAC 153.26 ETC 159.96 CLP 164.49
    RL 147.10 LAL
    RP 107.79 LAP
    RC 226.511 GL
   PLANETOCENTRIC CONIC
                                                                                                   3.11 VHP 22.147 DPA 15.04 RAP 59.43 ECC 5.3111
    C3 261.951 VHL 16.185 DLA 21.79 RAL 66.36 RAD 6571.5 VEL 19.577 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                          2928.4
                                                                                                                                                          125.03
                                                                                               69.36
                                                                                                          6 49 4
                                                                                                                                           -22.46
                     5 50 15 3528.36
                                                  -19.83
                                                                 132.72
                                                                               336.45
        90.00
                   0 14 28 4659.12
7 26 54 3216.74
1 20 30 4445.97
9 7 5 2903.31
1 56 49 4332.16
                                                                                                             1 32 7
                                                                                                                             4059.1
                                                                                                                                             10.83
                                                                                                                                                           191.21
                                                   14.28
                                                                 198.18
                                                                                322.46
                                                                                                 65.29
        90.00
                                                                                                        8 20 31
2 34 36
9 55 28
3 9 1
                                                                                                                             2616.7
                                                                                                                                            -24.71
                                                                                                                                                           102.88
                                                                 110.71
                                                                                337.37
                                                                                                 69.33
       100.00
                                                   -22.09
                                                                                                 64.70
                                                                                                                             3846.0
                                                                                                                                            12.93
                                                                                                                                                          174.46
       100.00
                                                   15.48
                                                                 181.46
                                                                               321.40
                                                                               339.70
                                                                                                 69.10
                                                                                                                             2303.3
                                                                                                                                           -30.27
                                                                                                                                                            81.00
                                                   -27.69
                                                                  89.24
       110.00
                     1 56 49
                                                  21.85
                                                                 170.04
                                                                               318.61
                                                                                                 63.03
                                                                                                                             3732.2
                                                                                                                                            18.06
                                                                                                                                                           162.96
                                  4332.16
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ST 1664.0 SR 242.9 SS 590.6
CRT .6170 CRS -.5863 CST -.9992
                                                                     SGT 4932.9 SGR 274.9 SG3 81.1
RRT .6185 RRF .6122 RTF .9919
SGB 4940.5 R23 -.0031 R13 .9919
    TOE 2.2531 TRAI2.7681 TC3 -.0025 BAU .0246
    ROE .6769 RRA .3490 RC3 .0066 FAU-.01093
FOE .3881 FRA 2.4161 FC3 .0361 BSP 16915
BOE 2.3526 BRA12.7729 BC3 .0070 FSP -273
                                                                                                                        LSA 1771.9 MSA 192.3 SSA 6.4
                                                                    5G1 4935.8 SG2 215.9 THA 1.98
                                                                                                                         EL1 1670.8 EL2 190.4 ALF 5.22
                                                                                                                                   ARRIVAL DATE AUG 10 1966
                                                                         FLIGHT TIME 220.00
LAUNCH DATE, JAN 2 1966
   HELIOCENTRIC CONIC
                                                                         01STANCE 589.110
    RL 147.10 LAL .00 LOL 101.15 VL 25.381 GAL 36.37 AZL 90.40 HCA 337.75 SHA 114.39 ECC .63609 INC .3952 V1 30.287 RP 107.75 LAP .15 LOP 78.90 VP 36.098 GAP 39.38 AZP 90.37 TAL 147.59 TAP 125.34 RCA 41.63 APO 187.14 V2 35.169 RC 227.845 GL -.45 GP -4.32 TAL 33.19 TAP 161.89 ETS 196.63 ZAE 128.11 ETE 184.18 ZAC 154.27 ETC 159.02 CLP 162.39
   PLANFTOCENTRIC CONIC
    C3 323.831 VHL 17.995 DLA 21.20 RAL 66.27 RAD 6571.8 VEL 21.098 PTH 3.20 VHP 24.296 DPA 15.39 RAP 60.55 ECC 6.3294
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -22.48
                                                                                                 69.39 6 56 11
66.17 1 25 10
69.29 8 26 46
65.66 2 28 31
                                                                                                                          2927.1
                    5 57 24 3527.13

O 6 38 4712.13

7 33 8 3218.44

1 13 35 4496.04
                                                                            338.16
                                                                                             69.39
                                                   -19.86
                                                                132.64
        90.00
                                                                                                                                             12.41
                                                                                                                             4112.1
                                                    15.77
                                                                 201.37
                                                                                323.90
        90.00
                                                                                                                                                           103.00
                                                                                                                                            -24.67
                                                   -22.05
                                                                 110.82
                                                                                339.04
                                                                                                                             2618.4
       100.00
                                                                                                                             3896.0
                                                                                                                                            14.47
                                                                                                                                                          177.38
                                                                                322.90
                                                   17.91
                                                                 184.49
       100.00
                                                                                                                                           -30.14
                                                                                                                                                            81.48
                    9 11 43 2910.02
                                                                                                 68.88 10 0 13
                                                                                                                             2310.0
                                                                  89.70
                                                                                341.35
                                                  -27.52
       110.00
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                           19.55
                                                                                                                             3777.2
                                                                 172.83
                                                    23.21
                     1 51 29
                                   4377.23
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1625.6 SR 224.0 SS 633.0
CRT .6061 CRS -.5801 CST -.9994
                                                                     SGT 4862.2 SGR 254.5 SG3 80.1
RRT .6200 RRF .6146 RTF .9941
SGB 4868.9 R23 -.0035 R13 .9941
     TOE 2.3804 TRA14.0367 TC3 .0830 BAU .3608
    ROE .6938 RRA .3615 RC3 .0076 FAU-.01621
FOE .4142 FRA 2.6465 FC3 .0433 BSP 16727
BOE 2.4794 BRA14.0413 BC3 .0833 FSP -270
                                                                                                                        LSA 1749.6 MSA 179.2 SSA 5.9
                                                                                                                         EL1 1631.3 EL2 177.5 ALF
                                                                                                                                                              4.83
                                                                     SG1 4864.8 SG2 199.6 THA 1.86
                                                                                                                                    ARRIVAL DATE MAR 14 1966
                                                                         FLIGHT TIME 70.00
LAUNCH DATE JAN 3 1966
                                                                         DISTANCE 214.971
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 30.210 GAL -15.95 A7L 87.19 MCA 99.40 SMA 148.81 ECC .27494 INC 2.8123 V1 30.287 RP 107.96 LAP 2.77 LOP 201.58 VP 39.582 GAP -.91 A7P 90.46 TAL 256.37 TAP 355.76 RCA 107.90 APO 189.73 V2 35.101 RC 74.954 GL 9.64 GP 12.81 7AL 167.02 ZAP 79.43 ETS 355.17 ZAE 171.00 ETE 135.50 ZAC 35.94 ETC 170.96 CLP -79.16
   PLANETOCENTRIC CONIC
                                                                                                   2.54 VHP 4.660 DPA
                                                                                                                                 -9.43 RAP 302.75 ECC 2.1933
    C3 72.506 VHL 8.515 DLA -12.29 RAL 291.10 RAD 6569.4 VEL 13.923 PTH
    C3 72.506 WE 8.515 DEA -12.29 RAE 291.10 RAE 0505.4 VEL 15.25 THE FO CST TIM INJ 2 LAT INJ 2 LONG ENCH AZMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 33 1 2141.04 -17.72 36.88 171.32 112.46 2 8 42 1541.0 -14.52 29.66
                   1 33 1
10 20 48
                                   2141.04
                                                                                                91.74 11 53 36
113.36 3 19 43
                                                                                                                              4968.4
                                                                                                                                             28.21
                                                                                                                                                           251.20
                                   5568.38
                                                   28.27
                                                                  259.87
                                                                                180.93
                                                                                                113.36
                                                                                                                              1298.9
                     2 48 4
                                   1898.91
                                                   -19.20
                                                                   18.42
                                                                                170.66
                                                                                                91.07 13 16 31
115.92 4 10 56
89.21 14 34 40
                   11 48 26 5285.74
3 42 7 1729.67
13 10 53 5027.75
                                                                                                                              4685.7
                                                                                                                                                           230.33
                                                   29.88
                                                                  239.13
                                                                                180.97
                                                                                                                             1129.7
                                                                                                                                                           356.44
                                                  -23.11
                                                                   3.65
                                                                                168.73
                                                                                                115.92
       110.00
                                                                                                                              4427.7
                                                                                                                                              33.69
                                                                                                                                                           210.34
                                               34.18
                                                                  219.55
                                                                                180.99
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 194.8 SR 376.3 SS 135.9
CRT .0903 CRS .4273 CST -.8470
                                                                     SGT 667.9 SGR 420.6 SG3 211.3
RRT -.3725 RRF -.4538 RTF .6784
     TOE -.0604 TRA -.9218 TC3 -.1196 BAU .1353
     ROE -.5552 RRA .2170 RC3 .0720 FAU .10865
                                                                    SGB 789.3 R23 .0893 R13 -.7065
SG1 694.3 SG2 375.5 THA 161.07
                                                                                                                        LSA 381.3 MSA 228.6 SSA 18.6
     FOE .1591 FRA-1.5159 FC3-1.2973 BSP 1410
                                                                                                                       EL1 376.8 EL2 193.7 ALF 86.36
     BDE .5584 BRA .9470 BC3 .1396 FSP
                                                       -634
```

```
FLIGHT TIME 72.00
                                                                                                                                                               ARRIVAL DATE MAR 16 1966
LAUNCH DATE JAN 3 1966
                                                                                        DISTANCE 221.379
   HELIOCENTRIC CONIC
         147.10 LAL .00 LOL 102.17 VL 30.158 GAL -15.76 A7L 87.27 HCA 102.61 SHA 148.29 ECC .27175 INC 2.7262 V1 30.287 108.00 LAP 2.66 LOP 204.80 VP 39.531 GAP -.32 A7P 90.60 TAL 255.87 TAP 358.49 RCA 107.99 APO 188.59 V2 35.089
     RL 147.10 LAL
                              9.45 GP 13.19 TAL 166.98 TAP 84.34 ETS 356.19 TAE 168.06 ETE 144.29 TAC 34.15 ETC 171.55 CLP -84.18
     RC 77.191 GL
   PLANETOCENTRIC CONIC
     C3 70.669 VHL 8.406 DLA -12.43 RAL 291.39 RAD 6569.4 VEL 13.857 PTH 2.53 VHP 4.572 DPA -9.36 RAP 300.92 ECC 2.1630
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                112.67
                                                                                                                                  2 10 54
                                                                                                                                                      1530.1
                                                                                                171.19
                                                                                                                                                                         -14.21
         90.00
                       1 35 23 2130.12
10 20 43 5567.22
                                                                                36.20
                                                             -17.43
                                                                                                                                 11 53 30
                                                                                                                    91.70
                                                                                                                                                       4967.2
                                                                                                                                                                         28.21
         90.00
                                                             28.27
                                                                               259.78
                                                                                                180.82
                                                                                                                                                                                             10.57
                                                                                17.76
                                                                                                170.52
                                                                                                                   113.59
                                                                                                                                   3 21 49
                                                                                                                                                       1288.3
                                                                                                                                                                         -15.56
                       2 50 21 1888.28
11 48 26 5284.29
        100.00
                                                            -18.91
                                                                                                                   91.01 13 16 31
116.18 4 12 51
89.12 14 34 51
                                                                                                                                                                         29.70
                                                                                                                                                                                           230.22
                                                                               239.02
                                                                                                                                                       4684.3
        100.00
                                                              29.88
                                                                                                180.86
                                                                                                                                                                                           355.85
                                                                                                                                                      1119.7
                                                                                                                                                                         -19.10
        110.00
                        3 44 11 1719.65
                                                            -22.81
                                                                                 3.03
                                                                                                168.59
        110.00
                                                                                                180.87
                                                                                                                                                       4425.7
                                                                                                                                                                           33.67
                                                                                                                                                                                           210.18
                       13 11 5
                                         5025.69
                                                              34.17
                                                                               219.39
                                                                                   91.39 180.87 182.12 14 36 17 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 182.12 1
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 210.6 SR 373.5 55 136.7
CRT .0493 CRS .4189 CST -.8720
     TDE -.0539 TRA -.9896 TC3 -.1621 BAU .1715
     ROE -.5437 RRA .2234 RC3 .0816 FAU .11194
                                                                                                                                                  LSA 378.4 MSA 242.9 SSA 18.7
    FOE .1535 FRA-1.5397 FC3-1.3713 BSP 1697
                                                                                                                                                  EL1 373.8 EL2 210.2 ALF 87.67
     BOE .5464 BRA 1.0145 BC3 .1815 FSP -664
                                                                                        FLIGHT TIME 74.00
                                                                                                                                                                ARRIVAL DATE MAR 18 1966
LAUNCH DATE JAN 3 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 227.738
                              .00 LOL 102.17 VL 30.100 GAL -15.58 AZL 87.36 HCA 105.83 SMA 147.71 ECC .26861 INC 2.6380 V1 30.287 2.54 LOP 208.01 VP 39.475 GAP .23 AZP 90.72 TAL 255.28 TAP 1.11 RCA 108.04 APO 187.39 V2 35.076 9.25 GP 13.55 ZAL 166.91 ZAP 89.11 ETS 357.24 ZAE 165.03 ETE 149.63 ZAC 32.48 ETC 172.16 CLP -89.09
    RL 147.10 LAL
     RP 108.04 LAP
    RC 79.446 GL
   PLANETOCENTRIC CONIC
                                                                                                                        2.52 VHP 4.512 DPA
                                                                                                                                                           -9.27 RAP 299.22 ECC 2.1333
    C3 68.861 VHL 8.298 OLA -12.58 RAL 291.73 RAD 6569.3 VEL 13.792 PTH
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 38 2 2118.89 -17.14 35.51 171.11 112.89 2 13 21 1518.9 -13.89 28.34
                         1 38 2 2118.89
                      10 20 48 5566.19
2 52 53 1877.36
11 48 37 5282.96
3 46 32 1709.37
13 11 28 5023.70
                                                              28.27
                                                                               259.71
                                                                                                 180.76
                                                                                                                     91.66
                                                                                                                                 11 53 34
                                                                                                                                                        4966.2
         90.00
                                                                                17.09
                                                                                                 170.44
                                                                                                                    113.82
                                                                                                                                                        1277.4
       100.00
                                                             -18.61
       100.00
                                                              29.88
                                                                              238.92
                                                                                                180.80
                                                                                                                     90.96 13 16 40
                                                                                                                                                        4683.0
                                                                                                                                                                           29.69
                                                                                                                                                                                            230.12
                                                                                                                                 4 15 1
                                                             -22.50
                                                                                  2.39
                                                                                                168.50
                                                                                                                   116.44
                                                                                                                                                       1109.4
                                                                                                                                                                         -18.77
       110.00
                                                                              219.23
                                                                                                180.80
                                                                                                                     89.02 14 35 12
                                                                                                                                                        4423.7
                                                                                                                                                                           33.66
                      13 11 28
                                         5023.70
                                                              34.17
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                   SGT 825.9 SGR 428.0 SG3 226.7
RRT -.4561 RRF -.5110 RTF .7562
                                                                                                                                                  ST 227.7 SR 369.4 SS 136.5
CRT .0158 CRS .4048 CST -.8941
     TOE -.0486 TRA-1.0598 TC3 -.2078 BAU .2089
     ROE -.5304 RRA .2287 RC3 .0912 FAU .11420
    FDE .1428 FRA-1.5469 FC3-1.4357 BSP 2002
BDE .5326 BRA 1.0842 BC3 .2269 FSP -690
                                                                                   5GB 930.3 R23 .0898 R13 -.7737
                                                                                                                                                   LSA 374.2 MSA 258.0 SSA 18.8
                                                                                   SG1 854.2 SG2 368.3 THA 163.56
                                                                                                                                                  EL1 369.5 EL2 227.6 ALF 89.10
                                                                                                                                                              ARRIVAL DATE MAR 20 1966
                                                                                        FLIGHT TIME 76.00
LAUNCH DATE JAN 3 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 234.051
    RL 147.10 LAL .00 LOL 102.17 VL 30.036 GAL -15.40 AZL 87.45 MCA 109.04 SMA 147.09 ECC .26551 INC 2.5471 V1 30.287
RP 108.08 LAP 2.41 LOP 211.23 VP 39.415 GAP .76 AZP 90.83 TAL 254.59 TAP 3.63 RCA 108.04 APO 186.14 V2 35.063
RC 81.719 GL 9.04 GP 13.88 ZAL 166.80 ZAP 93.72 ETS 358.30 ZAE 162.02 ETE 153.17 ZAC 30.97 ETC 172.79 CLP -93.83
   PLANETOCENTRIC CONIC
     C3 67.075 VHL 8.190 DLA -12.74 RAL 292.12 RAD 6569.3 VEL 13.727 PTH 2.51 VHP 4.476 DPA -9.16 RAP 297.69 ECC 2.1039 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                   1507.3
                                                                                                                                                                      -13.56
                                                                                             171.08
                                                                                                               113.11
                                                                                                                                  2 16 4
                                                                                                                                                                                           27.65
         90.00
                         1 40 56 2107.26
                                                             -16.83
                                                                                34.80
                                                              28.27
                                                                              259.64
                                                                                                180.75
                                                                                                                    91.63
                                                                                                                                 11 53 46
                                                                                                                                                       4965.3
                                                                                                                                                                         28.20
                                                                                                                                                                                           250.98
                       10 21 0
                                         5565.31
          90.00
                        2 55 42 1866.05
                                                            -18.30
                                                                                16.39
                                                                                                170.41
                                                                                                                   114.06
                                                                                                                                 3 26 48
                                                                                                                                                       1266.0
                                                                                                                                                                        -14.90
                                                                                                                                                                                             9.25
        100.00
                                                                                                180.79
                                                                                                                     90.91 13 16 57
                                                                                                                                                       4681.8
                                                                                                                                                                         29.69
                                                                                                                                                                                           230.03
                                                                              238.83
                       11 48 56 5281.76
                                                              29.88
        100.00
                                                                                                                   116.71 4 17 26
88.94 14 35 42
                                                                                                                                                                        -18.41
                                                                                                                                                       1098.7
                                                                                                                                                                                           354.63
                         3 49 7
                                         1698.74
                                                             -22.18
                                                                                  1.74
                                                                                                168.45
        110.00
                       13 12 0
                                                                                                180.78
                                                                                                                                                       4421.8
                                                                                                                                                                         33.64
                                                                                                                                                                                           209.88
                                                              34.17
                                                                              219.08
        110.00
                                         5021.83
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 245.9 SR 363.9 55 135.6
CRT -.0095 CRS .3858 CST -.9127
                                                                                    SGT 914.4 SGR 430.2 SG3 231.6
     TOE -.0453 TRA-1.1317 TC3 -.2563 BAU .2470
                                                                                   RRT -.4919 RRF -.5374 RTF ..7824
SGB 1010.5 R23 .0919 R13 -.7965
    ROE - .5152 RRA .2329 RC3 .1008 FAU .11549
FOE .1280 FRA-1.5385 FC3-1.4906 BSP 2325
BOE .5172 BRA 1.1554 BC3 .2754 FSP -714
                                                                                                                                                  LSA 368.8 MSA 273.7 55A 18.9
                                                                                                                                                  EL1 363.9 EL2 245.9 ALF 90.67
                                                                                    SG1 943.0 SG2 363.2 THA 164.63
                                                                                                                                                                ARRIVAL DATE HAR 22 1966
                                                                                        FLIGHT TIME 78.00
LAUNCH DATE JAN 3 1966
                                                                                        DISTANCE 240.320
   HELIOCENTRIC CONIC
                             .00 LOL 102.17 VL 29.968 GAL -15.21 ATL 87.55 MCA 112.25 SMA 146.43 ECC .26246 INC 2.4526 V1 30.287 2.27 LOP 214.44 VP 39.352 GAP 1.26 AZP 90.93 TAL 253.82 TAP 6.07 RCA 108.00 APO 184.86 V2 35.050 8.81 GP 14.21 ZAL 166.65 ZAP 98.12 ETS 359.40 ZAE 159.11 ETE 155.66 ZAC 29.65 ETC 173.45 CLP -98.38
    RL 147.10 LAL
RP 108.12 LAP
     RC 84.008 GL
   PLANETOCENTRIC CONIC
     C3 65.302 VHL 8.081 DLA -12.91 RAL 292.56 RAD 6569.2 VEL 13.662 PTH 2.50 VHP 4.461 DPA -9.01 RAP 296.34 ECC 2.0747
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                         2095.11
                                                                               34.06
                                                                                                171.09
                                                                                                                  113.34
                                                                                                                                  2 19 4
                                                                                                                                                      1495.1
                                                                                                                                                                        -13.20
                                                                                                                                                                                            26.93
         90.00
                         1 44 9
                                                             -16.50
                                                                                                                                 11 54 4
                                                                               259.60
                                                                                                 180.77
                                                                                                                    91.61
                                                                                                                                                       4964.7
                                                                                                                                                                         28.20
                                                                                                                                                                                           250.93
                       10 21 19
                                       5564.65
                                                              28.28
          90.00
                                                                                15.67
                                                                                                 170.41
                                                                                                                    114.30
                                                                                                                                   3 29 42
                                                                                                                                                       1254.2
                                                                                                                                                                         -14.54
                                                                                                                                                                                             8.56
                         2 58 48
                                        1854.24
                                                             -17.97
        100.00
                                                                               238.75
                                                                                                 180.81
                                                                                                                     90.87
                                                                                                                                 13 17 21
                                                                                                                                                       4680.7
                                                                                                                                                                         29.68
                                                                                                                                                                                           229.96
                       11 49 21
                                        5280.75
                                                              29.88
        100.00
                                                             -21.83
                                                                                 1.06
                                                                                                168.44
                                                                                                                   116.98
                                                                                                                                  4 20 7
                                                                                                                                                       1087.7
                                                                                                                                                                         -18.04
                                                                                                                                                                                           353.98
                         3 51 59
                                         1687.67
        110.00
                                                                                                                                 14 36 19
                       13 12 39
                                                                                                                     88.86
                                       5020.09
                                                                               218.95
                                                                                                180.80
                                                                                                                                                      4420.1
                                                                                                                                                                          33.63
                                                                                                                                                                                           209.75
        110.00
                                                                                  HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                             ST 265.0 SR 357.4 55 134.0

CRT -.0270 CRS .3726 C5T -.9243

LSA 362.8 MSA 289.6 SSA 19.0

ELI 357.5 EL2 264.8 ALF 92.54
                                                                                   9GT 1007.3 SGR 431.3 SG3 234.1
RRT -.5232 RRF -.5625 RTF .8019
SGB 1095.7 R23 .0964 R13 -.8136
     TOE -.0440 TRA-1.2040 TC3 -.3073 BAU .2849
     ROE - .4987 RRA .2354 RC3 .1100 FAU .11556
     FOE .1155 FRA-1.5100 FC3-1.5320 BSP 2653
RDF .5007 BRA 1.2268 BC3 .3264 FSP -722
     BOE .5007 BRA 1.2268 BC3 .3264 FSP
                                                                                   5G1 1035.8 5G2 357.4 THA 165.63
```

```
ARRIVAL DATE MAR 24 1966
                                                                     FLIGHT TIME 80.00
LAUNCH DATE JAN 3 1966
                                                                     DISTANCE 246.547
   RL 147.10 LAL .00 LOL 102.17 VL 29.896 GAL -15.03 AZL 87.65 MCA 115.46 SMA 145.73 ECC .25945 INC 2.3537 VI 30.287 RP 108.16 LAP 2.13 LOP 217.64 VP 39.285 GAP 1.73 AZP 91.01 TAL 252.97 TAP 8.43 RCA 107.92 APO 183.54 V2 35.036 RC 86.309 GL 8.56 GP 14.53 ZAL 166.48 ZAP 102.30 ETS .52 ZAE 156.32 ETE 157.48 ZAC 28.54 ETC 174.14 CLP-102.72
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 63.539 VHL 7.971 DLA -13.09 RAL 293.05 RAD 6569.2 VEL 13.598 PTH 2.49 VMP 4.465 DPA -8.84 RAP 295.19 ECC 2.0457
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      1482.3
                                                                                                                                                    26.18
                                                                                                      2 22 21
                                                               33.28
                                                                           171.13
                                                                                          113.58
                                                -16.15
                    1 47 39 2082.30
       90.00
                                                                                                                                      28.20
                                                                                                                                                    250.91
                                                                                                                       4964.3
                                                              259.57
                                                                                           91.59
                                                                                                      11 54 26
                                                                            180.84
                  10 21 41
                              1841.81
                                 5564.30
                                                28.28
        90.00
                                                                                                                       1241.8
                                                                                                                                      -14.16
                                                                            170.45
                                                                                           114.54
                                                                                                      3 32 53
                                                               14.91
                   3 2 11
                                               -17.62
                                                                                           90.84 13 17 50
117.26 4 23 3
88.79 14 37 2
                                                                                                                                                    229.90
                                                                                                                       4680.0
                                                                                                                                      29.68
                                                                            180.88
                                                              238.70
                  11 49 50
                                                29.88
                                                                                                                                      -17.65
                                                                                                                       1076.0
                  3 55 7 1676.04
13 13 24 5018.56
                                                                 . 35
                                                                            168.47
                                               -21.47
                                                                                                                                      33.62
                                                                                                                                                    209.63
                                                                                                                       4418.6
                                                              218.83
                                                                            180.86
                                                34.16
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 285.0 SR 349.3 SS 131.8
CRT -.0373 CRS .3494 CST -.9359
                                                                 SCT 1103.9 SGR 431.3 SG3 235.2
RRT -.5522 RRF -.5868 RTF .8169
SGB 1185.2 R23 .1018 R13 -.8267
SG1 1132.1 SG2 350.6 THA 166.51
    TDE -.0452 TRA-1.2764 TC3 -.3605 BAU .3226
    ROE - .4804 RRA .2371 RC3 .1194 FAU .11489
                                                                                                                   LSA 355.9 MSA 305.8 SSA 19.1
EL1 349.8 EL2 284.4 ALF 95.16
    FDE .0973 FRA-1.4719 FC3-1.5654 BSP 2995
BOE .4825 BRA 1.2982 BC3 .3798 FSP -731
                                                                                                                              ARRIVAL DATE MAR 26 1966
                                                                      FLIGHT TIME 82.00
LAUNCH DATE JAN 3 1966
                                                                     DISTANCE 252.734
   HELIOCENTRIC CONIC
                        .00 LOL 102.17 VL 29.820 GAL -14.84 AZL 87.75 HCA 118.66 SMA 145.01 ECC .25648 INC 2.2495 V1 30.287 1.97 LOP 220.85 VP 39.216 GAP 2.18 AZP 91.08 TAL 252.05 TAP 10.71 RCA 107.82 APO 182.20 V2 35.023 8.28 GP 14.87 ZAL 166.27 ZAP 106.25 ETS 1.68 ZAE 153.68 ETE 158.82 ZAC 27.65 ETC 174.88 CLP-106.83
    RL 147.10 LAL
    RP 108.20 LAP
    RC 88.623 GL
   PLANETOCENTRIC CONIC
    C3 61.783 VHL 7.860 DLA -13.29 RAL 293.58 RAD 6569.2 VEL 13.533 PTH 2.47 VHP 4.484 DPA -8.61 RAP 294.27 ECC 2.0168 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          113.82 2 25 59
91.60 11 54 50
                                                                                                                       1468.7
                                                 -15.78
                                                                           171.22
                                                               32.45
                    1 51 30 2068.68
       90.00
                                                                                                                                      28.20
                                                                                                                                                     250.91
                                                                                                                        4964.4
                                                 28.28
                                                              259.58
                                                                             180.94
        90.00
                   10 22 5
                                 5564.36
                                                                                            114.80 3 36 23
90.83 13 18 22
                                                                                                                                      -13.76
                                                                                                                                                      7.06
                                                                                                                        1228.6
                                                                             170.53
                                                 -17.25
                                                               14.11
                    3 5 54
                                 1828.62
       100.00
                                                                                                                                      29.68
                                                                                                                                                     229.87
                                                                                                                        4679.7
                                                                            180.98
       100.00
                  11 50 22 5279.66
3 58 33 1663.72
                                                  29.88
                                                              238.67
                                                                                                                                     -17.23
                                                                                                                                                     352.60
                                                                                                                        1063.7
                                                                                           117.55 4 26 17
88.73 14 37 50
                                                 -21.09
                                                               359.60
                                                                           168.53
       110.00
                                                                                                                                        33.61
                                                                                                                        4417.3
                                                              218.73
                                                                             180.96
                                                  34.16
       110.00
                  13 14 12
                                 5017.32
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 305.5 SR 339.9 SS 129.1
                                                                  SGT 1203.0 SGR 430.4 SG3 234.8
RRT -.5789 RRF -.6106 RTF .8280
SGB 1277.7 R23 .1088 R13 -.8364
    TOE -. 0491 TRA-1.3476 TC3 -.4157 BAU .3595
                                                                                                                    CRT -. 0409 CRS .3219 CST -. 9455
    ROE - .4605 RRA .2374 RC3 .1287 FAU .11346
FOE .0774 FRA-1.4224 FC3-1.5899 BSP .3340
BDE .4631 BRA 1.3684 BC3 .4352 FSP ~734
                                                                                                                    LSA 350.2 MSA 320.2 SSA 19.2
                                                                                                                   EL1 341.1 EL2 304.3 ALF 100.48
                                                                  5G1 1230.8 SG2 343.0 THA 167.30
                                                                                                                              ARRIVAL DATE MAR 28 1966
                                                                      FITCHT TIME 84.00
 LAUNCH DATE JAN 3 1966
    RL 147.10 LAL .00 LOL 102.17 VL 29.742 GAL -14.65 A7L 87.86 MCA 121.86 SMA 144.27 ECC .25356 INC 2.1388 VI 30.287 RP 108.24 LAP 1.82 LOP 224.05 VP 39.144 GAP 2.60 A7P 91.13 TAL 251.07 TAP 12.93 RCA 107.69 APO 180.85 V2 35.010 RC 90.946 GL 7.97 GP 15.22 ZAL 166.02 ZAP 109.96 ETS 2.88 ZAE 151.21 ETE 159.80 ZAC 26.98 ETC 175.68 CLP-110.72
                                                                      DISTANCE 258.883
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 60.030 VHL 7.748 DLA -13.51 RAL 294.16 RAD 6569.1 VEL 13.468 PTH 2.46 VMP 4.517 DPA -8.33 RAP 293.57 ECC 1.9879
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        114.07 2 29 58
91.62 11 55 13
115.07 3 40 14
90.84 13 18 53
117.85 4 29 50
88.69 14 38 39
                                                                                                                      1454.1
                                                                                                                                     -12.00
                                                                          171.33
                                                 -15.38
                                                               31.57
                     1 55 44 2054.07
        90.00
                                                                                                                                                     250.96
                                                                                                                        4965.0
                                                                                                                                      28.20
                                                               259.62
                                                                             181.09
                                                  28.27
         90.00
                    10 22 28 5564.99
                                                                                                                                                      6.23
                                                                                                                        1214.5
                                                                                                                                      -13.32
                                                                13.26
                                                                            170.64
                                                  -16.84
        100.00
                     3 9 59
                                 1814.48
                                                                                                                                                     229.89
                                                                                                                        4679.8
                                                                                                                                      29.68
                                                                             181.13
                                                               238.69
                                                 29.88
       100.00
                   11 50 53 5279.82
                                                                                                                                      -16.78
                                                                                                                                                     351.84
                                                                                                                        1050.6
                                                                             168.62
                                                 -20.67
                                                               358.81
                                 1650.57
       110.00
                     4 2 19
                                                                                                                                                    209.47
                                                                                                                        4416.5
                                                                                                                                      33.60
                                                                             181.10
                   13 15 3 5016.50
                                                               218.57
                                                  34.16
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 326.6 SR 329.6 SS 125.8
CRT -.0389 CRS .2984 CST -.9513
                                                                  SCT 1303.6 SGR 428.6 SG3 232.7

RRT -.6031 RRF -.6344 RTF .8359

SGB 1372.3 R23 .1185 R13 -.8434

SG1 1330.8 SG2 334.9 THA 168.01
     TOE -.0557 TRA-1.4169 TC3 -.4727 BAU .3952
     RDE -.4396 RRA .2364 RC3 .1380 FAU .11123
                                                                                                                     LSA 354.2 MSA 324.5 SSA 19.2
     FOE .0603 FRA-1.3611 FC3-1.6041 BSP 3681
BOE .4431 BRA 1.4364 BC3 .4924 FSP -725
                                                                                                                     EL1 334.6 EL2 321.5 ALF 128.54
                                                                                                                               ARRIVAL DATE MAR 30 1966
                                                                       FLIGHT TIME 86.00
 LAUNCH DATE JAN 3 1966
                                                                       DISTANCE 264.998
    HELIOCENTRIC CONIC
                         .00 LOL 102.17 VL 29.660 GAL -14.45 AZL 87.98 HCA 125.06 SMA 143.52 ECC .25069 INC 2.0203 V1 30.287 1.65 LOP 227.25 VP 39.070 GAP 3.01 AZP 91.16 TAL 250.02 TAP 15.08 RCA 107.54 APO 179.49 V2 34.996 7.62 GP 15.62 ZAL 165.75 ZAP 113.42 ETS 4.15 ZAE 148.90 ETE 160.50 ZAC 26.53 ETC 176.54 CLP-114.37
     RL 147.10 LAL
        108.29 LAP
     RC 93.279 GL
    PLANETOCENTRIC CONIC
     C3 58.281 VHL 7.634 DLA -13.76 RAL 294.78 RAD 6569.1 VEL 13.403 PTH 2.45 VHP 4.561 DPA -7.99 RAP 293.08 ECC 1.9592
     LNCH AZETH LNCH TIME L-I TIME IND LAT IND LONG IND RT ASC IND AZETH IND TIME PO CST TIM IND 2 LAT IND 2 LONG
                                                                                                                                     -11.53
                                                                                                         2 34 21
                                                                                            114.34
                     2 0 23 2038.23
10 22 45 5566.40
                                                  -14.94
                                                                30.61
                                                                            171.48
         90.00
                                                                                                                                                      251.06
                                                                                                       11 55 32
                                                                                                                         4966.4
                                                                                                                                        24.20
                                                                                              91.67
                                                                             181.27
                    10 22 45
                                                  28.27
                                                                259.72
         90.00
                                                                                                                                                       5.34
                                                                                                                         1199.2
                                                                                                                                       -12.85
                                                                                             115.35
                                                                                                         3 44 28
                                                                12.34
                                                                             170.78
                      3 14 29
                                 1799.18
                                                  -16.40
        100.00
                                                                                             90.87 13 19 22
118.17 4 33 43
                                                                                                                         4680.7
                                                                                                                                        29.68
                                                                                                                                                     229.95
                                                                238.75
                                                                              161.31
                    11 51 21
                                 5280.69
                                                  29.88
        100.00
                               1636.39
                                                                                                                                                      351.03
                                                                                                                         1036.4
                                                                                                                                      -16.30
                                                  -20.22
                                                                357.96
                                                                             168.75
        110.00
                     4 6 27
                                                                                              88.68 14 39 28
                                                                                                                         4416.2
                                                                                                                                        33.60
                                                34.16
                                                               218.65
                                                                             181.29
                    13 15 52
                                  5016.24
        110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 348.5 SR 317.6 SS 122.6
CRT -.0302 CRS .2589 CST -.9588
                                                                   SGT 1406.3 SGR 426.4 SG3 230.0
RRT -.6270 RRF -.6587 RTF .8419
     TDE -.0661 TRA-1.4843 TC3 -.5320 BAU .4303
      RDE -.4169 RRA .2346 RC3 .1480 FAU .10871
                                                                                                                     LSA 369.5 MSA 316.9 SSA 19.3
                                                                   SGB 1469.5 R23 .1294 R13 -.8487
     FOE .0371 FRA-1.2977 FC3-1.6148 BSP 4039
                                                                                                                     EL1 349.2 EL2 316.8 ALF 170.98
                                                                   SG1 1432.9 SG2 326.0 THA 168.64
      BDE .4221 BRA 1.5027 BC3 .5522 FSP
                                                      -721
```

```
LAUNCH DATE JAN 3 1966
                                                                    FLIGHT TIME 88.00
                                                                                                                          ARRIVAL DATE APR 1 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 271.080
    RL 147.10 LAL
                       .00 LOL 102.17 VL 29.576 GAL -14.25 A7L 88.11 MCA 128.26 SMA 142.75 ECC .24787 INC 1.8921 V1 30.287 1.49 LOP 230.44 VP 38.995 GAP 3.39 A7P 91.17 TAL 248.92 TAP 17.17 RCA 107.37 APO 178.13 V2 34.983
    RP 108.33 LAP
    RC 95.621 GL
                        7.23 GP 16.06 7AL 165.44 7AP 116.63 ETS 5.48 7AE 146.76 ETE 160.96 7AC 26.30 ETC 177.49 CLP-117.81
   PLANETOCENTRIC CONIC
    C3 56.535 VHL 7.519 DLA -14.04 RAL 295.44 RAD 6569.0 VEL 13.338 PTH
                                                                                            2.44 VHP 4.616 OPA
                                                                                                                       -7.58 RAP 292.80 ECC 1.9304
    LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  2 5 33 2020.88
10 22 54 5568.85
3 19 27 1782.45
        90.00
                                               -14.45
                                                             29.58
                                                                         171.67
                                                                                        114.62
                                                                                                    2 39 14
                                                                                                                   1420.9
                                                                                                                                 -11.01
                                                                                                                                                 22.59
                                                                                                                    4968.8
        90.00
                                               28.27
                                                                          181.49
                                                                                          91.76
                                                                                                   11 55 43
                                                                                                                                  28.21
       100.00
                                               -15.91
                                                              11.34
                                                                          170.96
                                                                                         115.65
                                                                                                     3 49 10
                                                                                                                    1182.4
                                                                                                                                  -12.33
                                                                                                                                                  4.38
                  11 51 41 5282.51
       100.00
                                               29.88
                                                             238.89
                                                                          181.54
                                                                                          90.94
                                                                                                   13 19 44
                                                                                                                    4682.5
                                                                                                                                  29.69
                                                                                                                                                230.09
                                                                                        118.50 4 38 2
88.70 14 40 14
       110.00
                  4 11 1 1620.96
13 16 37 5016.76
                                              -19.72
                                                             357.04
                                                                                                                                                350.16
                                                                          168.91
                                                                                                                   1021.0
                                                                                                                                 -15.76
       110.00
                                                            218.69
                                                                        181.52
                                                                                                                    4416.8
                                                                                                                                   33.60
                                                                                                                                                209.49
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                SGT 1509.7 SGR 423.7 SG3 226.4
RRT -.6499 RRF -.6836 RTF .8461
SGB 1568.1 R23 .1426 R13 -.8523
                                                                                                                ST 370.9 SR 304.4 SS 119.2
CRT -.0164 CRS .2122 CST -.9655
    TOE -. 0801 TRA-1.5485 TC3 -. 5933 BAU .4641
    ROE -.3929 RRA .2318 RC3 .1584 FAU .10580
    FDE .0130 FRA-1.2292 FC3-1.6201 BSP 4393
ROF .4010 BRA 1.5658 BC3 .6141 FSP -713
                                                                                                                LSA 388.9 MSA 304.8 55A 19.4
                                                                SG1 1535.8 SG2 316.6 THA 169.20
                                                                                                                EL1 371.0 EL2 304.3 ALF 177.64
LAUNCH DATE JAN 3 1966
                                                                    FLIGHT TIME 90.00
                                                                                                                          ARRIVAL DATE APR 3 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 277.131
   RL 147.10 LAL .00 LOL 102.17 VL 29.491 GAL -14.04 AZL 88.25 MCA 131.45 SMA 141.98 ECC .24511 INC 1.7522 V1 30.287
RP 108.37 LAP 1.31 LOP 233.64 VP 38.918 GAP 3.75 AZP 91.16 TAL 247.76 TAP 19.21 RCA 107.18 APO 176.78 V2 34.970
RC 97.969 GL 6.79 GP 16.58 ZAL 165.10 ZAP 119.61 ETS 6.91 ZAE 144.76 ETE 161.21 ZAC 26.28 ETC 178.53 CLP-121.03
   PLANETOCENTRIC CONIC
    C3 54.792 VHL 7.402 DLA -14.37 RAL 296.15 RAD 6569.0 VEL 13.272 PTH
                                                                                           2.43 VHP 4.679 DPA
                                                                                                                     -7.07 RAP 292.72 ECC 1.9017
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       114.92
       90.00
                   2 11 20 2001.63
                                               -13.90
                                                             28.43
                                                                        171.89
                                                                                                    2 44 42
                                                                                                                  1401.6
       90.00
                  10 22 49
                                5572.67
                                                28.26
                                                             260.18
                                                                          181.77
                                                                                          91.90
                                                                                                   11 55 41
                                                                                                                    4972.7
                                                                                                                                   28.22
                 3 25 0 1763.94
11 51 50 5285.59
      100.00
                                              -15.36
                                                             10.24
                                                                          171.17
                                                                                         115.96
                                                                                                    3 54 24
                                                                                                                    1163.9
      100.00
                                               29.88
                                                            239.11
                                                                          181.81
                                                                                          91.06
                                                                                                   13 19 55
                                                                                                                    4685.6
                                                                                                                                   29.70
                                                                                                                                                230.31
                   4 16 4 1603.99
13 17 15 5018.31
      110.00
                                              -19.17
                                                            356.04
                                                                          169.10
                                                                                        118.86
                                                                                                    4 42 48
                                                                                                                    1004.0
                                                                                                                                  -15.17
                                                                                                                                                349.20
                                                                                         88.78 14 40 53
                 13 17 15
      110.00
                                               34.16
                                                            218.81
                                                                          181.81
                                                                                                                    4418.3
                                                                                                                                  33.62
                                                                                                                                                209.61
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                56T 1614.2 5GR 421.0 5G3 222.3
RRT -.6723 RRF -.7095 RTF .8490
SGB 1668.2 R23 .1584 R13 -.8549
                                                                                                                ST 394.3 SR 289.9 SS 116.0
CRT .0031 CRS .1543 CST -.9718
    TOE -. 0983 TRA-1.6094 TC3 -.6570 BAU .4970
   RDE -.3617 RRA .2281 RC3 .1696 FAU .10262
FDE -.0131 FRA-1.1583 FC3-1.6214 BSP 4755
BDE .3806 BRA 1.6255 BC3 .6785 FSP -704
                                                                                                                LSA 410.2 MSA 290.4 SSA 19.5
                                                                5G1 1639.7 5G2 3D6.8 THA 169.69
                                                                                                                EL1 394.3 EL2 289.9 ALF
                                                                   FLIGHT TIME 92.00
                                                                                                                         ARRIVAL DATE APR 5 1966
LAUNCH DATE JAN 3 1966
                                                                   OISTANCE 283.153
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 29.404 GAL -13.83 AZL 88.40 MCA 134.65 SMA 141.21 ECC .24242 INC 1.5980 V1 30.287 RP 108.41 LAP 1.14 LOP 236.83 VP 38.841 GAP 4.09 AZP 91.12 TAL 246.55 TAP 21.20 RCA 106.97 APO 175.44 VZ 34.957 RC 100.323 GL 6.28 GP 17.18 ZAL 164.72 ZAP 122.34 ETS 8.46 ZAE 142.90 ETE 161.27 ZAC 26.47 ETC 179.68 CLP-124.05
   PLANETOCENTRIC CONIC
   C3 53.053 VHL 7.284 DLA -14.76 RAL 296.92 RAD 6568.9 VEL 13.207 PTH 2.41 VHP 4.75D DPA -6.45 RAP 292.82 ECC 1.8731
   LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                       172.15
                                                                                     115.24 2 50 51
92.11 11 55 21
                                                             27.15
                                                                                                                              -9.76
       90.00
                   2 17 51 1980.02
10 22 22 5578.34
                                              -13.27
                                                                                                   2 50 51
                                                                                                                  1380.0
                                                                                                                                               20.23
       90.00
                  10 22 22
                                               28.24
                                                            260.60
                                                                         182.09
                                                                                                                   4978.3
                                                                                                                                  28.24
                                                                                                                                               251.93
                                                                                       116.30 4 0 18
91.25 13 19 50
                              1743.23
      100.00
                   3 31 15
                                             -14.74
                                                             9.01
                                                                         171.42
                                                                                                                   1143.2
                                                                                                                                -11.08
                                                                                                                                                2.13
      100.00
                  11 51 40
                              5290.37
                                              29.87
                                                            239.47
                                                                         182.15
                                                                                                                   4690.4
                                                                                                                                 29.72
                                                                                                                                              230.67
                              1585.10
5021.26
                                                                                       119.25 4 48 9
88.91 14 41 22
      110.00
                   4 21 44
                                             -18.54
                                                            354.93
                                                                         169.33
                                                                                                                   985.1
                                                                                                                                 -14.50
                                                                                                                                               348.14
      110.00
                  13 17 40
                                               34.17
                                                            219.04
                                                                         182.1€
                                                                                                                   4421.3
                                                                                                                                 33.64
                                                                                                                                               209.84
                                                             MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ORBIT DETERMINATION ACCURACY
                                                              SCT 1718.3 SGR 418.3 SG3 217.2

RRT -.6933 RRF -.7360 RTF .8505

SGB 1768.5 R23 .1778 R13 -.8561

SGI 1743.4 SG2 297.1 THA 170.13
                                                                                                               ST 418.5 SR 274.4 SS 112.8
CRT .0274 CR5 .0929 CST -.9763
LSA 432.9 MSA 274.6 SSA 19.6
   TOE -.1206 TRA-1.6653 TC3 -.7228 BAU
                                                  .5285
   ROE -.3417 RRA .2228 RC3 .1814 FAU .09906
   FOE -.0374 FRA-1.0814 FC3-1.6165 BSP 5098
BOE .3624 BRA 1.6802 BC3 .7452 FSP -684
                                                                                                               EL1 418.6 EL2 274.2 ALF 1.80
LAUNCH DATE JAN 3 1966
                                                                   FLIGHT TIME 94.00
                                                                                                                          ARRIVAL DATE APR 7 1966
  HELTOCENTRIC CONTC
                                                                   DISTANCE 289.149
   RL 147.10 LAL
                        .OD LOL 102.17 VL 29.316 GAL -13.61 AZL 88.57 HCA 137.83 SMA 140.43 ECC .23979 INC 1.4260 V1 30.287 .96 LOP 240.01 VP 38.763 GAP 4.41 AZP 91.06 TAL 245.30 TAP 23.14 RCA 106.76 APO 174.11 V2 34.945 5.68 GP 17.89 ZAL 164.31 ZAP 124.84 ETS 10.16 ZAE 141.15 ETE 161.15 ZAC 26.84 ETC 180.95 CLP-126.89
   RP 108.44 LAP
   RC 102.662 GL
  PLANETOCENTRIC CONIC
   C3 51.321 VHL 7.164 DLA -15.22 RAL 297.73 RAD 6568.9 VEL 13.141 PTH 2.40 VHP 4.829 DPA -5.71 RAP 293.07 ECC 1.8446
   LNCH AZMTH LNCH TIME L-T TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   2 57 54
       90.00
                   2 25 18
                               1055.42
                                              -12.55
                                                            25.70
                                                                        172.47
                                                                                       115.59
                                                                                                                   1355.4
                                                                                                                                  -9.01
                                                                                                                                                18.82
       90.00
                               5586.48
                                               28.22
                                                                         182.49
                                                                                         92.40 11 54 32
                                                                                                                   4985.5
                                                                                                                                 28.26
                  10 21 26
                                                            261.19
                                                                                                                                               252.53
                               1719.71
                                                                         171.73
                                                                                        116.67
                                                                                                   4 7 1
      100.00
                   3 38 21
                                              -14.02
                                                             7.63
                                                                                                                   1119.7
                                                                                                                                 -10.33
                                                                                                                                                  .79
                                                                                         91.52 13 19 21
                  11 51 4 5297.42
4 28 7 1563.81
                                                            239.99
                                                                         182.55
                                                                                                                                              231.19
      100.00
                                              29.86
                                                                                                                   4697.4
                                                                                                                                 29.75
      110.00
                                              -17.83
                                                            353.69
                                                                         169.61
                                                                                       119.66
                                                                                                   4 54 11
                                                                                                                    963.8
                                                                                                                                 -13.75
                                                                                                                                              346.95
                                                                                         89.13 14 41 33
                 13 17 47
                                                            219.42
                                                                                                                   4426.1
                                              34.17
                                                                         182.58
                                                                                                                                  33.68
      110.00
                               5026.08
                                                                                                                                              210.21
                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                               ORBIT DETERMINATION ACCURACY
  DIFFFRENTIAL CORRECTIONS
                                                              SGT 1823.9 SGR 416.3 SG3 212.2
RRT -.7144 RRF -.7637 RTF .8515
                                                                                                             ST 444.6 SR 257.1 SS 110.7
CRT .0581 CRS .0066 CST -.9808
   TOE -.1490 TRA-1.7169 TC3 -.7919 BAU .5595
   RDE -.3141 RRA .2168 RC3 .1948 FAU .09552
                                                             SCB 1870.8 R23 .1999 R13 -.8570
SGI 1848.6 SGZ 287.4 THA 170.51
                                                                                                            LSA 458.0 MSA 256.6 SSA 19.8
EL1 444.9 EL2 256.4 ALF 2.88
   FDE -.0678 FRA-1.0069 FC3-1.6114 BSP 5461
BDE .3477 BRA 1.7305 BC3 .8155 FSP -671
```

ARRIVAL DATE APR 9 1966

FLIGHT TIME 96.00 LAUNCH DATE JAN 3 1966 DISTANCE 295.121 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 102.17 VL 29.227 GAL -13.39 A7L 88.77 HCA 141.02 SMA 139.66 ECC .23723 INC 1.2315 VI 30.287 RP 108.48 LAP .77 LOP 243.20 VP 38.684 GAP 4.72 AZP 90.96 TAL 244.01 TAP 25.03 RCA 106.53 APO 172.80 V2 34.932 4.98 GP 18.74 TAL 163.85 TAP 127.09 ETS 12.04 TAE 139.50 ETE 160.85 TAC 27.40 ETC 182.37 CLP-129.56 RC 105.043 GL PLANETOCENTRIC CONIC C3 49.600 VHL 7.043 OLA -15.77 RAL 298.61 RAO 6568.8 VEL 13.075 PTH 2.39 VHP 4.916 OPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 172.85 115.97 3 6 3 1326.9 -8.13 90.00 2 33 56 1926.94 10 19 47 5597.96 24.03 -11.71 11 53 5 253.37 4998.0 28.28 92.82 90.00 28.19 262.03 182.96 117.07 4 14 47 1092.6 -9.45 359.25 3 46 34 1692.60 11 49 50 5307.54 6.05 172.09 100.00 -13.19 13 18 18 4707.5 29.78 231.94 91.92 100.00 29.84 240.74 183.04 5 1 6 14 41 20 345.61 4 35 27 1539.47 13 17 27 5033.42 120.11 939.5 -12.87 -17.00 352.28 169.94 110.00 4433.4 210.78 183.10 89.47 34.18 219.99 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 472.8 SR 238.2 SS 110.1 CRT .0942 CRS -.0954 CST -.9825 SGT 1929.8 SGR 415.2 SG3 206.8 RRT -.7346 RRF -.7922 RTF 18519 TDE -.1838 TRA-1.7626 TC3 -.8641 BAU .5896 RDE -.2852 RRA .2096 RC3 .2096 FAU .09186 FOE -.1009 FRA -.9317 FC3-1.6034 BSP 5825 BDE .3393 BRA 1.7750 BC3 .8891 FSP -657 5GB 1973.9 R23 .2255 R13 -.8574 LSA 485.7 MSA 236.8 SSA 20.0 SG1 1954.2 SG2 278.2 THA 170.83 EL1 473.5 EL2 236.8 ALF ARRIVAL DATE APR 11 1966 FLIGHT TIME 98.00 LAUNCH DATE JAN 3 1966 HELIOCENTRIC CONIC DISTANCE 301.069 .00 LOL 102.17 VL 29.137 GAL -13.16 AZL 88.99 HCA 144.21 SMA 138.90 ECC .23475 INC 1.0083 VI 30.287 .59 LOP 246.38 VP 38.606 GAP 5.02 AZP 90.82 TAL 242.67 TAP 26.88 RCA 106.29 APO 171.51 V2 34.920 4.14 GP 19.76 ZAL 163.35 ZAP 129.09 ETS 14.16 ZAE 137.93 ETE 160.35 ZAC 28.14 ETC 183.96 CLP-132.07 RL 147.10 LAL RP 108.52 LAP RC 107.406 GL PLANETOCENTRIC CONIC 2.37 VHP 5.011 DPA -3.72 RAP 293.98 ECC 1.7882 C3 47.894 VHL 6.921 DLA -16.45 RAL 299.55 RAD 6568.8 VEL 13.010 PTH ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 44 8 1893.37 -10.70 22.08 173.31 116.37 3 15 42 1293.4 -7.08 15.28 11 50 41 254.54 10 17 7 5614.04 3 56 13 1660.78 93.41 5014.0 28.30 90.00 5614.04 28.13 263.20 183.53 357.46 117.50 4 23 54 1060.8 -12.20 172.54 100.00 4.21 92.48 13 16 25 120.60 5 9 10 89.97 14 40 31 233.00 11 47 43 5321.86 4 43 56 1511.18 29.80 241.81 183.63 4721.9 29.82 100.00 -11.85 -16.03 120.60 344.06 350.67 170.34 110.00 4444.2 33.80 211.61 183.74 110.00 13 16 27 5044.23 34.18 220.83 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 504.4 SR 217.6 SS 111.7 CRT .1365 CRS -.2136 CST -.9793 SGT 2036.3 SGR 415.4 SG3 201.1 RRT -.7534 RRF -.8211 RTF .8520 TOF -.2268 TRA-1.8016 TC3 -.9399 BAU .6190 RDE -.2549 RRA .2009 RC3 .2261 FAU .08809 LSA 517.3 MSA 215.1 SSA 20.3 EL1 505.5 EL2 215.1 ALF 4.12 FDE -.1382 FRA -.8556 FC3-1.5922 BSP 6193 BDE .3412 BRA 1.8127 BC3 .9668 FSP -642 SG8 2078.2 R23 .2550 R13 -.8574 SG1 2060.6 SG2 270.0 THA 171.11 ARRIVAL DATE APR 13 1966 FLIGHT TIME 100.00 LAUNCH DATE JAN 3 1966 DISTANCE 306.996 HELIOCENTRIC CONIC .DD LOL 102.17 VL 29.047 GAL -12.92 AZL 89.25 HCA 147.39 SMA 138.14 ECC .23235 INC .7481 V1 30.287
.40 LOP 249.56 VP 38.527 GAP 5.29 AZP 90.63 TAL 241.30 TAP 28.69 RCA 106.04 APO 170.24 V2 34.909
3.12 GP 21.00 ZAL 162.78 ZAP 130.82 ETS 16.57 ZAE 136.39 ETE 159.65 ZAC 29.06 ETC 185.76 CLP-134.44 RL 147.10 LAL RP 108.56 LAP RC 109.770 GL PLANETOCENTRIC CONIC C3 46.211 VHL 6.798 DLA -17.29 RAL 300.58 RAD 6568.7 VEL 12.945 PTH 2.36 VHP 5.118 DPA -2.40 RAP 294.59 ECC 1.7605 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1252.9 116.81 3 27 20 94.22 11 46 56 13.00 173.90 -5.80 -9.47 19.75 2 56 27 1852.92 90.00 28.32 256.19 28.03 264.84 184.23 5036.6 10 13 0 5636.56 90.00 117.98 4 34 51 93.26 13 13 21 355.33 -10.99 2.02 173.10 1022.7 -7.16 4 7 49 1622.66 100.00 4742.1 29.87 234.50 11 44 19 29.73 243.31 184.36 5342.05 100.00 121.14 5 18 43 90.69 14 38 51 -10.62 33.90 342.23 170.85 877.7 1477.66 -14.86 348.78 4 54 6 110.00 AASG.R 212.82 222.05 184.54 5059.82 34.18 110.00 13 14 32 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 540.4 SR 195.2 SS 115.7 CRT .1841 CRS -.3344 CST -.9704 SGT 2141.5 SGR 417.1 SG3 194.5 TOE -.2787 TRA-1.8312 TC3-1.0187 BAU .6472 ROE -.2234 RRA .1900 RC3 .2444 FAU .08402 FOE -.1766 FRA -.7750 FC3-1.5740 BSP 6531 BOE .3572 BRA 1.8410 BC3 1.0476 FSP -618 RRT -.7691 RRF -.8494 RTF .8513 LSA 553.4 MSA 191.9 SSA 20.6 SGB 2181.8 R23 .2888 R13 -.8567 EL1 541.8 EL2 191.3 ALF 4.35 SG1 2165.8 SG2 263.6 THA 171.35 ARRIVAL DATE APR 15 1966 FLIGHT TIME 102.00 LAUNCH DATE JAN 3 1966 **DISTANCE 312.903** HELIOCENTRIC CONIC .00 LOL 102.17 VL 28.957 GAL -12.68 AZL 89.56 HCA 150.57 SMA 137.39 ECC .23003 INC .4382 V1 30.287 .22 LOP 252.73 VP 38.449 GAP 5.56 AZP 90.38 TAL 239.90 TAP 30.46 RCA 105.79 APO 169.00 V2 34.897 1.86 GP 22.52 ZAL 162.13 ZAP 132.24 ETS 19.33 ZAE 134.84 ETE 158.72 ZAC 30.17 ETC 187.81 CLP-136.70 RL 147.10 LAL 108.59 LAP RC 112.133 GL PLANETOCENTRIC CONIC -.78 RAP 295.24 ECC 1.7334 C3 44.566 VHL 6.676 DLA -18.35 RAL 301.71 RAD 6568.7 VEL 12.881 PTH 2.35 VHP 5.239 DPA ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1202.8 -4.20 -7.92 16.89 174.66 117.28 3 41 49 90.00 3 11 46 1802.84 258.52 95.37 11 41 10 5068.4 28.30 27.84 267.16 185.10 10 6 41 5668.42 975.8 -5.60 352.72 -9.48 359.36 173.83 118.48 4 48 23 100.00 4 22 8 1575.80 94.37 13 8 32 121.74 5 30 22 91.73 14 35 56 4770.7 29.89 236.63 11 39 1 29.60 245.42 185.27 5370.69 -9.12 340.05 837.0 5 6 25 1437.04 -13.42 346.51 171.50 121.74 4482.2 34.01 13 11 13 5082.22 223.80 185.55 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2248.2 SGR 421.6 SG3 187.9 RRT -.7826 RRF -.8772 RTF .8509 SGB 2287.4 R23 .3250 R13 -.8565 SG1 2272.6 SG2 259.6 THA 171.54 ST 584.5 SR 169.8 55 125.3 CRT .2361 CRS -.4589 CST -.9551 TOE -.3446 TRA-1.8515 TC3-1.1018 BAU .6753 ROE -.1893 RRA .1773 RC3 .2655 FAU .07991 LSA 598.3 MSA 166.8 SSA 21.0 EL1 586.0 EL2 164.5 ALF 4.26 FOE -.2246 FRA -.6961 FC3-1.5522 BSP 6895

-599

BDE .3932 BRA 1.8600 BC3 1.1334 FSP

```
ARRIVAL DATE APR 17 1966
                                                                        FLIGHT TIME 104.00
LAUNCH CATE JAN 3 1966
                                                                       CISTANCE 318.792
  HELIOCENTRIC CONIC
                         .00 LOL 102.17 VL 28.867 CAL -12.43 AZL 89.94 MCA 153.74 SMA 136.66 ECC .22780 INC .0610 V1 30.287
.03 LOP 255.91 VP 38.371 CAP 5.81 AZP 90.06 TAL 238.46 TAP 32.20 RCA 105.53 APO 167.79 V2 34.886
    RL 147.10 LAL
RP 108.63 LAP
                            .27 GP 24.40 TAL 161.35 TAP 133.30 ETS 22.53 TAE 133.23 ETE 157.52 TAC 31.47 ETC 190.18 CLP-138.85
    RC 114.493 GL
   PLANETOCENTRIC CONTC
    C3 42.982 VHL 6.556 CLA -19.72 RAL 302.97 RAD 6568.6 VEL 12.820 PTH
                                                                                                 2.33 VHP 5.380 CPA
                                                                                                                              1.22 RAP 295.92 ECC 1.7074
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                           117.75
                                                                13.25
                                                                            175.72
                                                                                                           4 0 33
                                                                                                                          1138.6
                    3 31 34 1738.59
9 56 59 5714.46
                                                                                                                                          -2.14
                                                   -5.90
       90.00
                                                                                              97.01 11 32 13
119.01 5 5 43
                                                                                                                                           28.19
                                                   27.51
                                                                                                                                                        261.88
                                                                                                                           5114.5
        90.00
                                                                270.48
                                                                              186.18
                                                                                              119.01 5 5 43
95.95 13 0 59
122.39 5 45 0
93.22 14 31 4
                                                                                                                                                        349.44
                  4 40 27 1516.30
11 30 47 5411.98
                                                                              174.63
                                                                                                                           916.3
4812.0
                                                                                                                                           -3.60
                                                   -7.55
                                                                356.02
      100.00
                                               29.35
                                                                                                                                                        239.70
                                                                                                                                           29.86
      100.00
                                                                248.47
                                                                             186.42
                                              -11.59
34.05
                                                                                                                           786.4
                                                                                                                                           -7.23
                                                                                                                                                        337.35
      110.00
                  5 21 53 1386.43
13 5 50 5114.62
                                                                343.73
                                                                             172.39
                                                               226.33
                                                                              186.86
                                                                                                                           4514.6
                                                                                                                                           34.12
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  GIFFERENTIAL CORRECTIONS
                                                                   SCT 2356.4 SGR 429.3 SG3 180.6
RRT -.7921 RRF -.9034 RTF ..8507
SGB 2395.2 R23 ..3625 R13 -.8566
SG1 2381.2 SG2 259.3 TMA 171.69
                                                                                                                       ST 641.2 SR 140.8 SS 142.0
CRT .2875 CRS -.5635 CST -.9380
    TOE -.4291 TRA-1.8599 TC3-1.1890 BAU .7032
   RCE -.1521 RRA .1618 RC3 .2895 FAU .07557
FCE -.2811 FRA -.6157 FC3-1.5220 BSP 7277
BCE .4553 BRA 1.8670 BC3 1.2238 FSP -579
                                                                                                                      LSA 656.4 MSA 140.8 55A 21.5
                                                                                                                       EL1 642.5 EL2 134.6 ALF 3.78
                                                                                                                                  ARRIVAL DATE APR 19 1966
                                                                        FLIGHT TIME 106.00
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 324.662
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 28.777 GAL -12.17 A7L 90.41 MCA 156.91 SMA 135.93 ECC .22565 INC .4084 VI 30.287 RP 108.66 LAP -.16 LOP 259.08 VP 38.294 GAP 6.05 A7P 89.62 TAL 236.99 TAP 33.90 RCA 105.26 APO 166.61 VZ 34.875 RC 116.852 GL -1.79 GP 28.78 ZAL 160.34 ZAP 133.88 ETS 26.26 ZAE 131.46 ETE 156.02 ZAC 33.01 ETC 192.98 CLP-140.94
  PLANETOCENTRIC CONIC
                                                                                                 2.32 VHP 5.553 CPA
    C3 41.507 VHL 6.443 OLA -21.52 RAL 304.42 RAD 6568.6 VEL 12.762 PTH
                                                                                                                               3.72 RAP 296.55 ECC 1.6831
   LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 58 39 1651.77 -3.13 8.37 177.27 118.16 4 26 11 1051.8 .66 1.74
       90.00
                    9 41 28
                                 5783.67
                                                   26.83
                                                                275.43
                                                                              187.54
                                                                                               99.40
                                                                                                         11 17 52
                                                                                                                           5183.7
                                                                                                                                                         266.92
                                1437.22
                                                   -4.90
                                                                351.63
                                                                              176.30
                                                                                              119.53 5 29 5
                                                                                                                            837.2
                                                                                                                                            -.93
                                                                                                                                                         345.09
      100.00
                    5 5 8
                  11 17 41 5473.45
5 42 11 1321.05
                                                                                                98.27 12 48 54
                                                                                                                           4873.4
                                                                                                                                          29.67
      100.00
                                                   28.83
                                                                252.96
                                                                              187.89
                                                                                                                                                         244.26
                                                                                              123.07 6 4 12
95.40 14 23 9
                                                                                                                           721.0
                                                                                                                                           -4.76
                                                                                                                                                         333.90
      110.00
                                                   -9.18
                                                                340.20
                                                                              173.67
      110.00
                  12 57
                                  5162.39
                                                  33.80
                                                                230.04
                                                                              188.59
                                                                                                                           4562.4
                                                                                                                                           34.18
                                                                                                                                                         220.81
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 2461.3 SGR 440.0 SG3 171.8
RRT -.7950 RRF -.9263 RTF .8502
                                                                                                                       ST 715.4 SR 107.6 SS 166.2
CRT .3260 CRS -.6292 CST -.9256
    TOE -.5369 TRA-1.8495 TC3-1.2762 BAU .7295
    ROE -.1112 RRA .1415 RC3 .3157 FAU .07066
FOE -.3444 FRA -.9280 FC3-1.4738 85P 7603
BOE .5483 BRA 1.8549 BC3 1.3147 FSP -548
                                                                    SGB 2500.3 R23 .3998 R13 -.8564
                                                                                                                       LSA 732.8 MSA 116.2 SSA 21.6
                                                                                                                       EL1 716.2 EL2 101.6 ALF 2.86
                                                                    SG1 2486.4 SG2 264.2 THA 171.82
                                                                                                                                 ARRIVAL DATE APR 21 1966
                                                                       FLIGHT TIME 108.00
LAUNCH DATE JAN 3 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 330.516
   RL 147.10 LAL .00 LOL 102.17 VL 28.688 GAL -11.91 A7L 91.02 HCA 160.08 SNA 135.22 ECC .22359 INC 1.0217 VI 30.287 RP 108.69 LAP -.35 LOP 262.25 VP 38.218 GAP 6.28 A7P 89.04 TAL 235.48 TAP 35.57 RCA 104.99 APO 165.45 V2 34.865 RC 119.206 GL -4.53 GP 29.83 ZAL 158.96 ZAP 133.86 ETS 30.63 ZAE 129.41 ETE 154.17 ZAC 34.86 ETC 196.32 CLP-143.01
   PLANETOCENTRIC CONIC
    C3 40.235 VHL 6.343 DLA -23.95 RAL 306.15 RAD 6568.5 VEL 12.712 PTH 2.31 VHP 5.775 DPA
                                                                                                                             5.88 RAP 297.06 ECC 1.5622
    LNCH AZATH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        923.2
                                                                                          118.30 5 4 53
                                                                  1.20 179.80
                                                                                                                                           4.79
                                                                                                                                                       354.55
       90.00
                    4 39 30 1523.21
                                                  1.02
                    9 14 25
                                  608.47
                                                  25.33
                                                                305.45
                                                                              189.14
                                                                                              103.10
                                                                                                          9 24 34
                                                                                                                             8.5
                                                                                                                                           26.89
                                                                                                                                                        297.12
        90.00
                                                                                            119.87 6 3 15
101.78 12 28 16
123.74 6 31 2
98.68 14 9 51
                                                                                                                           724.1
                    5 41 11 1324.11
                                                   -1.08
                                                               345.41
                                                                             178.64
                                                                                                                                           2.91
                                                                                                                                                        338.88
      100.00
                                 5570.85
                                                 27.67
                                                               259.97
                                                                              189.72
                                                                                                                          4970.8
                                                                                                                                           29.02
                                                                                                                                                        251.42
                  10 55 25
      100.00
                                                                           175.68
                                                                                                                           632.1
                                                                                                                                           -1.37
                                                                                                                                                        329.25
      110.00
                    6 10 30
                                1232.14
                                                   -5.84
                                                               335.48
                                                                                                                          4635.6
                                                                              190.88
                                                                                                                                          34.04
                                                                                                                                                        226.52
                  12 42 35
                                  5235.58
                                                  33.19
                                                               235.66
      110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SCT 2570.4 SCR 456.0 SC3 162.0

RRT -.7918 RRF -.9455 RTF .8513

SCB 2610.6 R23 .4316 R13 -.8579

SCI 2596.0 SC2 275.8 THA 171.91
                                                                                                                      ST 822.8 SR 67.7 S5 204.0
CRT .2862 CRS -.6006 CST -.9236
    TDE -.6855 TRA-1.8187 TC3-1.3635 BAU .7566
    RDE -.0629 RRA .1160 RC3 .3450 FAU .06532
FOE -.4250 FRA -.4392 FC3-1.4055 BSP 7988
BOE .6884 BRA 1.8224 BC3 1.4065 FSP -520
                                                                                                                     LSA 844.5 MSA 97.7 35A 20.4
EL1 823.0 EL2 64.8 ALF 1.36
                                                                        FLIGHT TIME 110.00
                                                                                                                                  ARRIVAL DATE APR 23 1966
LAUNCH DATE JAN 3 1966
                                                                       DISTANCE 336.353
  HELIOCENTRIC CONIC
   RL 147.10 LAL
RP 108.72 LAP
    RL 147.10 LAL .00 LOL 102.17 VL 28.599 GAL -11.64 AZL 91.85 HCA 163.25 SMA 134.52 ECC .22163 INC 1.8540 VI 30.287 RP 108.72 LAP -.53 LOP 265.42 VP 38.142 GAP 6.50 AZP 88.22 TAL 233.96 TAP 37.20 RCA 104.71 APO 164.33 V2 34.856 RC 121.557 GL -8.31 GP 33.83 ZAL 156.87 ZAP 132.96 ETS 35.75 ZAE 126.85 ETE 151.94 ZAC 37.15 ETC 200.38 CLP-145.12
   PLANETOCENTRIC CONIC
    C3 39.373 VHL 6.275 DLA -27.36 RAL 308.34 RAD 6568.5 VEL 12.678 PTH
                                                                                                 2.30 VHP 6.084 DPA 10.97 RAP 297.31 ECC 1.6480
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                           116.95
                                 1271.06
                                                   9.03
                                                               347.00
                                                                             184.99
                                                                                                           6 22 14
                                                                                                                            671.1
                                                                                                                                         12.57
                                                                                                                                                        340.11
                    6 1 3
                  8 10 16 849.68
6 43 59 1132.33
10 10 1 5751.69
6 54 12 1100.23
12 16 17 5356.55
                                                                                                          8 24 26
                                                                                                                            249.7
                                                                                                                                           23.16
                                                                                                                                                        313.78
                                                  20.64
                                                                321.55
                                                                              190.18
                                                                                              109.83
                                                                                                                            532.3
                                                                                                                                            9.29
                                                                                                                                                        328.22
                                                    5.41
                                                                334.86
                                                                              183.03
                                                                                              119.44
                                                                                                           7 2 51
      100.00
                                                                                             107.64 11 45 53
124.17 7 12 33
                                                                                                                           5151.7
                                                                                                                                          26.71
                                                                                                                                                        264.36
                                                 24.53
                                                                272.48
                                                                              191.60
                                                   -.82
                                                                328.57
                                                                             179.17
                                                                                                                           500.2
                                                                                                                                            3.67
                                                                                                                                                        322.36
      110.00
                                                                                             103.81 13 45 34
                                                                                                                          4756.5
                                                   31.58
                                                                                                                                          33.16
                                                                244.72
                                                                             193.85
                                                                                                                                                        235.85
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 2678.4 SGR 476.5 SG3 149.8

RRT -,7786 RRF -,9587 RTF .8540

SGB 272D.5 R23 .4550 R13 -.8611

SG1 2704.3 SG2 296.2 THA 172.02
                                                                                                                   ST 981.7 SR 28.9 55 258.2

CRT -.4025 CRS .1176 CST -.9332

LSA 1011.2 MSA 92.6 55A 15.9

EL1 981.8 EL2 26.4 ALF 179.32
    TDE -.8954 TRA-1.7532 TC3-1.4379 BAU .7821
    ROE -.0036 RRA .0809 RC3 .3739 FAU .05905
    FOE -.5225 FRA -.3432 FC3-1.2984 BSP 8353
    BDE .8954 BRA 1.7551 BC3 1.4857 FSP -484
```

ARRIVAL CÂTE APR 25 1966

```
LAUNCH CATE JAN 3 1966
                                                                        DISTANCE 342.172
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 28.510 GAL -11.37 AZL 93.06 HCA 166.40 SMA 133.84 ECC .21975 INC 3.0603 V1 30.287 RP 108.75 LAP -.72 LOP 268.59 VP 38.067 GAP 6.71 AZP 87.03 TAL 232.40 TAP 38.80 RCA 104.43 APO 163.25 V2 34.846
    RC 123.903 GL -13.75 GP 39.19 TAL 153.46 ZAP 130.80 ETS 41.72 TAE 123.41 ETE 149.39 TAC 40.09 ETC 205.43 CLP-147.47
   PLANETOCENTRIC CONIC
    C3 39.437 VHL 6.280 DLA -32.29 RAL 311.35 RAD 6568.5 VEL 12.681 PTH 2.30 VHP 6.557 CPA 16.37 RAP 297.05 ECC 1.6490
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                          5 36 19
                    5 11 56 1463.32
9 23 25 658.25
                                                   17.20
                                                                  5.51
                                                                              191.99
                                                                                            117.76
                                                                                                                            863.3
                                                                                                                                           20.78
                                                                                                                                                         358.36
       73.79
                                                                                                          9 34 23
                                                                                                                              58.2
                                                                                                                                            20.79
                                                                                                                                                         298.59
                                                   17.22
                                                                 305.84
                                                                               192.00
                                                                                               117.75
                                  658.25
      106.21
                    9 23 25
                                                                                              117.76 5 36 19
117.75 9 34 23
123.19 8 35 42
112.84 12 46 27
                                                                   5.51
                                                                               191.99
                                                                                                                             863.3
                                                                                                                                            20.78
                                                                                                                                                         358.36
                    5 11 56 1463.32
                                                   17.20
        73.79
                   9 23 25
                                                                                                                              58.2
                                                                                                                                            20.79
                                                                                                                                                         298.69
                                                                 305.84
                                                                               192.00
                                                   17.22
      106.21
                                   658.25
                                                                 315.41
                                                                                                                             249.8
                                                                                                                                            12.99
                                                                                                                                                         308.97
                  8 21 32
11 13 0
                                                    8.68
                                                                              186.86
      110.00
                                   849.78
                                                                                                                                          29.01
                                                                                                                           5007.8
                                                                                                                                                         254.21
                                                                262.23
                                                                               196.54
                                  5607.82
                                                  26.15
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 2785.8 SGR 498.7 SG3 134.0
RRT -.7490 RRF -.9618 RTF .8597
                                                                                                                        ST 1229.3 SR 67.8 55 334.1
CRT -.9397 CRS .9890 CST -.9508
    TOE-1.2151 TRA-1.6317 TC3-1.4746 BAU .8046
    ROE .0718 RRA .0285 RC3 .3929 FAU .05131
    FDE -.6392 FRA -.2359 FC3-1.1264 BSP 8696
BDE 1.2172 BRA 1.6319 BC3 1.5261 FSP -433
                                                                    SGB 2830.0 R23 .4661 R13 -.8672
                                                                                                                        LSA 1271.6 MSA 102.1 55A 9.8
                                                                   361 2811.0 SG2 327.5 THA 172.26
                                                                                                                        ELI 1230.9 EL2 23.2 ALF 177.03
                                                                                                                                   ARRIVAL DATE APR 27 1966
                                                                        FLIGHT TIME 114.00
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 347.970
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 28.423 GAL -11.08 A7L 94.98 HCA 169.55 SMA 133.17 ECC .21794 INC 4.9765 V1 30.287 RP 108.78 LAP -.90 LOP 271.76 VP 37.994 GAP 6.90 AZP 85.11 TAL 230.81 TAP 40.36 RCA 104.14 APO 162.19 V2 34.838 RC 126.245 GL -21.94 GP 46.57 ZAL 147.51 ZAP 126.75 ETS 48.73 ZAE 118.45 ETE 146.84 ZAC 44.08 ETC 211.88 CLP-150.50
   PLANETOCENTRIC CONIC
                                                                                                  2.32 VHP 7.379 DPA 23.64 RAP 295.75 ECC 1.6903
    C3 41.945 VHL 6.476 DLA -39.67 RAL 316.16 RAD 6568.6 VEL 12.779 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 60.96 4 19 23 1693.66 20.09 25.70 199.97 124.96 4 47 37 1093.7 24.53 18.91 119.04 10 54 21 5747.08 20.11 269.76 199.98 124.95 12 30 8 5147.1 24.54 262.98
                    4 19 23 1693.66
10 54 21 5747.08
4 19 23 1693.66
                                                                                                          4 47 37
12 30 8
                                                                                                                            1093.7
                                                                                                                                            24.53
                                                                                                                                                           18.91
                                                    20.09
                                                                  25.70
                                                                               199.97
                                                                                               124.96
        60.96
                                                                                               124.95
                                                                                                                            5147.1
                                                                                                                                            24.54
                                                                                                                                                          262.98
      119.04
                   10 54 21
                                                    20.11
                                                                269.76
                                                                               199.98
                                                                                               1093.7
                                                                                                                                            24.53
                                                                                                                                                           18.91
        60.96
                                                   20.09
                                                                  25.70
                                                                               199.97
                   10 54 21
                                  5747.08
                                                   20.11
                                                                 269.76
                                                                               199.98
                                                                                                                            5147.1
                                                                                                                                            24.54
                                                                                                                                                          262.98
      119.04
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 2897.9 SGR 516.5 SG3 114.1
RRT -.6888 RRF -.9425 RTF .8739
SGB 2943.6 R23 .4558 R13 -.8813
                                                                                                                        ST 1633.6 SR 153.3 SS 442.9

CRT -.9093 CRS .9822 CST -.9707

LSA 1695.3 MSA 119.7 SSA 5.1
    TOE-1.7621 TRA-1.4075 TC3-1.4131 BAU .8203
    RDE .1711 RRA -.0546 RC3 .3781 FAU .04174
FDE -.7830 FRA -.1193 FC3 -.8614 BSP 9084
BDE 1.7704 BRA 1.4086 BC3 1.4628 FSP -371
                                                                    SG1 2920.0 SG2 371.6 THA 172.89
                                                                                                                        EL1 1639.6 EL2 63.6 ALF 175.12
                                                                                                                                  ARRIVAL DATE APR 29 1966
                                                                        FLIGHT TIME 116.00
LAUNCH DATE JAN 3 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 353.736
    RL 147.10 LAL .00 LOL 102.17 VL 28.336 GAL -10.79 AZL 98.51 MCA 172.68 SMA 132.51 ECC .21618 INC 8.5094 V1 30.287 RP 108.80 LAP -1.08 LOP 274.92 VP 37.921 GAP 7.08 AZP 81.56 TAL 229.20 TAP 41.87 RCA 103.86 APO 161.16 V2 34.830 RC 128.581 GL -34.57 GP 56.84 ZAL 136.93 ZAP 119.96 ETS 57.63 ZAE 110.81 ETE 145.84 ZAC 49.67 ETC 220.95 CLP-155.94
   PLANETOCENTRIC CONIC
    C3 52.695 VHL 7.259 DLA -50.60 RAL 325.89 RAD 6568.9 VEL 13.193 PTH 2.41 VMP 9.084 DPA 33.48 RAP 292.03 ECC 1.8672
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 1 24 1899.42
12 30 1 5655.58
4 1 24 1899.42
                                                                                            136.89 4 33 3
136.89 14 4 16
                                                                                                                         1299.4
                                                                                                                                        27.49
                                                  21.76
                                                                                                                                                           40.38
                                                                            216.74
                                                                                                           4 33 3
                                                                 46.12
        46.13
                                                                                                                                            27.50
                                                                                                                            5055.6
                                                    21.78
                                                                 262.94
                                                                               216.76
       133.87
                                                                                               136.89 4 33 3
136.89 14 4 16
                                                                                                                                                           40.38
                                                    21.76
                                                                  46.12
                                                                               216.74
                                                                                                                            1299.4
                                                                                                                                            27.49
        46.13
                                                                                                                                                         257.20
                                                                               216.76
                                                                                                                            5055.6
                                                                                                                                            27.50
                   12 30 1
                                  5655.58
                                                   21.78
                                                                262.94
       133.87
                                                                                               136.89 4 33 3
136.89 14 4 16
                                                                                                                                                           40.38
                                                                                                                            1299.4
                                                                                                                                            27.49
                    4 1 24 1899.42
                                                   21.76
                                                                  46.12
                                                                               216.74
        46.13
                                                                                                                                            27.50
                                                                                                                                                          257.20
                                                                               216.76
                                                                                                                            5055.6
                   12 30 1
                                                   21.78
                                                                 262.94
                                  5655.58
       133.87
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 2285.2 SR 201.3 SS 590.3
CRT -.8605 CRS .9314 CST -.9869
LSA 2364.8 MSA 136.5 SSA 2.3
                                                                     SGT 3008.5 SGR 499.2 SG3 89.3
RRT -.5078 RRF -.8193 RTF .9054
SGB 3049.6 R23 .4063 R13 -.9104
    TOE-2.8608 TRA -.9332 TC3-1.1118 BAU .8058
    ROE .2364 RRA -2002 RC3 .2689 FAU .02972
FOE -.9524 FRA .0184 FC3 -.4883 BSP 9396
BOE 2.8705 BRA .9544 BC3 1.1438 FSP -288
                                                                                                                        EL1 2291.8 EL2 102.3 ALF 175.66
                                                                     SG1 3019.3 SG2 428.5 THA 175.09
                                                                                                                                    ARRIVAL DATE MAY 1 1966
                                                                         FLIGHT TIME 118.00
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 359.424
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 28.250 GAL -10.47 A7L 107.14 MCA 175.73 SMA 131.87 ECC .21433 INC17.1401 V1 30.287 RP 108.82 LAP -1.26 LOP 278.09 VP 37.850 GAP 7.24 A7P 72.90 TAL 227.53 TAP 43.26 RCA 103.60 APO 160.13 V2 34.822 RC 130.911 GL -52.19 GP 70.27 ZAL 119.70 ZAP 109.65 ETS 76.39 ZAE 98.07 ETE 155.72 ZAC 57.11 ETC 241.12 CLP-175.01
   PLANETOCENTRIC CONIC
    C3 107.380 VHL 10.362 OLA -62.52 RAL 352.51 RAD 6570.1 VEL 15.123 PTH 2.72 VHP 13.806 DPA 45.88 RAP 280.80 ECC 2.7672
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 7 43 2145.31
14 56 3 5738.64
5 7 43 2145.31
14 56 3 5738.64
5 7 43 2145.31
14 56 3 5738.64
                                                                                              151.40
                                                                                                            5 43 28
                                                                                                                          1545.3
                                                                                                                                                           62.24
                                                   15.45
                                                                 65.96
                                                                              254.23
        31.61
                                                                                                         16 31 41
                                                                                                                             5138.6
                                                                                                                                             22.45
                                                                                                                                                           259.76
                                                                                               151.40
                                                    15.47
                                                                 263.48
                                                                               254.25
       148.39
                                                                                               151.40
                                                                                                            5 43 28
                                                                                                                             1545.3
                                                                                                                                            22.44
                                                                                                                                                            62.24
                                                    15.45
                                                                  65.96
                                                                               254.23
        31.61
                                                                                               151.40
                                                                                                         16 31 41
                                                                                                                             5138.6
                                                                                                                                            22.45
                                                                                                                                                          259.76
       148.39
                                                    15.47
                                                                 263.48
                                                                               254.25
                                                                                                             5 43 28
                                                                                                                                                            62.24
        31.61
                                                   15.45
                                                                  65.96
                                                                               254.23
                                                                                               151.40
                                                                                               151.40 16 31 41
                                                                                                                             5138.6
                                                                                                                                             22.45
                                                                                                                                                           259.76
                                                                               254.25
       148.39
                                                   15.47
                                                                 263.48
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 3077.8 SGR 607.9 SG3 63.2
RRT .6500 RRF .4496 RTF .9704
SGB 3137.3 R23 -.2571 R13 .9656
SG1 3103.7 SG2 458.1 THA 7.48
                                                                                                                       ST 2901.5 SR 509.8 55 753.4
CRT .9683 CRS -.9446 CST -.9966
     TOE-5.2405 TRA .4122 TC3 -.4404 BAU .6340
     ROE -.9034 RRA -.2832 RC3 .0335 FAU .01538
                                                                                                                     LSA 3037.5 MSA 141.4 55A 1.0
EL1 2943.3 EL2 125.6 ALF 9.67
    FOE-1.1323 FRA .2329 FC3 -.1240 BSP 9672
BOE 5.3178 BRA .5002 BC3 .4417 FSP -201
```

FLIGHT TIME 112.00

```
ARRIVAL CATE MAY 3 1966
LAUNCH DATE JAN 3 1966
                                                                     FLIGHT TIME 120.00
                                                                     DISTANCE 364.620
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 28.164 GAL -10.05 ATL 147.34 MCA 178.30 SMA 131.24 ECC .21117 INC57.3382 V1 30.287 RP 108.85 LAP -1.43 LOP 281.25 VP 37.780 GAP 7.25 ATP 32.67 TAL 225.67 TAP 43.97 RCA 103.53 APO 158.96 V2 34.816 RC 133.236 GL -55.43 GP 62.51 TAL 99.98 TAP 97.27 ETS 160.55 TAE 68.44 ETE 232.68 TAC 63.01 ETC 332.32 CLP 105.92
   PLANETOCENTRIC CONIC
    C3 803.980 VHL 28.355 DLA -51.03 RAL 26.11 RAD 6572.8 VEL 30.418 PTH
                                                                                              3.46 VHP 36.738 CPA 47.94 RAP 237.61 ECC14.2315
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                               63.73
                                                                           295.89
                                                                                         141.03
                                                                                                      8 38 33
                                                                                                                   1719.8
                                                                                                                                      6.46
                                                                                                                                                    59.09
                    7 59 53 2319.83
                                                   .25
       45.59
                                                              301.82
                                                                                                     16 44 54
                                                                                                                       180.1
                                                                                                                                                  297.19
                                                                           295.91
                                                                                          141.03
                                                                                                                                       6.47
                                  780.06
      134.41
                  16 31 54
                                                    .26
                                                               63.73
                                                                           295.89
                                                                                          141.03
                                                                                                      8 38 33
                                                                                                                      1719.8
                                                                                                                                       6.46
                                                                                                                                                   59.09
                                                    .25
                   7 59 53 2319.83
       45.59
                                                                                                    16 44 54
                                                                           295.91
                                                                                          141.03
                                                                                                                       180.1
                                                                                                                                       6.47
                                                                                                                                                  297.19
                                                              301.82
      134.41
                  16 31 54
                                  780.06
                                                   .26
                                                                                                      8 38 33
                                                                                                                                                   59.09
                                                    .25
                                                               63.73
                                                                           295.89
                                                                                          141.03
                                                                                                                      1719.8
                                                                                                                                       6.46
       45.59
                   7 59 53 2319.83
                                                                                          141.03 16 44 54
                                                                                                                                                  297.19
                                                              301.82
                                                                           295.91
                                                                                                                      180.1
                                                                                                                                       6.47
                  16 31 54
                                  780.06
      134.41
                                                   .26
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 589.9 SGR 2864.0 SG3 45.5
RRT -.2332 RRF .9959 RTF -.1441
SGB 2924.1 R23 -.1005 R13 .9949
                                                                                                                  ST 483.6 SR 1816.0 SS 976.8
CRT -.8608 CRS -.9979 CST .8260
    TOE 2.3554 TRA .8850 TC3 -.0355 BAU 1.7810
   ROE-8.4208 RRA 6.5759 RC3 .1618 FAU-.02478 FOE-1.3896 FRA 1.3058 FC3 .0267 B9P 7122 BOE 8.7440 BRA 6.6352 BC3 .1657 FSP -119
                                                                                                                  LSA 2102.8 MSA 253.4 55A
                                                                 SG1 2867.5 SG2 573.0 THA 92.86
                                                                                                                  EL1 1864.0 EL2 239.8 ALF 103.13
                                                                     FLIGHT TIME 122.00
                                                                                                                             ARRIVAL DATE MAY 5 1966
LAUNCH DATE JAN 3 1966
                                                                     DISTANCE 371.688
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 28.080 GAL -10.02 ATL 54.58 MCA 182.76 SMA 130.63 ECC .21370 INC35.4242 V1 30.287 RP 108.87 LAP -1.60 LOP 284.42 VP 37.712 GAP 7.80 AZP 125.39 TAL 224.47 TAP 47.23 RCA 102.71 APO 158.55 V2 34.809
                       60.24 GP -73.37 TAL 105.34 TAP 103.88 ETS 224.34 TAE 82.87 ETE 151.40 ZAC 88.07 ETC 64.96 CLP 146.94
   RC 135.553 GL
  PLANETOCENTRIC CONIC
   C3 38U.862 VHL 18.462 DLA 46.79 RAL 312.93 RAD 6571.9 VEL 21.498 PTH 3.21 VHP 20.892 DPA -78.18 RAP 135.60 ECC 6.6097 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 15.06 15.24.22 4850.75 -3.65 225.34 219.50 43.32 16.48 12
                                                                                            43.32
                                                                                                    24 16 19
                                                                                                                      2799.9
                                                                                                                                      -9.43
                                                                                                                                                   107.10
      128.94
                  23 19 39
                               3399.92
                                                 -3.64
                                                              112.24
                                                                           219.49
                                                                                           43.32 16 45 12
43.32 24 16 19
43.32 16 45 12
43.32 24 16 19
                 15 24 22
                                                                           219.50
                                                                                                                      4250.7
                                                                                                                                     -9.45
                                                                                                                                                   220.21
                                4850.75
                                                 -3.65
                                                              225.34
       51.06
                              3399.92
                                                                           219.49
                                                                                                                      2799.9
                                                                                                                                     -9.43
                                                                                                                                                   107.10
      128.94
                  23 19 39
                                                 -3.64
                                                              112.24
                 15 24 22 4850.75
                                                                           219.50
                                                                                                                      4250.7
                                                                                                                                     -9.45
                                                                                                                                                   220.21
       51.06
                                                 -3.65
                                                             225.34
      128.94
                  23 19 39
                                3399.92
                                                 -3.64
                                                              112.24
                                                                           219.49
                                                                                                                      2799.9
                                                                                                                                     -9.43
                                                                                                                                                   107.10
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 1461.1 SGR 2941.9 SG3 51.4
RRT -.8953 RRF -.9724 RTF .9733
                                                                                                                  ST 1389.8 SR 2186.0 SS 926.9

CRT -.9832 CRS .9950 CST -.9965

LSA 2742.5 MSA 218.7 SSA 1.1
    TOE 4.4552 TRA-1.0354 TC3 -.0146 BAU .3085
    ROE-6.7600 RRA 4.5185 RC3 -.0661 FAU .00068
    FOE 1.6265 FRA -.6941 FC3 -.0017 BSP 10264
BOE 8.0961 BRA 4.6356 BC3 .0677 FSP -172
                                                                 5GB 3284.8 R23 -.1473 R13 -.9885
                                                                 SG1 3230.9 SG2 592.6 THA 114.87
                                                                                                                  ELI 2581.5 EL2 214.7 ALF 122.26
                                                                                                                            ARRIVAL DATE MAY 7 1966
                                                                    FLIGHT TIME 124.00
LAUNCH DATE JAN 3 1966
   HELIOCENTRIC CONIC
                                                                    DISTANCE 377.229
   RL 147.10 LAL .00 LOL 102.17 VL 27.997 GAL -9.66 AZL 71.95 HCA 185.69 SMA 130.03 ECC .21183 INC18.0546 V1 30.287 RP 108.88 LAP -1.76 LOP 287.58 VP 37.645 GAP 7.91 AZP 107.97 TAL 222.70 TAP 48.39 RCA 102.49 APO 157.58 V2 34.804
    RC 137.863 GL 54.08 GP -61.68 TAL 116.39 TAP 117.49 ETS 279.51 TAE 101.56 ETE 201.23 TAC 80.92 ETC 119.26 CLP-166.70
   PLANETOCENTRIC CONIC
    C3 111.581 VHL 10.563 DLA 37.03 RAL 305.90 RAD 6570.1 VEL 15.262 PTH 2.74 VHP 11.011 DPA -78.90 RAP 358.67 ECC 2.8363
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                         54.19 17 12 0
54.18 22 47 36
                                                                                                                      3908.4
                                                                                                                                   -14.72
       65.07 15 56 52 4508.36
                                               -10.12
                                                             201.35
                                                                           202.23
                 21 51 5 3391.46
15 56 52 4508.36
                                                                                                                      2791.5
                                                                                                                                    -14.71
      114.93
                                               -10.10
                                                             117.21
                                                                           202.22
                                                                                           54.19 17 12 0
54.18 22 47 36
                                                                                                                                    -14.72
                                                                                                                      3908.4
       65.07
                                               -10.12
                                                             201.35
                                                                           202.23
                                                                                                                      2791.5
                                                                                                                                    -14.71
                  21 51 5
                               3391.46
                                               -10.10
                                                             117.21
                                                                           202.22
      T14.93
                                                                                           54.19 17 12 0
54.18 22 47 36
                                                                                                                                                  195.07
                                                                                                                      3908.4
                                                                                                                                   -14.72
                  15 56 52 4508.36
                                               -10.12
                                                             201.35
                                                                           202.23
       65.07
                                                                                                                      2791.5
                                                                                                                                   -14.71
                  21 51 5
                                               -10.10
                                                             117.21
                                                                           202.22
      114.93
                                3391.46
                                                                HID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                  5T 2197.5 SR 311.7 55 636.2
CRT -.8475 CRS .7649 CST -.9902
LSA 2301.3 MSA 187.8 55A 1.4
                                                                 SGT 3350.5 SGR 841.0 SG3 75.5
RRT -.8754 RRF -.6984 RTF .9562
SGB 3454.5 R23 -.3115 R13 -.9485
    TOE 3.8107 TRA-3.6589 TC3 -.4164 BAU .6219
    RDE -.3547 RRA 1.2034 RC3 .0197 FAU .02179
    FDE 1.2067 FRA -.6706 FC3 -.1691 BSP 10762
BDE 3.8272 BRA 3.8517 BC3 .4169 FSP -253
                                                                                                                  EL1 2213.4 EL2 164.3 ALF 173.11
                                                                 SG1 3431.6 SG2 396.9 THA 167.44
                                                                                                                             ARRIVAL DATE MAY 9 1966
                                                                     FLIGHT TIME 126.00
LAUNCH DATE JAN 3 1966
                                                                    DISTANCE 382.925
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 27.915 GAL -9.32 A7L 77.34 MCA 188.76 SMA 129.45 ECC .21057 INC12.6605 V1 30.287 RP 108.90 LAP -1.92 LOP 290.74 VP 37.579 GAP 8.05 A7P 102.52 TAL 220.98 TAP 49.76 RCA 102.19 APO 156.71 V2 34.799 RC 140.164 GL 46.83 GP -48.73 7AL 123.10 7AP 128.33 ETS 292.55 7AE 111.66 ETE 206.95 7AC 74.63 ETC 132.43 CLP-160.09
   PLANETOCENTRIC CONIC
    C3 68.525 VHL 8.278 DLA 29.43 RAL 306.48 RAD 6569.3 VEL 13.780 PTH 2.52 VHP 8.355 OPA -65.80 RAP 340.33 ECC 2.1278
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
81.65 17 47 47 4052.76 -11.69 168.17 194.99 62.80 18 55 30 3462.8 -15.24 161.22
                                                                                                     21 5 11
                                                                                                                      3020.0
                                                                                                                                     -15.23
                                                                                                                                                  128.70
                                                             135.65
                                                                           194.98
                                                                                            62.80
                  20 4 51
                                3620.00
                                               -11.67
       98.35
                                                                                                     21 59 17
                                                                           197.28
                                                                                            64.52
                                                                                                                      2837.0
                                                                                                                                    -19.48
                                                                                                                                                  117.15
                  21 2 0
                                3436.96
                                               -16.18
                                                             124.39
      100.00
                                                                                                     20 35 19
                  19 33 18 3721.03
23 40 55 2939.08
                                                                                           60.92
                                                                                                                      3121.0
                                                                                                                                    -11.07
                                                                                                                                                 134.04
                                                                           192.58
                                                -7.25
                                                             140.74
      100.00
                                                                                           67.93
                                                                                                   24 29 54
                                                                                                                      2339.1
                                                                                                                                    -29.54
                                                                                                                                                   83.53
                                                                           202.30
      110.00
                                                -26.79
                                                               91.64
                                                              140.00
                                                                                           55.91
                                                                                                    20 14 4
                                                                                                                      3191.7
                                                                                                                                     -1.86
                                                                           186.52
      110.00
                 19 10 53
                                3791.68
                                                  2.63
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                SGT 3525.3 SGR 409.1 SG3 101.1
RRT -.5343 RRF -.1511 RTF .9123
                                                                                                                 ST 1972.6 SR 164.6 55 579.8
CRT .354D CRS -.5586 CST -.9735
    TOE 2.6030 TRA-3.3649 TC3 -.8609 BAU .7891
    RDE .1674 RRA .4906 RC3 -.0268 FAU .03370
                                                                SGB 3548.9 R23 -.4034 R13 -.9098
                                                                                                                  LSA 2053.0 MSA 199.1 55A 2.2
    FDE 1.1396 FRA -.6293 FC3 -.4258 BSP 11010
```

BDE 2.6084 BRA 3.4005 BC3 .8613 FSP -335

SG1 3532.1 SG2 345.1 THA 176.42

ELI 1973.5 ELZ 153.9 ALF 1.70

```
ARRIVAL DATE MAY 11 1966
                                                                    FLIGHT TIME 128.00
LAUNCH DATE JAN 3 1966
                                                                    DISTANCE 388.651
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 27.834 GAL -8.99 AZL 79.93 HCA 191.91 SMA 128.88 ECC .20954 INC10.0745 V1 30.287 RP 108.91 LAP -2.07 LOP 293.90 VP 37.515 GAP 8.21 AZP 99.86 TAL 219.24 TAP 51.15 RCA 101.88 APO 155.89 V2 34.795
   RC 142.456 GL 41.63 GP -39.27 TAL 126.92 TAP 136.22 ETS 299.07 TAE 117.75 ETE 205.74 TAC 70.75 ETC 139.18 CLP-158.84
  PLANETOCENTRIC CONIC
   C3 52.403 VHL 7.239 CLA 24.40 RAL 308.05 RAD 6568.9 VEL 13.182 PTH 2.41 VHP 7.322 DPA -56.04 RAP 336.15 ECC 1.8624
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           74.15 22 8 32
                                                                                                                     2743.9
                                                                                                                                   -25.72
       90.00 21 12 48 3343.91
90.00 16 52 20 4208.34
                                                                          195.86
                                               -23.77
                                                             120.64
                                                                                                     18 2 29
                                                                                                                      3608.3
                                                                                                                                     -3.48
                                                                                                                                                   165.81
                                                                                            61.68
                                                  .31
                                                             172.45
                                                                           185.98
                                                                                                                      2414.3
                                                                                                                                    -28.07
                                                                                                                                                   88.80
                  22 55 3 3014.29
17 52 47 4013.19
                                                                                            75.27
                                                                                                    23 45 17
                                                -26.31
                                                             97.16
                                                                           196.62
      100.00
                                                                                           60.21 18 59 41
77.80 1 32 28
56.60 19 25 47
                                                                                                                                                   150.31
                                                                                                                      3413.2
                                                                                                                                     -1.38
                                                                           184.70
      100.00
                                                 2.60
                                                             156.83
                                                                                                                      2013.5
                                                                                                                                    -33.53
                                                                                                                                                    63.91
                                                                           198.24
                  0 47 55 2673.47
                                                -32.18
                                                              72.88
      110.00
                                                                                                                      3326.8
                                                                                                                                    3.30
                                                                                                                                                   140.84
      110.00
                  18 20 21
                                3926.78
                                                 7.75
                                                             147.11
                                                                           181.53
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 3627.2 SGR 317.6 SG3 120.2
RRT -.2990 RRF .1547 RTF .8854
SGB 3641.1 R23 -.4415 R13 -.8844
                                                                                                                   ST 1806.5 SR 185.7 SS 547.0
    TOE 2.0353 TRA-3.1284 TC3-1.2295 BAU .8618
                                                                                                                   CRT .6149 CRS -.8180 CST -.9566
    ROE .2123 RRA .3031 RC3 -.0393 FAU .04105
                                                                                                                  LSA 1884.9 MSA 209.7 SSA 3.3
EL1 1810.1 EL2 146.1 ALF 3.64
   FOE 1.0756 FRA -.5701 FC3 -.6782 BSP 11363
                                                                 SG1 3628.5 SG2 303.0 THA 178.49
    BOE 2.0463 BRA 3.1431 BC3 1.2301 FSP -394
                                                                                                                             ARRIVAL DATE HAY 13 1966
                                                                     FLIGHT TIME 130.00
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 27.754 GAL -8.66 A7L 81.44 MCA 195.05 SMA 128.33 ECC .20868 INC 8.5552 V1 30.287 RP 108.92 LAP -2.21 LOP 297.06 VP 37.453 GAP 8.36 A7P 98.27 TAL 217.50 TAP 52.55 RCA 101.55 APO 155.11 V2 34.791 RC 144.737 GL 37.95 GP -32.46 7AL 128.99 ZAP 141.92 ETS 303.76 7AE 121.54 ETE 203.26 ZAC 68.76 ETC 144.00 CLP-158.89
                                                                    DISTANCE 394.383
   PLANETOCENTRIC CONIC
   C3 44.047 VHL 6.637 DLA 21.06 RAL 309.79 RAD 6568.7 VEL 12.861 PTH 2.34 VHP 6.848 DPA -48.81 RAP 335.04 ECC 1.7249 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   2534.3
                                                                                         80.78 22 58 45
                                                                                                                                     -27.89
                                                                                                                                                   97.58
                  22 6 31 3134.31
16 12 30 4331.07
23 42 3 2826.23
                                                                          193.90
                                                -25.89
                                                             106.10
       90.00
                                                                                                                                                   172.66
                                                                                            61.98
                                                                                                      17 24 41
                                                                                                                       3731.1
                                                                                                                                       .48
                                                              179.30
                                                                            183.36
                                                 4.26
                                                                                                    24 29 9
                                                                                                                                                    75.07
                                                                                                                       2226.2
                                                                                                                                      -29.69
                                                                                            81.85
                                                                           194.24
      100.00
                                                -28.86
                                                               83.78
                                                                                                    18 28 13
2 6 12
19 4 28
                                                                                                                                       2.05
                                                                                                                                                   155.86
                 17 19 39 4114.37
1 24 14 2518.88
17 57 54 3994.49
                                                                                                                       3514.4
                                                                           182.40
                                                                                            60.66
      100.00
                                                 6.00
                                                              162.42
                                                                                                                                     -34.18
                                                                                                                                                    51.90
                                                                                                                       1918.9
                                                                                            84.57
                                                -33.60
                                                               61.12
                                                                           194.93
      110.00
                                                                                                                                                   144.40
                                                                                            57.21
                                                                                                                       3394.5
                                                                                                                                      5.87
                                             10.27
                                                             150.74
                                                                           179.81
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 3724.4 SGR 276.6 SG3 132.6
RRT -.2189 RRF .2450 RTF .8690
SGB 3734.6 R23 -.4471 R13 -.8684
                                                                                                                   ST 1695.0 SR 188.3 SS 519.8
    TOE 1.7161 TRA-2.9592 TC3-1.5406 BAU .9074
                                                                                                                   CRT .6639 CRS -.8781 CST -.9406
    ROE .2057 RRA .2252 RC3 -.0300 FAU .04513
                                                                                                                   LSA 1769.5 MSA 217.8 SSA 4.6
    FDE 1.0038 FRA -.5029 FC3 -.8871 BSP 11714
BDE 1.7284 BRA 2.9677 BC3 1.5409 FSP -433
                                                                 5G1 3724.9 SG2 269.9 THA 179.06
                                                                                                                  EL1 1699.7 EL2 140.4 ALF 4.25
                                                                                                                             ARRIVAL DATE MAY 15 1966
                                                                     FLIGHT TIME 132.00
LAUNCH DATE JAN 3 1966
                                                                     DISTANCE 400.115
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 27.676 GAL -8.31 AZL 82.45 HCA 198.20 SHA 127.79 ECC .20798 INC 7.5515 V1 30.287 RP 108.93 LAP -2.35 LOP 300.22 VP 37.392 GAP 8.52 AZP 97.18 TAL 215.74 TAP 53.94 RCA 101.21 APO 154.37 V2 34.788 RC 147.008 GL 35.28 GP -27.45 ZAL 129.95 ZAP 146.17 ETS 307.50 ZAE 123.97 ETE 200.76 ZAC 68.02 ETC 147.76 CLP-159.40
   PLANETOCENTRIC CONIC
    C3 38.817 VHL 6.230 OLA 18.81 RAL 311.57 RAO 6568.5 VEL 12.656 PTH 2.30 VMP 6.615 DPA -43.30 RAP 335.17 ECC 1.6388
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                         85.22 23 29 17
62.33 17 7 14
86.32 1 1 2
61.05 18 13 22
89.24 2 29 18
57.63 18 54 27
                                                                                                                    2408.0
                                                                           192.47
                  22 39 9
                                 3007.95
                                                -27.94
                                                              97.01
                                                                                                                                                   176.16
                                                                                                                       3793.7
                                                                                                                                       2.49
                  15 54 0 4393.65
0 15 53 2708.69
                                                                            182.51
                                                  6.25
                                                              182.82
                                                                                                                                                    66.34
                                                                                                                       2108.7
                                                                                                                                     -29.88
                                                                            192.61
                                                -29.69
                                                               75.14
       100.00
                                                                                                                                                   158.82
                                                                                                                       3568.1
                                                                                                                                       3.87
                                                                            181.67
                  17 3 53 4168.14
                                                              165.41
                                                  7.79
       100.00
                                                                                                                                                    43.98
                                                                           192.82
                                                                                                                      1817.3
                                                                                                                                     -33.90
                  1 49 1 2417.32
17 47 15 4032.28
                                                -34.18
                                                               53.22
      110.00
                                                                                                                                                   146.40
                                                                                                                       3432.3
                                                                                                                                       7.30
                                                                            179.35
                                                              152.79
                                           11.65
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1621.9 SR 188.8 S5 497.7
CRT .6846 CRS -.9085 CST -.9262
                                                                 SGT 3819.2 SGR 253.0 SG3 140.2
RRT -.2041 RRF .2452 RTF .8582
SGB 3827.6 R23 -.4301 R13 -.8578
    TOE 1.5179 TRA-2.8240 TC3-1.8142 BAU .9415
    ROE .1971 RRA .1811 RC3 -.0115 FAU .04709
FOE .9360 FRA -.4340 FC3-1.0503 BSP 12027
BOE 1.5307 BRA 2.8298 BC3 1.8142 FSP -457
                                                                                                                   LSA 1692.3 MSA 224.1 SSA 5.9
                                                                  SG1 3819.5 SG2 247.7 THA 179.22
                                                                                                                  ELI 1627.1 ELZ 137.2 ALF 4.59
                                                                                                                              APPIVAL DATE MAY 17 1966
                                                                      FLIGHT TIME 134.00
LAUNCH DATE JAN 3 1966
                                                                     DISTANCE 405.844
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 27.598 GAL -7.97 AZL 83.16 MCA 201.36 SMA 127.27 ECC .20741 INC 6.8358 V1 30.287 PP 108.94 LAP -2.48 LOP 303.39 VP 37.333 GAP 8.67 AZP 96.37 TAL 213.97 TAP 55.32 RCA 100.87 APO 153.66 V2 34.786 RC 149.266 GL 33.29 GP -23.67 ZAL 130.18 ZAP 149.44 ETS 310.55 ZAE 125.59 ETE 198.53 ZAC 68.13 ETC 150.79 CLP-160.10
   PLANETOCENTRIC CONIC
    C3 35.124 VHL 5.927 DLA 17.29 RAL 313.36 RAD 6568.4 VEL 12.510 PTH 2.26 VHP 6.502 OPA -38.95 RAP 335.95 ECC 1.5781
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-28.27 90.85 191.68 88.29 23 50 40 2323.5 -28.21 82.19
    LNCH AZMTH LNCH TIME L-I TIME
                  23 1 57 2923.55
15 45 31 4427.53
        90.00
                                                                                             62.57 16 59 19
89.43 1 21 2
61.30 18 6 50
92.50 2 46 32
57.88 18 50 41
                                                                                                                                                    178.05
                                                                                                                                        3.58
                                                              184.74
                                                                            182.44
                                                                                                                        3827.5
                                                  7.32
        90.00
                                                                                                                                                     60.43
                   0 37 13 2629.02
16 56 52 4197.29
                                                                69.23
                                                                            191.71
                                                                                                                       2029.0
                                                                                                                                      -29.65
                                                 -29.89
       100.00
                                                                                                                                                    160.43
                                                                                                                        3597.3
                                                                                                                                        4.85
                                                              167.05
                                                                            181.67
                                                  8.74
       100.00
                                                                                                                       1746.8
                                                                                                                                      -33.38
                                                                                                                                                     38.54
                                                 -34.10
                                                                47.71
                                                                            191.63
                   2 7 26 2346.76
       110.00
                                                                                                                                        8.05
                                                                                                                                                    147.46
                                                                                                                       3452.3
                                                              153.88
                                                                             179.50
                                 4052.32
                                                 12.38
       110.00
                   17 43 9
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 1575.6 SR 192.0 SS 481.7
     TOE 1.3884 TRA-2.7055 TC3-2.0646 BAU .9695
                                                                  SGT 3910.8 SGR 241.3 SG3 144.4
                                                                 RDE .1929 RRA .1508 RC3 .0106 FAU .04762
FDE .8784 FRA -.3650 FC3-1.1738 BSP 12294
     BOE 1.4017 BRA 2.7097 BC3 2.0646 FSP -466
```

LAUNCH DATE JAN 3 1966

```
5T 1546.5 SR 197.6 SS 469.0
CRT .7225 CR5 -.9488 CST -.9028
                               8.4
EL1 1553.1 EL2 136.0 ALF 5.31
         ARRIVAL DATE MAY 21 1966
         ARRIVAL DATE MAY 23 1966
              -27.46
                 4.12
               -28.71
                            51.36
                 5.23
                           161.06
               -32.00
                            30.00
                 8.09
                              6.18
```

FLIGHT TIME 136.00

DISTANCE 411.569 HELIOCENTRIC CONIC

RL 147.10 LAL .00 LOL 102.17 VL 27.522 GAL -7.61 AZL 83.70 MCA 204.51 SMA 126.76 ECC .20699 INC 6.2970 V1 30.287 RP 108.94 LAP -2.61 LOP 306.55 VP 37.275 GAP 8.83 AZP 95.73 TAL 212.18 TAP 56.69 RCA 100.52 APO 152.99 V2 34.785 RC 151.511 GL 31.77 GP -20.75 7AL 129.88 7AP 152.07 ETS 313.08 7AE 126.71 ETE 196.63 7AC 68.80 ETC 153.30 CLP-160.87 PLANETOCENTRIC CONIC

C3 32.297 VHL 3.683 DLA 16.29 RAL 315.18 RAD 6568.3 VEL 12.396 PTH 2.24 VHP 6.454 DPA -35.41 RAP 337.11 ECC 1.5315 LNCH A7HTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT A5C INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 19 1 2864.80 -28.31 86.56 191.41 90.44 24 6 46 2264.8 -27.95 77.91 90.00 15 42 59 4443.96 7.83 185.68 182.81 62.70 16 57 3 3844.0 4.11 178.97 100.00 0 53 26 2573.04 -29.85 65.07 191.38 91.62 1 36 19 1973.0 -29.51 56.30 100.00 16 55 12 4210.95 9.19 167.82 182.08 61.43 18 5 23 3610.9 5.30 161.18 110.00 2 21 53 2296.25 -33.88 43.78 191.12 94.81 3 D 10 1696.2 -32.85 34.70 110.00 17 43 13 4060.50 12.68 154.33 180.00 57.99 18 50 54 3460.5 8.36 147.90 C3 32.297 VHL 5.683 DLA 16.29 RAL 315.18 RAD 6568.3 VEL 12.396 PTH 2.24 VHP 6.454 DPA -35.41 RAP 337.11 ECC 1.5315 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY TOF 1.2992 TRA-2.4976 TC3-2.3056 BAU .9956

SGT 4003.4 SGR 237.6 SG3 146.8 RRT -.2165 RRF .1632 RTF .8446 SGB 4010.4 R23 -.3551 R13 -.8444 ROE .1919 RRA .1264 RC3 .0326 FAU .04746 FOE .8278 FRA -.3013 FC3-1.2722 BSP 12600 LSA 1611.1 MSA 234.4 55A BDE 1.3133 BRA 2.6007 BC3 2.3058 FSP -473 SG1 4003.7 SG2 231.9 THA 179.26

LAUNCH DATE JAN 3 1966

FLIGHT TIME 138.00

ARRIVAL CATE MAY 19 1966

HELIOCENTRIC CONIC DISTANCE 417.288

RL 147.10 LAL .00 LOL 102.17 VL 27.447 GAL -7.25 A7L 84.13 MCA 207.67 SMA 126.26 ECC .20672 INC 5.8744 V1 30.287 RP 108.94 LAP -2.72 LOP 309.71 VP 37.219 GAP 8.98 AZP 95.21 TAL 210.38 TAP 58.04 RCA 100.16 APO 152.36 V2 34.784 30.58 CP -18.44 TAL 129.20 TAP 154.24 ETS 315.15 TAE 127.52 ETE 195.03 TAC 69.86 ETC 155.39 CLP-161.69 RC 153.743 GL PLANETOCENTRIC CONIC

PLANTOCENTRIC CONIC
C3 30.011 VHL 5.478 OLA 15.66 RAL 317.05 RAD 6568.2 VEL 12.304 PTH 2.22 VHP 6.447 OPA -32.43 RAP 338.52 ECC 1.4939
LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 32 24 2823.42 -28.25 83.53 191.57 91.96 24 19 28 2223.4 -27.68 74.91
90.00 15 44 30 4448.44 7.97 185.93 183.46 62.74 16 58 38 3848.4 4.25 179.22
100.00 1 6 18 2533.27 -29.74 62.12 191.49 93.17 1 48 32 1933.3 -28.98 53.39
100.00 16 57 13 4213.82 9.28 167.98 182.76 61.46 18 7 27 3613.8 5.40 161.34
110.00 2 33 44 2259.72 -33.64 40.96 191.11 96.46 3 11 24 1659.7 -32.38 31.95
110.00 17 46 16 4060.14 12.66 154.31 180.75 57.98 18 53 56 3460.1 8.34 147.88 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY \$GT 4097.7 \$GR 239.4 \$G3 148.1 RRT -.2154 RRF .1182 RTF .8412 \$GB 4104.7 R23 -.3073 R13 -.8410 5T 1529.7 SR 205.0 S5 458.9 CRT .7441 CR5 -.9633 CST -.8942 TOE 1.2363 TRA-2.4952 TC3-2.5447 BAU 1.0212 ROE .1933 RRA .1051 RC3 .0534 FAU .04692

FOE .7830 FRA -. 2433 FC3-1.3534 BSP 12967 LSA 1592.5 MSA 237.5 55A 9.7 SG1 4098.0 SG2 233.8 THA 179.28 BOE 1.2513 BRA 2.4974 BC3 2.5453 FSP EL1 1537.4 EL2 136.3 ALF

LAUNCH DATE JAN 3 1966

FLIGHT TIME 140.00

E

HELIOCENTRIC CONIC DISTANCE 423.000

RL 147.10 LAL .00 LOL 102.17 VL 27.373 GAL -6.88 AZL 84.47 HCA 210.82 SMA 125.77 ECC .20659 INC 5.5322 VI 30.287 RP 108.94 LAP -2.83 LOP 312.87 VP 37.165 GAP 9.14 AZP 94.75 TAL 208.56 TAP 59.38 RCA 99.79 APO 151.76 VZ 34.784 RC 153.962 GL 29.62 GP -16.58 ZAL 128.20 ZAP 156.08 ETS 516.85 ZAE 128.13 ETE 193.68 ZAC 71.20 ETC 157.16 CLP-162.51 PLANETOCENTRIC CONIC

C3 28.093 VHL 5.300 DLA 15.32 RAL 318.97 RAD 6568.1 VEL 12.226 PTH 2.20 VMP 6.465 DPA -29.86 RAP 340.10 ECC 1.4623 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 23 43 14 2794.66
15 49 1 4444.16
1 16 52 2505.34
17 2 0 4208.70
2 43 46 2233.49
17 51 36 4053.33 93.01 24 29 48 62.70 17 3 6 90.00 -28.17 81.43 192.06 2194.7 90.00 185.69 184.33 3844.2 7.84 60.05 191.96 94.25 1 58 38 1905.3 -29.62 100.00 3608.7 61.41 18 12 9 167.69 183.65 100.00 9.12 97.64 3 20 59 57.89 18 59 9 -33.42 38.94 191.50 1633.5 110.00 3453.3 153.94 181.68 110.00 12.42 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY TOE 1.1820 TRA-2.4051 TC3-2.8008 BAU 1.0523 ST 1514.8 SR 213.1 55 445.5

SGT 4208.9 SGR 243.7 SG3 149.6 RRT -.2065 RRF .0730 RTF .8425 SGB 4215.9 R23 -.2530 R13 -.8423 RDE .1953 RRA .0850 RC3 .0714 FAU .04661 FDE .7339 FRA -.2003 FC3-1.4364 BSP 13637 CRT .7636 CRS -.9738 CST -.8876 LSA 1575.4 MSA 237.7 SSA 11.1 BOE 1.1980 BRA 2.4066 BC3 2.8018 FSP SG1 4209.2 SG2 238.4 THA 179.31 EL1 1523.6 EL2 136.8 ALF

LAUNCH DATE JAN 3 1966

FLIGHT TIME 142.00

ARRIVAL DATE MAY 25 1966

HELIOCENTRIC CONIC **DISTANCE 428.711**

RL 147.10 LAL .00 LOL 102.17 VL 27.300 GAL -6.50 A7L 84.75 MCA 213.98 SMA 125.30 ECC .2066 INC 5.2480 V1 30.287 RP 108.94 LAP -2.93 LOP 316.04 VP 37.112 GAP 9.29 A7P 94.36 TAL 206.73 TAP 60.71 RCA 99.41 APO 151.19 V2 34.785 RC 158.168 GL 28.85 GP -15.05 TAL 126.93 TAP 157.69 ETS 318.23 TAE 128.60 ETE 192.54 TAC 72.74 ETC 158.67 CLP-163.33 PLANETOCENTRIC CONIC

C3 26.437 VHL 5.142 OLA 15.22 RAL 320.97 RAD 6568.1 VEL 12.158 PTH 2.18 VHP 6.501 DPA -27.59 RAP 341.80 ECC 1.4351 LNCH AZMITH LNCH TIME L-I TIME INJLAT INJ LONG INJRT ASC INJAZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 52 11 2775.73 -28.09 80.06 192.85 93.69 24 38 27 2175.7 -27.29 71.48 90.00 15 56 1 4432.87 7.48 185.04 185.40 62.61 17 9 54 3832.9 1 25 45 2486.68 2 7 12 100.00 -29.51 58.67 192.73 94.97 1886.7 -28.51 17 9 4 100.00 17 9 4 4197.15 2 52 28 2215.34 4197.15 8.74 167.04 184.72 61.30 18 19 1 3597.2 4.84 160.42 98.44 3 29 23 57.74 19 6 12 -33.25 37.55 192.21 1615.3 -31.72 28.66 110.00 17 58 51 4041.25 153.28 182.78 3441.2

MID-COURSE EXECUTION ACCURACY
SGT 4252.8 SGR 256.7 SG3 147.0 ST 1543.4 SR 225.5 SS 457.8
RRT = .1905 RRF .0662 RTF .8316 CRT .7985 CRS -.9853 CST -.8853
SGB 4260.5 R23 -.2294 R13 -.8315 LSA 1607.3 M5A 242.4 SSA 12.0
SGI 4253.0 SG2 252.0 THA 179.34 ELI 1553.9 ELZ 134.9 ALF 6.71 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS TOE 1.1893 TRA-2.2671 TC3-2.9933 BAU 1.0584 ROE .2012 RRA .0697 RC3 .0930 FAU .04419 FOE .7294 FRA -.1186 FC3-1.4471 BSP 13217 BDE 1.2062 BRA 2.2682 BC3 2.9947 FSP -454

ARRIVAL DATE MAY 27 1966

```
FLIGHT TIME 144.00
LAUNCH DATE JAN 3 1966
                                                                          DISTANCE 434.412
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 27.229 GAL -6.11 AZL 84.99 MCA 217.14 SHA 124.84 ECC .20680 INC 5.0067 V1 30.287 RP 108.94 LAP -3.02 LOP 319.20 VP 37.061 GAP 9.45 AZP 93.99 TAL 204.89 TAP 62.03 RCA 99.02 APO 150.66 V2 34.787 RC 160.359 GL 28.21 GP -13.77 TAL 125.44 ZAP 159.12 ETS 319.32 ZAE 128.98 ETE 191.58 TAC 74.44 ETC 159.98 CLP-164.15
   PLANETOCENTRIC CONIC
                                                                                                    2.17 VHP 6.551 DPA -25.53 RAP 343.59 ECC 1.4113
    C3 24.990 VML 4.999 DLA 15.29 RAL 323.05 RAD 6568.0 VEL 12.098 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                              -27.18
                                                                                                                              2164.6
                   0 3 42 2764.62
16 5 2 4416.16
1 33 23 2475.37
17 16 2 4180.64
                                                                   79.25
                                                                                 193.90
                                                                                                 94.10
                                                                                                              0 49 47
                                                    -28.04
        90.00
                                                                                                                                                 3.22
                                                                                                   62.48
                                                                                                             17 18 38
                                                                                                                                3816.2
                                                                                 186.64
                                                                  184.10
                                                     6.96
        90.00
                                                                                                                                                -28.39
                                                                                 193.76
                                                                                                   95.40
                                                                                                              2 14 39
                                                                                                                                1875.4
                                                                    57.84
                                                   -29.45
                                                                                                                                                              159.51
                                                                                                                               3580.6
1603.7
                                                                                                                                                 4.29
                                                                                                   61.15 18 27 43
                                                                                 185.97
       100.00
                                                     8.20
                                                                   166.11
                                                                                                                                               -31.54
                                                                                                   98.96 3 36 57
57.55 19 14 46
                   3 0 14 2203.66
18 7 41 4025.12
                                                                                 193.22
                                                  -33.13
                                                                    36.66
                                                                                                                                                  7.03
                                                                                                                                                               146.02
                                                                                                                                3425.1
                                                                                 184.05
                                                                  152.40
                                                    11.39
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1554.3 SR 236.0 SS 454.6
CRT .8232 CRS -.9913 CST -.8839
                                                                      SCT 4345.3 SGR 266.7 SG3 146.7
RRT -.1700 RRF .0451 RTF .8318
    TOE 1.1750 TRA-2.1599 TC3-3.2381 BAU 1.0824
    ROE .2052 RRA .0528 RC3 .1089 FAU .04314
FOE .6993 FRA -.0719 FC3-1.4945 BSP 13642
                                                                                                                           LSA 1618.6 MSA 241.1 SSA 13.2
EL1 1566.5 EL2 132.9 ALF 7.18
                                                                       SGB 4353.5 R23 -.1897 R13 -.8316
                                                                       SG1 4345.6 SGZ 262.8 THA 179.40
    BOE 1.1928 BRA 2.1606 BC3 3.2400 FSP -463
                                                                                                                                        ARRIVAL CATE MAY 29 1966
                                                                           FLIGHT TIME 146.00
                                                                          DISTANCE 440.107
   RL 147.10 LAL .00 LOL 102.17 VL 27.158 GAL -5.72 A7L 85.20 MCA 220.30 SMA 124.39 ECC .20715 INC 4.7982 V1 30.287 RP 108.93 LAP -3.10 LOP 322.37 VP 37.011 GAP 9.61 A7P 93.66 TAL 203.04 TAP 63.33 RCA 98.62 APO 150.16 V2 34.789 RC 162.536 GL 27.66 GP -12.70 ZAL 123.74 ZAP 160.41 ETS 320.17 ZAE 129.30 ETE 190.76 ZAC 76.27 ETC 161.13 CLP-164.96
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 23.710 VHL 4.869 DLA 15.53 RAL 325.23 RAD 6568.0 VEL 12.045 PTH 2.15 VHP 6.610 DPA -23.65 RAP 345.45 ECC 1.3902 ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2160.2
                                                                                                 94.26 0 56 13
                                                                                 195.19
                                                                   78.92
                                                    -28.02
                     0 10 13 2760.18
        90.00
                   16 15 54 4394.80
1 40 5 2470.36
17 28 43 4159.85
3 7 18 2197.47
                                                                                                                                                                176.22
                                                                                                                                                  2.53
                                                                                                    62.33
                                                                                                              17 29 9
                                                                                                                                 3794.8
                                                                   182.89
                                                                                  188.07
                                                      6.28
        90.00
                                                                                                             2 21 15
18 38 3
                                                                                                                                                                 48.83
                                                                                                    95.59
                                                                                                                                 1870.4
                                                                                                                                                -2A.33
                                                                                  195.05
                                                                    57.47
                                                    -29.41
       100.00
                                                                                                                                                               158.36
                                                                                                    60.98
                                                                                                                                 3559.8
                                                                                                                                                  3.59
                                                      7.51
                                                                   164.95
                                                                                  187.40
       100.00
                                                                                                    99.23 3 43 55
57.33 19 24 45
                                                                                                                                                                27.34
                                                                                                                                                -31.43
                                                                                                                                 1597.5
                                                    -33.06
                                                                    36.19
                                                                                  194.50
       110.00
                                                                                                                                                                144.98
                                                                                                                                                  6.29
                                                                   151.33
                                                                                  185.49
                                                                                                                                 3405.5
       110.00
                   18 17 59
                                   4005.50
                                                    10.67
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1578.5 SR 247.2 SS 456.6
CRT .8497 CRS -.9954 CST -.8852
                                                                       SGT 4426.3 SGR 278.5 SG3 145.6
RRT -.1459 RRF .0356 RTF .8306
    TOE 1.1783 TRA-2.0410 TC3-3.4757 BAU 1.1024
    ROE .2098 RRA .0374 RC3 .1239 FAU .04175
FOE .6783 FRA -.0217 FC3-1.5243 BSP 13909
BOE 1.1968 BRA 2.0413 BC3 3.4779 FSP -460
                                                                                                                            LSA 1644.4 MSA 238.9 SSA 14.4
                                                                       5GB 4435.0 R23 -.1590 R13 -.8305
                                                                                                                            ELI 1592.5 ELZ 129.2 ALF 7.63
                                                                       5G1 4426.5 5G2 275.5 THA 179.47
                                                                                                                                        ARRIVAL DATE MAY 31 1966
                                                                           FLIGHT TIME 148.00
LAUNCH DATE JAN 3 1966
                                                                           DISTANCE 445.795
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 27.089 GAL -5.31 AZL 85.38 MCA 223.46 SHA 123.96 ECC .20767 INC 4.6152 VI 30.287 RP 108.92 LAP -3.17 LOP 325.53 VP 36.963 GAP 9.78 AZP 93.35 TAL 201.17 TAP 64.63 RCA 98.21 APO 149.70 V2 34.792 RC 164.699 GL 27.18 GP -11.79 ZAL 121.85 ZAP 161.59 ETS 320.79 ZAE 129.57 ETE 190.06 ZAC 78.19 ETC 162.13 CLP-165.75
    PLANETOCENTRIC CONIC
    C3 22.574 VHL 4.751 OLA 15.90 RAL 327.51 RAD 6567.9 VEL 11.998 PTH 2.14 VMP 6.678 DPA -21.90 RAP 347.37 ECC 1.3715
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                94.21 1 1 54. 2161.6
62.18 17 41 17 3769.5
                                                                                                                                                -27.15
                   0 15 53 2761.57
16 28 28 4369.46
1 46 2 2470.83
17 40 59 4135.44
3 13 51 2196.07
18 29 40 3982.96
                                                                               196.71
                                                    -28.03
                                                                   79.02
         90.00
                                                                                                                                                  1.72
                                                                                                                                                                174.81
                                                                   181.46
                                                                                  189.68
                                                       5.48
         90.00
                                                                                                            2 27 13
18 49 55
                                                                                                                                                                 48.87
                                                                                                                                 1870.8
                                                                                                                                                -28.33
                                                                    57.50
                                                                                 196.58
                                                                                                    95.57
                                                     -29.42
        100.00
                                                                                                                                                                157.02
                                                                                                                                 3535.4
                                                      6.70
                                                                                                    60.80
                                                                   163.59
                                                                                  189.01
        100.00
                                                                                                                                                -31.41
                                                                                                                                                                27.24
                                                                                                    99.29 3 50 27
57.10 19 36 3
                                                                                                                                 1596.1
                                                    -33.05
                                                                     36.08
                                                                                 196.03
        110.00
                                                                                                                                 3383.D
                                                                                                                                                               143.79
                                                                                   187.10
                                                                   150.11
                                                     9.84
        110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                            ST 1610.5 SR 258.6 SS 460.0
CRT .8755 CRS -.9973 CST -.8886
                                                                       SCT 4505.4 SCR 290.8 SG3 144.4
RRT - .1199 RRF .0315 RTF .8303
SCB 4514.8 R23 - .1324 R13 - .8302
     TOE 1.1910 TRA-1.9160 TC3-3.7154 BAU 1.1220
     ROE .2143 RRA .0228 RC3 .1370 FAU .04032
FOE .6601 FRA .0260 FC3-1.5464 BSP 14183
BOE 1.2102 BRA 1.9161 BC3 3.7179 FSP -457
                                                                                                                           LSA 1678.3 MSA 234.9 55A 15.5
EL1 1626.4 EL2 123.8 ALF 8.05
                                                                        SG1 4505.6 SG2 288.7 THA 179.55
                                                                                                                                         ARRIVAL DATE JUN 2 1966
                                                                            FLIGHT TIME 150.00
 LAUNCH DATE JAN 3 1966
                                                                            DISTANCE 451.475
    HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 27.021 GAL -4.90 AZL 85.55 MCA 226.62 SMA 123.53 ECC .20837 INC 4.4523 V1 30.287 RP 108.91 LAP -3.23 LOP 328.70 VP 36.917 GAP 9.94 AZP 93.06 TAL 199.30 TAP 65.92 RCA 97.79 APO 149.27 V2 34.796 RC 166.847 GL 26.75 GP -11.00 ZAL 119.78 ZAP 162.68 ETS 321.20 ZAE 129.82 ETE 189.46 ZAC 80.19 ETC 163.03 CLP-166.53
    PLANETOCENTRIC CONIC
                                                                                                      2.13 VHP 6.754 DPA -20.25 RAP 349.33 ECC 1.3549
     C3 21.565 VHL 4.644 DLA 16.38 RAL 329.92 RAD 6567.9 VEL 11.956 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  93.96 1 7 0
62.02 17 54 59
95.37 2 32 41
60.62 19 3 15
99.16 3 56 41
56.86 19 48 37
                                                                                                                                 2168.2
                                                                                 198.48
                                                                                                                                                -27.22
                     0 20 52 2768.24
16 42 38 4340.67
                                                                     79.51
                                                      -28.06
         90.00
                                                                                                                                                                 173.20
                                                                                                                                  3740.7
                                                                                                                                                    .79
                                                                                   191.50
                                                       4.56
                                                                    179.84
         90.00
                                                                                                                                                  -28.40
                                                                                                                                                                 49.26
                                                                                                                                  1876.2
                      1 51 25 2476.24
                                                                     57.90
                                                                                   198.35
                                                      -29.45
        100.00
                                                                                                                                  3507.9
                                                                                                                                                                 155.51
                                                                                                                                                   1.83
                                                        5.79
                                                                    162.06
                                                                                   190.82
                                   4107.91
        100.00
                     17 54 47
                                                                                                                                  1599.0
                                                                                                                                                 -31.46
                                                                                                                                                                  27.45
                    3 20 2 2198.97
18 42 39 3957.94
                                                                     36.30
                                                                                   197.81
                                                     -33.08
        110.00
                                                                                                                                  3357.9
                                                                                                                                                   4.49
                                                                                                                                                                 142.48
                                                                    148.77
                                                                                   188.91
        110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ST 1650.9 SR 270.0 SS 464.9
CRT .9000 CRS -.9973 CST -.8937
    DIFFERENTIAL CORRECTIONS
                                                                        SGT 4581.6 SGR 303.3 SG3 143.0
RRT -.0926 RRF .0321 RTF .8305
     TOE 1.2130 TRA-1.7834 TC3-3.9547 BAU 1.1410
     RDE .2188 RRA .0091 RC3 .1483 FAU .03887
FDE .6444 FRA .0724 FC3-1.5603 8SP 14443
                                                                       SGB 4591.6 R23 -.1098 R13 -.8304 LSA 1720.9 MSA 229.2 SSA 16.7
SGI 4581.7 SGZ 302.0 THA 179.65 EL1 1668.8 EL2 116.5 ALF 8.42
                                                                       SGB 4591.6 R23 -.1098 R13 -.8304
```

-453

BDE 1.2326 BRA 1.7835 BC3 3.9574 FSP

Ξ

```
LAUNCH DATE JAN 3 1966
                                                                         FLIGHT TIME 152.00
                                                                                                                                    ARRIVAL DATE JUN 4 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 457.147
    RL 147.10 LAL .00 LOL 102.17 VL 26.954 GAL -4.47 A7L 85.69 HCA 229.78 SHA 123.12 ECC .20926 INC 4.3055 V1 30.287 RP 108.89 LAP -3.29 LOP 331.87 VP 36.872 GAP 10.12 A7P 92.78 TAL 197.41 TAP 67.19 RCA 97.35 APO 148.88 V2 34.800
    RC 168.980 CL 26.34 GP -10.32 7AL 117.52 7AP 163.69 ETS 321.41 7AE 130.04 ETE 188.94 7AC 82.25 ETC 163.82 CLP-167.30
   PLANETOCENTRIC CONIC
    C3 20.675 VHL 4.547 DLA 16.96 RAL 332.45 RAD 6567.8 VEL 11.919 PTH 2.12 VHP 6.836 DPA -18.68 RAP 351.32 ECC 1.3403
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 25 18 2779.82
16 58 24 4308.83
1 56 21 2486.24
18 10 2 4077.65
                                                                  80.35
                                                                               200.48
                                                                                               93.54 1 11 38
                                                                                                                           2179.8
                                                   -28.11
                                                                                 193.53
                                                                  178.06
                                                                                                  61.89
                                                                                                           18 10 12
                                                                                                                              3708.8
                                                                                 200.36
                                                                                                          2 37 47
                                                    -29.51
                                                                   58.64
                                                                                                  94.98
                                                                                                                              1886.2
                                                                                                                                             -28.51
                                                                                                                                                             49.98
                                                                                                 60.46 19 18 0
98.86 4 2 44
56.63 20 2 25
                                                     4.77
                                                                 160.38
                                                                                192.85
                                                                                                                              3477.6
                                                                                                                                                .60
                                                                                                                                                            153.85
                   3 25 58 2205.82
18 56 54 3930.83
                                                   -33.15
                                                                   36.83
                                                                                199.85
                                                                                                                              1605.8
       110.00
                                                     7.90
                                                                 147.33
                                                                                190.92
                                                                                                                              3330.8
                                                                                                                                               3.46
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 4650.5 SGR 316.0 SG3 141.4
RRT -.0642 RRF .0384 RTF .8304
    TOE 1.2459 TRA-1.6405 TC3-4.1860 BAU 1.1579
                                                                                                                          5T 1702.4 SR 281.5 55 472.5
CRT .9230 CR5 -.9956 CST -.9004
    RDE .2234 RRA -.0036 RC3 .1579 FAU .03730
FOE .6329 FRA .1192 FC3-1.5618 BSP 14636
                                                                     568 4661.2 R23 -.0921 R13 -.8303
                                                                                                                          LSA 1775.1 MSA 222.2 SSA 17.8
                                                                                                                         EL1 1722.2 EL2 107.1 ALF 8.71
    BDE 1.2658 BRA 1.6405 BC3 4.1890 FSP -445
                                                                     SG1 4650.5 SG2 315.4 THA 179.75
LAUNCH DATE JAN 3 1966
                                                                         FLIGHT TIME 154.00
                                                                                                                                     ARRIVAL DATE JUN 6 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 462.810
    RL 147.10 LAL .00 LOL 102.17 VL 26.888 GAL -4.04 A7L 85.83 MCA 232.94 SMA 122.71 ECC .21034 INC 4.1718 V1 30.287 RP 108.88 LAP -3.33 LOP 335.04 VP 36.829 GAP 10.29 A7P 92.52 TAL 195.52 TAP 68.46 RCA 96.90 APO 148.53 V2 34.805
    RC 171.096 GL 25.94 GP -9.72 7AL 115.09 7AP 164.65 ETS 321.43 7AE 130.25 ETE 188.48 7AC 84.37 ETC 164.53 CLP-168.06
   PLANETOCENTRIC CONIC
    C3 19.897 VHL 4.461 OLA 17.63 RAL 335.12 RAO 6567.8 VEL 11.886 PTH 2.11 VHP 6.925 DPA -17.18 RAP 353.35 ECC 1.3275
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 29 18 2796.04
17 19 41 4274.32
2 0 56 2500.53
18 26 44 4045.06
3 31 46 2216.33
19 12 23 3902.02
       90.00
                                                   -28.18
                                                                  81.54
                                                                               202.73
                                                                                                92.96
                                                                                                             1 15 54
                                                                                                                            2196.0
                                                                                                                                            -27.47
                                                                                                                                                             72.94
                                                                                                                              3674.3
        90.00
                                                    2.44
                                                                  176.13
                                                                                 195.79
                                                                                                  61.78
                                                                                                           18 26 56
                                                                                                                                              -1.36
                                                                                                                                                            169.50
       100.00
                                                   -29.59
                                                                   59.69
                                                                                202.63
                                                                                                  94.43
                                                                                                             2 42 37
                                                                                                                              1900.5
                                                                                                                                             -28.66
                                                                                                                                                             51.01
                                                                                                           19 34 9
       100.00
                                                     3.68
                                                                 158.59
                                                                                195.10
                                                                                                  60.31
                                                                                                                              3445.1
                                                                                                                                               -.30
                                                                                                                                                            152.06
      110.00
                                                 -33.26
                                                                   37.63
                                                                                202.15
                                                                                                  98.40
                                                                                                           4 8 42
                                                                                                                              1616.3
                                                                                                                                             -31.74
                                                                                                                                                             28.73
                                                                                                  56.42 20 17 25
      110.00
                                                  6.82
                                                                 145.80
                                                                                193,16
                                                                                                                              3302.0
                                                                                                                                             2.36
                                                                                                                                                            139.55
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 1758.8 SR 292.8 SS 479.3
CRT .9429 CRS -.9924 CST -.9078
    TOE 1.2828 TRA-1.4927 TC3-4.4179 BAU 1.1760
                                                                     SGT 4721.9 SGR 328.3 SG3 139.8
                                                                     RRT -.0363 RRF .0451 RTF .8319
SGB 4733.3 R23 -.0755 R13 -.8319
    ROE .2279 RRA -.0155 RC3 .1651 FAU .03583
    FOE .6207 FRA .1622 FC3-1.5590 BSP 14900
                                                                                                                        LSA 1833.8 MSA 213.6 55A 18.9
EL1 1780.4 EL2 96.4 ALF 8.95
    BOE 1.3029 BRA 1.4928 BC3 4.4209 FSP -442
                                                                     SG1 4721.9 SG2 328.1 THA 179.85
                                                                         FLIGHT TIME 156.00
                                                                                                                                    ARRIVAL DATE JUN 8 1966
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 468.462
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.823 GAL -3.59 AZL 85.95 MCA 236.11 SMA 122.32 ECC .21162 INC 4.0487 VI 30.287 RP 108.86 LAP -3.36 LOP 338.21 VP 36.787 GAP 10.48 AZP 92.26 TAL 193.62 TAP 69.73 RCA 96.43 APO 148.21 V2 34.811 RC 173.196 GL 25.53 GP -9.20 ZAL 112.50 ZAP 165.55 ETS 321.25 ZAE 130.45 ETE 188.09 ZAC 86.54 ETC 165.16 CLP-168.81
   PLANETOCENTRIC CONIC
    C3 19.230 VHL 4.385 OLA 18.37 RAL 337.93 RAO 6567.8 VEL 11.858 PTN 2.10 VHP 7.021 OPA -15.72 RAP 355.40 ECC 1.3165
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  0 32 55 2816.71
17 34 31 4237.45
2 5 16 2518.91
18 44 51 4010.49
3 37 30 2230.31
19 29 6 3871.86
                                                                               205.24
                                                                                                                          2216.7
                                                                                                                                           -27.63
                                                                                                                                                            74.43
        90.00
                                                   -28.24
                                                                 81.04
                                                                                               92.20
                                                                                                            1 19 51
                                                                 174.07
                                                                                198.30
                                                                                                 61.71
                                                                                                           18 45 8
                                                                                                                             3637.5
                                                                                                                                              -2.54
                                                                                                                                                           167.44
        90.00
                                                     1.25
                                                                                                            2 47 15
                                                                                205.15
                                                                                                 93.72
                                                                                                                             1918.9
                                                                                                                                             -28.85
                                                                                                                                                            52.35
       100.00
                                                   -29.6A
                                                                   61.05
                                                                 156.68
                                                                                                 60.20 19 51 41
                                                                                                                             3410.5
                                                                                197.59
                                                                                                                                             -1.47
                                                                                                                                                           150.16
       100.00
                                                    2.51
                                                  -33.39
                                                                                                 97.7A
                                                                                                            4 14 41
                                                                                                                             1630.3
                                                                                                                                           -31.96
                                                                                                                                                            29.76
      110.00
                                                                  34.70
                                                                                204:71
                                                                                                 56.24 20 33 37
                                                                 144.20
                                                                                195.63
                                                                                                                             3271.9
                                                                                                                                               1.21
                                                                                                                                                           137.98
      110.00
                                                    5.68
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4790.4 SGR 340.3 SG3 138.1
RRT -.0084 RRF .0541 RTF .8340
    TOE 1.3266 TRA-1.3362 TC3-4.6399 BAU 1.1936
                                                                                                                         ST 1823.2 SR 303.9 SS 486.5
CRT .9598 CRS -.9879 CST -.9158
    RDE .2324 RRA -.0263 RC3 .1700 FAU .03438
    FDE .6097 FRA .2042 FC3-1.5477 BSP 15161
                                                                     SGB 4802.5 R23 -. 0611 R13 -. 8339
                                                                                                                         LSA 1900.3 MSA 203.9 SSA 20.1
                                                                                                                         EL1 1846.4 EL2 84.2 ALF 9.11
                                                                     SG1 4790.4 SG2 340.2 THA 179.97
    BOE 1.3468 BRA 1.3365 BC3 4.6430 FSP -439
LAUNCH DATE JAN 3 1966
                                                                         FLIGHT TIME 158.00
                                                                                                                                    ARRIVAL DATE JUN 10 1966
                                                                        DISTANCE 474.104
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.760 GAL -3.13 AZL 86.07 MCA 239.27 SMA 121.94 ECC .21313 INC 3.9344 VI 30.287 RP 108.84 LAP -3.38 LOP 341.38 VP 36.747 GAP 10.67 AZP 92.01 TAL 191.71 TAP 70.98 RCA 95.95 APO 147.93 V2 34.817 RC 175.278 GL 25.11 GP -8.74 ZAL 109.74 ZAP 166.40 ETS 320.89 ZAE 130.64 ETE 187.75 ZAC 88.74 ETC 165.73 CLP-169.54
   PLANETOCENTRIC CONIC
   PLANETOCENTRIC CONIC
C3 18.671 VHL 4.321 OLA 19.17 RAL 340.89 RAD 6567.8 VEL 11.834 PTH 2.10 VHP 7.123 DPA -14.32 RAP 357.47 ECC 1.3073
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 36 13 2841.72 -28.29 84.87 208.00 91.29 1 23 35 2241.7 -27.81 76.24
90.00 17 54 52 4198.56 -.01 171.90 201.D7 61.68 19 4 50 3598.6 -3.79 165.27
100.00 2 9 24 2541.23 -29.77 62.71 207.94 92.86 2 51 46 1941.2 -29.05 53.97
100.00 19 4 22 3974.29 1.28 154.70 200.35 60.13 20 10 36 3374.3 -2.70 148.17
110.00 19 46 59 3840.75 4.50 142.57 198.34 56.08 20 50 59 3240.7 .02 136.35
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ALCUMAL.

SGT 4814.6 SGR 351.8 SG3 136.4 ST 1896.2 SR 315.0 SS 494.7

RRT .0195 RRF .0656 RTF .8364 CRT .9737 CRS -.9823 CST -.9240

SGB 4867.3 R23 .0492 R13 .8364 LSA 1975.2 MSA 193.6 SSA 21.3

EL1 1920.9 EL2 70.8 ALF 9.20
    TOE 1.3776 TRA-1.1699 TC3-4.8451 BAU 1.2102
    ROE .2373 RRA -.0360 RC3 .1726 FAU .03290
FOE .6004 FRA .2456 FC3-1.5257 89P 15393
```

BOF 1.3979 BRA 1.1705 BC3 4.8482 FSP -435

ARRIVAL DATE JUN 12 1966

```
FLIGHT TIME 160.00
LAUNCH DATE JAN 3 1966
                                                                      DISTANCE 479.734
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 26.697 GAL -2.66 AZL 86.17 MCA 242.44 SMA 121.56 ECC .21486 INC 3.8274 VI 30.287 RP 108.82 LAP -3.39 LOP 344.55 VP 36.708 GAP 10.87 AZP 91.77 TAL 189.80 TAP 72.23 RCA 95.45 APO 147.68 VZ 34.824 RC 177.341 GL 24.64 GP -8.32 TAL 106.82 TAP 167.22 ETS 320.31 TAE 130.83 ETE 187.45 TAC 90.98 ETC 166.24 CLP-170.27
  PLANETOCENTRIC CONIC
   C3 18.225 VHL 4.269 DLA 20.02 RAL 344.02 RAD 6567.7 VEL 11.816 PTH 2.09 VMP 7.233 DPA -12.95 RAP 359.56 ECC 1.2999 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      2270.9
                                                                                                                                     -27.99
                  0 39 16 2870.94
18 16 43 4158.00
                                                                           211.02
                                                                                           90.21
                                                                                                       1 27 7
                                                 -28.32
                                                                87.01
       90.00
                                                                                                                                                     162.99
                                                                                                                                        -5.09
                                                                                              61.71
                                                                                                       19 26 1
                                                                                                                         3558.0
                                                               169.64
                                                                             204.11
                                                  -1.32
        90.00
                                                                                                                                                       55.88
                  2 13 26 2567.30
19 25 14 3936.87
                                                                             210.99
                                                                                              91.84
                                                                                                        2 56 13
                                                                                                                        1967.3
                                                                                                                                       -29.27
                                                 -29.84
                                                                64.64
      100.00
                                                                                                                                                      146.11
                                                                                              60.11
                                                                                                      20 30 51
                                                                                                                         3336.9
                                                                                                                                        -3.96
                                                              152.64
                                                                             203.37
      100.00
                                                   .02
                                                                                              96.10 4 26 57
55.96 21 9 29
                                                                                                                                       -32.49
                                                                                                                                                       32.56
                                                 -33.70
                                                                41.58
                                                                             210.67
                                                                                                                        1667.8
      110.00
                  3 49 9 2267.83
20 6 0 3809.11
                                                                             201.32
                                                                                                                        3209.1
                                                                                                                                       -1.19
                                                                                                                                                      134.70
                                                  3.30
                                                              140.91
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1978.0 SR 326.1 SS 503.8
CRT .9844 CRS -.9757 CST -.9321
                                                                   SGT 4911.2 SGR 363.1 SG3 134.4
    TOE 1.4362 TRA -.9916 TC3-5.0238 BAU 1.2248
   ROE .2426 RRA -.0445 RC3 .1729 FAU .03136
FOE .5929 FRA .2879 FC3-1.4898 BSP 15560
                                                                   RRT .0472 RRF
                                                                                      .0800 RTF .8386
                                                                                                                     LSA 2058.7 MSA 183.2 SSA 22.4
EL1 2003.9 EL2 56.7 ALF 9.23
                                                                   SGB 4924.6 R23 .0402 R13 .8386
                                                                   561 4911.2 562 362.6 THA
                                                                                                       .20
    BOE 1.4565 BRA .9926 BC3 5.0267 FSP -427
                                                                                                                                ARRIVAL DATE JUN 14 1966
                                                                       FLIGHT TIME 162.00
LAUNCH DATE JAN 3 1966
                                                                       DISTANCE 485.351
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 26.636 GAL -2.17 AZL 86.27 MCA 245.61 SMA 121.20 ECC .21683 INC 3.7263 V1 30.287 RP 108.79 LAP -3.39 LOP 347.73 VP 36.671 GAP 11.08 AZP 91.54 TAL 187.88 TAP 73.48 RCA 94.92 APO 147.48 V2 34.832 RC 179.385 GL 24.14 GP -7.96 ZAL 103.75 ZAP 167.99 ETS 319.52 ZAE 131.01 ETE 187.19 ZAC 93.25 ETC 166.70 CLP-170.98
   PLANETOCENTRIC CONIC
   C3 17.894 VHL 4.230 DLA 20.89 RAL 347.29 RAD 6567.7 VEL 11.802 PTH 2.09 VHP 7.349 DPA -11.60 RAP 1.67 ECC 1.2945 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        1 30 31
                                                                                                                      2304.2
                                                                                                                                       -28.14
                                                 -28.30
                                                                                          88.99
                                                                          214.31
                   0 42 7 2904.24
                                                               89.44
       90.00
                                                                                                       19 48 38
                                                                                                                                                      160.63
                  18 40 1
                                 4116.15
                                                  -2.67
                                                               167.30
                                                                             207.44
                                                                                              61.80
                                                                                                                         3516.2
                                                                                                                                         -6.42
        90.00
                                                                                                                                                        58.06
                                                 -29.89
                                                                66.84
                                                                             214.31
                                                                                              90.68
                                                                                                         3 0 42
                                                                                                                         1996.9
                                                                                                                                        -29.47
                   2 17 25 2596.94
      100.00
                                                                                                       20 52 23
                                                                                              60.13
                                                                                                                         3298.7
                                                                                                                                         -5.24
                                                                                                                                                      144.01
                                                  -1.28
                                                               150.55
                                                                             206.67
                  19 47 24
                                 3898.68
      100.00
                                                                                              95.05
                                                                                                        4 33 24
                                                                                                                         1690.9
                                                                                                                                        -32.78
                                                                                                                                                       34.30
                    3 55 14 2290.94
                                                 -33.85
                                                                43.37
                                                                             214.08
                                                                                                      21 29 3
      110.00
                                                                                                                                                      133.05
                                                                                              55.87
                                                                                                                         3177.4
                                                                                                                                         -2.40
                                                   2.09
                                                               139.25
                                                                             204.57
                  20 26
                                 3777.45
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ST 2061.1 SR 337.1 SS 511.1
CRT .9916 CRS -.9685 CST -.9396
                                                                   SGT 4969.1 SGR 373.5 SG3 132.5
    TOE 1.4964 TRA -.8067 TC3-5.1814 BAU 1.2402
                                                                  RRT .0741 RRF .0940 RTF .8422
SGB 4983.1 R23 .0314 R13 .8422
    RDE .2483 RRA -.0518 RC3 .1704 FAU .02993
                                                                                                                     LSA 2143.0 MSA 173.0 SSA 23.6
    FOE .5842 FRA .3275 FC3-1.4478 BSP 15794
BOE 1.5168 BRA .8084 BC3 5.1842 FSP -424
                                                                                                                      EL1 2088.1 ELZ 43.0 ALF 9.22
                                                                  5G1 4969.2 SG2 372.5 THA .32
                                                                                                                                ARRIVAL DATE JUN 16 1966
                                                                       FLIGHT TIME 164.00
LAUNCH DATE JAN 3 1966
                                                                      DISTANCE 490.953
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.575 GAL -1.66 AZL 86.37 HCA 248.78 SMA 120.85 ECC .21907 INC 3.6301 V1 30.287 RP 108.77 LAP -3.38 LOP 350.91 VP 36.634 GAP 11.30 AZP 91.32 TAL 185.95 TAP 74.73 RCA 94.37 APO 147.32 V2 34.840
    RC 181.409 GL 23.58 GP -7.63 ZAL 100.55 ZAP 168.73 ETS 318.50 ZAE 131.19 ETE 186.97 ZAC 95.54 ETC 167.11 CLP-171.69
   PLANETOCENTRIC CONIC
    C3 17.684 VHL 4.205 DLA 21.78 RAL 350.73 RAD 6567.7 VEL 11.793 PTH 2.09 VHP 7.474 DPA -10.29 RAP
                                                                                                                                           3.79 ECC 1.2910
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        1 33 50
                                                                                                                       2341.5
                                                                           217.86
                                                                                           87.63
                                                                                                                                       -28.26
                   0 44 48 2941.47
19 4 44 4073.43
2 21 25 2629.91
                                                 -28.23
                                                               92.17
        90.00
                                                                                              61.95 20 12 38
                                                                                                                                                      158.21
                                                                                                                         3473.4
                                                                                                                                         -7.76
                                                                             211.07
                                                   -4.04
                                                               164.91
        90.00
                                                                                              89.39 3 5 15
60.21 21 15 8
                                                                                                                                        -29.65
                                                                                                                                                       60.50
                                                                                                                         2029.9
                                                 -29.89
                                                               * 69.29
                                                                             217.91
       100.00
                                                                                                                                                      141.87
                                                                                                                                        -6.53
                                                                                                                         3260.2
                   20 10 48 3860.22
4 1 34 2316.60
20 47 9 3746.30
                                                               148.44
                                                                             210.27
                                                  -2.58
       100.00
                                                                                                                                                       36.24
                                                                                                                                       -33.08
                                                                                              93.88 4 40 11
55.83 21 49 35
                                                                                                                         1716.6
                                                 -33.99
                                                                 45.36
                                                                             217.77
       110.00
                                                                                                                                         -3.59
                                                                                                                         3146.3
                                                     . 90
                                                               137.63
                                                                             208.09
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2147.4 SR 348.0 SS 517.8
CRT .9959 CRS -.9604 CST -.9463
                                                                   SGT 5022.2 SGR 383.4 SG3 130.5

RRT .1003 RRF .1093 RTF .8457

SGB 5036.8 R23 .0241 R13 .8458

SGI 5022.4 SG2 381.4 THA .44
    TOE 1.5606 TRA -.6101 TC3-5.3040 BAU 1.2546
    ROE .2547 RRA -.0578 RC3 .1654 FAU .02849
FOE .5758 FRA .3679 FC3-1.3947 BSP 15988
                                                                                                                     LSA 2230.0 MSA 163.8 SSA 24.6
                                                                                                                      EL1 2175.2 EL2 31.2 ALF
    BOE 1.5813 BRA .6129 BC3 5.3066 FSP -419
                                                                                                                                ARRIVAL DATE JUN 18 1966
                                                                       FLIGHT TIME 166.00
LAUNCH DATE JAN 3 1966
                                                                       DISTANCE 496.537
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.516 GAL -1.14 AZL 86.46 MCA 251.95 SMA 120.50 ECC .22158 INC 3.5380 V1 30.287 RP 108.74 LAP -3.36 LOP 354.08 VP 36.600 GAP 11.53 AZP 91.10 TAL 184.02 TAP 75.97 RCA 93.80 APO 147.20 V2 34.849 RC 183.413 GL 22.95 GP -7.34 ZAL 97.22 ZAP 169.44 ETS 317.22 ZAE 131.37 ETE 186.77 ZAC 97.85 ETC 167.47 CLP-172.39
   PLANE TOCENTRIC CONIC
    63.16
                                                                                                          3 9 58
                                                 -29.83
                                                                71.97
                                                                              221.76
                                                                                              87.99
       100.00
                     2 25 32
                                  2665.91
                                                                                               60.34 21 38 59
                                                                                                                          3222.1
                                                                                                                                         -7.79
                                                                                                                                                       139.74
                   20 35 17
                                  3822.08
                                                  -3.87
                                                               146.34
                                                                              214.14
                                                                                                                                                        38.37
                                                                                                         4 47 21
                    4 8 16 2344.48
21 9 2 3716.28
                                  2344.48
                                                 -34.10
                                                                 47.53
                                                                              221.74
                                                                                               92.60
                                                                                                       22 10 58
                                                                                                                          3116.3
                                                                                                                                         -4.73
                                                                                                                                                       129.85
                                                   -.25
                                                                136.06
                                                                              211.89
                                                                                               55.82
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5072.7 SGR 392.5 SG3 128.5

RRT .1262 RRF .1260 RTF .8502

SGB 5087.8 R23 .0182 R13 .8503

SGI 5072.9 SG2 389.4 THA .56
                                                                                                                    ST 2253.5 SR 358.9 55 523.4
CRT .9974 CRS -.9521 CST -.9525
     TOE 1.6272 TRA -.4041 TC3-5.3874 BAU 1.2684
    ROE .2620 RRA -.0624 RC3 .1579 FAU .02708
FDE .5675 FRA .4067 FC3-1.3318 BSP 16188
BDE 1.6482 BRA .4089 BC3 5.3897 FSP -414
                                                                                                                     LSA 2316.6 MSA 155.7 SSA 25.4
ELI 2262.0 EL2 25.5 ALF 9.11
```

```
FLIGHT TIME 168.00
                                                                                                                                            ARRIVAL DATE JUN 20 1966
   HELIOCENTRIC CONIC
                                                                             DISTANCE 502.104
    RL 147.10 LAL .00 LOL 102.17 VL 26.458 GAL -.61 A7L 86.55 MCA 255.12 SMA 120.16 ECC .22438 INC 3.4490 V1 30.287 RP 108.71 LAP -3.33 LOP 357.26 VP 36.566 GAP 11.78 A7P 90.89 TAL 182.09 TAP 77.21 RCA 93.20 APO 147.12 V2 34.858
     RC 185.395 GL 22.26 GP -7.07 TAL 93.79 ZAP 170.12 ETS 315.64 TAE 131.55 ETE 186.59 TAC 100.19 ETC 167.80 CLP-173.08
    PLANETOCENTRIC CONIC
    C3 17.659 VHL 4.202 OLA 23.53 RAL 358.03 RAD 6567.7 VEL 11.792 PTH 2.08 VHP 7.749 OPA -7.73 RAP 8.07 ECC 1.2906 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 49 52 3026.86 -27.83 98.38 225.70 84.54 1 40 19 2426.9 -28.29 89.75
                                                                                                   INJ man.
84.54 I 40 ._
52.44 21 4 25
- 14 55
                     19 57 57 3987.37
2 29 50 2704.55
         90.00
                    19 57 57
                                                        -6.77
                                                                     160.07
                                                                                     219.21
                                                                                                                                     3387.4
                                                                                                                                                     -10.41
        100.00
                                                      -29.70
                                                                       74.63
                                                                                     225.87
                                                                                                       86.48
                                                                                                                3 14 55
                                                                                                                                     2104.5
                                                                                                                                                     -29.88
                    2 29 30
21 0 40 3784.92
4 15 26 2374.17
3688.06
                                                                                                       60.51 22 3 45
91.23 4 55 0
55.84 22 33 2
        100.00
                                                        -5.12
                                                                     144.29
                                                                                     216.30
                                                                                                                                     3184.9
                                                                                                                                                      -9.01
                                                                                                                                                                     137.66
       110.00
                                                      -34.16
                                                                       49.85
                                                                                     225.97
                                                                                                                                    1774.2
                                                                                                                                                     -5.80
       110.00
                                                       -1.33
                                                                     134.59
                                                                                     215.95
                                                                                                                                     3088.1
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         9GT 5115.2 SGR 401.0 SG3 126.3
RRT .1518 RRF .1442 RTF .8544
SGB 5130.9 R23 .0139 R13 .8544
                                                                                                                               ST 2318.6 SR 369.7 SS 528.0
CRT .9967 CRS -.9432 CST -.9578
     TOE 1.6965 TRA -. 1848 TC3-5.4186 BAU 1.2797
     RDE .2703 RRA -.0656 RC3 .1483 FAU .02562
                                                                                                                              LSA 2401.7 MSA 149.6 SSA 25.8
EL1 2347.7 EL2 29.8 ALF 9.03
    FDE .5592 FRA .4467 FC3-1.2561 BSP 16327
BDE 1.7179 BRA .1961 BC3 5.4206 FSP -409
                                                                          SG1 5115.6 SG2 396.4 THA .69
                                                                              FLIGHT TIME 170.00
                                                                             DISTANCE 507.648
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.400 GAL -.05 AZL 86.64 MCA 258.29 SMA 119.83 ECC .22751 INC 3.3627 VI 30.287
RP 108.68 LAP -3.29 LOP .44 VP 36.534 GAP 12.04 AZP 90.68 TAL 180.16 TAP 78.46 RCA 92.57 APO 147.10 VZ 34.868
RC 187.357 GL 21.49 GP -6.83 ZAL 90.28 ZAP 170.76 ETS 313.74 ZAE 131.73 ETE 186.44 ZAC 102.53 ETC 168.08 CLP-173.77
   PLANETOCENTRIC CONIC
    C3 17.864 VHL 4.227 DLA 24.35 RAL
                                                           1.88 RAD 6567.7 VEL 11.800 PTH
                                                                                                          2.09 VHP 7.901 OPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 52 21 3074.51
20 26 8 3945.17
2 34 26 2745.33
21 26 45 3749.52
4 23 8 2405.22
21 54 31 3662.39
                                                      -27.47
                                                                     101.82
                                                                                    229.96
                                                                                                      82.85
                                                                                                                    1 43 36
                                                                                                                                   2474.4
        90.00
                                                                                                                                                    -28.18
                                                                                     223.70
                                                                                                       62.77 21 31 53
                                                                                                                                     3345.2
        90.00
                                                       -8.09
                                                                     157.67
                                                                                                                                                     -11.68
                                                                                                                                                                     150.83
                                                      -29.50
                                                                       77.85
                                                                                     230.20
                                                                                                       84.91
                                                                                                                   3 20 11
                                                                                                                                     2145.3
       100.00
                                                                                                                                                     -29.89
                                                                                                                                                                      69.07
                                                                                                       84.91
60.72 22 29 14
89.80 5 3 14
                                                       -6.30
                                                                     142.32
                                                                                     222.73
                                                                                                                                     3149.5
                                                                                                                                                     -10.16
       100.00
                                                                                                                                                                     135.66
                                                    -34.18
                                                                       52.27
                                                                                     230.46
                                                                                                       89.80
                                                                                                                                     1805.2
                                                                                                                                                    -33.83
                                                                                                                                                                      43.05
       110.00
      110.00
                                                                     133.25
                                                                                    220.26
                                                                                                      55.89 22 55 34
                                                                                                                                    3062.4
                                                                                                                                                     -6.77
                                                                                                                                                                     127.01
                                                     -2.31
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
    TOE 1.7409 TRA .0430 TC3-5.4172 BAU 1.2942
RDE .2782 RRA -.0673 RC3 .1366 FAU .02426
                                                                        SGT 5152.0 SGR 407.0 SG3 122.9

RRT .1692 RRF .1461 RTF .8592

SGB 5168.0 R23 -.0002 R13 .8592

SGI 5152.5 SG2 401.1 THA .77
                                                                                                                                ST 2364.0 SR 378.4 SS 513.3
CRT .9939 CRS -.9309 CST -.9602
    FDE .5309 FRA .4831 FC3-1.1756 BSP 16780
BDE 1.7630 BRA .0800 BC3 5.4189 FSP -426
                                                                                                                                LSA 2444.0 MSA 145.1 SSA 26.1
EL1 2393.7 EL2 41.2 ALF 9.04
                                                                                                                                           ARRIVAL DATE JUN 24 1966
LAUNCH DATE JAN 3 1966
                                                                             FLIGHT TIME 172.00
                                                                            DISTANCE 513.168
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.344 GAL .53 A7L 86.72 MCA 261.47 SMA 119.51 ECC .23098 INC 3.2782 VI 30.287 RP 108.65 LAP -3.24 LOP 3.62 VP 36.503 GAP 12.31 A7P 90.49 TAL 178.23 TAP 79.70 RCA 91.91 APO 147.12 VZ 34.878 RC 189.297 GL 20.66 GP -6.61 ZAL 86.70 ZAP 171.38 ETS 311.46 ZAE 131.90 ETE 186.30 ZAC 104.90 ETC 168.32 CLP-174.45
   PLANETOCENTRIC CONTC
    C3 18.232 VHL 4.270 OLA 25.11 RAL 5.82 RAD 6567.7 VEL 11.816 PTH 2.09 VHP 8.063 OPA -5.26 RAP 12.41 ECC 1.3001
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   81.11 1 46 59
63.15 22 0 6
83.30 3 25 55
                                                  -27.00
                                                                                 234.40
      90.00
                    0 54 54 3124.65
20 55 2 3904.47
2 39 27 2787.58
                                                                    105.41
                                                                                                                                  2524.6
                                                                                    228.45
                                                                                                                                    3304.5
                                                                                                                                                    -12.88
                                                                                                                                                                    148.44
                                                       -9.35
                                                                     155.34
        90.00
                                                                                    234.75
                                                                                                                                    2187.6
                                                                                                                                                                     72.21
                                                                      80.95
                                                    -29.20
       100.00
                                                                                                       60.95 22 55 7
88.32 5 12 7
                    21 53 10 3716.77
4 31 29 2437.04
                                                                                    227.39
                                                                                                                                    3116.8
                                                                                                                                                    -11.21
                                                                    140.50
                                                       -7.39
       100.00
                                                    -34.15
                                                                                    235.17
                                                                                                                                     1837.0
                                                                                                                                                    -34.00
                                                                                                                                                                     45.52
                                                                      54.76
       110.00
                                                                                                       55.95 23 18 17
                                                                                                                                     3040.1
                                                                                                                                                    -7.61
       110.00
                    22 17 37
                                    3640.08
                                                      -3.16
                                                                    132.09
                                                                                    224.79
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5195.6 SGR 415.5 SG3 122.0
RRT .2000 RRF .1818 RTF .8640
SGB 5212.2 R23 .0081 R13 .8640
                                                                                                                                ST 2457.6 SR 390.5 SS 530.6
CRT .9898 CRS -.9244 CST -.9662
    TOE 1.8262 TRA .2848 TC3-5.3419 BAU 1.3024
ROE .2901 RRA -.0673 RC3 .1233 FAU .02289
    FDE .5598 FRA .5258 FC3-1.0867 BSP 16668
BDE 1.8491 BRA .2926 BC3 5.3433 FSP -396
                                                                                                                                LSA 2540.2 MSA 144.1 55A 25.8
EL1 2487.9 EL2 55.1 ALF 8.94
                                                                         SG1 5196.2 SG2 407.0 THA
                                                                                                                .92
                                                                             FLIGHT TIME 174.00
                                                                                                                                            ARRIVAL DATE JUN 26 1966
LAUNCH DATE JAN 3 1966
                                                                            DISTANCE 518.661
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.288 GAL 1.13 A7L 86.80 MCA 264.65 SMA 119.20 ECC .23482 INC 3.1950 V1 30.287 RP 108.62 LAP -3.18 LOP 8.81 VP 36.474 GAP 12.61 A7P 90.30 TAL 176.31 TAP 80.95 RCA 91.21 APO 147.19 V2 34.889 RC 191.216 GL 19.76 GP -6.42 TAL 83.10 ZAP 171.95 ETS 308.75 ZAE 132.07 ETE 186.19 ZAC 107.27 ETC 168.52 CLP-175.14
   PLANETOCENTRIC CONIC
    C3 18.779 VHL 4.333 DLA 25.80 RAL 9.84 RAD 6567.8 VEL 11.839 PTH 2.10 VHP 8.238 DPA -4.05 RAP 14.59 ECC 1.3D9D LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                   1 50 34
                      0 57 37
                                     3176.97
                                                                     109.12
                                                                                    239.01
                                                                                                       79.35
                                                                                                                                   2577.0
                                                                                                                                                     -27.60
                                                                                                                                                                    100.56
                                                     -26.39
        90.00
                    0 57 37 3176.97
21 24 22 3866.01
                                                                                                                 22 28 48
                                                     -10.53
                                                                    153.13
                                                                                     233.42
                                                                                                       63.56
                                                                                                                                     3266.0
        90.00
                      2 45 3
                                    2830.59
                                                                      84.09
                                                                                     239.47
                                                                                                       81.69
                                                                                                                  3 32 14
                                                                                                                                     2230.6
                                                                                                                                                    -29.67
                                                                                                                                                                     75.39
                                                     -28.82
       100.00
                                                                                                       61.19 23 21 4
86.85 5 21 44
56.01 23 40 56
                    22 19 37
                                                       -8.35
                                                                     138.87
                                                                                     232.27
                                                                                                                                     3087.6
                                                                                                                                                    -12.13
                                                                                                                                                                    132.12
       100.00
                                     3687.62
                                                                                                                                     1869.1
                                                     -34.06
                                                                       57.26
                                                                                     240.08
                                                                                                                                                    -34.12
                                                                                                                                                                     48.01
                      4 40 35
                                     2469.12
       110.00
                                                     -3.85
                                                                                                                                    3021.9
                    22 40 34
                                                                    131.13
                                                                                     229.51
                                                                                                                                                    -8.29
                                                                                                                                                                    124.85
                                    3621.86
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 5227.0 SGR 421.5 SG3 119.9
RRT .2245 RRF .2030 RTF .8689
                                                                                                                                ST 2515.3 SR 400.4 SS 530.6
CRT .9842 CRS -.9144 CST -.9695
    TOE 1.8910 TRA .5427 TC3-5.2159 BAU 1.3098
    RDE .3020 RRA -.0656 RC3 .1090 FAU .02150
FOE .5307 FRA .5678 FC3 -.9913 BSP 16722
                                                                        SGB 5244.0 R23 .0069 R13 .8689
SG1 5227.9 SG2 410.7 THA 1.04
                                                                                                                              LSA 2597.5 MSA 145.1 SSA 25.1
EL1 2546.0 EL2 70.1 ALF 8.91
    BOE 1.9150 BRA .5466 BC3 5.2170 FSP -388
```

ARRIVAL DATE JUN 28 1966

```
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 524.121
   RL 147.10 LAL .00 LOL 102.17 VL 26.234 GAL 1.76 A7L 86.89 HCA 267.83 SMA 118.89 ECC .23906 INC 3.1127 V1 30.287 RP 108.58 LAP -3.11 LOP 9.99 VP 36.445 GAP 12.92 A7P 90.12 TAL 174.39 TAP 82.21 RCA 90.47 APO 147.32 V2 34.900 RC 193.113 GL 18.80 GP -6.24 7AL 79.49 7AP 172.49 ETS 305.54 7AE 132.24 ETE 186.08 7AC 109.65 ETC 168.69 CLP-173.82
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 19.524 VHL 4.419 DLA 26.39 RAL 13.89 RAD 6567.8 VEL 11.870 PTH 2.11 VHP 8.425 DPA -2.86 RAP 16.78 ECC 1.3213 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             77.60
                                                                                                                           2630.6
                                                                            243.75
                     1 0 38 3230.56
                                                  -25.66
                                                                112.88
        90.00
                                                                                                           22 57 34
                                                                                                                             3230.8
                                                                                                                                            -14.99
                                                                                238.59
                                                                                                 63.98
                   21 53 43 3830.79
2 51 26 2873.38
                                                  -11.59
                                                                 151.08
        90.00
                                                                                                                                            -29.43
                                                                                                                                                            78.55
                                                                                                                             2273.4
                                                                                                            3 39 19
                                                                  87.19
                                                                                244.34
                                                                                                 80.12
                                                  -28.36
       100.00
                                                                                                                                                           130.71
                                                                                                                             3063.2
                                                                                                                                            -12.89
                                                   -9.15
                                                                 137.49
                                                                                237.31
                                                                                                 61.42
                                                                                                          23 46 40
                                  3663.20
       100.00
                   22 45 37
                                                                                                 85.40 5 32 11
56.06 24 3 10
                                                                                                                                            -34.17
                                                                                                                                                            50.49
                                                                                                                             1900.8
                                                                                245.17
                  4 50 30 2500.82
23 3 2 3608.53
                                                                  59.72
       110.00
                                                  -33.91
                                                                                                                             3008.5
                                                                                                                                              -8.79
                                                                                234.39
       110.00
                                                    -4.36
                                                                 130.43
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SCT 5256.8 SGR 426.4 SG3 117.6
RRT .2472 RRF .2228 RTF .8746
SGB 5274.1 R23 .0054 R13 .8746
SGI 5257.9 SGZ 413.1 THA 1.16
                                                                                                                         ST 2549.8 SR 409.3 SS 525.9
CRT .9775 CRS -.9039 CST -.9722
    TOE 1.9449 TRA .8083 TC3-5.0486 BAU 1.3180
    ROE .3149 RRA -.0624 RC3 .0939 FAU .02021
FDE .5183 FRA .6077 FC3 -.8963 BSP 16877
BOE 1.9703 BRA .8107 BC3 5.0494 FSP -384
                                                                                                                        LSA 2631.2 MSA 148.0 SSA 24.1
ELI 2581.1 EL2 85.4 ALF 8.93
                                                                                                                                     ARRIVAL DATE JUN 30 1966
                                                                         FLIGHT TIME 178.00
LAUNCH DATE JAN 3 1966
                                                                         DISTANCE 529.545
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 26.181 GAL 2.41 AZL 86.97 MCA 271.01 SMA 118.60 ECC .24375 INC 3.0307 V1 30.287 PP 108.55 LAP -3.03 LOP 13.18 VP 36.418 GAP 13.26 AZP 89.95 TAL 172.47 TAP 83.48 RCA 89.69 APO 147.51 V2 34.912 RC 194.989 GL 17.79 GP -6.07 ZAL 75.90 ZAP 172.99 ETS 301.76 ZAE 132.40 ETE 185.99 ZAC 112.04 ETC 168.81 CLP-176.50
   PLANETOCENTRIC CONIC
    C3 20.490 VHL 4.527 DLA 26.89 RAL 17.96 RAD 6567.8 VEL 11.911 PTH 2.12 VMP 8.628 DPA -1.69 RAP 18.99 ECC 1.3372
ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                           -26.52
                                                                                                                              2684.3
                                                                               248.58
                                                                                              75.92
                                                                                                             1 58 56
                    1 4 12
22 22 35
                                   3284.34
                                                   -24.82
                                                                 116.59
        90.00
                                                                                                 64.38 23 25 55
78.64 3 47 23
                                                                                                                              3200.0
                                                                                                                                             -15.85
                                                                                                                                                            142.21
                                                                                243.90
                                   3800.01
                                                   -12.50
                                                                 149.28
        90.00
                                                                                                                              2314.9
                                                                                                                                             -29.12
                                                                   90.17
                                                                                249.34
                                                   -27.84
                    2 58 48
23 10 41
                                   2914.90
                                                                                                 61.60 24 11 25
84.00 5 43 29
56.10 24 24 41
       100.00
                                                                                                                              3044.7
                                                                                                                                            -13.47
                                                                                                                                                           129.63
                                                                                242.47
                                                    -9.75
                                                                 136.45
                                   3644.68
       100.00
                                                                                                                              1931.6
                                                                                                                                           -34.18
                                                                                250.39
                                   2531.60
                                                  -33.72
                                                                   62.11
       110.00
                     5 1 18
                                                                                                                                              -9.08
                                                                                                                              3000.7
                    23 24 40
                                                                 130.02
                                                                                239.37
                                   3600.75
                                                   -4.66
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                     MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SCT 5282.5 SCR 430.3 SC3 115.3
RRT .2695 RRF .2428 RTF .8807
SCB 5300.0 R23 .0041 R13 .8807
SCI 5283.8 SC2 414.3 THA 1.27
                                                                                                                         ST 2567.0 SR 417.2 SS 519.2
CRT .9697 CRS -.8926 CST -.9744
    TOE 1.9920 TRA 1.0876 TC3-4.8356 BAU 1.3248
    ROE .3290 RRA -.0575 RC3 .0786 FAU .01898
FOE .5049 FRA .6481 FC3 -.8019 BSP 17019
                                                                                                                         LSA 2647.5 MSA 152.9 SSA 22.9
                                                                                                                         EL1 2598.7 EL2 100.7 ALF 8.97
     BOE 2.0190 BRA 1.0891 BC3 4.8362 FSP -379
                                                                                                                                    ARRIVAL DATE JUL 2 1966
                                                                         FLIGHT TIME 180.00
LAUNCH DATE JAN 3 1966
                                                                         CISTANCE 534.927
    HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
     C3 21.705 VHL 4.659 DLA 27.28 RAL 22.00 RAD 6567.9 VEL 11.962 PTH 2.13 VHP 8.846 DPA -.54 RAP 21.20 ECC 1.3572 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2736.7
                                                                                              74.36 2 4 18
64.73 23 53 15
                                                                                                                                         -25.83 112.02
                    1 8 41 3336.74
22 50 20 3775.29
                                                                               253.49
                                                                                                             2 4 18
                                                                 120.16
                                                   -23.91
         90.00
                                                                                                                              3175.3
                                                                                                                                            -16.52
                                                                                                                                                           140.70
                                                                 147.83
                                                                                249.30
         90.00
                                                                                                 77.28 3 56 39
61.72 24 34 51
                                                                                                                              2354.0
                                                                                                                                            -28.76
                                                                                                                                                             84.45
                                                                  92.94
                                                                                254.44
                    3 7 25
23 34 18
                                   2954.00
                                                   -27.28
       100.00
                                                                                                                                            -13.82
                                                                                                                                                            124.97
                                                                                                                              3033.3
                                   3633.27
                                                   -10.12
                                                                 135.80
                                                                                247.70
       100.00
                                                                                                                                                            55.19
                                                                                                             5 55 42
                                                                                                                              1961.0
                                                                                                                                             -34.13
                                                                                                  82.68
                      5 13 1 2560.98
23 45 11 3599.05
                                                   -33.48
                                                                   64.37
                                                                                255.71
       110.00
                                                                                                  56.11 24 45 10
                                                                                                                                             -9.14
                                                                                                                                                            123.63
                                                                                                                              2999.1
                                                                  129.94
                                                                                244.42
                    23 45 11
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     RRI .2914 RRF .2632 RIF .8865
SGB 5321.1 R23 .0035 RI3 .8865
SGI 5304.9 SGZ 414.3 THA 1.37
                                                                                                                         ST 2567.0 SR 423.8 55 511.1
     TOE 2.0318 TRA 1.3825 TC3-4.5813 BAU 1.3295
                                                                                                                         CRT .9609 CRS -.8805 CST -.9763
     ROE .3442 RRA -.0508 RC3 .0638 FAU .01775
FOE .4911 FRA .6904 FC3 -.7081 BSP 17133
                                                                                                                         LSA 2646.6 MSA 159.7 SSA 21.7
                                                                                                                          EL1 2599.2 EL2 116.0 ALF 9.03
     BOE 2.0608 BRA 1.3834 BC3 4.5818 FSP -373
                                                                                                                                      ARRIVAL DATE JUL 4 1966
                                                                          FLIGHT TIME 182.00
 LAUNCH DATE JAN 3 1966
                                                                         DISTANCE 540.261
    RL 147.10 LAL .00 LOL 102.17 VL 26.076 GAL 3.81 AZL 87.13 MCA 277.38 SMA 118.02 ECC .25462 INC 2.8654 V1 30.287 RP 108.47 LAP -2.84 LOP 19.56 VP 36.366 GAP 14.02 AZP 89.63 TAL 168.68 TAP 86.06 RCA 87.97 APO 148.07 V2 34.936 RC 198.673 GL 15.67 GP -5.79 ZAL 68.88 ZAP 173.83 ETS 292.24 ZAE 132.71 ETE 185.83 ZAC 116.83 ETC 168.95 CLP-177.87
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 23.203 VHL 4.817 DLA 27.56 RAL 25.98 RAD 6567.9 VEL 12.024 PTH 2.15 VHP 9.082 DPA
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                           -25.09
                                                                               258.47
                                                                                                             2 11 7
                                                                                                                              2785.5
                                                                                                                                                           115.39
                                                                                                  72.98
                       1 14 42 3385.45
                                                                  123.42
                                                    -22.97
                                                                                                                                                             139.70
                                                                                                  64.97 24 18 44
                                                                                                                               3159.0
                                                                                                                                             -16.96
                                                                                 254.71
         90.00
                    23 16 5
                                    3758.96
                                                    -13.70
                                                                  146.86
                                                                                                                                                              87.02
                                                                                                              4 7 20
                                                                                                                               2389.5
                                                                                                                                              -28.37
                                                                                                  76.08
                      3 17 31
                                                    -26.72
                                                                   95.43
                                                                                 259.61
        100.00
                                  2989.54
                                                                                                                                                             128.78
                                                                                                  61.76 24 56 27
                                                                                                                               3030.1
                                                                                                                                             -13.92
                                    3630.10
                                                    -10.22
                                                                  135.62
                                                                                 252.93
        100.00
                    23 55 57
                                                                                                  81.45 6 8 46
56.08 1 8 20
                                                                                                                               1988.6
                                                                                                                                            -34.05
                                                                                                                                                             57.34
                                                                                 261.10
                      5 25 37 2588.62
                                                   -33.22
                                                                    66.48
                                                                                                                                                             123.89
                                                                                                                              3003.8
                                                                                                                                               -A.96
                                                                  130.18
                                                                                 249.48
                       0 8 16
                                   3603.79
                                                    -4.54
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                     SGT 5319.6 SGR 435.2 SG3 110.9
RRT .3134 RRF .2849 RTF .8923
SGB 5337.4 R23 .0038 R13 .8923
SGI 5321.4 SG2 413.1 THA 1.48
                                                                                                                          ST 2554.0 SR 429.1 SS 503.0
CRT .9509 CRS -.8676 CST -.9780
      TOE 2.0664 TRA 1.6960 TC3-4.2897 BAU 1.3307
     ROE .3605 RRA -.0422 RC3 .0501 FAU .01651
FOE .4778 FRA .7352 FC3 -.6160 BSP 17168
BOE 2.0976 BRA 1.6966 BC3 4.2900 FSP -366
                                                                                                                          LSA 2632.8 MSA 167.9 SSA 20.4
EL1 2586.5 EL2 131.2 ALF 9.10
```

FLIGHT TIME 176.00

```
LAUNCH DATE JAN 3 1966
                                                                         FLIGHT TIME 184.00
                                                                                                                                    ARRIVAL DATE JUL 6 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 545.536
    RL 147.10 LAL .00 LOL 102.17 VL 26.026 GAL 4.57 AZL 87.22 MCA 280.57 SMA 117.75 ECC .26091 INC 2.7812 V1 30.287
RP 108.43 LAP -2.73 LOP 22.75 VP 36.342 GAP 14.44 AZP 89.49 TAL 166.80 TAP 87.37 RCA 87.03 APO 148.47 V2 34.948
RC 200.481 GL 14.58 GP -5.67 ZAL 65.51 ZAP 174.15 ETS 286.39 ZAE 132.85 ETE 185.77 ZAC 79.65 ETC 284.22 CLP-178.56
   PLANETOCENTRIC CONIC
    C3 25.022 VHL 5.002 DLA 27.74 RAL 29.87 RAD 6568.0 VEL 12.100 PTH 2.17 VHP 9.338 DPA
                                                                                                                                 1.69 RAP 25.65 ECC 1.4118
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                               --! TIM
3427.19
        90.00
                     1 23 7
                                                   -22.12
                                                                              263.51
                                                                                               71.85 2 20 14
                                                                126.18
                                                                                                                            2827.2
                                                                                                                                           -24.39
                                                                                                                                                          118.25
        90.00
                   23 38 40
                                  3754.22
                                                  -13.83
                                                                 146.58
                                                                                260.08
                                                                                                 65,04
                                                                                                           24 41 14
                                                                                                                             3154.2
                                                                                                                                            -17.08
                                                                                                                                                           139.41
                    3 29 15
       100.00
                                  3020.58
                                                  -26.20
                                                                  97.59
                                                                                264.84
                                                                                                 75.06
                                                                                                           4 19 36
                                                                                                                             2420.6
                                                                                                                                                            89.25
                                                                                                                                            -27.99
                     0 19 9
5 39 4
                                                  -1d.03
                                                                                258.13
       100.00
                                  3636.07
                                                                 135.96
                                                                                                 61.69
                                                                                                           1 19 45
6 22 38
                                                                                                                             3036.1
                                                                                                                                            -13.73
                                                                                                                                                           129.13
                                 2614.31
       110.00
                                                   -32.95
                                                                   68.44
                                                                                266.53
                                                                                                 80.33
                                                                                                                             2014.3
                                                                                                                                            -33.93
                                                                                                                                                            59.34
                                                                     HID-COURSE EXECUTION ACCURACY
                     0 25 50
                                                    -4.11
       110.00
                                  3615.10
                                                                 130.78
                                                                                                                             3015.1
                                                                                                                                              -8.54
                                                                                                                                                           124.49
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SCT 5332.8 SCR 435.6 SC3 108.5
RRT .3329 RRF .3033 RTF .8990
SCB 5350.5 R23 .0023 R13 .8990
SCI 5334.7 SCZ 410.6 THA 1.57
    TOE 2.0810 TRA 2.0147 TC3-3.9931 BAU 1.3358
                                                                                                                         ST 2511.5 SR 432.2 SS 490.2
CRT .9395 CRS -.8527 CST -.9793
    RDE .3771 RRA -.0322 RC3_ .0370 FAU .01549
FDE .4601 FRA .7774 FC3 -.5360 BSP 17448
BDE 2.1149 BRA 2.0149 BC3 3.9933 FSP -366
                                                                                                                         LSA 2589.0 MSA 177.1 SSA 19.1
EL1 2544.3 EL2 146.1 ALF 9.21
LAUNCH DATE JAN 3 1966
                                                                         FLIGHT TIME 186.00
                                                                                                                                    ARRIVAL DATE JUL 8 1966
                                                                        DISTANCE 550.746
    RL 147.10 LAL .00 LOL 102.17 VL 25.976 GAL 5.36 AZL 87.30 HCA 283.76 SMA 117.48 ECC .26784 INC 2.6951 V1 30.287 RP 108.39 LAP -2.62 LOP 25.94 VP 36.319 GAP 14.90 AZP 89.36 TAL 164.95 TAP 88.71 RCA 86.01 APO 148.94 V2 34.961 RC 202.264 GL 13.48 GP -5.55 ZAL 62.25 ZAP 174.40 ETS 279.84 ZAE 132.99 ETE 185.71 ZAC 79.24 ETC 284.12 CLP-179.26
  PLANETOCENTRIC CONIC
    C3 27.210 VHL 5.216 DLA 27.81 RAL 33.63 RAD 6568.1 VEL 12.190 PTH 2.19 VHP 9.617 DPA 2.77 RAP 27.89 ECC 1.4478
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 34 53 3458.60 -21.44 128.24 268.64 71.04 2 32 32 2858.6 -23.83 120.38
                     0 0 53
                                 3764.32
                                                  -13.54
                                                                 147.18
                                                                                265.30
                                                                                                 64.89
                                                                                                            1 3 37
                                                                                                                             3164.3
                                                                                                                                            -16.82
                                                                                                                                                           140.03
                                 3046.67
                                                  -25.73
                                                                  99.39
                                                                                270.11
                                                                                                 74.23
                                                                                                            4 33 27
                                                                                                                             2446.7
                                                                                                                                            -27.64
                                                                                                                                                             91.11
                     0 35 47
                                                                                                           1 36 38
       100.00
                                 3651.48
                                                    -9.53
                                                                 136.83
                                                                                263.23
                                                                                                 61.53
                                                                                                                             3051.5
                                                                                                                                            -13.26
                                                                                                                                                           130.03
                    5 53 14 2638.07
0 41 43 3632.84
                                                                                                           6 37 12
      110.00
                                                  -32.66
                                                                  70.23
                                                                                271.98
                                                                                                 79.30
                                                                                                                             2038.1
                                                                                                                                            -33.79
                                                                                                                                                             61.1A
      110.00
                                                                 131.71
                                                                                259.51
                                                                                                 55.97
                                                                                                                             3032.8
                                                                                                                                             -7.88
                                                                                                                                                           125.44
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    5CT 5340.0 SGR 435.1 SG3 106.3
RRT .3534 RRF .3240 RTF .9052
SGB 5357.7 R23 .0023 R13 .9052
    TOE 2.0945 TRA 2.3594 TC3-3.6673 BAU 1.3341
                                                                                                                         ST 2465.5 SR 433.7 SS 479.7
    ROE .3948 RRA -.0201 RC3 .0259 FAU .01437
FOE .4449 FRA .8244 FC3 -.4572 BSP 17551
                                                                                                                         CRT .9267 CRS -.8370 CST -.9806
                                                                                                                         LSA 2542.0 MSA 187.0 SSA 17.9
    BOE 2.1314 BRA 2.3595 BC3 3.6674 FSP -361
                                                                    SG1 5342.2 SG2 406.9 THA 1.66
                                                                                                                         EL1 2498.2 EL2 160.8 ALF 9.30
LAUNCH DATE JAN 3 1966
                                                                        FLIGHT TIME 188.00
                                                                                                                                   ARRIVAL DATE JUL 10 1966
                                                                        DISTANCE 555.878
  HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 25.927 GAL 6.20 AZL 87.39 HCA 286.95 SMA 117.22 ECC .27550 INC 2.6065 VI 30.287 RP 108.35 LAP -2.49 LOP 29.14 VP 36.296 GAP 15.41 AZP 89.24 TAL 163.11 TAP 90.07 RCA 84.92 APO 149.51 V2 34.974 RC 204.023 GL 12.39 GP -5.45 ZAL 59.12 ZAP 174.55 ETS 272.68 ZAE 133.11 ETE 185.66 ZAC 78.84 ETC 284.00 CLP-179.97
   PLANETOCENTRIC CONIC
    C3 29.825 VHL 5.461 DLA 27.79 RAL 37.26 RAD 6568.2 VEL 12.296 PTH 2.21 VHP 9.921 DPA
                                                                                                                                3.82 RAP 30.13 ECC 1.4909
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 50 23
                                 3478.09
                                                  -21.00
                                                                129.50
                                                                               273.87
                                                                                                70.55
                                                                                                           2 48 21
                                                                                                                            2878.1
                                                                                                                                           -23.46
                                                                                                                                                           121.69
        90.00
                     0 14 17
                                  3790.66
                                                  -12.78
                                                                148.73
                                                                               270.32
                                                                                                           1 17 28
                                                                                                 64.51
                                                                                                                             3190.7
                                                                                                                                            -16.10
                                                                                                                                                           141.64
       100.00
                     3 57 38
                                  3067,90
                                                  -25.33
                                                                 100.84
                                                                               275.40
                                                                                                 73.57
                                                                                                             4 48 46
                                                                                                                             2467.9
                                                                                                                                           -27.33
                                                                                                                                                            92.61
       100.00
                     0 49 43
                                  3676.08
                                                   -8.73
                                                                138.22
                                                                               268.22
                                                                                                 61.30
                                                                                                           1 51 0
                                                                                                                             3076.1
                                                                                                                                           -12.49
                                                                                                                                                           131.46
                                                                  71.88
       110.00
                                 2660.04
                                                  -32.37
                                                                                                             6 52 17
                                                                               277.41
                                                                                                 78.36
                                                                                                                             2060.0
                                                                                                                                           -33.63
                                                                                                                                                            62.88
                     0 55 54
                                3656.70
      110.00
                                                                132.95
                                                                                                 55.90
                                                   -2.53
                                                                               264.42
                                                                                                            1 56 50
                                                                                                                             3056.7
                                                                                                                                             -6.98
                                                                                                                                                           126.71
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    RT .3738 RRF .3444 RTF .9116
SGB 5360.7 R23 .0019 R13 .9116
SGI 5345.6 SG2 402.0 THA 1.75
                                                                                                                        ST 2409.8 SR 433.2 SS 469.3
CRT .9125 CRS -.8201 CST -.9818
    TOE 2.1008 TRA 2.7218 TC3-3.3355 BAU 1.3300
    ROE .4129 RRA -.0062 RC3 .0163 FAU .01330
FDE .4295 FRA .8734 FC3 -.3862 BBE 17595
                                                                                                                         LSA 2485.2 MSA 197.2 SSA 16.8
    BOE 2.1410 BRA 2.7218 BC3 3.3355 FSP -356
                                                                                                                         EL1 2442.2 EL2 174.9 ALF 9.36
LAUNCH DATE JAN 3 1966
                                                                        FLIGHT TIME 190,00
                                                                                                                                   ARRIVAL DATE JUL 12 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 560.918
   RL 147.10 LAL .00 LOL 102.17 VL 25.880 GAL 7.09 AZL 87.49 MCA 290.15 SMA 116.96 ECC .28396 INC 2.5148 V1 30.287 RP 108.31 LAP -2.36 LOP 32.34 VP 36.275 GAP 15.96 AZP 89.13 TAL 161.31 TAP 91.46 RCA 83.75 APO 150.17 VZ 34.987 RC 205.757 GL 11.32 GP -5.35 ZAL 56.14 ZAP 174.60 ETS 265.11 ZAE 133.21 ETE 185.60 ZAC 78.44 ETC 283.84 CLP 179.31
  PLANETOCENTRIC CONIC
    C3 32.939 VHL 5.739 DLA 27.68 RAL 40.71 RAD 6568.3 VEL 12.422 PTH 2.24 VHP 10.253 DPA
                                                                                                                                 4.85 RAP 32.38 ECC 1.5421
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 8 54 3487.57 -20.78 130.11 279.17 70.32 3 7 2 2887.6 -23.28 122.32
                                                                                                            3 7 2
                     0 23 21
                                  3831.09
                                                  -11.58
                                                                 151.10
                                                                               275.13
                                                                                                 63.98
                                                                                                             1 27 12
                                                                                                                             3231.1
        90.00
                                                                                                                                            -14.99
                                                                                                                                                           144.08
      100.00
                                 3084.88
                     4 13 49
                                                  -24.99
                                                                 101.99
                                                                               280.68
                                                                                                 73.05
                                                                                                             5 5 14
                                                                                                                             2484.9
                                                                                                                                            -27.08
                                                                                                                                                            93.81
                                                                                                           2 2 56
7 7 43
      100.00
                     1 1 7
                                 3709.01
                                                   -7.64
                                                                140.07
                                                                               273.06
                                                                                                 61.01
                                                                                                                             3109.0
                                                                                                                                           -11.45
                                                                                                                                                           133.35
                     6 23 2
      110.00
                                2680.48
                                                  -32.08
                                                                  73.40
                                                                               282.80
                                                                                                 77.51
                                                                                                                             2080.5
                                                                                                                                           -33.47
                                                                                                                                                            64.45
      110.00
                     1 8 24
                                 3686.18
                                                   -1.40
                                                                 134.49
                                                                               269.21
                                                                                                 55.84
                                                                                                            2 9 50
                                                                                                                             3086.2
                                                                                                                                             -5.87
                                                                                                                                                           128.26
  DIFFERENTIAL CORRECTIONS
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
    TOE 2.0948 TRA 3.1044 TC3-3.0061 BAU 1.3238
                                                                    SGT 5341.1 SGR 430.8 SG3 102.0
RRT .3929 RRF .3645 RTF .9179
                                                                                                                         ST 2342.3 SR 430.5 SS 459.3
CRT .8961 CRS -.8017 CST -.9832
   ROE .4513 RRA .0094 RC3 .0085 FAU .01227
FOE .4141 FRA .9249 FC3 -.3224 88P 17783
                                                                    SGB 5358.5 R23 .0020 R13 .9179
SG1 5343.8 SG2 395.9 THA 1.83
                                                                                                                        LSA 2416.5 MSA 207.5 SSA 15.8
EL1 2374.1 EL2 188.5 ALF 9.41
    BDE 2.1387 BRA 3.1044 BC3 3.0061 FSP -352
```

ARRIVAL DATE JUL 14 1966

LAUNCH DATE JAN 3 1966

DISTANCE 565.850 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 102.17 VL 25.833 GAL 8.05 AZL 87.58 MCA 293.35 SMA 116.71 ECC .29332 INC 2.4193 V1 30.287 RP 108.27 LAP -2.22 LOP 35.53 VP 36.254 GAP 16.56 AZP 89.04 TAL 159.55 TAP 92.89 RCA 82.48 APO 150.95 V2 35.000 RC 207.465 GL 10.28 GP -5.27 ZAL 53.30 ZAP 174.54 ETS 257.38 ZAE 133.30 ETE 185.56 ZAC 128.73 ETC 168.50 CLP 178.58 PLANETOCENTRIC CONIC 5.85 RAP 34.63 ECC 1.6029 C3 36.636 VHL 6.053 DLA 27.49 RAL 43.99 RAD 6568.4 VEL 12.570 PTH 2.28 VHP 10.618 OPA LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 284.47 -23.21 70.24 3 27 21 2890.9 130.32 90.00 2 29 10 3490.86 -20.71 1 33 58 3281.5 -13.55 147.09 279.75 63.39 0 29 16 3881.51 -10.06 154.02 72.63 5 22 29 60.72 2 12 46 76.71 7 23 18 55.82 2 21 19 285.93 2498.6 -26.86 94.77 102.92 4 30 51 3098.61 -24.72 3149.0 -10.17 134.63 277.75 100.00 1 10 17 3748.99 -6.32 142.29 288.13 6 38 18 2699.74 1 19 19 3720.63 2099.7 -33.29 65.92 -31.79 74.83 110.00 3120.6 -4.57 130.08 -.08 273.89 136.29 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS RRT .4148 RRF .3885 RTF .9241 SGB 5357.2 R23 .DD35 R13 .9241 SGB 5343.0 SG2 388.8 THA 1.91 ST 2289.4 SR 426.6 SS 454.9 CRT .8788 CRS -.7847 CST -.9849 TOE 2.1012 TRA 3.5282 TC3-2.6621 BAU 1.3039 ROE .4506 RRA .0276 RC3 .0032 FAU .01102 FOE .4043 FRA .9846 FC3 -.2605 BSP 17476 BOE 2.1490 BRA 3.5283 BC3 2.6621 FSP -337 LSA 2362.8 MSA 217.0 SSA 14.9 EL1 2320.1 EL2 200.9 ALF 9.37 ARRIVAL DATE JUL 16 1966 FLIGHT TIME 194.00 DISTANCE 570.650 HELIOCENTRIC CONIC .00 LOL 102.17 VL 25.787 GAL 9.06 AZL 87.68 HCA 296.55 SMA 116.47 ECC .30371 INC 2.3189 V1 30.287
-2.07 LOP 38.74 VP 36.235 GAP 17.22 AZP 88.96 TAL 157.82 TAP 94.37 RCA 81.10 APO 151.84 V2 35.014
9.26 GP -5.19 ZAL 50.63 ZAP 174.37 ETS 249.80 ZAE 133.36 ETE 185.51 ZAC 131.07 ETC 168.26 CLP 177.82 RL 147.10 LAL PLANETOCENTRIC CONIC 6.82 RAP 36.88 ECC 1.6752 2.32 VHP 11.019 OPA C3 41.024 VHL 6.405 DLA 27.24 RAL 47.09 RAD 6568.6 VEL 12.743 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -23.21 3 48 14 2891.3 289.73 70.23 130.35 2 50 3 3491.26 -20.70 90.00 0 33 4 3938.28 4 48 17 3110.09 1 17 30 3794.68 6 53 32 2718.13 1 28 44 3759.41 1 38 42 3338.3 -11.89 150.43 284.19 62.83 -8.31 157.28 90.00 72.29 5 40 7 60.46 2 20 45 75.96 7 38 51 2510.1 -26.67 95.57 291.12 282.28 -24.48 103.69 100.00 3194.7 -8.69 134.21 100.00 -4.79 144.83 293.38 2118.1 -33.10 67.32 -31.49 76.18 110.00 55.84 2 31 24 3159.4 -3.09 132.11 110.00 1.40 278.44 138.31 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5331.5 SGR 422.5 SG3 98.4 RRT .4340 RRF .4088 RTF .9306 ST 2219.9 SR 420.1 SS 448.1 CRT .8592 CRS -.7649 CST -.9863 TOE 2.0882 TRA 3.9624 TC3-2.3473 BAU 1.2874 RDE .4694 RRA .0469 RC3 -.0013 FAU .01001 FDE .3908 FRA 1.0437 FC3 -.2111 BSP 17515 BDE 2.1403 BRA 3.9627 BC3 2.3473 FSP -331 SGB 5348.2 R23 .0033 R13 .9306 SG1 5334.6 SG2 380.4 THA 1.98 LSA 2292.1 MSA 226.0 SSA 14.0 ELI 2249.3 EL2 212.2 ALF 9.32 ARRIVAL DATE JUL 18 1966 FLIGHT TIME 196.00 LAUNCH DATE JAN 3 1966 DISTANCE 575.292 RL 147.10 LAL .00 LOL 102.17 VL 25.743 GAL 10.15 AZL 87.79 HCA 299.75 SHA 116.24 ECC .31525 INC 2.2127 VI 30.287 RP 108.19 LAP -1.92 LOP 41.94 VP 36.216 GAP 17.96 AZP 88.90 TAL 156.15 TAP 95.90 RCA 79.59 APO 152.88 V2 35.027 RC 210.800 GL 8.27 GP -5.11 TAL 48.11 ZAP 174.09 ETS 242.60 ZAE 133.40 ETE 185.46 ZAC 133.39 ETC 167.95 CLP 177.04 PLANETOCENTRIC CONIC C3 46.237 VHL 6.800 0LA 26.93 RAL 49.98 RAD 6568.7 VEL 12.946 PTH 2.36 VHP 11.464 0PA 7.76 RAP 39.13 ECC 1.7609 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 10 47 3490.94 -20.71 130.33 294.91 70.24 4 8 58 2890.9 -23.21 122.55 90.00 0 35 26 3998.83 -6.41 160.71 288.48 62.36 1 42 5 3398.8 -10.06 153.94 100.00 5 5 46 3120.26 -24.27 104.37 296.23 71.99 5 57 46 2520.3 -26.50 96.28 100.00 1 23 8 3844.74 -3.11 147.59 286.66 60.25 2 27 13 3244.7 -7.04 141.01 110.00 7 8 34 2735.96 -31.19 77.48 298.52 75.24 7 54 10 2136.0 -32.90 68.68 110.00 1 36 49 3801.79 3.02 140.53 282.85 55.93 2 40 11 3201.8 -1.47 134.32 C3 46.237 VHL 6.800 OLA 26.93 RAL 49.98 RAD 6568.7 VEL 12.946 PTH 2.36 VHP 11.464 DPA HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5318.8 SGR 416.3 SG3 96.6 RRT .4528 RRF .4290 RTF .9371 SGB 5335.0 R23 .0029 R13 .9372 SGI 5322.1 SG2 370.9 THA 2.04 ST 2151.0 SR 411.7 SS 443.1 CRT .8377 CRS -.7443 CST -.9878 TOE 2.0711 TRA 4.4255 TC3-2.0470 BAU 1.2654 ROE .4881 RRA .0680 RC3 -.0043 FAU .00900 FOE .3781 FRA 1.1072 FC3 -.1685 RSP 17540 LSA 2222.1 MSA 233.8 SSA 13.2 EL1 2178.8 EL2 222.0 ALF 9.21 .3781 FRA 1.1072 FC3 -.1685 BSP 17540 BOE 2.1278 BRA 4.4260 BC3 2.0470 FSP -326 ARRIVAL DATE JUL 20 1966 LAUNCH DATE JAN 3 1966 FLIGHT TIME 198.00 DISTANCE 579.744 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 102.17 VL 25.699 GAL 11.33 AZL 87.90 HCA 302.96 SMA 116.01 ECC .32810 INC 2.0993 V1 30.287 RP 108.15 LAP -1.76 LOP 45.14 VP 36.198 GAP 18.77 AZP 88.86 TAL 154.54 TAP 97.50 RCA 77.95 APO 154.07 V2 35.040 RC 212.427 GL 7.32 GP -5.05 ZAL 45.77 ZAP 173.70 ETS 235.98 ZAE 133.41 ETE 185.41 ZAC 135.68 ETC 167.57 CLP 176.23 PLANETOCENTRIC CONIC C3 52.441 VHL 7.242 OLA 26.57 RAL 52.68 RAD 6568.9 VEL 13.183 PTH 2.41 VHP 11.957 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 29 6 2891.1 -23.21 122.56 299.97 70.24 -20.70 3 30 55 3491.07 0 36 49 4061.54 130.33 90.00 1 44 30 157.53 62.00 3461.5 -8.13 164.24 292.61 90.00 -4.42 6 15 8 2 32 25 96.95 71.71 2529.8 -26.34 301.22 100.00 5 22 58 3129.83 -24.07 105.01 3298.0 143.97 60.13 -5.27 100.00 1 27 27 3898.02 -1.30 150.51 290.89 8 9 8 2 47 47 2153.5 70.00 74.55 -32.69 110.00 - 30 .88 78.76 303.55 7 23 15 2753.49 3247.1 136.69 142.90 287.13 56.11 .26 4.74 110.00 1 43 39 3847.12 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5303.2 SGR 409.0 SG3 94.8 ST 2086.9 SR 401.7 SS 440.8 RRT .4718 RRF .4496 RTF .9436 CRT .8150 CRS -.7239 CST -.9894 SGB 5319.0 R23 .0026 R13 .9437 L5A 2157.1 MSA 240.0 SSA 12.5 SG1 5306.8 SGZ 360.4 THA 2.09 EL1 2112.7 EL2 229.9 ALF 9.02 TOE 2.0542 TRA 4.9238 TC3-1.7615 BAU 1.2350 RDE .5068 RRA .0908 RC3 -.0059 FAU .00795 FDE .3674 FRA 1.1766 FC3 -.1312 BSP 17477 BOE 2.1158 BRA 4.9247 BC3 1.7615 FSP -318

FLIGHT TIME 192.00

```
FLIGHT TIME 200.00
                                                                                                                                  ARRIVAL CATE JUL 22 1966
LAUNCH DATE JAN 3 1966
                                                                        DISTANCE 583.962
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 102.17 VL 25.657 GAL 12.61 A7L 88.02 MCA 306.16 SMA 115.79 ECC .34246 INC 1.9773 V1 30.287 RP 108.11 LAP -1.60 LOP 48.35 VP 36.181 GAP 19.68 A7P 88.83 TAL 153.01 TAP 99.17 RCA 76.14 APO 155.44 V2 35.053 RC 214.027 GL 6.41 GP -4.99 ZAL 43.59 ZAP 173.21 ETS 230.00 ZAE 133.38 ETE 185.36 ZAC 137.93 ETC 167.12 CLP 175.39
   PLANETOCENTRIC CONIC
    C3 59.848 VHL 7.736 CLA 26.18 RAL 55.17 RAC 6569.1 VEL 13.461 PTH 2.46 VHP 12.506 CPA
                                                                                                                               9.53 RAP 43.58 ECC 1.9849
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                         2892.2
                                                                              304.88
                                                                                              70.21
                                                                                                          4 48 24
        90.00
                    3 50 12 3492.22
                                                  -20.68
                                                                130.41
                                                                                                                                        -23.19
                                                                                                                                                       122.64
                   0 37 26 4125.37
5 39 41 3139.27
1 30 38 3953.55
7 37 26 2770.85
1 49 22 3894.74
                                                                167.82
                                                                                                           1 46 11
        90.00
                                                   -2.37
                                                                               296.61
                                                                                                61.77
                                                                                                                           3525.4
                                                                                                                                           -6.13
                                                                                                                                                         161.15
                                                                               306.08
                                                                                                           6 32 0
                                                                                                                                          -26.18
                                                                                                                                                          97.60
       100.00
                                                  -23.86
                                                                105.64
                                                                                                71.44
                                                                                                                           2539.3
                                                                                                         2 36 31
8 23 37
                                                     .58
                                                                               294.97
                                                                                                60.11
                                                                                                                           3353.6
                                                                                                                                           -3.40
                                                                                                                                                        147.03
      100.00
                                                                153.56
                                                  -30.56
                                                                                                                           2170.8
                                                                                                                                                         71.31
                                                                               308.43
                                                                                                73.88
                                                                                                                                         -32.46
      110.00
                                                                 80.01
                                                                                                56.37
                                                                                                           2 54 17
                                                                                                                                            2.08
                    1 49 22
                                 3894.74
                                                   6.54
                                                                              291.27
                                                                                                                           3294.7
                                                                                                                                                        139.17
      110.00
                                                                145.41
                                                                   MIC-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 5282.3 SGR 400.4 SG3 93.1
RRT .4899 RRF .4692 RTF .9501
    TOE 2.0324 TRA 5.4545 TC3-1.4982 BAU 1.1987
                                                                                                                      5T 2023.4 SR 389.9 55 440.0
CRT .7907 CRS -.7029 CST -.9909
   RCE .5251 RRA .1150 RC3 -.0066 FAU .00693
FCE .3569 FRA 1.2511 FC3 -.1002 BSP 17492
BCE 2.0991 BRA 5.4557 BC3 1.4982 FSP -313
                                                                    SGB 5297.4 R23 .0020 R13 .9501
SG1 5286.0 SG2 348.8 THA 2.14
                                                                                                                       LSA 2092.8 MSA 244.6 SSA 11.8
EL1 2047.1 EL2 236.0 ALF 8.78
LAUNCH DATE JAN 3 1966
                                                                        FLIGHT TIME 202.00
                                                                                                                                  ARRIVAL CATE JUL 24 1966
                                                                       DISTANCE 587.894
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 25.616 GAL 14.00 AZL 88.16 HCA 309.37 SMA 115.58 ECC .35855 INC 1.8448 VI 30.287 RP 108.07 LAP -1.43 LOP 51.56 VP 36.164 GAP 20.69 AZP 88.83 TAL 151.56 TAP 100.93 RCA 74.14 APO 157.02 VZ 35.067 RC 215.599 GL 5.54 GP -4.93 ZAL 41.60 ZAP 172.62 ETS 224.68 ZAE 133.31 ETE 185.30 ZAC 140.14 ETC 166.59 CLP 174.50
  PLANETOCENTRIC CONIC
   C3 68.729 VHL 8.290 DLA 25.75 RAL 57.46 RAD 6569.3 VEL 13.787 PTH 2.52 VHP 13.122 DPA 10.35 RAP 45.78 ECC 2.1311 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -23.14
                                                                              309.62
                    4 8 29 3494.56
0 37 24 4189.61
        90.00
                                                  -20.62
                                                                130.56
                                                                                               70.15
                                                                                                           5 6 44
                                                                                                                          2894.6
                                                                                                                                                        122.79
                                                                                                           1 47 14
                                  4189.61
                                                    - 30
                                                                171.40
                                                                               300.45
                                                                                                61.68
                                                                                                                           3589.6
                                                                                                                                           -4.08
                                                                                                         6 48 12
2 39 42
8 37 29
                   5 55 43 3148.84
1 32 51 4010.55
      100.00
                                                  -23.65
                                                                106.27
                                                                               310.77
                                                                                                71.17
                                                                                                                           2548.8
                                                                                                                                          -26.01
                                                                                                                                                          98.26
                                                   2.51
                                                                156.69
                                                                              298.89
                                                                                                                           3410.6
                                                                                                                                           -1.47
                    7 51 1 2788.11
1 54 3 3944.05
      110.00
                                                  -30.22
                                                                 81.24
                                                                              313.14
                                                                                                73.21
                                                                                                                           2188.1
                                                                                                                                         -32.22
                                                                                                                                                          72.60
      110.00
                                                   8.40
                                                                148.03
                                                                              295.27
                                                                                                           2 59 47
                                                                                                                           3344.1
                                                                                                                                            3.96
  DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 5257.6 SGR 390.6 SG3 91.4

RRT .5076 RRF .4886 RTF .9563

SGB 5272.1 R23 .0014 R13 .9563

SGI 5261.3 SG2 336.3 THA 2.17
   TOE 2.0109 TRA 6.0264 TC3-1.2545 BAU 1.1527
                                                                                                                       57 1964.6 SR 576.7 55 441.9
    ROE .5430 RRA .1406 RC3 -.0064 FAU .00586
                                                                                                                       CRT .7655 CRS -.6821 CST -.9924
                                                                                                                       LSA 2033.7 MSA 247.1 SSA 11.1
          .3478 FRA 1.3327 FC3 -.0738 BSP 17491
    BOE 2.0829 BRA 6.0281 BC3 1.2546 JP -308
                                                                                                                       EL1 1986.0 EL2 239.8 ALF 8.47
LAUNCH DATE JAN 3 1966
                                                                       FLIGHT TIME 204.00
                                                                                                                                 ARRIVAL CATE JUL 26 1966
                                                                       CISTANCE 591.470
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 102.17 VL 25.577 GAL 15.53 AZL 88.30 MCA 312.58 SMA 115.38 ECC .37664 INC 1.6994 VI 30.287 RP 108.03 LAP -1.25 LOP 54.77 VP 36.149 GAP 21.84 AZP 88.85 TAL 150.22 TAP 102.81 RCA 71.92 APO 158.83 V2 35.080 RC 217.144 GL 4.70 GP -4.87 ZAL 39.78 ZAP 171.93 ETS 219.98 ZAE 133.19 ETE 185.24 ZAC 142.29 ETC 165.98 CLP 173.56
  PLANETOCENTRIC CONTC
    C3 79.434 VHL 8.913 CLA 25.30 RAL 59.54 RAD 6569.6 VEL 14.170 PTH 2.58 VHP 13.814 CPA 11.14 RAP 47.94 ECC 2.3073
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 25 42 3498.03
0 36 48 4253.74
                                                                              314.17
                                                                                               70.07
                                                                                                          5 24 0
                                                                                                                         2898.0
                                                                                                                                        -23.07
                                                               130.78
       90.00
                                                 -20.54
                                                                                               61.73
                                                                                                                           3653.7
                                                                174.98
                                                                              304.15
                                                   1.77
        90.00
                                                                                                        7 3 37 2 42 1
                    6 10 58 3158.64
1 34 13 4068.35
                                                                              315.28
                                                                                               70.90
                                                                                                                          2558.6
                                                                                                                                         -25.83
                                                 -23.44
                                                                106.92
      100.00
                                                               159.87
                                                                              302.66
                                                                                               60.41
                                                                                                                          3468.4
      100.00
                                                   4.46
                                                                                               72.57 8 50 40
57.22 3 4 20
                                                                                                                          2205.2
                                                                                                                                         -31.97
                                 2805.24
                                                 -29.88
                                                                 82.46
                                                                              317.66
      110.00
                    8 3 55
                    1 57 45
                                                               150.74
                                                                              299.12
                                                                                                                           3394.5
      110.00
                                 3994.52
                                                 10.27
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ORBIT CETERMINATION ACCURACY
                                                                   SCT 5228.8 SGR 379.7 SG3 89.8
RRT .5248 RRF .5076 RTF .9623
SGB 5242.6 R23 .0008 R13 .9623
SGI 5232.6 SG2 323.0 THA 2.19
   TOE 1.9915 TRA 6.6449 TC3-1.0309 BAU 1.0948
                                                                                                                       ST 1910.8 SR 362.1 SS 446.6
   RDE .5606 RRA .1675 RC3 -.0054 FAU .00472
FDE .3405 FRA 1.4225 FC3 -.0514 BSP 17469
                                                                                                                       CRT .7399 CRS -.6622 CST -.9938
                                                                                                                      LSA 1980.0 MSA 247.4 SSA 10.5
EL1 1929.8 EL2 241.2 ALF 8.11
    BOF 2.0689 BRA 6.6470 BC3 1.0309 FSP -303
                                                                       FLIGHT TIME 206.00
                                                                                                                                 ARRIVAL CATE JUL 28 1966
LAUNCH DATE JAN 3 1966
  HELIOCENTRIC CONIC
                                                                       DISTANCE 594.600
                       .00 LOL 102.17 VL 25.539 GAL 17.22 AZL 88.46 HCA 315.80 SMA 115.18 ECC .39705 INC 1.5381 V1 30.287 -1.07 LOP 57.98 VP 36.135 GAP 23.13 AZP 88.90 TAL 149.02 TAP 104.82 RCA 69.45 APO 160.92 V2 35.092 3.91 GP -4.82 ZAL 38.14 ZAP 171.14 ETS 215.84 ZAE 133.00 ETE 185.17 ZAC 144.38 ETC 165.28 CLP 172.5
   RL 147.10 LAL
   RP 107.99 LAP
   RC 218.662 GL
  PLANETOCENTRIC CONIC
   C3 92.421 VHL 9.614 DLA 24.82 RAL 61.41 RAD 6569.8 VEL 14.621 PTH 2.65 VHP 14.598 DPA 11.88 RAP 50.06 ECC 2.5210
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 41 46 3502.44 -20.44 131.06 318.50 69.96 5 40 9 2902.4 -22.98 123.32
                                                                                                                                            .03
                                                                              307.68
                                                                                               61.92
                                                                                                          1 47 35
                                                                                                                           3717.3
                                                                                                                                                        171.90
       90.00
                   0 35 38
                                 4317.31
                                                   3.82
                                                                178.53
                                                                                                         7 18 8
                                                                                                                                         -25.64
                                                                                                                                                         99.62
                                                                                               70.62
                                                                                                                           2568.6
      100.00
                   6 25 19 3168.58
                                                  -23.21
                                                               107.57
                                                                              319.58
                                                                                               60.74
                                                                                                          2 43 33
                                                                                                                           3526.4
      100.00
                    1 34 46 4126,40
                                                    6.40
                                                               163.09
                                                                              306.26
                                                                                                                                          2.46
                                                                                                                                                        156.52
                    8 16 3 2822.13
                                                 -29.53
                                                                 83.65
                                                                              321.96
                                                                                               71.94
                                                                                                          9 3 5
                                                                                                                           2222.1
                                                                                                                                         -31.71
                                                                                                                                                         75.12
      110.00
                    2 0 31
                                 4045.62
                                                  12.14
                                                                153.52
                                                                              302.80
                                                                                               57.80
                                                                                                          3 7 57
                                                                                                                           3445.6
                                                                                                                                           7.80
                                                                                                                                                        147.11
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
    TOE 1.9789 TRA 7.3197 TC3 -.8260 BAU 1.0206
                                                                   SGT 5197.7 SGR 367.6 SG3 88.3
RRT .5417 RRF .5264 RTF .9680
                                                                                                                       ST 1863.5 SR 346.5 SS 454.8
CRT .7150 CRS -.6438 CST -.9950
    RDE .5779 RRA .1954 RC3 -.0039 FAU .00343
                                                                   SGB 5210.7 R23 .0002 R13 .9680
   FDE .3356 FRA 1.5227 FC3 -.0321 BSP 17364
                                                                                                                      LSA 1933.7 MSA 245.4 SSA 9.9
```

SG1 5201.6 SG2 308.8 THA 2.20

ELI 1880.72 ELZ 240.1 ALF 7.70

BOE 2.0616 BRA 7.3223 BC3 .8260 FSP -296

```
ARRIVAL DATE JUL 30 1966
                                                                     FLIGHT TIME 208.00
LAUNCH DATE JAN 3 1966
                       .00 LOL 102.17 VL 25.504 GAL 19.09 AZL 88.64 MCA 319.01 SMA 115.00 ECC .42016 INC 1.3568 V1 30.287
-.89 LOP 61.19 VP 36.122 GAP 24.61 AZP 88.98 TAL 147.97 TAP 106.99 RCA 66.68 APO 163.32 V2 35.105
3.14 GP -4.78 ZAL 36.70 ZAP 170.23 ETS 212.17 ZAE 132.73 ETE 185.10 ZAC 146.39 ETC 164.48 CLP 171.47
                                                                     DISTANCE 597.165
  HELIOCENTRIC CONIC
   RL 147.10 LAL
RP 107.95 LAP
    RC 220.152 GL
   PLANETOCENTRIC CONIC
                                                                                              2.72 VHP 15.491 OPA 12.57 RAP 52.12 ECC 2.7822
    C3 108.294 VHL 10.406 DLA 24.33 RAL 63.06 RAD 6570.1 VEL 15.154 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2907.5
                                                                                                      5 55 8
                   4 56 41 3507.46
0 33 53 4380.01
                                                                                            69.85
                                                 -20.32
                                                              131.39
                                                                           322.59
       90.00
                                                                                                                        3780.0
                                                                                                                                       2.06
                                                                                                                                                    175.39
                                                                                                        1 46 53
                                                                                             62.24
                                                              182.05
                                                                            311.02
                                                  5.82
        90.00
                                                                                                      7 31 41
                                                                                                                                      -25.46
                                                                                                                                                    100.29
                                                                                                                        2578.5
                    6 38 43 3178.50
1 34 32 4184.20
                                                                                             70.35
                                                -22.99
                                                              108.22
                                                                            323.63
      100.00
                                                                                                      2 44 16
9 14 40
                                                                                                                        3584.2
                                                                                                                                       4.41
                                                                                                                                                    159.71
                                                                            309.66
                                                                                             61.18
                                                  8.32
                                                             166.31
      100.00
                    1 34 32
                                                                                                                                      -31.44
                                                                                                                                                     76.32
                                                                                                                       2238.6
                                                                84.80
                                                -29.18
                                                                            326.02
                                                                                             71.35
                    8 27 22 2838.59
      110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                        3496.9
                                                                                                                                        9.71
                                                                                                                                                    149.85
                                                              156.34
                                                13.98
                    2 2 22
                                4096.88
      110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                 SGT 5160.8 SGR 354.2 SG3 86.8
RRT .5574 RRF .5439 RTF .9733
                                                                                                                   ST 1818.6 SR 329.9 SS 465.8
CRT .6903 CRS -.6261 CST -.9962
    TDE 1.9689 TRA 8.0518 TC3 -.6422 BAU .9298
    ROE .5946 RRA .2239 RC3 -.0021 FAU .00200
FOE .3321 FRA 1.6335 FC3 -.0160 BSP 17331
                                                                  SGB 5172.9 R23 -.0004 R13 .9733
SGI 5164.6 SGZ 293.9 THA 2.20
                                                                                                                    LSA 1890.7 MSA 241.2 55A 9.2
                                                                                                                    ELI 1833.0 EL2 236.8 ALF 7.26
    BDE 2.0567 BRA 8.0550 BC3 .6422 FSP -292
                                                                                                                               ARRIVAL DATE AUG 1 1966
                                                                      FLIGHT TIME 210.00
LAUNCH DATE JAN 3 1966
                                                                     01STANCE 599.007
   HELIOCENTRIC CONIC
                        .00 LOL 102.17 VL 25.470 GAL 21.19 A7L 88.85 HCA 322.23 SMA 114.83 ECC .44644 INC 1.1503 V1 30.287 -.70 LOP 64.41 VP 36.110 GAP 26.31 A7P 89.09 TAL 147.12 TAP 109.36 RCA 63.57 APO 166.10 V2 35.117 2.42 GP -4.73 ZAL 35.47 ZAP 169.21 ETS 208.91 ZAE 132.36 ETE 185.01 ZAC 148.30 ETC 163.58 CLP 170.29
    RL 147.10 LAL
    RP 107.91 LAP
    RC 221.615 GL
   PLANETOCENTRIC CONIC
    C3 127.858 VHL 11.307 DLA 23.83 RAL 64.48 RAD 6570.4 VEL 15.786 PTH 2.80 VHP 16.513 DPA 13.21 RAP 54.1D ECC 3.1D42 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                       6 8 57
                                                                                                                       2912.7
                                                                                                                                     -22.78
                    5 10 24 3512.72
0 31 28 4441.50
                                                                            326.38
                                                                                             69.72
                                                 -20.20
                                                              131.72
        90.00
                                                                                                        1 45 30
                                                                                                                                                     178.83
                                                                                                                        3841.5
                                                                                                                                        4.03
                                                                                             62.68
                                                   7.75
                                                               185.54
                                                                             314.15
        90.00
                    0 31 28
                                                                                                      7 44 13 2 44 10
                                                                                                        7 44 13
                                                                                                                        2588.1
                                                                                                                                       -25.27
                                                                                                                                                     100.95
                   6 51 5 3188.11
1 33 28 4241.35
                                                                                             70.09
                                                 -22.77
                                                               108.85
                                                                             327.39
       100.00
                                                                                             61.74
                                                                                                                        3641.3
                                                                                                                                        6.32
                                                                                                                                                     162.87
                                                              169.54
                                                                             312.86
                                                 10.17
       100.00
                                                                                                      9 25 20
3 12 25
                                                                                             70.78
                                                                                                                        2254.4
                                                                                                                                       -31.17
                                                                                                                                                      77.47
                    8 37 46 2854.36
2 3 17 4147.86
                                                 -28.83
                                                                85.89
                                                                             329.79
       110.00
                                                                                                                        3547.9
                                                                                                                                      11.58
                                                                                                                                                     152.61
                                                                                             59.27
       110.00
                                                 15.77
                                                               159.21
                                                                             309.61
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5119.9 SGR 339.7 SG3 85.4

RRT .5721 RRF .5605 RTF .9762

SGB 5131.2 R23 -.0010 R13 .9782

SG1 5123.6 SG2 278.4 THA 2.18
                                                                                                                    ST 1777.7 SR 312.4 SS 480.6
CRT .6670 CRS -.6100 CST -.9971
     TOE 1.9679 TRA 8.8543 TC3 -.4772 BAU .8158
    ROE .6109 RRA .2525 RC3 -.0002 FAU .00033
                                                                                                                    LSA 1853.0 MSA 234.8 SSA
                                                                                                                                                         8.6
     FOE .3311 FRA 1.7579 FC3 -.0022 BSP 17279
                                                                                                                    EL1 1790.1 EL2 231.1 ALF
                                                                                                                                                         6.80
     BOE 2.0605 BRA 8.8579 BC3 .4772 FSP -287
                                                                                                                              ARRIVAL DATE AUG 3 1966
                                                                      FLIGHT TIME 212.00
LAUNCH DATE JAN 3 1966
    RL 147.10 LAL .00 LOL 102.17 VL 25.439 GAL 23.56 A7L 89.09 MCA 325.45 SMA 114.68 ECC .47641 INC .9114 VI 30.287 RP 107.87 LAP -.52 LOP 67.62 VP 36.100 GAP 28.26 A7P 89.25 TAL 146.52 TAP 111.97 RCA 60.04 APO 169.51 V2 35.130 RC 223.050 GL 1.72 GP -4.68 TAL 34.47 ZAP 168.05 ETS 205.99 ZAE 131.87 ETE 184.91 ZAC 150.08 ETC 162.60 CLP 169.00
                                                                      DISTANCE 599.917
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 152.202 VHL 12.337 DLA 23.30 RAL 65.65 RAD 6570.7 VEL 16.539 PTH 2.88 VHP 17.691 DPA 13.80 RAP 55.98 ECC 3.5049
                                               INJ LAT INJ LONG INJ RT ASC INJ ATHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                      6 21 32
1 43 20
                                                                                                                                                    124.33
                                                                                                                       2917.8
                                                                                                                                     -22.68
                                                                           329.86
                                                                                             69.60
                   5 22 54 3517.76
0 28 19 4501.52
                                                 -20.08
                                                              132.04
        90.00
                                                                                                                        3901.5
                                                                                                                                        5.94
                                                                                                                                                     182.21
                                                   9.61
                                                               188.97
                                                                             317.04
                                                                                             63.24
        90.00
                                                                                                      7 55 39
2 43 10
                                                                                                                                       -25.10
                                                                                                                                                     101.55
                                                                                                                        2597.1
                                                                                             69.85
                    7 2 22 3197.06
                                                 -22.56
                                                               109.43
                                                                             330.84
       100.00
                                                                                                                                        8.18
                                                                                                                                                    166.00
                                                                                                                        3697.5
                                                               172.74
                                                                             315.81
                                                                                             62.40
                                                 11.96
                    1 31 32
                                 4297.46
                                                                                                       9 35 0
       100.00
                                                                                                                                       -30.91
                                                                                                                                                      78.55
                                                                                                                        2269.1
                                                                                              70.27
                                                                             333.23
                     8 47 11 2869.11
2 3 12 4198.17
                                                 -28.49
                                                                86.91
       110.00
                                                                                                                                      13.40
                                                                                                                                                     155.37
                                                                                             60.16
                                                                                                        3 13 10
                                                                                                                        3598.2
                                                               162.08
                                                                             312.68
                                                 17.50
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5074.4 SGR 323.9 SG3 84.0
RRT .5854 RRF .5755 RTF .9825
SGB 5084.7 R23 -.0016 R13 .9825
                                                                                                                    ST 1740.0 SR 294.3 SS 499.7
CRT .6455 CRS -.5958 CST -.9978
     TOE 1.9795 TRA 9.7364 TC3 -.3302 BAU .6718
    RDE .6269 RRA .2804 RC3 .0018 FAU-.00169
FDE .3332 FRA 1.8981 FC3 .0096 BSP 17210
BDE 2.0764 BRA 9.7405 BC3 .3302 FSP -283
                                                                                                                     LSA 1820.0 MSA 226.5 SSA
                                                                                                                                                         8.1
                                                                   SG1 5078.0 SG2 262.4 THA 2.15
                                                                                                                     EL1 1750.5 EL2 223.4 ALF
                                                                                                                                                         6.33
                                                                                                                                ARRIVAL DATE AUG 5 1961
                                                                       FLIGHT TIME 214.00
 LAUNCH DATE JAN 3 1966
                                                                       DISTANCE 599.613
                         .00 LOL 102.17 VL 25.412 GAL 26.26 AZL 89.37 HCA 328.67 SMA 114.54 ECC .51069 INC .6298 V1 30.287
-.33 LOP 70.84 VP 36.092 GAP 30.54 AZP 89.46 TAL 146.21 TAP 114.88 RCA 56.04 APO 173.03 V2 35.141
1.06 GP -4.64 ZAL 33.71 ZAP 166.73 ETS 203.35 ZAE 131.24 ETE 184.79 ZAC 151.72 ETC 161.55 CLP 167.55
   HELIOCENTRIC CONIC
     RL 147.10 LAL
RP 107.84 LAP
     RC 224.456 GL
    PLANE TOCENTRIC CONIC
     C3 182.808 VHL 13.521 DLA 22.77 RAL 66.55 RAO 6571.0 VEL 17.439 PTH 2.96 VHP 19.057 DPA 14.33 RAP 57.73 ECC 4.0086
     ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         6 32 48
                                                                                                                        2922.1
                                                                            332.96
                                                                                              69.50
                                 3522.09
                                                  -19.98
                                                               132.32
                     5 34 6
        90.00
                                                                                                                                                      185.51
                                                                                                          1 40 17
                                                                                                                         3959.8
                                                                                                                                         7.78
                                                                                              63.89
                                                                              319.65
                     0 24 17
                                 4559.82
                                                  11.38
                                                               192.34
         90.00
                                                                                                                                                      102.09
                                                                                                          8 5 53
                                                                                                                         2604.9
                                                                                                                                        -24.94
                                                                             333.92
                                                                                              69.64
                                 3204.93
                                                  -22.37
                                                                109.94
                     7 12 28
        100.00
                                                                                                                                                      169.09
                                                                                                         2 41 8
                                                                                                                         3752.2
                                                                                                                                          9.96
                                                                                              63.16
                                                                              318.48
                    1 28 36 4352.22
                                                  13.67
                                                                175.91
        100.00
                                                                                                                                                       79.51
                                                                                                                                        -30.67
                                                                                              69.80
                                                                                                          9 43 34
                                                                                                                         2282.5
                     8 55 32 2882.49
2 2 2 4247.42
                                                                             336.29
                     8 55 32
                                                  -28.18
                                                                87.83
        110.00
                                                                                              61.13
                                                                                                         3 12 49
                                                                                                                         3647.4
                                                                                                                                        15.15
                                                                                                                                                      158.12
                                                                164.95
                                                                              315.46
                                                  19.15
        110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
     IFFERENTIAL CORRECTIONS
                                                                                                                     ST 1705.3 SR 275.7 55 523.9
CRT .6268 CRS -.5841 CST -.9984
                                                                   SGT 5025.4 SGR 306.9 SG3 82.8
RRT .5971 RRF .5886 RTF .9863
     TOE 2.0116 TRAID.7121 TC3 -.1996 BAU .4878
     RDE .6429 RRA .3068 RC3 .0037 FAU-.00424
FOE .3599 FRA 2.0578 FC3 .0201 BSP 17043
BOE 2.1118 BRA10.7165 BC3 .1996 FSP -277
                                                                                                                     LSA 1792.2 MSA 216.3 SSA 7.5
                                                                   5GB 5D34.7 R23 -. 0021 R13 .9863
                                                                                                                      EL1 1714.2 EL2 213.7 ALF 5.88
                                                                  5G1 5028.7 SG2 246.0 THA 2.09
```

DIFFERENTIAL CORRECTIONS

TOE -.0617 TRA -.9763 TC3 -.1389 BAU .1585 ROE - .5622 RRA .2220 RC3 .0740 FAU .10741 FOE .1263 FRA-1.4540 FC3-1.2347 83P 1556 BOE .5656 BRA 1.0012 BC3 .1574 F3P -609 ORBIT DETERMINATION ACCURACY

ST 202.4 SR 373.9 SS 127.6 CRT .0815 CRS .3799 CST -.8757 LSA 377.5 MSA 232.8 SSA 18.4 EL1 374.4 EL2 201.4 ALF 86.45

```
LAUNCH DATE JAN 3 1966
                                                                             FLIGHT TIME 216.00
                                                                                                                                        ARRIVAL CATE AUG 7 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 597.713
     RL 147.10 LAL
RP 107.80 LAP
                          .00 LOL 102.17 VL 25.388 GAL 29.37 AZL 89.71 MCA 331.90 SMA 114.42 ECC .54997 INC .2900 V1 30.287 -.14 LOP 74.07 VP 36.087 GAP 33.22 AZP 89.74 TAL 146.28 TAP 118.17 RCA 51.49 APO 177.35 V2 35.153 .43 GP -4.58 ZAL 33.25 ZAP 165.21 ETS 200.96 ZAE 130.42 ETE 184.65 ZAC 153.18 ETC 160.46 CLP 165.92
     RC 225.834 GL
    PLANETOCENTRIC CONIC
     C3 221.711 VHL 14.890 DLA 22.22 RAL 67.14 RAD 6571.3 VEL 18.521 PTH 3.05 VHP 20.654 DPA 14.80 RAP 59.30 ECC 4.6488 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                6 42 42
1 36 7
        90.00
                     5 43 56 3525.16
D 19 11 4616.22
                                                     -19.90
                                                                                    335.64
                                                                    132.51
                                                                                                     69.43
         90.00
                                                                                    321.91
                                                     13.05
                                                                    195.64
                                                                                                      64.64
                     7 21 18 3211.26
1 24 31 4405.35
                                                                                                                8 14 49
2 37 57
       100.00
                                                     -22.22
                                                                    110.35
                                                                                    336.57
                                                                                                      69.48
       100.00
                                                                                    320.80
                                                     15.28
                                                                    179.04
                                                                                                      63.99
                                                                       59.41 9 5D 55

59.41 9 5D 55

62.17 3 11 12

MID-COURSE EXECUTION ACCURACY

SGT 4968.8 SGR 288.6 4/2
       110.00
                     9 2 41 2894.05
1 59 37 4295.32
                                                     -27.91
                                                                      88.61
       110.00
                                                     20.70
                                                                   167.81
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4968.8 SGR 288.6 SG3 81.6

RRT ..6056 RRF ..985 RTF ..9896

SGB 4977.1 R23 -.0026 R13 ..9896

SGI 4971.9 SG2 229.5 THA 2.02
     TOE 2.0632 TRAI1.7843 TC3 -.0861 BAU .2558
     RDE .6587 RRA .3297 RC3 .DD53 FAU-.DD745
FDE .3507 FRA 2.2389 FC3 .D291 BSP 16946
     BOE 2.1658 BRA11.7889 BC3 .0863 FSP
                                                           -274
LAUNCH DATE JAN 3 1966
                                                                            FLIGHT TIME 218.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 593.709
                           .00 LOL 102.17 VL 25.370 GAL 32.97 AZL 90.13 MCA 335.12 SMA 114.33 ECC .59496 INC .1267 VI 30.287 .05 LOP 77.29 VP 36.085 GAP 36.38 AZP 90.12 TAL 146.81 TAP 121.93 RCA 46.31 APO 182.35 V2 35.164 -.17 GP -4.53 ZAL 33.11 ZAP 163.45 ETS 198.75 ZAE 129.37 ETE 184.48 ZAC 154.41 ETC 159.38 CLP 164.06
    RL 147.10 LAL
RP 107.77 LAP
          107.77 LAP
    RC 227.182 GL
                          -.17 GP
   PLANETOCENTRIC CONIC
    C3 271.715 VHL 16.484 DLA 21.65 RAL 67.39 RAD 6571.6 VEL 19.825 PTH
                                                                                                       3.13 VHP 22.529 OPA 15.20 RAP 60.66 ECC 5.4717
    UNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 5 52 18 3526.37 -19.87 132.59 337.81 69.40 6 51 5 2926.4 -22.50 124.90
        90.00
                     0 12 47
                                    4670.58
                                                      14.61
                                                                    198.87
                                                                                    323.76
                                                                                                     65.47
                     7 28 43 3215.49
1 19 3 4456.69
                                                     -22.12
                                                                    110.63
                                                                                    338.72
                                                                                                     69.37
                                                                                                                2 33 20
9 56 53
       100.00
                                                      16.79
                                                                   182.10
                                                                                   322.71
                                                                                                     64.90
                     9 8 30 2903.33
1 55 46 4341.62
       110.00
                                                    -27.69
                                                                     89.24
                                                                                   341.05
                                                                                                     69.10
       110.00
                                                      22.14
                                                                   170.62
                                                                                   319.95
                                                                                                     63.27
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
    TOE 2.1461 TRA12.9636 TC3 .D118 BAU .D492
ROE .6749 RRA .3470 RC3 .D066 FAU-.D1163
FOE .3680 FRA 2.4457 FC3 .D371 BSP 16810
BOE 2.2497 BRA12.9682 BC3 .D135 FSP -271
                                                                        SGT 4905.2 SGR 269.0 SG3 80.5
RRT .6102 RRF .6042 RTF .9923
                                                                       SGB 4912.5 R23 -.0031 R13 .9923
SG1 4907.9 SG2 213.0 THA 1.92
LAUNCH DATE JAN 3 1966
                                                                           FLIGHT TIME 220.00
   HELIOCENTRIC CONIC
                                                                           DISTANCE 586.935
                         .00 LOL 102.17 VL 25.358 GAL 37.18 AZL 90.67 MCA 338.35 SMA 114.27 ECC .64623 INC .6646 VI 30.287 .25 LOP 80.52 VP 36.087 GAP 40.15 AZP 90.62 TAL 147.93 TAP 126.27 RCA 40.42 APO 188.11 VZ 35.174 -.73 GP -4.46 ZAL 33.35 ZAP 161.39 ETS 196.72 ZAE 128.03 ETE 184.29 ZAC 155.37 ETC 158.40 CLP 161.92
    RL 147.10 LAL
    RP 107.74 LAP
   PLANETOCENTRIC CONIC
    C3 336.665 VHL 18.348 DLA 21.05 RAL 67.23 RAD 6571.9 VEL 21.400 PTH 3.21 VHP 24.744 DPA 15.53 RAP 61.73 ECC 6.5407
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 59 3 3525.05 -19.90 132.51 339.42 69.43 6 57 48 2925.1 -22.53 124.82 90.00 0 4 45 4722.89 16.06 202.02 325.12 66.36 1 23 28 4122.9 12.73 194.93
                                                                                                    340.29
       100.00
                    7 34 34 3217.03
                                                   -22.09
                                                                   110.73
                                                                     342.58 68.89 10 1 17
173.39 321.51 64.41 3 3 17
MID-COURSE EXECUTION ACCURACY
56T 4834.1 SGR 244
                                                                                  324.13
       100.00
                     1 11 54
                                   4506.14
                                                    18.19
                                                                   185.10
       110.00
                      9 12 47 2909.77
                                                   -27.53
                                                                    89.68
                                                                   173.39
                      1 50 11 4386.17
                                                     23.48
   DIFFERENTIAL CORRECTIONS
                                                                       5GT 4834.1 SGR 248.1 SG3 79.5
RRT .6D89 RRF .6D38 RTF .9944
    TOE 2.2740 TRA14.2524 TC3 .0954 BAU .4308
    ROE .6917 RRA .3555 RC3 .0075 FAU-.01721
FOE .3947 FRA 2.6825 FC3 .0443 BSP 16530
                                                                       5GB 4840.5 R23 -.0035 R13 .9944
    BOE 2.3769 BRA14.2569 BC3 .0957 FSP -266
                                                                       SG1 4836.5 SG2 196.7 THA 1.79
                                                                            FLIGHT TIME 70.00
LAUNCH DATE JAN 4 1966
                                                                           DISTANCE 216.161
  HELIOCENTRIC CONIC
                         .00 LOL 103.19 VL 30.321 GAL -16.22 AZL 87.24 HCA 99.99 SMA 149.94 ECC .27998 INC 2.7604 V1 30.287 2.72 LOP 203.19 VP 39.661 GAP -.55 AZP 90.48 TAL 257.50 TAP 357.49 RCA 107.96 APO 191.92 V2 35.095
    RL 147.10 LAL
    RP 107.98 LAP
    RC 76.070 GL 9.30 GP 13.18 ZAL 167.69 ZAP 82.62 ETS 355.79 ZAE 168.87 ETE 142.09 ZAC 34.30 ETC 171.53 CLP -82.42
  PLANETOCENTRIC CONIC
    C3 75.311 VHL 8.678 DLA -12.57 RAL 291.54 RAD 6569.5 VEL 14.024 PTH 2.56 VHP 4.715 DPA -9.34 RAP 301.08 ECC 2.2394
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                     1 33 13 2140.51
                                                    -17.70
                                                                   36.85
                                                                                 172.31
                                                                                                 112.47
                                                                                                                2 8 54
                                                                                                    92.41 11 49 23
       90.00
                    10 16 17
                                   5586.64
                                                    28.22
                                                                   261.20
                                                                                  182.19
       100.00
                     2 48 6
                                   1898.93
                                                    -19.20
                                                                    18.42
                                                                                  171.65
                                                                                                   113.36
                                                                                                                3 19 45
                                                                                                    91.76 13 12 29
                  11 44 5 5303.44
3 41 45 1730.88
       100.00
                                                     29.85
                                                                   240.44
                                                                                  182.26
                                                                                                                                  4703.4
                                                                                                                                                 29.77
                                                                                                                                                                 231.64
       110.00
                                                    -23.14
                                                                     3.73
                                                                                  169.71
                                                                                                  115.89 4 10 36
89.97 14 30 59
                                                                                                                                  1130.9
                                                                                                                                                -19.47
                                                                                                                                                                356.52
      110.00
                  13 6 55
                                   5044.27
                                                    34.18
                                                                   220.84
                                                                                  182.34
                                                                                                                                  4444.3
                                                                                                                                                  33.80
                                                                                                                                                                211.61
```

MID-COURSE EXECUTION ACCURACY

SGT 704.2 SGR 420.5 SG3 203.9 RRT -.3884 RRF -.4574 RTF .6999 SGB 820.2 R23 .0846 R13 -.7234 SG1 730.1 SG2 373.7 THA 162.11

```
ARRIVAL DATE MAR 17 1966
                                                                      FLIGHT TIME 72.00
LAUNCH DATE JAN 4 1966
                                                                      DISTANCE 222.534
   RL 147.10 LAL .00 LOL 103.19 VL 30.260 GAL -16.03 AZL 87.33 HCA 103.20 SMA 149.32 ECC .27659 INC 2.6708 VI 30.287 RP 108.02 LAP 2.60 LOP 206.41 VP 39.603 GAP .03 AZP 90.61 TAL 256.93 TAP .14 RCA 108.02 APO 190.62 V2 35.082 RC 78.316 GL 9.10 GP 13.54 ZAL 167.63 ZAP 87.42 ETS 356.83 ZAE 165.88 ETE 148.16 ZAC 32.61 ETC 172.13 CLP -87.34
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 73.350 VHL 8.564 DLA -12.71 RAL 291.87 RAD 6569.4 VEL 13.954 PTH 2.55 VHP 4.641 CPA -9.26 RAP 299.36 ECC 2.2071
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            172.22
                                                                                           112.69
                  1 35 47 2129.33
10 16 19 5585.50
                                                               36.16
                                                -17.41
       90.00
                                                                                                                                       28.26
                                                                                                                                                      252.45
                                                                                             92.37
                                                                                                       11 49 25
                                                                                                                         4985.5
                                                                             182.12
                                                               261.12
                                                28.23
        90.00
                                                                                                                                                      10.56
                  2 50 34 1888.06
11 44 13 5302.00
3 44 1 1720.64
13 7 15 5042.19
                                                                                                                         1288.1
                                                                                                                                        -15.55
                                                                             171.55
                                                                                            113.59
                                                                                                        3 22 2
                                                                17.75
                                                -18.91
                                                                                            91.70 13 12 35
116.15 4 12 42
89.88 14 31 17
                                                                                                                                       29.77
                                                                                                                                                      231.53
                                                                                                                         4702.0
                                                               240.33
                                                                             182.18
      100.00
                                                 29.85
                                                                                                                                       -19.14
                                                                                                                        1120.6
                                                                                            116.15
                                                                3.09
                                                                            169.60
                                               -22.84
                                                                                                                                        33.79
                                                                                                                        4442.2
                                                                             182.25
                                                               220.68
                                                 34.18
      110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 218.6 SR 371.4 SS 127.7
CRT .0492 CRS .3914 CST -.8850
                                                                  SGT 782.0 SGR 424.0 SG3 209.8
RRT -.4252 RRF -.4848 RTF .7357
SGB 889.5 R23 .0886 R13 -.7547
    TOE -.0570 TRA-1.0454 TC3 -.1809 BAU .1950
    ROE -.5508 RRA .2264 RC3 .0824 FAU .10944
                                                                                                                     LSA 375.1 MSA 247.0 SSA 18.5
EL1 371.7 EL2 218.2 ALF 87.47
    FOE .1302 FRA-1.4536 FC3-1.2917 BSP 1841
BOE .5537 BRA 1.0696 BC3 .1988 FSP -608
                                                                   5G1 8D8.4 SG2 371.3 THA 163.42
                                                                                                                                ARRIVAL DATE MAR 19 1966
                                                                      FLIGHT TIME 74.00
                                                                      OISTANCE 228.861
   HELIOCENTRIC CONIC
                        .00 LOL 103.19 VL 30.194 GAL -15.85 AZL 87.42 MCA 106.42 SMA 148.66 ECC .27326 INC 2.5789 V1 30.287 2.47 LOP 209.62 VP 39.542 GAP .58 AZP 90.73 TAL 256.27 TAP 2.69 RCA 108.04 APO 189.28 V2 35.069 8.90 GP 13.87 ZAL 167.55 ZAP 92.06 ETS 357.90 ZAE 162.89 ETE 152.14 ZAC 31.07 ETC 172.75 CLP -92.12
    RL 147.10 LAL
       108.06 LAP
    RC 80.581 GL
   PLANETOCENTRIC CONIC
                                              RAL 292.25 RAD 6569.4 VEL 13.884 PTH 2.54 VMP 4.593 OPA -9.16 RAP 297.78 ECC 2.1755
INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    C3 71.425 VHL 8.451 DLA -12.87 RAL 292.25 RAD 6569.4 VEL 13.884 PTH
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                           112.91 2 13 54
92.33 11 49 34
                                                                                                                        1517.8
                                                                                                                                       -13.86
                                                                                                                                                       28.28
                                                                            172.17
                   1 38 36 2117.82
10 16 30 5584.53
2 53 17 1876.87
                                                 -17.11
                                                               35.45
       90.00
                                                                                                                         4984.5
                                                                                                                                        28.25
                                                                                                                                                       252.38
                                                 28.23
                                                               261.05
                                                                              182.08
        90.00
                                                                                             113.83 3 24 34
91.65 13 12 50
                                                                                                                                        -15.22
                                                                                                                                                        9.89
                                                                                                                         1276.9
                                                                17.06
                                                                             171.49
                                                 -18.60
       100.00
                                                                                                                         4700.7
                                                                                                                                       29.76
                  11 44 30 5300.71
3 46 32 1710.12
                                                 29.85
                                                               240.24
                                                                             182.15
       100.00
                                                                                                                                       -18.79
                                                                                                                                                       355.29
                                                                                                                         1110.1
                                                                                             116.42 4 15 2
89.79 14 31 45
                                                 -22.52
                                                                 2.44
                                                                            169.53
       110.00
                                                                                                                                         33.78
                                                                                                                         4440.2
                                                               220.52
                                                                              182.21
       110.00
                  13 7 44
                                  5040.23
                                                  34.18
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 235.8 SR 366.1 S5 127.5
CRT .0209 CRS .3423 CST -.9177
                                                                   SGT 865.D SGR 426.5 SG3 216.7

RRT - .4645 RRF - .5106 RTF .7657

SGB 964.4 R23 .0867 R13 - .7806
    TOE -.0534 TRA-1.1156 TC3 -.2253 BAU .2324
    ROE - .5352 RRA .2321 RC3 .0921 FAU .11181
FOE .1021 FRA-1.4672 FC3-1.3552 BSP 2150
BOE .5379 BRA 1.1395 BC3 .2434 FSP -664
                                                                                                                     LSA 369.0 MSA 263.3 SSA 18.6
                                                                                                                     EL1 366.1 EL2 235.7 ALF 88.68
                                                                   SG1 892.2 SG2 366.2 THA 164.41
                                                                                                                               ARRIVAL DATE MAR 21 1966
                                                                       FLIGHT TIME 76.00
LAUNCH DATE JAN 4 1966
                                                                      01STANCE 235.140
    RL 147.10 LAL .00 LOL 103.19 VL 30.124 GAL -15.66 AZL 87.52 HCA 109.63 SHA 147.95 ECC .26996 INC 2.4840 VI 30.287 RP 108.10 LAP 2.34 LOP 212.83 VP 39.476 GAP 1.09 AZP 90.83 TAL 255.52 TAP 5.15 RCA 108.01 APO 187.89 V2 35.056 RC 82.862 GL 8.67 GP 14.18 ZAL 167.43 ZAP 96.52 ETS 358.98 ZAE 159.97 ETE 154.91 ZAC 29.70 ETC 173.40 CLP -96.72
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 69.519 VHL 8.338 DLA -13.03 RAL 292.67 RAD 6569.3 VEL 13.816 PTH 2.52 VHP 4.567 DPA -9.03 RAP 296.39 ECC 2.1441
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                      1505.9
                                                                                          -13.52
                                                                            172.17
                   1 41 42 2105.87
10 16 47 5583.72
                                                  -16.79
                                                                34.71
        90.00
                                                                                                                                        28.25
                                                                              182.10
                                                                                                                         4983.7
                                                               260.99
                                                  28.23
                                                                                              114.07 3 27 22
91.61 13 13 13
                                                                              171.48
                                                                                             114.07
                                                                                                                         1265.3
                                                                                                                                        -14.87
                                                                16.34
                    2 56 17
                                  1865.26
                                                  -18.28
       100.00
                                                                                                                         4699.6
                                                                                                                                        29.76
                                                                              182.16
                                                               240.15
       100.00
                   11 44 54 5299.56
                                                  29.85
                                                                                              116.69 4 17 37
89.70 14 32 21
                                                                                                                                                      354.66
                                                                                                                                       -18.43
                                                                                                                         1099.2
                   3 49 18 1699.21
13 8 22 5038.37
                                                                              169.51
                                                                                             116.69
       110.00
                                                  -22.19
                                                                  1.77
                                                                                                                                         33.76
                                                                                                                         4438.4
                                                                220.38
                                                                              182.22
                                                  34.18
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 254.2 SR 360.5 SS 126.3
CRT .0023 CRS .3292 CST -.9291
                                                                    SGT 953.4 SGR 427.9 SG3 219.9
     TDE -.0520 TRA-1.1874 TC3 -.2724 BAU .2699
                                                                   RRT - .4958 RRF - .5351 RTF .7872
SGB 1045.0 R23 .0910 R13 - .7995
SG1 980.6 SG2 361.3 THA 165.44
     ROE -.5195 RRA .2349 RC3 .1007 FAJ .11228
                                                                                                                     LSA 363.4 MSA 279.3 SSA 18.7
    FDE .0914 FRA-1.4454 FC3-[.3982 BSP 2464
BDE .521 BRA 1.2104 BC3 .2904 FSP -673
                                                                                                                      EL1 360.5 ELZ 254.2 ALF 89.82
     BOE .5221 BRA 1.2104 BC3 .2904 FSP
                                                                                                                                ARRIVAL DATE MAR 23 1966
                                                                       FLIGHT TIME 78.00
 LAUNCH DATE JAN 4 1966
                                                                       DISTANCE 241.376
   HELIOCENTRIC CONIC
                        .00 LOL 103.19 VL 30.049 GAL -15.47 AZL 87.61 HCA 112.84 SMA 147.21 ECC .26672 INC 2.3853 V1 30.287 2.20 LOP 216.04 VP 39.407 GAP 1.58 AZP 90.93 TAL 254.69 TAP 7.53 RCA 107.95 APO 186.47 V2 35.043 8.43 GP 14.49 ZAL 167.27 ZAP 100.76 EYS .10 ZAE 157.16 ETE 156.92 ZAC 28.54 ETC 174.07 CLP-101.12
     RL 147.10 LAL
        108.14 LAP
    PLANETOCENTRIC CONIC
     C3 67.631 VHL 8.224 DLA -13.21 RAL 293.14 RAD 6569.3 VEL 13.747 PTH 2.51 VHP 4.562 DPA -8.88 RAP 295.20 ECC 2.1130
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     ENCH AZMTH LNCH TIME L-I TIME
                                                                                            113.37 2 19 59
92.28 11 50 13
                                                                                                                         1493.3
                                                                             172.20
                                                  -16.45
                                                                 33.95
         90.00
                     1 45 6 2093.35
                                                                                                                                         28.25
                                                                                                                          4983.2
                                                                260.95
                                                                              182.15
                                                   28.23
         90.00
                    10 17 10
                                  4483.16
                                                                                             114.32
                                                                                                                          1253.1
                                                                                                                                         -14.51
                                                                                                          3 30 26
                                                                  15.60
                                                                              171.51
                                                  -17.94
                     2 59 33
                                  1853.10
        100.00
                                                                                              91.57 13 13 42
116.97 4 20 27
                                                                                                                                         29.75
                                                                                                                          4698.6
                                                                240.08
                                                                              182.21
        100.00
                    11 45 23
                                  5298.64
                                                   29.85
                                                                                                                          1087.8
                                                                                             116.97
                                                  -21.84
                                                                   1.07
                                                                              169.52
        110.00
                                  1687.83
                     3 52 19
                                                                                              89.62 14 33 3
                                                                                                                                          33.75
                                                                                                                          4436.7
                                                                             182.26
                                                  34.18
                                                                220.24
        110.00
                    13 9 6
                                  5036.68
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                    HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 273.4 SR 353.4 SS 124.6
CRT -.0095 CRS .3052 CST -.9407
                                                                   SGT 1045.7 SGR 428.2 SG3 221.9

RRT -.5249 RRF -.5589 RTF .8038

SGB 1130.0 R23 .0959 R13 -.8142

SG1 1072.7 SG2 355.3 THA 166.34
     TOE -.0530 TRA-1.2594 TC3 -.3217 BAU .3072
     RDE -.5018 RRA .2368 RC3 .1095 FAU .11205
                                                                                                                     LSA 356.4 HSA 296.2 SSA 18.8
     FOE .0750 FRA-1.4144 FC3-1.4344 BSP 2791
                                                                                                                     EL1 353.4 EL2 273.3 ALF 91.05
     BDE .5046 BRA 1.2815 BC3 .3398 FSP -684
```

H

```
LAUNCH DATE JAN 4 1966
                                                                                   FLIGHT TIME 80.00
                                                                                                                                                     ARRIVAL DATE MAR 25 1966
    HELIOCENTRIC CONIC
                                                                                   DISTANCE 247.570
     RL 147.10 LAL .00 LOL 103.19 VL 29.970 GAL -15.28 AZL 87.72 MCA 116.04 SMA 146.44 ECC .26352 INC 2.2820 V1 30.287 RP 108.18 LAP 2.05 LOP 219.25 VP 39.335 GAP 2.04 AZP 91.00 TAL 253.79 TAP 9.83 RCA 107.85 APO 185.03 V2 35.030 RC 87.465 GL 8.16 GP 14.80 ZAL 167.09 ZAP 104.78 ETS 1.24 ZAE 154.50 ETE 158.42 ZAC 27.58 ETC 174.77 CLP-105.30
    PLANETOCENTRIC CONIC
      C3 65.755 VHL 8.109 DLA -13.39 RAL 293.66 RAD 6569.2 VEL 13.679 PTH 2.50 VHP 4.575 DPA -8.68 RAP 294.21 ECC 2.0822
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00
                       1 48 48 2080.13
10 17 35 5582.95
                                                          -16.10
                                                                           33.14
                                                                                        172.27
                                                                                                         113.62 2 23 28
                                                                                                                                          1480.1
                                                                                                                                                                               26.05
          90.00
                                                          28.23
                                                                          260.93
                                                                                           182.23
                                                                                                              92.28
                                                                                                                         11 50 38
                                                                                                                                              4982.9
                                                                                                                                                               28.25
                                                                                                                                                                               252.27
                      3 3 8 1840.28
11 45 56 5298.02
3 55 38 1675.85
13 9 55 5035.22
         100.00
                                                         -17.58
                                                                           14.82
                                                                                           171.57
                                                                                                            114.57
                                                                                                                         3 33 48
                                                                                                                                             1240.3
                                                                                                                                                              -14.12
                                                                                                                                                                                  7.74
         100.00
                                                          29.86
                                                                          240.04
                                                                                           182.30
                                                                                                            91.55 13 14 14
117.26 4 23 34
89.56 14 33 50
                                                                                                                                             4698.0
                                                                                                                                                              29.75
                                                                                                                                                                               231.24
         110.00
                                                         -21.47
                                                                              . 34
                                                                                                                                            1075.8
                                                                                          169.57
                                                                                                                                                              -17.64
                                                                                                                                                                               353.30
                                                          34.18
        110.00
                                                                          220.13
                                                                                          182.35
                                                                                                                                             4435.2
                                                                                                                                                                33.74
                                                                                                                                                                               210.91
    DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                             SGT 1141.2 SGR 427.5 SG3 222.3
RRT -.5516 RRF -.5822 RTF .8164
                                                                                                                                        ST 293.4 SR 344.9 SS 122.5
CRT -.0145 CRS .2771 CST -.9502
     TOE -.0567 TRA-1.3311 TC3 -.3731 BAU .3440
     ROE -.4826 RRA .2375 RC3 .1182 FAU .11105
     FOE .0571 FRA-1.3728 FC3-1.4621 BSP 3128
BOE .4859 BRA 1.3521 BC3 .3913 FSP -691
                                                                              SGB 1218.7 R23 .1023 R13 -.8253
                                                                                                                                        LSA 348.4 MSA 313.5 SSA 18.9
                                                                               SG1 1167.8 SG2 348.5 THA 167.16
                                                                                                                                      EL1 345.0 ELZ 293.2 ALF 92.55
LAUNCH DATE JAN 4 1966
                                                                                   FLIGHT TIME 82.00
                                                                                                                                                     ARRIVAL DATE MAR 27 1966
   HELIOCENTRIC CONIC
                                                                                  DISTANCE 253.725
                             .00 LOL 103.19 VL 29.888 GAL -15.08 AZL 87.83 HCA 119.24 SMA 145.65 ECC .26037 INC 2.1729 VI 30.287 1.90 LOP 222.45 VP 39.261 GAP 2.48 AZP 91.06 TAL 252.81 TAP 12.06 RCA 107.73 APO 183.58 VZ 35.016 7.87 GP 15.13 ZAL 166.87 ZAP 108.55 ETS 2.42 ZAE 151.99 ETE 159.52 ZAC 26.85 ETC 175.53 CLP-109.25
     RL 147.10 LAL
RP 108.22 LAP
     RC 89.783 GL
   PLANETOCENTRIC CONIC
     C3 63.889 VHL 7.993 DLA -13.60 RAL 294.22 RAD 6569.2 VEL 13.610 PTH
                                                                                                                2.49 VHP 4.598 DPA -8.44 RAP 293.45 ECC 2.0514
     LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RY ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                        1 52 51 2066.03
                                                                                                         113.87
                                                         -15.71
                                                                          32.29
                                                                                         172.37
                                                                                                                          2 27 17
                                                                                                                                            1466.0
                                                                                                                                                                                 25.22
         90.00
                     7 3 1826.63
11 46 29 5297.84
3 59 15 1663.13
13 10 46 503.4
                      10 18 0
3 7 3
                                      5583.21
                                                         28.23
                                                                         260.95
                                                                                          182.36
                                                                                                            92.29 11 51 3
                                                                                                                                             4983.2
        100.00
                                                         -17.19
                                                                           13.99
                                                                                          171.67
                                                                                                            114.84
                                                                                                                          3 37 29
                                                                                                                                             1226.6
                                                                                                                                                                                  6.94
        100.00
                                                         29.86
                                                                         240.02
                                                                                                            91.54 13 14 47
117.56 4 26 58
89.50 14 34 40
                                                                                          182.42
                                                                                                                                             4697.8
                                                                                                                                                              29.75
                                                         -21.07
                                                                          359.57
                                                                                         169.65
                                                                                                                                             1063.1
                                                                                                                                                              -17.21
                                                                                                                                                                               352.56
        110.00
                                                                                                                                                             33.73
                                                        34.18
                                                                         220.04
                                                                                         182.47
                                                                                                                                             443411
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                             SGT 1238.9 SGR 425.9 SG3 221.3
RRT -.5764 RRF -.6054 RTF .8257
SGB 1310.0 R23 .1105 R13 -.8335
SGI 1264.9 SG2 340.9 THA 167.90
     TOE -. 0632 TRA-1.4015 TC3 -. 4263 BAU . 3800
                                                                                                                                        ST 314.0 SR 335.2 SS 120.0
CRT -.0132 CRS .2447 CST -.9579
     ROE -.4619 RRA .2371 RC3 .1270 FAU .10936
FOE .0380 FRA-1.3216 FC3-1.4819 BSP 3470
BOE .4662 BRA 1.4214 BC3 .4448 FSP -692
                                                                                                                                       LSA 342.4 MSA 328.3 55A 19.0
                                                                                                                                        EL1 335.5 EL2 313.8 ALF 95.72
LAUNCH DATE JAN 4 1966
                                                                                  FLIGHT TIME 84.00
                                                                                                                                                    ARRIVAL DATE MAR 29 1966
   MELIOCENTRIC CONIC
                                                                                 DISTANCE 259.844
    RL 147.10 LAL .00 LOL 103.19 VL 29.804 GAL -14.88 AZL 87.94 HCA 122.44 SMA 144.85 ECC .25727 INC 2.0568 V1 30.287 RP 108.26 LAP 1.74 LOP 225.65 VP 39.185 GAP 2.90 AZP 91.10 TAL 251.78 TAP 14.23 RCA 107.59 APO 182.12 V2 35.003 RC 92.112 GL 7.54 GP 15.49 ZAL 166.61 ZAP 112.09 ETS 3.65 ZAE 149.65 ETE 160.33 ZAC 26.34 ETC 176.34 CLP-112.97
   PLANETOCENTRIC CONIC
    C3 62.030 VHL 7.876 DLA -13.83 RAL 294.82 RAD 6569.2 VEL 13.542 PTH 2.48 VHP 4.636 DPA -8.14 RAP 292.9D ECC 2.0208
    C3 62.030 VML 7.876 OLA -13.83 RAL 294.82 RAD 6369.2 VEL 13.342 PTH 2.48 VMP 4.636 OPA -8.14 RAP 292.90 ECC 2.0208 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 57 17 2050.87 -15.29 31.37 172.50 114.13 2 31 28 1450.9 -11.90 24.33 90.00 10 18 22 5584.11 28.23 261.02 182.52 92.32 11 51 26 4984.1 28.25 252.35 100.00 3 11 20 1811.98 -16.77 13.11 171.80 115.11 3 41 32 1212.0 -13.25 6.09 100.00 11 47 1 5298.24 29.86 240.05 182.59 91.56 13 15 19 4698.2 29.75 231.25 110.00 4 3 12 1649.52 -20.64 358.75 169.76 117.87 4 30 41 1049.5 -16.75 351.78 110.00 13 11 38 5033.45 34.18 219.99 182.63 89.47 14 35 32 4433.5 33.73 210.78
   DIFFERENTIAL CORRECTIONS
                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                             SGT 1337.7 SGR 423.6 SG3 219.0
RRT -.5992 RRF -.6287 RTF .8322
SGB 1403.1 R23 .1213 R13 -.8392
SGI 1363.1 SGZ 332.8 THA 168.57
                                                                                                                                      ST 335.2 SR 324.6 SS 117.1

CRT -.0071 CRS .2156 CST -.9626

LSA 354.6 MSA 324.5 SSA 19.1

EL1 335.3 EL2 324.4 ALF 173.80
     TOE -.0723 TRA-1.4695 TC3 -.4812 BAU .4146
     ROE -.4401 RRA .2353 RC3 .1359 FAU .10700
                                                           3802
-683
    FOE .0216 FRA-1.2605 FC3-1.4934 BSP
    BOE .4460 BRA 1.4882 BC3 .5000 FSP
LAUNCH DATE JAN 4 1966
                                                                                 FLIGHT TIME 86.00
                                                                                                                                                    ARRIVAL DATE MAR 31 1966
                                                                                 DISTANCE 265.929
  HELIOCENTRIC CONIC
                            .00 LOL 103.19 VL 29.717 GAL -14.68 AZL 88.07 HCA 125.64 SMA 144.04 ECC .25423 INC 1.9322 V1 30.287 1.57 LOP 228.85 VP 39.107 GAP 3.29 AZP 91.13 TAL 250.69 TAP 16.33 RCA 107.42 APO 180.66 V2 34.990 7.18 GP 15.90 ZAL 166.32 ZAP 115.39 ETS 4.94 ZAE 147.46 ETE 160.89 ZAC 26.05 ETC 177.22 CLP-116.47
    RL 147.10 LAL
        108.31 LAP
         94.449 GL
   PLANETOCENTRIC CONIC
    C3 60.177 VHL 7.757 DLA -14.09 RAL 295.47 RAD 6569.1 VEL 13.473 PTH
                                                                                                              2.46 VHP 4.684 OPA -7.77 RAP 292.57 ECC 1.9904
    LNCH AZMTH LNCH TIME L-I TIME INI LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 2 11 2034.39 -14.83 30.38 172.67 114.40 2 36 5 1434.4 -11.41 23.37 90.00 10 18 38 5585.87 28.22 261.15 182.72 92.38 11 51 44 4985.9 28.26 252.48
                       10 18 38 5585.87
3 16 3 1796.07
       100.00
                                                        -16.31
                                                                          12.15
                                                                                        171.96
                                                                                                           115.41
                                                                                                                          3 45 59
                                                                                                                                            1196.1
                                                                                                                                                            -12.75
                                                                                                                                                                                5.16
                                                                                                          115.41 3 45 59
91.60 13 15 47
118.20 4 34 46
89.47 14 36 21
                   11 47 27 5299.42
                                                                                      182.79
                                                         29.85
                                                                         240.14
                                                                                                                                            4699.4
                                                                                                                                                            29.76
                                                                                                                                                                             231.34
                                                                                      169.90
                       4 7 31
       110.00
                                     1634.82
                                                       -20.17
                                                                         357.87
                                                                                                                                            1034.8
                                                                                                                                                            -16.24
                                                                                                                                                                             350.94
                                   5033.44
                    13 12 28
                                                        34.18
                                                                        219.99
                                                                                        182.84
                                                                                                                                            4433.4
                                                                                                                                                              33.73
                                                                                                                                                                             210.78
   DIFFERENTIAL CORRECTIONS
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                          SGT 1438.3 SGR 420.7 SG3 216.3
RRT --6219 RRF --6529 RTF .8371
SGB 1498.6 R23 .1333 R13 --8435
                                                                                                                                     ST 357.3 SR 312.3 SS 114.4
CRT .0053 CRS .1693 CST -.9688
LSA 374.2 MSA 312.9 SSA 19.2
    TOE -. 0854 TRA-1.5355 TC3 -.5383 BAU .4486
    RDE -.4166 RRA .2328 RC3 .1454 FAU .10442
    FOE -.0004 FRA-1.1984 FC3-1.5022 BSP 4152
BOE .4253 BRA 1.5530 BC3 .5576 FSP -678
```

SG1 1463.2 SG2 323.9 THA 169.15

EL1 357.3 EL2 312.3 ALF 1.12

ARRIVAL DATE APR 2 1966

```
FLIGHT TIME 88.00
LAUNCH DATE JAN 4 1966
                       .00 LOL 103.19 VL 29.628 GAL -14.47 A7L 88.20 HCA 128.84 SMA 143.22 ECC .25125 INC 1.7974 V1 30.287 1.40 LOP 232.04 VP 39.028 GAP 3.66 AZP 91.13 TAL 249.54 TAP 18.38 RCA 107.24 APO 179.20 V2 34.977 6.77 GP 16.36 7AL 166.00 ZAP 118.44 ETS 6.31 ZAE 145.43 ETE 161.24 ZAC 25.96 ETC 178.18 CLP-119.76
                                                                    DISTANCE 271.981
  HELIOCENTRIC CONIC
   RL 147.10 LAL
   RP 108.35 LAP
   RC 96.794 GL
  PLANETOCENTRIC CONIC
   C3 58.332 VHL 7.638 DLA -14.39 RAL 296.16 RAD 6569.1 VEL 13.405 PTH 2.45 VHP 4.742 DPA -7.32 RAP 292.43 ECC 1.9600
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                    1416.3
                                                                                                      2 41 13
                  2 7 37 2016.28
10 18 43 5588.79
                                                                                         114.69
                                                -14.32
                                                             29.30
                                                                          172.87
       90.00
                                                                                                                      4988.8
                                                                                                                                     28.26
                                                                                                                                                  252.69
                                                                                                     11 51 52
                                                                                           92.49
                                                             261.36
                                                                           182.97
                                                28.22
       90.00
                                                                                                                                                    4.16
                                                                                                                      1178.6
                                                                                                                                    -12.21
                                                                                                      3 50 54
                  3 21 16 1778.64
11 47 45 5301.66
                                                                                          115.71
                                                -15.79
                                                               11.11
                                                                           172.15
      100.00
                                                                                                                                                  231.50
                                                                                                     13 16 6
                                                                                                                      4701.7
                                                                                                                                     29.76
                                                                                           91.69
                                                             240.31
                                                                           183.04
                                                29.85
      100.00
                                                                                                                                                   350.03
                                                                                                                                    -15.68
                                                                                                      4 39 17
                                                                                                                      1018.8
                                                                                          118.55
                                                              356.91
                                                                           170.08
                                1618.78
                                               -19.65
      110.00
                   4 12 18
                                                                                           89.51 14 37 6
                                                                                                                      4434.3
                                                                                                                                     33.73
                                                                                                                                                  210.84
                                                             220.06
                                                                           183.09
                                                34.18
                                5034.28
      110.00
                  13 13 12
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 1540.0 SGR 417.6 SG3 212.8
RRT -.6440 RRF -.6780 RTF .8406
                                                                                                                   ST 380.2 SR 298.8 35 111.7
CRT .0228 CRS .1145 CST -.9741
    TOE -.1024 TRA-1.5984 TC3 -.5976 BAU .4816
    ROE -.3918 RRA .2294 RC3 .1555 FAU .10152
                                                                                                                   LSA 395.6 MSA 299.1 SSA 19.3
                                                                 SGB 1595.7 R23 .1478 R13 -.8465
   FOE -.0235 FRA-1.1330 FC3-1.5067 BSP 4503
BDE .4050 BRA 1.6148 BC3 .6175 FSP -670
                                                                                                                   EL1 380.4 EL2 298.6 ALF 2.68
                                                                 SG1 1564.4 SG2 314.5 THA 169.67
    BOE .4050 BRA 1.6148 BC3 .6175 FSP
                                                                                                                             ARRIVAL DATE APR 4 1966
                                                                     FLIGHT TIME 90.00
LAUNCH DATE JAN 4 1966
                                                                     DISTANCE 278.004
                        .00 LOL 103.19 VL 29.538 GAL -14.26 AZL 88.35 HCA 132.03 SMA 142.40 ECC .24834 INC 1.6500 V1 30.287 1.23 LOP 235.23 VP 38.948 GAP 4.01 AZP 91.10 TAL 248.35 TAP 20.38 RCA 107.04 APO 177.76 V2 34.964 6.30 GP 16.89 ZAL 165.64 ZAP 121.27 ETS 7.78 ZAE 143.54 ETE 161.40 ZAC 26.08 ETC 179.24 CLP-122.85
  HELIOCENTRIC CONIC
    RL 147.10 LAL
    RP 108.39 LAP
    RC 99.145 GL
   PLANETOCENTRIC CONIC
    C3 56.494 VHL 7.516 DLA -14.74 RAL 296.90 RAD 6569.0 VEL 13.336 PTH 2.44 VHP 4.807 DPA -6.78 RAP 292.47 ECC 1.9297
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 13 41 1996.14 -13.74 28.10 173.11 115.01 2 46 57 1396.1 -10.26 21.16
                                                                                                                       4993.2
                                                                                                     11 51 44
                                                                                            92.65
                                                 28.20
                                                              261.68
                                                                            183.26
                   10 18 31
                                 5593.23
       90.00
                                                                                                       3 56 25
                                                                                                                       1159.3
                                                                                                                                     -11.60
                                                                                                                                                     3.05
                                                                                           116.04
                               1759.30
                                                               9.96
                                                                            172.38
                                                -15.22
                    3 27 6
      100.00
                                                                                                     13 16 13
                                                                                                                       4705.3
                                                                                                                                                   231.77
                                                                                                                                     29.78
                  11 47 48 5305.30
4 17 36 1601.09
                                                                                            91.83
                                                              240.58
                                                                            183.34
      100.00
                                                 29.84
                                                                                                    4 44 17
14 37 43
                                                                                                                       1001.1
                                                                                                                                     -15.07
                                                                                                                                                   349.04
                                                                                           118.92
                                                -19.07
                                                              355.87
                                                                            170.29
      110.00
                                                                                                                                     33.75
                                                                                                                                                   211.00
                                                                                                                       4436.3
                                                                                           89.61
                                 5036.27
                                                 34.18
                                                              220.21
                                                                           183.40
                  13 13 47
      110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 1642.8 SGR 414.5 SG3 208.9
RRT -.6659 RRF -.7043 RTF .8429
SGB 1694.3 R23 .1648 R13 -.8486
                                                                                                                   ST 404.3 SR 284.0 SS 109.5
CRT .0454 CRS .0479 CST -.9786
    TOE -.1237 TRA-1.6577 TC3 -.6594 BAU .5136
    ROE - .3658 RRA .2249 RC3 .1665 FAU .09843
                                                                                                                   LSA 418.6 MSA 283.7 SSA 19.4
EL1 404.7 EL2 283.4 ALF 3.59
                                                   4859
    FOE -. 0486 FRA-1.0658 FC3-1.5084 BSP
                                                                  5G1 1666.6 5G2 304.8 THA 170.13
    BOE .3862 BRA 1.6729 BC3 .6801 FSP -661
                                                                                                                             ARRIVAL DATE APR 6 1966
                                                                     FLIGHT TIME 92.00
LAUNCH DATE JAN 4 1966
    RL 147.10 LAL .00 LOL 103.19 VL 29.446 GAL -14.04 A7L 88.51 HCA 135.22 SMA 141.58 ECC .24549 INC 1.4872 V1 30.287 RP 108.43 LAP 1.05 LOP 238.42 VP 38.867 GAP 4.35 A7P 91.06 TAL 247.11 TAP 22.33 RCA 106.82 APO 176.34 V2 34.951 RC 101.502 GL 5.75 GP 17.52 TAL 165.25 TAP 123.85 ETS 9.39 TAE 141.78 ETE 161.38 TAC 26.39 ETC 180.40 CLP-125.74
                                                                     DISTANCE 284.000
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 54.664 VML 7.394 DLA -15.15 RAL 297.69 RAD 6569.0 VEL 13.267 PTH 2.42 VHP 4.880 DPA
                                                                                                                          -6.12 RAP 292.69 ECC 1.8996
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     1373.5
                                                                                         115.34
                                                                                                       2 53 27
                                                                         173.40
                   2 20 34 1973.46
10 17 56 5599.70
3 33 40 1737.59
                                                -13.08
                                                              26.76
        90.00
                                                                                            92.89 11 51 15
                                                                                                                                      28.28
                                                                                                                       4999.7
                                                                                                                                                   253.49
                                                              262.16
                                                                            183.61
                                                28.18
        90.00
                                                                                                                                     -10.90
                                                                                                                                                     1.80
                                                                                                                       1137.6
                                                 -14.57
                                                                8.68
                                                                           172.66
                                                                                           116.39
                                                                                                       4 2 37
       100.00
                                                                                            92.05 13 16 1
                                                                                                                                                   232.18
                                                                                                                       4710.8
                                                                                                                                     29.79
                                                                            183.70
                                                              240.99
                                                29.83
       100.00
                  11 47 31
                                 5310.80
                                                                                           119.32 4 49 54
89.77 14 38 7
                  4 23 32 1581.36
13 14 7 5039.79
                                                                                                                                                   347.93
                                                                                                                                     -14.37
                                                                                                                        981.4
                                                                            170.54
                                                -18.42
                                                              354.71
       110.00
                                                                                                                                     33.77
                                                                                                                                                   211.27
                                                                                                                       4439.8
                                                                            183.78
                                                              220.49
                                                 34.18
       110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 429.3 SR 268.1 SS 107.3
CRT .0725 CRS -.0211 CST -.9809
                                                                  SGT 1745.0 SGR 411.4 SG3 204.2
RRT -.6863 RRF -.7313 RTF .8438
SGB 1792.8 R23 .1857 R13 -.8493
     TOE -.1490 TRA-1.7117 TC3 -.7230 BAU .5442
    ROE -.3391 RRA .2189 RC3 .1780 FAU .09496
FDE -.0716 FRA -.9930 FC3-1.5040 BSP 5194
BDE .3704 BRA 1.7256 BC3 .7446 FSP -643
                                                                                                                   LSA 442.7 MSA 267.1 SSA 19.6
EL1 430.0 EL2 267.0 ALF 4.22
                                                                  SG1 1768.3 SG2 295.3 THA 170.54
                                                                                                                              ARRIVAL DATE APR 8 1966
                                                                      FLIGHT TIME 94.00
 LAUNCH DATE JAN 4 1966
                                                                      DISTANCE 289.970
   HELIOCENTRIC CONIC
                        .00 LOL 103.19 VL 29.354 GAL -13.81 AZL 88.69 HCA 138.41 SHA 140.76 ECC .24272 INC 1.3049 V1 30.287
.87. LOP 241.60 VP 38.786 GAP 4.66 AZP 90.98 TAL 245.82 TAP 24.23 RCA 106.60 APO 174.93 V2 34.939
5.12 GP 18.27 ZAL 164.82 ZAP 126.21 ETS 11.15 ZAE 140.12 ETE 161.18 ZAC 26.89 ETC 181.69 CLP-128.47
     RL 147.10 LAL
        108.46 LAP
     RP
     RC 103.862 GL
   PLANETOCENTRIC CONIC
                                                                                               2.41 VHP 4.961 DPA -5.33 RAP 293.05 ECC 1.8697
     C3 52.847 VHL 7.270 OLA -15.64 RAL 298.53 RAD 6568.9 VEL 13.199 PTH
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                           173.74
                                                                                           115.70
                                                                                                                        1347.5
                                                                                                        3 0 54
                                                 -12.32
                                                               25.24
                     2 28 26
                                 1947.53
        90.00
                                                                                            93.22 11 50 15
116.78 4 9 43
92.36 13 15 22
119.75 4 56 15
90.03 14 38 12
                                                                                                                        5008.9
                                                                                                                                       24.30
                                                                                                                                                    254.16
                                                                            184.03
                                                 28.15
                                                               262.83
                   10 16 46
                                 5608.90
        90.00
                                                                                                                        1112.9
                                                                                                                                     -10.11
                                                                                                                                                       .40
                                                                             172.99
                                                                                            116.78
                                                 -13.81
                                                                 7.23
                     3 41 10
                                 1712.86
       100.00
                                                                                                                                                    232.78
                                                                                                                        4718.8
                                                                                                                                      29.82
                                                                             184.13
                                                 29.81
                                                               241.58
                   11 46 43
                                 5318.81
       100.00
                                                                                                                                                    346.69
                                                                                            119.75
                                                                                                                        959.1
                                                                                                                                     -13.58
                   4 30 16 1559.06
13 14 7 5045.37
                                                 -17.67
                                                               353.41
                                                                             170.84
       110.00
                                                                                                                        4445.4
                                                                                                                                       33.81
                                                                                                                                                    211.70
                                                                             184.23
                                                  34.18
                                                               220.92
       110.00
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 456.6 SR 250.5 SS 106.7
CRT .1055 CRS -.1137 CST -.9818
                                                                  SGT 1848.6 SGR 409.0 SG3 199.5
RRT -.7069 RRF -.7597 RTF .8445
     TOE -.1807 TRA-1.7612 TC3 -.7900 BAU .5743
     RDE -.3107 RRA .2122 RC3 .1911 FAU .09155
                                                                                                                    LSA 469.5 MSA 248.5 SSA 19.7
EL1 457.7 EL2 248.5 ALF 4.70
                                                                  SGB 1893.3 R23 .2094 R13 -.8499
SG1 1871.7 SG2 285.7 THA 170.90
     FOE -.1007 FRA -.9229 FC3-1.4998 BSP 5546
BOE .3594 BRA 1.7739 BC3 .8128 FSP -630
```

```
LAUNCH DATE JAN 4 1966
                                                                                               FLIGHT TIME 96.00
                                                                                                                                                                          ARRIVAL DATE APR 10 1966
     HELIOCENTRIC CONIC
                                                                                               DISTANCE 295.916
                                  .00 LOL 103.19 VL 29.261 GAL -13.58 AZL 88.90 MCA 141.59 SMA 139.96 ECC .24003 INC 1.0986 V1 30.287 .68 LOP 244.79 VP 38.705 GAP 4.96 AZP 90.86 TAL 244.49 TAP 26.09 RCA 106.36 APO 173.55 V2 34.926 4.38 GP 19.17 ZAL 164.34 ZAP 128.32 ETS 13.12 ZAE 138.55 ETE 160.81 ZAC 27.56 ETC 183.13 CLP-131.03
       RL 147.10 LAL
       RP 108.50 LAP
       RC 106.225 GL
     PLANETOCENTRIC CONIC
       C3 51.045 VHL 7.145 DLA -16.23 RAL 299.43 RAD 6568.9 VEL 13.130 PTH 2.40 VHP 5.050 DPA -4.37 RAP 293.54 ECC 1.8401
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         2 37 36 1917.42
10 14 49 5621.79
3 49 52 1684.25
11 45 14 5330.19
4 38 0 1533.48
13 13 36 5053.73
            90.00
                                                                  -11.43
                                                                                     23.48
                                                                                                     174.15
                                                                                                                          116.09
                                                                                                                                           3 9 33
                                                                                                                                                               1317.4
                                                                                                                                                                                 -7.83
                                                                                                                                                                                                        16.65
            90.00
                                                                  28.10
                                                                                     263.77
                                                                                                        184.54
                                                                                                                            93.69
                                                                                                                                         11 48 30
                                                                                                                                                                                     28.31
                                                                                                                                                                 5021.8
                                                                                                                                                                                                       255.11
          100.00
                                                                  -12.93
                                                                                      5.57
                                                                                                       173.38
                                                                                                                           117.19
                                                                                                                                           4 17 56
                                                                                                                                                                 1084.2
                                                                                                                                                                                      -9.18
                                                                                                                                                                                                       358.78
          100.00
                                                                                                                           92.80 13 14 4
120.22 5 3 33
90.41 14 37 49
                                                                  29.77
                                                                                     242.43
                                                                                                       184.64
                                                                                                                                                               4730.2
                                                                                                                                                                                     29.84
                                                                                                                                                                                                       233.62
          110.00
                                                                 -16.80
                                                                                    351.94
                                                                                                     171.19
                                                                                                                                                                 933.5
                                                                                                                                                                                    -12.66
                                                                                                                                                                                                       345.28
                                                                                                    184.79
          110.00
                                                                                    221.58
                                                                                                                                                                 4453.7
                                                                34.18
                                                                                                                                                                                     33.86
                                                                                                                                                                                                       212.35
     DIFFERENTIAL CORRECTIONS
                                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
       TDE -.2196 TRA-1.8048 TC3 -.8604 BAU .6037
                                                                                         SGT 1983.2 SGR 407.7 SG3 194.6
RRT -.7267 RRF -.7890 RTF .8447
SGB 1995.3 R23 .2366 R13 -.8501
                                                                                                                                                           ST 486.7 SR 231.2 SS 107.9
CRT .1442 CRS -.2200 CST -.9786
      RDE -.2810 RRA .2041 RC3 .2056 FAU .08804
      FDE -.1332 FRA -.8524 FC3-1.4931 BSP 5907
BDE .3566 BRA 1.8163 BC3 .8847 FSP -617
                                                                                                                                                          LSA 499.5 HSA 228.2 55A 20.0
                                                                                         SG1 1976.0 SG2 276.8 THA 171.20
                                                                                                                                                          EL1 488.2 EL2 228.1 ALF 5.02
 LAUNCH DATE JAN 4 1966
                                                                                               FLIGHT TIME 98.00
                                                                                                                                                                          ARRIVAL DATE APR 12 1966
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 301.840
      RL 147.10 LAL .00 LOL 103.19 VL 29.168 GAL -13.35 AZL 89.14 MCA 144.78 SMA 139.16 ECC .23742 INC .8612 V1 30.287 RP 108.54 LAP .50 LOP 247.97 VP 38.623 GAP 5.25 AZP 90.70 TAL 243.13 TAP 27.91 RCA 106.12 APO 172.19 VZ 34.914 RC 108.588 GL 3.48 GP 20.24 ZAL 163.80 ZAP 130.18 ETS 15.34 ZAE 137.03 ETE 160.24 ZAC 28.41 ETC 184.74 CLP-133.44
    PLANETOCENTRIC CONIC
      C3 49.265 VHL 7.019 0LA -16.95 RAL 300.41 RAO 6568.8 VEL 13.062 PTH 2.38 VHP 5.147 0PA
                                                                                                                                                                   -3.21 RAP 294.13 ECC 1.8108
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CET TIM INJ 2 LAT INJ 2 LONG
                        2 48 28 1881.75
10 11 43 5639.77
4 0 8 1650.53
11 42 45 5346.22
4 47 1 1503.64
13 12 21 5065.88
           90.00
                                                                                                                        116.50 3 19 50
                                                                -10.35
                                                                                    21.41
                                                                                                    174.66
                                                                                                                                                            1281.8
                                                                                                                                                                                                        14.62
           90.00
                                                                  28.01
                                                                                    265.07
                                                                                                       185.14
                                                                                                                            94.34
                                                                                                                                         11 45 43
                                                                                                                                                                 5039.8
                                                                                                                                                                                     28.32
                                                                                                                                                                                                       256.42
         100.00
                                                                -11.87
                                                                                      3.62
                                                                                                       173.87
                                                                                                                           117.64
                                                                                                                                         4 27 38
                                                                                                                                                                 1050.5
                                                                                                                                                                                      -8.D8
                                                                                                                                                                                                       356.88
         100.00
                                                                                                                                         13 11 51
                                                                29.71
                                                                                    243.61
                                                                                                       185.28
                                                                                                                             93.43
                                                                                                                                                                                                       234.81
                                                                                                                                                                 4746.2
                                                                                                                                                                                     29.87
         110.00
                                                                                                                            120.73 5 12 5
90.97 14 36 47
                                                                -15.77
                                                                                    350.24
                                                                                                      171.63
                                                                                                                          120.73
                                                                                                                                                                 903.6
                                                                                                                                                                                                       343.64
                         13 12 21
         110.00
                                            5065.88
                                                               34.17
                                                                                    222.53
                                                                                                      185.48
                                                                                                                                                               4465.9
                                                                                                                                                                                     33.93
                                                                                                                                                                                                       213.29
    DIFFERENTIAL CORRECTIONS
                                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                                        SGT 2056.7 SGR 407.2 SG3 188.9
RRT -.7439 RRF -.8183 RTF .8441
      TOE -.2659 TRA-1.8401 TC3 -.9334 BAU .6319
                                                                                                                                                          ST 520.2 SR 210.5 SS 110.7
CRT .1880 CRS -.3296 CST -.9709
      RDE -.2503 RRA .1939 RC3 .2215 FAU .D8425
FDE -.1663 FRA -.7776 FC3-1.4805 8SP 6241
BDE .3651 BRA 1.8503 BC3 .9594 FSP -596
                                                                                        3GB 2096.6 R23 .2684 R13 -.8495
3GI 2079.2 SG2 269.2 THA 171.48
                                                                                                                                                           LSA 533.0 MSA 206.4 SSA 20.2
                                                                                                                                                                                                        5.16
                                                                                                                                                          EL1 521.9 EL2 206.0 ALF
LAUNCH DATE JAN 4 1966
                                                                                             FLIGHT TIME 100.00
                                                                                                                                                                        ARRIVAL DATE APR 14 1966
    HELIOCENTRIC CONIC
                                                                                            DISTANCE 307.744
                                .00 LOL 103.19 VL 29.074 GAL -13.10 AZL 89.42 HCA 147.96 SMA 138.37 ECC .23490 INC .5833 V1 30.287
.31 LOP 251.15 VP 38.542 GAP 5.52 AZP 90.49 TAL 241.73 TAP 29.69 RCA 105.86 APO 170.87 V2 34.903
2.40 GP 21.55 ZAL 163.20 ZAP 131.76 ETS 17.86 ZAE 135.54 ETE 159.47 ZAC 29.43 EYC 186.55 CLP-135.73
     RL 147.10 LAL
     RP 108.58 LAP
     RC 110.951 GI
    PLANETOCENTRIC CONIC
     C3 47.518 VHL 6.893 DLA -17.85 RAL 301.47 RAD 6568.8 VEL 12.995 PTH 2.37 VHP 5.257 OPA -1.81 RAP 294.79 ECC 1.7820
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     116.95 3 32 20
95.25 11 41 24
118.12 4 39 22
94.30 13 8 18
121.29 5 22 15
91.78 14 34 47
                                                                                                 175.31
                                                                                                                                                          1238.5
          90.00
                           3 1 41 1838.53
                                                                 -9.03
                                                                                   18.92
                                                                                                                                                                             -5.34
                                                                                                                                                                                                     12.18
                        10 6 59
          90.00
                                           5664.93
                                                                  27.87
                                                                                   266.90
                                                                                                    185.89
                                                                                                                                                               5064.9
                                                                                                                                                                                   28.30
                                                                                                                                                                                                     258.26
                                                                                                 174.49
                      4 12 32 16D9.95
11 38 49 5368.77
         100.00
                                                               -10.58
                                                                                     1.30
                                                                                                                                                               1009.9
                                                                                                                                                                                    -6.74
                                                                                                                                                                                                     354.62
         100.00
                                                                29.61
                                                                                  245.28
                                                                                                    186.05
                                                                                                                                                               4768.8
                                                                                                                                                                                   29.89
                                                                                                                                                                                                     236.49
         110.00
                          4 57 47 1468.14
                                                               -14.52
                                                                                  348.24
                                                                                                    172.19
                                                                                                                                                                868.1
                                                                                                                                                                                -10.27
                                                                                                                                                                                                     341.72
                        13 10 3
        110.00
                                           5083.32
                                                                 34.14
                                                                                  223.89
                                                                                                     186.34
                                                                                                                                                               4483.3
                                                                                                                                                                                  34.01
                                                                                                                                                                                                     214.64
                                                                                     MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                                      SGT 2162.1 SGR 409.1 SG3 183.2
RRT -.7597 RRF -.8478 RTF .8438
SGB 2200.4 R23 .3031 R13 -.8493
                                                                                                                                                        ST 560.0 SR 187.1 SS 118.1
CRT .2373 CRS -.4470 CST -.9574
LSA 573.4 MSA 182.6 SSA 20.6
     TOE -.3240 TRA-1.8677 TC3-1.0109 BAU .6600
     ROE -.2174 RRA .1824 RC3 .2399 FAU .D8047
FOE -.2076 FRA -.7052 FC3-1.4661 BSP 6603
BOE .3902 BRA 1.8766 BC3 1.0389 FSP -581
                                                                                       SG1 2184.6 SG2 263.3 THA 171.70
                                                                                                                                                        EL1 562.0 EL2 181.2 ALF 5.06
LAUNCH DATE JAN 4 1966
                                                                                             FLIGHT TIME 102.00
                                                                                                                                                                        ARRIVAL DATE APR 16 1966
   HELTOCENTRIC CONTC
                                                                                             DISTANCE 313.629
     RL 147.10 LAL
                                 .00 LOL 103.19 VL 28.981 GAL -12.86 AZL 89.75 HCA 151.13 SMA 137.59 ECC .23247 INC .2514 V1 30.287 .12 LOP 254.32 VP 38.462 GAP 5.78 AZP 90.22 TAL 240.30 TAP 31.43 RCA 105.60 APO 169.57 V2 34.892 1.05 GP 23.16 ZAL 162.49 ZAP 133.02 ETS 20.75 ZAE 134.02 ETE 158.47 ZAC 30.63 ETC 168.63 CLP-137.91
          108.61 LAP
     RC 113.313 GL
   PLANETOCENTRIC CONIC
     C3 45.820 VHL 6.769 DLA -18.98 RAL 302.64 RAD 6568.7 VEL 12.930 PTH 2.36 VHP 5.382 OPA
                                                                                                                                                                   -. D9 RAP 295.50 ECC 1.7541
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                  176.17
          90.00
                          3 18 16 1784.62
                                                                  -7.35
                                                                                   15.85
                                                                                                                        117.42
                                                                                                                                          3 48 O
                                                                                                                                                              1184.6
                                                                                                                                                                                   -3.62
                                                                                                                                                                                                        9.16
                                                                                                                        96.52 11 34 46
118.64 4 53 57
95.53 13 2 45
121.90 5 34 43
92.93 14 31 21
                                                                 27.62
          90.00
                          9 59 46 5700.60
                                                                                  269.48
                                                                                                    185.81
                                                                                                                                                               5100.6
                                                                                                                                                                                   28.23
                                                                                                                                                                                                     260.87
                      4 27 57 1559.68
11 32 44 5400.76
5 10 58 1424.91
        100.00
                                                                  -8.95
                                                                                  358.46
                                                                                                    175.30
                                                                                                                                                                959.7
                                                                                                                                                                                    -5.06
                                                                                                                                                                                                     351.83
                                                                                                                                                                                                 238.87
                                                                                  247.64
                                                                                                 187.02
172.91
        100.00
                                                                29.42
                                                                                                                                                                                   29.88
                                                                                                                                                               4800.8
                                                                -12.98
        110.00
                                                                                   345.84
                                                                                                                                                               824.9
                                                                                                                                                                                    -8.67
                                                                                                                                                                                                    339.40
                       13 6 13 5108.30
                                                            34.07
                                                                                   225.83
        110.00
                                                                                                     187.43
                                                                                                                                                              4508.3
                                                                                                                                                                                   34.10
                                                                                                                                                                                                     216.59
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                   SGT 2267.9 SGR 413.4 SG3 176.9

RRT -.7720 RRF -.8764 RTF .8435

SGB 2305.2 R23 .3406 R13 -.8491

SG1 2290.5 SG2 260.1 THA 171.88
                                                                                                                                                      ST 608.8 SR 161.0 SS 130.6

CRT .2897 CRS -.5539 CST -.9409

LSA 623.2 MSA 157.7 SSA 21.0

EL1 610.7 EL2 153.6 ALF 4.68
     TOE -.3965 TRA-1.8845 TC3-1.0919 BAU .6876
     TOE -.3965 TRA-1.0040 (CUT-1.0210 CUT-1.0210 CUT-1.0210
```

```
ARRIVAL DATE APR 18 1966
                                                                   FLIGHT TIME 104.00
LAUNCH DATE JAN 4 1966
                                                                   CISTANCE 319.496
  HELIOCENTRIC CONIC
                       .00 LOL 103.19 VL 28.888 GAL -12.60 AZL 90.15 HCA 154.31 SMA 136.82 ECC .23013 INC .1531 V1 30.287 -.07 LOP 257.50 VP 38.382 GAP 6.02 AZP 89.86 TAL 238.83 TAP 33.14 RCA 105.34 APO 168.31 V2 34.881
   RL 147.10 LAL
RP 108.64 LAP
                        -.65 CP 25.16 ZAL 161.61 ZAP 133.90 ETS 24.10 ZAE 132.41 ETE 157.20 ZAC 32.03 ETC 191.05 CLP-140.01
   RC 115.673 GL
  PLANETOCENTRIC CONIC
                                                                                                                      2.03 RAP 296.20 ECC 1.7275
                                                                                           2.34 VHP 5.531 DPA
   C3 44.202 VHL 6.648 DLA -20.45 RAL 303.96 RAD 6568.7 VEL 12.867 PTH
   ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                               -5.14
                                                            11.90
                                                                        177.36
                                                                                      117.88
                                                                                                   4 8 32
                                                                                                                  1114.7
                                                                                                                                 -1.37
                                                                                                                                                 5.25
                               1714.68
       90.00
                3 39 57
                                                                                        98.33 11 24 28
119.17 5 12 51
97.28 12 54 5
122.57 5 50 32
94.59 14 25 46
                                                                                                                   5152.5
                                                                                                                                  28.03
                                                                                                                                               264.65
                                                                         187.95
                                               27.16
                                                            273.21
       90.00
                   9 48 35
                              5752.46
                                                                                                                                               348.28
                                                                         176.44
                                                                                                                    895.3
                                                                                                                                  -2.89
                                                -6.83
                                                            354.85
                   4 47 56 1495.30
      100.00
                                                                                                                  4847.1
                                                                                                                                  29.77
                                                                                                                                               242.31
                                                                        188.25
                 11 23 18 5447.07
                                              29.07
                                                            251.04
      100.00
                 5 27 41 1370.70
13 0 2 5144.44
                                                                                                                   770.7
                                                                                                                                  -6.64
                                                                                                                                               336.52
                                              -11.01
                                                            342.88
                                                                        173.91
                                                                                        122.57
      110.00
                                                                                                                  4544.4
                                                                                                                                  34.17
                                                                                                                                               219.41
                                                                         188.84
                                                            228.65
      110.00
                                              33.91
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 671.7 SR 131.2 SS 150.2
CRT .3398 CRS -.6368 CST -.9265
                                                               SGT 2374.7 SGR 420.9 SG3 170.0
RRT -.7799 RRF -.9030 RTF .8435
   TDE -.4889 TRA-1.8881 TC3-1.1761 BAU .7150
   RDE -.1437 RRA .1511 RC3 .2839 FAU .07225
FDE -.3117 FRA -.5547 FC3-1.4150 BSP 7336
BDE .5096 BRA 1.8942 BC3 1.2099 FSP --544
                                                                                                               LSA 687.7 MSA 132.6 SSA 21.3
EL1 673.2 EL2 123.1 ALF 3.93
                                                               SGB 2411.7 R23 .3788 R13 -.8493
                                                                5G1 2397.6 SG2 261.0 THA 172.04
                                                                                                                          ARRIVAL DATE APR 20 1966
                                                                   FLIGHT TIME 106.00
LAUNCH DATE JAN 4 1966
                                                                   DISTANCE 325.346
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 28.795 GAL -12.34 AZL 90.66 HCA 157.48 SMA 136.07 ECC .22788 INC .6639 V1 30.287 RP 108.68 LAP -.25 LOP 260.67 VP 38.302 GAP 6.26 AZP 89.39 TAL 237.34 TAP 34.82 RCA 105.06 APO 167.08 V2 34.870 RC 118.029 GL -2.86 GP 27.69 ZAL 160.48 ZAP 134.29 ETS 28.00 ZAE 130.61 ETE 155.62 ZAC 33.68 ETC 193.90 CLP-142.05
  PLANETOCENTRIC CONIC
                                                                                                                       4.67 RAP 296.84 ECC 1.7031
   C3 42.722 VHL 6.536 DLA -22.39 RAL 305.48 RAD 6568.6 VEL 12.810 PTH 2.33 VHP 5.714 DPA
   ENCH AZHTH LNCH TIME LI TIME IN LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      118.25
                                                                        179.16
                                                                                                    4 37 13
                                                                                                                   1018.4
                               1618.37
                                               -2.05
                                                             6.51
                  4 10 15
       90.00
                                                                                       101.01 11 7 39
119.66 5 38 45
99.85 12 40 3
123.26 6 11 33
97.01 14 16 38
                                                                                                                    5231.6
                                                                                                                                   27.51
                                                                                                                                               270.38
                  9 30 28
                                5831.63
                                                26.26
                                                            278.83
                                                                         189.35
       90.00
                                                                                                                    808.5
                                                                                                                                    .05
                                                                                                                                               343.51
                                                            350.04
                                                                         178.12
      100.00
                   5 15 17
                               1408.47
                                                -3.93
                 11 8 7
                                                                                                                    4916.8
                                                                                                                                  29.43
                                                                                                                                               247.46
      100.00
                               5516.75
                                               28.36
                                                            256.10
                                                                         189.79
                                                                        175.37
                   5 49 53 1300.02
                                                                                                                    700.0
                                                                                                                                  -3.96
                                                                                                                                               332.79
                                                -8.39
                                                            339.08
      110.00
                                               33.54
                                                            232.78
                                                                         190.69
                                                                                                                   4598.0
                                                                                                                                  34.15
                                                                                                                                               223.59
                 12 50 0
                                5197.97
      110.00
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                               SGT 2478.9 SGR 431.3 SG3 161.6

RRT -.7804 RRF -.9260 RTF .8433

SGB 2516.1 R23 .4159 R13 -.8495

SG1 2501.9 SG2 267.2 THA 172.18
                                                                                                                ST 754.8 SR 96.8 SS 177.5
CRT .3731 CRS -.6806 CST -.9193
    TOE -.6078 TRA-1.8718 TC3-1.2597 BAU .7408
                                                                                                         CRT .3731 LR3 .0000
LSA 773.3 MSA 110.2 SSA 21.2
EL1 755.7 EL2 89.7 ALF 2.78
    RDE -.1013 RRA .1285 RC3 .3091 FAU .06741
   FOE -.3755 FRA -.4715 FC3-1.3661 BSP 7662
BDE .6162 BRA 1.8762 BC3 1.2971 FSP -515
                                                                                                                          ARRIVAL DATE APR 22 1966
                                                                   FLIGHT TIME 108.00
LAUNCH DATE JAN 4 1966
                                                                   DISTANCE 331.179
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 28.703 GAL -12.07 A7L 91.33 MCA 160.65 SMA 135.34 ECC .22572 INC 1.3323 V1 30.287 RP 108.71 LAP -.44 LOP 263.84 VP 38.224 GAP 6.48 A7P 88.74 TAL 235.82 TAP 36.46 RCA 104.79 APO 165.89 V2 34.860 RC 120.382 GL -5.81 GP 30.93 7AL 158.88 7AP 134.01 ETS 32.56 7AE 128.49 ETE 153.70 7AC 35.64 ETC 197.31 CLP-144.09
   PLANETOCENTRIC CONTC
    C3 41.500 VHL 6.442 DLA -25.02 RAL 307.32 RAD 6568.6 VEL 12.762 PTH 2.32 VHP 5.956 DPA 8.03 RAP 297.32 ECC 1.6830
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      118.19 5 22 34
105.22 9 8 36
                                                                       182.21
                                                                                                                869.2
                                                                                                                               6.51
                                                            358.19
                                                2.76
       90.00
                   4 58 5 1469.20
                                                            310.22
                                                                         190.90
                                                                                                                     78.1
                                                                                                                                  26.03
                                                                                                                                               302.04
                   8 57 18
                                678.12
                                                24.17
       90.00
                    5 56 33 1280.44
                                                                                      119.89 6 17 53
103.81 12 15 21
123.90 6 41 27
100.65 14 1 9
                                                                        180.90
                                                                                                                    680.4
                                                                                                                                   4.38
                                                                                                                                               336.48
                                                            343.01
      100.00
                                                 .41
                                                                                                                   5030.1
                                                                                                                                  28.41
                                                                                                                                               255.73
                                               26.78
                                                                         191.65
                  10 41 31 5630.15
                                                            264.15
      100.00
                                                                                                                                   -.23
                                                                                                                                               327.70
                                                -4.72
                                                                         177.71
                                                                                                                     602.4
                                                            333.91
      110.00
                   6 21 25
                               1202.43
                  12 33 8 5280.93
                                                                                                                   4680.9
                                                                                                                                  33.80
                                                                                                                                               230.04
                                                                         193.12
                                                            239.10
      110.00
                                              32.68
                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                             ST 874.9 SR 55.6 SS 218.5
CRT .3007 CRS -.6109 CST -.9229
                                                                SGT 2586.7 SGR 446.8 SG3 152.0
    TOE -.7721 TRA-1.8325 TC3-1.3409 BAU .7670
                                                               RRT -.7737 RRF -.9445 RTF .8450
SGB 2625.0 R23 .4465 R13 -.8516
SG1 2610.0 SG2 280.6 THA 172.30
    ROE -.0511 RRA .0999 RC3 .3365 FAU .06208
    FOE -.4565 FRA -.3867 FC3-1.2951 BSP 8039
BOE .7738 BRA 1.8352 BC3 1.3825 FSP -487
                                                                                                               LSA 898.2 MSA 95.6 SSA 19.1
                                                                                                                EL1 875.0 EL2 53.1 ALF 1.10
                                                                                                                          ARRIVAL DATE APR 24 1966
                                                                    FLIGHT TIME 110.00
LAUNCH DATE JAN 4 1966
                                                                    DISTANCE 336.996
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 28.611 GAL -11.80 A7L 92.25 MCA 163.81 SMA 134.62 ECC .22366 INC 2.2492 V1 30.287 RP 108.74 LAP -.63 LOP 267.01 VP 38.147 GAP 6.69 A7P 87.84 TAL 234.27 TAP 38.07 RCA 104.51 APO 164.72 V2 34.851
                      -9.91 GP 35.18 ZAL 156.46 ZAP 132.79 ETS 37.85 ZAE 125.79 ETE 151.43 ZAC 38.07 ETC 201.48 CLP-146.22
    RC 122.731 GL
   PLANETOCENTRIC CONIC
    C3 40.802 VHL 6.388 DLA -28.70 RAL 309.68 RAD 6568.6 VEL 12.735 PTH 2.32 VHP 6.298 DPA 12.37 RAP 297.49 ECC 1.6715
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                15.18
                                                                         189.97
                                                                                       114.66
                                                                                                     6 46 9
                                                                                                                     602.1
                                                                                                                                18.38
                    6 26 7
                               1202.06
                                                            345.00
       85.09
                   7 48 5
                                                                                                     8 3 42
                                                                                                                                                318.32
                                                                          189.98
                                                                                         114.65
                                                                                                                     336.7
                                                                                                                                   18.39
                                936.69
                                               15.19
                                                            325.56
       94.91
                             1034.42
5867.60
                                                                                         118.73
                                                                                                    7 35 D
                                                                                                                     434.4
                                                                                                                                   12.42
                                                                                                                                                322.64
                   7 17 46
                                                 8.65
                                                             329.40
                                                                          186.62
      100.00
                                                                                        110.84 11 16 56
124.17 7 29 33
106.41 33 31 45
                                                                                                                                               272.30
                                                                                                                    5267.6
                                                                                                                                  24.57
                   9 39 8
                                               21.93
                                                            280.10
                                                                         192.95
      100.00
                                                                                                                    452.5
                                                                                                                                    5.48
                                                                                                                                               319.86
      110.00
                    7 12 1
                               1052.51
                                                 1.00
                                                            326.08
                                                                          161.93
                              5422.28
                                                                                                                   4822.3
                                                                                                                                  32.36
                                                                                                                                               240.81
      110.00
                  12 1 22
                                                            249.49
                                                                          196.14
                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                           ST 1053.2 SR 25.0 SS 276.4

CRT -.7334 CRS .5546 CST -.9364

LSA 1084.9 MSA 94.7 SSA 14.1

EL1 1053.3 EL2 17.0 ALF 179.00
                                                              SGT 2695.0 SGR 466.4 SG3 140.0

RRT -.7554 RRF -.9558 RTF .8490

SGB 2735.1 R23 .4672 R13 -.8560

SG1 2718.3 SG2 303.0 THA 172.46
    TOE-1.0073 TRA-1.7548 TC3-1.4060 BAU .7919
    RDE .0106 RRA .0604 RC3 .3618 FAU .05579
    FOE -.5550 FRA -.2951 FC3-1.1838 BSP 8414
    BOE 1.0074 BRA 1.7559 BC3 1.4518 FSP -452
```

ARRIVAL DATE APR 26 1966

LAUNCH DATE JAN 4 1966

```
DISTANCE 342.796
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 103.19 VL 28.520 GAL -11.51 A7L 93.60 HCA 166.96 SMA 133.91 ECC .22169 INC 3.5957 V1 30.287 RP 108.76 LAP -.81 LOP 270.18 VP 38.070 GAP 6.89 A7P 86.50 TAL 232.69 TAP 39.65 RCA 104.22 APO 163.60 V2 34.842 RC 125.075 GL -15.83 GP 40.90 ZAL 152.49 ZAP 130.20 ETS 44.00 ZAE 122.10 ETE 148.89 ZAC 41.20 ETC 206.68 CLP-148.65
    PLANETOCENTRIC CONIC
     C3 41.301 VHL 6.427 DLA -34.05 RAL 313.03 RAD 6568.6 VEL 12.754 PTH 2.32 VHP 6.835 CPA 18.10 RAP 297.05 ECC 1.6797
                                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                             119.59 5 18 2 944.1

119.59 5 18 2 944.1

119.58 9 58 37 .8

119.58 9 58 37 .8

120.93 9 38 17 66.1

118.29 11 49 48 5214.8
                                                                                                        194.89
                                                                     17.67
                                                                                                                                                                                           21.47
                                                                                                                                                                                                                      4.95
           70.25 4 52 18 1544.05
                                                                                          12.01
                                                                                                            194.90
                                                                                                                                                                                                                    294.62
                            9 48 36
                                                600.84
                                                                       17.68
                                                                                         301.68
                                                                                                                                                                                                 21.48
         109.75
                           4 52 18 1544.05
                                                                     17.67
                                                                                          12.01
                                                                                                        194.89
                                                                                                                                                                                                 21.47
                                                                                                                                                                                                                      4.95
           70.25
                                              600.84
                                                                                         301.68
                                                                                                            194.90
                                                                                                                                                                                                 21.48
                                                                                                                                                                                                                    294.62
                           9 48 36
                                                                      17.68
         109.75
                                                                                                        193.47
                                                                                                                                                                                                 19.35
                                                                                                                                                                                                                    298.50
                                                                                         305.35
                             9 27 11
                                                                     15.34
                                                 666.13
         110.00
                                                                                                                                                                                                 23.66
                                              5814.80
                                                                                                                                                                        5214.8
                         10 12 53
                                                                 20.04
                                                                                         275.18
                                                                                                             196.28
                                                                                                                                                                                                                    267.91
         110.00
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SCT 2801.8 SCR 486.1 SC3 124.4

RRT -.7164 RRF -.9538 RTF .8568

SCB 2843.6 R23 .4743 R13 -.8641

SCI 2823.6 SC2 336.6 THA 172.81
                                                                                                                                                                  ST 1329.3 SR 80.4 S5 356.6
CRT -.9130 CRS .9884 CST -.9554
      TDE-1.3706 TRA-1.6122 TC3-1.4235 BAU .8125
     RDE .0887 RRA .0008 RC3 .3732 FAU .04796
FDE -.6724 FRA -.1922 FC3-1.0054 BSP 8753
BDE 1.3734 BRA 1.6122 BC3 1.4716 FSP -401
                                                                                                                                                                    LSA 1374.5 MSA 106.4 SSA 8.4
                                                                                                                                                                   ELI 1331.3 EL2 32.7 ALF 176.84
                                                                                                    FLIGHT TIME 114.00
                                                                                                                                                                                     ARRIVAL DATE APR 28 1966
LAUNCH DATE JAN 4 1966
                                                                                                   DISTANCE 348.573
   HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 103.19 VL 28.430 GAL -11.22 AZL 95.78 HCA 170.10 SNA 133.22 ECC .21980 INC 5.7795 V1 30.287
RP 108.79 LAP -.99 LOP 273.34 VP 37.995 GAP 7.08 AZP 84.31 TAL 231.08 TAP 41.19 RCA 103.94 APO 162.50 VZ 34.834
     RC 127.413 GL -24.74 GP 48.75 TAL 145.64 ZAP 125.60 ETS 51.24 ZAE 116.73 ETE 146.58 ZAC 45.42 ETC 213.42 CLP-151.99
   PLANETOCENTRIC CONIC
     C3 45.045 VHL 6.712 OLA -42.01 RAL 318.58 RAD 6568.7 VEL 12.900 PTH
                                                                                                                                        2.35 VHP 7.795 DPA 25.80 RAP 295.38 ECC 1.7413
     C3 45.045 VHL 6.712 DLA -42.01 RAL 318.58 RAD 6568.7 VEL 12.900 PTH 2.35 VMP 7.795 DPA 25.80 RAP 295.38 ECC 1.7413 LNCH AYMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.57 4 10 5 1753.50 20.37 31.04 204.22 127.57 4 39 19 1153.5 25.10 24.46 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 57.57 4 10 5 1753.50 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 57.57 4 10 5 1753.50 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 57.57 4 10 5 1753.50 20.37 31.04 204.22 127.57 4 39 19 1153.5 25.10 24.46 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 15 6 5723.15 20.38 267.93 204.23 127.56 12 50 29 5123.2 25.12 261.34 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43 11 122.43
                                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                            MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SCT 2912.0 SGR 497.7 SG3 104.7
RRT -.6330 RRF -.9173 RTF .8752
SGB 2954.2 R23 .4566 R13 -.8818
     TOE-2.0063 TRA-1.3458 TC3-1.3233 BAU .8232

ROE .1836 RRA -.0944 RC3 .3425 FAU .03827

FOE -.8162 FRA -.0795 FC3 -.7355 BSP 9116

BDE 2.0147 BRA 1.3491 BC3 1.3669 FSP -340
                                                                                                                                                                   ST 1775.3 SR 160.7 S5 470.0
CRT -.8908 CRS .9696 CST -.9747
                                                                                                                                                                   LSA 1839.3 MSA 123.8 SSA 4.3
EL1 1781.0 EL2 72.8 ALF 175.38
                                                                                              SG1 2929.2 SG2 383.0 THA 173.72
                                                                                                                                                                                    ARRIVAL DATE APR 30 1966
                                                                                                   FLIGHT TIME 116.00
LAUNCH DATE JAN 4 1966
                                                                                                 .DISTANCE 354.313
    HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 28.341 GAL -10.92 AZL 99.95 HCA 173.22 SMA 132.55 ECC .21793 INC 9.9520 VI 30.287 RP 108.81 LAP -1.17 LOP 276.51 VP 37.922 GAP 7.25 AZP 80.12 TAL 229.44 TAP 42.66 RCA 103.66 APO 161.43 V2 34.826 RC 129.747 GL -38.26 GP 59.58 ZAL 133.80 ZAP 118.14 ETS 60.93 ZAE 108.39 ETE 146.64 ZAC 51.25 ETC 223.43 CLP-158.66
   PLANETOCENTRIC CONIC
     C3 60.312 VHL 7.766 DLA -53.38 RAL 330.43 RAO 6569.1 VEL 13.478 PTH 2.46 VHP 9.866 DPA 36.06 RAP 290.71 ECC 1.9926
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                       4 4 57 1956.64
12 54 46 5664.72
4 4 57 1956.64
12 54 46 5664.72
4 4 57 1956.64
12 54 46 5664.72
12 54 46 5664.72
                                                                                                                              140.32 4 37 34
140.31 14 29 11
140.32 4 37 34
140.31 14 29 11
                                                                                                       223.91
                                                                                                                                                                      1356.6
                                                                     20.92
                                                                                        51.17
          42.65
                                                                                                                                                                           5064.7
                                                                                                                                                                                                 26.99
                                                                      20.93
                                                                                        262.88
                                                                                                           223.93
                                                                                                                                                                           1356.6
                                                                                                                                                                                                26.98
                                                                      20.92
                                                                                         51.17
                                                                                                          223.91
           42.65
                                                                                                                                                                           5064.7
                                                                                                                                                                                                 26.99
                                                                      20.93
                                                                                        262.88
                                                                                                           223.93
                                                                                                                                  140.32 4 37 34
140.31 14 29 11
                                                                                                                                                                           1356.6
                                                                                                                                                                                                26.98
                                                                                                           223.91
                                                                      20.92
                                                                                          51.17
                                                             20.93
                                                                                                                                                                           5064.7
                                                                                                                                                                                                26.99
                                                                                        262.88
                                                                                                            223.93
                                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 3020.7 SGR 469.8 SG3 81.0
RRT - ,3470 RRF - .6904 RTF .9149
SGB 3057.0 R23 .3903 R13 - .9180
SGI 3025.2 SG2 440.0 THA 176.84
                                                                                                                                                                   ST 2467.7 SR 157.4 S5 621.7
CRT -.7228 CRS .8149 CST -.9895
      TOE-3.3221 TRA -.7646 TC3 -.9599 BAU .7921
     ROE .1699 RRA -.2552 RC3 .2090 FAU .02629
FOE -.9878 FRA .0581 FC3 -.3774 BSP 9427
BOE 3.3265 BRA .8061 BC3 .9824 FSP -261
                                                                                                                                                                    LSA 2545.9 MSA 138.5 SSA
                                                                                                                                                                    EL1 2470.4 EL2 108.7 ALF 177.36
                                                                                                                                                                                    ARRIVAL DATE MAY 2 1966
                                                                                                   FLIGHT TIME 118.00
LAUNCH DATE JAN 4 1966
                                                                                                   DISTANCE 359.949
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 103.19 VL 28.253 GAL -10.59 A7L 110.93 MCA 176.24 SMA 131.89 ECC .21590 INC20.9247 VI 30.287 RP 108.84 LAP -1.34 LOP 279.67 VP 37.849 GAP 7.39 AZP 69.12 TAL 227.75 TAP 43.99 RCA 103.42 APO 160.37 VZ 34.819 RC 132.074 GL -55.66 GP 72.63 ZAL 115.65 ZAP 107.26 ETS 86.46 ZAE 94.17 ETE 163.93 ZAC 58.59 ETC 250.76 CLP 173.64
    PLANETOCENTRIC CONIC
                                                                                                                                       2.85 VHP 15.997 OPA 48.20 RAP 276.22 ECC 3.3750
                                                                          2.24 RAD 6570.6 VEL 16.298 PTH
     C3 144.311 VHL 12.013 DLA -63.16 RAL
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        266.02
                        5 40 47 2206.35
15 32 43 5793.62
5 40 47 2206.35
15 32 43 5793.62
                                                                                          68.22
                                                                                                                                 152.51
                                                                                                                                                     6 17 33
                                                                                                                                                                           1606.3
                                                                                                                                                                                                 19.11
          30.85
                                                                      12.05
                                                                                                                                  152.51 17 9 16
                                                                                                                                                                            5193.6
                                                                                                                                                                                                 19.13
                                                                      12.06
                                                                                         264.86
         149.15
                                                                                          68.22
                                                                                                             266.02
                                                                                                                                  152.51
                                                                                                                                                     6 17 33
                                                                                                                                                                            1606.3
                                                                                                                                                                                                 19.11
                                                                                                                                                                                                                     64.74
                                                                      12.05
          30.85
                                                                                                                                152.51 17 9 16
152.51 6 17 33
152.51 17 9 16
                                                                                         264.86
                                                                                                             266.05
                                                                                                                                                                            5193.6
                                                                                                                                                                                                 19.13
                                                                                                                                                                                                                    261.38
         149.15
                                                                     12.06
                                                                                                                                                                           1606.3
                                                                                                                                                                                                                     64.74
                                                                     12.05
                                                                                           68.22
                                                                                                             266.02
                                                                                                                                                                                                 19.11
                         5 40 47 2206.35
15 32 43 5793.62
          30.85
                                                                                                                                                                        5193.6
                                                                                         264.86
                                                                                                            266.05
                                                                                                                                                                                                 19.13
                                                                     12.06
         149.15
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                            HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                            SCT 2959.3 SGR 1013.6 SG3 57.3
RRT .8811 RRF .7865 RTF .9847
SGB 3128.0 R23 -.2164 R13 .9758
                                                                                                                                                                   ST 2709.1 SR 1010.9 55 768.7
      TDE-5.6414 TRA .9947 TC3 -.2676 BAU .5162
                                                                                                                                                                  CRT .9903 CRS -.9792 CST -.9979
LSA 2988.5 MSA 145.1 SSA .9
     ROE-2.1190 RRA -.0724 RC3 -.0026 FAU .01161
FDE-1.1469 FRA .3167 FC3 -.0696 BSP 9499
BOE 6.0262 BRA .9973 BC3 .2676 FSP -180
                                                                                             SG1 3094.3 SG2 458.4 THA 17.18
                                                                                                                                                                    ELI 2888.6 ELZ 131.9 ALF 20.33
```

FLIGHT TIME 112.00

```
ARRIVAL CATE MAY 4 1966
                                                                    FLIGHT TIME 120.00
LAUNCH DATE JAN 4 1966
                                                                   CISTANCE 364.771
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 28.166 GAL -10.08 A7L 166.85 MCA 178.45 SMA 131.25 ECC .21160 INC76.8451 V1 30.287 RP 108.86 LAP -1.51 LOP 282.83 VP 37.778 GAP 7.30 A7P 13.16 TAL 225.74 TAP 44.19 RCA 103.48 APO 159.02 V2 34.812 RC 134.395 GL -47.81 GP 52.20 TAL 97.79 TAP 95.76 ETS 169.06 TAE 57.83 ETE 238.33 TAC 62.42 ETC 343.76 CLP 99.43
  PLANETOCENTRIC CONIC
    C31328.442 VML 36.448 CLA -42.26 RAL 24.88 RAC 6573.1 VEL 38.075 PTH 3.55 VHP 46.686 CPA 40.82 RAP 226.52 ECC22.8628
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                      132.25 9 10 21
132.25 15 56 14
132.25 9 10 21
132.25 15 56 14
132.25 9 10 21
132.25 15 56 14
                                                                                                                 1635.5
                                                                                                                                4.56
                                                                        295.76
                                                                                                                                                 49.12
                                                - .81
                                                              54.64
       57.21
                   8 33 6 2235.55
                                                                                                                     309.1
                                                                                                                                     4.58
                                                                                                                                                 307.39
                                                  - .80
                                                             312.90
                                                                          295.77
                  15 41 5
      122.79
                                909.07
                                                                                                                                                 49.12
                                                                          295.76
                                                                                                                    1635.5
                                                                                                                                     4.56
                                                              54.64
       57.21
                  8 33 6 2235.55
                                                  - .81
                                                                          295.77
                                                                                                                     309.1
                                                                                                                                     4.58
                                                                                                                                                 307.39
                                                            312.90
                                                 - .80
      122.79
                 15 41 5
                                 909.07
                                                                                                                    1635.5
                                                                                                                                     4.56
                                                                                                                                                 49.12
                                                                          295.76
                   8 33 6 2235.55
                                                              54.64
                                                 - .81
       57.21
                                                                                                                     309.1
                                                                                                                                     4.58
                                                                                                                                                307.39
                                                             312.90
                                                                          295.77
                                                 - .80
      172 74
                 15 A1 5
                                909.07
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                               ST 660.9 SR 1376.8 SS 1073.9
CRT -.9268 CRS -.9989 CST .9080
                                                                SGT 807.1 SGR 2523.4 SG3 44.3
    TOE 4.2026 TRA -.2208 TC3 -.0633 BAU 3.1717
                                                                RRT -.7276 RRF .9983 RTF -.6865
5GB 2649.3 R23 -.1085 R13 .9941
    RDE-8.0424 RRA 8.5357 RC3 .1670 FAU-.04930
FDE-1.5218 FRA 1.8308 FC3 .0321 BSP 6865
BDE 9.0743 BRA 8.5385 BC3 .1786 FSP -123
                                                                                                                LSA 1850.5 MSA 247.7 SSA
                                                                5G1 2594.0 SG2 538.6 THA 103.70
                                                                                                               ELI 1510.4 ELZ 226.2 ALF 114.57
                                                                                                                           ARRIVAL CATE MAY 6 1966
                                                                    FLIGHT TIME 122.00
LAUNCH DATE JAN 4 1966
  HELIOCENTRIC CONIC
                                                                    DISTANCE 372.197
   RL 147.10 LAL .00 LOL 103.19 VL 28.080 GAL -10.13 AZL 59.11 HCA 183.27 SMA 130.63 ECC .21520 INC30.8908 V1 30.287 RP 108.87 LAP -1.68 LOP 286.00 VP 37.709 GAP 7.95 AZP 120.85 TAL 224.65 TAP 47.92 RCA 102.51 APO 158.74 V2 34.806
    RC 136.709 GL 59.92 GP -72.77 ZAL 107.54 ZAP 106.23 ETS 238.24 ZAE 86.88 ETE 164.98 ZAC 87.00 ETC 79.68 CLP 160.60
  PLANETOCENTRIC CONIC
                                                                                             3.12 VMP 18.296 DPA -81.87 RAP 120.80 ECC 5.4263
    C3 268.956 VHL 16.400 DLA 45.52 RAL 310.88 RAD 6571.6 VEL 19.755 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                        216.03
                                                                                       44.69 16 38 32
44.69 23 57 54
44.69 16 38 32
44.69 16 38 32
44.69 16 38 32
44.69 23 57 54
                                                                                                                                 -10.59
                                                                                                                  4206.9
                                                                                                                                               217.26
                  15 18 25
                                4806.93
                                                -4.94
                                                             222.56
       52.74
                23 1 26
                                                                                                                     2787.4
                                                                                                                                   -10 58
                                                                                                                                                 107.10
                                                            112.40
                                                                          216.01
                                3387.39
                                                 -4.92
      127.26
                                                                                                                     4206.9
                                                                                                                                   -10.59
                                                                                                                                                 217.26
                                                             222.56
                                                                          216.03
                  15 18 25
                                4806.93
                                                 -4.94
       52.74
                 23 1 26
                                                                        216.01
                                                                                                                                                 107.10
                                                                                                                     2787.4
                                                                                                                                  -10.58
                                3387.39
                                                -4.92
                                                            112.40
      127.26
                                                                                                                                                 217.26
                                                                                                                     4206.9
                                                                                                                                  -10.59
                                                -4.94
                                                             222.56
                                                                         216.03
       52.74
                  15 18 25
                                4806.93
                                                            112.40
                                                                         216.01
                                                                                                                    2787.4
                                                                                                                                  -10.58
                                                                                                                                                 107.10
                                                -4.92
      127.26
                  23 1 26
                                3387.39
                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1783.0 SR 1748.9 S5 825.9

CRT -.9862 CRS ..9889 CST -.9999

LSA 2621.9 M5A 213.4 SSA 1.2

EL1 2488.9 EL2 207.4 ALF 135.56
                                                                SGT 2069.3 SGR 2592.4 SG3 53.8
RRT -.9427 RRF -.9520 RTF ..9987
    TOE 5.0165 TRA-2.1897 TC3 -.0413 BAU .1685
    RDE-4.7007 RRA 4.0202 RC3 -.0222 FAU .00566
    FOE 1.4650 FRA -. 7006 FC3 -. 0182 BSP 10501
                                                               SGB 3317.0 R23 -.1764 R13 -.9835
    BOE 6.8748 BRA 4.5779 BC3 .0469 FSP -183
                                                                 SG1 3271.6 SG2 547.2 THA 128.22
                                                                                                                           ARRIVAL DATE MAY 8 1966
                                                                    FLIGHT TIME 124.00
LAUNCH DATE JAN 4 1966
                                                                   DISTANCE 377.769
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 27.995 GAL -9.77 AZL 72.64 HCA 186.25 SMA 130.02 ECC .21341 INC17.1573 V1 30.287 RP 108.89 LAP -1.84 LOP 289.16 VP 37.641 GAP 8.06 AZP 107.06 TAL 222.89 TAP 49.13 RCA 102.27 APO 157.76 V2 34.801
    RC 139.015 GL 52.84 GP -59.65 7AL 117.76 7AP 119.31 ETS 281.59 7AE 103.22 ETE 202.80 7AC 80.03 ETC 122.53 CLP-165.65
   PLANETOCENTRIC CONIC
    C3 104.280 VHL 10.212 OLA 35.85 RAL 306.37 RAD 6570.0 VEL 15.021 PTH 2.70 VHP 10.600 CPA -76.69 RAP 354.09 ECC 2.7162
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 67.03 16 5 20 4463.07 -10.38 197.90 201.70 55.49 17 19 43 3863.1 -14.83 191.50
                                                                                        1NJ AZMTH INJ TIME

55.49 17 19 43

55.49 22 35 17

55.49 17 19 43

55.49 22 35 17

55.49 17 19 43

55.49 22 35 17
       67.03 16 5 20 4463.07
                                                                          201.69
                                                                                                                     2808.6
                                                                                                                                  -14.81
                                                                                                                                                 112.38
                  21 38 28
                                3408.60
                                               -10.36
                                                            118.78
      112.97
                                                                                                                     3863.1
                                                                                                                                  -14.83
                                                                                                                                                191.50
                 16 5 20
                                                            197.90
                                                                          201.70
                               4463.07
                                               -10.38
       67.03
                                                            118.78
                                                                          201.69
                                                                                                                     2808.6
                                                                                                                                  -14.81
                                                                                                                                                112.38
                                               -10.36
      112.97
                  21 38 28
                                3408.60
                                                                           201.70
                                                                                                                     3863.1
                                                                                                                                  -14.83
                                                                                                                                                191.50
                                                            197.90
                                               -10.38
       67.03
                  16 5 20 4463.07
                                                                                                                                 -14.81
                                                                                                                    2808.6
                                                                                                                                                112.38
                  21 38 28
                                                            118.78
                                                                           201.69
      112 47
                                3408.60
                                               -10.36
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                               ST 2141.1 SR 252.4 SS 615.6

CRT -.7565 CRS .6437 CST -.9874

LSA 2233.9 MSA 191.2 SSA 1.5

EL1 2149.6 EL2 164.4 ALF 174.87
                                                                SGT 3377.4 SGR 751.3 SG3 77.4
    TOE 3.5646 TRA-3.6774 TC3 -.4713 BAU .6575
    FOE -.2130 RRA 1.0706 RC3 .0153 FAU .02349
FOE 1.1724 FRA -.6624 FC3 -.1951 BSP 10764
BOE 3.5710 BRA 3.8300 BC3 .4716 FSP -259
                                                                RRT -.8495 RRF -.6405 RTF .9479
SGB 3459.9 R23 -.3327 R13 -.9409
                                                                SG1 3437.9 SG2 389.4 THA 169.16
                                                                                                                            ARRIVAL DATE MAY 10 1966
                                                                    FLIGHT TIME 126.00
LAUNCH DATE JAN 4 1966
                                                                    DISTANCE 383.459
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 27.911 GAL -9.43 A7L 77.63 MCA 189.35 SMA 129.42 ECC .21211 INC12.3723 VI 30.287 RP 108.90 LAP -1.99 LOP 292.32 VP 37.575 GAP 8.21 AZP 102.21 TAL 221.15 TAP 50.49 RCA 101.97 APO 156.88 V2 34.797 RC 141.312 GL 45.98 GP -47.45 ZAL 123.94 ZAP 129.56 ETS 292.85 ZAE 112.47 ETE 206.83 ZAC 74.39 ETC 134.01 CLP-160.36
   PLANETOCENTRIC CONIC
    C3 67.299 VHL 8.204 DLA 28.75 RAL 307.20 RAD 6569.3 VEL 13.735 PTH 2.51 VHP 8.301 DPA -64.26 RAP 340.42 ECC 2.1076
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 -15.04
                                                                                                                     3377.2
                                                                                                                                                 154.81
                                                                        195.31
                                                                                       63.49 19 18 14
63.49 20 40 9
                18 11 56 3977.25
                                                -11.57
                                                            161.80
       84.79
                                                                                                                                   -15.02
                                                                                                                                                 134.27
                                                                                                                     3096.9
        95.21
                   19 38 32
                                3696.91
                                                -11.55
                                                             141.26
                                                                           195.30
                                                                                           66.17 22 21 41
60.45 20 10 38
69.07 24 37 17
55.99 20 4 24
                                                                                                                                                 111.78
                                                                                                                     2752.0
                21 25 49
                                                                           198.73
                                                                                                                                   -21.66
       100.00
                                3352.01
                                                -18.60
                                                             119.23
                                                                           191.62
                                                                                                                     3197.4
                                                                                                                                    -8.60
                                                                                                                                                 138.36
       100.00
                  19 7 21
                                3797.38
                                                -4.70
                                                             144.98
                                                                                                                                                  81.06
                                                                                                                     2304.1
                                                                                                                                   -30.25
                  23 48 53 2904.09
                                                -27.67
                                                              89.30
                                                                           202.78
      110.00
                                                                                                                                      -.85
                                                                                                                     3218.1
       110.00
                   19 D 46
                                3818.07
                                                3.64
                                                             141.38
                                                                           186.46
                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 1924.3 SR 166.9 55 563.8
CRT .3654 CRS -.5813 CST -.9698
                                                                SCT 3533.0 SCR 404.6 SC3 100.8
RRT -.5372 RRF -.1402 RTF .9055
SCB 3556.1 R23 -.4159 R13 -.9030
                                                   .8047
    TOE 2.4987 TRA-3.3879 TC3 -.8941 BAU
    RDE .1728 RRA .4822 RC3 -.0242 FAU .03431
                                                                                                               CRT .3654 CRS -130,0 CS
LSA 2001.9 MSA 203.0 SSA 2.4
    FOE 1.1052 FRA -.6145 FC3 -.4414 BSP 11109
                                                                                                                 EL1 1925.3 EL2 155.2 ALF 1.83
    BOE 2.5047 BRA 3.4221 BC3 .8944 FSP -335
                                                                SG1 3539.7 SG2 340.6 THA 176.45
```

```
FLIGHT TIME 128.00
                                                                                                                                              ARRIVAL CATE MAY 12 1966
LAUNCH DATE JAN 4 1966
                                                                              CISTANCE 389.174
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 27.829 GAL -9.09 AZL 80.03 HCA 192.48 SMA 128.85 ECC .21104 INC 9.9651 V1 30.287 RP 108.92 LAP -2.14 LOP 295.48 VP 37.510 GAP 8.36 AZP 99.73 TAL 219.40 TAP 51.88 RCA 101.65 APO 156.04 V2 34.793
                            41.06 CP -30.54 ZAL 127.48 ZAP 137.03 ETS 298.94 ZAE 118.14 ETE 205.43 ZAC 70.98 ETC 140.36 CLP-159.32
     RC 143.598 GL
   PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ ET ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 17 48 3323.26 -24.15 119.25 196.62 74.75 22 13 11 2723.3 -24.01
                                                                                                    74.75 22 13 11
61.70 17 55 56
75.84 23 48 58
60.26 18 54 6
78.34 1 34 46
56.70 19 21 35
         90.00
                     16 45 27
                                    4229.03
                                                         .98
                                                                      173.60
                                                                                      186.48
                                                                                                                                       3629.0
                                                                                                                                                        -2.81
                   22 59 1 2996.92
                                                                                     197.33
                                                                                                                                       2396.9
                                                                                                                                                       -28.29
                                                                                                                                                                        87.55
                                                     -26.60
                                                                        95.95
       100.00
                   17 46 55
                                                                                      185.25
                                                                                                                                       3430.6
                                                                                                                                                          -.79
                                                                                                                                                                       151.27
       100.00
                                    4030.61
                                                         3.19
                                                                      157.79
                    0 50 26 2660.67
18 15 56 3939.62
                                                                                                                                       2060.7
                                                                                                                                                       -33.63
                                                                        71.93
                                                                                     198.84
       110.00
                                                       -32.36
                                                                                      182.14
                                                       8.23
                                                                      147.79
                                                                                                                                       3339.6
                                                                                                                                                         3.79
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ST 1770.5 SR 184.2 SS 531.8
CRT .5937 CRS -.8111 CST -.9522
                                                                          SCT 3633.5 SGR 318.8 SG3 117.9
RRT -.3362 RRF .1259 RTF .8792
     TOE 1.9803 TRA-3.1606 TC3-1.2439 BAU .8719
    ROE .2093 RRA .3095 RC3 -.0328 FAU .04088
FOE 1.0401 FRA -.5508 FC3 -.6753 BSP 11409
BOE 1.9914 BRA 3.1757 BC3 1.2444 FSP -386
                                                                        SGB 3647.5 R23 -.4497 R13 -.8781
                                                                                                                                  LSA 1845.5 MSA 213.2 SSA
                                                                                                                                                                             3.5
                                                                                                                                  EL1 1773.9 EL2 147.9 ALF
                                                                          SG1 3635.1 SG2 300.1 THA 178.30
                                                                               FLIGHT TIME 130.00
                                                                                                                                               ARRIVAL DATE MAY 14 1966
LAUNCH DATE JAN 4 1966
  HELIOCENTRIC CONIC
                                                                              DISTANCE 394.895
    PLANETOCENTRIC CONIC
    C3 44.391 VHL 6.663 DLA 20.87 RAL 310.54 RAD 6568.7 VEL 12.875 PTH
                                                                                                           2.35 VHP 6.919 DPA -48.08 RAP 336.02 ECC 1.7306
    LNCH AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 7 53 3127.83 -26.96 105.64 194.75 81.00 23 0 1 2527.8 -27.93 97.11
                                                                                                        62.03 17 21 37
82.06 24 30 10
60.72 18 25 24
84.76 2 6 46
57.30 19 2 6
                   16 9 15
                                    4341.46
                                                                      179.89
                                                                                      184.16
                                                                                                                                       3741.5
                                                        4.59
                                                                                                                                                         .81
                  23 43 10 2820.62
17 16 40 4123.90
                                                       -28.91
                                                                        83.37
                                                                                      195.08
                                                                                                                                       2220.6
                                                                                                                                                        -29.71
                                                                                                                                                                         74.65
                                                                                                                                       3523.9
                                                                      162.95
                                                                                  183.21
                                                         6.32
                                                                                                                                                        2.37
                                                                                                                                                                       156.39
                   1 24 51 2514.77
17 55 24 4002.52
                                                       -33.83
                                                                        60.80
                                                                                     195.74
                                                                                                                                       1914.8
                                                                                                                                                       -34.18
                                                                                                                                                                         51.58
                                                                                   180.64
                                                                                                                                     3402.5
                                                      10.56
                                                                      151.17
                                                                                                                                                        6.18
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          SGT 3729.2 SGR 278.8 SG3 129.1
RRT - .2627 RRF .2087 RTF .8629
                                                                                                                                 ST 1667.0 SR 187.3 S5 505.6
CRT .6451 CRS -.8730 CST -.9356
     TOE 1.6818 TRA-2.9940 TC3-1.5421 BAU .9153
     ROE .2046 RRA .2327 RC3 -.0228 FAU .04451
                                                                                                                                LSA 1738.0 MSA 221.0 SSA 4.8
EL1 1671.4 EL2 142.8 ALF 4.18
    FOE .9704 FRA -.4823 FC3 -.8681 BSP 11717
                                                                         SGB 3739.7 R23 -.4525 R13 -.8622
     BOE 1.6942 BRA 3.0030 BC3 1.5422 FSP
                                                                          9G1 3730.0 5G2 269.0 THA 178.87
                                                           -420
                                                                              FLIGHT TIME 132.00
                                                                                                                                              ARRIVAL CATE MAY 16 1966
LAUNCH DATE JAN 4 1966
   HELIOCENTRIC CONIC
                                                                             01STANCE 400.616
    RL 147.10 LAL .00 LOL 103.19 VL 27.668 CAL -8.41 AZL 82.46 HCA 198.77 SMA 127.74 ECC .20940 INC 7.5394 V1 30.287 RP 108.93 LAP -2.42 LOP 301.81 VP 37.385 CAP 8.66 AZP 97.14 TAL 215.87 TAP 54.64 RCA 100.99 APO 154.48 V2 34.787 RC 148.138 GL 34.97 CP -27.26 TAL 130.29 ZAP 146.60 ETS 306.97 ZAE 124.03 ETE 200.60 ZAC 68.75 ETC 148.57 CLP-159.92
   PLANETOCENTRIC CONIC
    C3 39.258 VHL 6.266 DLA 18.73 RAL 312.32 RAD 6568.5 VEL 12.674 PTH 2.30 VHP 6.697 DPA -42.75 RAP 336.26 ECC 1.6461
    C3 39.258 VHL 6.266 OLA 18.73 RAL 312.32 RAD 6568.5 VEL 12.674 PTH 2.30 VHP 6.697 OPA -42.75 RAP 336.26 ECC 1.6461 LNCH A7MTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO C5T TIM INJ 2 LAT INJ 2 LONG 90.00 22 39 9 3007.33 -27.95 96.96 193.40 85.24 23 29 16 2407.3 -28.31 88.32 90.00 15 52 9 4399.98 6.45 183.18 183.41 62.37 17 5 29 3800.0 2.70 176.51 100.00 0 15 47 2708.36 -29.69 75.12 193.55 86.34 1 0 55 2108.4 -29.88 66.32 100.00 17 2 7 4174.18 7.99 165.75 182.58 61.10 18 11 41 3574.2 4.07 159.15 110.00 1 48 44 2417.55 -34.18 53.24 193.75 89.23 2 29 2 1817.5 -33.91 44.00 110.00 17 45 39 4037.76 11.85 153.09 180.26 57.70 18 52 57 3437.8 7.50 146.69
                  1 48 44 2417.55
17 45 39 4037.76
                                                                        HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                                                                 ST 1596.9 SR 189.1 55 484.2
                                                                          SCT 3825.5 SCR 256.2 SC3 136.1
RRT - .2444 RRF .2109 RTF .8522
SCB 3834.0 R23 - .4332 R13 - .8518
    TOE 1.4908 TRA-2.8615 TC3-1.8096 BAU .9497
                                                                                                                                CRT .6687 CRS -.9057 CST -.9204
    RCE .1981 RRA .1875 RC3 -.0048 FAU .04627
FDE .9047 FRA -.4149 FC3-1.0203 BSP 12061
                                                                                                                                LSA 1663.9 MSA 227.4 SSA 6.1
EL1 1601.9 EL2 140.2 ALF 4.56
                                                                          SG1 3826.0 SG2 248.3 THA 179.06
    BOF 1.5039 BRA 2.8676 BC3 1.8096 FSP
                                                          -442
                                                                                                                                              ARRIVAL DATE MAY 18 1966
                                                                              FLIGHT TIME 134.00
                                                                             DISTANCE 406.334
    RL 147.10 LAL .00 LOL 103.19 VL 27.589 GAL -8.05 AZL 83.16 HCA 201.92 SMA 127.20 ECC .20880 INC 6.8367 V1 30.287 RP 108.94 LAP -2.55 LOP 304.97 VP 37.325 GAP 8.81 AZP 96.35 TAL 214.08 TAP 56.00 RCA 100.64 APO 153.76 V2 34.786 RC 150.390 GL 33.03 GP -23.61 ZAL 130.47 ZAP 149.80 ETS 309.90 ZAE 125.60 ETE 198.46 ZAC 68.98 ETC 151.49 CLP-160.60
   PLANETOCENTRIC CONIC
    C3 35.581 VML 5.965 OLA 17.27 RAL 314.11 RAD 6568.4 VEL 12.528 PTH 2.27 VMP 6.586 DPA -38.52 RAP 337.09 ECC 1.5856 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                      NJ AZMTH INJ TIME
88.20 23 50 1
62.60 16 58 13
89.33 1 20 21
61.34 18 5 45
92.38 2 45 49
57.93 18 49 39
                                                                                   192.67
                                                                                                                                       2325.9
                                                                                                                                                     -28.22
                                                                                                                                                                        82.37
                                                                      91.03
        90.00 23 1 15 2925.94
                                                      -28.26
                                                                                                                                       3831.7
                                                                                                                                                         3.72
        90.00
                    15 44 21
                                    4431.67
                                                       7.45
                                                                      184.98
                                                                                     143.39
                                                                                                                                       2031.5
                                                                                                                                                       -29.66
                                                                                                                                                                        60.61
                      0 36 29 2631.48
                                                      -29.89
                                                                      69.41
                                                                                     192.71
       100.00
                    16 55 44
                                     4201.36
                                                        8.88
                                                                      167.28
                                                                                     182.62
                                                                                                                                       3601.4
                                                                                                                                                         4.98
                                                                                                                                                                       160.65
       100.00
                                                                                   192.64
                                                   -34.11
                                                                                                                                                                        38.74
                                                                                                                                       1749.3
                                                                                                                                                       -33.41
                      2 6 40 2349.35
                                                                       47.91
       110.00
                                                                      154.10
                                                                                                                                       3456.3
                                                                                                                                                         8.20
                                                                                                                                                                       147.67
                                                                                     180.44
       110.00
                    17 42 3
                                    4056.26
                                                      12.52
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ORBIT DETERMINATION ACCORDE.

ST 1551.8 SR 193.0 SS 467.9

CRT .6893 CR5 -.9295 CST -.9072

LSA 1615.5 MSA 232.8 SSA 7.4
                                                                        SCT 3918.7 SCR 244.7 SC3 140.2
RRT -.2426 RRF .1810 RTF .8447
SCB 3926.3 R23 -.3986 R13 -.8444
     TOE 1.3642 TRA-2.7440 TC3-2.0568 BAU .9784
    RDE .1949 RRA .1554 RC3 .0159 FAU .04680
FDE .8478 FRA -.3494 FC3-1.1388 BSP 12365
BDE 1.3780 BRA 2.7484 BC3 2.0568 FSP -455
```

SG1 3919.1 SG2 237.3 THA 179.13

EL1 1557.5 EL2 139.3 ALF 4.94

ARRIVAL CATE HAY 20 1966 FLIGHT TIME 136.00 LAUNCH DATE JAN 4 1966 DISTANCE 412.049 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.511 GAL -7.69 AZL 83.70 MCA 205.07 SMA 126.69 ECC .20834 INC 6.3034 V1 30.287 RP 108.94 LAP -2.67 LOP 308.13 VP 37.267 GAP 8.96 AZP 95.71 TAL 212.28 TAP 57.36 RCA 100.29 APO 153.08 V2 34.785 RC 152.629 GL 31.54 GP -20.77 ZAL 130.15 ZAP 152.37 ETS 312.32 ZAE 126.70 ETE 196.62 ZAC 69.73 ETC 153.91 CLP-161.36 PLANETOCENTRIC CONIC C3 32.739 VHL 5.722 CLA 16.31 RAL 315.94 RAC 6568.3 VEL 12.414 PTH 2.24 VHP 6.539 CPA -35.04 RAP 338.28 ECC 1.5388 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 17 56 2868.90 -28.32 86.86 192.44 90.29 24 5 45 2268.9 -27.98 78.21 23 17 56 2868.90 15 42 15 4446.70 62.72 16 56 21 91.46 1 35 18 3846.7 4.20 179.12 185.83 183.77 7.92 90.00 0 52 21 2577.09 16 54 26 4213.74 65.37 192.42 1977.1 -29.34 56.60 -29.86 100.00 91.46 61.46 18 4 40 94.63 2 59 11 167.97 3613.7 5.40 161.34 183.04 9.28 100.00 94.63 2 59 11 58.02 18 50 9 1700.2 -32.89 35.00 2 20 51 2300.21 17 42 26 4063.39 -33.91 44.09 192.16 110.00 3463.4 8.46 148.05 180.96 12.78 154.49 110.00 17 42 26 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1525.3 SR 199.7 SS 457.0 CRT .7117 CRS -.9488 CST -.8959 SCT 40D8.2 SGR 241.8 SG3 142.3 RRT -.2414 RRF .1426 RTF .8386 SGB 4015.5 R23 -.3562 R13 -.8383 TOE 1.2795 TRA-2.6327 TC3-2.2920 BAU 1.0033 ROE .1952 RRA .1301 RC3 .0371 FAU .04650 FDE .8018 FRA -.2851 FC3-1.2296 BSP 12620 LSA 1587.1 MSA 237,7 SSA 8.6 EL1 1532.0 EL2 139.7 ALF 5.37 BOE 1.2943 BRA 2.6360 BC3 2.2923 FSP -457 SG1 4008.7 SG2 234.6 THA 179.16 ARRIVAL CATE MAY 22 1966 FLIGHT TIME 138.00 LAUNCH DATE JAN 4 1966 **DISTANCE 417.758** HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.435 GAL -7.32 A7L 84.12 MCA 208.23 SMA 126.18 ECC .20804 INC 5.8824 VI 30.287 RP 108.94 LAP -2.78 LOP 311.29 VP 37.211 GAP 9.11 A7P 95.19 TAL 210.47 TAP 58.70 RCA 99.93 APO 152.43 V2 34.784 RC 154.855 GL 30.37 GP -18.52 7AL 129.45 7AP 154.50 ETS 314.31 7AE 127.51 ETE 195.07 7AC 70.86 ETC 155.93 CLP-162.15 PLANETOCENTRIC CONIC C3 30.426 VHL 5.516 OLA 15.71 RAL 317.81 RAD 6568.2 VEL 12.321 PTH 2.22 VHP 6.531 DPA -32.10 RAP 339.71 ECC 1.5007 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -27.72 75.28 192.62 91.77 24 18 13 2228.5 90.00 23 31 4 2828.53 -28.27 83.91 62.75 16 58 12 92.97 1 47 19 61.48 18 6 58 96.25 3 10 15 58.01 18 53 24 3850.2 4.31 179.32 90.00 15 44 2 4450.22 8.02 186.03 184.44 1 5 1 2538.26 16 56 42 4215.71 2 32 31 2264.48 17 45 42 4062.26 192.55 1938.3 -29.03 53.76 -29.76 62.49 100.00 183.73 3615.7 5.46 161.45 100.00 9.34 168.09 -33.68 1664.5 -32.44 32.31 110.00 41.32 192.18 12.74 154.43 181.71 3462.3 8.42 147.99 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ST 1509.4 SR 207.8 55 447.7 CRT ,7349 CRS -.9638 CST -.8871 SGT 4101.4 SGR 243.8 SG3 143.6 RRT -.2336 RRF .1042 RTF .8350 TOE 1.2184 TRA-2.5281 TC3-2.5281 BAU 1.0286 ROE .1972 RRA .1079 RC3 .0570 FAU .04593 FOE .7593 FRA -.2283 FC3-1.3069 BSP 12975 SGB 4108.6 R23 -.3085 R13 -.8348 LSA 1569.7 MSA 240.8 SSA 9.9 SG1 4101.8 SG2 237.0 THA 179.20 EL1 1517.2 EL2 140.2 ALF 5.83 BOE 1.2343 BRA 2.5304 BC3 2.5287 FSP -464 ARRIVAL CATE MAY 24 1966 FLIGHT TIME 140.00 LAUNCH DATE JAN 4 1966 CISTANCE 423.462 HELTOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.360 GAL -6.95 AZL 84.46 MCA 211.39 SMA 125.69 ECC .20789 INC 5.5399 VI 30.287 RP 108.94 LAP -2.88 LOP 314.46 VP 37.156 GAP 9.27 AZP 94.73 TAL 208.64 TAP 60.03 RCA 99.56 APO 151.82 V2 34.785 RC 157.067 GL 29.43 GP -16.69 ZAL 128.44 ZAP 156.33 ETS 315.94 ZAE 128.11 ETE 193.76 ZAC 72.24 ETC 157.64 CLP-162.96 PLANETOCENTRIC CONIC C3 28.476 VHL 5.336 DLA 15.39 RAL 319.74 RAD 6568.1 VEL 12.241 PTH 2.20 VHP 6.548 CPA -29.55 RAP 341.30 ECC 1.4686 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 92.80 24 28 26 2200.4 62.71 17 2 51 3845.2 94.03 1 57 18 1910.9 193.12 -27.50 73.25 90.00 23 41 45 2800.39 90.00 15 48 45 4445.19 100.00 1 15 27 2510.92 81.85 -28.19 185.31 4.15 179.04 185.75 7.87 1 57 18 18 11 51 193.02 94.03 1910.9 -28.77 51.77 60.46 100.00 -29.64 3609.9 5.27 151.13 167.76 184.62 61.42 100.00 17 1 41 4209.90 2 42 26 2238.74 17 51 11 4054.84 9.16 97.41 3 19 45 57.91 18 58 46 1638.7 -32.08 30.39 192.57 -33.47 39.34 110.00 3454.8 8.14 147.60 154.02 182.65 110.00 12.47 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4203.8 SGR 248.8 SG3 144.6 RRT -.2193 RRF .0677 RTF .8349 SGB 4211.2 R23 -.2577 R13 -.8347 ST 1498.9 SR 216.6 SS 437.6 CRT .7572 CRS -.9750 CST -.8804 TOE 1.1706 TRA-2.4303 TC3-2.7744 BAU 1.0566 RCE .1999 RRA .0873 RC3 .0747 FAU .04538 FOE .7170 FRA -.1815 FC3-1.3798 BSP 13500 BOE 1.1875 BRA 2.4319 BC3 2.7754 FSP -482 LSA 1557.8 MSA 241.8 55A 11.2 SG1 4204.2 SGZ 242.7 THA 179.25 ELI 1508.0 ELZ 140.6 ALF 6.30 ARRIVAL DATE MAY 26 1966 FLIGHT TIME 142.00 LAUNCH DATE JAN 4 1966 **CISTANCE 429.163** HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.286 GAL -6.56 A7L 84.75 HCA 214.54 SMA 125.21 ECC .20789 INC 5.2541 VI 30.287 RP 108.94 LAP -2.98 LOP 317.62 VP 37.103 GAP 9.42 AZP 94.33 TAL 206.80 TAP 61.34 RCA 99.18 APO 151.24 VZ 34.786 RC 159.265 GL 28.66 GP -15.18 ZAL 127.16 ZAP 157.92 ETS 317.26 ZAE 128.59 ETE 192.65 ZAC 73.83 ETC 159.12 CLP-163.77 PLANETOCENTRIC CONIC C3 26.789 VHL 5.176 DLA 15.29 RAL 321.75 RAD 6568.1 VEL 12.172 PTH 2.18 VHP 6.582 CPA -27.28 RAP 343.01 ECC 1.4409 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 93.47 24 36 59 62.61 17 9 47 94.74 2 5 47 61.31 18 18 51 98.20 3 28 6 57.76 19 5 55 193.91 2181.8 -27.34 71.92 23 50 37 2781.83 -28.12 80.50 90.00 15 55 54 3833.3 3.77 178.38 185.07 186.38 4433.34 7.50 90.00 50.44 59.11 193.80 1892.6 -28.58 1 24 14 2492.58 -29.55 100.00 160.46 185.70 3597.8 4.85 4197.82 8.76 167.08 100.00 17 8 53 2 51 5 2220.87 17 58 32 4042.30 193.30 1620.9 -31.81 29.06 -33.30 37.97 110.00 7.67 146.93 183.75 3442.3 110.00 153.33 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 1523.0 SR 228.9 SS 447.2 CRT .7916 CRS -.9859 CST -.8781 SGT 4255.0 SGR 260.7 SG3 142.6 RRT -.1985 RRF .0620 RTF .8255 SGB 4263.0 R23 -.2310 R13 -.8253 TOE 1.1731 TRA-2.2958 TC3-2.9739 BAU 1.0656 ROE .2056 RRA .0708 RC3 .0946 FAU .04326 FOE .7085 FRA -.1073 FC3-1.3981 BSP 13220 LSA 1584.8 MSA 245.6 SSA 12.2 EL1 1533.9 EL2 138.9 ALF 6.84

-439

BDE 1.1909 BRA 2.2969 BC3 2.9754 FSP

SG1 4255.3 SG2 255.5 THA 179.30

LAUNCH DATE JAN 4 1966

ARRIVAL DATE MAY 28 1966

DISTANCE 434.856 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.214 GAL -6.17 A7L 84.99 HCA 217.70 SMA 124.75 ECC .20806 INC 5.0108 V1 30.287 RP 108.93 LAP -3.06 LOP 320.78 VP 37.051 GAP 9.57 A7P 93.97 TAL 204.94 TAP 62.65 RCA 98.79 APO 150.70 V2 34.788 RC 161.449 GL 28.02 GP -13.92 ZAL 125.67 ZAP 159.35 ETS 318.30 ZAE 128.98 ETE 191.71 ZAC 75.56 ETC 160.39 CLP-164.57 PLANETOCENTRIC CONIC C3 25.311 VHL 5.031 DLA 15.38 RAL 323.84 RAD 6568.0 VEL 12.111 PTH 2.17 VHP 6.630 DPA -25.23 RAP 344.81 ECC 1.4166 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 194.96 93.87 0 48 15 -28.07 0 2 4 2770.95 16 5 3 4416.13 2170.9 -27.24 90.00 79.71 71.14 62.48 17 18 39 187.63 90.00 6.96 164.10 3816.1 3.22 177.41 49.64 100.00 1 31 50 2481.49 -29.48 58.29 194.83 95.17 2 13 11 1881.5 -28.45 95.17 2 15 11 61.15 18 27 39 98.71 3 35 38 100.00 17 17 58 - 4180.83 8.20 166.12 166.95 3560.6 4.29 159.52 2 58 49 2209.34 18 7 29 4025.74 110.00 -33.19 37.09 194.31 1609.3 -31.63 28.21 110.00 11.41 152.43 165.02 57.56 19 14 35 3425.7 7.05 146.05 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4347.7 SGR 270.5 SG3 142.5 RRT -.1748 RRF .0435 RTF .8259 SGB 4356.1 R23 -.1914 R13 -.8257 ST 1533.2 SR 239.5 SS 443.9 CRT .6170 CRS -.9916 CST -.8768 TOE 1.1585 TRA-2.1869 TC3-3.2188 BAU 1.0899 ROE .2096 RRA .0534 RC3 .1098 FAU .04225 FOE .6792 FRA -.0622 FC3-1.4453 B9P 13647 LSA 1595.4 MSA 244.1 35A 13.4 EL1 1545.7 EL2 137.0 ALF 7.33 SG1 4348.0 SG2 266.3 THA 179.37 BOE 1.1773 BRA 2.1875 BC3 3.2207 FSP -448 LAUNCH DATE JAN 4 1966 FLIGHT TIME 146.00 ARRIVAL DATE MAY 30 1966 HELIOCENTRIC CONIC DISTANCE 440.542 RL 147.10 LAL .00 LOL 103.19 VL 27.142 GAL -5.77 AZL 85.20 HCA 220.86 SMA 124.29 ECC .20840 INC 4.7998 V1 30.287 RP 108.92 LAP -3.14 LOP 323.95 VP 37.001 GAP 9.73 AZP 93.63 TAL 203.08 TAP 63.94 RCA 98.39 APO 150.20 V2 34.791 RC 163.619 GL 27.47 GP -12.86 ZAL 123.96 ZAP 160.61 ETS 319.09 ZAE 129.31 ETE 190.90 ZAC 77.41 ETC 161.51 CLP-165.36 PLANETOCENTRIC CONIC C3 24.003 VHL 4.899 OLA 15.62 RAL 326.02 RAO 6568.0 VEL 12.057 PTH 2.16 VHP 6.687 DPA -23.34 RAP 346.67 ECC 1.3950 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 8 33 2766.66 -28.05 79.39 196.25 94.02 0 54 39 2166.7 -27.20 70.83 16 16 2 4394.32 6.27 182.86 169.06 62.33 17 29 16 3794.3 90.00 2.52 176.19 1 38 29 2476.60 17 28 46 4159.61 3 5 52 2203.23 100.00 -29.45 57.93 196.12 95.35 2 19 46 1876.6 -28.40 49.28 100.00 60.98 18 38 6 98.98 3 42 35 57.33 19 24 39 7.51 164.94 188.38 3559.6 3.50 158.35 -33.12 36.63 195.58 1603.2 -31.53 27.77 110.00 18 17 54 10.68 151.35 3405.7 4005.74 186.46 6.30 110.00 144.99 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4428.0 SGR 282.1 SG3 141.5 RRT -.1481 RRF .0363 RTF .8248 ST 1556.7 SR 250.9 SS 446.1 CRT .8444 CRS -.9957 CST -.8783 TOE 1.1620 TRA-2.0654 TC3-3.4564 BAU 1.1098 ROE .2142 RRA .0375 RC3 .1240 FAU .04090 FDE .6592 FRA -.0133 FC3-1.4752 B3P 13912 BDE 1.1816 BRA 2.0657 BC3 3.4586 F3P -445 LSA 1620.7 MSA 241.8 35A 14.6 EL1 1571.1 EL2 133.2 ALF 7.81 SGB 4437.0 R23 -.1608 R13 -.8247 SG1 4428.2 SG2 279.0 THA 179.46 ARRIVAL DATE JUN 1 1966 FLIGHT TIME 148.00 LAUNCH DATE JAN 4 1966 DISTANCE 446.222 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 27.072 GAL -5.36 AZL 85.39 HCA 224.02 SMA 123.85 ECC .20891 INC 4.6141 V1 30.287 RP 108.91 LAP -3.20 LOP 327.12 VP 36.953 GAP 9.89 AZP 93.32 TAL 201.21 TAP 65.23 RCA 97.98 APO 149.73 V2 34.794 RC 165.775 GL 26.98 GP -11.95 ZAL 122.06 ZAP 161.78 ETS 319.66 ZAE 129.60 ETE 190.21 ZAC 79.35 ETC 162.49 CLP-166.14 PLANETOCENTRIC CONIC C3 22.839 VHL 4.779 DLA 16.00 RAL 328.32 RAD 6567.9 VEL 12.009 PTH 2.14 VHP 6.754 OPA -21.59 RAP 348.59 ECC 1.3759 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 14 11 2768.16 -28.06 79.50 197.78 93.97 1 0 19 2168.2 -27.21 70.94 93.97 1 0 19 62.17 17 41 31 95.33 2 25 43 60.80 18 50 4 99.04 3 49 6 57.10 19 36 3 16 28 43 4368.56 5.45 181.41 190.67 3768.6 1.69 174.75 90.00 100.00 1 44 26 2477.15 -29.46 57.97 197.65 1877.2 -28.41 49.32 190.00 3534.8 2.74 156.98 17 41 10 4134.80 6.68 163.55 100.00 1601.9 -31.51 27.67 3 12 24 2201.87 -33.11 36.53 197.12 110.00 18 29 40 3382.8 5.43 143.70 9.84 150.11 188.06 3982.84 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4506.1 SGR 294.2 SG3 140.5 RRT -.1199 RRF .0340 RTF .8246 SGB 4515.7 R23 -.1343 R13 -.8245 ST 1588.4 SR 262.4 SS 449.8 CRT .8711 CRS -.9974 CST -.8821 TOE 1.1755 TRA-1.9376 TC3-3.6959 BAU 1.1293 RDE .2187 RRA .D225 RC3 .1364 FAU .D3951 FDE .6418 FRA .D333 FC3-1.4976 BSP 14178 BDE 1.1956 BRA 1.9378 BC3 3.6984 FSP -442 LSA 1654.5 MSA 237.6 55A 15.7 SG1 4506.3 SG2 292.0 THA 179.55 EL1 1604.8 EL2 127.5 ALF 8.24 FLIGHT TIME 150.00 ARRIVAL DATE JUN 3 1966 LAUNCH DATE JAN 4 1966 HELIOCENTRIC CONIC DISTANCE 451.894 RL 147.10 LAL .00 LOL 103.19 VL 27.003 GAL -4.94 AZL 85.55 MCA 227.18 SMA 123.42 ECC .20960 INC 4.4484 V1 30.287 RP 108.90 LAP -3.26 LOP 330.28 VP 36.906 GAP 10.06 AZP 93.03 TAL 199.32 TAP 66.50 RCA 97.55 APO 149.29 V2 34.798 RC 167.915 GL 26.54 GP -11.17 ZAL 119.97 ZAP 162.86 ETS 320.02 ZAE 129.85 ETE 189.62 ZAC 81.37 ETC 163.36 CLP-166.91 PLANETOCENTRIC CONIC C3 21.806 VHL 4.670 DLA 16.49 RAL 330.74 RAD 6567.9 VEL 11.966 PTH 2.13 VMP 6.828 DPA -19.93 RAP 350.55 ECC 1.3589 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 93.72 1 5 25 62.02 17 55 20 95.12 2 31 11 60.62 19 3 31 98.91 3 55 21 56.86 19 48 43 0 19 10 2774.92 -28.09 80.00 199.55 2174.9 -27.28 71.42 3739.4 .74 173.13 16 43 1 4339.35 4.52 179.77 192.50 1882.6 -28.47 1 49 48 2482.63 -29.49 58.37 199.43 49.72 4106.87 3506.9 1.60 17 55 4 5.75 162.00 191.82 155.45 3 18 36 2204.79 -33.14 36.75 196.90 1604.8 -31.55 27.88 3357.5 8.90 189.90 4.47 142.45 18 42 45 3957.48 148.75 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCI 4582.0 SCR 306.5 SC3 139.2
RRT - .0911 RRF .0355 RTF .8251
SCB 4592.2 R23 -.1115 R13 -.8250
SCI 4582 1 4582 1 4582 1 DIFFERENTIAL CORRECTIONS ST 1627.5 SR 273.8 SS 454.6 CRT .8963 CRS -.9972 CST -.8877 TOE 1.1971 TRA-1.8029 TC3-3.9363 BAU 1.1483 ROE .2231 RRA .0085 RC3 .1470 FAU .03810 FOE .6266 FRA .0781 FC3-1.5125 BSP 14449 LSA 1696.0 MSA 231.7 S5A 16.9 EL1 1646.0 EL2 120.1 ALF 8.62 SG1 4582.1 SG2 305.2 THA 179.65 BOE 1.2177 BRA 1.8029 BC3 3.9391 FSP -440

FLIGHT TIME 144.00

ARRIVAL DATE JUN 5 1966

```
LAUNCH DATE JAN 4 1966
                                                                                              DISTANCE 457.558
   HELIOCENTRIC CONTC
    RL 147.10 LAL .00 LOL 103.19 VL 26.936 CAL -4.51 AZL 85.70 HCA 230.35 SHA 123.01 ECC .21048 INC 4.2989 VI 30.287 RP 108.89 LAP -3.31 LOP 333.45 VP 36.861 CAP 10.23 AZP 92.75 TAL 197.43 TAP 67.77 RCA 97.12 APO 148.90 V2 34.803 RC 170.040 GL 26.13 GP -10.49 ZAL 117.71 ZAP 163.86 ETS 320.18 ZAE 130.09 ETE 189.11 ZAC 83.45 ETC 164.13 CLP-167.67
   PLANETOCENTRIC CONIC
     C3 20.893 VML 4.571 OLA 17.07 RAL 333.28 RAD 6567.8 VEL 11.928 PTH 2.12 VMP 6.909 OPA -18.35 RAP 352.55 ECC 1.3438
                                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                                                                2186.6
                                                                                                      201.56
                                                                                                                              93.30
                                                                                                                                            1 10 2
                                                                                                                                                                                     -27.39
                         0 23 36 2786.58
16 58 54 4307.09
                                                                                     80.85
                                                                  -28.14
          90.00
                                                                                                                                                                                                           171.33
                                                                                                                                         18 10 41
                                                                                                                                                                   3707.1
                                                                                                                                                                                         -.30
                                                                                                        194.54
                                                                                                                               61.88
                                                                                     177.96
                                                                   3.49
          90.00
                                                                                                                              94,74 2 36 11

60.45 19 18 23 3476.2

98.61 4 1 25 1611.6 -31.67 28

56.63 20 2 37 3330.0 3.43 141

ORBIT DETERMINATION ACCURACY

1678.3 SR 285.3 35 41
                                                                                                                                                                                                            50.44
                                                                                                        201.45
                                                                                                                              94.74
                                                                                                                                             2 36 17
                                                                                                                                                                   1892.7
                                                                                                                                                                                       -28.58
                         1 54 44 2492.68
18 10 27 4076.23
                                                                  -29.55
                                                                                      59.11
                                                                                                                                                                                                           153.77
                                                                                                        193.85
         100.00
                                                                    4.73
                                                                                     160.31
                         3 24 33 2211.64
18 57 7 3930.04
                                                                                                                                                                                                           28.38
                                                                                                        200.95
                                                                  -33.21
                                                                                      37.27
                                                                                                                                                                                                           141.01
                                                                                                        191.92
                                                                                     147.28
                                                                  7.87
         110.00
                                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                          SGT 4650.6 SGR 319.0 SG3 137.7
RRT -.0615 RRF .0427 RTF .8252
SGB 4661.5 R23 -.0938 R13 -.8252
SGI 4650.6 SG2 318.4 TMA 179.76
                                                                                                                                                              ST 1678.3 SR 285.3 SS 462.2
CRT .9201 CRS -.9953 CST _.8950
      TOE 1.2303 TRA-1.6576 TC3-4.1690 BAU 1.1653
     ROE .2276 RRA -.0043 RC3 .1560 FAU .03657
FOE .6156 FRA .1237 FC3-1.5153 BSP 14641
BOE 1.2512 BRA 1.6576 BC3 4.1719 FSP -433
                                                                                                                                                              LSA 1749.6 HSA 224.3 SSA
EL1 1698.8 EL2 110.4 ALF
                                                                                                                                                                                                                18.0
                                                                                                                                                                                                                8.93
                                                                                                                                                                             ARRIVAL DATE JUN 7 1966
                                                                                                FLIGHT TIME 154.00
                                                                                               DISTANCE 463.214
     RL 147.10 LAL .00 LOL 103.19 VL 26.869 GAL -4.07 A7L 85.84 MCA 233.51 SMA 122.60 ECC .21156 INC 4.1624 VI 30.287 RP 108.87 LAP -3.35 LOP 336.62 VP 36.818 GAP 10.41 A7P 92.48 TAL 195.52 TAP 69.03 RCA 96.66 APO 148.54 V2 34.808 RC 172.148 GL 25.72 GP -9.90 TAL 115.27 ZAP 164.81 ETS 320.14 ZAE 130.31 ETE 188.66 ZAC 85.59 ETC 164.82 CLP-168.41
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                 2.11 VHP 6.997 DPA -16.84 RAP 354.58 ECC 1.3307
     C3 20.095 VHL 4.483 DLA 17.75 RAL 335.97 RAD 6567.8 VEL 11.894 PTM
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                     -27.52
                                                                                                                                                                   2202.9
                                                                                                                                                                                                            73.43
                                                                                                       203.82
                                                                                                                               92.71
                                                                                                                                             1 14 18
                                                                                      82.04
                           0 27 35 2802.90
          90.00
                                                                  -28.20
                        17 16 21 4272.16
1 59 20 2507.04
18 27 17 4043.25
3 30 23 2222.16
                                                                                                                                                                                                            169.38
                                                                                                                                             18 27 33
                                                                                                                                                                    3672.2
                                                                                                                                                                                         -1.43
                                                                                      176.01
                                                                                                         196.81
                                                                                                                               61.77
          90.00
                                                                     2.37
                                                                                                                                                                                        -24.73
                                                                                                                                                                                                             51.48
                                                                                                                                             2 41 7
                                                                                                                                                                    1907.0
                                                                                                         203.72
                                                                                                                               94.18
                                                                   -29.63
                                                                                       60.17
         100,00
                                                                                                                                                                                                           151.96
                                                                                                                               60.31 19 34 40
                                                                                                                                                                    3443,3
                                                                                                                                                                                          -.36
                                                                     3.62
                                                                                      158.49
                                                                                                         196.12
         100.00
                                                                                                                                             4 7 25
                                                                                                                                                                    1622.2
                                                                                                                                                                                      -31.83
                                                                                                                                                                                                             29.16
                                                                   -33.31
                                                                                       38.07
                                                                                                         203.25
                                                                                                                               98.14
         110.00
                                                                                                                               56.42 20 17 44
                                                                                     145.74
                                                                                                         194.16
                                                                                                                                                                    3300.9
                                                                                                                                                                                          2.32
                                                                                                                                                                                                            139.49
        110.00
                         19 12 43
                                             3900.89
                                                                    6.78
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                         HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                              ST 1733.8 SR 296.6 55 468.8
CRT .9407 CRS -.9919 CST -.9030
                                                                                          SGT 4721.5 SGR 331.1 SG3 136.3
RRT -.0326 RRF .0497 RTF .8270
      TOE 1.2673 TRA-1.5072 TC3-4.4023 BAU 1.1835
      ROE .2320 RRA -.0163 RC3 .1626 FAU .03515
                                                                                                                                                               LSA 1807.5 MSA 215.3 SSA 19.2
                                                                                           SGB 4733.1 R23 -.0768 R13 -.8270
      FDE .6036 FRA .1656 FC3-1.5144 BSP 14911
                                                                                                                                                               EL1 1756.2 EL2 99.4 ALF
                                                                                          5G1 4721.5 SG2 330.9 THA 179.87
                                                                                                                                                                                                                 9.17
      BDE 1.2884 BRA 1.5073 BC3 4.4053 FSP -430
                                                                                                                                                                             ARRIVAL DATE JUN 9 1966
                                                                                                FLIGHT TIME 156.00
LAUNCH DATE JAN 4 1966
                                                                                                DISTANCE 468.859
     RL 147.10 LAL .00 LOL 103.19 VL 26.804 GAL -3.61 AZL 85.96 MCA 236.67 SMA 122.20 ECC .21285 INC 4.0366 VI 30.287 RP 108.85 LAP -3.37 LOP 339.80 VP 36.776 GAP 10.59 AZP 92.22 TAL 193.61 TAP 70.29 RCA 96.19 APO 148.21 V2 34.814 RC 174.239 GL 25.30 GP -9.37 ZAL 112.65 ZAP 165.70 ETS 319.90 ZAE 130.51 ETE 188.27 ZAC 87.76 ETC 165.44 CLP-169.15
    PLANETOCENTRIC CONIC
      C3 19.409 VHL 4.406 DLA 18.49 RAL 338.80 RAD 6567.8 VEL 11.866 PTH 2.10 VHP 7.092 DPA -15.38 RAP 356.63 ECC 1.3194
     LOCAL TRANSPORT OF THE LOCAL TIME LOCAL TIME
                                                                                                                                                                                        -32.04
                                                                                                                                                                                                            30.19
                         3 36 9 2236.15
19 29 33 3870.41
                                                                                                                                              4 13 25
                                                                                                                                                                    1636.2
                                                                                                                               97.52
         110.00
                                                                   -33.44
                                                                                       39.14
                                                                                                         205.63
                                                                                                                               56,23 20 34 4
                                                                                                                                                                                                           137.90
                                                                                                                                                                    3270.4
                                                                                                                                                                                          1.15
                                                                    5.63
                                                                                      144.13
                                                                                                         196.64
         110.00
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SGT 4788.7 SGR 342.9 SG3 134.7
RRT -. 0038 RRF . 0596 RTF . 6292
                                                                                                                                                               ST 1798.3 SR 307.7 SS 476.6
      TOE 1.3121 TRA-1.3476 TC3-4.6247 BAU 1.2008
                                                                                                                                                               CRT .9583 CRS -.9872 CST -.9117
      RDE .2365 RRA -.0271 RC3 .1670 FAU .03371
FDE .5936 FRA .2068 FC3-1.5037 BSP 15154
                                                                                           SGB 4801.0 R23 -.0628 R13 -.8292
SGI 4788.7 SG2 342.9 THA 179.98
                                                                                                                                                               LSA 1874.4 HSA 205.3 SSA 20.4
                                                                                                                                                               EL1 1822.4 EL2 86.7 ALF 9.33
      BOE 1.3332 BRA 1.3479 BC3 4.6277 FSP
                                                                      -427
                                                                                                                                                                              ARRIVAL DATE JUN 11 1966
                                                                                                 FLIGHT TIME 158.00
                                                                                                DISTANCE 474.493
    HELIOCENTRIC CONIC
     RL 147.10 LAL .00 LOL 103.19 VL 26.740 GAL -3.15 AZL 86.08 HCA 239.84 SMA 121.82 ECC .21436 INC 3.9196 V1 30.287 RP 108.83 LAP -3.39 LOP 342.97 VP 36.735 GAP 10.78 AZP 91.97 TAL 191.69 TAP 71.53 RCA 95.70 APO 147.93 V2 34.821 RC 176.312 GL 24.87 GP -8.91 ZAL 109.88 ZAP 166.54 ETS 319.47 ZAE 130.72 ETE 187.94 ZAC 89.98 ETC 166.00 CLP-169.88
     PLANETOCENTRIC CONIC
      C3. 18.835 VHL 4.340 DLA 19.30 RAL 341.79 RAD 6567.8 VEL 11.841 PTH 2.10 VHP 7.194 DPA -13.97 RAP 358.71 ECC 1.3100 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                               1 21 59
                                                                                                                                                                   2248.9
                                                                                                                                                                                       -27.86
                                                                                                         209.10
                                                                                                                                91.02
           90.00
                                                                                       85.40
                                                                   -28.30
                            0 34 30 2848.87
                                                                                                                                61.68 19 5 48
                                                                                                                                                                     3595.5
                                                                                                                                                                                         -3.89
                                                                                                                                                                                                            165.10
                                                                                       171.73
                                                                                                          202.12
           90.00
                          17 55 52
                                           4195.53
                                                                     -.11
                         2 7 49 2547.93
19 5 14 3971.70
                                                                                                                                               2 50 17
                                                                                                                                                                     1947.9
                                                                                                                                                                                         -29.11
                                                                                                                                                                                                              54.46
                                                                                                          209.05
                                                                                                                                92.60
                                                                   -29.79
                                                                                        63.20
          100.00
                                                                                                                                                                                                           148.03
                                                                                                                                60.13 20 11 26
                                                                                                                                                                     3371.7
                                                                                                                                                                                         -2.79
                                                                                                          201.40
          100.00
                                                                      1.20
                                                                                       154.55
                                                                                                                                96.75 4 19 31
56.07 20 51 34
                                                                                                                                                                     1653.4
                                                                                                                                                                                        -32.29
                                                                                                                                                                                                             31.48
                                                                                                          208.69
                           3 41 58
                                            2253,41
                                                                  -33.59
                                                                                        40.47
          110.00
                                                                                       142.47
                                                                                                                                                                     3239.0
                                                                                                                                                                                           -.05
                                                                                                                                                                                                            136.26
                                                                                                          199.38
          110.00
                          19 47 35
                                              3838.98
                                                                    4.43
                                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                          HID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ST 1870.9 SR 318.8 SS 484.7
CRT .9727 CRS -.9814 CST -.9204
                                                                                          SGT 4851.2 SGR 354.4 SG3 133.1
RRT .0245 RRF .0715 RTF .8316
SGB 4864.1 R23 .0510 R13 .8316
      TOE 1.3634 TRA-1.1781 TC3-4.8302 BAU 1.2171
      ROE .2412 RRA -.0368 RC3 .1692 FAU .03225
FOE .5847 FRA .2478 FC3-1.4823 BSP 15379
                                                                                                                                                              LSA 1948.9 MSA 194.6 55A
                                                                                                                                                               LSA 1948.9 MSA 194.6 SSA 21.6
EL1 1896.4 EL2 72.9 ALF 9.43
                                                                                           5G1 4851.2 5G2 354.3 THA .10
      BOE 1.3846 BRA 1.1787 BC3 4.8332 FSP -423
```

FLIGHT TIME 152.00

FLIGHT TIME 160.00 ARRIVAL DATE JUN 13 1966 LAUNCH DATE JAN 4 1966 HELIOCENTRIC CONIC DISTANCE 480.116 RL 147.10 LAL .00 LOL 103.19 VL 26.676 GAL -2.67 AZL 86.19 MCA 243.01 SMA 121.44 ECC .21610 INC 3.8098 V1 30.287 RP 108.81 LAP -3.39 LOP 346.14 VP 36.696 GAP 10.98 AZP 91.73 TAL 189.77 TAP 72.78 RCA 95.20 APO 147.68 VZ 34.828 RC 178.366 GL 24.40 GP -8.50 ZAL 106.94 ZAP 167.35 ETS 318.82 ZAE 130.91 ETE 187.64 ZAC 92.23 ETC 166.50 CLP-170.59 C3 18.376 VHL 4.287 DLA 20.15 RAL 344.94 RAD 6567.7 VEL 11.822 PTH 2.09 VHP 7.302 DPA -12.59 RAP LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 37 33 2878.29 18 17 56 4154.51 2 11 52 2574.15 19 26 18 3933.89 3 47 53 2273.75 20 6 46 3807.05 212.14 -28.02 89.95 1 25 31 61.72 19 27 10 91.57 2 54 47 -28.32 2278.3 87.55 1 25 31 90.00 -1.43 169.44 205.19 3554.5 -5.20 162.79 -29.85 65.15 212.12 1974.1 -29.32 56.39 100.00 19 26 18 - .09 152.48 204.45 60.11 20 31 52 3333.9 -4.06 145.95 -32.57 -33.74 42.04 211.82 95.83 4 25 47 1673.7 20 6 46 55.95 21 10 13 110.00 3.22 140.80 202.38 3207.1 -1.27 134.60 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4907.5 SGR 365.5 SG3 131.3 RRT .0527 RRF .0858 RTF .8341 SGB 4921.0 R23 .0417 R13 .8341 SGI 4907.5 SG2 364.9 THA .23 TOE 1.4220 TRA -.9971 TC3-5.0108 BAU 1.2317 5T 1952.1 SR 329.9 55 493.6 ROE .2464 RRA -.0451 RC3 .1690 FAU .03075 FOE .5773 FRA .2892 FC3-1.4488 BSP 15547 BOE 1.4432 BRA .9982 BC3 5.0136 FSP -416 CRT .9838 CR5 -.9747 CST -.9290 LSA 2031.9 MSA 183.9 SSA 22.7 EL1 1978.9 EL2 58.3 ALF 9.45 ARRIVAL DATE JUN 15 1966 FLIGHT TIME 162.00 HELIOCENTRIC CONIC **DISTANCE 485.725** RL 147.10 LAL .00 LOL 103.19 VL 26.614 GAL -2.17 A7L 86.29 MCA 246.17 SMA 121.07 ECC .21809 INC 3.7060 V1 30.287 RP 108.78 LAP -3.39 LOP 349.32 VP 36.659 GAP 11.19 A7P 91.50 TAL 187.84 TAP 74.01 RCA 94.67 APO 147.48 V2 34.836 RC 180.400 GL 23.88 GP -8.13 ZAL 103.85 ZAP 168.11 ETS 317.95 ZAE 131.10 ETE 187.38 ZAC 94.51 ETC 166.94 CLP-171.30 PLANETOCENTRIC CONIC C3 18.035 VHL 4.247 DLA 21.02 RAL 348.25 RAD 6567.7 VEL 11.807 PTH 2.09 VHP 7.419 DPA -11.24 RAP C3 18.035 VML 4.247 DLA 21.02 RAL 348.25 RAD 6567.7 VEL 11.807 PTM 2.09 VMP 7.419 DPA -11.24 RAP 2.91 ECC 1.2968 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 40 24 2911.83 -28.29 90.00 215.45 88.72 1 28.56 2311.8 -28.17 81.34 90.00 18 41 28 4112.20 -2.79 167.08 208.56 61.81 19.50 1 3512.2 -6.54 160.41 100.00 2 15.53 2603.95 -29.89 67.36 215.47 90.41 2 59.17 2003.9 -29.51 58.58 100.00 19.48 40 3895.32 -1.39 150.36 207.78 60.14 20.53 36 3295.3 -5.36 143.82 110.00 3 54 1 2296.91 -33.89 43.83 215.25 94.78 4 32.18 1696.9 -32.85 34.75 110.00 20.27 1 3775.12 2.00 139.13 205.66 55.87 21.29 57 3175.1 -2.49 132.93 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 4964.6 SGR 375.8 SG3 129.5 RRT .D800 RRF .1001 RTF .8380 SG8 4978.8 R23 .0329 R13 .8380 SG1 4964.7 SG2 374.6 THA .35 ST 2035.5 SR 340.8 SS 501.1 CRT .9913 CRS -.9673 CST -.9370 TOE 1.4829 TRA -.8090 TC3-5.1694 BAU 1.2470 ROE .2520 RRA -.0523 RC3 .1661 FAU .02935 FOE .5692 FRA .3281 FC3-1.4089 BSP 15767 BOE 1.5041 BRA .8107 BC3 5.1721 FSP -413 LSA 2116.6 MSA 173.3 SSA 23.9 EL1 2063.3 EL2 44.2 ALF FLIGHT TIME 164.00 ARRIVAL DATE JUN 17 1966 LAUNCH DATE JAN 4 1966 DISTANCE 491.320 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 26.553 GAL -1.66 A7L 86.39 HCA 249.34 SMA 120.72 ECC .22034 INC 3.6071 V1 30.287 RP 108.76 LAP -5.37 LOP 352.49 VP 36.623 GAP 11.41 A7P 91.27 TAL 185.91 TAP 75.25 RCA 94.12 APO 147.32 V2 34.845 RC 182.414 GL 23.30 GP -7.80 7AL 100.62 7AP 168.84 ETS 316.84 7AE 131.29 ETE 187.16 7AC 96.81 ETC 167.34 CLP-172.00 PLANETOCENTRIC CONTC C3 17.617 VHL 4.221 OLA 21.91 RAL 351.71 RAD 6567.7 VEL 11.798 PTH 2.09 VHP 7.543 OPA -9.92 RAP 5.03 ECC 1.2932 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 43 5 2949.35 19 6 26 4069.03 2 19 56 2637.11 20 12 17 3856.51 4 0 27 2322.64 20 48 15 3743.74 -28.27 87.34 1 32 15 61.97 20 14 15 89.11 3 3 53 219.02 2349.4 84.08 90.00 -28.20 92.74 3469.0 -7.90 157.96 90.00 -4.18 164.56 212.22 219.08 2037.1 -29.68 61.03 100.00 -29.88 69.83 60.22 21 16 34 93.60 4 39 9 55.83 21 50 39 3256.5 141.67 100.00 -2.71 148.23 211.40 -6.65 -33.14 110.00 -34.02 45.83 218.97 1722.6 36.70 .80 3143.7 110.00 137.50 209.21 -3.69 131.29 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 5017.4 SGR 385.5 SG3 127.6 RRT .1062 RRF .1152 RTF .8420 SGB 5032.2 R23 .0254 R13 .8420 SGI 5017.6 SG2 383.3 THA .47 ST 2120.1 SR 351.6 SS 507.3 CRT .9957 CRS -.9592 CST -.9442 TDE 1.5462 TRA -.6107 TC3-5.2936 BAU 1.2615 RDE .2583 RRA -.0581 RC3 .1608 FAU .02794 FDE .5605 FRA .3670 FC3-1.3577 BSP 15985 BDE 1.5677 BRA .6135 BC3 5.2960 FSP -409 LSA 2201.9 MSA 163.6 SSA 24.9 ELI 2148.9 EL2 32.1 ALF 9.38 FLIGHT TIME 166.00 ARRIVAL DATE JUN 19 1966 LAUNCH DATE JAN 4 1966 HELIOCENTRIC CONIC DISTANCE 496.897 RL 147.10 LAL .00 LOL 103.19 VL 26.494 GAL -1.14 A7L 86.49 MCA 252.52 SMA 120.37 ECC .22287 INC 3.5122 V1 30.287 RP 108.73 LAP -3.35 LOP 355.67 VP 36.588 GAP 11.64 A7P 91.06 TAL 183.97 TAP 76.49 RCA 93.54 APO 147.20 V2 34.854 RC 184.407 GL 22.67 GP -7.51 ZAL 97.27 ZAP 169.53 ETS 315.46 ZAE 131.48 ETE 186.96 ZAC 99.13 ETC 167.70 CLP-172.69 PLANETOCENTRIC CONIC C3 17.731 VHL 4.211 DLA 22.80 RAL 355.33 RAD 6567.7 VEL 11.795 PTH 2.09 VHP 7.676 DPA -8.63 RAP LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 45 40 2990.66 19 32 44 4025.47 1 35 30 2390.7 -28.04 95.75 222.85 85.84 -28.32 90.00 -5.57 162.22 216.18 62.19 20 39 49 3425.5 -9.25 90.00 2 24 5 2673.32 20 37 0 3818.04 72.52 222.97 87.70 3 8 38 2073.3 63.71 100.00 -29.81 -29.81 60.35 21 40 38 92.32 4 46 25 55.82 22 12 13 -7.92 3218.0 100.00 -4.01 146.12 215.32 139.52 4 7 14 2350.58 21 10 20 3713.54 1750.6 -33.42 38.83 -34.11 48.01 222.96 110,00 21 10 20 135.92 213.05 3113.5 -4.84 110.00 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGB 5078.0 R23 .0205 R13 .8461 SGB 5062.9 SG2 391.2 THA .60 ST 2210.3 SR 362.5 SS 514.4 CRT .9974 CRS -.9507 CST -.9509 TOE 1.6162 TRA -.3981 TC3-5.3696 BAU 1.2733 ROE .2656 RRA -.0624 RC3 .1532 FAU .02648 FDE .5539 FRA .4069 FC3-1.2930 BSP 16097 BDE 1.6378 BRA .4030 BC3 5.3717 FSP -402 LSA 2292.7 MSA 155.5 SSA 25.7 ELI 2239.7 ELZ 25.8 ALF 9.29

ARRIVAL DATE JUN 21 1966

```
FLIGHT TIME 168.00
LAUNCH DATE JAN 4 1966
    RL 147.10 LAL .00 LOL 103.19 VL 26.435 GAL -.59 AZL 86.58 MCA 255.69 SMA 120.03 ECC .22571 INC 3.4205 V1 30.287 RP 108.70 LAP -3.31 LOP 358.85 VP 36.564 GAP 11.88 AZP 90.85 TAL 182.03 TAP 77.72 RCA 92.94 APO 147.12 V2 34.863 RC 186.379 GL 21.96 GP -7.24 ZAL 93.81 ZAP 170.20 ETS 313.78 ZAE 131.66 ETE 186.79 ZAC 101.47 ETC 168.01 CLP-173.38
                                                                          DISTANCE 502.455
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 17.786 VHL 4.217 DLA 23.66 RAL 359.09 RAD 6567.7 VEL 11.797 PTH 2.09 VHP 7.818 DPA -7.35 RAP
                                                                                                                                                    9.32 ECC 1.2927
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                              2435.5
                                                                                                                                             -28.28
                    0 48 10 3035.47
20 0 13 3982.09
                                                                                 226.92
                                                                                                 84.23
                                                                                                                1 38 45
                                                    -27.77
                                                                   99.00
        90.00
                                                                                                                                                 -10.57
                                                                                                                                                                152.97
                                                                                                    62.48 21 6 35
                                                                                                                                 3382.1
                                                                   159.77
                                                                                  220.44
                                                     -6.94
        90.00
                                                                                                                3 13 39
                                                                                                                                 2112.2
                                                                                                                                                 -29.88
                                                                                                                                                                 66.60
                     2 28 27 2712.16
21 2 37 3780.63
                                                                                                    86.19
                                                    -29.67
                                                                    75.40
                                                                                  227.10
       100.00
                                                                                                    60.53 22 5 38
90.95 4 54 11
55.84 22 34 28
                                                                                                                                 3180.6
                                                                                                                                                  -9.15
                                                                                                                                                                137.42
                                                                   144.05
                                                                                  219.52
                                                     -5.26
                    21 2 37
       100.00
                                                                                                                                                                 41.12
                     4 14 31 2380.32
21 33 2 3685.24
                                                                                                                                 1780.3
                                                                                                                                                 -33.66
                                                    -34.17
                                                                     50.33
                                                                                  227.23
       110.00
                                                                                                                                                                128.21
                                                                                                                                 3085.2
                                                                                                                                                 -5.91
                   21 33 2
                                                                   134.44
                                                                                  217.14
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5108.0 SGR 402.9 SG3 123.7
RRT .1579 RRF .1501 RTF .8506
                                                                                                                             ST 2291.6 SR 373.1 S5 517.8
CRT .9966 CRS -.9415 CST -.9562
    TDE 1.6828 TRA -.1770 TC3-5.4066 BAU 1.2860
    ROE .2738 RRA -.0652 RC3 .1432 FAU .02512
FOE .5445 FRA .4465 FC3-1.2226 BSP 16278
BDE 1.7049 BRA .1887 BC3 5.4085 FSP -398
                                                                                                                             LSA 2374.0 MSA 149.5 SSA 26.2
                                                                       SGB 5123.8 R23 .0151 R13 .8507
                                                                       5G1 51D8.4 5G2 397.8 THA .72
                                                                                                                             EL1 2321.6 EL2 30.1 ALF 9.22
                                                                                                                                         ARRIVAL DATE JUN 23 1966
                                                                            FLIGHT TIME 170.00
LAUNCH DATE JAN 4 1966
                                                                           DISTANCE 507.991
    RL 147.10 LAL .00 LOL 103.19 VL 26.377 GAL -.03 A7L 86.67 MCA 258.86 SMA 119.70 ECC .22887 INC 3.3313 V1 30.287 RP 108.67 LAP -3.27 LOP 2.03 VP 36.522 GAP 12.14 A7P 90.64 TAL 180.10 TAP 78.96 RCA 92.30 APO 147.10 V2 34.873 RC 188.330 GL 21.18 GP -7.00 ZAL 90.27 ZAP 170.83 ETS 311.76 ZAE 131.84 ETE 186.63 ZAC 103.83 ETC 168.28 CLP-174.06
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
         90.00
                    20 28 39
                                   3939.57
                                                                                                                                                                  69.64
                                                                                                                 3 19 0
                                                                                                                                  2153.1
                                                                                                                                                 -29.88
                                                                                                     84.61
       100.00
                     2 33 7 2753.08
                                                    -29.45
                                                                     78.42
                                                                                   231.47
                                                                                                              22 31 19
                                                                                                                                                 -10.30
                                                                                                                                                                 135.41
                                                                                                     60.75
                                                                                                                                  3145.1
                    21 28 53 3745.11
                                                      -6.45
                                                                    142.08
                                                                                   223.99
       100.00
                                                                                                                                  1811.3
                                                                                                                                                 -33.87
                                                                                                                                                                 43.52
                    4 22 21 2411.34
21 56 9 3659.62
                                                                                                     89.51
                                                                                                                 5 2 33
                                                    -34.18
                                                                     52.75
                                                                                   231.75
       110.00
                                                                                                     89.51 5 2 33
55.89 22 57 9
                                                                                                                                3059.6
                                                                                                                                                 -6.88
                                                                                                                                                                126.86
                                    3659.62
                                                     -2.42
                                                                    133.11
                                                                                   221.49
       110.00
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5142.3 SGR 405.5 SG3 116.9
RRT .1741 RRF .1206 RTF .8765
SGB 5158.3 R23 -.0335 R13 .8764
                                                                                                                             ST 2288.8 SR 377.6 55 462.5
CRT .9944 CRS -.9307 CST -.9582
     TOE 1.6914 TRA -.0179 TC3-5.4303 BAU 1.3066
     RDE .2786 RRA -.0711 RC3 .1278 FAU .02470
                                                                                                                             LSA 2361.5 MSA 134.2 SSA 26.1
EL1 2319.5 EL2 39.4 ALF 9.32
    FDE .4765 FRA .4263 FC3-1.1886 BSP 17061
BDE 1.7142 BRA .0733 BC3 5.4318 FSP -440
                                                                        5G1 5142.8 SG2 399.3 THA
                                                                                                              .79
                                                                                                                                         ARRIVAL DATE JUN 25 1966
                                                                            FLIGHT TIME 172.00
LAUNCH DATE JAN 4 1966
                                                                          DISTANCE 513.503
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 26.320 GAL .56 AZL 86.76 MCA 262.04 SMA 119.38 ECC .23238 INC 3.2440 V1 30.287 RP 108.63 LAP -3.21 LOP 5.22 VP 36.491 GAP 12.42 AZP 90.45 TAL 178.16 TAP 80.20 RCA 91.64 APO 147.12 V2 34.884 RC 190.259 GL 20.34 GP -6.78 ZAL 86.67 ZAP 171.42 ETS 309.36 ZAE 132.02 ETE 186.50 ZAC 106.20 ETC 168.51 CLP-174.74
    PLANETOCENTRIC CONIC
                                                                                                                                     -4.87 RAP 13.66 ECC 1.3023
     C3 18.366 VML 4.286 DLA 25.23 RAL 6.95 RAD 6567.7 VEL 11.822 PTH 2.09 VHP 8.133 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              1 45 28
22 2 51
                    0 53 14 3134.08

20 57 52 3898.48

2 38 15 2795.53

21 55 33 3712.26

4 30 52 2443.17

22 19 25 3637.38
                                                                                                                                2534.1
                                                                                                  80.79
                                                                                                                                                -27.89
                                                    -26.89
                                                                  106.08
                                                                                 235.68
         90.00
                                                                                                                                                 -13.06
                                                                                                                                                                 146.09
                                                                                                                                  3298.5
                                                                                   229.77
                                                                                                     63.21
                                                       -9.54
                                                                    155.00
         90.00
                                                                                                                                  2195.5
                                                                                                                                                 -29.80
                                                                                                                                                                 72.80
                                                                                                               3 24 50
                                                                                   236.04
                                                                                                     83.00
                                                     -29.14
                                                                     81.54
        100.00
                                                                                                               22 57 25
                                                                                                                                  3112.3
                                                                                                                                                 -11.35
                                                                                                                                                                133.53
                                                                                   228.70
                                                                                                     60.99
                                                      -7.54
                                                                   140.25
        100.00
                                                                                                                                                -34.03
                                                                                                                                                                  45.99
                                                                                   236.50
                                                                                                                5 11 35
                                                                                                                                  1843.2
                                                                                                     88.04
                                                     -34.13
                                                                     55.24
        110.00
                                                                                                              23 20 2
                                                                                                                                                   -7.71
                                                                                                                                  3037.4
                                                                                   226.07
                                                                                                     55.95
                                                     -3.26
                                                                    131.94
        110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2428.6 SR 393.7 S5 519.9
CRT .9896 CRS -.9225 CST -.9651
                                                                       SCT 5186.0 SGR 417.1 SG3 119.4

RRT .2D61 RRF .1876 RTF .8613

SGB 52D2.7 R23 .0093 R13 .8613

SGI 5186.7 SG2 4D8.1 THA .96
     TOE 1.8109 TRA .2976 TC3-5.3260 BAU 1.3081
     RDE .2936 RRA -.0664 RC3 .1180 FAU .02242
                                                                                                                              LSA 2510.3 MSA 143.8 S5A 26.0
EL1 2459.6 EL2 55.9 ALF 9.12
     FOE .5251 FRA .5232 FC3-1.0568 BSP 16623
                                                                                                               .96
     BDE 1.8346 BRA .3049 BC3 5.3273 FSP -387
                                                                                                                                         ARRIVAL DATE JUN 27 1966
                                                                            FLIGHT TIME 174.00
 LAUNCH DATE JAN 4 1966
                                                                           DISTANCE 518.986
    HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 26.264 GAL 1.17 AZL 86.84 MCA 265.22 SMA 119.06 ECC .23627 INC 3.1580 V1 30.287 PP 108.60 LAP -3.15 LOP 8.40 VP 36.462 GAP 12.72 AZP 90.26 TAL 176.22 TAP 81.44 RCA 90.93 APO 147.19 V2 34.895 RC 192.167 GL 19.42 GP -6.58 ZAL 83.04 ZAP 171.98 ETS 306.51 ZAE 132.20 ETE 186.38 ZAC 108.58 ETC 168.70 CLP-175.41
    PLANETOCENTRIC CONIC
     C3 18.923 VHL 4.350 DLA 25.91 RAL 11.01 RAD 6567.8 VEL 11.845 PTH 2.10 VHP 8.309 DPA -3.66 RAP 15.85 ECC 1.3114
     LOCAL AZATTAL LACH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ARMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 55 59 3186.80 -26.27 109.82 240.32 79.02 1 49 6 2586.8 -27.52 101.37 100.00 2 27 29 3859.78 -10.72 152.77 234.80 63.63 22 31 48 3259.8 -14.17 145.80 100.00 2 43 59 2838.61 -28.74 84.68 240.80 81.39 3 31 18 2238.6 -29.63 75.99 100.00 22 22 9 3883.21 -8.49 138.62 233.63 61.23 23 23 33 3083.2 -12.27 131.87
                                                                                                     61.23 23 23 33
86.57 5 21 24
56.02 23 42 48
                                                                                                                                   1875.2
                                                                                                                                                 -34.13
                                                                                                                                                                  48.48
                     4 40 9 2475.15
22 42 29 3619.43
        110.00
                                                     -34.03
                                                                      57.73
                                                                                   241.46
                                                                                                                                   3019.4
                                                                                                                                                  -8.38
                                                                                                                                                                  124.72
                                                                                   230.84
                                                      -3.95
                                                                    131.00
        110.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                       SGT 5217.1 SGR 423.0 SG3 117.5
RRT .2302 RRF .2091 RTF .8660
SGB 5234.2 R23 .0087 R13 .8660
SGI 5218.0 SG2 411.6 THA 1.08
                                                                                                                            ST 2484.2 SR 403.4 55 520.1
CRT .9839 CRS -.9123 CST -.9685
      TOE 1.8740 TRA .5583 TC3-5.1987 BAU 1.3154
     ROE .3055 RRA -.0642 RC3 .1038 FAU .02104
FOE .5164 FRA .5653 FC3 -.9628 BSP 16680
BOE 1.8988 BRA .5620 BC3 5.1997 FSP -378
                                                                                                                              LSA 2565.7 MSA 145.2 SSA 25.3
                                                                                                                              EL1 2515.7 EL2 71.2 ALF 9.08
```

```
FLIGHT TIME 176.00
                                                                                                                                                                          ARRIVAL DATE JUN 29 1966
LAUNCH DATE JAN 4 1966
    HELIOCENTRIC CONIC
                                                                                              DISTANCE 524.437
     RL 147.10 LAL .00 LOL 103.19 VL 26.210 GAL 1.80 AZL 66.93 HCA 268.40 SMA 118.76 ECC .24057 INC 3.0727 V1 30.287 RP 108.57 LAP -3.07 LOP 11.59 VP 36.433 GAP 13.04 AZP 90.09 TAL 174.30 TAP 82.70 RCA 90.19 APO 147.33 VZ 34.906 RC 194.054 GL 18.45 GP -6.40 ZAL 79.40 ZAP 172.50 ETS 303.17 ZAE 132.37 ETE 186.28 ZAC 110.97 ETC 168.86 CLP-176.09
    PLANETOCENTRIC CONIC
     C3 19.663 VHL 4.437 DLA 26.49 RAL 15.10 RAD 6567.8 VEL 11.877 PTM 2.11 VHP 8.498 DPA -2.48 RAP 18.05 ECC 1.3239 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          0 59 4 5240.73
21 57 4 3824.47
2 50 33 2881.33
                                                                 -25.51
                                                                                                   245.09
                                                                                                                                                             2640.7
                                                                                                                         77.28 1 53 5
                                                                                   113.58
                                                                                                                                                                                  -27.01 105.24
                                                                                                                              64.06 23 0 48
           90.00
                         21 57
                                                                 -11.78
                                                                                   150.72
                                                                                                       240.02
                                                                                                                                                                  3224.5
                                                                -28.26
                                                                                      87.76
                                                                                                       245.71
                                                                                                                              79.84
                                                                                                                                          3 38 34
                                                                                                                                                                2281.3
                                                                                                                                                                                     -29.38
         100.00
                                                                                                                             61.46 23 49 15
85.13 5 32 4
56.07 24 5 8
         100.00
                         22 48 16
                                             3659.11
                                                                    -9.28
                                                                                   137.26
                                                                                                       238.71
                                                                                                                                                                  3059.1
                                                                                                                                                                                     -13.02
                          4 50 17 2506.68
                                                                -33.88
                                                                                      60.18
                                                                                                       246.58
                                                                                                                                                                  1906.7
                                                                                                                                                                                     -34.18
                                                                                                                                                                                                          50.95
         110.00
         110.00
                         23 5 1
                                             3606.52
                                                                   -4.44
                                                                                   130.33
                                                                                                       235.76
                                                                                                                                                                  3006.5
                                                                                       HID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                         SGT 5247.1 SGR 427.6 SG3 115.3
RRT .2528 RRF .2277 RTF .8725
SGB 5264.5 R23 .0059 R13 .8726
SGI 5248.3 SGZ 413.6 THA 1.19
                                                                                                                                                            ST 2515.7 SR 412.0 SS 514.4
CRT .9770 CRS -.9012 CST -.9712
      TOE 1.9253 TRA .8265 TC3-5.0310 BAU 1.3241
     ROE .3183 RRA -.0606 RC3 .0886 FAU .01984
FDE .5030 FRA .6043 FC3 -.8725 BSP 16855
BDE 1.9515 BRA .8267 BC3 5.0318 FSP -376
                                                                                                                                                            CRT .9770 CRS -.9012 CS1
LSA 2596.2 MSA 148.3 SSA 24.3
                                                                                               FLIGHT TIME 178.00
   HELIOCENTRIC CONIC
                                                                                              DISTANCE 529.851
     RL 147.10 LAL .00 LOL 103.19 VL 26.156 GAL 2.46 A7L 87.01 MCA 271.58 SMA 118.46 ECC .24532 INC 2.9876 V1 30.287 RP 108.53 LAP -2.99 LOP 14.77 VP 36.406 GAP 13.38 AZP 89.92 TAL 172.38 TAP 83.96 RCA 89.40 APO 147.52 V2 34.918 RC 195.918 GL 17.43 GP -6.24 ZAL 75.79 ZAP 172.97 ETS 299.27 ZAE 132.54 ETE 186.19 ZAC 113.36 ETC 168.97 CLP-176.77
    PLANETOCENTRIC CONIC
    PLANFOCENTRIC CONIC
C3 20.669 VHL 4.546 OLA 26.98 RAL 19.20 RAD 6567.8 VEL 11.918 PTH 2.12 VHP 8.701 OPA -1.31 RAP 20.26 ECC 1.3402
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 2 45 3294.70 -24.65 117.30 249.95 75.60 1 57 39 2694.7 -26.39 109.07
90.00 22 26 7 3793.82 -12.88 148.92 245.38 64.47 23 29 20 3193.8 -16.02 141.83
100.00 2 58 10 2922.60 -27.73 90.72 250.75 78.37 3 46 53 2322.6 -29.05 82.16
100.00 23 13 22 3641.16 -9.86 136.25 243.92 61.64 24 14 3 3041.2 -13.58 129.43
110.00 5 1 20 2537.19 -33.67 62.54 251.84 83.75 5 43 37 1937.2 -34.17 53.33
110.00 23 26 41 3599.33 -4.71 129.95 240.78 56.10 24 26 41 2999.3 -9.13 123.65
                                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                                         $6T $271.3 $GR 431.3 $G3 113.1

RRT .2747 RRF .2474 RTF .8786

$G8 $288.9 R23 .0047 R13 .8786

$G1 $272.6 $G2 414.6 THA 1.30
     TOE 1.9701 TRA 1.1098 TC3-4.8138 BAU 1.3304
                                                                                                                                                            ST 2530.5 5R 419.5 55 507.7
CRT .9690 CR5 -.8894 CST -.9735
     ROE .3324 RRA -.0553 RC3 .0735 FAU .01861
FOE .4896 FRA .6451 FC3 -.7793 BSP 16990
BOE 1.9979 BRA 1.1112 BC3 4.8144 FSP -371
                                                                                                                                                         LSA 2610.1 MSA 153.7 SSA 23.0
EL1 2563.0 EL2 102.4 ALF 9.14
                                                                                                                                                                          ARRIVAL DATE JUL 3 1966
                                                                                              FLIGHT TIME 180.00
LAUNCH DATE JAN 4 1966
                                                                                             DISTANCE 535,221
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 26.103 GAL 3.15 AZL 87.10 HCA 274.77 SMA 118.17 ECC .25056 INC 2.9023 VI 30.287 RP 108.49 LAP -2.89 LOP 17.96 VP 36.379 GAP 13.74 AZP 89.76 TAL 170.47 TAP 85.24 RCA 88.56 APO 147.78 VZ 34.930 RC 197.761 GL 16.37 GP -6.09 ZAL 72.22 ZAP 173.40 ETS 294.74 ZAE 132.70 ETE 186.10 ZAC 115.76 ETC 169.04 CLP-177.44
   PLANETOCENTRIC CONIC
     C3 21.912 VHL 4.681 OLA 27.35 RAL 23.28 RAD 6567.9 VEL 11.970 PTH 2.13 VHP 8.921 DPA -.16 RAP 22.48 ECC 1.3606
LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                         1 7 26 3347.00
22 53 55 3769.60
3 7 6 2961.21
                                                                                                  254.90
                                                                                                                        74.06
                                                                                                                                            2 3 13
                                                                                                                                                             2747.0 -25.68 112.73
                                                                                  120.85
         90.00
                                                                -23.72
                                                                                                      250.82
                                                                                                                             64.81 23 56 44
                                                                                                                                                                 3169.6
                                                                                                                                                                                    -16.67
                                                                                    147.49
          90.00
                                                                -13.39
                                                                                                    255.88
                                                                                                                            77.03
                                                                                                                                          3 56 27
                                                                                                                                                                 2361,2
                                                                                                                                                                                   -28.68
                                                                                    93.45
        100.00
                                                                -27.17
                                                                                                                            61.75 24 37 26
82.44 5 56 6
56.11 24 47 10
                       23 36 55 3630.63
5 13 19 2566.22
23 47 11 3598.38
                                                                                                                                                                 3030.6
                                                                                                                                                                                   -13.90
                                                                                                                                                                                                       128.81
                                                                                                      249.18
                                                                                   135.65
        100.00
                                                                -10.20
                                                                                                                                                                 1966.2
                                                                                                                                                                                   -34.12
                                                                                                                                                                                                         55.59
                                                                                                      257.20
        110.00
                                                                -33.44
                                                                                     64.77
                                                                                                                                                                                      -9.17
                                                                                                      245.87
                                                                                                                                         24 47 10
                                                                                                                                                                                                       123.60
         110.00
                                                                 -4.75
                                                                                   129.90
                                                                                                                                                                 2998.4
                                                                                        HID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                        SCT 5291.7 SCR 434.0 SC3 111.0
RRT .2963 RRF .2677 RTF .8849
SGB 5309.5 R23 ].0040 R13 .8849
SGI 5293.3 SGZ 414.4 THA 1.40
                                                                                                                                                           ST 2528.1 SR 425.8 S5 499.5
CRT .9598 CRS -.8768 CST -.9754
     TOE 2.0072 TRA 1.4078 TC3-4.5572 BAU 1.3351
    RDE .3475 RRA -.0481 RC3 .0590 FAU .01741
FDE .4756 FRA .6869 FC3 -.6880 BSP 17113
BDE 2.0371 BRA 1.4086 BC3 4.5575 FSP -367
                                                                                                                                                          LSA 2606.9 MSA 160.9 55A 21.7
EL1 2561.0 EL2 118.0 ALF 9.20
                                                                                              FLIGHT TIME 182.00
                                                                                                                                                                          ARRIVAL DATE JUL 5 1966
LAUNCH DATE JAN 4 1966
                                                                                              DISTANCE 540.542
   HELTOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 26.051 GAL 3.88 AZL 87.18 MCA 277.96 SMA 117.88 ECC .25634 INC 2.8160 V1 30.287 RP 108.45 LAP -2.79 LOP 21.15 VP 36.354 GAP 14.14 AZP 89.61 TAL 168.57 TAP 86.53 RCA 87.67 APO 148.10 V2 34.942 RC 199.580 GL 15.29 GP -5.95 ZAL 68.73 ZAP 173.76 ETS 289.55 ZAE 132.85 ETE 186.03 ZAC 118.16 ETC 169.08 CLP-178.13
   PLANETOCENTRIC CONIC
     C3 23.445 VHL 4.842 DLA 27.62 RAL 27.28 RAD 6568.0 VEL 12.034 PTH 2.15 VHP 9.160 DPA
                                                                                                                                                                         .96 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 13 48 3395.08 -22.78 124.06 259.91 72.71 2 10 23 2795.1 -24.93 116.06 90.00 23 19 31 3754.36 -13.83 146.59 256.27 65.04 24 22 5 3154.4 -17.08 139.42
                          3 17 35 2996.01
0 2 20 3628.66
                                                                                     95.89
                                                                                                      261.09
                                                                                                                             75.87
                                                                                                                                           4 7 31
                                                                                                                                                                 2396.0
                                                                                                                                                                                     -28.30
                                                                                                                                                                                                         87.49
                                                                -26.62
        100.00
                                                                -10.27
                                                                                    135.54
                                                                                                       254.45
                                                                                                                             61.77
                                                                                                                                                                 3028.7
                                                                                                                                                                                    -13.96
                                                                                                                                                                                                       128.70
        100.00
                           5 26 14 2593.42
0 10 11 3604.01
                                                                                                                                           6 9 27
                                                                -33.17
                                                                                      66.85
                                                                                                      262.62
                                                                                                                             81.24
                                                                                                                                                                 1993.4
                                                                                                                                                                                    -34.03
                                                                                                                                                                                                         57.71
        110.00
                                                                                                                                          1 10 15
                                                                                                                                                                 3004.0
                                                                                   130.20
                                                                                                      250.96
                                                                                                                             56.08
                                                                                                                                                                                    -8.96
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                       SGT 5307.4 SGR 435.8 SG3 108.9

RRT .3180 RRF .2891 RTF .8910

SGB 5325.2 R23 .0042 R13 .8910

SG1 5309.2 SG2 413.0 THA 1.50
                                                                                                                                                        ST 2512.8 SR 430.6 S5 491.2

CRT .9494 CRS -.8632 CST -.9772

LSA 2590.7 MSA 169.5 SSA 20.4

ELI 2545.9 ELZ 133.5 ALF 9.27
     TOE 2.0388 TRA 1.7252 TC3-4.2626 BAU 1.3360
     ROE .3637 RRA -.0390 RC3 .0457 FAU .01619
FOE .4621 FRA .7316 FC3 -.5980 BSP 17133
     BDE 2.0710 BRA 1.7257 BC3 4.2629 FSP -359
```

ARRIVAL DATE JUL 7 1966

LAUNCH DATE JAN 4 1966

```
DISTANCE 545.804
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 26.000 GAL 4.65 AZL 87.27 HCA 281.15 SHA 117.61 ECC .26272 INC 2.7284 V1 30.287 RP 108.41 LAP -2.68 LOP 24.35 VP 36.330 GAP 14.57 AZP 89.47 TAL 166.69 TAP 87.84 RCA 86.71 APO 148.50 V2 34.955 RC 201.376 GL 14.19 GP -5.83 ZAL 65.34 ZAP 174.05 ETS 283.68 ZAE 133.00 ETE 185.97 ZAC 120.56 ETC 169.07 CLP-178.81
  PLANETOCENTRIC CONIC
   C3 25.305 VHL 5.030 DLA 27.78 RAL 31.19 RAD 6568.0 VEL 12.111 PTH 2.17 VHP 9.418 DPA
                                                                                                                                      2.06 RAP 26.94 ECC 1.4165
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                 118.81
                                                                                   264.99
                                                                                                     71.64
                                                                                                                 2 20 5
                                                                                                                                  2835.4
                                                                                                                                                 -24.25
                    1 22 50 3435.38
23 41 41 3751.58
                                                                    126.72
                                                    -21.94
        90.00
                                                                                                      65.08
                                                                                                               24 44 13
                                                                                                                                   3151.6
                                                                                                                                                   -17.15
                                                                                                                                                                   139.25
                                                                                   261.65
                                                    -13.91
                                                                    146.42
        90.00
                                                                                                                                                                   89.64
                                                                                   266.36
                                                                                                      74.88
                                                                                                                 4 20 13
                                                                                                                                   2426.1
                                                                                                                                                   -27.92
                                                                     97.97
                   3 29 47 3026.10
                                                   -26.10
                                                                                                     61.69 1 21 56
80.14 6 23 38
56.03 1 27 54
                                                                                                                                                                  129.13
                                                                                                                                   3036.1
                                                                                                                                                  -13.73
                                                                                   259.66
      100.00
                     0 21 20
                                  3636.09
                                                   -10.03
                                                                    135.96
                                                                                   268.09
                                                                                                                                   2018.6
                                                                                                                                                  -33.91
                                                                                                                                                                    59.67
                     5 39 59 2618.64
                                                   -32.90
                                                                     68.77
                                                                                                                                  3016.3
                                                                                                                                                   -8.50
                                                                                                                                                                  124.56
                                                                                   256.04
                      0 27 38
                                  3616.32
                                                     -4.07
                                                                    130.84
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                        SGT 5319.2 SGR 436.2 SG3 106.8
RRT .3386 RRF .3094 RTF .8974
SGB 5337.1 R23 .0039 R13 .8974
SGI 5321.3 SG2 410.3 THA 1.60
                                                                                                                               ST 2477.3 SR 433.6 SS 481.0
CRT .9376 CRS -.8481 CST -.9787
    TOE 2.0576 TRA 2.0556 TC3-3.9508 BAU 1.3366
   ROE .3805 RRA -.0283 RC3 .0334 FAU .01507
FOE .4470 FRA .7768 FC3 -.5155 BSP 17232
                                                                                                                              LSA 2554.2 MSA 179.1 SSA 19.1
EL1 2510.5 EL2 148.8 ALF 9.35
    BOE 2.0925 BRA 2.0558 BC3 3.9509 FSP -354
                                                                                                                                           ARRIVAL DATE JUL 9 1966
                                                                             FLIGHT TIME 186.00
                                                                           DISTANCE 550.998
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 25.950 GAL 5.45 AZL 87.36 HCA 284.34 SMA 117.34 ECC .26976 INC 2.6387 V1 30.287 RP 108.37 LAP -2.56 LOP 27.54 VP 36.306 GAP 15.04 AZP 89.35 TAL 164.83 TAP 89.17 RCA 85.68 APO 148.99 V2 34.968 RC 203.147 GL 13.10 GP -5.72 ZAL 62.07 ZAP 174.26 ETS 277.18 ZAE 133.13 ETE 185.91 ZAC 122.95 ETC 169.01 CLP-179.51
   PLANETOCENTRIC CONIC
   C3 27.546 VHL 5.248 DLA 27.83 RAL 34.98 RAD 6568.1 VEL 12.203 PTH 2.19 VHP 9.700 DPA 3.14 RAP 29.19 ECC 1.4533 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                 2864 .4
                                                                                                      70.89 2 33 13
                                                                                   270.18
                                                                   128.61
       90.00
                     1 35 29 3464.42
                                                     -21.31
                                                                      140.05
                                                                                                                  1 5 54
                                                                                                                                    3164.6
                                                                                                                                                    -16.81
                                                                     147.20
                                                                                    266.87
                                                                                                      64.89
        90.00
                     0 3 10 3764.61
                                                     -13.53
                                                                                                                                                                     91.42
                                                                                                                                    2451.1
                                                                                                                                                   -27.58
                                                                      99.69
      100.00
                     3 43 42
                                    3051.07
                                                     -25.64
                                                                                                                                                                   130.13
                                                                                                                                    3053.2
                                                                                                                                                   -13.21
                    0 37 37 3653.19
5 54 27 2641.88
                                                      -9.47
                                                                     136.93
      100.00
                                                                                                                                    2041.9
                                                                                                                                                   -33.77
                                                                                                                                                                     61.47
                                                     -32.61
                                                                      70.52
      110.00
                                                                                                                                                                   125.56
                                                                                                                                    3035.1
                                                                                                                                                    -7.79
      110.00
                     0 43 22
                                                                     131.83
                                   3635.15
                                                      -3.35
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                               ST 2429.0 SR 434.5 SS 470.7
CRT .9241 CRS -.8318 CST -.9801
   TOE 2.0675 TRA 2.4044 TC3-3.6241 BAU 1.3347
ROE .3980 RRA -.0157 RC3 .0228 FAU .01397
FDE .4317 FRA .8240 FC3 -.4389 BSP 17315
BDE 2.1054 BRA 2.4045 BC3 3.6242 FSP -349
                                                                       SGT 5326.9 SGR 435.6 SG3 104.7
RRT .3587 RRF .3298 RTF .9038
                                                                                                                               LSA 2504.8 MSA 189.4 SSA 17.9
                                                                        SGB 5344.7 R23 .0039 R13 .9038
                                                                                                                               EL1 2462.1 EL2 163.8 ALF 9.43
                                                                        SG1 5329.2 SG2 406.4 THA 1.69
                                                                                                                                          ARRIVAL DATE JUL 11 1966
                                                                             FLIGHT TIME 188.00
LAUNCH DATE JAN 4 1966
                                                                           DISTANCE 556.112
   HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 25.901 GAL 6.30 AZL 87.45 MCA 287.53 SMA 117.07 ECC .27753 INC 2.5463 VI 30.287 RP 108.33 LAP -2.43 LOP 30.74 VP 36.284 GAP 15.55 AZP 89.23 TAL 163.00 TAP 90.53 RCA 84.58 APO 149.57 V2 34.981 RC 204.893 GL 12.01 GP -5.61 ZAL 58.93 ZAP 174.38 ETS 270.16 ZAE 133.26 ETE 185.85 ZAC 125.34 ETC 168.91 CLP 179.78
   PLANETOCENTRIC CONIC
    C3 30.227 VHL 5.498 DLA 27.79 RAL 38.61 RAD 6568.2 VEL 12.313 PTH 2.22 VHP 10.008 OPA
                                                                                                                                      4.19 RAP 31.44 ECC 1.4975
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                 -23.40
                                                                                                  70.48 2 49 58
                                                                                                                                2881.2
                     1 51 56 3481.23
0 15 42 3794.23
                                                                                 275.46
                                                                   129.70
                                                     -20.93
                                                                                                                1 18 56
4 50 20
1 52 30
                                                                                    271.89
                                                                                                      64.46
                                                                                                                                   3194.2
                                                                                                                                                   -16.01
                                                                                                                                                                   141.86
                                                                     148.94
                                                     -12.67
                                                                                                      73.47
                                                                                                                                   2471.1
                                                                                                                                                   -27.29
                                                                                                                                                                    92.84
                                                                                    277.00
                                                                     101.06
                                    3071.14
                                                     -25.26
       100.00
                      3 59 9
                                                                                                                                    3079.5
                                                                                                                                                   -12.38
                                                                                                                                                                   131.66
                                                                       1 52 30

78.23 6 53 51

33.13 265.96 55.89 1 58 22

MID-COURSE EXECUTION ACCURACY

SGT 5330.0 SGR 434.0 627
                                                                                                      61.26
                      0 51 11 3679.54
                                                                                    269.78
                                                      -8.61
                                                                     138.41
                                                                                                                                    2063.3
                                                                                                                                                   -33.61
                                                                                                                                                                    63.13
                      6 9 27 2663.33
0 57 22 3660.12
       110.00
                                                     -32.33
                                                                      72.13
                                                                                                                                   3060.1
                                                                                                                                                   -6.A6
                                                                                                                                                                   126.89
                                                     -2.40
                                                                    133.13
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         SGT 5330.0 SGR 434.0 SG3 102.8
RRT .3792 RRF .3512 RTF .9104
SGB 5347.7 R23 .0043 R13 .9104
SGI 5332.6 SG2 401.4 THA 1.78
                                                                                                                               ST 2375.3 SR 433.7 SS 461.9
CRT .9090 CRS -.8146 CST -.9816
    TOE 2.0729 TRA 2.7780 TC3-3.2833 BAU 1.3268
    RDE .4162 RRA -.0011 RC3 .0140 FAU .01284
FDE .4178 FRA .8750 FC3 -.3676 BSP 17279
BDE 2.1142 BRA 2.7780 BC3 3.2834 FSP -341
                                                                                                                               LSA 2450.1 MSA 200.0 SSA 16.7
                                                                                                                               ELI 2408.0 EL2 178.3 ALF 9.48
                                                                                                                                           ARRIVAL DATE JUL 13 1966
                                                                             FLIGHT TIME 190.00
LAUNCH DATE JAN 4 1966
                                                                             DISTANCE 561.131
    RL 147.10 LAL .00 LOL 103.19 VL 25.853 GAL 7.21 AZL 87.55 MCA 290.73 SMA 116.82 ECC .28613 INC 2.4506 V1 30.287

RP 108.29 LAP -2.29 LOP 33.94 VP 36.262 GAP 16.11 AZP 89.13 TAL 161.19 TAP 91.92 RCA 83.39 APO 150.24 V2 34.994

RC 206.614 GL 10.94 GP -5.52 ZAL 55.94 ZAP 174.40 ETS 262.84 ZAE 133.36 ETE 185.80 ZAC 127.71 ETC 168.75 CLP 179.06
   PLANETOCENTRIC CONIC
    C3 33.421 VHL 5.781 DLA 27.66 RAL 42.08 RAD 6568.3 VEL 12.442 PTH 2.25 VHP 10.345 DPA 5.21 RAP 33.69 ECC 1.5500 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                  -23.26
                                                                                   280.81
                                                                                                      70.30
                                                                                                                  3 9 25
                                                                                                                                   2888.4
                                                      -20.76
                                                                     130.16
                                     3488.43
                      2 11 17
0 24 1
         90.00
                                                                                                                 1 27 59
5 7 14
2 4 6
7 9 32
                                                                                                                                    3237.6
                                                                                                                                                   -14.80
                                                                                                                                                                    144.47
                                                                                                       63.90
                                                      -11.39
                                                                     151.48
                                                                                     276.69
                                     3637.56
         90.00
                                                                                                                                                   -27.04
                                                                                                                                                                     93.96
                                                                                                                                    2487.0
                                                                     102.14
                                                                                     282.31
                                                                                                       72.98
                      4 15 47
                                                      -24.95
       100.00
                                     3087.05
                                                                                                                                                   -11.29
                                                                                                                                                                   133.64
                      1 2 12
                                                       -7.47
                                                                                                       60.97
                                                                                                                                    3114.2
                                                                     140.35
                                                                                     274.62
       100.00
                                     3714.18
                                                                                                                                                   -33.44
                                                                                                       77.39
                                                                                                                                    2083.3
                                                                                                                                                                     64.66
                                     2683.29
                                                     -32.04
                                                                       73.61
                                                                                    284.45
                      6 24 48
       110.00
                                                                                                                                                      -5.70
                                                                                                                  2 11 11
                                                                                                                                                                    128.50
                                                                                    270.77
                                                                                                      55.84
                                                                                                                                    3090.7
                      1 9 40
                                                      -1.23
                                                                     134.73
                                     3690.70
       110.00
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                           ST 2310.0 SR 430.6 SS 452.4

CRT .8921 CRS -.7955 CST -.9829

LSA 2383.7 MSA 210.4 SSA 15.7

EL1 2342.0 EL2 191.9 ALF 9.51
                                                                        SGT 5329.0 SGR 431.0 SG3 100.8
RRT .3986 RRF .3711 RTF .9170
SGB 5346.4 R23 .0039 R13 .9170
SGI 5331.7 SG2 395.0 THA 1.86
     TOE 2.0668 TRA 3.1663 TC3-2.9520 BAU 1.3190
    ROE .4344 RRA .0151 RC3 .0067 FAU .01181
FOE .4027 FRA .9273 FC3 -.3059 BSP 17369
     BOE 2.1120 BRA 3.1664 BC3 2.9520 FSP -336
```

FLIGHT TIME 184.00

```
LAUNCH DATE JAN 4 1966
                                                                         FLIGHT TIME 192.00
                                                                                                                                   ARRIVAL DATE JUL 15 1966
    HELIOCENTRIC CONIC
                                                                        DISTANCE 566.037
    RL 147.10 LAL .00 LOL 103.19 VL 25.806 GAL 8.18 A7L 87.65 HCA 293.93 SMA 116.57 ECC .29566 INC 2.3507 VI 30.287
RP 108.25 LAP -2.15 LOP 37.13 VP 36.242 GAP 16.72 A7P 89.05 TAL 159.43 TAP 93.35 RCA 82.10 APO 151.03 VZ 35.007
RC 208.309 GL 9.89 GP -5.43 ZAL 53.10 ZAP 174.32 ETS 255.44 ZAE 133.45 ETE 185.75 ZAC 130.07 ETC 168.54 CLP 178.33
    PLANETOCENTRIC CONIC
    C3 37.217 VHL 6.101 DLA 27.45 RAL 45.36 RAD 6568.5 VEL 12.593 PTH 2.28 VHP 10.715 DPA 6.20 RAP 35.95 ECC 1.6125
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    2 32 7 3490.14
0 29 22 3890.19
                                                                                                          3 30 17
1 34 12
                                                   -20.72
                                                                130.27
                                                                              286.15
                                                                                               70.26
                                                                                                                           2890.1
        90.00
                                                                                                                                          -23.23
                                                                                281.30
                                                    -9.79
                                                                154.52
                                                                                                 63.30
                                                                                                                            3290.2
                                                                                                72.59 5 24 51
60.68 2 13 35
76.61 7 25 20
55.82 2 22 29
       100.00
                    4 33 12 3099.84
1 10 59 3755.72
                                                   -24.69
                                                                103.00
                                                                               287.59
                                                                                                                           2499.8
                                                                                                                                           -26.84
                                                                                                                                                           94.86
       100,00
                                                   -6.10
                                                                142.67
                                                                                279.31
                                                                                                                            3155.7
                                                                                                                                            -9.96
                                                                                                                                                          136.01
       110.00
                    6 40 18
                                2702.10
                                                   -31.75
                                                                  75.00
                                                                               289.80
                                                                                                                            2102.1
                                                                                                                                           -33.26
                                                                                                                                                            66.10
                    1 20 22 3726.23
       110.00
                                                                 136.58
                                                                               275.46
                                                                                                                            3126.2
                                                                                                                                           -4.35
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5323.4 SGR 426.8 SG3 98.9

RRT .4176 RRF .9911 RTF .9237

SGB 5340.5 R23 .0036 R13 .9238

SGI 5326.4 SG2 387.6 TMA 1.93
    TOE 2.0541 TRA 3.5797 TC3-2.6257 BAU 1.3064
                                                                                                                        ST 2241.1 SR 425.5 SS 444.3
    ROE .4529 RRA .0330 RC3 .0011 FAU .01080
FOE .3881 FRA .9830 FC3 -.2512 BSP 17430
                                                                                                                        CRT .8730 CRS -.7752 CST -.9843
                                                                                                                        LSA 2313.5 MSA 220.5 SSA 14.8
EL1 2271.9 EL2 204.7 ALF 9.49
    BOE 2.1034 BRA 3.5798 BC3 2.6257 FSP
                                                      -332
                                                                         FLIGHT TIME 194.00
LAUNCH DATE JAN 4 1966
                                                                                                                                   ARRIVAL DATE JUL 17 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 570.808
         RL 147.10 LAL
   PLANETOCENTRIC CONIC
    C3 41.727 VHL 6.460 DLA 27.18 RAL 48.45 RAD 6568.6 VEL 12.771 PTH 2.32 VHP 11.125 DPA 7.16 RAP 38.21 ECC 1.6867 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          3 51 32
                   2 53 22 3489.58
0 32 47 3948.53
                                                  -20.74
                                                                                                                         2889.6
        90.00
                                                                130.24
                                                                               291.44
                                                                                                70.27
                                                                                                                                          -23.24 122.46
        90.00
                                                   -7.99
                                                                 157.86
                                                                               285.73
                                                                                                 62.74
                                                                                                           1 38 35
                                                                                                                             3348.5
                                                                                                                                           -11.58
                                                                                                                                                          151.02
                                                                    1 30 35

12.28 5 42 47

15.27 283.85 60.42 2 21 17

16.33 295.06 75.88 7 41 3

8.66 280.01 55.85 2 32 22

MID-COURSE EXECUTION ACCURACY

SGT 5313.8 SGR 421.4 CC7
                    4 50 56 3110.58
1 17 54 3802.76
       100.00
                                                  -24.47
                                                                 103.72
                                                                                                                            2510.6
                                                                                                                                           -26.67
                                                                                                                                                           95.61
       100.00
                                                   -4.52
                                                                 145.27
                                                                                                                            3202.8
                                                                                                                                           -8.43
                                                                                                                                                          138.66
       110.00
                     6 55 43 2720.11
                                                 -31.46
                                                                  76.33
                                                                                                                            2120.1
                                                                                                                                           -33.08
                                                                                                                                                           67.48
                     1 29 36
       110.00
                                  3766.00
                                                   1.65
                                                                138.66
                                                                                                                            3166.0
                                                                                                                                           -2.84
                                                                                                                                                          132.45
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
    TOE 2.0364 JRA 4.0194 TC3-2.3107 BAU 1.2890
                                                                    SGT 5313.8 SGR 421.4 SG3 97.0
RRT .4364 RRF .4110 RTF .9305
SGB 5330.5 R23 .0032 R13 .9305
                                                                                                                        ST 2171.7 SR 418.4 SS 437.9
CRT .8520 CRS -.7540 CST -.9858
    ROE .4714 RRA .0527 RC3 -.0029 FAU .00980
FOE .3744 FRA 1.0429 FC3 -.2033 BSP 17471
BOE 2.0903 BRA 4.0198 BC3 2.3107 FSP -326
                                                                                                                        LSA 2242.8 MSA 229.6 SSA 13.9
                                                                                                                        EL1 2201.0 EL2 216.1 ALF 9.41
                                                                     SG1 5317.0 SG2 379.0 THA 1.99
                                                                                                                                  ARRIVAL DATE JUL 19 1966
LAUNCH DATE JAN 4 1966
                                                                        FLIGHT TIME 196.00
   HELIOCENTRIC CONIC
                                                                       DISTANCE 575.416
    RL 147.10 LAL .00 LOL 103.19 VL 25.716 GAL 10.32 AZL 87.87 MCA 300.33 SMA 116.09 ECC .31798 INC 2.1342 V1 30.287 RP 108.17 LAP -1.84 LOP 43.54 VP 36.203 GAP 18.14 AZP 88.92 TAL 156.03 TAP 96.37 RCA 79.18 APO 153.01 V2 35.034 RC 211.617 GL 7.89 GP -5.28 ZAL 47.92 ZAP 173.83 ETS 241.40 ZAE 133.55 ETE 185.65 ZAC 134.73 ETC 167.94 CLP 176.79
   PLANETOCENTRIC CONIC
    C3 47,090 VHL 6.862 DLA 26.86 RAL 51.34 RAO 6568.8 VEL 12.979 PTH 2.37 VHP 11.574 OPA
                                                                                                                              8.09 RAP 40.46 ECC 1.7750
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   3 14 19 3488.73

0 34 54 4010.19

5 8 38 3120.21

1 23 16 3853.95

7 10 54 2737.64

1 37 30 3809.28
                                                                              296.63
                                                                                               70.29
                                                                                                          4 12 28
                                                                                                                          2888.7
                                                                                                                                         -23.25
                                                                                                                                                        122.40
        90.00
                                                 -20.76
                                                                130.18
                                                                               290.02
                                                                                                          1 41 44
                                                                                                                            3410.2
                                                   -6.05
                                                                161.36
                                                                                                62.28
        90.00
                                                                                                         6 0 38
2 27 30
                                                                                                                                          -26.50
                                                 -24.27
                                                                104.37
                                                                               297.93
                                                                                                71.99
                                                                                                                           2520.2
                                                                                                                                                          96.28
       100.00
                                                                               288.23
                                                                                                60.23
                                                                                                                            3254.0
                                                                                                                                           -6.74
                                                                                                                                                         141.52
                                                  -2.79
                                                                148.09
      100.00
                                                                                                                                         -32.88
                                                                               300.22
                                                                                                75.18
                                                                                                           7 56 31
                                                                                                                            2137.6
                                                                                                                                                          68.80
                                                                 77.61
                                                  -31.16
      110.00
                                                                                                55.96
                                                                                                           2 40 59
                                                                                                                            3209.3
                                                                                                                                           -1.19
                                                   3.30
                                                                140.92
                                                                               284.43
      110.00
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 5301.9 SGR 415.1 SG3 95.3
RRT .4554 RRF .4516 RTF .9372
SGB 5318.2 R23 .0032 R13 .9372
SGI 5305.3 SG2 369.3 THA 2.05
                                                                                                                       ST 2106.9 SR 409.7 SS 434.3
CRT .8295 CRS -.7329 CST -.9875
    TOE 2.0187 TRA 4.4926 TC3-2.0075 BAU 1.2638
    ROE .4900 RRA .0742 RC3 -.0054 FAU .00875
FOE .3627 FRA 1.1084 FC3 -.1609 BSP 17388
                                                                                                                       LSA 2176.9 MSA 237.4 SSA 13.1
EL1 2134.4 EL2 225.9 ALF 9.27
    BOE 2.0773 BRA 4.4932 BC3 2.0075 FSP -319
                                                                        FLIGHT TIME 198.00
                                                                                                                                  ARRIVAL DATE JUL 21 1966
LAUNCH DATE JAN 4 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 579.827
        147.10 LAL .00 LOL 103.19 VL 25.672 GAL 11.52 AZL 87.98 HCA 303.54 SMA 115.87 ECC .33107 INC 2.0152 VI 30.287 108.13 LAP -1.68 LOP 46.74 VP 36.185 GAP 18.97 AZP 88.89 TAL 154.43 TAP 97.97 RCA 77.51 APO 154.23 VZ 35.047 213.230 GL 6.95 GP -5.21 ZAL 45.58 ZAP 173.42 ETS 235.10 ZAE 133.56 ETE 185.60 ZAC 137.02 ETC 167.53 CLP 175.98
    RL 147.10 LAL
    RC 213.230 GL
   PLANETOCENTRIC CONIC
    C3 53.478 VHL 7.313 DLA 26.49 RAL 54.03 RAO 6568.9 VEL 13.223 PTH 2.42 VMP 12.076 OPA
                                                                                                                               8.98 RAP 42.70 ECC 1.8801
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                          4 32 43
                    3 34 34 3488.59
                                                 -20.76
                                                                                                                                                      122.39
                                                                130.18
                                                                             301.70
                                                                                             70.30
                                                                                                                          2888.6
                                                                                                                                         -23.26
        90.00
                    0 36 5
                                  4073.72
                                                   -4.03
                                                                164.93
                                                                               294.15
                                                                                                61.95
                                                                                                           1 43 59
                                                                                                                            3473.7
                                                                                                                                           -7.75
                                                                                                                                                         158.23
                    5 26 D
                                                                               302.93
                                                                                                71.73
                                                                                                           6 18 9
                                                                                                                            2529.4
                                                                                                                                          -26.35
                                3129.38
                                                  -24.08
                                                                104.98
                                                                                                                                                          96.92
      100.00
                                                                               292.45
                                                                                                60.12
                                                                                                           2 32 29
                                                                                                                            3308.2
                                                                                                                                           -4.93
      100.00
                    1 27 21
                                  3908.16
                                                    -.96
                                                                151.07
                                                                                                                                                         144.53
                                2754.91
                                                  -30.85
                                                                               305.25
                                                                                                74.50
                                                                                                           8 11 35
                    7 25 40
                                                                                                                            2154.9
                                                                                                                                          -32.67
                                                                                                                                                          70.11
      110.00
                     1 44 9
                                  3855.41
                                                   5.06
                                                                143.34
                                                                               288.71
                                                                                                56.15
                                                                                                           2 48 25
                                                                                                                            3255.4
                                                                                                                                           .58
                                                                                                                                                         137.12
      110.00
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 5284.0 SGR 407.3 SG3 93.5
RRT .4732 RRF .4510 RTF .9438
SGB 5299.7 R23 .0026 R13 .9439
    TOE 1.9929 TRA 4.9934 TC3-1.7266 BAU 1.2344
                                                                                                                       ST 2040.4 SR 399.0 SS 431.7
    ROE .5082 RRA .0971 RC3 -.0068 FAU .00776
FOE .3506 FRA 1.1779 FC3 -.1257 BSP 17425
BOE 2.0567 BRA 4.9943 BC3 1.7266 FSP -314
                                                                                                                     CRT .8048 CRS -.7104 CST -.9891
                                                                                                                      LSA 2109.3 MSA 243.7 SSA 12.4
                                                                                                                     EL1 2065.9 EL2 233.9 ALF 9.06
```

SG1 5287.5 SG2 358.5 THA 2.10

JPL TM 33-99

```
ARRIVAL DATE JUL 23 1966
                                                                     FLIGHT TIME 200.00
LAUNCH DATE JAN 4 1966
                                                                     DISTANCE 583.996
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 25.630 GAL 12.82 AZL 88.11 MCA 306.75 SMA 115.65 ECC .34572 INC 1.8868 V1 30.287 P1 108.09 LAP -1.51 LOP 49.95 VP 36.168 GAP 19.89 AZP 88.87 TAL 152.90 TAP 99.65 RCA 75.67 APO 155.63 V2 35.060 RC 214.816 GL 6.04 GP -5.15 ZAL 43.42 ZAP 172.92 ETS 229.41 ZAE 133.53 ETE 185.54 ZAC 139.27 ETC 167.04 CLP 173.13
  PLANETOCENTRIC CONIC
                                                                                                                         9.83 RAP 44.92 ECC 2.0058
   C3 61.115 VML 7.818 DLA 26.08 RAL 56.51 RAD 6569.1 VEL 13.508 PTM 2.47 VMP 12.636 DPA
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 53 53 3489.64 -20.74 130.24 306.61 70.27 4 52 3 2889.6 -23.24 122.46
                                                                                            61.75
                                                              168.53
                                                                            298.14
                  0 36 34 4138.14
5 42 47 3138.56
                                                 -1.96
       90.00
                                                                                                     6 35 6
2 36 25
8 26 7
2 54 46
                                                                                                                                                    97.55
                                                                                                                                     -26.19
                                                                                            71.46
                                                                                                                       2538.6
                                                                            307.79
                                                -23.88
                                                              105.59
      100.00
                                                                                                                                                   147.63
                                                              154.16
                                                                            296.53
                                                                                            60.12
                                                                                                                       3364.4
                                                                                                                                     -3.03
                   1 30 21 3964.45
7 39 55 2772.07
                                                   .95
      100.00
                                                                                                                                                    71.40
                                                                                            73.83
                                                                                                                       2172.1
                                                                                                                                     -32.45
                                                -30.53
                                                               80.09
                                                                           310.13
      110.00
                                                                                                                                                   139.64
                                                              145.89
                                                                            292.85
                                                                                            56.43
                                                                                                                       3303.7
                                                                                                                                      2.42
                                                 6.88
     110.00
                   1 49 42
                               3903.71
                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                               MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1978.5 SR 386.7 S5 431.5
CRT .7788 CRS -.6880 CST -.9907
                                                                 SGT 5262.3 SGR 398.3 SG3 91.9
RRT .4908 RRF .4701 RTF .9504
    TOE 1.9661 TRA 5.5312 TC3-1.4648 BAU 1.1969
   ROE .5261 RRA .1215 RC3 -.0071 FAU .00675
                                                                                                                   LSA 2046.6 MSA 248.2 SSA 11.7
   FOE .3398 FRA 1.2535 FC3 -.0957 BSP 17442
BOE 2.0353 BRA 5.5325 BC3 1.4649 FSP -309
                                                                 SGB 5277.3 R23 .0019 R13 .9504
                                                                                                                   EL1 2001.6 EL2 239.8 ALF 8.78
                                                                 SG1 5265.9 SG2 346.8 THA 2.14
                                                                      FLIGHT TIME 202.00
                                                                                                                              ARRIVAL DATE JUL 25 1966
LAUNCH DATE JAN 4 1966
                                                                     DISTANCE 587.867
  HELIOCENTRIC CONIC
   RL 147.10 LAL .00 LOL 103.19 VL 25.589 GAL 14.24 A7L 88.25 MCA 309.96 SMA 115.44 ECC .36214 INC 1.7472 V1 30.287 RP 108.05 LAP -1.34 LOP 53.16 VP 36.151 GAP 20.93 A7P 88.88 TAL 151.46 TAP 101.42 RCA 73.63 APO 157.24 V2 35.073 RC 216.375 GL 5.18 GP -5.09 ZAL 41.43 ZAP 172.32 ETS 224.31 ZAE 133.45 ETE 185.48 ZAC 141.47 ETC 166.48 CLP 174.24
  PLANETOCENTRIC CONIC
   C3 70.284 VHL 8.384 DLA 25.64 RAL 58.79 RAD 6569.4 VEL 13.843 PTH 2.53 VHP 13.263 DPA 10.64 RAP 47.12 ECC 2.1567 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   4 12 9 3491.98
0 36 26 4202.79
5 58 51 3147.97
1 32 25 4022.02
                                                                                                                      2892.0
                                                                                                                                                  122.62
                                                                            311.35
                                                                                            70.22
                                                                                                       5 10 21
                                                                                                                                     -23.19
       90.00
                                                -20.68
                                                             130.39
                                                                                                                                                    165.50
                                                                            301.98
                                                                                             61.68
                                                                                                       1 46 28
                                                                                                                       3602.8
                                                                                                                                       -3.66
                                                   .13
                                                              172.14
       90.00
                                                                 6 51 19

60.24 2 39 27

71.32 314.83 73.17 8 40 1

18.54 296.85 56.82 3 0 7

MID-COURSE EXECUTION ACCURACY

SGT 5236.8 3GR 388.1 977

RRT ,5074
                                                                                                                                                     98.20
                                                                                                                                      -26.02
                                                -23.67
                                                              106.21
                                                                                                                       2548.0
      100.00
                  1 32 25
                                                                                                                       3422.0
                                                                                                                                       -1.08
                                                                                                                                                    150.80
                                                2.90
                                                             157.32
      100.00
                                                                                                                                                     72.67
                   7 53 32 2789.17
                                                                                                                       2189.2
                                                                                                                                      -32.21
                                                -30.20
                                                               81.32
      110.00
                                                                                                                       3353.6
                                                                                                                                        4.32
                                                                                                                                                    142.25
                                                 8.75
                                                              148.54
                    1 54 13
                                3953.59
      110.00
                                                                                                                   ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1921.8 SR 373.1 55 434.1
    TOE 1.9399 TRA 6.1114 TC3-1.2228 BAU 1.1490
                                                                                                                   CRT .7520 CRS -.6661 CST -.9922
    RDE .5437 RRA .1472 RC3 -.0066 FAU .00569
                                                                                                                   LSA 1989.4 MSA 250.4 SSA 11.0
ELI 1942.5 ELZ 243.3 ALF 8.44
                                                                 3GB 5251.2 R23 .0013 R13 .9568
SGI 5240.6 SG2 334.1 THA 2.16
          .3306 FRA 1.3367 FC3 -.0701 BSP 17432
    FOF
    BOE 2.0146 BRA 6.1132 BC3 1.2228 FSP -304
                                                                                                                             ARRIVAL DATE JUL 27 1966
                                                                     FLIGHT TIME 204.00
LAUNCH DATE JAN 4 1966
                                                                     DISTANCE 591.368
  HELIOCENTRIC CONIC
       147.10 LAL .00 LOL 103.19 VL 25.550 GAL 15.79 AZL 88.41 HCA 313.17 SMA 115.24 ECC .38061 INC 1.5936 V1 30.287 108.01 LAP -1.16 LOP 56.37 VP 36.136 GAP 22.10 AZP 88.91 TAL 150.14 TAP 103.31 RCA 71.38 APO 159.09 V2 35.086 217.906 GL 4.35 GP -5.03 ZAL 39.63 ZAP 171.62 ETS 219.78 ZAE 133.32 ETE 185.42 ZAC 143.62 ETC 165.81 CLP 173.29
   RL 147.10 LAL
    RC 217.906 GL
   PLANETOCENTRIC CONIC
    C3 81.353 VHL 9.020 DLA 25.17 RAL 60.85 RAD 6569.6 VEL 14.237 PTH 2.59 VMP 13.971 DPA 11.41 RAP 49.29 ECC 2.3389
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      5 27 33
                                                                                                                     2895.5
                                                                                                                                     -23.12
                                                                                                                                                   122.86
                                                                            315.89
                                                                                            70.13
                                                              130.62
       90.00
                  4 29 17 3495.51
0 35 44 4267.16
                                                -20.60
                                                                                                     1 46 51
7 6 42
2 41 38
                                                                                                                                                   169.10
                                                              175.73
                                                                            305.67
                                                                                            61.76
                                                                                                                       3667.2
                                                                                                                                      -1.59
       90.00
                                                 2.21
                                                                                                                                                     98.87
                                                                                                                       2557.7
                                                                                                                                      -25.85
                                                                            316.98
                                                                                            70.92
                                                              106.85
       100.00
                   6 14 5 3157.67
                                                -23.46
                                                                                                                                                   153.99
                                                                                                                       3480.2
                                                                                                                                       .89
                                                              160.53
                                                                            304.20
                                                                                            60.47
      100.00
                   1 33 38
                                 4080.24
                                                  4.86
                                                                                            72.54 8 53 12
57.32 3 4 31
                                                                                                                       2206.2
                                                                                                                                     -31.96
                                                                                                                                                    73.94
                                                                            319.34
                   8 6 26
                                                -29.86
                                                               82.52
       110.00
                                 2806.16
                                                                                                                       3404.5
                                                                                                                                       6.25
                                                                                                                                                   144.93
                                                              151.28
                                                                            300.69
      110.00
                    1 57 46
                                 A004 - 50
                                                 10.64
                                                                 HID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                   ST 1872.7 SR 358.3 S5 440.1
CRT .7255 CRS -.6459 CST -.9937
                                                                  SGT 5209.4 SGR 376.9 SG3 88.8
RRT .5250 RRF .5081 RTF .9628
    TOE 1.9200 TRA 6.7436 TC3 -.9988 BAU 1.0863
   RDE .5611 RRA .1742 RC3 -.0054 FAU .00449
FDE .3240 FRA 1.4293 FC3 -.0478 BSP 17301
                                                                 RRT .5250 RRF
                                                                                                                   LSA 1940.7 MSA 250.2 SSA 10.4
EL1 1890.9 EL2 244.2 ALF 8.04
                                                                 SGB 5223.1 R23 .0008 R13 .9628
    BOE 2.0003 BRA 6.7458 BC3 .9988 FSP -297
                                                                  SG1 5213.2 SG2 320.6 THA 2.18
                                                                                                                              ARRIVAL DATE JUL 29 1966
                                                                      FLIGHT TIME 206.00
LAUNCH DATE JAN 4 1966
                                                                      DISTANCE 594.403
  HELIOCENTRIC CONIC
                        .00 LOL 103.19 VL 25.512 GAL 17.52 AZL 88.58 MCA 316.39 SMA 115.04 ECC .40147 INC 1.4230 V1 30.287
-.98 LOP 59.58 VP 36.122 GAP 23.42 AZP 88.97 TAL 148.95 TAP 105.34 RCA 68.86 APO 161.23 V2 35.099
3.56 GP -4.98 ZAL 38.01 ZAP 170.82 ETS 215.76 ZAE 133.12 ETE 185.35 ZAC 145.69 ETC 165.06 CLP 172.28
    RL 147.10 LAL
    RP 107.97 LAP
    RC 219.410 GL
   PLANETOCENTRIC CONIC
    C3 94.801 VHL 9.737 DLA 24.69 RAL 62.69 RAD 6569.8 VEL 14.702 PTH 2.66 VHP 14.772 DPA 12.13 RAP 51.40 ECC 2.5602
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2900.0
                                                                                                                                      -23.03
                                                                                                                                                    123.15
                                                 -20.50
                                                                                                        5 43 35
                    4 45 15 3500.00
                                                                            320.20
                                                                                             70.02
                                                              130.91
       90.00
                                                                                                                        3730.9
                                                                                                                                          .47
                                                                                                                                                    172.65
                                                                             309.19
                                                                                             61.98
                                                                                                        1 46 40
                    0 34 29
                                 4330.86
                                                   4.25
                                                               179.29
       90.00
                                                                                                       7 21 10 2 43 2
                                                                                                                                      -25.66
                                                                                                                                                     99.54
                                                                                                                        2567.5
                                                                             321.25
                                                                                             70.65
       100.00
                    6 28 22 3167.55
                                                 -23.24
                                                               107.50
                                                                                                                                        2.87
                                                                                                                                                    157.19
                    1 34 3 4138.55
8 18 31 2822.93
2 0 24 4055.93
                                                                             307.79
                                                                                             60.82
                                                                                                                        3538.5
       100.00
                                                   6.81
                                                              163.76
                                                                                                                                     -31.70
                                                                                                       9 5 34
                                                                                                                        2222.9
       110.00
                                                 -29.51
                                                                83.70
                                                                             323.63
                                                                                             71.92
                    2 0 24
                                 4055.93
                                                 12.51
                                                              154.08
                                                                            304.37
                                                                                             57.93
                                                                                                        3 8 0
                                                                                                                        3455.9
                                                                                                                                        8.18
       110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1824.9 SR 342.3 SS 448.4
                                                                  SGT 5175.4 SGR 364.3 SG3 87.3
RRT .5407 RRF .5256 RTF .9686
SGB 5188.2 R23 .0001 R13 .9686
    TOE 1.8977 TRA 7.4242 TC3 -.7983 BAU 1.0118
                                                                                                                    CRT .6984 CRS -.6257 CST -.9950
    ROE .5778 RRA .2017 RC3 -.0038 FAU .00324
                                                                                                                   LSA 1893.9 MSA 247.9 SSA 9.8
    FOE .3177 FRA 1.5306 FC3 -.0296 8SP 17305
                                                                                                                  EL1 1840.7 EL2 242.8 ALF 7.60
    BOE 1.9837 BRA 7.4269 BC3 .7983 FSP -293
                                                                 SG1 5179.2 SG2 306.3 THA 2.19
```

```
ARRIVAL DATE JUL 31 1966
                                                                                         FLIGHT TIME 208.00
LAUNCH DATE JAN 4 1966
    HELIOCENTRIC CONIC
                                                                                        DISTANCE 596.848
     RL 147.10 LAL .00 LOL 103.19 VL 25.476 GAL 19.43 AZL 88.77 HCA 319.60 SMA 114.86 ECC .42511 INC 1.2307 VI 30.287 RP 107.93 LAP -.80 LOP 62.80 VP 36.109 GAP 24.93 AZP 89.06 TAL 147.93 TAP 107.54 RCA 66.03 APO 163.69 VZ 35.111 RC 220.887 GL 2.80 GP -4.93 ZAL 36.60 ZAP 169.91 ETS 212.17 ZAE 132.84 ETE 185.26 ZAC 147.69 ETC 164.20 CLP 171.18
    PLANETOCENTRIC CONIC
     C3 111.267 VHL 10.548 DLA 24.19 RAL 64.31 RAD 6570.1 VEL 15.251 PTH 2.73 VHP 15.686 DPA 12.60 RAP 53.46 ECC 2.8312 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
         90.00 5 0 2 3505.11
90.00 0 32 39 4393.55
100.00 6 41 40 3177.42
100.00 1 33 42 4196.47
                                                                                                                                                    2905.1
                                                              -20.38
                                                                              131.24
                                                                                                 324.25
                                                                                                                  69.90 5 58 27
                                                                                                                                                                         -22.93
                                                                                                                                                                                           123.49
                                                                6.25
                                                                               182.82
                                                                                                 312.52
                                                                                                                      62.32
                                                                                                                                   1 45 53
                                                                                                                                                        3793.5
                                                                                                                                                                            2.49
                                                                                                                                                                                            176.15
                                                                                                                                 7 34 37
2 43 36
                                                                                                                      70.38
         100.00
                                                              -23.01
                                                                               108.15
                                                                                                 325.28
                                                                                                                                                        2577.4
                                                                                                                                                                          -25.48
                                                                                                                                                                                            100.22
        100.00
                                                                8.72
                                                                               167.00
                                                                                                 311.18
                                                                                                                      61.29
                                                                                                                                                        3596.5
                                                                                                                                                                            4.82
                                                                                                                                                                                            160.38
                                                                                   14.85 327.65 71.32 9 17 4

16.93 307.86 58.64 3 10 34

MID-COURSE EXECUTION ACCURACY

567 5137.8 469 350
                         8 29 45 2839.27
                                                             -29.16
                                                                                 84.85
                                                                                                                                                        2239.3
                                                                                                                                                                          -31.43
                                                                                                                                                                                             76.37
        110.00
                         2 2 6
                                                               14.35
                                                                               156.93
                                                                                                                                                        3507.4
                                                                                                                                                                          10.10
                                                                                                                                                                                            150.41
         110.00
                                          4107.39
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5137.8 SGR 350.5 SG3 85.9

RRT .5556 RRF .5424 RTF .9739

SGB 5149.7 R23 -.0005 R13 .9739

SGI 5141.5 SG2 291.2 THA 2.18
                                                                                                                                                   ST 1782.2 SR 325.3 SS 460.2
CRT .6724 CRS -.6070 CST -.9962
     TOE 1.8823 TRA 8.1683 TC3 -.6168 BAU .9175
     ROE .5941 RRA .2297 RC3 -.0020 FAU .00179
     FOE .3138 FRA 1.6439 FC3 -.0139 BSP 17271
BOE 1.9738 BRA 8.1715 BC3 .6168 FSP -289
                                                                                                                                                   LSA 1853.2 MSA 243.2 SSA 9.1
                                                                                                                                                   ELI 1795.8 ELZ 239.0 ALF 7.12
                                                                                         FLIGHT TIME 210.00
                                                                                                                                                                ARRIVAL DATE AUG 2 1966
LAUNCH DATE JAN 4 1966
                                                                                         DISTANCE 598.538
   HELIOCENTRIC CONIC
                              .00 LOL 103.19 VL 25.443 GAL 21.58 AZL 88.99 MCA 322.82 SMA 114.69 ECC .45200 INC 1.0110 V1 30.287
-.61 LOP 66.02 VP 36.097 GAP 26.67 AZP 89.19 TAL 147.12 TAP 109.94 RCA 62.85 APO 166.54 VZ 35.124
2.09 GP -4.89 ZAL 35.40 ZAP 168.87 ETS 208.96 ZAE 132.45 ETE 185.17 ZAC 149.57 ETC 163.23 CLP 169.99
     RL 147.10 LAL
     RP 107.89 LAP
     RC 222.336 GL
   PLANETOCENTRIC CONIC
     C3 131.599 VHL 11.472 DLA 23.68 RAL 65.70 RAD 6570.4 VEL 15.904 PTH 2.81 VHP 16.734 DPA 13.43 RAP 55.43 ECC 3.1658 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 13 34 3510.45 -20.25 131.58 328.01 69.77 6 12 5 2910.4 -22.82 123.85
                                                                                                                                 1 44 25
7 47 1
2 43 25
9 27 37
                       0 30 10 4454.90
6 53 54 3166.98
1 32 31 4253.63
8 40 2 2854.91
                                                                                                                                                        3854.9
          90.00
                                                                8.17
                                                                               186.30
                                                                                                 315.63
                                                                                                                      62.79
                                                                                                                                                                            4.46
                                                                                                                                                                                             179.58
                                                                                                                                                        2587.0
                                                                                                                                                                          -25.30
                                                                                                                                                                                             100.87
        100.00
                                                             -22.79
                                                                               108.7A
                                                                                                 329.01
                                                                                                                      70.12
                                                                               170.23
                                                                                                 314.36
                                                                                                                      61.88
                                                                                                                                                        3653.6
                                                                                                                                                                                            163.55
        100.00
                                                              10.57
                                                                                                                                                                            6.73
                                                                                                                      70.76
                                                                                                                                                                          -31.16
                                                                                85.93
                                                                                                 331.38
                                                                                                                                                        2254.9
                                                                                                                                                                                              77.52
        110.00
                                                             -28.82
                                                                                  MID-COURSE EXECUTION ACCURACY
                         2 2 52
        110.00
                                         4158.44
                                                              16.14
                                                                               159.81
                                                                                                                                                        3558.4
                                                                                                                                                                           11.97
                                                                                                                                                                                            153.19
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
     TOE 1.8761 TRA 8.9838 TC3 -.4541 BAU .7989

ROE .6101 RRA .2575 RC3 .0000 FAU .00008

FOE .3123 FRA 1.7711 FC3 -.0005 BSP 17215

BOE 1.9728 BRA 8.9875 BC3 .4541 FSP -285
                                                                                   SGT 5095.9 SGR 335.5 SG3 84.5
RRT .5693 RRF .5580 RTF .9787
                                                                                                                                                   ST 1743.4 SR 307.6 SS 475.8
CRT .6479 CRS -.5901 CST -.9971
                                                                                   SGB 5107.0 R23 -.0011 R13 .9787
SG1 5099.5 SG2 275.6 THA 2.15
                                                                                                                                                   LSA 1817.8 MSA 236.3 SSA 8.5
EL1 1755.0 EL2 232.8 ALF 6.64
                                                                                                                                                               ARRIVAL DATE AUG 4 1966
                                                                                        FLIGHT TIME 212.00
LAUNCH DATE JAN 4 1966
                                                                                        DISTANCE 599.251
   HELIOCENTRIC CONIC
    RL 147.10 LAL .00 LOL 103.19 VL 25.413 GAL 24.01 AZL 89.24 MCA 326.04 SMA 114.54 ECC .48269 INC .7560 VI 30.287 RP 107.86 LAP -.42 LOP 69.23 VP 36.087 GAP 28.68 AZP 89.37 TAL 146.55 TAP 112.59 RCA 59.25 APO 169.83 VZ 35.135 RC 223.756 GL 1.40 GP -4.84 ZAL 34.43 ZAP 167.69 ETS 206.07 ZAE 131.95 ETE 185.06 ZAC 151.34 ETC 162.18 CLP 168.67
   PLANETOCENTRIC CONIC
    UNCH AZMITH LINCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 25 51 3515.55 -20.13 131.90 331.43 69.66 6 24 27 2915.5 -22.72 124.19 90.00 0 26 55 4514.66 10.01 189.72 318.49 63.37 1 42 10 3914.7 6.36 182.95 100.00 7 5 0 3195.88 -22.59 109.36 332.41 69.88 7 58 16 2595.9 -24.12 101.4m
                         1 30 28 4309.56
8 49 19 2869.52
                                                                                                                     62.56
                                                                                                                                                       3709.6
                                                                                                                                                                           8.57
                                                             12.34
                                                                              173.44
                                                                                                317.28
                                                                                                                                  2 42 17
        100.00
                                                                                                                                  9 37 8
                                                                                                                                                                         -30.91
                                                                                                                                                       2269.5
                                                            -28.49
                                                                                86.94
                                                                                                334.77
                                                                                                                     70.25
                                                                                                                                                                                            78.57
        110.00
                                                                                                                                 3 12 47
                                                                                                                                                       3608.7
                                                                                                                                                                         13.78
                          2 2 38
                                                                              162.69
                                                                                                314.18
                                                                                                                     60.36
                                                                                                                                                                                           154.95
                                                             17.86
        110.00
                                         4208.68
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                   SGT 5051.8 SGR 319.4 SG3 83.3
RRT .5820 RRF .5723 RTF .9831
SG6 5061.9 R23 -.0016 R13 .9831
SG1 5055.2 SG2 259.6 THA 2.11
                                                                                                                                                 ST 1709.3 SR 289.4 S5 496.3

CRT .6261 CRS -.5761 CST -.9979

LSA 1788.9 MSA 227.3 SSA 8.0

EL1 1719.1 EL2 224.4 ALF 6.16
     TOE 1.8873 TRA 9.8857 TC3 -.3082 BAU .6466
    ROE .6259 RRA .2845 RC3 .0021 FAU-.00205
FOE .3150 FRA 1.9158 FC3 .0113 89P 17030
80E 1.9884 BRA 9.8898 BC3 .3082 FSP -278
                                                                                                                                                                ARRIVAL DATE AUG 6 1966
                                                                                        FLIGHT TIME 214.00
LAUNCH DATE JAN 4 1966
                                                                                        DISTANCE 598.688
   HELIOCENTRIC CONIC
                              .00 LOL 103.19 VL 25.386 GAL 26.78 AZL 89.55 HCA 329.27 SMA 114.41 ECC .51782 INC .4542 V1 30.287
-.23 LOP 72.45 VP 36.080 GAP 31.03 AZP 89.61 TAL 146.30 TAP 115.56 RCA 55.16 APO 173.65 V2 35.147
.75 GP -4.79 ZAL 33.71 ZAP 166.35 ETS 203.45 ZAE 131.28 ETE 184.93 ZAC 152.94 ETC 161.05 CLP 167.20
    RL 147.10 LAL
RP 107.82 LAP
     RC 223.148 GL
   PLANETOCENTRIC CONIC
     C3 188.890 VHL 13.744 DLA 22.62 RAL 67.69 RAO 6571.0 VEL 17.613 PTH 2.98 VHP 19.347 OPA 14.51 RAP 59.02 ECC 4.1087
    LNCM AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 36 48 3519.91 -20.03 132.18 334.47 69.55 6 35 28 2919.9 -22.63 124.48 90.00 0 22 47 4572.56 11.76 193.08 321.05 64.05 1 39 0 3972.6 8.18 186.23
                        7 14 52 3203.68
1 27 24 4364.02
8 57 28 2882.73
2 1 18 4257.75
                                                                                                335.42
                                                                                                                                    8 8 16
                                                                                                                                                        2603.7
                                                                                                                                                                          -24.97
                                                                                                                                                                                            102.00
                                                             -22.40
                                                                               109.86
                                                                                                                     69.68
        100.00
                                                                                                                                  2 40 8
                                                                                                319.90
                                                                                                                     63.33
                                                                                                                                                        3764.0
                                                                                                                                                                         10.34
                                                                                                                                                                                           169.76
                                                              14.03
                                                                              176.60
        100.00
                                                                                87.84
                                                                                                337.78
                                                                                                                     69.80
                                                                                                                                    9 45 30
                                                                                                                                                       2282.7
                                                                                                                                                                         -30.66
                                                                                                                                                                                            79.53
                                                            -28.18
        110.00
                                                                               165.56
                                                                                                316.92
                                                                                                                     61.34
                                                                                                                                   3 12 16
                                                                                                                                                       3657.7
                                                                                                                                                                         15.51
                                                                                                                                                                                          158.70
        110.00
   DIFFERENTIAL CORRECTIONS
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                  SGT 4999.7 SGR 301.8 SG3 82.1
RRT .5918 RRF .5837 RTF .9868
SGB 5008.8 R23 -.0021 R13 .9868
SGI 5002.9 SG2 243.1 THA 2.05
                                                                                                                                                  ST 1674.6 SR 270.7 SS 521.0 CRT .6058 CRS -.5630 CST -.9985
     TOE 1.9097 TRAID.8736 TC3 -.1810 BAU .4572
                                                                                                                                              CRT .6058 CRS -.5630 CS: .....
LSA 1761.3 MSA 216.7 SSA 7.4
EL1 1682.8 EL2 214.3 ALF 5.68
    RDE .6414 RRA .3091 RC3 .0039 FAU-.00465
FOE .3202 FRA 2.0786 FC3 .0213 BSP 16969
     BDE 2.0146 BRA10.8780 BC3 .1811 FSP -275
```

ARRIVAL DATE AUG 8 1966

FLIGHT TIME 216.00 LAUNCH DATE JAN 4-1966 **DISTANCE 596.449** HELIOCENTRIC CONIC .DD LOL 103.19 VL 25.363 GAL 29.98 AZL 89.91 MCA 332.49 SNA 114.29 ECC .55808 INC .0887 V1 30.287
-.D4 LOP 75.68 VP 36.074 GAP 33.78 AZP 89.92 TAL 146.43 TAP 118.92 RCA 50.51 APO 178.08 V2 35.158
.13 GP -4.74 ZAL 33.29 ZAP 164.80 ETS 201.05 ZAE 130.43 ETE 184.78 ZAC 154.36 ETC 159.89 CLP 165.54 RL 147.10 LAL RP 107.79 LAP RC 226.511 GL PLANETOCENTRIC CONIC C3 229.578 VML 15.152 DLA 22.07 RAL 68.23 RAD 6571.3 VEL 18.732 PTH 3.06 VMP 20.990 DPA 14.96 RAP 60.57 ECC 4.7783 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2923.0 -22.57 124.68 5 46 20 3522.98 0 17 34 4628.44 -19.95 132.38 337.07 69.48 6 45 3 90.00 189.43 196.36 64.82 1 34 42 4028.4 9.90 13.40 323.26 90.00 0 17 34 7 23 26 3209.92 1 23 10 4416.73 9 4 22 2894.09 1 58 42 4305.32 -24.84 102.42 110.27 338.00 69.51 8 16 55 2609.9 -22.26 100.00 2 36 46 9 52 37 12.02 172.77 64.18 3816.7 179.71 322.17 100.00 1 23 10 15.62 80.34 340.33 69.41 2294.1 -30.45 -27.91 88.62 110.00 62.40 3 10 27 161.41 3705.3 17.15 168.41 319.31 21.01 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1640.7 SR 251.7 SS 551.4 CRT .5882 CRS -.5519 CST -.9989 SGT 4941.7 SGR 283.0 SG3 80.9 RRT .5985 RRF .5917 RTF .9900 SGB 4949.8 R23 -.0026 R13 .9900 TOE 1.9566 TRA11.9632 TC3 -.0700 BAU .2155 ROE .6569 RRA .3297 RC3 .0055 FAU-.00799 FDE .3305 FRA 2.2641 FC3 .0301 BSP 16872 LSA 1737.1 MSA 204.7 SSA 6.8 EL1 1647.5 EL2 202.7 ALF 5.24 SG1 4944.6 SG2 226.6 THA 1.97 BOE 2.0639 BRA11.9678 BC3 .0702 FSP -272 ARRIVAL DATE AUG 10 1966 FLIGHT TIME 218.00 LAUNCH DATE JAN 4 1966 DISTANCE 591.998 HELIOCENTRIC CONIC .00 LOL 103.19 VL 25.345 GAL 33.68 AZL 90.36 MCA 335.71 SMA 114.20 ECC .60416 INC .3644 VI 30.287 .15 LOP 78.90 VP 36.073 GAP 37.05 AZP 90.33 TAL 147.05 TAP 122.77 RCA 45.21 APO 183.20 V2 35.169 -.46 GP -4.68 ZAL 33.21 ZAP 162.99 ETS 198.83 ZAE 129.33 ETE 184.60 ZAC 155.54 ETC 158.75 CLP 163.63 RL 147.10 LAL RP 107.75 LAP RC 227.845 GL PLANETOCENTRIC CONIC C3 281.985 VHL 16.792 DLA 21.50 RAL 68.41 RAD 6571.6 VEL 20.082 PTH 3.14 VHP 22.923 DPA 15.35 RAP 61.88 ECC 5.6408 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 54 20 3524.16 -19.93 132.45 339.16 69.45 6 53 4 2924.2 -22.55 124.76 192.54 325.04 65.66 1 29 2 4082.2 11.52 90.00 0 11 0 4662.16 14.93 199.56 8 24 5 2 31 58 7 30 31 3214.04 1 17 31 4467.51 9 9 53 2903.15 -24.76 102.70 340.06 69.40 2614.0 -22.16 110.53 100.00 175.71 3867.5 13.60 182.75 324.01 65.10 100.00 17.10 80.99 9 58 16 3 7 9 342.37 69.11 2303.1 -30.27 110.00 -27.69 89.23 164.07 18.69 1 54 38 4351.17 22.43 171.21 321.28 63.50 3751.2 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1605.8 SR 232.7 S5 588.5 CRT .5734 CRS -.5429 CST -.9993 SGT 4876.6 SGR 262.9 SG3 79.9 RRT .6006 RRF .5949 RTF .9926 TOE 2.0355 TRA13.1607 TC3 .0256 BAU .0999 ROE .6728 RRA .3439 RC3 .0067 FAU-.01237 FOE .3475 FRA 2.4762 FC3 .0380 BSP 16730 BOE 2.1438 BRA13.1651 BC3 .0265 FSP -269 LSA 1715.3 MSA 191.7 SSA 6.2 5GB 4883.7 R23 -.0030 R13 .9926 FIT 1611.4 FLZ 190.0 ALF 4.82 SG1 4879.2 SG2 210.1 THA 1.86 ARRIVAL DATE AUG 12 1966 FLIGHT TIME 220.00 LAUNCH DATE JAN 4 1966 DISTANCE 584.641 HELIOCENTRIC CONIC RL 147.10 LAL .00 LOL 103.19 VL 25.335 GAL 38.02 A7L 90.95 HCA 338.94 SMA 114.15 ECC .65660 INC .9480 V1 30.287 RP 107.72 LAP .34 LOP 82.13 VP 36.075 GAP 40.94 A7P 90.88 TAL 148.28 TAP 127.22 RCA 39.20 APO 189.10 V2 35.179 RC 229.188 GL -1.01 GP -4.61 ZAL 33.53 ZAP 160.89 ETS 196.78 ZAE 127.94 ETE 184.39 ZAC 156.44 ETC 157.73 CLP 161.43 PLANETOCENTRIC CONTC C3 350.180 VHL 18.713 DLA 20.90 RAL 68.17 RAD 6571.9 VEL 21.714 PTH 3.22 VHP 25.206 DPA 15.66 RAP 62.90 ECC 6.7631 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 69.49 6 59 22 66.56 1 21 40 69.37 8 29 34 66.07 2 25 24 2922.8 124.67 6 0 39 3522.79 0 2 46 4733.72 340.65 -22.57 -19.96 132.36 90.00 195.57 202.68 326.31 4133.7 13.05 16.36 90.00 7 35 58 3215.44 110.62 341.52 2615.4 -24.73 102.60 -22.12 100.00 325.33 3916.3 15.08 178.57 18.47 185.73 1 10 8 4516.30 100.00 9 13 49 2909.35 1 48 47 4395.15 68.90 10 2 18 81.43 2309.4 -30.15 -27.54 89.65 343.79 110.00 20.13 166.67 322.75 64.65 3 2 2 3795.2 23.74 173.95 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS TOE 2.1605 TRA14.4650 TC3 .1069 BAU .5016
ROE .6895 RRA .3480 RC3 .0075 FAU-.01822
FOE .3740 FRA 2.7185 FC3 .0451 BSP 16446
BOE 2.2679 BRA14.4692 BC3 .1071 FSP -264 ST 1568.6 SR 213.9 SS 633.4 SGT 4803.6 SGR 241.6 SG3 79.0 RRT .5959 RRF .5910 RTF .9947 SGB 4809.6 R23 -.0034 R13 .9947 CRT .5614 CRS -.5357 CST -.9995 LSA 1695.8 MSA 178.0 SSA 5.7 EL1 1573.3 ELZ 176.5 ALF 4.43 SG1 4805.7 SG2 193.9 THA 1.72 ARRIVAL DATE MAR 16 1966 FLIGHT TIME 70.00 LAUNCH DATE JAN 5 1966 DISTANCE 217.361 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 30.431 GAL -16.50 AZL 87.29 MCA 100.58 SMA 151.08 ECC .28516 INC 2.7064 V1 30.287 RP 108.00 LAP 2.66 LOP 204.80 VP 39.740 GAP -.19 AZP 90.50 TAL 258.59 TAP 359.16 RCA 108.00 APO 194.16 V2 35.089 RC 77.191 GL 8.96 GP 13.51 ZAL 168.32 ZAP 85.72 ETS 356.43 ZAE 166.72 ETE 146.61 ZAC 32.75 ETC 172.09 CLP -85.60 PLANETOCENTRIC CONIC 2.57 VHP 4.782 DPA -9.26 RAP 299.49 ECC 2.2868 C3 78.192 VHL 8.843 DLA -12.83 RAL 292.02 RAD 6569.5 VEL 14.126 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1540.1 2140.07 -17.69 36.82 173.34 112.47 2 9 9 90.00 1 33 29 93.06 11 45 22 5004.4 28.29 10 11 58 5604.44 28.16 262.50 163.47 113.36 3 19 50 1299.0 -15.88 11.21 -19.20 18.43 172.67 100.00 2 48 11 1899.05 92.43 13 8 37 115.85 4 10 21 4720.7 29.82 232.92 11 39 57 29.80 241.72 183.56 5320.70 1132.1 -19.51 356.59 1732.15 -23.18 3.81 170.71 115.85 110.00 3 41 29 14 27 29 5060.37 4460.4 33.90 222.09 183.70 90.72 110.00 34.18 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 739.7 SGR 419.7 SG3 196.2 RRT -.4011 RRF -.4564 RTF .7164 SGB 850.4 R23 .0799 R13 -.7360 SG1 764.9 SG2 371.8 THA 163.07 ST 209.7 SR 371.2 55 119.7 CRT .0775 CRS .3194 CST -.9040 TOE -.0642 TRA-1.0303 TC3 -.1565 BAU .1816 ROE -.5686 RRA .2262 RC3 .0754 FAU .10592 LSA 373.5 MSA 237.2 55A FDE .0906 FRA-1.3883 FC3-1.1727 BSP 1695 BDE .5722 BRA 1.0548 BC3 .1737 FSP -589 18.2 EL1 371.7 EL2 208.8 ALF 86.33

E

```
FLIGHT TIME 72.00
                                                                                                                                     ARRIVAL DATE MAR 18 1966
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 223.699
    RL 147.10 LAL -.00 LOL 104.21 VL 30.362 GAL -16.31 AZL 87.39 MCA 103.79 SMA 150.37 ECC .28156 INC 2.6133 VI 30.287 RP 108.04 LAP 2.54 LOP 208.01 VP 39.676 GAP .38 AZP 90.62 TAL 257.94 TAP 1.74 RCA 108.03 APO 192.70 VZ 35.076
                         8.76 GP 13.84 ZAL 168.26 ZAP 90.40 ETS 357.49 ZAE 163.75 ETE 151.06 ZAC 31.17 ETC 172.70 CLP -90.41
    RC 79.446 GL
   PLANETOCENTRIC CONIC
    C3 76.104 VHL 8.724 DLA -12.99 RAL 292.38 RAD 6569.5 VEL 14.052 PTH
                                                                                                    2.55 VMP 4.721 OPA -9.17 RAP 297.89 ECC 2.2525
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  1 36 14 2128.66

10 12 6 5603.35

2 50 50 1887.95

11 40 11 5319.29

3 43 55 1721.71

13 3 36 5058.30
                                                                               173.27
                                                                                               112.70 2 11 42
                                                                                                                           1528.7
                                                                                                                                                             28.92
        90.00
                                                   -17.39
                                                                  36.11
                                                                                                                                            -14.17
                                                                                                          11 45 30
        90.00
                                                   28.17
                                                                  262.42
                                                                                183.42
                                                                                                  93.02
                                                                                                                              5003.3
                                                                                                                                             28.29
                                                                                                                                                            253.76
                                                                                                              3 22 18
                                                                                                                              1287.9
                                                                                                                                                             10.55
       100.00
                                                   -18.90
                                                                   17.74
                                                                                172.60
                                                                                                 113.60
                                                                                                                                             -15.55
                                                                                                92.38 13 8 50
116.13 4 12 37
90.62 14 27 54
       100.00
                                                   29.81
                                                                  241.62
                                                                                183.51
                                                                                                                              4719.3
                                                                                                                                             29.82
                                                                                                                                                            232.81
       110.00
                                                                                                                                                            355.97
                                                   -22.87
                                                                   3.16
                                                                                170.63
                                                                                                                             1121.7
                                                                                                                                             -19.17
                                                                                                                              4458.3
                                                                                                                                                            212.70
      110.00
                                                  34.18
                                                                  221.93
                                                                                183.65
                                                                                                                                              33.89
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 818.3 SGR 422.5 SG3 202.2

RRT -.4370 RRF -.4837 RTF .7476

SGB 920.9 R23 .0816 R13 -.7633

SG1 844.0 SG2 368.5 THA 164.20
                                                                                                                         ST 226.2 SR 367.6 S5 119.6
CRT .0504 CRS .2989 CST -.9223
    TOE -.0610 TRA-1.0997 TC3 -.1974 BAU .2182
    ROE -.5551 RRA .2308 RC3 .0838 FAU .10796
                                                                                                                         LSA 369.5 MSA 252.4 SSA 18.4
EL1 367.9 EL2 225.7 ALF 87.15
    FOE .0785 FRA-1.3921 FC3-1.2281 BSP 1985
BDE .5584 BRA 1.1237 BC3 .2144 FSP -614
                                                                          FLIGHT TIME 74.00
                                                                                                                                     ARRIVAL DATE HAR 20 1966
LAUNCH DATE JAN 5 1966
                                                                         DISTANCE 229.990
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 30.288 GAL -16.11 AZL 87.48 HCA 107.00 SMA 149.61 ECC .27801 INC 2.5177 VI 30.287 RP 108.08 LAP 2.41 LOP 211.23 VP 39.608 GAP .92 AZP 90.74 TAL 257.21 TAP 4.22 RCA 108.02 APO 191.20 V2 35.063 RC 81.719 GL 8.54 GP 14.14 ZAL 168.16 ZAP 94.90 ETS 358.57 ZAE 160.83 ETE 154.13 ZAC 29.77 ETC 173.33 CLP -95.05
   PLANETOCENTRIC CONIC
    C3 74.049 VHL 8.605 DLA -13.14 RAL 292.80 RAD 6569.4 VEL 13.979 PTH 2.55 VHP 4.684 DPA -9.06 RAP 296.46 ECC 2.2187 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 39 14 2116.87
10 12 23 5602.40
                                                   -17.08
                                                                   35.39
                                                                                173.25
                                                                                               112.93
                                                                                                              2 14 31
                                                                                                                             1516.9
                                                                                                                                             -13.83
                                                                                                                                                             28.22
        90.00
                                                                                                 92.99 11 45 45
113.84 3 25 1
92.33 13 9 12
                                                                  262.35
                                                                                                                               5002.4
                                                                                                                                                             253.69
                                                    28.17
                                                                                183.42
                                                                                                                                              28.29
        90.00
                   2 53 44 1876.49
11 40 34 5318.01
                                                                                                                               1276.5
                                                                                                                                                               9.87
                                                   -18.59
                                                                   17.03
                                                                                172.57
                                                                                                 113.84
                                                                                                                                             -15.21
      100.00
                                                                                                                               4718.0
                                                                                                                                             29.81
                                                                                                                                                            232.72
                                                   29.81
                                                                 241.52
                                                                                183.51
      100.00
                    3 46 36 1710.95
                                                   -22.55
                                                                                170.59
                                                                                               116.40 4 15 7
90.53 14 28 28
                                                                                                                             1110.9
                                                                                                                                                            355.34
                                                                    2.49
                                                                                                                                             -18.82
      110.00
                                                                  221.78
                                                                                                                                                            212.55
                   13 4 12
                                                                                                                              4456.3
                                                                                                                                              33.88
                                                   34.18
                                                                                183.63
      110.00
                                  5056.32
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                      SGT 902.2 SGR 424.3 SG3 206.1
RRT -.4684 RRF -.5078 RTF .7713
SGB 996.9 R23 .0856 R13 -.7843
                                                                                                                          ST 243.7 SR 362.9 55 118.8
CRT .0307 CRS .2849 CST -.9338
    TOE -.0597 TRA-1.1706 TC3 -.2407 BAU .2551
    RDE - .5402 RRA .2339 RC3 .0920 FAU .10887
    FDE .0689 FRA-1.3774 FC3-1.2729 BSP 2285
                                                                                                                         LSA 364.6 MSA 268.2 55A 18.5
                                                                      SG1 928.0 SG2 364.4 THA 165.25
                                                                                                                         EL1 363.0 EL2 243.5 ALF 87.85
                                                                                                                                    ARRIVAL DATE MAR 22 1966
                                                                         FLIGHT TIME 76.00
LAUNCH DATE JAN 5 1966
                                                                        DISTANCE 236.234
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 30.210 GAL -15.92 AZL 87.58 MCA 110.21 SMA 148.82 ECC .27450 INC 2.4189 V1 30.287 RP 108.12 LAP 2.27 LOP 214.44 VP 39.536 GAP 1.42 AZP 90.84 TAL 256.40 TAP 6.62 RCA 107.97 APO 189.67 V2 35.050 RC 84.008 GL 8.31 GP 14.44 ZAL 168.04 ZAP 99.20 ETS 359.67 ZAE 158.01 ETE 156.35 ZAC 28.55 ETC 173.98 CLP -99.50
   PLANETOCENTRIC CONIC
    C3 72.021 VHL 8.487 DLA -13.31 RAL 293.25 RAD 6569.4 VEL 13.906 PTH
                                                                                                   2.54 VHP 4.668 OPA -8.92 RAP 295.21 ECC 2.1853
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 42 31 2104.60
10 12 45 5601.66
                                                                              173.27
                                                                                             113.16
                                                                                                            2 17 35
                                                                                                                           1504.6
                                                                                                                                           -13.48
                                                                                                                                                            27.49
                                                   -16.76
                                                                  34.64
        90.00
                                                                                                                                                            253.64
                                                  28.17
                                                                 262.30
                                                                               183.45
                                                                                                 92.96
                                                                                                           11 46 7
                                                                                                                              5001.7
                                                                                                                                             28.29
        90.00
                   2 56 54 1864.58
11 41 3 5316.92
                                                                               172.58
                                                                                                114.09
                                                                                                            3 27 59
                                                                                                                              1264.6
                                                                                                                                             -14.85
                                                                                                                                                             9.17
                                                  -18.26
                                                                  16.30
       100.00
                                                                                               92.29 13 9 40
116.68 4 17 51
90.45 14 29 9
                                                                                                                              4716.9
                                                                                                                                             29.81
                                                                                                                                                            232.64
                                                  29.81
                                                                 241.44
                                                                               183.54
      100.00
                                                                                                            4 17 51
                                                                                                                              1099.8
                                                                                                                                             -18.45
                                                                                                                                                            354.69
                    3 49 32 1699.77
                                                                   1.80
                                                                               170.59
                                                  -22.21
      110.00
                                                                              183.66
                                                                                                                             4454.5
                                                                                                                                             33.86
                                                                                                                                                            212.41
                   13 4 55
                                                   34.18
                                                                 221.64
      110.00
                                   5054.49
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 990.3 SGR 424.9 SG3 208.7

RRT -.4975 RRF -.5310 RTF .7899

SGB 1077.6 R23 .0901 R13 -.8007
                                                                                                                         ST 262.2 SR 356.7 S5 117.7
CRT .D178 CRS .2604 CST -.9452
    TDE -.0606 TRA-1.2422 TC3 -.2863 BAU .2921
    RDE -.5233 RRA .2361 RC3 .1002 FAU .10904
FDE .0542 FRA-1.3533 FC3-1.3108 B9P 2600
BOE .5268 BRA 1.2645 BC3 .3034 FSP -640
                                                                                                                        LSA 358.2 MSA 284.9 SSA 18.6
                                                                      5G1 1015.9 SG2 359.3 THA 166.19
                                                                                                                          EL1 356.8 EL2 262.1 ALF 88.37
                                                                         FLIGHT TIME 78.00
                                                                                                                                     ARRIVAL DATE HAR 24 1966
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                         01STANCE 242.436
    RL 147.10 LAL -.00 LOL 104.21 VL 30.128 GAL -15.72 ATL 87.68 MCA 113.42 SMA 148.00 ECC .27105 INC 2.3160 VI 30.287 RP 108.16 LAP 2.13 LOP 217.64 VP 39.482 GAP 1.90 ATP 90.92 TAL 255.52 TAP 8.94 RCA 107.88 APO 188.11 V2 35.036 RC 86.309 GL 8.05 GP 14.74 ZAL 167.87 ZAP 103.28 ETS .80 ZAE 155.32 ETE 158.00 ZAC 27.54 ETC 174.65 CLP-103.74
   PLANETOCENTRIC CONIC
    C3 70.012 VHL 8.367 DLA -13.49 RAL 293.75 RAD 6569.3 VEL 13.833 PTH 2.53 VMP 4.670 DPA -8.75 RAP 294.18 ECC 2.1522
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 46 5 2091.73 -16.41 33.85 173.33 113.40 2 20 57 1491.7 -13.10 26.73
                   10 13 11 5601.20
3 0 21 1852.09
11 41 36 5316.08
3 52 43 1688.08
13 5 43 5052.84
                                                                 262.27
                                                                                183.53
                                                                                                 92.94
                                                                                                           11 46 32
                                                                                                                              5001.2
                                                                                                                                             28.29
                                                                                                                                                            253.60
        90.00
                                                    28.18
                                                                                                 114.34 3 31 13
92.25 13 10 12
                                                                                172.63
                                                                                                114.34
                                                                                                                              1252.1
                                                                                                                                             -14.47
                                                                                                                                                              8.43
       100.00
                                                  -17.91
                                                                  15.54
                                                                 241.38
                                                                                183.61
                                                                                                                              4716.1
                                                                                                                                             29.81
                                                                                                                                                            232.57
       100.00
                                                    29.82
                                                                                                          4 20 51
14 29 56
                                                   -21.85
                                                                   1.09
                                                                                170.62
                                                                                                116.97
                                                                                                                              1088.1
                                                                                                                                            -18.06
                                                                                                                                                            354.01
      110.00
       110.00
                                                   34.18
                                                                 221.51
                                                                                183.73
                                                                                                 90.37
                                                                                                                              4452.8
                                                                                                                                              33.85
                                                                                                                                                            212.28
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 281.5 SR 349.3 SS 116.1
CRT .0114 CRS .2322 CST -.9544
LSA 350.5 MSA 302.4 SSA 18.7
                                                               SGT 1081.7 SGR 424.5 SG3 209.8 ST 281.5 SR 349.3 SS 116.1 RRT -.5241 RRF -.5537 RTF .8038 CRT .0114 CRS .2322 CST -.9544 SG8 1162.1 R23 .0961 R13 -.8131 LSA 350.5 MSA 302.4 SSA 18.7 SG1 1107.1 SG2 353.3 THA 167.03 EL1 349.3 EL2 281.4 ALF 88.50
    TOE -.0639 TRA-1.3138 TC3 -.3340 BAU .3286
    RDE -.5048 RRA .2371 RC3 .1083 FAU .10843
    FDE .0381 FRA-1.3180 FC3-1.3408 BSP 2923
BDE .5088 BRA 1.3350 BC3 .3511 FSP -648
```

ARRIVAL DATE MAR 26 1966

```
LAUNCH DATE JAN 5 1966
                                                                        FLIGHT TIME 80.00
                                                                        DISTANCE 248.596
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 30.043 GAL -15.52 AZL 87.79 MCA 116.62 SMA 147.16 ECC .26766 INC 2.2080 V1 30.287 RP 108.20 LAP 1.97 LOP 220.85 VP 39.385 GAP 2.35 AZP 90.99 TAL 254.56 TAP 11.18 RCA 107.77 APO 186.54 V2 35.023 RC 88.623 GL 7.77 GP 15.04 ZAL 167.68 ZAP 107.13 ETS 1.96 ZAE 152.78 ETE 159.24 ZAC 26.75 ETC 175.37 CLP-107.76
   PLANETOCENTRIC CONIC
    C3 68.019 VHL 8.247 DLA -13.69 RAL 294.30 RAD 6569.3 VEL 13.761 PTM 2.51 VMP 4.687 DPA -8.54 RAP 293.35 ECC 2.1194
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 49 58 2078.09
10 13 38 5601.14
                                                  -16.04
                                                                  33.02
                                                                              173.41
                                                                                             113.65
                                                                                                          2 24 36
                                                                                                                           1478.1
                                                                                                                                          -12.71
                                                                                                                                                           25.93
        90.00
                                                                                                92.94
                                                                                                          11 47 O
                                                                                                                            5001.1
                                                                                                                                           28.29
                                                                                                                                                          253.60
                                                  28.18
                                                                 262.26
                                                                               183.64
        90.00
                  3 4 7 1838.88
11 42 11 5315.59
3 56 12 1675.76
13 6 35 5051.47
                                                  -17.54
                                                                  14.73
                                                                               172.71
                                                                                               114.60
                                                                                                           3 34 46
                                                                                                                            1238.9
                                                                                                                                           -14.07
                                                                                                                                                            7.65
      100.00
                                                                                              92.23 13 10 47
117.26 4 24 7
90.31 14 30 47
                                                                                                                                                          232.54
                                                                                                                            4715.6
                                                                                                                                           29.81
                                                                241.34
                                                                               183.72
                                                  29.82
      100.00
                                                                               170.69
                                                                                                                            1075.8
                                                                                                                                           -17.64
                                                                                                                                                          353.29
                                                  -21.47
                                                                    . 33
      110.00
                                                                                                                           4451.5
                                                                                                                                           33.45
                                                                                                                                                          212.17
                                                                221.40
                                                                             183.84
                   13 6 35
                                                  34.18
      110.00
                                  5051.47
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 1175.8 SGR 423.1 SG3 209.7
RRT -.5488 RRF -.5761 RTF .8144
SGB 1249.6 R23 .1035 R13 -.8224
                                                                                                                        ST 301.5 SR 340.6 $5 114.1
CRT .0111 CRS .1992 CST -.9618
    TOE -. 0699 TRA-1.3845 TC3 -. 3835 BAU . 3645
   ROE - .4847 RRA .2371 RC3 .1165 FAU .10715
FOE .0207 FRA-1.2738 FC3-1.3638 BSP .3253
BOE .4897 BRA 1.4047 BC3 .4008 FSP -652
                                                                                                                        LSA 341.6 MSA 320.8 SSA 18.8
                                                                                                                         EL1 340.6 EL2 301.5 ALF 87.39
                                                                    SG1 1200.7 SG2 346.4 THA 167.80
                                                                                                                                    ARRIVAL DATE MAR 28 1966
                                                                         FLIGHT TIME 82.00
LAUNCH DATE JAN 5 1966
                                                                         DISTANCE 254.719
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 29.955 GAL -15.32 A7L 87.91 HCA 119.83 SNA 146.30 ECC .26431 INC 2.0938 V1 30.287 RP 108.24 LAP 1.82 LOP 224.05 VP 39.507 GAP 2.78 A7P 91.04 TAL 253.54 TAP 13.37 RCA 107.63 APO 184.97 V2 35.010 RC 90.946 GL 7.46 GP 15.37 ZAL 167.45 ZAP 110.74 ETS 3.16 ZAE 150.40 ETE 160.15 ZAC 26.17 ETC 176.13 CLP-111.55
  PLANETOCENTRIC CONIC
    C3 66.038 VML 8.126 OLA -13.90 RAL 294.89 RAD 6569.3 VEL 13.689 PTH 2.50 VMP 4.718 DPA -8.28 RAP 292.75 ECC 2.0868
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                          1463.5
                                                                                                                                          -12.28
                                                                                                                                                           25.07
                                                                 32.14
                                                                             173.54
                                                                                              113.91 2 28 37
        90.00
                    1 54 13
                                  2063.52
                                                  -15.64
                                                                                               92.96 11 47 26
114.87 3 38 38
92.23 13 11 22
117.57 4 27 41
90.26 14 31 40
                                                                                                                             5001.6
                                                                                                                                            28.29
                                                                                                                                                           253.63
        90.00
                   10 14 5
                                  5601.60
                                                   28.17
                                                                 262.30
                                                                                183.78
                  3 8 15
11 42 46 5315.55
3 59 59 1662.65
29 5050.48
                                                                                                                             1224.8
                                                                                                                                           -13.64
                                                                                                                                                            6.83
                                                   -17.14
                                                                  13.88
                                                                               172.83
       100.00
                                                                 241.34
                                                                                                                             4715.6
                                                                                                                                           29.61
                                                                                                                                                           232.54
       100.00
                                                   29.82
                                                                               183.87
                                                                                                                             1062.6
                                                                                                                                          -17.20
                                                                                                                                                           352.54
      110.00
                                                   -21.05
                                                                 359.54
                                                                              170.79
      110.00
                                                                 221.32
                                                                                183.98
                                                                                                                             4450.5
                                                                                                                                           33.64
                                                                                                                                                          212.09
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    SGT 1271.4 SGR 420.9 SG3 208.1
RRT -.5713 RRF -.5986 RTF .8218
                                                                                                                        ST 322.2 SR 330.8 SS 111.7
CRT .0158 CRS .1700 CST -.9663
LSA 340.0 MSA 331.4 SSA 18.9
    TDE -.0784 TRA-1.4534 TC3 -.4346 BAU .3992
    ROE - .4655 RRA .2356 RC3 .1247 FAU .10514
FDE .0060 FRA-1.2190 FC3-1.3783 BSP .3575
BOE .4700 BRA 1.4724 BC3 .4521 FSP -645
                                                                    SGB 1339.2 R23 .1134 R13 -.8290
                                                                                                                         EL1 331.5 EL2 321.5 ALF 74.57
                                                                    SG1 1295.6 SG2 338.9 THA 168.49
                                                                                                                                   ARRIVAL DATE MAR 30 1966
                                                                         FLIGHT TIME 84.00
LAUNCH DATE JAN 5 1966
                                                                        DISTANCE 260.806
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 29.865 GAL -15.12 AZL 88.03 MCA 123.03 SMA 145.43 ECC .26103 INC 1.9723 VI 30.287 RP 108.29 LAP 1.65 LOP 227.25 VP 39.226 GAP 3.19 AZP 91.08 TAL 252.46 TAP 15.49 RCA 107.47 APO 183.40 V2 34.996 RC 93.279 GL 7.12 GP 15.74 ZAL 167.18 ZAP 114.11 ETS 4.41 ZAE 148.18 ETE 160.81 ZAC 25.81 ETC 176.95 CLP-115.12
   PLANETOCENTRIC CONTC
    C3 64.070 VHL 8.004 OLA -14.14 RAL 295.52 RAD 6569.2 VEL 13.617 PTH 2.49 VMP 4.760 CPA -7.95 RAP 292.35 ECC 2.0544
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            114.18 2 33 0 1447.8

93.00 11 47 49 5002.8

115.16 3 42 52 1209.6

92.26 13 11 54 4716.2

117.90 4 31 35 1048.6

90.24 14 32 33 4450.0
                                                                            173.69
                                                                                                                                                           24.16
                   1 58 52 2047.81
10 14 26 5602.79
3 12 42 1809.61
                                                                 31.19
                                                                                                                                        -11.81
                                                  -15.20
        90.00
                                                                               183.96
                                                                                                                                           28.29
                                                                                                                                                          253.72
                                                                262.38
                                                  28.17
        90.00
                                                                               172.97
                                                                                                                                           -13.17
                                                                                                                                                            5.95
                                                  -16.70
                                                                 12.96
       100.00
                                                                                                                                           29.81
                                                                                                                                                          232.59
                                                  29.81
                                                                               184.05
                                                                241.39
      100.00
                   11 43 18
                                  5316.23
                                                                                                                                                          351.73
                                                                              170.92
                                                                                                                                           -16.72
                                1648.59
                                                  -20.61
                                                                 358.69
      110.00
                    4 4 7
                   13 8 23 5050.01
                                                                                                                                          33.84
                                                                                                                                                          212.06
                                                                                184.16
      110.00
                                                   34.18
                                                                 221.29
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 343.8 SR 319.6 SS 109.5
CRT .0266 CRS .1255 CST -.9716
LSA 360.1 MSA 319.9 SSA 19.0
                                                                     SGT 1369.0 SGR 418.0 SG3 206.1
    TOE -.0907 TRA-1.5208 TC3 -.4878 BAU .4332
    ROE -.4405 RRA .2335 RC3 .1334 FAU .10288
FDE -.0136 FRA-1.1628 FC3-1.3901 BSP 3915
BDE .4497 BRA 1.5388 BC3 .5057 FSP -642
                                                                     RRT -.5937 RRF -.6220 RTF .8275
                                                                    5GB 1431.4 R23 .1245 R13 -.8340
5G1 1392.7 SG2 330.6 THA 169.10
                                                                                                                         EL1 344.5 EL2 318.8 ALF 9.99
                                                                                                                                    ARRIVAL DATE APR 1 1966
                                                                         FLIGHT TIME 86.00
LAUNCH DATE JAN 5 1966
                                                                         DISTANCE 266.860
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 29.773 GAL -14.91 A7L 88.16 HCA 126.22 SMA 144.56 ECC .25781 INC 1.8416 V1 30.287 RP 108.33 LAP 1.49 LOP 230.44 VP 39.144 GAP 3.57 AZP 91.09 TAL 251.33 TAP 17.55 RCA 107.29 APO 181.83 V2 34.983 RC 95.621 GL 6.74 GP 16.15 ZAL 166.88 ZAP 117.25 ETS 5.73 ZAE 146.12 ETE 161.25 ZAC 25.66 ETC 177.85 CLP-118.47
   PLANETOCENTRIC CONIC
    C3 62.112 VHL 7.881 DLA -14.42 RAL 296.19 RAD 6569.2 VEL 13.545 PTH
                                                                                                   2.48 VHP 4.811 OPA -7.55 RAP 292.15 ECC 2.0222
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              114.46 2 37 51
93.08 11 48 5
                                                                                                                                          -11.30
                                                   -14.72
                                                                                                                            1430.7
                                                                                                                                                           23 16
                    2 4 0
                                  2030.69
                                                                  30.16
                                                                              173.88
        90.00
                                                                                                                             5004.9
                                                                                                                                            28.29
                                                                                                                                                           253.87
        90.00
                   10 14 40
                                  5604.93
                                                   28.16
                                                                 262.54
                                                                                184.19
                                                                                                            3 47 31
                                                                                                                             1193.1
                                                                                                                                            -12.66
                                                                                                                                                            4.99
                     3 17 38
                                  1793.10
                                                   -16.22
                                                                  11.97
                                                                                173.15
                                                                                                115.46
       100.00
                                                                                                 92.32 13 12 21
                  11 43 43
                                                                                                                             4717.7
                                                                                                                                            29.81
                                                                                                                                                           232.70
                                  5317.75
                                                   29.81
                                                                 241.50
                                                                                184.27
       100.00
                                                                                                 118.23 4 35 52
90.25 14 33 23
                                                                                                                             1033.4
                                                                                                                                           -16.19
                                                                                                                                                           350.86
       110.00
                    4 8 38
                                  1633.36
                                                  -20.12
                                                                 357.78
                                                                               171.08
                                                                                               118.23
                   13 9 12
                                                                                                                             4450.3
                                                                                                                                            33.84
                                                                                                                                                          212.08
       110.00
                                  5050.25
                                                                 221.30
                                                                               184.39
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                                                                       ST 366.2 SR 307.1 SS 107.4

CRT .0421 CRS .0733 CST -.9760

LSA 381.4 MSA 306.8 SSA 19.1

EL1 367.0 EL2 306.2 ALF 6.69
                                                                   SGT 1467.9 SGR 414.7 SG3 203.3
RRT -.6155 RRF -.6462 RTF .8315
SGB 1525.4 R23 .1377 R13 -.8376
    TOE -.1065 TRA-1.5854 TC3 -.5430 BAU .4661
    RDE -.4162 RRA .2303 RC3 .1426 FAU .10027
    FOE -.0342 FRA-1.1031 FC3-1.3976 BSP 4257
BOE .4296 BRA 1.6021 BC3 .5614 FSP -637
                                                                    SG1 1491.0 SG2 321.8 THA 169.65
```

ARRIVAL DATE APR 3 1966

LAUNCH DATE JAN 5 1966

```
015TANCE 272.883
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 29.679 CAL -14.69 A7L 88.30 MCA 129.42 SMA 143.69 ECC .25467 INC 1.6999 V1 30.287 RP 108.37 LAP 1.31 LOP 233.64 VP 39.061 CAP 3.93 A7P 91.08 TAL 250.14 TAP 19.56 RCA 107.10 APO 180.28 V2 34.970 RC 97.969 CL 6.30 CP 16.63 TAL 166.54 TAP 120.16 ETS 7.14 TAE 144.20 ETE 161.50 TAC 25.72 ETC 178.82 CLP-121.62
   PLANETOCENTRIC CONTC
    C3 60 164 VHL 7.757 DLA -14.73 RAL 296.90 RAD 6569.1 VEL 13.473 PTH 2.46 VHP 4.871 DPA -7.07 RAP 292.15 ECC 1.9902
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                          114.76
93.20
                                                                            174.10
                                                                                                         2 43 14
                                                                                                                         1411.8
                                                                                                                                      -10.73
                                                                29.04
                    2 9 42 2011.82
10 14 40 5608.34
        90.00
                                                -14.19
                                                                                                       11 48 9
                                                                                                                         5008.3
                                                                                                                                       28.30
                                                                             184.45
        90.00
                   10 14 40
                                                28.15
                                                               262.79
                   3 23 7 1774.96
11 43 57 5320.43
4 13 38 1616.72
13 9 55 5051.44
                                                                             173.37
                                                                                                         3 52 41
                                                                                                                         1175.0
                                                                                            115.78
                                                                                                                                       -12.09
                                                                10.89
      100.00
                                                -15.69
                                                                                              92.42 13 12 37
                                                               241.70
                                                                                                                         4720.4
                                                                                                                                       29.82
       100.00
                                                29.80
                                                                             184.54
                                                                                            118.59 4 40 34
90.31 14 34 7
                                                                                                                                                     349.92
                                                                                                                        1016.7
                                                                                                                                       -15.61
       110.00
                                                -19.58
                                                               346.79
                                                                             171.27
                                                                                                                         4451.4
                                                                                                                                       33.85
                                                               221.40
                                                                             184.67
       110.00
                                                 34.18
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 1567.9 SGR 411.2 SG3 200.1
RRT -.6371 RRF -.6717 RTF .8343
SGB 1620.9 R23 .1533 R13 -.8400
                                                                                                                    ST 389.7 SR 293.3 55 105.6
CRT .0624 CRS .0114 CST -.9794
    TDE -.1262 TRA-1.6469 TC3 -.6004 BAU .4982
    ROE -.3907 RRA .2263 RC3 .1524 FAU .09744
FOE -.0563 FRA-1.0411 FC3-1.4022 BSP 4602
                                                                                                                     LSA 404.0 MSA 292.4 SSA 19.2
                                                                   SG1 1590.6 SG2 312.4 THA 170.13
    BDE .4106 BRA 1.6624 BC3 .6194 FSP -630
                                                                                                                     EL1 390.7 EL2 292.0 ALF
                                                                                                                                                          6.12
                                                                       FLIGHT TIME 90.00
                                                                                                                                ARRIVAL DATE APR 5 1966
LAUNCH DATE JAN 5 1966
                                                                      DISTANCE 278.877
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 29.584 GAL -14.47 A7L 88.46 HCA 132.61 SMA 142.82 ECC .25159 INC 1.5447 V1 30.287 RP 108.41 LAP 1.14 LOP 236.83 VP 38.977 GAP 4.28 AZP 91.05 TAL 248.91 TAP 21.52 RCA 106.89 APO 178.75 V2 34.957 RC 100.323 GL 5.81 GP 17.19 ZAL 166.17 ZAP 122.83 ETS 8.67 ZAE 142.41 ETE 161.57 ZAC 25.97 ETC 179.89 CLP-124.58
   PLANETOCENTRIC CONIC
                                                                                                                            -6.49 RAP 292.31 ECC 1.9563
                                                                                                2.45 VHP 4.939 DPA
    C3 58.228 VHL 7.631 DLA -15.10 RAL 297.66 RAO 6569.1 VEL 13.401 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            174.36
                                                                                                        2 49 16
                                                                                                                       1390.8
                                1990.77
                                                 -13.58
                                                               27.78
                                                                                           115.09
                                                                                                                                       -10.09
                                                                                                                                                      20.85
        90.00
                    2 16 5
                                                                                                        11 47 56
                   10 14 22
                                 5613.42
                                                  28.13
                                                               263.16
                                                                             184.77
                                                                                              93.39
                                                                                                                         5013.4
                                                                                                                                        28.30
                                                                                                                                                      254.50
        90.00
                  3 29 13 1754.78
11 43 55 5324.65
4 19 11 1598.31
                                                                                                                         1154.8
                                                 -15.08
                                                                 9.69
                                                                             173.62
                                                                                            116.12
                                                                                                        3 58 28
                                                                                                                                       -11.45
                                                                                                                                                       2.79
       100.00
                                                                                              92.59 13 12 39
                                                                                                                         4724.6
                                                                                                                                                      233.21
       100.00
                                                 29.79
                                                               242.01
                                                                             184.87
                                                                                                                                        29.83
                                                                                                       4 45 49
                                                                                                                                       -14.97
                                                -18.98
                                                               355.70
                                                                             171.49
                                                                                            118.98
                                                                                                                          998.3
                                                                                                                                                      348.88
       110.00
                                                               221.59
                                                                             185.00
                                                                                              90.42 14 34 41
                                                                                                                         4453.9
                                                                                                                                       33.86
                                                                                                                                                      212.36
                  13 10 27
                                 5053.88
                                                  34.18
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   SGT 1667.8 SGR 407.4 SG3 196.1
RRT -.6574 RRF -.6981 RTF .8356
                                                                                                                     ST 414.2 SR 278.5 SS 103.7
CRT .0870 CRS -.0518 CST -.9808
    TOE -.1496 TRA-1.7038 TC3 -.6595 BAU .5288
    RDE -.3644 RRA .2207 RC3 .1627 FAU .09425
    FOE -.0764 FRA -.9739 FC3-1.4013 BSP 4928
BDE .3939 BRA 1.7180 BC3 .6793 FSP -614
                                                                   SGB 1716.8 R23 .1725 R13 -.8411
                                                                                                                     LSA 427.6 MSA 276.8 SSA 19.3
                                                                                                                     EL1 415.5 EL2 276.6 ALF 6.03
                                                                   SG1 1689.9 SG2 303.0 THA 170.57
                                                                                                                               ARRIVAL DATE APR 7 1966
                                                                      FLIGHT TIME 92.00
LAUNCH DATE JAN 5 1966
                                                                     DISTANCE 284.845
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 29.488 GAL -14.25 A7L 88.63 MCA 135.80 SMA 141.95 ECC .24859 INC 1.3729 V1 30.287 RP 108.44 LAP .96 LOP 240.01 VP 38.893 GAP 4.60 A7P 90.98 TAL 247.63 TAP 23.43 RCA 106.66 APO 177.24 VZ 34.945 RC 102.682 GL 5.24 GP 17.85 TAL 165.76 TAP 125.28 ETS 10.33 TAE 140.74 ETE 161.47 TAC 26.40 ETC 181.07 CLP-127.36
   PLANETOCENTRIC CONIC
    C3 56.307 VHL 7.504 OLA -15.53 RAL 298.48 RAD 6569.0 VEL 13.329 PTH 2.44 VHP 5.014 DPA -5.79 RAP 292.64 ECC 1.9267
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        1367.0
                    2 23 19 1966.99
10 13 37 5620.75
                                                                        174.67
                                                                                                                                        -9.36
                                                                26.38
                                                                                         115.43 2 56 6
93.65 11 47 17
                                                                                                        2 56 6
                                                -12.89
        90.00
                                                                                                                                        28.31
                                                                                                                                                     255.03
                                                                                                                         5020.7
                                                  28.10
                                                               263.69
                                                                            185.14
                   10 13 37
        90.00
                                                                                                                                                       1.49
                               1732.06
5330.92
                                                                                                         4 5 0
                                                                                                                         1132.1
                                                                                                                                       -10.73
                    3 36 8
                                                -14.40
                                                                8.35
                                                                            173.92
                                                                                            116.48
       100.00
                                                                                            92.83 13 12 20
119.39 4 51 42
90.61 14 35 0
                                                                                                                                       29.85
                                                                                                                                                     233.68
                                                29.77
                                                               242.48
                                                                             185.25
                                                                                                                        4730.9
                   11 43 29
       100.00
                                                                                                                                                     347.73
                                                -18.30
                                                                                                                         977.7
                                                                                                                                       -14.24
                                                               354.50
                                                                          171.76
                    4 25 24
                                1577.73
       110.00
                                                                                                                       4458.0
                                                                                                                                        33.89
                                                              221.91
                                                                             185.40
                                 5058.01
                                                34.18
                   13 10 42
       110.00
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 1769.4 5GR 404.1 5G3 192.1
RRT -.6782 RRF -.7261 RTF .8365
SGB 1815.0 R23 .1942 R13 -.8419
SG1 1791.1 SG2 293.4 THA 170.95
                                                                                                                    ST 440.6 SR 262.0 35 103.2
CRT .1174 CRS -.1360 CST -.9808
    TOE -.1789 TRA-1.7567 TC3 -.7219 BAU
                                                     .5591
    RDE -.3364 RRA .2144 RC3 .1743 FAU .09107
                                                                                                                    LSA 453.7 MSA 259.3 SSA 19.5
    FOE -.1019 FRA -.9089 FC3-1.4003 BSP 5277
                                                                                                                     EL1 442.3 EL2 259.2 ALF
                                                                                                                                                        6.09
    BOE .3810 BRA 1.7698 BC3 .7427 FSP -603
                                                                                                                               ARRIVAL DATE APR 9 1966
                                                                       FLIGHT TIME 94.00
LAUNCH DATE JAN 5 1966
                                                                      DISTANCE 290.788
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 29.391 GAL -14.02 AZL 88.82 MCA 138.98 SMA 141.10 ECC .24568 INC 1.1803 V1 30.287 RP 108.48 LAP .77 LOP 243.20 VP 38.809 GAP 4.91 AZP 90.89 TAL 246.31 TAP 25.30 RCA 106.43 APO 175.76 V2 34.932 RC 105.043 GL 4.57 GP 18.64 ZAL 165.30 ZAP 127.49 ETS 12.16 ZAE 139.16 ETE 161.20 ZAC 27.01 ETC 182.37 CLP-129.97
   PLANETOCENTRIC CONIC
    C3 54.402 VHL 7.376 DLA -16.05 RAL 299.34 RAD 6569.0 VEL 13.258 PTH 2.42 VHP 5.096 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                            175.04
                                                                                           115.60
                                                                                                         3 3 58
                                                                                                                         1339.7
                                 1939.72
                                                 -12.09
                                                               24.78
                    2 31 38
                                                                                                       11 46 4
                                                                                                                         5031.1
                                                                                                                                        28.32
                                                                             185.59
                                                                                              94.03
                   10 12 13 5631.07
                                                 28.05
                                                               264.44
        90.00
                   3 44 2 1706.09
11 42 30 5339.93
4 32 28 1554.39
13 10 34 5064.39
                                                                                                                                        -9.89
                                                                                            116.88
                                                                                                        4 12 28
                                                                                                                         1106.1
                                                 -13.60
                                                                 6.84
                                                                             174.27
       100.00
                                                                                             93.18 13 11 30
                                                                                                                         4739.9
                                                                                                                                       29.86
                                                                                                                                                     234.35
                                                                             165.71
                                                 29.74
                                                               243.15
       100.00
                                                                                            119.84
                                                                                                        4 58 22
                                                                                                                         954.4
                                                                                                                                      -13.41
                                                                                                                                                     346.43
                                                -17.51
                                                               353.14
                                                                             172.08
       110.00
                                                                                                                                        33.92
                                                                                                                                                     213.17
                                                                                             90.90 14 34 58
                                                                                                                         4464.4
                                                               222.41
                                                                             185.89
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 1871.9 SGR 401.5 SG3 187.8
RRT -.6984 RRF -.7553 RTF .8370
                                                                                                                    ST 469.5 SR 244.0 SS 104.1
CRT .1528 CRS -.2323 CST -.9775
    TOE -.2144 TRA-1.8045 TC3 -.7872 BAU .5885
                                                                                                                  CRT .1528 CRS -.2325 LS: .....
LSA 482.5 MSA 240.1 SSA 19.7
EL1 471.5 EL2 240.1 ALF 6.14
    ROE - . 3072 RRA . 2069 RC3 . 1872 FAU . 08781
                                                                  3GB 1914.5 R23 .2192 R13 -.8423
    FOE -.1305 FRA -.8437 FC3-1.3973 85P 5629
BDE .3746 BRA 1.8164 BC3 .8092 F3P -592
                                                                  SG1 1893.3 SG2 284.1 THA 171.28
```

FLIGHT TIME 88.00

ARRIVAL DATE APR 11 1966

LAUNCH DATE JAN 5 1966 DISTANCE 296.709 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 29.295 GAL -13.78 AZL 89.04 HCA 142.17 SHA 140.25 ECC .24285 INC .9617 V1 30.287 RP 108.52 LAP .59 LOP 246.38 VP 38.725 GAP 5.20 AZP 90.76 TAL 244.96 TAP 27.13 RCA 106.19 APO 174.31 V2 34.920 RC 107.406 GL 3.78 GP 19.58 ZAL 164.79 ZAP 129.47 ETS 14.21 ZAE 137.65 ETE 160.76 ZAC 27.79 ETC 183.82 CLP-132.43 PLANETOCENTRIC CONIC 2.41 VHP 5.186 DPA -3.93 RAP 293.67 ECC 1.8643 C3 52.520 VHL 7.247 DLA -16.68 RAL 300.27 RAD 6568.9 VEL 13.186 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1307.9 -7.53 22.92 175.49 116.20 3 13 9 16.11 2 41 21 1907.90 10 9 56 5645.46 -11.14 90.00 28.32 265.49 94.55 11 44 1 5045.5 256.84 186.12 27.98 90.00 3 53 14 1675.93 11 40 43 5352.66 358.31 5.08 174.70 117.30 4 21 10 1075.9 -8.91 -12.67 100.00 93.67 13 9 56 120.32 5 6 4 91.34 14 34 25 29.88 235.29 4752.7 244.09 186.26 29.69 100.00 927.5 -12.44 344.95 351.60 172.47 110.00 4 40 36 1527.54 -16.59 4473.8 33.97 213.90 186.49 223.14 110.00 13 9 51 5073.61 34.16 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 501.6 SR 224.3 SS 107.1 CRT .1934 CRS -.3372 CST -.9698 SCT 1975.] SGR 399.8 SG3 183.2 RRT -.7176 RRF -.7855 RTF .8371 TOE -.2573 TRA-1.8459 TC3 -.8558 BAU .6173 ROE -.2767 RRA .1979 RC3 .2015 FAU .06442 FOE -.1622 FRA -.7777 FC3-1.3916 83P .5985 BOE .3778 BRA 1.8565 BC3 .8792 FSP -580 LSA 514.7 HSA 219.4 SSA 19.9 EL1 503.9 EL2 219.1 ALF 6.10 568 2015.1 R23 .2481 R13 -.8423 5G1 1996.2 5G2 275.5 THA 171.57 ARRIVAL DATE APR 13 1966 FLIGHT TIME 98.00 LAUNCH DATE JAN 5 1966 01STANCE 302.609 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 29.198 GAL -13.54 AZL 89.29 HCA 145.35 SMA 139.41 ECC .24011 INC .7091 VI 30.287 RP 108.56 LAP .40 LOP 249.56 VP 38.641 GAP 5.48 AZP 90.58 TAL 243.57 TAP 28.92 RCA 105.94 APO 172.89 V2 34.909 RC 109.770 GL 2.83 GP 20.72 ZAL 164.22 ZAP 131.19 ETS 16.53 ZAE 136.19 ETE 160.13 ZAC 28.73 ETC 185.44 CLP-134.76 PLANETOCENTRIC CONIC C3 50.666 VML 7.118 DLA -17.44 RAL 301.28 RAD 6968.9 VEL 13.116 PTH 2.39 VMP 5.286 DPA -2.71 RAP 294.33 ECC 1.8338 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 52 56 1870.04 -9.99 20.73 176.04 116.63 3 24 6 1270.0 -6.34 13.96 28.30 258.30 95.27 11 40 48 5065.5 10 6 23 5665.47 27.86 266.94 186.76 90.00 1040.2 356.31 4 4 9 117.76 4 31 29 -7.74 1640.23 -11.55 3.03 175.23 100.00 4 31 29 13 7 21 4770.5 29.89 236.62 186.93 94.36 100.00 11 37 50 5370.51 29.60 245.41 120.85 5 15 5 91.97 14 33 7 343.23 1496.10 896.1 -11.30 4 50 9 -15.50 349.81 172.95 110.00 13 8 20 34.13 224.21 167.23 4467.4 34.03 214.96 5087.39 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 537.6 SR 203.1 SS 111.9 CRT .2387 CRS -.4400 CST -.9584 SGT 2077.0 SGR 399.1 SG3 177.9 RRT -.7341 RRF -.8156 RTF .8363 TOE -.3079 TRA-1.8783 TC3 -.9267 BAU .6447 ROE -. 2452 RRA .1867 RC3 .2171 PAU .08078 SGB 2115.0 R23 .2817 R13 -.8416 SG1 2097.9 SG2 268.3 THA 171.84 FOE -.1946 FRA -.7074 FC3-1.3802 BSP 6310 BOE .3936 BRA 1.8876 BC3 .9518 FSP -561 LSA 550.9 MSA 197.4 SSA 20.2 EL1 540.1 EL2 196.4 ALF 5.94 ARRIVAL DATE APR 15 1966 FLIGHT TIME 100.00 LAUNCH DATE JAN 5 1966 01STANCE 308.489 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 29.101 GAL -13.29 ATL 89.59 MCA 148.53 SMA 138.59 ECC .23747 INC .4127 V1 30.287 RP 108.59 LAP .22 LOP 252.73 VP 38.557 GAP 5.74 ATP 90.35 TAL 242.14 TAP 30.67 RCA 105.68 APO 171.50 V2 34.897 RC 112.133 GL 1.67 GP 22.10 TAL 163.57 TAP 132.63 ETS 19.16 TAE 134.73 ETE 159.29 TAC 29.84 ETC 187.28 CLP-138.97 PLANETOCENTRIC CONIC C3 48.856 VHL 6.990 DLA -18.40 RAL 302.38 RAD 6568.8 VEL 13.047 PTH 2.38 VHP 5.399 DPA -1.22 RAP 295.05 ECC 1.8040 LNCH AZHTH LNCH TIME L-I TIME INJ. LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 117.09 3 37 30 96.26 11 35 51 1223.9 3 7 6 1823.87 10 0 58 5693.48 4 17 25 1597.00 11 33 21 5395.58 176.75 -4.87 11.36 -8.57 18.09 90.00 268.97 187.55 5093.5 28.25 260.35 27.67 90.00 118.26 4 44 2 95.33 13 3 16 121.43 5 25 55 92.86 14 30 46 175.91 118.26 997.0 -6.31 353.90 . 56 -10.16 100.00 4795.6 29.88 238.48 247.26 187.76 29.45 100.00 1458.55 858.6 -9.92 341.20 347.71 173.55 121.43 -14.15 110.00 5 1 36 4506.8 34.10 216.47 188.15 34.08 225.72 110.00 13 5 39 5106.79 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2181.2 SGR 400.8 SG3 172.7 RRT -.7490 RRF -.8460 RTF .8360 SGB 2217.7 R23 .3179 R13 -.8414 SG1 2202.1 SGZ 263.0 THA 172.05 ST 581.1 SR 179.3 SS 121.7 CRT .2889 CRS -.5435 CST -.9430 TOE -.3714 TRA-1.9029 TC3-1.0022 BAU .6724 ROE -.2114 RRA .1739 RC3 .2351 FAU .07713 FOE -.2356 FRA -.6395 FC3-1.3668 BSP 6668 BDE .4273 BRA 1.9108 BC3 1.0294 FSP -546 LSA 595.0 MSA 173.6 SSA 20.6 ELI 583.6 ELZ 170.9 ALF 5.57 ARRIVAL DATE APR 17 1966 FLIGHT TIME 102.00 LAUNCH DATE JAN 5 1966 DISTANCE 314.351 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 29.004 GAL -13.03 AZL 89.94 MCA 151.70 SMA 137.78 ECC .23492 INC .0568 V1 30.287 RP 108.63 LAP .03 LOP 255.91 VP 38.474 GAP 5.99 AZP 90.05 TAL 240.68 TAP 32.39 RCA 105.41 APO 170.15 V2 34.886 .24 GP 23.80 TAL 162.79 TAP 133.74 ETS 22.19 TAE 133.23 ETE 158.22 TAC 31.14 ETC 189.39 CLP-139.08 RC 114.493 GL PLANETOCENTRIC CONIC C3 47,108 VHL 6.864 DLA -19.62 RAL 303.60 RAD 6568.8 VEL 12.980 PTH 2.37 VHP 5.529 DPA .60 RAP 295.79 ECC 1.7753 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 3 25 3 1765.82 9 52 44 5733.31 4 34 3 1543.15 11 26 25 5431.21 -3.02 -6.76 14.79 177.71 117.56 5 54 29 1165.8 8.11 90.00 97.67 11 28 17 28.12 263.26 27.34 271.84 188.52 5133.3 90.00 350.92 357.53 176.82 118.79 4 59 46 943.1 -4.51 100.00 -8.41 96.68 12 56 56 29.82 241.13 29.20 188.79 4831.2 100.00 249.88 338.74 5 15 45 -12.54 345.16 174.36 122.07 5 39 16 812.6 -8.21 110.00 5 15 43 1412.58 -12.54 13 1 14 5134.54 33.96 94.13 14 26 49 218.64 4534.5 227.88 189.32 34.16 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY SCT 2286.3 SGR 404.9 SG3 166.8 RRT -.7600 RRF -.8753 RTF .8358 SGB 2321.8 R23 .3564 R13 -.8414 SG1 2307.2 SG2 260.8 THA 172.23 ST 634.8 SR 152.5 S5 136.7 CRT .3417 CRS -.6323 CST -.9278 TOE -.4507 TRA-1.9160 TC3-1.0811 BAU .6996 RDE -.1751 RRA .1584 RC3 .2553 FAU .07327 FDE -.2832 FRA -.5697 FC3-1.3465 BSP 7028 LSA 649.8 MSA 149.1 SSA 20.9 EL1 637.1 EL2 142.8 ALF 4.94

FLIGHT TIME 96.00

BOE .4835 BRA 1.9225 BC3 1.1108 FSP -530

```
ARRIVAL DATE APR 19 1966
                                                                                           FLIGHT TIME 104.00
LAUNCH DATE JAN 5 1966
    HELIOCENTRIC CONIC
                                                                                          OISTANCE 320.197
     RL 147.10 LAL -.00 LOL 104.21 VL 28.908 GAL -12.77 AZL 90.38 HCA 154.88 SMA 136.99 ECC .23247 INC .3787 V1 30.287 RP 108.66 LAP -.16 LOP 259.08 VP 38.392 GAP 6.23 AZP 89.66 TAL 239.19 TAP 34.07 RCA 105.14 APO 168.83 V2 34.875 RC 116.852 GL -1.58 GP 25.92 ZAL 161.82 ZAP 134.44 ÉTS 25.69 ZAE 131.62 ETE 156.88 ZAC 32.63 ETC 191.84 CLP-141.12
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 45.462 VHL 6.743 DLA -21.19 RAL 304.97 RAD 6568.7 VEL 12.916 PTH 2.35 VHP 5.685 DPA 2.84 RAP 296.52 ECC 1.7482

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 3 48 53 1689.55 -4.34 10.49 179.07 118.01 4 17 2 1089.6 -.56 3.85

90.00 9 39 53 5791.72 26.74 276.01 189.72 99.67 11 16 25 5191.7 27.81 267.50

100.00 4 53 51 1473.42 -6.11 353.63 178.10 119.32 5 20 24 873.4 -2.15 347.08

100.00 11 15 36 5483.08 28.73 253.66 190.08 98.62 12 47 0 4883.1 29.63 244.97

110.00 5 33 47 1354.53 -10.42 342.00 175.48 122.74 5 56 21 754.5 -6.03 335.66

110.00 12 54 10 5174.74 33.72 200.9 190.83 95.96 14 20 25 4574.7 34.18 221.78
                                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 2390.0 SGR 411.5 SG3 159.8
RRT -.7649 RRF -.9019 RTF .8354
                                                                                                                                                       ST 703.4 SR 122.2 SS 157.6
CRT .3923 CRS -.6976 CST -.9175
     TOE -.5505 TRA-1.9135 TC3-1.1613 BAU .7257
     ROE -.1361 RRA .1387 RC3 .2774 FAU .06897
     FOE -.3367 FRA -.4947 FC3-1.3135 BSP 7363
BDE .5670 BRA 1.9185 BC3 1.1939 FSP -506
                                                                                                                                                       LSA 720.0 MSA 125.4 SSA 21.1
EL1 705.0 EL2 112.2 ALF 4.00
                                                                                      SGB 2425.2 R23 .3960 R13 -.8413
                                                                                      SG1 2410.9 SG2 262.8 THA 172.41
                                                                                           FLIGHT TIME 106.00
                                                                                                                                                                     ARRIVAL DATE APR 21 1966
   HELIOCENTRIC CONIC
                                                                                           DISTANCE 326.026
     RL 147.10 LAL -.00 LOL 104.21 VL 28.812 GAL -12.50 AZL 90.93 MCA 158.05 SMA 136.21 ECC .23011 INC .9316 V1 30.287 RP 108.69 LAP -.35 LOP 262.25 VP 38.311 GAP 6.46 AZP 89.14 TAL 237.68 TAP 35.72 RCA 104.87 APO 167.55 V2 34.865 RC 119.206 GL -3.95 GP 28.60 ZAL 160.53 ZAP 134.62 ETS 29.76 ZAE 129.79 ETE 155.23 ZAC 34.38 ETC 194.75 CLP-143.12
    C3 43.990 VHL 6.632 DLA -23.27 RAL 306.58 RAD 6568.7 VEL 12.859 PTH 2.34 VHP 5.881 DPA 5.64 RAP 297.15 ECC 1.7240 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 22 59 1582.05 -.88 4.48 181.16 118.30 4 49.21 982.1 2.91 357.85 90.00 9 18 36 5882.67 25.54 282.39 191.15 102.66 10 56 39 5282.7 27.03 274.04 100.00 5 26 17 1377.74 -2.89 348.35 180.04 119.77 5 49.14 777.7 1.09 341.83 100.00 10 57 59 5562.21 27.79 259.36 191.69 101.48 12 30.41 4962.2 29.09 250.79 110.00 5 58 4 1278.07 -7.57 337.91 177.15 123.43 6 19.22 678.1 -3.12 331.65 110.00 12 42 41 523.45 33.20 235.99 192.80 98.64 14 9 56 4634.7 34.04 226.45
          43.990 VHL 6.632 DLA -23.27 RAL 306.58 RAD 6568.7 VEL 12.859 PTH
                                                                                                                            2.34 VHP 5.881 DPA
                                                                                                                                                                 5.64 RAP 297.15 ECC 1.7240
                                                                                      HID-COURSE EXECUTION ACCURACY
                                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                      SGT 2496.3 SGR 422.4 SG3 152.1
RRT -.7637 RRF -.9251 RTF .8364
                                                                                                                                                       ST 797.3 SR 86.3 SS 189.0 CRT .4194 CRS -.7227 CST -.9157
     TOE -.6831 TRA-1.8925 TC3-1.2424 BAU .7519
     RDE -.0916 RRA .1144 RC3 .3021 FAU .06435
                                                                                      SGB 2531.8 R23 .4318 R13 -.8426
SG1 2517.3 SG2 270.4 THA 172.55
     FOE -.4042 FRA -.4190 FC3-1.2663 BSP 7732
BOE .6892 BRA 1.8960 BC3 1.2786 FSP -484
                                                                                                                                                     LSA 816.9 MSA 105.4 SSA 20.5
EL1 798.2 EL2 78.2 ALF 2.62
                                                                                                                                                                    ARRIVAL DATE APR 23 1966
                                                                                           FLIGHT TIME 108.00
LAUNCH DATE JAN 5 1966
                                                                                          DISTANCE 331.839
   HELLOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 28.717 GAL -12.23 AZL 91.66 HCA 161.21 SMA 135.45 ECC .22786 INC 1.6597 VI 30.287 RP 108.72 LAP -.53 LOP 265.42 VP 38.231 GAP 6.67 AZP 88.43 TAL 236.13 TAP 37.34 RCA 104.59 APO 166.31 VZ 34.856 RC 121.557 GL -7.13 GP 32.04 ZAL 158.70 ZAP 134.08 ETS 34.48 ZAE 127.57 ETE 153.25 ZAC 36.46 ETC 198.24 CLP-145.15
   PLANETOCENTRIC CONIC
     C3 42.841 VHL 6.545 DLA -26.10 RAL 308.54 RAD 6568.6 VEL 12.814 PTH 2.33 VHP 6.143 DPA 9.20 RAP 297.59 ECC 1.7051
     LNCH AZMTH LNCH TIME E-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                            347.81
                                                                                               184.89
                                                                                                                                                       804.1 8.55
                                                                                354.54
                                                                                                                 117.93 5 43 54
                        5 20 29 1404.09
8 36 44 759.27
                                                                 4.85
         90.00
                                                                                                                                                                                                307.67
                                                                                                   192.51
                                                                                                                       107.51
                                                                                                                                      8 49 23
                                                                                                                                                             159.3
                                                                                                                                                                               24.80
                                                                                 315.66
                                                                22.61
          90.00
                       6 36 44 759.27
6 14 8 1230.84
10 25 46 5695.79
6 33 21 1170.56
12 23 3 5328.83
                                                                                                   183.36
                                                                                                                      119.83
                                                                                                                                                             630.8
                                                                                                                                                                                 6.04
                                                                                                                                                                                                 333.73
                                                                                 340.29
        100.00
                                                                 2.09
                                                                                                                      105.93 12 0 42
124.02 6 52 51
102.67 13 51 52
                                                                                                                                                           5095.8
                                                                                                                                                                               27.57
                                                                                                                                                                                                 260.42
                                                                                                   193.50
                                                                                 268.69
                                                               25.63
        100.00
                                                                                                                                                                                  .98
                                                                                                                                                                                                 326.04
                                                                                 332.24
                                                                                                   179.88
                                                                                                                                                            570.6
        110.00
                                                                -3.51
                                                                                                                                                                              35.43
                                                                                                                                                                                                238.73
                                                                                                                                                           4728.8
                                                                                                   195.36
                                                                                 242.68
        110.00
                                                                32.02
                                                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                      ST 930.3 SR 44.1 SS 232.9
CRT .3055 CRS -.6062 CST -.9238
                                                                                     $4T 2602.5 $GR 437.2 $G3 142.7

RRT -.7528 RRF -.9427 RTF .8388

$GB 2639.0 R23 .4610 R13 -.8453
     TOE -.8641 TRA-1.8434 TC3-1.3170 BAU .7772
     ROE -.0395 RRA .0823 RC3 .3273 FAU .05902
FDE -.4855 FRA -.3378 FC3-1.1926 BSP 8090
BDE .8650 BRA 1.8452 BC3 1.3570 FSP -456
                                                                                                                                                    LSA 955.2 MSA 94.7 SSA 17.6
EL1 930.4 EL2 42.0 ALF .83
                                                                                     SG1 2623.5 SG2 285.5 THA 172.70
                                                                                                                                                                     ARRIVAL DATE APR 25 1966
                                                                                           FLIGHT TIME 110.00
LAUNCH DATE JAN 5 1966
                                                                                          DISTANCE 337.636
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 104.21 VL 28.623 GAL -11.95 A7L 92.67 HCA 164.37 SMA 134.71 ECC .22571 INC 2.6699 VI 30.287 RP 108.75 LAP -.72 LOP 268.59 VP 38.151 GAP 6.88 AZP 87.43 TAL 234.56 TAP 38.93 RCA 104.30 APO 165.11 VZ 34.846 RC 123.903 GL -11.56 GP 36.36 ZAL 155.90 ZAP 132.52 ETS 39.96 ZAE 124.72 ETE 150.93 ZAC 39.02 ETC 202.52 CLP-147.30
   PLANETOCENTRIC CONIC
     C3 42.357 VHL 6.508 OLA -30.08 RAL 311.10 RAD 6568.6 VEL 12.795 PTH
                                                                                                                            2.33 VHP
                                                                                                                                             6.524 DPA 13.80 RAP 297.66 ECC 1.6971
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      6 5 28
                                                                                                                                                             755.9
                                                                                                                                                                               18.95
                                                                                                                                                                                                 349.38
                         5 42 52 1355.94
                                                                15.57
                                                                                 356.56
                                                                                                   192.32
                                                                                                                      116.07
         79.40
                                                                                                                                      8 48 10
                                                                                                                                                              201.7
                                                                                                                                                                                18.97
                                                                                                                                                                                                 308.61
                                                               15.59
                                                                                 315.78
                                                                                                   192.33
                                                                                                                       116.06
                          8 34 48
                                          801.68
        100.60
                                                                                                                                        6 5 28
                                                                                                                                                              755.9
                                                                                                                                                                                18.95
                                                                                                                                                                                                 349.38
                                                                                 356.56
                                                                                                   192.32
                                                                                                                       116.07
                          5 42 52 1355.94
                                                                15.57
          79.40
                                                                                                                                     8 48 10
7 49 29
                                                                                                                                                                              18.97
                                                                                                   192.33
                                                                                                                       116.06
                                                                                                                                                             201.7
                                                                                                                                                                                                 304.61
                                           801.68
                                                               15.59
                                                                                 315.78
        100.60
                         8 34 48
                                                                                                                       124.06
                                                                                                                                       7 49 29
                                                                                                                                                             397.3
                                                                                                                                                                                 7.56
                                                                                                                                                                                                 316.94
                          7 32 52
                                             997.34
                                                                  3.11
                                                                                 323.20
                                                                                                   185.04
        110.00
                                                                                                                      109.14 13 15 35
                                                                                                                                                           4896.3
                                                                                                                                                                               31.21
                                                                                                                                                                                                 246.28
                        11 43 59
                                           5496.32
                                                                28.88
                                                                                 254.70
                                                                                                   198.29
        110.00
    DIFFERENTIAL CORRECTIONS
                                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                    $GT 2710.1 SGR 455.7 SG3 130.9

RRT -.7281 RRF -.9511 RTF .8443

SGB 2748.2 R23 .4789 R13 -.8511
                                                                                                                                                      ST 1128.4 SR 27.9 55 294.3
CRT -.8950 CRS .8573 CST -.9401
     TOE-1.1271 TRA-1.7517 TC3-1.3709 BAU .8010
                                                                                                                                                 CRT -.8950 CRS .8973 LS. .....
LSA 1162.3 MSA 97.4 SSA 12.4
EL1 1128.7 EL2 12.4 ALF 178.73
     ROE .0243 RRA .0379 RC3 .3464 FAU .05268
FDE -.5849 FRA -.2504 FC3-1.0767 BSP 8464
BDE 1.1273 BRA 1.7521 BC3 1.4145 FSP -422
```

5G1 2730.6 5G2 310.0 THA 172.93

ARRIVAL DATE APR 27 1966 FLIGHT TIME 112.00 LAUNCH DATE JAN 5 1966 DISTANCE 343.415 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 28.529 GAL -11.66 A7L 94.18 MCA 167.52 SMA 133.98 ECC .22365 INC 4.1754 VI 30.287 RP 108.78 LAP -.90 LOP 271.76 VP 38.074 GAP 7.07 A7P 85.92 TAL 232.96 TAP 40.48 RCA 104.02 APO 163.95 V2 34.838 RC 126.245 GL -17.98 GP 42.65 7AL 151.32 7AP 129.50 ETS 46.28 7AE 120.76 ETE 148.45 7AC 42.32 ETC 207.90 CLP-149.85 PLANETOCENTRIC CONIC 2.34 VHP 7.135 DPA 19.87 RAP 297.01 ECC 1.7145 C3 43.415 VHL 6.589 DLA -35.86 RAL 314.84 RAD 6568.6 VEL 12.837 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 17.68 197.99 121.51 5 3 49 1012.9 22.10 10.74 4 36 56 1612.94 10 10 32 5845.15 18.06 67.02 269.44 11 47 57 5245.2 22.12 198.00 121.50 112.98 18.08 276.39 4 36 56 1612.94 10 10 32 5845.15 197.99 121.51 5 3 49 1012.9 22.10 10.74 18.06 .17.68 67.02 22.12 121.50 11 47 57 121.51 5 3 49 121.50 11 47 57 269.44 198.00 5245.2 112.98 18.08 276.39 4 36 56 1012.9 22.10 10.74 197.99 67.02 1612.94 18.06 17.68 22.12 269.44 5245.2 276.39 198.00 112.98 10 10 32 5845.15 18.08 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 2817.6 SGR 472.7 SG3 115.4 RRT -.6765 RRF -.9415 RTF .8548 SGB 2856.9 R23 .4811 R13 -.8616 ST 1434.9 SR 91.5 SS 378.7 CRT -.8867 CRS .9786 CST -.9598 TOE-1.5410 TRA-1.5857 TC3-1.3678 BAU .8197 ROE .1034 RRA -.0295 RC3 .3514 FAU .04477 FOE -.7032 FRA -.1520 FC3 -.8927 BSP 8815 BOE 1.5445 BRA 1.5859 BC3 1.4122 FSP -373 LSA 1482.8 MSA 110.6 SSA 7.2 SG1 2835.9 SG2 345.9 THA 173.43 EL1 1437.2 EL2 42.2 ALF 176.76 ARRIVAL DATE APR 29 1966 FLIGHT TIME 114.00 LAUNCH DATE JAN 5 1966 HELIOCENTRIC CONIC **DISTANCE 349.170** RL 147.10 LAL -.00 LOL 104.21 VL 28.437 GAL -11.36 AZL 96.67 HCA 170.66 SMA 133.27 ECC .22166 INC 6.6721 VI 30.287 RP 108.80 LAP -1.08 LOP 274.92 VP 37.997 GAP 7.26 AZP 83.42 TAL 231.34 TAP 41.99 RCA 103.73 APO 162.82 V2 34.830 RC 128.581 GL -27.63 GP 50.97 ZAL 143.53 ZAP 124.33 ETS 53.79 ZAE 114.93 ETE 146.47 ZAC 46.77 ETC 215.00 CLP-153.60 PLANETOCENTRIC CONIC 2.38 VHP 8.261 OPA 27.98 RAP 294.88 ECC 1.8029 C3 48.786 VHL 6.985 DLA -44.38 RAL 321.29 RAD 6568.8 VEL 13.044 PTH LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.49 4 33 49 1209.2 29.74 20.45 36.08 208.86 130.28 4 3 40 1809.16 54.28 5107.5 25.50 260.26 5707.47 20.47 266.60 208.88 130.28 13 10 23 125.72 11 35 15 4 33 49 13 10 23 1209.2 25.49 29.74 208.86 130.28 20.45 36.08 54.28 4 3 40 1809.16 5107.5 25.50 260.26 11 35 15 5707.47 4 3 40 1809.16 20.47 266.60 208.88 130.28 125.72 130.28 4 33 49 130.28 13 10 23 1209.2 25.49 29.74 20.45 36.08 208.86 54.28 266.60 208.88 5107.5 25.50 260.26 20.47 125.72 11 35 15 5707.47 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFFRENTIAL CORRECTIONS 5T 1922.8 SR 160.6 55 496.7 CRT -.8619 CR5 .9480 C5T -.9784 SGT 2925.1 SGR 478.2 SG3 96.1 RRT -.5600 RRF -.8774 RTF .8781 TDE-2.2818 TRA-1.2688 TC3-1.2258 BAU .8237 ROE .1864 RRA -.1377 RC3 .3040 FAU .03498 FOE -.8477 FRA -.0427 FC3 -.6208 B3P 9151 B0E 2.2894 BRA 1.2763 BC3 1.2629 FSP -312 SGB 2963.9 R23 .4545 R13 -.8839 LSA 1988.3 MSA 127.3 SSA 3.6 SG1 2937.5 SG2 394.5 THA 174.67 EL1 1927.8 EL2 81.2 ALF 175.88 ARRIVAL DATE MAY 1 1966 FLIGHT TIME 116.00 LAUNCH DATE JAN 5 1966 DISTANCE 354.881 HELIOCENTRIC CONTC RL 147.10 LAL -.00 LOL 104.21 VL 28.348 GAL -11.05 AZL 101.64 MCA 173.75 SMA 132.58 ECC .21968 INC11.6350 V1 30.287 RP 108.82 LAP -1.26 LOP 278.09 VP 37.922 GAP 7.42 AZP 78.43 TAL 229.68 TAP 43.43 RCA 103.46 APO 161.71 V2 34.822 RC 130.911 GL -41.97 GP 62.32 ZAL 130.49 ZAP 116.22 ETS 64.64 ZAE 105.82 ETE 148.03 ZAC 52.78 ETC 226.34 CLP-162.02 PLANETOCENTRIC CONIC C3 70.391 VML 8.390 DLA -55.96 RAL 335.75 RAD 6569.4 VEL 13.847 PTH 2.53 VMP 10.791 DPA 38.61 RAP 289.04 ECC 2.1585 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 13 16 2012.88 13 21 5 5682.60 4 13 16 2012.88 13 21 5 5682.60 4 13 16 2012.88 13 21 5 5682.60 143.54 4 46 48 143.53 14 55 48 1412.9 50.91 231.81 19.61 55.77 39.49 5082.6 25.97 258.26 231.83 140.51 19.62 263.13 143.54 4 46 48 143.53 14 55 48 143.54 1412.9 25.96 50.91 231.81 39.49 19.61 54.77 258.26 5082.6 25.97 231.83 140.51 19.62 263.13 4 46 48 50.91 1412.9 25.96 231.81 39.49 19.61 55.77 143.54 4 46 48 143.53 14 55 48 258.26 5082.6 25.97 231.83 140.51 19.62 263.13 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 3029.9 SGR 451.7 SG3 73.8 RRT -.1008 RRF -.4616 RTF .9269 ST 2636.0 SR 114.2 SS 652.5 CRT -.0929 CRS .2193 CST -.9918 TOE-3.8481 TRA -.5517 TC3 -.8044 BAU .7700 ROE .0281 RRA -.3071 RC3 .1500 FAU .02307 F0E-1.0232 FRA .0981 FC3 -.2837 88P 9467 B0E 3.8482 BRA .6314 BC3 .8182 FSP -237 SGB 3063.4 R23 .3679 R13 -.9277 SG1 3030.3 SG2 449.3 THA 179.12 LSA 2714.3 MSA 139.5 55A 1.6 ELI 2636.0 EL2 113.7 ALF 179.77 ARRIVAL DATE MAY 3 1966 FLIGHT TIME 118.00 LAUNCH DATE JAN 5 1966 **DISTANCE 360.450** HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 28.256 GAL -10.70 A7L 115.83 MCA 176.72 SMA 131.91 ECC .21742 INC25.8335 V1 30.287 RP 108.85 LAP -1.43 LOP 281.25 VP 37.848 GAP 7.54 AZP 64.20 TAL 227.95 TAP 44.67 RCA 103.23 APO 160.59 V2 34.816 RC 133.236 GL -58.32 GP 73.90 ZAL 111.73 ZAP 104.90 ETS 100.87 ZAE 89.78 ETE 176.65 ZAC 59.78 ETC 264.92 CLP 158.00 PLANETOCENTRIC CONIC C3 202.131 VHL 14.217 DLA -62.51 RAL 11.65 RAD 6571.1 VEL 17.985 PTH 3.01 VHP 18.859 DPA 49.94 RAP 270.33 ECC 4.3266 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 16 16 20 152.17 6 53 56 1660.1 15.61 64.79 2260.10 8.56 69.24 277.15 31.62 152.17 17 42 3 5253.6 15.62 263.34 8.57 266.79 277.17 16 4 29 5653.61 148.36 6 53 56 1660.1 15.61 65.79 6 16 16 8.56 69.24 277.15 152.17 2260.10 31.62 152.17 17 42 3 5253.6 15.62 263.34 8.57 266.79 277.17 148.38 16 4 29 5853.61 6 53 56 1660.1 15.61 65.79 2260.10 8.56 69.24 277.15 152.17 6 16 16 31.62 152.17 17 42 3 5253.6 15.62 265.34 16 4 29 5853.61 266.79 277.17 148.38 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY RET .9416 RRF .9097 RTF .9962 SGB 3111.4 R23 -.1811 R13 .9832 SGI 3073.8 SG2 482.4 THA 32.07 ST 2205.8 SR 1629.2 SS 786.4 CRT .9935 CRS -.9884 CST -.9993 TOE-5.3697 TRA 1.6325 TC3 -.1299 BAU .3514 RDE-4.0294 RRA .5031 RC3 -.0058 FAU .00752 FDE-1.1651 FRA .4259 FC3 -.0322 BSP 9847 LSA 2848.3 MSA 160.9 SSA EL1 2738.2 EL2 149.6 ALF 36.40 BOE 6.7134 BRA 1.7083 BC3 .1300 FSP -172

Ξ

```
ARRIVAL DATE MAY 5 1966
                                                                                                                          FLIGHT TIME 120.00
LAUNCH DATE JAN 5 1966
                                                                                                                          01STANCE 367.928
     HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 104.21 VL 28.167 GAL -10.76 A7L 7.44 HCA 181.61 SMA 131.26 ECC .22113 INC82.5613 VI 30.287 RP 108.87 LAP -1.60 LOP 284.42 VP 37.776 GAP 8.21 A7P 172.56 TAL 226.82 TAP 48.43 RCA 102.23 APO 160.28 VZ 34.809 RC 135.553 GL 45.23 GP -52.19 TAL 97.84 ZAP 96.52 ETS 185.20 ZAE 54.44 ETE 118.44 ZAC 84.23 ETC 28.95 CLP 100.68
     PLANETOCENTRIC CONIC
       C31493.831 VHL 38.650 DLA 41.77 RAL 340.56 RAD 6573.2 VEL 40.188 PTH 3.56 VHP 46.540 DPA -52.84 RAP 173.01 ECC25.5847
      C31493.831 VML 38.650 DLA 41.77 RAL 340.56 RAD 6573.2 VEL 40.188 PTH 3.36 VMP 46.340 DPA -32.64 RAP 173.DI ECC25.3847 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 57.91 17 33 26 4875.17 .97 223.D7 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.64 48.24 1 38 41 2965.3 -4.34 117.20 122.09 0 39 15 3565.33 .98 122.76 251.64 48.24 1 38 41 2965.3 -4.34 117.20 122.09 0 39 15 3565.33 .98 122.76 251.64 48.24 1 38 41 2965.3 -4.34 117.20 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.64 48.24 1 38 41 2965.3 -4.34 117.20 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 48.24 18 54 41 4275.2 -4.36 217.51 122.09 0 39 15 3565.33 .98 122.76 251.65 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250.00 250
                                                                                                                 23.07 251.65 48.24 18 54 41
22.76 251.64 48.24 1 38 41
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                    SGT 945.3 SGR 2496.3 SG3 44.0
RRT .8150 RRF -.9989 RTF -.7877
                                                                                                                                                                                                          ST 495.3 SR 2119.8 SS 1771.7

CRT .9532 CRS .9999 CST .9491

LSA 2802.6 MSA 151.3 SSA .4
       TOE-3.1390 TRA 2.8296 TC3 -.0777 BAU 3.6751
      RO-14.2849 RRA 1.4615 RC3 -.1668 FAU-.05611
FOE 2.9705 FRA -.2048 FC3 .0325 BSP 8554
BOE14.6257 BRA 3.1848 BC3 .1840 FSP -151
                                                                                                                    SGB 2669.3 R23 -.1097 R13 -.9939
                                                                                                                    861 2617.7 862 522.3 THA 72.11
                                                                                                                                                                                                          EL1 2172.0 EL2 146.2 ALF 77.39
                                                                                                                           FLIGHT TIME 122.00
                                                                                                                                                                                                                               ARRIVAL DATE MAY 7 1966
LAUNCH DATE JAN 5 1966
                                                                                                                          DISTANCE 372.717
    HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 104.21 VL 28.079 GAL -10.24 AZL 62.41 MCA 183.80 SMA 130.62 ECC .21676 INC27.5915 V1 30.287 RP 108.88 LAP -1.76 LOP 287.58 VP 37.706 GAP 8.10 AZP 117.54 TAL 224.82 TAP 48.63 RCA 102.31 APO 158.93 V2 34.804
                                        59.10 GP -71.23 ZAL 109.61 ZAP 108.51 ETS 249.62 ZAE 90.19 ETE 176.03 ZAC 85.90 ETC 92.00 CLP 170.51
      RC 137.863 GL
     PLANE TOCENTRIC CONIC

C3 222.455 VHL 14.915 DLA 44.09 RAL 309.74 RAD 6571.3 VEL 18.541 PTH 3.05 VMP 16.435 DPA -84.31 RAP 95.30 ECC 4.6610

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

54.68 15 17 19 4761.63 -6.04 219.49 213.48 46.24 16 36 40 4161.6 -11.53 214.02

125.32 22 45 34 3380.72 -6.02 112.88 213.47 46.24 23 41 54 2780.7 -11.52 107.41

54.68 15 17 19 4761.63 -6.04 219.49 213.48 46.24 16 36 40 4161.6 -11.53 214.02

125.32 22 45 34 3380.72 -6.02 112.88 213.47 46.24 23 41 34 2780.7 -11.52 107.41

54.68 15 17 19 4761.63 -6.04 219.49 213.48 46.24 16 36 40 4161.6 -11.53 214.02

125.32 22 45 34 3380.72 -6.02 112.88 213.47 46.24 23 41 34 2780.7 -11.52 107.41

54.68 15 17 19 4761.63 -6.04 219.49 213.48 46.24 16 36 40 4161.6 -11.53 214.02

125.32 22 45 34 3380.72 -6.02 112.88 213.47 46.24 23 41 54 2780.7 -11.52 107.41
    PLANETOCENTRIC CONIC
                                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                                                         ST 1998.5 SR 1339.5 SS 754.9
CRT -.9844 CRS .9790 CST -.9996
LSA 2513.1 MSA 205.5 S5A 1.2
                                                                                                                    SGT 2223.2 SGR 2188.0 SG3 56.2
RRT -.9540 RRF -.9270 RTF ..9960
SGB 3339.7 R23 -.2058 R13 -.9776
       TOE 5.0518 TRA-2.9748 TC3 -.0882 BAU .2634
       ROE-3.1863 RRA 3.3908 RC3 .0082 FAU .00947
       FOE 1.3525 FRA -. 7012 FC3 -. 0369 BSP 10767
       BOE 5.9727 BRA 4.5107 BC3 .0886 FSP -194
                                                                                                                    SG1 3301.9 SG2 501.1 THA 139.26
                                                                                                                                                                                                          EL1 2397.8 EL2 196.7 ALF 146.33
                                                                                                                                                                                                                            ARRIVAL DATE MAY 9 1966
                                                                                                                          FLIGHT TIME 124.00
LAUNCH DATE JAN 5 1966
                                                                                                                        DISTANCE 378.307
     HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 104.21 VL 27.992 GAL -9.88 AZL 73.60 HCA 186.81 SMA 130.00 ECC .21500 INC16.3973 V1 30.287 RP 108.90 LAP -1.92 LOP 290.74 VP 37.637 GAP 8.21 AZP 106.29 TAL 223.06 TAP 49.87 RCA 102.05 APO 157.95 V2 34.799 RC 140.164 GL 31.66 GP -57.74 ZAL 119.04 ZAP 121.03 ETS 283.20 ZAE 104.72 ETE 203.91 ZAC 79.28 ETC 125.35 CLP-164.94
     PLANETOCENTRIC CONIC
      C3 98.506 VML 9.925 DLA 34.76 RAL 306.91 RAD 6569.9 VEL 14.827 PTH 2.68 VMP 10.273 DPA -74.55 RAP 351.23 ECC 2.6212

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

68.95 16 14 26 4418.33 -10.55 194.47 201.35 56.69 17 28 4 3818.3 -14.86 187.98

111.05 21 25 52 3429.11 -10.54 120.52 201.34 56.69 22 23 1 2829.1 -14.85 114.03

68.95 16 14 26 4418.33 -10.55 194.47 201.35 56.69 17 28 4 3818.3 -14.86 187.98

111.05 21 25 52 3429.11 -10.54 120.52 201.34 56.69 22 23 1 2829.1 -14.85 114.03

68.95 16 14 26 4418.33 -10.55 194.47 201.35 56.69 17 28 4 3818.3 -14.86 187.98

111.05 21 25 52 3429.11 -10.54 120.52 201.34 56.69 22 23 1 2829.1 -14.85 114.03
       C3 98.506 VHL 9.925 DLA 34.76 RAL 306.91 RAD 6569.9 VEL 14.827 PTH 2.68 VHP 10.273 DPA -74.55 RAP 351.23 ECC 2.6212
                                                                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                   SGT 3397.2 SGR 686.4 SG3 78.8
RRT -.8247 RRF -.5854 RTF .9395
                                                                                                                                                                                                          ST 2083.7 SR 215.2 SS 596.3
CRT -.6397 CRS .4947 CST -.9844
LSA 2169.2 M5A 195.0 SSA 1.6
       TOE 3.3478 TRA-3.6920 TC3 -.5227 BAU .6885
      ROE -.1142 RRA .9718 RC3 .0118 FAU .02500
FOE 1.1389 FRA -.6526 FC3 -.2197 BSP 10814
BDE 3.3497 BRA 3.8177 BC3 .5228 FSP -263
                                                                                                                   SGB 3465.9 R23 -.3525 R13 -.9331
                                                                                                                   SG1 3444.7 SG2 382.9 THA 170.42
                                                                                                                                                                                                           EL1 2088.2 EL2 165.1 ALF 176.20
                                                                                                                                                                                                                              ARRIVAL DATE MAY 11 1966
                                                                                                                          FLIGHT TIME 126.00
LAUNCH DATE JAN 5 1966
                                                                                                                         DISTANCE 383.989
    HELTOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 104.21 VL 27.907 GAL -9.54 AZL 77.89 HCA 189.91 SMA 129.39 ECC .21367 INC12.1091 V1 30.287 RP 108.91 LAP -2.07 LOP 293.90 VP 37.570 GAP 8.36 AZP 101.93 TAL 221.31 TAP 51.22 RCA 101.75 APO 157.04 V2 34.795 RC 142.456 GL 45.17 GP -46.26 ZAL 124.75 ZAP 130.72 ETS 293.10 ZAE 113.22 ETE 206.67 ZAC 74.23 ETC 135.54 CLP-160.64
     PLANETOCENTRIC CONIC
                                                                                                                                                                      2.50 VHP 8.263 DPA -62.77 RAP 340.65 ECC 2.0907
       C3 66.272 VHL 8.141 DLA 28.12 RAL 307.93 RAD 6569.3 VEL 13.698 PTH
       LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                  65.29 20 25 46
                                                                                                                                                                                                                 3138.5
                                                                                                                                                                                                                                           -17.50
                                                                                                                                                                                                                                                                  138.45
                                                                                                                                     197.07
                                                                                                             145.65
             90'.00 19 23 28 3738.52
90'.00 18 25 0 3928.30
                                                                                    -14.28
                                                                                                                                                                    62.92
                                                                                                                                                                                   19 30 28
                                                                                                                                                                                                                  3328.3
                                                                                                                                                                                                                                           -12.18
                                                                                                                                                                                                                                                                    149.84
                                                                                                             156.71
                                                                                                                                     194.27
                                                                                     -8.62
                                 21 41 48 3292.54
18 49 21 3849.51
                                                                                                                                                                    67.48 22 36 40
                                                                                                                                                                                                                  2692.5
                                                                                                                                                                                                                                           -23.07
                                                                                                                                                                                                                                                                    107.92
                                                                                                                                      199.78
                                                                                                              115.54
                                                                                   -20.19
           100.00
                                                                                                                                                                   60.24 19 53 30
70.13 24 43 42
56.08 19 55 51
                                                                                                                                                                                                                                            -6.88
                                                                                                                                                                                                                                                                    141.28
                                                                                                                                                                                                                  3249.5
                                                                                      -2.94
                                                                                                             147.85
                                                                                                                                      191.18
           100.00
                                                                                                                                                                                                                  2273.1
                                                                                                                                                                                                                                           -30.84
                                                                                                                                                                                                                                                                      78.83
                                                                                                                                      203.27
                                                                                   -28.40
                                                                                                                87.18
           110.00
                                 23 55 49 2873.05
                                                                                                                                                                                                               3241.8
                                                                                                                                                                                                                                                .06
                                                                                                                                                                                                                                                                    136.41
                                                                                                                                      186.54
                                                                                                             142.62
           110.00
                                 18 51 49
                                                         3841.76
                                                                                      4.54
                                                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                                                          ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                 SCT 3539.3 SGR 401.1 SG3 100.2
RRT -.5431 RRF -.1331 RTF .8986
SGB 3562.0 R23 -.4280 R13 -.8961
                                                                                                                                                                                                         ST 1878.7 SR 168.6 55 548.3
CRT .3702 CRS -.5981 CST -.9659
        TOE 2.4033 TRA-3.4096 TC3 -.9238 BAU .8187
       ROE .1766 RRA .4759 RC3 -.0213 FAU .03480
FOE 1.0715 FRA -.5981 FC3 -.4546 BSP 11160
BOE 2.4098 BRA 3.4427 BC3 .9240 FSP -332
                                                                                                                                                                                                       LSA 1953.4 MSA 206.8 SSA 2.6
EL1 1879.7 EL2 156.6 ALF 1.92
                                                                                                                    SG1 3546.1 SG2 336.2 THA 176.45
```

```
ARRIVAL DATE MAY 13 1966
                                                                              FLIGHT TIME 128.00
LAUNCH DATE JAN 5 1966
                                                                             DISTANCE 389.693
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 27.823 GAL -9.19 AZL 80.14 HCA 193.04 SMA 128.81 ECC .21255 INC 9.8588 V1 30.287 RP 108.92 LAP -2.21 LOP 297.06 VP 37.504 GAP 8.50 AZP 99.61 TAL 219.55 TAP 52.59 RCA 101.43 APO 156.18 V2 34.791 RC 144.737 GL 40.50 GP -37.84 ZAL 128.04 ZAP 137.82 ETS 298.80 ZAE 118.50 ETE 205.14 ZAC 71.26 ETC 141.52 CLP-159.78
   PLANETOCENTRIC CONIC
                                                                                                          2.41 VMP 7.406 OPA -53.97 RAP 337.71 ECC 1.8630
    C3 52.439 VHL 7.241 DLA 23.68 RAL 309.56 RAD 6568.9 VEL 13.183 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      75.32 22 17 27
61.72 17 49 53
76.37 23 52 23
60.32 18 48 53
78.85 1 36 56
56.81 19 17 38
                                                                                                                                                     -26.27
                                                                                    197.38
                                                                                                                                     2704.3
                                                                                                                                                                     109.74
        90.00 21 22 22 3304.26
90.00 16 39 4 4248.32
                                                                     117.96
                                                      -24.49
                                                                                                                                                                      168.05
                                                                                                                                      3648.3
                                                                                                                                                       -2.19
                                                                                      187.02
                                                        1.60
                                                                     174.68
                                                                                                                                      2380.8
                   23 2 42 2980.77
17 41 26 4047.05
                                                                                      198.04
                                                                                                                                                      -28.47
                                                                                                                                                                        86.39
                                                      -26.87
                                                                       94.82
                                                                                                                                      3447.1
                                                                                                                                                        - .23
                                                                                                                                                                      152.17
                                                                                      185.83
       100.00
                                                        3.75
                                                                      158.70
                                                                                                                                      2048.7
                                                                                                                                                      -33.72
                                                                                                                                                                        62.00
                     0 52 47 2648.65
18 11 46 3951.93
                                                                                    199.47
                                     2648.65
                                                      -32.52
                                                                       71.03
       110.00
                                                                                                                                      3351.9
                                                                                                                                                        4.26
                                                                                                                                                                      142.16
                                                                                     182.79
                                                        8.69
                                                                      148.45
       110.00
                                                                          HID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 3639.8 SGR 320.4 SG3 115.6
RRT -.3705 RRF .0995 RTF .8729
                                                                                                                                  ST 1735.2 SR 183.2 SS 517.0
CRT .5733 CRS -.8052 CST -.9474
     TOE 1.9264 TRA-3.1922 TC3-1.2577 BAU .8819
     RDE .2072 RRA .3156 RC3 -.0265 FAU .04069
                                                                                                                                  LSA 1806.9 MSA 216.8 SSA 3.7
EL1 1738.4 EL2 149.8 ALF 3.49
                                                                          SGB 3653.8 R23 -.4576 R13 -.8717
    FOE 1.0056 FRA -.5313 FC3 -.6717 BSP 11458
BDE 1.9376 BRA 3.2077 BC3 1.2580 FSP -378
                                                                          SG1 3641.7 SG2 297.5 THA 178.12
                                                                                                                                              ARRIVAL DATE MAY 15 1966
                                                                              FLIGHT TIME 130.00
                                                                              DISTANCE 395.403
  HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 27.740 GAL -8.85 AZL 81.53 HCA 196.19 SMA 128.23 ECC .21161 INC 8.4697 V1 30.287 RP 108.93 LAP -2.35 LOP 300.22 VP 37.440 GAP 8.65 AZP 98.14 TAL 217.77 TAP 53.96 RCA 101.10 APO 155.37 V2 34.788 RC 147.008 GL 37.13 GP -31.67 ZAL 129.82 ZAP 143.06 ETS 303.04 ZAE 121.88 ETE 202.78 ZAC 69.84 ETC 145.91 CLP-159.91
   PLANETOCENTRIC CONIC
                                                                                                           2.35 VHP 6.991 OPA -47.34 RAP 337.D2 ECC 1.7361
     C3 44.728 VHL 6.688 DLA 20.68 RAL 311.31 RAD 6568.7 VEL 12.888 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   22 9 16 3121.45
16 6 6 4351.65
23 44 17 2815.07
17 13 46 4133.26
1 25 30 2510.69
17 52 58 4010.41
                                                                                                                                                     -27.97
                                                                                                      81.22 23 1 17
                                                                                                                                    2521.4
                                                                                    195.59
                                                       -27.03
                                                                      105.18
         90.00
                                                                                                        62.08 17 18 37
62.27 24 31 12
60.79 18 22 39
84.95 2 7 21
57.38 18 59 48
                                                                                                                                                         1.14
                                                                                                                                                                       173.81
                                                                                      184.97
                                                                                                                                       3751.6
                                                        4.91
                                                                      180.46
         90.00
                                                                                                                                                       -29.73
                                                                                                                                                                        74.24
                                                                                                                                       2215.1
                                                                                      195.91
                                                       -28.97
                                                                       82.96
        100.00
                                                                                                                                       3533.3
                                                                                                                                                         2.69
                                                                                                                                                                       156.90
                                                                                      184.03
                                                        6.63
                                                                      163.47
        100.00
                                                                                                                                       1910.7
                                                                                                                                                       -34.18
                                                                                                                                                                        51.26
                                                                                     196.55
                                                       -33.85
                                                                        60.49
        110.00
                                                                                                                                                         6.48
                                                                                                                                                                       145.24
                                                                                                                                       3410.4
                                                                                      181.47
                                                       10.85
                                                                      151.60
        110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 1637.6 SR 186.8 S5 491.5
CRT .6262 CR5 -.8686 CST -.9300
                                                                          SGT 3735.9 SGR 281.4 SG3 125.8
RRT -. 3029 RRF .1751 RTF .8567
     TOE 1.6446 TRA-3.0298 TC3-1.5456 BAU .9243
     ROE .2041 RRA .2397 RC3 -.0160 FAU .04394
                                                                           SGB 3746.5 R23 -.4575 R13 -.8560
                                                                                                                                 LSA 1705.3 MSA 224.4 SSA 5.0
     FOE .9374 FRA -.4626 FC3 -.8505 BSP 11769
                                                                                                                                EL1 1641.8 EL2 145.3 ALF 4.12
                                                                          SG1 3736.9 SG2 268.1 THA 178.69
     BOF 1.6572 BRA 3.0393 BC3 1.5457 FSP -409
                                                                                                                                              ARRIVAL DATE MAY 17 1966
                                                                              FLIGHT TIME 132.00
LAUNCH DATE JAN 5 1966
                                                                              DISTANCE 401.113
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 27.659 GAL -8.50 AZL 82.48 HCA 199.33 SMA 127.68 ECC .21083 INC 7.5230 V1 30.287 RP 108.94 LAP -2.48 LOP 303.39 VP 37.378 GAP 8.80 AZP 97.10 TAL 215.99 TAP 55.32 RCA 100.76 APO 154.60 V2 34.786 RC 149.286 GL 34.65 GP -27.06 ZAL 130.63 ZAP 147.04 ETS 306.46 ZAE 124.10 ETE 200.45 ZAC 69.48 ETC 149.38 CLP-160.42
    PLANETOCENTRIC CONIC
     C3 39.686 VHL 6.300 OLA 18.64 RAL 313.08 RAD 6568.5 VEL 12.691 PTH 2.31 VHP 6.778 DPA -42.19 RAP 337.34 ECC 1.6531
    C3 39.686 VHL 6.300 OLA 18.64 RAL 313.08 RAD 6568.5 VEL 12.691 PTH 2.31 VMP 6.778 DPA -42.19 RAP 337.34 ECC 1.6551 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 39 13 3006.44 -27.95 96.90 194.34 65.27 23 29 20 2406.4 -28.31 88.25 90.00 15 50 17 4406.35 6.65 183.54 184.32 62.41 17 3 44 3806.3 2.90 176.87 100.00 0 15 46 2707.78 -29.69 75.07 194.48 66.36 1 0.54 2107.8 -29.88 66.27 100.00 17 0 21 4180.24 8.18 166.09 183.49 61.15 18 10 2 3580.2 4.27 159.49 110.00 148 32 2417.54 -34.18 53.23 194.69 89.23 2 28 50 1817.5 -33.91 44.00 110.00 17 44 5 4043.25 12.05 153.39 181.17 57.77 18 51 28 3443.2 7.71 146.98
                       1 48 32 2417.54
17 44 5 4043.25
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 3830.4 SGR 259.6 SG3 132.1
RRT - 2809 RRF .1801 RTF .8460
SGB 3839.2 R23 - 4362 R13 - .8454
                                                                                                                                   ST 1572.0 SR 189.7 55 471.2
     TOE 1.4632 TRA-2.8968 TC3-1.8048 BAU .9576
                                                                                                                                   CRT .6534 CRS -.9037 CST -.9142
     RDE .1994 RRA .1935 RC3 .0015 FAU .04546 FDE .8749 FRA -.3954 FC3 -.9917 BSP 12077
                                                                                                                                   LSA 1635.9 MSA 230.8 35A 6.3
                                                                          5G1 3831.1 SG2 249.1 THA 178.90
                                                                                                                                   EL1 1577.0 EL2 143.2 ALF 4.55
     BOE 1.4767 BRA 2.9032 BC3 1.8048 FSP
                                                          -428
                                                                                                                                               ARRIVAL DATE MAY 19 1966
                                                                               FLIGHT TIME 134.00
LAUNCH DATE JAN 5 1966
                                                                               DISTANCE 406.821
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 104.21 VL 27.579 GAL -8.14 AZL 83.17 HCA 202.49 SMA 127.14 ECC .21019 INC 6.8331 VI 30.287
RP 108.94 LAP -2.61 LOP 306.55 VP 37.317 GAP 8.99 AZP 96.32 TAL 214.19 TAP 56.67 RCA 100.42 APO 153.86 V2 34.785
RC 151.511 GL 32.77 GP -23.54 ZAL 130.77 ZAP 150.15 ETS 309.27 ZAE 125.63 ETE 198.39 ZAC 69.84 ETC 152.19 CLP-161.09
    PLANETOCENTRIC CONIC
     C3 36.024 VML 6.002 DLA 17.24 RAL 314.88 RAD 5568.4 VEL 12.546 PTH 2.27 VMP 6.671 DPA -38.06 RAP 338.23 ECC 1.5929
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      88.12 23 49 27
62.63 16 57 7
                                                                                     193.66
                                                                                                                                       2328.0
                                                                                                                                                       -28.22
                                                                                                                                                                        82.51
                  23 0 39
         90.00
                                     2927.97
                                                       -28.26
                                                                       91.16
                                                                                                                                        3835.9
                                                                                                                                                          3.85
                                                                                                                                                                        178.52
                                                                                      184.34
          90.00
                     15 43 11
                                     4435.89
                                                        7.58
                                                                       185.22
                                                                                                                                        2033.6
                                                                                                                                                        -29.67
                                                                                                                                                                         60.77
                                                                                                         89.25
                                                                                                                      1 19 46
                                                                        69.57
                                                                                      193.71
                       0 35 52 2633.60
                                                       -29.88
        100.00
                                                                                                         61.38 18 4 41
92.27 2 45 11
57.98 18 48 38
                                                                                                                                        3605.5
                                                                                                                                                          5.12
                                                                                                                                                                        160.88
                                                                                      183.57
        100.00
                      16 54 35
                                      4205.50
                                                         9.01
                                                                       167.51
                                                                                                                                       1751.6
                                                                                                                                                       -33.43
                                                                                                                                                                         38.91
        110.00
                      2 5 59 2351.62
17 40 57 4060.24
                                                       -34.12
                                                                        48.09
                                                                                      193.64
                                                                                                                                     3460.2
                                                                                                                                                         8.35
                                                                                                                                                                       147.89
        110.00
                                                                                      181.39
                                                                       154.32
                                                       12.67
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                          SGT 3921.4 SGR 249.1 SG3 135.8
RRT -2730 RRF .1565 RTF .8379
SGB 3929.3 R23 -.4013 R13 -.8375
                                                                                                                                   ST 1530.2 SR 194.9 SS 456.6
     TOE 1.3425 TRA-2.7772 TC3-2.0455 BAU .9852
                                                                                                                                  CRT .6771 CRS -.9293 CST -.9002
     ROE .1978 RRA .1604 RC3 .0216 FAU .04581
FOE .8225 FRA -.3295 FC3-1.1010 BSP 12337
BDE 1.3570 BRA 2.7819 BC3 2.0456 FSP -435
                                                                                                                              CRT .6771 CR5 -.929 CE-
L5A 1591.2 M5A 236.5 SSA 7.6
EL1 1535.9 EL2 142.9 ALF 4.97
                                                                          5G1 3922.0 SG2 239.6 THA 179.00
```

```
LAUNCH DATE JAN 5 1966
                                                                             FLIGHT TIME 136.00
                                                                                                                                           ARRIVAL DATE MAY 21 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 412.526
     RL 147.10 LAL -.00 LOL 104.21 VL 27.500 GAL -7.77 AZL 83.69 MCA 205.64 SMA 126.61 ECC .20971 INC 6.3054 V1 30.287 RP 108.94 LAP -2.72 LOP 309.71 VP 37.259 GAP 9.10 AZP 95.69 TAL 212.38 TAP 58.02 RCA 100.06 APO 153.16 VZ 34.784 RC 153.743 GL 31.31 GP -20.78 ZAL 130.42 ZAP 152.67 ETS 311.59 ZAE 126.71 ETE 196.61 ZAC 70.68 EYC 154.52 CLP-161.83
   PLANETOCENTRIC CONIC
     C3 33.169 VHL 5.759 OLA 16.32 RAL 316.71 RAD 6568.3 VEL 12.431 PTH 2.25 VMP 6.624 DPA -34.65 RAP 339.45 ECC 1.5459
     LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                 90.15 24 4 50
62.75 16 55 39
91.32 1 34 24
61.49 18 3 57
94.46 2 58 18
58.06 18 49 25
         90.00 23 16 57 2872.60
90.00 15 41 29 4449.57
                                                                    67.13
185.99
                                                                                 193.47
                                                     -28.32
                                                                                                                                   2272.6 -28.00
                                                                                                                                                                    78.48
                                                                                    184.74
                                                       8.00
                                                                                                                                    3849.6
                                                                                                                                                     4.29
                                                                                                                                                                   179.29
                      0 51 23 2580.77
                                                     -29.87
                                                                      65.64
                                                                                 193.45
                                                                                                                                   1980.8
                                                                                                                                                    -29.36
       100.00
                    16 53 40
                                   4216.63
                                                        9.37
                                                                    168.14
                                                                                    184.01
                                                                                                                                    3616.6
                    2 19 54 2303.82
17 41 39 4066.35
       110.00
                                                     -33.93
                                                                      44.37
                                                                                   193.21
                                                                                                                                   1703.8
                                                                                                                                                   -32.94
       110.00
                                                     12.89
                                                                    154.65
                                                                                    181.93
                                                                                                                                    3466.3
                                                                                                                                                     8.57
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                         SGT 4013.4 SGR 245.9 SG3 138.1
RRT -.2642 RRF .1235 RTF .8324
     TOE 1.2578 TRA-2.6671 TC3-2.2801 BAU 1.0113
                                                                                                                               ST 1503.3 SR 201.9 55 445.1
                                                                                                                             CRT .7007 CRS -.9490 CST -.8886
     ROE .1986 RRA .1336 RC3 .0414 FAU .04559
    FDE .7762 FRA -.2694 FC3-1.1900 BSP 12650
BDE 1.2734 BRA 2.6704 BC3 2.2805 FSP -442
                                                                        SGB 4020.9 R23 -.3569 R13 -.8321
                                                                                                                               LSA 1562.3 MSA 241.0 SSA 8.8
                                                                         SG1 4013.9 SG2 237.2 THA 179.07
                                                                                                                               EL1 1510.0 EL2 143.4 ALF 5.43
                                                                             FLIGHT TIME 138.00
  HELIOCENTRIC CONIC
                                                                            DISTANCE 418.226
    RL 147.10 LAL -.00 LOL 104.21 VL 27.423 GAL -7.40 A7L 84.11 MCA 208.80 SMA 126.10 ECC .20938 INC 5.8863 VI 30.287 RP 108.94 LAP -2.83 LOP 312.87 VP 37.202 GAP 9.24 A7P 95.16 TAL 210.55 TAP 59.34 RCA 99.70 APO 152.50 V2 34.784 RC 155.962 GL 30.15 GP -18.57 ZAL 129.70 ZAP 154.77 ETS 313.50 ZAE 127.50 ETE 195.11 ZAC 71.86 ETC 156.48 CLP-162.61
   PLANETOCENTRIC CONIC
    C3 30.831 VHL 5.553 DLA 15.75 RAL 318.58 RAD 6568.2 VEL 12.337 PTH
                                                                                                         2.22 VHP
                                                                                                                       6.614 DPA -31.74 RAP 340.89 ECC 1.5074
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    23 29 52 2833.25
                                                     -28.28
                                                                     84.25
                                                                                  193.66
                                                                                                      91.60 24 17 5
                                                                                                                                   2233.2
                                                                                                                                                   -27.75
        90.00
                   15 43 33
                                   4452.12
                                                                                                      62.77 16 57 45
        90.00
                                                       8.08
                                                                    186.14
                                                                                    185.42
                                                                                                                                    3852.1
                                                                                                                                                     4.37
                                   2542.89
                                                     -29.77
                                                                      62.83
                                                                                    193.60
                                                                                                      92.79
                                                                                                                   1 46 13
                                                                                                                                    1942.9
       100.00
                      1 3 50
                                                                                                                                                    -29.07
                                                                                                                                                                    54.10
                                                                                                      92.79 1 46 13
61.50 18 6 29
96.05 3 9 13
58.04 18 52 51
                                                                               184.71
       100.00
                  16 56 12 4217.72
                                                       9.41
                                                                     168.20
                                                                                                                                    3617.7
                                                                                                                                                     5.53
                                                                                                                                                                   161.56
                                                                                                                                                   -32.50
       110.00
                     2 31 24 2268.91
                                                     -33.71
                                                                     41.67
                                                                                    193.24
                                                                                                                                    1668.9
                                                                                                                                                                    32.64
       110.00
                   17 45 7 4064.46
                                                                    154.55
                                                                                   182.68
                                                                                                                                   3464.5
                                                                                                                                                     8.50
                                                    12.82
   DIFFERENTIAL CORRECTIONS
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
     TOE 1.1988 TRA-2.5604 TC3-2.5135 BAU 1.0363
                                                                       SGT 4105.7 SGR 248.0 SG3 139.3
RRT -.2502 RRF .0913 RTF .8289
SGB 4113.1 R23 -.3093 R13 -.8286
                                                                                                                                5T 1488.4 SR 210.5 S5 436.4
     ROE .2011 RRA .1103 RC3 .0603 FAU .04501
                                                                                                                               CRT .7254 CRS -.9644 CST -.8794
    FOE .7359 FRA -.2139 FC3-1.2639 BSP 12988
                                                                                                                              LSA 1546.1 MSA 244.2 SSA 10.1
EL1 1496.3 EL2 144.1 ALF 5.91
    BOE 1.2155 BRA 2.5628 BC3 2.5142 FSP -448
                                                                        SG1 4106.1 SG2 240.1 THA 179.13
                                                                            FLIGHT TIME 140.00
                                                                                                                                          ARRIVAL DATE MAY 25 1966
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                           DISTANCE 423.918
    RL 147.10 LAL -.00 LOL 104.21 VL 27.347 GAL -7.02 A7L 84.46 HCA 211.95 SMA 125.60 ECC .20921 INC 5.5436 VI 30.287 RP 108.94 LAP -2.93 LOP 316.04 VP 37.147 GAP 9.39 A7P 94.71 TAL 208.71 TAP 60.66 RCA 99.33 APO 151.88 VZ 34.785 RC 158.168 GL 29.22 GP -16.78 ZAL 128.68 ZAP 156.57 ETS 315.06 ZAE 128.11 ETE 193.83 ZAC 73.29 ETC 158.14 CLP-163.40
   PLANETOCENTRIC CONIC
    C3 28.852 VHL 5.371 DLA 15.44 RAL 320.52 RAD 6568.2 VEL 12.257 PTH 2.21 VHP 6.630 DPA -29.21 RAP 342.49 ECC 1.4748
    C3 28.852 VHL 5.371 DLA 15.44 RAL 320.52 RAO 6568.2 VEL 12.257 PTM 2.21 VMP 6.650 DPA -29.21 RAP 342.49 ECC 1.4748 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 40 24 2805.71 -28.21 82.24 194.18 92.60 24 27 10 2205.7 -27.55 73.64 90.00 15 48 27 4446.43 7.91 185.82 186.30 62.72 17 2 34 3846.4 4.19 179.11 100.00 114 8 2516.10 -29.67 60.84 194.09 93.83 1 56 4 1916.1 -28.82 52.14 100.00 17 1 20 4211.27 9.20 167.83 185.61 61.43 18 11 31 3611.3 5.31 161.20 110.00 2 41 13 2243.64 -33.51 39.72 193.65 97.19 3 18 37 1643.6 -32.15 30.75 110.00 17 50 45 4056.50 12.53 154.11 183.62 57.93 18 58 21 3456.5 8.21 147.69
                                                                       MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 1458.1 SR 218.7 55 420.0
CRT .7438 CRS -.9743 CST -.8717
                                                                        SGT 4228.3 SGR 251.0 SG3 141.5
RRT -.2312 RRF .0505 RTF .8330
SGB 4235.7 R23 -.2505 R13 -.8328
     TOE 1.1375 TRA-2.4750 TC3-2.7777 BAU 1.0718
    ROE .2032 RRA .0878 RC3 .0756 FAU .04505
FDE .6838 FRA -.1811 FC3-1.3517 BSP 13862
                                                                                                                             LSA 1523.2 MSA 243.4 SSA 11.6
EL1 1477.2 EL2 145.3 ALF 6.38
                                                                        SG1 4228.7 SG2 244.2 THA 179.21
    BOE 1.1555 BRA 2.4765 BC3 2.7788 FSP -492
                                                                                                                                          ARRIVAL DATE HAY 27 1966
LAUNCH DATE JAN 5 1966
                                                                            FLIGHT TIME 142,00
                                                                           DISTANCE 429.613
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 27.272 GAL -6.63 AZL 84.74 MCA 215.11 SMA 125.12 ECC .20918 INC 5.2566 VI 30.287 RP 108.94 LAP -3.02 LOP 319.20 VP 37.093 GAP 9.54 AZP 94.30 TAL 206.86 TAP 61.97 RCA 98.95 APO 151.29 V2 34.787 RC 160.359 GL 28.45 GP -15.30 ZAL 127.40 ZAP 158.14 ETS 316.32 ZAE 128.60 ETE 192.75 ZAC 74.92 ETC 159.57 CLP-164.19
   PLANETOCENTRIC CONIC
    C3 27.133 VHL 5.209 DLA 15.37 RAL 322.53 RAD 6568.1 VEL 12.186 PTH 2.19 VHP 6.662 DPA -26.95 RAP 344.21 ECC 1.4465
                                                   INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                                    93.26 24 35 37
62.62 17 9 40
94.53 2 4 29
61.31 18 18 41
97.97 3 26 54
57.77 19 5 38
                                                                                 194.98
                                                                                                                                   2187.6
                                                                                                                                                  -27.39
                                                                                                                                                                    72.33
        90.00 23 49 10 2787.58
                                                     -28.14
                                                                     80.92
                                                                                                                                                     3.79
                                                       7.52
                                                                                   187.37
                                                                                                                                   3833.9
        90.00
                    15 55 46
                                    4433.93
                                                                    185.11
                                                                                                                                   1898.2
                                                                                                                                                                    50.84
                                                                                    194.87
                                                                                                                                                   -28.64
       100.00
                     1 22 50 2498.16
                                                     -29.58
                                                                     59.52
                                                                                                                                                     4.89
       100.00
                   17 8 42 4198.58
                                                       6.79
                                                                    167.12
                                                                                  186.69
                                                                                                                                   3598.5
                                                                                                                                                                  160.50
                                  2226.09
                                                    -33.35
                                                                     38.37
                                                                                  194.38
                                                                                                                                   1626.1
                                                                                                                                                  -31.89
                                                                                                                                                                    29.45
       110.00
                     2 49 48
                                                                    153.40
                                                                                    184.73
                                                                                                                                   3443.4
                                                                                                                                                     7.72
       110.00
                   17 58 14 4043.42
                                                     12.06
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 4258.5 SGR 264.7 SG3 138.5
RRT -.2061 RRF .0577 RTF .8194
SGB 4266.7 R23 -.2322 R13 -.8192
     TDE 1.1545 TRA-2.3240 TC3-2.9576 BAU 1.0734
                                                                                                                               ST 1501.3 SR 232.2 SS 436.4
    RDE .2099 RRA .D718 RC3 .D961 FAU .D4241
FDE .6875 FRA -.D963 FC3-1.3530 BSP 13239
BDE 1.1735 BRA 2.3252 BCJ 2.9591 FSP -425
                                                                                                                             CRT .7843 CRS -.9865 CST -.8702
                                                                                                                              LSA 1560.8 MSA 248.8 SSA 12.4
                                                                        5G1 4258.8 SG2 259.0 THA 179.26
                                                                                                                             EL1 1512.4 EL2 143.0 ALF 6.98
```

ARRIVAL DATE MAY 29 1966

LAUNCH DATE JAN 5 1966

01STANCE 435.296 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 27.199 GAL -6.23 AZL 84.99 HCA 218.27 SMA 124.65 ECC .20933 INC 5.0114 V1 30.287 RP 108.93 LAP -3.10 LOP 322.37 VP 37.041 GAP 9.70 AZP 93.94 TAL 204.99 TAP 63.26 RCA 98.56 APO 150.74 V2 34.789 RC 162.536 GL 27.81 GP -14.06 ZAL 125.89 ZAP 159.54 ETS 317.30 ZAE 129.00 ETE 191.83 ZAC 76.68 ETC 160.81 CLP-164.98 PLANETOCENTRIC CONIC C3 25.626 VML 5.062 CLA 15.46 RAL 324.63 RAD 6568.0 VEL 12.124 PTH 2.17 VHP 6.708 OPA -24.91 RAP 346.02 ECC 1.4217 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 0 33 2776-96 16 5 3 4416-22 1 30 23 2487-30 17 17 55 4181-11 2 57 29 2214-74 18 7 18 4026-44 196.03 93.65 0 46 50 2177.0 -27.30 71.57 80.14 90.00 -28.10 62.48 17 18 39 3.22 177.42 3816.2 188.62 6.96 184.10 90.00 1887.3 -26.52 50.06 195.91 56.72 100.00 -29.52 3581 - 1 159.53 4.30 100.00 8.21 166.14 187.94 28.61 195.40 1614.7 -31.71 -33.24 37.51 110.00 146.09 7.08 186.00 11.44 152.47 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1511.6 SR 243.0 SS 433.7 CRT .8107 CRS -.9923 CST -.8691 SCT 4349.4 SGR 274.2 SG3 138.4 RRT - 1792 RRF .0425 RTF .8198 SGB 4358.0 R23 - .1930 R13 - .8196 TOE 1.1412 TRA-2.2120 TC3-3.2006 BAU 1.0972 ROE .2141 RRA .0538 RC3 .1105 FAU .04140 LSA 1571.9 MSA 247.3 SSA 13.6 Fit 1524.5 EL2 141.1 ALF 7.49 FOE .6599 FRA -.0521 FC3-1.3986 BSP 13652 BOE 1.1611 BRA 2.2127 BC3 3.2025 FSP -433 ELI 1524.5 ELZ 141.1 ALF 561 4349.6 562 269.8 THA 179.35 ARRIVAL DATE MAY 31 1966 FLIGHT TIME 146.00 DISTANCE 440.975 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 27.126 GAL -5.82 A7L 85.20 MCA 221.43 SMA 124.19 ECC .20966 INC 4.7982 V1 30.287
RP 108.92 LAP -3.17 LOP 325.53 VP 36.991 GAP 9.85 A7P 93.60 TAL 203.12 TAP 64.55 RCA 98.15 APO 150.23 V2 34.792
RC 164.699 GL 27.26 GP -13.00 ZAL 124.17 ZAP 160.80 ETS 318.04 ZAE 129.33 ETE 191.04 ZAC 78.55 ETC 161.89 CLP-165.76 PLANETOCENTRIC CONIC C3 24.289 VHL 4.928 DLA 15.71 RAL 326.83 RAD 6568.0 VEL 12.069 PTH 2.16 VHP 6.765 DPA -23.02 RAP 347.89 ECC 1.3997 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 6 59 2772.84 16 16 10 4393.95 1 37 0 2482.56 17 28 50 4159.46 3 4 31 2208.73 18 17 48 4006.05 93.80 0 53 12 2172.8 71.28 197.32 -27.26 90.00 -28.08 79.84 190.05 62.33 17 29 24 3793.9 2.50 176.17 90.00 6.26 182.84 2 18 23 1882.6 -28.47 49.71 58.37 197.20 95.13 100.00 -29.49 60.98 18 38 9 98.74 3 41 20 158.34 7.50 164.93 189.38 3559.5 3.57 100.00 1608.7 37.05 28.17 -33.18 196.67 110.00 57.34 19 24 34 3406.1 145.01 187.45 110.00 10.69 151.36 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1534.2 SR 254.5 SS 435.8 CRT .8388 CRS -.9959 CST -.8709 SGT 4429.7 SGR 285.6 SG3 137.7 RRT -.1501 RRF .0369 RTF .8190 TOE 1.1446 TRA-2.0886 TC3-3.4388 BAU 1.1174 ROE .2186 RRA .0374 RC3 .1239 FAU .04010 FOE .6403 FRA -.0050 FC3-1.4292 B3P 13925 B0E 1.1653 BRA 2.0890 BC3 3.4411 F3P -432 SGB 4438.9 R23 -.1622 R13 -.8189 LSA 1596.3 MSA 244.7 SSA 14.8 EL1 1549.1 EL2 137.2 ALF 5G1 4430.0 5G2 282.3 THA 179.44 ARRIVAL DATE JUN 2 1966 FLIGHT TIME 148.00 LAUNCH DATE JAN 5 1966 DISTANCE 445.646 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 27.055 GAL -5.41 A7L 85.39 MCA 224.59 SMA 123.75 ECC .21016 INC 4.6100 V1 30.287 RP 108.91 LAP -3.23 LOP 328.70 VP 36.942 GAP 10.01 A7P 93.29 TAL 201.23 TAP 65.82 RCA 97.74 APO 149.75 V2 34.796 RC 166.847 GL 26.77 GP -12.10 7AL 122.26 7AP 161.96 ETS 318.55 7AE 129.63 ETE 190.36 7AC 80.52 ETC 162.85 CLP-166.52 PLANETOCENTRIC CONIC C3 23.099 VHL 4.806 DLA 16.10 RAL 329.14 RAO 6567.9 VEL 12.020 PTH 2.15 VHP 6.830 OPA -21.26 RAP 349.81 ECC 1.3801 C3 23.099 VHL 4.806 DLA 10.10 KAL 329.14 KAD 0507.9 VEL 12.020 PTM 2.15 VMP 6.830 DPA -21.26 KAP 349.81 ECC 1.3801 LMCH AZMIN LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 16 28 58 4357.75 5.43 181.36 191.67 62.17 17 41 46 3767.8 1.66 174.71 100.00 1 42 55 2483.21 -29.49 58.42 198.75 95.10 2 24 18 1883.2 -28.47 49.76 100.00 17 41 20 4134.24 6.67 163.52 191.00 60.79 18 50 14 3534.2 2.72 156.95 3 47 51 3 11 4 2207.43 18 29 41 3982.79 1607.4 -31.60 98.79 110.00 -33.17 36.95 198.21 57.10 19 36 4 3382.8 5.43 9.84 150.11 189.07 MID-COURSE EXECUTION ACCURACY ORBIT CETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4506.9 SGR 297.4 SG3 136.7 RRT -.1200 RRF .0361 RTF .8189 SGB 4516.7 R23 -.1358 R13 -.8188 ST 1565.0 SR 266.0 SS 439.5 TOE 1.1583 TRA-1.9582 TC3-3.6784 BAU 1.1367 CRT .8664 CRS -.9974 CST -.8751 RDE .2230 RRA .0221 RC3 .1357 FAU .03673 FDE .6237 FRA .0405 FC3-1.4516 BSP 14189 LSA 1629.5 M5A 240.4 SSA 15.9 EL1 1582.0 EL2 131.4 ALF 8.44 SG1 4507.1 SG2 295.3 THA 179.54 BOE 1.1796 BRA 1.9584 BC3 3.6809 FSP -429 ARRIVAL DATE JUN 4 1966 FLIGHT TIME 150.00 **BISTANCE 452.311** RL 147.10 LAL -.00 LOL 104.21 VL 26.986 GAL -4.98 AZL 85.56 MCA 227.75 SMA 123.31 ECC .21084 INC 4.4418 V1 30.287 RP 108.89 LAP -3.29 LOP 331.87 VP 38.896 GAP 10.17 AZP 92.99 TAL 199.34 TAP 67.09 RCA 97.31 APO 149.31 V2 34.800 RC 168.980 GL 26.33 GP -11.33 ZAL 120.17 ZAP 163.03 ETS 318.86 ZAE 129.89 ETE 189.78 ZAC 82.55 ETC 163.69 CLP-167.28 PLANETOCENTRIC CONIC C3 22.041 VHL 4.695 DLA 16.59 RAL 331.57 RAD 6567.9 VEL 11.976 PTH 2.13 VHP 6.902 DPA -19.60 RAP 351.78 ECC 1.3627 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2181.3 71.88 200.63 93.49 1 3 55 -27.34 0 17 34 2781.33 16 43 24 4338.13 80.46 -28.12 90.00 17 55 42 173.06 179.70 193.50 62.01 3738.1 .70 90.00 4.48 50.16 94.89 2 29 46 1888.8 -28.54 58.83 200.51 100.00 1 48 17 2488.77 17 55 22 4105.92 -29.53 19 3 48 60.61 3505.9 1.76 155.40 100.00 5.72 161.95 192.82 3 17 16 3 54 6 98.66 1610.4 28.29 110.00 -33.20 37.17 200.00 2210.37 98.66 3 54 6 56.85 19 48 50 190.89 3357.1 4.46 148.73 110.00 18 42 52 3957.08 8.88 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY SCT 4581.9 SCR 309.6 SC3 135.6 RRT - .0895 RRF .0391 RTF .8195 SCB 4592.4 R23 -.1133 R13 -.8194 57 1604.1 SR 277.6 55 444.7 TOE 1.1810 TRA-1.8209 TC3-3.9189 BAU 1.1556 ROE .2274 RRA .0079 RC3 .1458 FAU .03735 FOE .6095 FRA .0843 FC3-1.4669 BSP 14451 CRT .8926 CRS -.9970 CST -.8813 LSA 1671.2 MSA 234.2 SSA 17.1 EL1 1623.3 EL2 123.7 ALF 8.83 SG1 4582.0 SG2 308.3 THA 179.65 BOE 1.2027 BRA 1.8209 BC3 3.9216 FSP -427

FLIGHT TIME 144.00

Ē

```
FLIGHT TIME 152.00
                                                                                                                                 ARRIVAL DATE JUN 6 1966
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 457.967
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 26.917 GAL -4.54 A7L 85.71 HCA 230.91 SMA 122.89 ECC .21171 INC 4.2896 V1 30.287 RP 108.88 LAP -3.33 LOP 335.04 VP 36.850 GAP 10.34 A7P 92.71 TAL 197.43 TAP 68.34 RCA 96.87 APO 148.91 V2 34.805 RC 171.096 GL 25.90 GP -10.65 ZAL 117.89 ZAP 164.03 ETS 318.96 ZAE 130.14 ETE 189.27 ZAC 84.65 ETC 164.45 CLP-168.03
   PLANETOCENTRIC CONTC
    C3 21.106 VHL 4.594 DLA 17.18 RAL 334.13 RAD 6567.9 VEL 11.937 PTH 2.12 VMP 6.982 DPA -18.01 RAP 353.78 ECC 1.3474
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 21 59 2793.10
16 59 25 4305.45
1 53 13 2498.89
18 10 53 4074.89
                                                                             202.64
                                                                                              93.06
                                                                                                          1 8 32
                                                                                                                         2193.1
                                                                81.32
                                                                                                                                        -27.44
                                                  -28.16
       90.00
                                                                                                       18 11 11
                                                                              195.55
                                                                                               61.88
                                                                                                                          3705.5
                                                                                                                                           -.35
        90.00
                                                   3.44
                                                               177.87
                                                                                              94.50
                                                                                                         2 34 52
                                                                                                                          1898.9
                                                                                                                                         -28.65
                                                                                                                                                        50.89
                                                                              202.54
                                                 -29.5A
                                                                 59.57
       100.00
                                                                                              60.44 19 18 47
                                                                                                                          3474.9
                                                                                                                                                       153.70
      100.00
                                                   4.68
                                                               160.23
                                                                             194.87
                                                                                                                                            .71
                   3 23 14 2217.24
18 57 21 3929.30
                                                                                                                                                        28.80
                                                                                                         4 0 11
                                                                                                                          1617.2
                                                                                                                                        -31.75
      110.00
                                                -33.27
                                                                37.70
                                                                             202.05
                                                                                              98.36
                                                                                                       20 2 50
                                                                                              56.62
                                                                                                                         3329.3
                                                                                                                                           3.40
                                                                                                                                                       140.98
      110.00
                                                   7.84
                                                               147.24
                                                                             192.92
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 4650.1 SGR 321.9 SG3 134.2
RRT -.0589 RRF .0466 RTF .8199
SGB 4661.3 R23 -.0952 R13 -.8199
                                                                                                                      ST 1653.6 SR 289.1 SS 452.1
CRT .9171 CRS -.9949 CST -.8893
    TOE 1.2139 TRA-1.6733 TC3-4.1529 BAU 1.1726
    RDE .2318 RRA -.0051 RC3 .1541 FAU .03586
                                                                                                                     LSA 1723.6 MSA 226.5 SSA 18.2
    FDE .5986 FRA .1284 FC3-1.4711 BSP 14644
                                                                   SG1 4650.2 SG2 321.4 THA 179.77
                                                                                                                      ELI 1674.8 ELZ 113.8 ALF 9.15
    BDE 1.2358 BRA 1.6733 BC3 4.1558 FSP -420
                                                                       FLIGHT TIME 154.00
                                                                                                                                 ARRIVAL DATE JUN 8 1966
LAUNCH DATE JAN 5 1966
  HELIOCENTRIC CONIC
                                                                      DISTANCE 463.615
   RL 147.10 LAL -.00 LOL 104.21 VL 26.850 GAL -4.10 A7L 85.85 MCA 234.07 SMA 122.48 ECC .21279 INC 4.1504 V1 30.287 RP 108.86 LAP -3.36 LOP 338.21 VP 36.807 GAP 10.52 A7P 92.44 TAL 195.52 TAP 69.60 RCA 96.42 APO 148.55 V2 34.811 RC 173.196 GL 25.49 GP -10.06 ZAL 115.43 ZAP 164.96 ETS 318.86 ZAE 130.37 ETE 188.83 ZAC 86.80 ETC 165.12 CLP-168.76
   PLANETOCENTRIC CONIC
    C3 20.288 VHL 4.504 DLA 17.86 RAL 336.84 RAD 6567.8 VEL 11.902 PTH 2.11 VHP 7.069 DPA -16.49 RAP 355.81 ECC 1.3339

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 25 58 2809.52
                                                                            204.91
                                                                                             92.46
                                                                                                          1 12 47
                                                                                                                         2209.5
                                                 -28.22
                                                                82.52
       90.00
                                                                                              61.77 18 28 11
93.94 2 39 42
60.30 19 35 13
97.89 4 6 12
56.41 20 18 5
                                 4270.09
                                                   2.30
                                                               175.89
                                                                              197.84
                                                                                                                          3670.1
                                                                                                                                          -1.49
       90.00
                  1 57 49 2513.32
18 27 51 4041.53
3 29 5 2227.79
19 13 5 3899.83
                   17 17 1
                                                                              204.82
                                                                                                                          1913.3
                                                  -29.66
                                                                 60.64
      100.00
      100.00
                                                   3.56
                                                               158.39
                                                                              197.14
                                                                                                                          3441.5
                                                                                                                                                       151.87
                                                  -33.37
                                                                 38.50
                                                                             204.37
                                                                                                                          1627.8
                                                                                                                                                        29.57
      110.00
                                                               145.68
                                                                              195.18
                                                                                                                          3299.8
                                                                                                                                           2.27
                                                   6.74
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 4720.1 SGR 333.9 SG3 132.9
RRT -.0290 RRF .0545 RTF .8218
                                                                                                                     ST 1708.9 SR 300.3 SS 458.9
CRT .9385 CRS -.9913 CST -.8979
    TOE 1.2517 TRA-1.5200 TC3-4.3869 BAU 1.1907
    ROE .2360 RRA -.0171 RC3 .1602 FAU .03447
    FOE -5874 FRA .1696 FC3-1.4708 BSP 14907
BDE 1.2737 BRA 1.5201 BC3 4.3898 FSP -418
                                                                   SGB 4731.9 R23 -.0784 R13 -.8218
                                                                                                                      LSA 1781.5 MSA 217.1 SSA 19.4
                                                                   SG1 4720.1 SG2 333.7 THA 179.88
                                                                                                                     EL1 1732.1 EL2 102.3 ALF 9.40
                                                                                                                                ARRIVAL DATE JUN 10 1966
                                                                       FLIGHT TIME 156.00
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 469.253
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 26.784 GAL -3.64 AZL 85.98 MCA 237.24 SMA 122.08 ECC .21409 INC 4.0220 V1 30.287 RP 108.84 LAP -3.38 LOP 341.38 VP 36.765 GAP 10.70 AZP 92.18 TAL 193.60 TAP 70.84 RCA 95.95 APO 148.22 V2 34.817 RC 175.278 GL 25.06 GP -9.54 ZAL 112.81 ZAP 165.84 ETS 318.56 ZAE 130.58 ETE 188.45 ZAC 88.99 ETC 165.73 CLP-169.49
   PLANETOCENTRIC CONIC
    C3 19.585 VHL 4.425 DLA 18.61 RAL 339.69 RAD 6567.8 VEL 11.873 PTH 2.11 VHP 7.163 DPA -15.03 RAP 357.86 ECC 1.3223
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2230.5
                                                                           207.43
                                                                                           91.70 1 16 45
                                                                                                                                       -27.74
                                                                                                                                                        75.42
                   0 29 34 2830.46
                                                 -28.27
                                                               84.05
       90.00
                   17 36 11 4232.36
2 2 10 2531.88
                                                               173.79
                                                                             200.38
                                                                                              61.70
                                                                                                        18 46 43
                                                                                                                          3632.4
                                                                                                                                        -2.71
                                                                                                                                                       167.16
                                                   1.08
        90.00
                                                 -29.73
                                                                 62.01
                                                                             207.36
                                                                                              93.22
                                                                                                        2 44 22
                                                                                                                          1931.9
                                                                                                                                        -28.97
                                                                                                                                                        53.29
      100.00
                                                                                                       19 53 3
                                                                                                                          3406.2
                                                                                                                                        -1.62
                                                                                                                                                       149.93
                                                               156.45
                                                                             199.67
                                                                                              60.19
                                                   2.36
                   18 45 17
                                 4006.18
      100.00
                                                                                              97.27
                                                                                                         4 12 15
                                                                                                                          1641.8
                                                                                                                                        -32.13
                                                                                                                                                        30.61
                    3 34 53
                                                 -33.49
                                                                39.58
                                                                             206.96
                                 2241.80
                                                                                              97.27 4 12 15
56.22 20 34 32
      110.00
                                                                                                                          3269.0
                                                                                                                                        1.10
                                                                                                                                                       137.43
                                                               144.05
                                                                              197.67
                                                  5.57
      110.00
                   19 30 3
                                 3869.03
                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                   SGT 4786.2 SGR 345.5 SG3 131.4
                                                                                                                     ST 1772.5 SR 311.4 55 466.3
CRT .9568 CRS -.9864 CST -.9072
    TOE 1.2964 TRA-1.3578 TC3-4.6101 BAU 1.2078
    RDE .2404 RRA -.0280 RC3 .1641 FAU .03306
                                                                   RRT .0004 RRF .0643 RTF .8243
SGB 4798.6 R23 .0640 R13 .8243
SG1 4786.2 SG2 345.5 THA .00
                                                                                                                     LSA 1847.4 MSA 206.6 SSA 20.6
ELI 1797.4 EL2 89.3 ALF 9.57
    FDE .5773 FRA .2097 FC3-1.4614 BSP 15150
BDE 1.3185 BRA 1.3581 BC3 4.6130 FSP -415
                                                                                                                                 ARRIVAL DATE JUN 12 1966
                                                                       FLIGHT TIME 158.00
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 474.880
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 26.719 GAL -3.16 A7L 86.10 MCA 240.41 SHA 121.70 ECC .21560 INC 3.9023 V1 30.287 RP 108.82 LAP -3.39 LOP 344.55 VP 36.724 GAP 10.89 A7P 91.93 TAL 191.67 TAP 72.08 RCA 95.46 APO 147.93 V2 34.824 RC 177.341 GL 24.62 GP -9.08 ZAL 110.01 ZAP 166.68 ETS 318.06 ZAE 130.79 ETE 188.12 ZAC 91:22 ETC 166.27 CLP-170.20
   PLANETOCENTRIC CONIC
    C3 18.996 VHL 4.358 DLA 19.42 RAL 342.70 RAD 6567.8 VEL 11.848 PTH 2.10 VMP 7.264 DPA -13.61 RAP 359.94 ECC 1.3126
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                        2255.8
                   0 32 53 2855.79
17 56 54 4192.60
                                                  -28.31
                                                                85.90
                                                                             210.22
                                                                                             90.77
                                                                                                         1 20 29
                                                                                                                                        -27.90
                                                                                                                                                        77.26
        90.00
                                                                                                       19 6 47
                                                                                                                                          -3.98
                                                                                                                                                       164.93
                                                               171.57
                                                                              203.19
                                                                                               61.68
                                                                                                                          3592.6
                                 4192.60
                                                   - . 20
        90.00
                                                                                                         2 48 55
                                                                                                                                        -29.17
                                                                                                                                                        54.94
                    2 6 20 2554.42
                                                                              210.17
                                                                                               92.34
                                                                                                                          1954.4
                                                  -29.81
                                                                 63.68
       100.00
                                                                                                                                                       147.89
                   19 6 8
                                                                                               60.13 20 12 17
                                                                                                                          3369.2
                                                                                                                                         -2.87
                                                                154.42
                                                                              202.46
                                3969.21
                                                   1.11
      100.00
                                                                                                                                        -32.37
                                                                                                                                                        31.90
                    3 40 44
                                                 -33.63
                                                                40.91
                                                                              209.83
                                                                                              96.49 4 18 23
56.06 20 52 11
                                                                                                                          1659.1
                                 2259.09
       110.00
                   19 48 13 3837.30
                                                                                                                          3237.3
                                                                                                                                           -.12
                                                                                                                                                       136.17
                                                               142.39
                                                                              200.43
      110.00
                                                  4.37
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 4849.3 SGR 356.8 SG3 129.9
RRT .0293 RRF .0762 RTF .8272
SG8 4862.4 R23 .0519 R13 .8272
                                                                                                                     ST 1844.1 SR 322.5 55 474.3
CRT .9717 CRS -.9805 CST -.9166
    TOE 1.3477 TRA-1.1861 TC3-4.8187 BAU 1.2245
    ROE .2450 RRA -.0376 RC3 .1657 FAU .03165
FDE .5686 FRA .2494 FC3-1.4427 BSP 15389
                                                                                                                    LSA 1921.2 MSA 195.5 SSA 21.9
EL1 1870.6 EL2 75.1 ALF 9.66
```

BOE 1.3698 BRA 1.1867 BC3 4.8215 FSP -413

SG1 4849.3 SG2 356.7 THA .12

JPL TM 33-99

```
ARRIVAL DATE JUN 14 1966
                                                                       FLIGHT TIME 160.00
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 480.496
   RL 147.10 LAL -.00 LOL 104.21 VL 26.655 GAL -2.68 A7L 86.21 MCA 243.57 SMA 121.32 ECC .21735 INC 3.7898 VI 30.287 RP 108.79 LAP -3.39 LOP 347.73 VP 36.685 GAP 11.09 A7P 91.69 TAL 189.74 TAP 73.31 RCA 94.95 APO 147.69 V2 34.832 RC 179.385 GL 24.14 GP -8.67 7AL 107.05 7AP 167.47 ETS 317.34 7AE 131.00 ETE 187.83 7AC 93.48 ETC 166.76 CLP-170.91
   PLANETOCENTRIC CONIC
                                                                                                 2.09 VHP 7.372 DPA -12.22 RAP
    C3 18.524 VHL 4.304 DLA 20.27 RAL 345.88 RAD 6567.7 VEL 11.828 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                        -28.06
                                                                                                                         2285.4
                                                                                                                                                         79.41
                                                                                              89.68 1 24 2
                  0 35 56 2885.42
18 19 10 4151.14
                                                                             213.28
                                                                                                       19 28 21
       90.00
                                                  -28.32
                                                                88.07
                                                                                                                                                        162.60
                                                                                                                           3551.1
                                                                                                                                          -5.31
                                                                169.26
                                                                              206.29
                                                                                               61.72
                                                   -1.54
        90.00
                                                                                                                                                         56.87
                                                                                                           2 53 26
                                                                                                                           1980.8
                  2 10 25 2500.77
19 27 23 3931.01
                                                                                               91.32
                                                  -29.87
                                                                 65.64
                                                                              213.26
      100.00
                                                                                               60.11 20 32 54
95.57 4 24 43
                                                                                                                           3331.0
                                                                                                                                                        145.79
                                                                152.32
                                                                              205.53
      100.00
                                                    -.18
                                                                                                                                                         33.43
                                                                                                          4 24 43
                                                                                                                           1679.5
                    3 46 43 2279.48
20 7 34 3805.08
                                                  -33.78
                                                                 42.48
                                                                              212.98
      110.00
                                                                                               55.94 21 10 59
                                                                                                                           3205.1
                                                                                                                                          -1.35
                                                                                                                                                         134.49
                                                                140.70
                                                                             203.46
                  20 7 34
                                                  3.14
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 4903.6 SGR 367.8 SG3 128.2

RRT .0580 RRF .0913 RFF .8297

SGB 4917.4 R23 .0430 R13 .8297

SG1 4903.7 SG2 367.2 THA .25
                                                                                                                       ST 1925.7 SR 333.6 S5 483.7
CRT .9852 CR5 -.9736 CST -.9259
    TOE 1.4073 TRA-1.0017 TC3-4.9988 BAU 1.2386
    RDE .2501 RRA -.0458 RC3 .1651 FAU .03016
                                                                                                                       LSA 2004.7 MSA 184.4 SSA 23.1
    FOE .5621 FRA .2903 FC3-1.4097 BSP 15532
                                                                                                                       ELI 1953.4 ELZ 60.0 ALF 9.67
    BOE 1.4293 BRA 1.0026 BC3 5.0016 FSP -405
                                                                                                                                  ARRIVAL DATE JUN 15 1966
                                                                        FLIGHT TIME 162.00
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 486.097
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 26.593 GAL -2.18 AZL 86.32 HCA 246.74 SMA 120.95 ECC .21936 INC 3.6833 VI 30.287 RP 108.77 LAP -3.38 LOP 350.91 VP 36.647 GAP 11.30 AZP 91.46 TAL 187.80 TAP 74.54 RCA 94.42 APO 147.48 V2 34.840 RC 181.409 GL 23.61 GP -8.30 ZAL 103.94 ZAP 168.22 ETS 316.39 ZAE 131.20 ETE 187.57 ZAC 95.77 ETC 167.19 CLP-171.61
   PLANETOCENTRIC CONIC
    1.12 VIL 4.263 DLA 21.15 RAL 349.21 RAD 6567.7 VEL 11.813 PTH 2.09 VHP 7.488 DPA -10.87 RAP 4.14 ECC 1.2991
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                              88.45 1 27 27
61.82 19 51 25
90.14 2 57 58
60.14 20 54 50
94.52 4 31 18
55.86 21 30 52
                  0 38 48 2919.20
18 42 56 4108.39
2 14 27 2610.74
19 49 57 3892.08
                                                                             216.60
                                                                                                                          2319.2
                                                                                                                                         -28.19
                                                                                                                                                         81.87
                                                  -28.28
                                                                90.54
                                                                                                                           3508.4
                                                                                                                                                         160.19
                                                   -2.92
                                                                166.87
                                                                              209.68
                                                                                                                           2010.7
                                                                                                                                          -29.55
                                                                                                                                                          59.08
                                                  -29.89
                                                                67.87
                                                                              216.63
                                                                                                                           3292.1
                                                                                                                                                         143.64
                                                   -1.50
                                                                150.19
                                                                              208.90
       100.00
                  3 52 55 2302.70
20 27 59 3772.89
                                                                                                                           1702.7
                                                                                                                                         -32.92
                                                                                                                                                          35.18
                                                  -33.92
                                                                 44.28
                                                                              216.43
       110.00
                                                                                                                           3172.9
                                                                                                                                           -2.58
       110.00
                                                   1.91
                                                                139.02
                                                                              206.76
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 4959.7 SGR 378.0 SG3 126.5
RRT .0854 RRF .1057 RTF .8337
SGB 4974.1 R23 .0342 R13 .8337
                                                                                                                       ST 2008.4 SR 344.4 55 491.0
    TOE 1.4681 TRA -.8108 TC3-5.1581 BAU 1.2538
                                                                                                                       CRT .9910 CRS -.9660 CST -.9344
    ROE .2557 RRA -.0528 RC3 .1619 FAU .02877
                                                                                                                      LSA 2088.7 MSA 173.5 SSA 24.2
EL1 2037.2 EL2 45.4 ALF 9.65
           .5540 FRA .3286 FC3-1.3708 BSP 15749
                                                                    5G1 4959.8 SG2 376.7 THA
                                                                                                         . 38
    BDE 1.74902 BRA .8126 BC3 5.1606 FSP -402
                                                                                                                                  ARRIVAL DATE JUN 18 1966
                                                                        FLIGHT TIME 164.00
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 491.684
    RL 147.10 LAL -.00 LOL 104.21 VL 26.531 GAL -1.66 A7L 86.42 MCA 249.91 SMA 120.59 ECC .22163 INC 3.5818 VI 30.287 RP 108.74 LAP -3.36 LOP 354.08 VP 36.611 GAP 11.52 A7P 91.23 TAL 185.86 TAP 75.77 RCA 93.86 APO 147.32 VZ 34.849 RC 183.413 GL 23.02 GP -7.97 TAL 100.69 TAP 168.94 ETS 315.19 TAE 131.39 ETE 187.35 TAC 98.08 ETC 167.58 CLP-172.30
   PLANETOCENTRIC CONIC
    C3 17.948 VHL 4.236 DLA 22.04 RAL 352.71 RAD 6567.7 VEL 11.804 PTH 2.09 VHP 7.612 DPA -9.54 RAP
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           87.06 1 30 46
61.99 20 15 54
                                                                                                                       2357.0
                                                                            220.20
                                                                                                                                        -28.29
                   0 41 29 2957.01
19 8 9 4064.78
                                                                93.30
                                                                                                           1 30 46
        90.00
                                                  -28.18
                                                                                                                                           -8.03
                                                                                                                           3464.8
                                                    -4.31
                                                                164.43
                                                                              213.38
        90.00
                                                                                                                           2044.1
                                                                                                                                          -29.71
                                                                                                                                                          61.55
                    2 18 32 2644.08
                                                  -29.87
                                                                 70.35
                                                                              220.27
                                                                                               88.84
                                                                                                           3 2 36
       100.00
                                                                                               88.84 3 2 36
60.23 21 18 0
                                                                                                                           3252.9
                                                                                                                                          -6.77
                                                                148.04
                                                                              212.55
                                  3852.94
                                                    -2.83
                   20 13 47
       100.00
                                                                                               93.34 4 38 14
55.82 21 51 45
                                                                                                                                         -33.20
                                                                                                                                                          37.14
                                                                                                                           1728.5
                                                                 46.28
                                                                              220.17
                   3 59 25 2328.48
20 49 24 3741.31
                                                  -34.04
       110.00
                                                                                                                           3141.3
                                                                                                                                           -3.78
                                                                137.37
                                                                              210.35
                                  3741.31
       110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2092.8 SR 355.1 35 497.0
CRT .9956 CRS -.9578 CST -.9420
                                                                    SGT 5012.7 SGR 387.6 SG3 124.8
RRT .1119 RRF .1206 RTF .8384
SGB 5027.7 R23 .0264 R13 .8384
    TOE 1.5316 TRA -.6100 TC3-5.2840 BAU 1.2684
    ROE .2619 RRA .0585 RC3 .1561 FAU .02742
FDE .5455 FRA .3663 FC3-1.3224 BSP 15972
BDE 1.5538 BRA .6128 BC3 5.2863 FSP -399
                                                                                                                       LSA 2173.9 MSA 163.5 SSA 25.3
                                                                                                         .50
                                                                                                                       EL1 2122.5 EL2 32.9 ALF
                                                                    SG1 5012.9 SG2 385.1 THA
                                                                                                                                  ARRIVAL DATE JUN 20 1966
                                                                        FLIGHT TIME 166.00
LAUNCH DATE JAN 5 1966
                                                                        DISTANCE 497.254
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 26.471 GAL -1.13 AZL 86.52 MCA 253.08 SMA 120.24 ECC .22419 INC 3.4842 V1 30.287 RP 108.71 LAP -3.33 LOP 357.26 VP 36.576 GAP 11.75 AZP 91.01 TAL 183.91 TAP 77.00 RCA 93.28 APO 147.20 V2 34.858 RC 185.395 GL 22.37 GP -7.67 ZAL 97.31 ZAP 169.62 ETS 313.71 ZAE 131.58 ETE 187.15 ZAC 100.41 ETC 167.92 CLP-172.99
   PLANETOCENTRIC CONIC
    C3 17.857 VHL 4.226 DLA 22.93 RAL 356.37 RAD 6567.7 VEL 11.800 PTH 2.09 VHP 7.745 DPA
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                         87.68
                                                                                                           1 34 3
                                                                                                                          2398.6
                     0 44 4
                                  2998.64
                                                   -27.99
                                                                 96.33
                                                                              224.05
                                                                                                85.56
                                                                                                62.22 20 41 43
                                                                                                                            3420.8
                                                                                                                                            -9.39
                                                                                                                                                         155.20
                                                                               217.38
                   19 34 42
                                  4020.80
                                                   -5.72
                                                                 161.95
                                                                           224.18
                                                                                                87.42
                                                                                                            3 7 25
                                                                                                                            2080.5
                                                                                                                                           -29.83
                                                                                                                                                           64.25
                     2 22 45
                                  2680.48
                                                   -29.79
                                                                  73.05
       100.00
                                                                                                60.37 21 42 17
92.05 4 45 35
                                                                                                                            3214.2
                                                                                                                                            -8.05
                                                                                                                                                         139.30
                   20 38 43 3814.18
                                                   -4.14
                                                                 145.90
                                                                               216.51
       100.00
                                                                                                           4 45 35
                                                                                                                           1756.5
                                                                                                                                          -33.47
                                                                                                                                                          39.29
                     4 6 19 2356.47
                                                   -34.13
                                                                 48.47
                                                                               224.20
       110.00
                                                                                                         22 13 30
                                                                                                                            3111.0
                                                                                                                                           -4.93
                                                                                                                                                         129.57
                                                                                                55.82
                                                   -.45
                                                                               214.22
                   21 11 39 3710.96
                                                                134.79
       110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                 ST 2181.1 SR 365.9 SS 503.3

CRT .9974 CRS -.9491 CST -.9489

LSA 2262.7 MSA 155.1 SSA 26.1

EL1 2211.4 EL2 26.2 ALF 9.50
                                                                   5GT 5058.0 SGR 396.6 SG3 122.9
RRT .1385 RRF .1381 RTF .8429
     TOE 1.6004 TRA -.3952 TC3-5.3620 BAU 1.2806
     RDE .2691 RRA -.0625 RC3 .1481 FAU .02601
                                                                   SGB 5073.6 R23 .0208 R13 .8429
SG1 5058.3 SG2 392.7 THA .63
     FDE .5383 FRA .4054 FC3-1.2611 BSP 16093
```

BOE 1.6228 BRA .4001 BC3 5.3641 FSP -392

LAUNCH CATE JAN 5 1966

ARRIVAL CATE JUN 22 1966

```
01STANCE 502.804
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 YL 26.412 GAL -.58 AZL 86.61 MCA 256.26 SMA 119.90 ECC .22705 INC 3.3898 V1 30.287 RP 108.68 LAP -3.29 LOP .44 YP 36.543 GAP 11.99 AZP 90.81 TAL 181.97 TAP 78.23 RCA 92.68 APO 147.12 V2 34.868 RC 187.357 GL 21.65 GP -7.41 ZAL 93.83 ZAP 170.27 ETS 311.93 ZAE 131.77 ETE 186.98 ZAC 102.76 ETC 168.22 CLP-173.67
   PLANETOCENTRIC CONIC
                                                        .16 RAC 6567.7 YEL 11.802 PTH 2.09 YHP 7.887 CPA
                                                                                                                              -6.97 RAP 10.57 ECC 1.2948
    C3 17.911 VHL 4.232 DLA 23.78 RAL
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                               83.94 1 37 20
62.52 21 8 45
85.90 3 12 30
60.55 22 7 31
90.67 4 53 28
55.85 22 35 54
                                                                             228.15
                                                                                                                           2445.8
                  0 46 36 3043.80
20 2 28 3977.03
                                                                                                                                         -28.26
                                                                                                                                                          90.98
                                                 -27.71
                                                                 99.61
       90.00
                                                                                                                           3377.0
                                                                                                                                          -10.72
        90.00
                                                  -7.10
                                                                159.48
                                                                              221.68
                                                                                                                                                         152.68
                                                                                                                           2119.5
                                                                                                                                          -29.89
                                                 -29.64
                                                                 75.94
                                                                              228.34
                                                                                                                                                          67.15
      100.00
                    2 27 11
                                 2719.52
                                                                                                                                                        137.19
                                                                              220.75
                                                                                                                           3176.6
      100.00
                  21 4 34
                                 3776.55
                                                  -5.40
                                                                143.82
                                                                                                                                            -9.28
                                                                              228.50
                                                                                                                           1786.2
                                                                                                                                          -33.71
                                                                                                                                                          41.58
      110.00
                  4 13 42 2386.25
21 34 32 3682.59
                                                 -34.18
                                                                 50.79
                                                                134.31
                                                                              218.35
                                                                                                                           3082.6
                                                                                                                                            -6.0i
                                                                                                                                                         128.07
      110.00
                                                  -1.54
                                                                   HID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                   SGT 5104.4 SGR 404.7 SG3 121.1
RRT .1637 RRF .1553 RTF .8486
SGB 5120.4 R23 .0157 R13 .8486
                                                                                                                       ST 2260.8 SR 376.5 S5 507.0 CRT .9966 CR5 -.9401 CST -.9548
    TOE 1.6659 TRA -.1729 TC3-5.4015 BAU 1.2938
   ROE .2773 RRA -.0651 RC3 .1377 FAU .02472
FOE .5296 FRA .4427 FC3-1.1946 BSP 16296
                                                                                                                       LSA 2342.4 MSA 148.6 SSA 26.6
                                                                    SG1 5104.8 SG2 399.2 THA
    BOE 1.6888 BRA .1847 BC3 5.4033 FSP -390
                                                                                                                       EL1 2291.7 EL2 30.4 ALF 9.43
                                                                                                         .75
                                                                        FLIGHT TIME 170.00
LAUNCH DATE JAN 5 1966
                                                                                                                                  ARRIVAL CATE JUN 24 1966
                                                                       01STANCE 508.318
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 26.353 GAL -.01 ATL 86.70 MCA 259.44 SMA 119.57 ECC .23026 INC 3.2978 V1 30.287
RP 108.65 LAP -3.24 LOP 3.62 VP 36.510 GAP 12.26 ATP 90.61 TAL 180.03 TAP 79.47 RCA 92.03 APO 147.10 VZ 34.878
RC 189.297 GL 20.86 GP -7.16 ZAL 90.28 ZAP 170.88 ETS 309.78 ZAE 131.96 ETE 186.83 ZAC 105.13 ETC 168.48 CLP-174.35
   C3 18.122 VHL 4.257 OLA 24.59 RAL 4.06 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 8.041 OPA -5.72 RAP 12.73 ECC 1.2982 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 49 13 3091.57 -27.32 103.05 232.44 82.24 146.44
  PLANETOCENTRIC CONIC
                                                                                               62.86 21 36 32
84.34 3 18 0
       90.00
                  29 30 57
                                  3934.74
                                                   -8.42
                                                                157.08
                                                                              226.24
                                                                                                                            3334.7
                                                                                                                                           -11.99
                                                                                                                                                         150.22
      100.00
                    2 32 0 2760.17
                                                  -29.40
                                                                              232.72
                                                                                                                           2160.2
                                                                                                                                           -29.87
                                                                 78.94
                 21 30 51 3741.37
4 21 42 2416.96
                                                                                                60.77 22 33 12
      100.00
                                                   -6.57
                                                                141.87
                                                                              225.24
                                                                                                                           3141.4
                                                                                                                                          -10.42
                                                                                                       5 1 59
22 58 36
      110.00
                                                 -34.18
                                                                 53.19
                                                                              233.04
                                                                                                89.25
                                                                                                                           1817.0
                                                                                                                                          -33.90
                                                                                                                                                          43.96
                  21 57 38
                                                  -2.50
                                                                132.99
                                                                              222.72
                                                                                                55.90
                                                                                                                           3057.3
                                                                                                                                            -6.96
      110.00
                                  3657.34
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 5375.4 SGR 409.1 SG3 129.5
RRT .2030 RRF .1568 RTF .9077
                                                                                                                       5T 2244.4 SR 386.3 SS 492.8
CRT .9950 CR5 -.9427 CST -.9647
    TOE 1.6639 TRA -.0740 TC3-5.7381 BAU 1.3904
   ROE .2860 RRA -.0726 RC3 .1027 FAU .02941
FOE .5098 FRA .3978 FC3-1.4050 BSP 19674
BOE 1.6883 BRA .1037 BC3 5.7390 FSP -603
                                                                                                                       LSA 2326.3 MSA 130.5 55A 27.8
                                                                    568 5390.9 R23 -.0291 R13 .9077
                                                                                                                       EL1 2277.1 EL2 37.9 ALF
                                                                    SG1 5376.0 SG2 400.5 THA
                                                                                                        .89
                                                                                                                                 ARRIVAL DATE JUN 26 1966
                                                                       FLIGHT TIME 172.00
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 513.835
   RL 147.10 LAL -.00 LOL 104.21 VL 26.296 GAL .59 AZL 86.79 HCA 262.61 SMA 119.24 ECC .23380 INC 3.2077 VI 30.287 RP 108.62 LAP -3.18 LOP 6.81 VP 36.479 GAP 12.53 AZP 90.41 TAL 178.08 TAP 80.69 RCA 91.36 APO 147.12 VZ 34.889 RC 191.216 GL 20.00 GP -6.95 ZAL 86.63 ZAP 171.46 ETS 307.27 ZAE 132.15 ETE 186.69 ZAC 107.50 ETC 168.70 CLP-175.02
  PLANETOCENTRIC CONIC
    CS 18.501 VHL 4.301 DLA 25.35 RAL 8.10 RAD 6567.7 VEL 11.827 PTH 2.09 VHP 8.204 DPA -4.48 RAP 14.92 ECC 1.3045
                                               INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                           236.98
                                                                                            80.48 1 44 7
63.27 22 5 34
                                                                                                                                       -27.84
                                                                                                          1 44 7
                                                                                                                                                         95.22
                    0 51 44 3143.17
                                                  -26.79
                                                                106.73
                                                                                                                           2543.2
       90.00
                  21 0 41 3892.81
2 37 11 2803.17
                                                                                                                                                        147.76
       90.00
                                                   -9.71
                                                                154.67
                                                                              231.11
                                                                                                                           3292.8
                                                                                                                                         -13.22
                                                                                                                                                         73.36
                                                 -29.07
                                                                 82.10
                                                                              237.36
                                                                                               82.71
                                                                                                          3 23 54
                                                                                                                           2203.2
                                                                                                                                         -29.77
      100.00
                                                                                               61.02 22 59 42
                 21 57 54
                                                                140.01
                                                                              230.03
                                                                                                                           3108.0
                                                                                                                                         -11.4A
                                                                                                                                                        133.29
      100.00
                                 3708.04
                                                   -7.68
                                                                                                                                         -34.05
                                                                 55.70
                                                                              237.85
                                                                                               87.77
                                                                                                          5 11 11
                                                                                                                           1849.1
                                                                                                                                                         46.45
      110.00
                    4 30 22 2449.05
                                                 -34.12
                                                                                                        23 21 48
                                                                                                                                           -7.80
                                                                                                                                                        125.55
                                                                131.82
                                                                              227.37
                                                                                               55.96
                                                                                                                           3034.9
      110.00
                  22 21 13
                                  3634.92
                                                   -3.36
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 2398.4 SR 396.8 SS 509.9
CRT .9895 CRS -.9202 CST -.9638
                                                                   SGT 5178.2 SGR 418.6 SG3 117.2
RRT .2118 RRF .1932 RTF .8581
SGB 5195.1 R23 .0105 R13 .8581
    TOE 1.7946 TRA .3113 TC3-5.3128 BAU 1.3144
   ROE .2971 RRA -.0653 RC3 .1126 FAU .02198
FOE .5111 FRA .5221 FC3-1.0288 BSP 16604
                                                                                                                      LSA 2479.6 MSA 143.9 SSA 26.4
                                                                                                        .99
                                                                                                                       EL1 2430.4 EL2 56.7 ALF
    BOE 1.8190 BRA .3181 BC3 5.3140 FSP -379
                                                                    SG1 5178.9 SG2 409.1 THA
                                                                                                                                                            9.30
                                                                        FLIGHT TIME 174.00
                                                                                                                                  ARRIVAL DATE JUN 28 1966
LAUNCH DATE JAN 5 1966
                                                                       DISTANCE 519.309
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 104.21 VL 26.240 GAL 1.20 AZL 86.88 MCA 265.79 SMA 118.93 ECC .23773 INC 3.1189 VI 30.287 RP 108.58 LAP -3.11 LOP 9.99 VP 36.449 GAP 12.83 AZP 90.23 TAL 176.14 TAP 81.93 RCA 90.65 APO 147.20 VZ 34.900 RC 193.113 GL 19.08 GP -6.75 ZAL 82.97 ZAP 172.00 ETS 304.30 ZAE 132.33 ETE 186.58 ZAC 109.89 ETC 168.88 CLP-175.69
  PLANETOCENTRIC CONIC
                                                                                                                              -3.27 RAP 17.11 ECC 1.3138
                                                                                                 2.10 VHP 8.380 OPA
    C3 19.068 VHL 4.367 DLA 26.01 RAL 12.19 RAD 6567.8 VEL 11.851 PTH
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                             241.65
                                                                                               78.71
                                                                                                           1 47 48
                                                                                                                           2596.2
                                                                                                                                        -27.44
                    0 54 32
                                 3196.23
                                                 -26.14
                                                               110.48
       90.00
                                                                                               63.70 22 34 46
                                                                                                                                          -14.34
                                                                              236.19
                                                                                                                           3254.0
                                                                                                                                                        145.45
                  21 30 32
                                 3853.97
                                                 -10.89
                                                                152.43
       90.00
                                                                                                           3 30 32
                                                                                                                           2246.3
                                                                                                                                          -29.59
                                                                                                                                                          76.55
                    2 43 5
                                 2846.25
                                                 -28.66
                                                                 85.23
                                                                              242.15
                                                                                               81.11
      100.00
                                                                                                                           3079.2
                                                                                               61.27 23 25 59
                                                                                                                                         -12.40
                                                                                                                                                        131.63
                  22 24 40 3679.17
                                                  -8.63
                                                                138.39
                                                                              235.00
      100.00
                                2480.91
                                                                                                                           1880.9
                                                                                                                                                          48.93
                    4 39 51
                                                 -34.01
                                                                 58.18
                                                                              242.84
                                                                                               86.31
                                                                                                           5 21 12
                                                                                                                                         -34.14
      110.00
                                                                                               56.03 23 44 40
                                                                                                                           3017.3
                                                                                                                                           -8.46
                  22 44 23 3617.28
                                                                              232.18
                                                  -4.03
                                                                130.89
                                                                  HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5208.2 SGR 424.2 SG3 115.2
RRT .2355 RRF .2130 RTF .8640
                                                                                                                      ST 2449.9 SR 406.1 SS 508.1
CRT .9836 CRS -.9097 CST -.9674
    TOE 1.8544 TRA .5740 TC3-5.1846 BAU 1.3219
    RDE .3088 RRA -.0628 RC3 .0983 FAU .02067
FDE .5005 FRA .5619 FC3 -.9387 BSP 16673
BDE 1.8799 BRA .5774 BC3 5.1856 FSP -371
                                                                  SGB 5225.4 R23 .0085 R13 .8640
SG1 5209.2 SG2 412.2 THA 1.11
                                                                                                                     LSA 2530.4 MSA 145.1 SSA 25.6
EL1 2482.2 EL2 72.4 ALF 9.27
```

FLIGHT TIME 168.00

ARRIVAL DATE JUN 30 1966

FLIGHT TIME 176.00 LAUNCH DATE JAN 5 1966 DISTANCE 524.750 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 26.185 GAL 1.84 AZL 86.97 HCA 268.97 SMA 118.62 ECC .24209 INC 3.0307 VI 30.287 RP 108.55 LAP -3.03 LOP 13.18 VP 36.421 GAP 13.15 AZP 90.05 TAL 174.20 TAP 83.18 RCA 89.90 APO 147.34 VZ 34.912 RC 194.989 GL 18.10 GP -6.57 ZAL 79.31 ZAP 172.49 ETS 300.84 ZAE 132.50 ETE 186.47 ZAC 112.29 ETC 169.02 CLP-176.36 PLANETOCENTRIC CONIC C3 19.844 VHL 4.455 DLA 26.59 RAL 16.33 RAD 6567.8 VEL 11.884 PTH 2.11 VHP 8.570 OPA -2.09 RAP 19.31 ECC 1.3266 LNCH AZMTH LNCH TIME LI TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2650.4 0 57 42 3250.40 22 0 20 3818.67 105.93 -25.36 114.26 246.45 76.97 1 51 53 -26.91 90.00 143.33 23 3 58 3218.7 -15.33 -11.95 150.38 241.46 64.14 90.00 79.69 2 49 52 2888.85 22 50 52 3655.46 88.30 247.10 79.57 3 38 D 2288.8 -29.32 -28.17 100.00 61.49 23 51 47 84.88 5 32 6 56.08 24 7 4 130.26 3055.5 -13.13 137.06 240.13 100.00 -9.40 4 50 13 2512.23 23 6 59 3604.84 248.00 1912.2 -34.18 51.38 -33.84 60.61 110.00 123.94 3004.8 -A.93 130.24 237.14 -4.50 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2479.9 SR 414.5 55 502.9 CRT .9765 CRS -.8983 CST -.9702 SGT 5236.8 SGR 428.7 SG3 113.1 RRT .2578 RRF .2321 RTF .8704 TOE 1.9042 TRA .8458 TC3-5.0128 BAU 1.3301 ROE .3216 RRA -.0588 RC3 .0833 FAU .01946 FOE .4877 FRA .6011 FC3 -.8488 BSP 16838 LSA 2559.7 MSA 148.7 SSA 24.5 EL1 2512.7 EL2 88.2 ALF 9.28 SGB 5254.4 R23 .0065 R13 .8704 SG1 5238.0 SG2 414.1 THA 1.22 BOE 1.9312 BRA .8479 BC3 5.0135 FSP -368 ARRIVAL DATE JUL 2 1966 FLIGHT TIME 178.00 LAUNCH DATE JAN 5 1966 DISTANCE 530.153 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 26.131 GAL 2.51 AZL 87.06 HCA 272.16 SMA 118.32 ECC .24690 INC 2.9426 V1 30.287 RP 108.51 LAP -2.94 LOP 16.37 VP 36.393 GAP 13.50 AZP 89.89 TAL 172.28 TAP 84.44 RCA 89.11 APO 147.53 V2 34.924 RC 196.842 GL 17.07 GP -6.40 ZAL 75.67 ZAP 172.94 ETS 296.82 ZAE 132.68 ETE 186.38 ZAC 114.69 ETC 169.12 CLP-177.03 PLANETOCENTRIC CONIC -.92 RAP 21.53 ECC 1.3432 C3 20.852 VHL 4.566 OLA 27.06 RAL 20.46 RAD 6567.8 VEL 11.926 PTH 2.12 VHP 8.775 DPA LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 2704.4 -26.26 109.75 117.97 251.34 75.31 1 56 36 3304.44 -24.48 1 1 32 90.00 141.50 64.55 23 32 38 3166.3 -16.17 22 29 30 3788.30 -12.84 148.60 246.86 90.00 78.12 3 46 35 61.67 24 16 36 2329.8 -28.99 82.69 -27.63 91.23 252.17 100.00 2 57 45 2929.79 3038.2 -13.67 129.26 100.00 23 15 58 3638.18 -9.96 136.08 245.37 83.51 5 43 55 56.11 24 28 39 1942.5 -34.17 53.74 5 1 32 2542.45 -33.63 62.94 253.30 110.00 -9.17 23 28 40 -4.75 129.90 242.20 2998.3 123.59 3598.29 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 2493.1 SR 421.7 55 496.2 CRT .9681 CRS -.8860 CST -.9725 SGT 5260.7 SGR 432.2 SG3 111.0 RRT .2797 RRF .2518 RTF .8767 SGB 5278.5 R23 .0053 R13 .8768 TOE 1.9472 TRA 1.1329 TC3-4.7926 BAU 1.3362 ROE .3356 RRA -.0530 RC3 .0685 FAU .01825 FOE .4743 FRA .6420 FC3 -.7577 BSP 16959 BOE 1.9759 BRA 1.1342 BC3 4.7931 FSP -364 LSA 2572.0 MSA 154.6 SSA 23.2 5G1 5262.1 5G2 414.9 THA 1.32 EL1 2526.4 EL2 104.2 ALF 9.32 ARRIVAL CATE JUL 4 1966 FLIGHT TIME 180.00 LAUNCH DATE JAN 5 1966 DISTANCE 535.511 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 26.077 GAL 3.22 AZL 87.15 HCA 275.35 SMA 118.03 ECC .25222 INC 2.8541 VI 30.287 RP 108.47 LAP -2.84 LOP 19.56 VP 36.367 GAP 13.87 AZP 89.73 TAL 170.36 TAP 85.71 RCA 88.26 APO 147.80 V2 34.936 RC 198.673 GL 16.00 GP -6.25 TAL 72.08 ZAP 173.34 ETS 292.20 ZAE 132.84 ETE 186.30 ZAC 117.09 ETC 169.19 CLP-177.70 PLANETOCENTRIC CONIC C3 22.122 VHL 4.703 CLA 27.42 RAL 24.57 RAO 6567.9 VEL 11.979 PTH 2.14 VHP 8.997 CPA .22 RAP 23.76 ECC 1.3641 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 73.79 2 2 25 64.89 24 0 2 2756.5 -25.54 113.39 256.32 1 6 29 3356.45 -23.54 121.49 90.00 140.06 3164.8 -16.80 147.21 252.34 90.00 22 57 17 3764.79 -13.53 3 56 30 24 39 54 76.81 2367.8 -28.62 85.45 257.34 3 7 2 2967.83 -27.07 93.91 100.00 3028.6 -13.96 126.70 61.77 250.67 100.00 23 39 25 3628.64 -10.27 135.54 5 56 40 -34.11 55.98 5 13 49 2571.10 23 49 8 3598.14 82.23 1971.1 258.70 110.00 -33.39 65.14 2998.1 -9.17 123.54 24 49 6 247.33 56.11 -4.76 129.89 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY CIFFERENTIAL CORRECTIONS SGT 5280.0 SGR 434.8 SG3 109.0 RRT .3011 RRF .2721 RTF .8832 SGB 5297.9 R23 .0048 R13 .8832 SGI 5281.7 SG2 414.5 THA 1.43 ST 2488.8 SR 427.7 SS 488.3 CRT .9586 CRS -.8728 CST -.9746 TOE 1.9819 TRA 1.4349 TC3-4.5317 BAU 1.3404 ROE .3507 RRA -.0453 RC3 .0543 FAU .01707 FOE .4606 FRA .6841 FC3 -.6680 BSP 17069 BOE 2.0127 BRA 1.4356 BC3 4.5320 FSP -359 LSA 2566.8 MSA 162.2 SSA 21.8 EL1 2522.4 EL2 120.2 ALF 9.38 ARRIVAL DATE JUL 6 1966 FLIGHT TIME 182.00 LAUNCH DATE JAN 5 1966 DISTANCE 540.819 RL 147.10 LAL -.00 LOL 104.21 VL 26.025 GAL 3.95 AZL 87.24 MCA 278.53 SMA 117.74 ECC .25808 INC 2.7646 V1 30.287 RP 108.43 LAP -2.73 LOP 22.75 VP 36.341 GAP 14.27 AZP 89.59 TAL 168.46 TAP 86.99 RCA 87.36 APO 148.13 V2 34.948 RC 200.481 GL 14.91 GP -6.12 TAL 68.57 ZAP 173.67 ETS 286.95 ZAE 133.00 ETE 186.23 ZAC 119.49 ETC 169.21 CLP-178.38 PLANETOCENTRIC CONIC C3 23.690 VHL 4.867 DLA 27.66 RAL 28.60 RAD 6568.0 VEL 12.044 PTH 2.15 VHP 9.238 DPA 1.34 RAP 25.99 ECC 1.3899 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 13 18 3403.61 -22.61 124.63 261.37 72.48 2 10 2 2803.6 -24.79 116.64 90.00 23 22 39 3750.95 -13.93 146.39 257.82 65.09 24 25 10 3150.9 -17.17 139.21 75.68 4 7 58 61.78 1 5 6 81.05 6 10 19 56.08 1 12 7 2401.8 -28.23 87.90 96.29 262.59 3001.81 -26.52 100.00 3 17 56 3028.0 -13.98 128.66 -10.29 135.50 255.96 100.00 0 4 38 3627.97 5 27 1 0 12 2 1997.8 -34.01 58.06 2597.84 67.19 264.16 -33.13 110.00 -8.93 3004.7 123.94 130.23 252.45 110.00 3604.71 -4.51 MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY ST 2470.6 SR 432.0 SS 479.9 CRT .9477 CRS -.8585 CST -.9764 LSA 2547.8 MSA 171.3 SSA 20.4 EL1 2504.4 EL2 136.1 ALF 9.44 SGT 5294.5 SGR 436.3 SG3 107.0 RRT .3224 RRF .2931 RTF .8894 TOE 2.0100 TRA 1.7559 TC3-4.2339 BAU 1.3410 ROE .3668 RRA -.0358 RC3 .0414 FAU .01587 FDE .4469 FRA .7288 FC3 -.5798 85P 17101 BDE 2.0432 BRA 1.7562 BC3 4.2341 FSP -352 SGB 5312.4 R23 .0049 R13 .8894 SGI 5296.4 SGZ 412.8 THA 1.53

```
ARRIVAL CATE JUL 8 1966
                                                                            FLIGHT TIME 184.00
LAUNCH DATE JAN 5 1966
                                                                            DISTANCE 546.067
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.974 GAL 4.73 AZL 87.33 MCA 281.72 SMA 117.47 ECC .26456 INC 2.6735 VI 30.287 RP 108.39 LAP -2.62 LOP 25.94 VP 36.317 GAP 14.70 AZP 89.46 TAL 166.58 TAP 88.30 RCA 86.39 APO 148.54 VZ 34.961 RC 202.264 GL 13.81 GP -5.99 ZAL 65.17 ZAP 173.94 ETS 281.08 ZAE 133.15 ETE 186.16 ZAC 121.89 ETC 169.18 CLP-179.07
   PLANETOCENTRIC CONIC
     C3 25.596 VHL 5.059 OLA 27.60 RAL 32.53 RAD 6568.0 VEL 12.125 PTH 2.17 VHP 9.499 DPA
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                    1 23 3 3442.09
23 44 17 3750.51
3 30 37 3030.85
0 23 20 3636.99
5 41 5 2622.55
0 29 21 3616.06
                                                                                                 71.46
                                                                   127.16
                                                                                  266.50
                                                                                                                 2 20 25
                                                                                                                               2842.1 -24.13 119.26
        90.00
                                                    -21.80
                                                                                   263.22
                                                                                                     65.10 24 46 47
                                                                                                                                   3150.5
                                                                                                                                                  -17.18
                                                                    146.36
        90.00
                                                    -13.94
                                                                                                                4 21 8
                                                                                                                                                 -27.86
                                                                                                     74.73
                                                                                                                                  2430.9
                                                                     98.30
                                                                                   267.90
       100.00
                                                    -26.DI
                                                                                                                1 23 57 6 24 47
                                                                                                                                   3037.0
                                                                                                                                                  -13.71
                                                                                                                                                                 129.19
                                                                                                     61.68
                                                                    136.01
                                                                                   261.20
                                                    -10.00
       100.00
                                                                                                                                  2022.5
                                                                                                                                                 -33.89
                                                                                                     79.97
                                                                       257.55 56.02 1 29 39
MID-COURSE EXECUTION ACCURACY
SGT 5305.9 SGR 412
       110.00
                                                    -32.85
                                                                      69.06
                                                                                   269.66
                                                                                                                                  3018.1
                                                                                                                                                   -8.43
                                                                    130.93
      110.00
                                                  -4.00
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SGT 5305.9 SGR 436.5 SG3 105.0
RRT .3426 RRF .3131 RTF .8862
SGB 5323.8 R23 .0044 R13 .8962
SGI 5308.0 SG2 409.9 THA 1.62
                                                                                                                              ST 2433.0 SR 434.5 SS 469.7
CRT .9352 CRS -.8425 CST -.9779
     TOE 2.0253 TRA 2.0903 TC3-3.9196 BAU 1.3413
    ROE .3855 RRA -.0245 RC3 .0295 FAU .01477
FCE .4315 FRA .7740 FC3 -.4995 BSP 17197
BDE 2.0613 BRA 2.0905 BC3 3.9197 FSP -348
                                                                                                                             LSA 2509.1 MSA 181.3 SSA 19.0
EL1 2466.8 EL2 151.7 ALF 9.52
                                                                                                                                          ARRIVAL CATE JUL 10 1966
                                                                            FLIGHT TIME 186.00
   HELIOCENTRIC CONIC
                                                                            DISTANCE 551.244
    RL 147.10 LAL -.00 LOL 104.21 VL 25.924 GAL 5.54 A7L 87.42 MCA 284.92 SMA 117.20 ECC .27170 INC 2.5802 VI 30.287 RP 108.35 LAP -2.49 LOP 29.14 VP 36.294 GAP 15.17 AZP 89.34 TAL 164.71 TAP 89.63 RCA 85.35 APO 149.04 V2 34.974 RC 204.023 GL 12.71 GP -5.88 ZAL 61.89 ZAP 174.12 ETS 274.66 ZAE 133.28 ETE 186.10 ZAC 124.29 ETC 169.11 CLP-179.76
   PLANETOCENTRIC CONIC
    C3 27.893 VHL 5.281 DLA 27.83 RAL 36.33 RAD 6568.1 VEL 12.218 PTH 2.20 VMP 9.784 DPA 3.51 RAP 30.49 ECC 1.4590 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                2 34 28
1 7 43
                     1 36 39 3468.32
0 4 56 3766.74
                                                    -21.21
                                                                    128.88
                                                                                   271.74
                                                                                                     70.79
                                                                                                                                  2868.5
        on no
                                                                                                                                   3166.7
                                                                    147.32
                                                                                   268.44
                                                                                                     64.86
                                                    -13.47
        90.00
                                                                                                               4 35 57
1 40 10
6 39 56
1 45 33
                     3 45 2 3054.66
0 39 14 3655.83
                                                                                   273.25
                                                                                                      75.98
                                                                                                                                   2454.7
                                                    -25.58
                                                                      99.93
       100.00
                                                                    137.08
                                                                                   266.33
                                                                                                      61.49
                                                                                                                                   3055.8
                                                                                                                                                                  130.28
       100.00
                                                      -9.39
                                               -32.57
                                                                                   275.17
                                                                                                                                               -33.74
-7.69
                      5 55 51 2645.26
                                                                      70.77
                                                                                                      78.99
                                                                                                                                  2045.3
                                                                                                                                                                   61.73
      110.00
                                                                                                                                                                125.71
                                                                                                                               3038.0
   DIFFERENTIAL CORRECTIONS
TOE 2 0307
                                                                                                      55.95
                                                                    131.98
                                                                                    262.58
                                                      -3.24
                                                                    ORBIT DETERMINATION ACCURACY
                                                                                                                          ST 2381.7 SR 434.9 SS 459.4
    TOE 2.0303 TRA 2.4428 TC3-3.5915 BAU 1.3393
                                                                                                                          CRT .9210 CR5 -.8251 C51 -....
LSA 2456.7 M5A 192.1 55A 17.8
EL1 2415.3 EL2 167.1 ALF 9.59
    ROE .4009 RRA -.0115 RC3 .0193 FAU .01369
FOE .4161 FRA .8213 FC3 -.4249 BSP 17334
     BOE 2.0694 BRA 2.4428 BC3 5.5916 FSP -343
                                                                                                                                         ARRIVAL DATE JUL 12 1966
                                                                            FLIGHT TIME 188.00
LAUNCH DATE JAN 5 1966
                                                                           DISTANCE 556.340
    RL 147.10 LAL -.00 LOL 104.21 VL 25.875 GAL 6.41 AZL 87.52 MCA 288.11 SMA 116.93 ECC .27960 INC 2.4840 VI 30.287 RP 108.31 LAP -2.35 LOP 32.34 VP 36.271 GAP 15.69 AZP 89.23 TAL 162.88 TAP 90.99 RCA 84.24 APO 149.63 VZ 34.987 RC 205.757 GL 11.61 GP -5.77 ZAL 58.74 ZAP 174.21 ETS 267.82 ZAE 133.41 ETE 186.04 ZAC 126.68 ETC 168.99 CLP 179.53
   PLANETOCENTRIC CONIC
    C3 30.642 VHL 5.536 DLA 27.77 RAL 39.98 RAD 6568.2 VEL 12.329 PTH 2.22 VHP 10.096 DPA
    LNCH APATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ APATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     1 54 4 3482.65
0 16 37 3799.65
4 0 58 3073.57
0 52 24 3683.96
                                                                                277.08
                                                                                                   70.44 2 52 7
                                                                                                                                 2882.7 -23.37 122.00
                                                     -20.90
                                                                   129.79
        90.00
                                                                                                                1 19 56
4 52 12
                                                                                                                                  3199.6
                                                                                                                                                  -15.86
                                                                                   273.45
                                                                                                     64.39
                                                    -12.51
                                                                    149.26
                                                                                                                                  2473.6
                                                                                                                                                 -27.25
                                                                                                                                                                   93.01
                                                                                                     73.39
                                                    -25.22
                                                                   101.22
                                                                                  278.61
       100.00
                                                     -8.47 138.66
                                                                                                                1 53 48
6 55 34
1 59 47
                                                                                                                                                                 131.91
                                                                                                                                  3084.0
                                                                                                                                                 -12.25
                                                                                                     61.23
       100.00
                                                                                  271.33
                     6 11 8 2666.19
0 58 43 3664.10
                                                                                                                                                 -33.59
                                                                                                                                                                   63.35
                                                                                                                                  2066.2
                                                    -32.29
                                                                     72.34
                                                                                   280.66
                                                                                                     7A . 11
       110.00
                                                                    133.34
                                                                                   267.51
                                                                                                     55.88
                                                                                                                                  3064.1
                                                                                                                                                   -6.71
       110.00
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5314.4 SGR 433.7 SG3 101.1
RRT .3825 RRF .3542 RTF .9095
SGB 5332.0 R23 .0046 R13 .9096
SGI 5317.0 SG2 400.5 THA 1.80
                                                                                                                              ST 2327.7 SR 433.5 55 450.9
CRT .9051 CRS -.8069 CST -.9808
     TOE 2.0328 TRA 2.8199 TC3-3.2484 BAU 1.3307
    ROE .4188 RRA .0035 RC3 .0111 FAU .01258
FOE .4021 FRA .8728 FC3 -.3553 BSP 17255
                                                                                                                             LSA 2401.7 MSA 203.0 SSA 16.7
EL1 2360.7 EL2 181.7 ALF 9.63
     BOE 2.0755 BRA 2.8199 BC3 3.2484 FSP -335
                                                                                                                                          ARRIVAL DATE JUL 14 1966
LAUNCH DATE JAN 5 1966
                                                                            FLIGHT TIME 190.00
                                                                            DISTANCE 561.337
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.826 GAL 7.33 AZL 87.62 MCA 291.31 SMA 116.68 ECC .28835 INC 2.3842 VI 30.287 RP 108.27 LAP -2.22 LOP 35.53 VP 36.280 GAP 16.26 AZP 89.13 TAL 161.07 TAP 92.38 RCA 83.03 APO 150.32 V2 35.000 RC 207.465 GL 10.54 GP -5.68 ZAL 55.74 ZAP 174.20 ETS 260.74 ZAE 133.51 ETE 185.99 ZAC 129.06 ETC 168.81 CLP 178.82
   PLANETOCENTRIC CONIC
    C3 33.920 VHL 5.824 DLA 27.62 RAL 43.45 RAD 6568.3 VEL 12.462 PTH 2.25 VHP 10.437 DPA
                                                                                                                                       5.56 RAP 35.01 ECC 1.5582
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                3 12 17
1 28 20
                                                                                                     70.32
                                                                                                                                  2887.8
                                                                                                                                                  -23.27
                     2 14 9 3487.82
0 24 14 3845.65
                                                                                   282.47
                                                    -20.78
                                                                    130.12
                                                                                                                                   3245.6
                                                                                   278.23
                                                                                                     63.60
        90.00
                                                    -11.14
                                                                    151.95
                                                                                                                5 9 31 2 5 2
                    4 IB 2 3088.42
1 3 2 3720.27
6 26 44 2685.67
1 10 49 3695.80
                                                                                                                                   2488.4
                                                                                                                                                  -27.02
                                                                                                     72.94
                                                    -24.92
                                                                    102.23
                                                                                   283.96
                                                                                                                                   3120.3
                                                                                                                                                  -11.10
                                                     -7.27
                                                                    140.70
                                                                                   276.18
                                                                                                     60.93
                                                                                                                 7 11 30
                                                                                                                                  2085.7
                                                    -32.00
                                                                                   266.10
                                                                                                     77.29
                                                                     73.79
                                                                                                                2 12 25
                                                                   135.00
                                                                                                     55.83
                                                                                                                                   3095.8
                                                                                                                                                  -5.51
                                                                                   272.33
                                                     -1.03
                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5312.7 SGR 430.4 SG3 99.2

RRT .4015 RRF .3737 RTF .9165

SGB 5330.1 R23 .0041 R13 .9165

SGI 5315.5 SG2 394.0 THA 1.87
                                                                                                                              ST 2261.6 SR 429.8 SS 441.6
     TOE 2.0224 TRA 3.2139 TC3-2.9154 BAU 1.3221
                                                                                                                           CRT .8870 CRS -.7864 CST -.9822
LSA 2334.2 MSA 213.8 SSA 15.6
EL1 2293.7 EL2 195.7 ALF 9.64
    RDE .4369 RRA .0201 RC3 .0042 FAU .01157
FOE .3666 FRA .9254 FC3 -.2953 BSP 17332
     BOE 2.0690 BRA 3.2139 BC3 2.9154 FSP -331
```

ARRIVAL DATE JUL 16 1966

```
LAUNCH DATE JAN 5 1966
                                                                          DISTANCE 566.217
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.779 GAL 8.31 A7L 87.72 MCA 294.51 SMA 116.43 ECC .29803 INC 2.2798 V1 30.287 RP 108.23 LAP -2.07 LOP 38.74 VP 36.229 GAP 16.88 A7P 89.05 TAL 159.30 TAP 93.82 RCA 81.73 APO 151.13 V2 35.014 RC 209.146 GL 9.50 GP -5.59 7AL 52.90 ZAP 174.09 ETS 253.65 ZAE 133.60 ETE 185.94 ZAC 131.42 ETC 168.58 CLP 178.08
   PLANETOCENTRIC CONIC
                                                                                                                                    6.55 RAP 37.27 ECC 1.6224
    C3 37.819 VHL 6.150 DLA 27.40 RAL 46.74 RAD 6568.5 VEL 12.617 PTM 2.29 VMP 10.813 DPA
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                   130.15
                                                                                 287.85
                                                                                                   70.31
                                                                                                               3 33 37
                   2 35 29 3488.23
0 29 7 3900.20
                                                    -20.77
                                                                                                              1 34 7
                                                                                                                                 3300.2
                                                                                                                                                -13.01
                                                                                                    63.19
                                                                                  282.84
                                                                   155.10
                                                    -9.48
                                                                                                                                 2500.3
                                                                                                                                                -26.83
                                                                                  289.27
                                                                                                    72.58
                                                                                                               5 27 29
                    4 35 48 3100.34
1 11 28 3763.32
                                                                   103.03
                                                   -24.68
                                                                                                   72.58 5 27 29
60.63 2 14 12
76.53 7 27 30
55.82 2 23 32
                                                                                                                                                               136.44
                                                                                                                                 3163.3
                                                                                                                                                 -9.71
                                                                                  280.87
                                                                   143.09
       100.00
                                                     -5.84
                                                                                                                                                -33.24
                                                                                                                                2104.0
                    6 42 26 2704.05
1 21 20 3732.38
                                                                                  291.47
                                                   -31.72
                                                                    75.15
                                                                                                                                3132.4
                                                                                                                                                  -4.12
                                                                                                                                                                130.69
                                                                                  277.03
                                                       . 37
                                                                   136.90
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 2192.6 SR 424.2 SS 433.9
CRT .8666 CRS -.7648 CST -.9837
                                                                       SGT 5306.4 SGR 425.9 SG3 97.4
RRT .4201 RRF .3934 RTF .9234
     TOE 2.0053 TRA 3.6325 TC3-2.5885 BAU 1.3088
    ROE .4551 RRA .0385 RC3 -.0009 FAU .01057
FDE .3720 FRA .9819 FC3 -.2420 BSP 17385
BDE 2.0563 BRA 3.6327 BC3 2.5885 FSP -326
                                                                                                                             LSA 2263.9 MSA 224.1 SSA 14.7
EL1 2223.5 EL2 208.7 ALF 9.60
                                                                       SGB 5323.5 R23 .0037 R13 .9234
SGI 5309.5 SGZ 386.3 THA 1.94
                                                                                                                                        ARRIVAL DATE JUL 18 1966
                                                                           FLIGHT TIME 194.00
                                                                           DISTANCE 570.959
    RL 147.10 LAL -.00 LOL 104.21 VL 25.733 GAL 9.36 AZL 87.83 HCA 297.71 SHA 116.19 ECC .30879 INC 2.1699 VI 30.287 RP 108.19 LAP -1.92 LOP 41.94 VP 36.209 GAP 17.56 AZP 88.99 TAL 157.58 TAP 95.30 RCA 80.31 APO 152.06 V2 35.027 RC 210.800 GL 8.48 GP -5.51 ZAL 50.23 ZAP 173.88 ETS 246.77 ZAE 133.67 ETE 185.89 ZAC 133.76 ETC 168.28 CLP 177.32
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                       2.33 VHP 11.227 DPA
                                                                                                                                     7.49 RAP 39.53 ECC 1.6987
    C3 42.455 VHL 6.516 DLA 27.11 RAL 49.82 RAD 6568.6 VEL 12.799 PTH
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                              2887.0
                                                                                                              3 55 8
                                                                                                    70.34
                                                                                 293.16
                                                                   130.07
                      2 57 1 3486.95
                                                    -20.80
        90.00
                    0 32 12 3959.88
4 53 49 3110.42
1 18 6 3811.64
6 58 2 2721.71
1 30 22 3773.12
                                                                                                                                                                 151.68
                                                                                                                 1 38 12
                                                                                                                                  3359.9
                                                                                                                                                 -11.24
                                                                    158.51
                                                                                  287.27
                                                                                                     62.65
         90.00
                                                      -7.63
                                                                                                              5 45 39
2 21 37
7 43 24
2 33 15
                                                                                                                                                                  95.60
                                                                                                                                                 -26.67
                                                                                                                                  2510.4
                                                                    103.71
                                                                                  294.50
                                                                                                     72.28
                                                     -24.48
       100.00
                                                                                                                                                                139.16
                                                                                                    60.38
                                                                                                                                  3211.6
                                                                                                                                                 -8.13
       100.00
                                                      -4.22
                                                                   145.76
                                                                                  285.41
                                                                                                                                  2121.7
                                                                                                                                                -33.06
                                                                                                                                                                  67.60
                                                   -31.43
                                                                     76.44
                                                                                  296.75
                                                                                                    75.82
       110.00
                                                                                                                                                                 132.82
                                                    1.92
                                                                   139.03
                                                                                  281.59
                                                                                                    55.86
                                                                                                                                  3173.1
                                                                                                                                                  -2.57
       110.00
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                      HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       SGT 5296.1 SGR 420.2 SG3 95.6
RRT .4384 RRF .4129 RTF .9304
SGB 5312.7 R23 .0033 R13 .9304
SGI 5299.3 SG2 377.5 THA 2.00
                                                                                                                             ST 2123.2 SR 416.6 S5 428.0
CRT .8441 CR5 -.7422 CST -.9853
     TOE 1.9826 TRA 4.0777 TC3-2.2740 BAU 1.2907
     ROE .4733 RRA .0585 RC3 -.0045 FAU .00959
    FOE .3581 FRA 1.0424 FC3 -.1956 BSP 17420
BOE 2.0383 BRA 4.0781 BC3 2.2740 FSP -322
                                                                                                                             LSA 2193.1 HSA 233.5 SSA 13.8
                                                                                                                             EL1 2152.4 EL2 220.3 ALF 9.50
                                                                                                                                        ARRIVAL DATE JUL 20 1966
                                                                           FLIGHT TIME 196.00
LAUNCH DATE JAN 5 1966
                                                                           01STANCE 575.532
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.688 GAL 10.49 ATL 87.95 HCA 300.92 SHA 115.95 ECC .32076 INC 2.0533 V1 30.287 RP 108.15 LAP -1.76 LOP 45.14 VP 36.190 GAP 18.32 ATP 88.94 TAL 155.92 TAP 96.83 RCA 78.76 APO 153.14 V2 35.040 RC 212.427 GL 7.51 GP -5.43 ZAL 47.72 TAP 173.56 ETS 240.27 ZAE 133.70 ETE 185.83 ZAC 136.07 ETC 167.92 CLP 176.54
    PLANETOCENTRIC CONIC
     C3 47.973 VHL 6.926 DLA 26.77 RAL 52.71 RAD 6568.8 VEL 13.013 PTH 2.37 VHP 11.686 OPA 8.41 RAP 41.79 ECC 1.7895
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                             2885.7
                                                                                                                                              -23.31
                                                                                                                                                                122.20
                                                                                                 70.37 4 16 13
                     3 18 7 3485.73
0 34 7 4022.50
5 11 43 3119.56
                                                                   129.99
                                                                                298.36
                                                    -20.82
         90.00
                                                                                                                                                                155.30
                                                                                  291.55
                                                                                                    62.21
                                                                                                                1 41 9
                                                                                                                                 3422.5
                                                                                                                                                 -9.34
                                                                    162.05
         90.00
                                                      -5.66
                                                                                                              6 3 42
2 27 36
                                                                                                                                                                  96.23
                                                                                  299.64
                                                                                                    72.01
                                                                                                                                 2519.6
                                                                                                                                                 -26.52
                                                                   104.32
                                                    -24.28
        100.00
                                                                                                                                                                142.08
                                                                                                                                 3263.9
                                                                                                                                                  -6.41
                                                                                   289.79
                                                                                                    60.20
                                                                   148.64
        100.00
                     1 23 13 3863.91
                                                      -2.46
                                                                                                               7 59 D
                                                                                                                                                                  68.90
                                                                                                                                 2138.9
                                                                                                                                                - 32 . 86
                     7 13 21 2738.94
1 38 3 3817.29
                                                                                  301.92
                                                                                                    75.13
                                                    -31.14
                                                                     77.70
        110.00
                                                                                                                                                                135.13
                                                                                                                2 41 41
                                                                                                                                 3217.3
                                                                                                                                                  - . AA
                                                                                   286.01
                                                                                                     55.98
                                                     3.61
                                                                   141.34
        110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                        MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                       RRT .4569 RRF .4351 RTF .9373
SGB 5299.5 R23 .0031 R13 .9373
SGI 5286.7 SGZ 367.6 THA 2.06
                                                                                                                             ST 2059.3 SR 407.3 SS 424.8
CRT .8200 CRS -.7197 CST -.9871
     TOE 1.9602 TRA 4.5570 TC3-1.9713 BAU 1.2643
     ROE .4916 RRA .0803 RC3 -.0065 FAU .00856
FOE .3461 FRA 1.1088 FC3 -.1545 BSP 17343
BOE 2.0209 BRA 4.5577 BC3 1.9713 FSP -314
                                                                                                                            LSA 2128.0 MSA 241.3 SSA 13.0
                                                                                                                             EL1 2086.5 EL2 230.1 ALF 9.33
                                                                                                                                         APRIVAL CATE JUL 22 1966
                                                                            FLIGHT TIME 198.00
 LAUNCH DATE JAN 5 1966
                                                                            01STANCE 579.900
    HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.645 GAL 11.71 AZL 88.07 MCA 304.13 SMA 115.72 ECC .33410 INC 1.9284 V1 30.287 RP 108.11 LAP -1.60 LOP 48.35 VP 36.172 GAP 19.16 AZP 88.92 TAL 154.32 TAP 98.44 RCA 77.06 APO 154.39 V2 35.053 RC 214.027 GL 6.57 GP -5.37 ZAL 45.39 ZAP 173.14 ETS 234.28 ZAE 133.71 ETE 185.78 ZAC 138.36 ETC 167.47 CLP 175.73
    PLANETOCENTRIC CONIC
     C3 54.555 VHL 7.386 DLA 26.39 RAL 55.39 RAD 6569.0 VEL 13.263 PTH 2.42 VHP 12.197 DPA 9.28 RAP 44.04 ECC 1.8978 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                              4 36 32
1 43 16
6 21 20
2 32 24
8 14 9
                                                                                                                                 2885.5
                                                                                                                                                -23.32
                                                                                   303.44
                                                                                                   70.37
                     3 38 26
D 35 9
                                    3485.46
                                                     -20.83
                                                                    129.97
         90.00
                                                                                                                                  3486.7
                                                                                                                                                   -7.34
                                                                                                                                                                 158.96
                                                                                                     61.90
                                                                    165.66
                                                                                   295.68
                                    4086.71
                                                      -3.61
         90.00
                                                                                                                                  2528.4
                                                                                                                                                  -26.36
                                                                                                                                                                  96.85
                                                                                                     71.75
                                                                    104.91
                                                                                   304.65
                                    3128.42
                                                     -24.10
        100.00
                     5 29 11
                                                                                                                                                                 145.13
                                                                                                                                  3319.0
                                                                                                                                                  -4.56
                                                                                                     60.11
                                                                    151.66
                                                                                   294.01
        100.00
                      1 27 5
                                    3918.98
                                                        -.59
                      7 28 13
                                                                                                                                                                  70.19
                                                                                                     74.45
                                                                                                                                  2156.0
                                                                                                                                                 -32.66
                                                     -30.83
                                                                      78.94
                                                                                   306.95
                                    2755.98
        110.00
                                                                        ENU.Z9 56.19 2 48 57
HID-COURSE EXECUTION ACCURACY
SGT 5984 7 479
                                                                                                                                                      .91
                                                                                                                                  3264.2
                                                      5.39
                                                                    143.80
                                    3864.18
        110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 1994.3 SR 396.1 S5 422.8
CRT .7936 CRS -.6958 CST -.9888
LSA 2061.9 MSA 247.6 SSA 12.3
EL1 2019.3 EL2 238.0 ALF 9.09
                                                                        SGT 5264.7 SGR 405.4 SG3 92.3
RRT .4743 RRF .4520 RTF .9441
     TOE 1.9297 TRA 5.0643 TC3-1.6916 BAU 1.2338
     RDE .5095 RRA .1034 RC3 -.0076 FAU .00759
FDE .3339 FRA 1.1794 FC3 -.1204 BSP 17375
                                                                       SGB 5280.3 R23 .0025 R13 .9441
SG1 5268.2 SG2 356.6 THA 2.10
     BDE 1.9958 BRA 5.0654 BC3 1.6917 FSP -310
```

FLIGHT TIME 192.00

```
LAUNCH DATE JAN 5 1966
                                                                                FLIGHT TIME 200.00
                                                                                                                                               ARRIVAL CATE JUL 24 1966
   HELIOCENTRIC CONIC
                                                                               DISTANCE 584.017
    RL 147.10 LAL -.00 LOL 104.21 VL 25.602 GAL 13.03 A7L 88.21 MCA 307.34 SMA 115.51 ECC .34904 INC 1.7936 VI 30.287 RP 108.07 LAP -1.43 LOP 51.56 VP 36.154 GAP 20.11 A7P 88.91 TAL 152.79 TAP 100.13 RCA 75.19 APO 155.82 V2 35.067 RC 215.599 GL 5.67 GP -5.30 ZAL 43.24 ZAP 172.63 ETS 228.84 ZAE 133.67 ETE 185.72 ZAC 140.60 ETC 166.95 CLP 174.88
   PLANETOCENSAIC CONIC
    C3 62.432 VHL 7.901 DLA 25.96 RAL 57.85 RAD 6569.2 VEL 13.557 PTH 2.48 VHP 12.768 DPA 10.12 RAP 46.26 ECC 2.0275 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ.RT ASC INJ.AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      1 29 55 3913.14
                                                                                                                     4 55 52
1 44 42
                                                                                                                                       2886.5
                                                                                       308.35
                                                                                                         70.35
                                                                                                                                                         -23.30
                                                       -20.81
                                                                       130.04
         90.00
                                                                       169.28
                                                                                       299.67
                                                                                                          61.72
                                                                                                                                        3551.6
                                                                                                                                                         -5.29
                                                                                                                                                                         162.63
         90.00
                                                       -1.52
                                                                                                                    6 38 20
2 36 10
                                                                                       309.51
                                                                                                          71.50
                                                                                                                                        2537.4
                                                                                                                                                                          97.47
                                                      -23.90
                                                                       105.51
                                                                                                                                                         -26.21
       100.00
                                                                                                          60.13
                                                                                                                                        3375.9
                                                                                                                                                                         148.27
       100.00
                                                         1.34
                                                                       154.79
                                                                                       298.08
                                                                                                                                                         -2.64
                                                                                                                    8 28 44
2 55 9
                                                                                                                                        2173.0
                                                                                                                                                                          71.46
       110.00
                                                      -30.52
                                                                        80.16
                                                                                       311.83
                                                                                                          73.79
                                                                                                                                                         -32.43
                                                                                                                                                          2.78
                                                                                       294.43
                                                                                                         56.50
                                                                                                                                        3313.1
                                                                                                                                                                         140.13
       110.00
                                                        7.24
                                                                       146.39
                                                                          MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                          RIGT 5242.1 SGR 396.0 SG3 90.7
RRT .4913 RRF .4707 RTF .9507
SGB 5257.0 R23 .0019 R13 .9508
SG1 5245.7 SG2 344.7 THA 2.13
                                                                                                                                   ST 1934.3 SR 383.4 55 423.3
CRT .7660 CRS -.6721 CST -.9905
    TOE 1.8983 TRA 5.6097 TC3-1.4311 BAU 1.1945
    RDE .5271 RRA .1279 RC3 -.0076 FAU .00658
FOE .3229 FRA 1.2565 FC3 -.0912 BSP 17387
                                                                                                                                   LSA 2001.1 MSA 251.8 SSA 11.6
    BOE 1.9701 BRA 5.6111 BC3 1.4312 FSP -305
                                                                                                                                    ELI 1956.9 ELZ 243.7 ALF 8.77
                                                                               FLIGHT TIME 202.00
                                                                                                                                                ARRIVAL DATE JUL 26 1966
LAUNCH DATE JAN 5 1966
                                                                               DISTANCE 587.825
  HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.561 GAL 14.48 A7L 88.35 MCA 310.55 SMA 115.30 ECC .36579 INC 1.6466 V1 30.287 RP 108.03 LAP -1.25 LOP 54.77 VP 36.138 GAP 21.16 A7P 88.93 TAL 151.37 TAP 101.92 RCA 73.12 APO 157.47 V2 35.080 RC 217.144 GL 4.81 GP -5.25 ZAL 41.27 ZAP 172.02 ETS 223.95 ZAE 133.59 ETE 185.66 ZAC 142.80 ETC 166.34 CLP 173.98
   PLANETOCENTRIC CONIC
    C3 71.902 VHL 8.479 DLA 25.51 RAL 60.11 RAD 6569.4 VEL 13.902 PTH 2.54 VHP 13.408 DPA 10.92 RAP 48.47 ECC 2.1833 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 15 58 3488.92 -20.75 130.20 313.08 70.29 5 14 7 2888.9 -23.25 122.42
                                                                                                                                                          -3.22
        90.00
                     0 35 18 4216.57
6 2 7 3146.69
1 31 50 4034.03
                      0 35 18
                                     4216.57
                                                           .57
                                                                       172.90
                                                                                       303.51
                                                                                                          61.69
                                                                                                                       1 45 34
                                                                                                                                         3616.6
                                                                                                                                                                         166.27
                                                                                                                    6 54 34
2 39 4
8 42 39
                                                       -23.70
                                                                                                          71.23
                                                                                                                                         2546.7
       100.00
                                                                       106.13
                                                                                       314.19
                                                                                                                                                         -26.04
                                                                                                                                                                          98.11
       100.00
                                                         3.31
                                                                       157.98
                                                                                       302.00
                                                                                                          60.27
                                                                                                                                        3434.0
                                                                                                                                                            -.68
                                                                                                                                                                         151.45
                                   2789.93
       110.00
                      7 56 9
                                                      -30.19
                                                                        81.37
                                                                                       316.53
                                                                                                          73.15
                                                                                                                                        2189.9
                                                                                                                                                                          72.73
       110.00
                       1 54 17
                                     3963.56
                                                       9.12
                                                                      149.07
                                                                                       298.43
                                                                                                          56.91
                                                                                                                      3 0 21
                                                                                                                                        3363.6
                                                                                                                                                            4.70
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 5215.7 SGR 385.5 SG3 89.2
RRT .5078 RRF .4891 RTF .9572
                                                                                                                                    ST 1879.5 SR 369.4 55 426.5
CRT .7374 CR5 -.6489 CST -.9921
    TOE 1.8667 TRA 6.1979 TC3-1.1910 BAU 1.1449
    RDE .5443 RRA .1536 RC3 -.0069 FAU .00552
FDE .5153 FRA 1.3411 FC3 -.0664 BSP 17380
BDE 1.9444 BRA 6.1998 BC3 1.1910 FSP -301
                                                                          SGB 5230.0 R23 .0012 R13 .9572
SGI 5219.4 SG2 331.9 THA 2.16
                                                                                                                                 LSA 1945.9 MSA 253.8 SSA 10.9
EL1 1899.5 EL2 246.9 ALF 8.39
                                                                                                                                               ARRIVAL DATE JUL 28 1966
                                                                               FLIGHT TIME 204.00
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                              01STANCE 591.248
    RL 147.10 LAL -.00 LOL 104.21 VL 25.522 GAL 16.06 AZL 88.52 HCA 313.76 SMA 115.09 ECC .38466 INC 1.4847 V1 30.287 RP 107.99 LAP -1.07 LOP 57.98 VP 36.123 GAP 22.36 AZP 88.97 TAL 150.06 TAP 103.82 RCA 70.82 APO 159.37 V2 35.092 RC 218.662 GL 3.99 GP -5.19 ZAL 39.48 ZAP 171.31 ETS 219.57 ZAE 133.45 ETE 185.59 ZAC 144.94 ETC 165.62 CLP 173.02
   PLANETOCENTRIC CONIC
    C3 83.350 VHL 9.130 DLA 25.04 RAL 62.15 RAD 6569.6 VEL 14.307 PTH 2.60 VMP 14.131 DPA 11.67 RAP 50.63 ECC 2.3717 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 33 0 3492.57 -20.67 130.43 317.61 70.20 5 31 13 2892.6 -23.18 122.66
                      0 34 32 4281.12
6 17 18 3156.32
                                                         2.65
                                                                      176.51
                                                                                      307.19
                                                                                                         61.80
                                                                                                                     1 45 53
                                                                                                                                        3681.1
                                                                                                                                                         -1.14
                                                                                                                                                                        169.55
        90.00
                                                                                                         70.96 7 9 54
60.53 2 41 8
                     6 17 18
                                                      -23.49
                                                                      106.76
                                                                                      318.68
                                                                                                                                       2556.3
                                                                                                                                                        -25.87
                                                                                                                                                                         98.77
       100.00
                                                                                      305.75
                                                                                                                                        3492.6
                                                                                                                                                          1.31
                                                                                                                                                                        154.57
                                    4092.60
                                                         5.28
                                                                      161.21
                      1 32 55
       100.00
                      8 9 1 2806.81
                                                                                      321.03
                                                                                                         72.51 8 55 48
                                                                                                                                       2206.8
                                                                                                                                                        -31.95
                                                                                                                                                                          73.98
                                                      -29.85
                                                                        82.57
       110.00
                                                                                                         57.43
                                                                                                                      3 4 37
                                                                                                                                        3414.9
                                                                                                                                                         6.64
                                                                                                                                                                        145.48
                      1 57 42
                                    4014.88
                                                      11.02
                                                                      151.84
                                                                                      302.26
       110.00
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5187.6 SGR 373.9 SG3 87.8
RRT .5242 RRF .5075 RTF .9634
SGB 5201.1 R23 .0007 R13 .9634
SGI 5191.3 SG2 318.2 THA 2.17
                                                                                                                                  ST 1832.6 SR 354.2 SS 433.3
CRT .7092 CRS -.6276 CST -.9937
    TOE 1.8416 TRA 6.8393 TC3 -.9693 BAU 1.0801
    RDE .5613 RRA .1804 RC3 -.0054 FAU .00432
FDE .3063 FRA 1.4356 FC3 -.0449 BSP 17247
BDE 1.9252 BRA 6.8417 BC3 .9693 FSP -294
                                                                                                                                  LSA 1899.3 MSA 253.2 SSA 10.3
ELI 1850.1 EL2 247.4 ALF 7.95
                                                                               FLIGHT TIME 206.00
                                                                                                                                               ARRIVAL DATE JUL 30 1966
LAUNCH DATE JAN 5 1966
                                                                              DISTANCE 594.184
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.484 GAL 17.82 AZL 88.70 MCA 316.98 SMA 114.90 ECC .40598 INC 1.3043 V1 30.287 RP 107.95 LAP -.89 LOP 61.19 VP 36.108 GAP 23.71 AZP 89.05 TAL 148.89 TAP 105.87 RCA 68.26 APO 161.55 V2 35.105 RC 220.152 GL 3.21 GP -5.14 ZAL 37.89 ZAP 170.50 ETS 215.66 ZAE 133.24 ETE 185.52 ZAC 147.00 ETC 164.81 CLP 172.00
   PLANETOCENTRIC CONIC
    C3 97.282 VHL 9.863 DLA 24.55 RAL 63.97 RAD 6569.9 VEL 14.786 PTH 2.67 VMP 14.950 DPA 12.38 RAP 52.75 ECC 2.6010
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                    3497.19
                                                       -20.56
                                                                      130.73
                                                                                      321.89
                                                                                                         70.09
                                                                                                                     5 47 8
                                                                                                                                      2897.2
                                                                                                                                                       -23.09
                                                                                                                                                                       122.97
        90.00
                      4 48 51
                                                                                                                     1 45 38
                      0 33 13
                                   4344.87
                                                        4.70
                                                                       180.08
                                                                                       310.70
                                                                                                         62.04
                                                                                                                                        3744.9
                                                                                                                                                            . 92
                                                                                                                                                                         173.43
                      6 31 31 3166.17
1 33 14 4151.12
                                                                                                                                        2566.2
                                                       -23.27
                                                                       107.41
                                                                                       322.93
                                                                                                         70.69
                                                                                                                      7 24 17
                                                                                                                                                         -25.69
                                                                                                                                                                          99.45
       100.00
                                                                                                                    2 42 25
                                                                                                                                        3551.1
                                                                                                                                                                        157.88
                                                         7.22
                                                                      164.46
                                                                                       309.32
                                                                                                         60.92
                                                                                                                                                          3.29
       100.00
                      8 21 3 2823.47
                                                      -29.50
                                                                       83.74
                                                                                      325.29
                                                                                                         71.90
                                                                                                                      987
                                                                                                                                        2223.5
                                                                                                                                                       -31.69
                                                                                                                                                                          75.21
       110.00
                                                                                                                      3 7 57
                                                                      154.67
                      2 0 11 4066.58
                                                                                      305.93
                                                                                                         58.07
                                                                                                                                        3466.6
                                                                                                                                                          A.5A
                                                                                                                                                                        148.22
       110.00
                                                   12.90
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                         MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 5152.9 SGR 360.9 SG3 86.4

RRT .5392 RRF .5244 RTF .9691

SGB 5165.5 R23 .0001 R13 .9691

SGI 5156.5 SG2 303.7 THA 2.17
                                                                                                                               ST 1787.3 SR 337.9 SS 442.3
CRT .6806 CRS -.6064 CST -.9950
    TOE 1.8142 TRA 7.5307 TC3 -.7708 BAU 1.0025
    ROE .3776 RRA .2077 RC3 -.0037 FAU .00305
FDE .2998 FRA 1.5390 FC3 -.0271 BSP 17243
                                                                                                                                 LSA 1855.1 MSA 250.4 SSA 9.7
EL1 1802.3 EL2 245.5 ALF 7.47
    BDE 1.9040 BRA 7.5335 BC3 .7708 FSP -290
```

ARRIVAL DATE AUG 1 1966 FLIGHT TIME 208.00 LAUNCH DATE JAN 5 1966 DISTANCE 596.505 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 25.449 GAL 19.78 AZL 88.90 HCA 320.20 SHA 114.72 ECC .43016 INC 1.1005 V1 30.287 RP 107.91 LAP -.70 LOP 64.41 VP 36.095 GAP 25.26 AZP 89.15 TAL 147.90 TAP 108.09 RCA 65.37 APO 164.07 V2 35.117 RC 221.615 GL Z.47 GP -5.09 ZAL 36.50 ZAP 169.56 ETS 212.15 ZAE 132.94 ETE 185.43 ZAC 148.98 ETC 163.88 CLP 170.89 PLANETOCENTRIC CONIC 2.75 VHP 15.886 DPA 13.03 RAP 54.80 ECC 2.8822 C3 114.369 VHL 10.694 DLA 24.04 RAL 65.56 RAD 6570.2 VEL 15.353 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -22.99 2902.4 5 3 27 3502.43 0 31 19 4407.48 -20.44 131.06 325.91 69.96 6 1 50 90.00 3807.5 2.94 314.01 62.42 1 44 46 6.68 90.00 -25.50 6 44 41 3176.02 1 32 45 4209.11 7 37 37 2576.0 -23.05 108.06 326.92 70.42 100.00 161.08 3609.1 5.24 312.70 61.41 2 42 55 167.71 9.13 100.00 -31.42 8 32 11 2839.70 2 1 45 4118.20 2239.7 329.28 71.31 9 19 31 -29.15 84.88 110.00 10.50 309.40 58.80 3 10 23 3518.2 157.53 14.74 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5114.4 SGR 346.7 SG3 85.0 RRT .5532 RRF .5404 RTF .9745 SGB 5126.1 R23 -.0005 R13 .9745 SGI 5118.0 SG2 288.6 THA 2.15 ST 1746.9 SR 320.7 SS 454.9 CRT .6532 CRS -.5868 CST -.9962 TOE 1.7936 TRA 8.2865 TC3 -.5916 BAU .9046 ROE .5936 RRA .2351 RC3 -.0018 FAU .00158 FOE .2954 FRA 1.6548 FC3 -.0119 8SP 17210 LSA 1817.0 MSA 245.1 SSA 9.1 EL1 1759.7 EL2 241.1 ALF 6.97 BOE 1.8893 BRA 8.2898 BC3 .5916 FSP -286 ARRIVAL DATE AUG 3 1966 FLIGHT TIME 210.00 LAUNCH DATE JAN 5 1966 DISTANCE 598.034 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 25.416 GAL 21.98 AZL 89.13 MCA 323.41 SMA 114.56 ECC .45769 INC .8671 V1 30.287 RP 107.87 LAP -.52 LOP 67.62 VP 36.084 GAP 27.05 AZP 89.30 TAL 147.11 TAP 110.53 RCA 62.13 APO 166.99 V2 35.130 RC 223.050 GL 1.76 GP -5.04 ZAL 35.33 ZAP 168.53 ETS 209.00 ZAE 132.54 ETE 185.33 ZAC 150.85 ETC 162.85 CLP 169.68 C3 135.510 VHL 11.641 DLA 23.53 RAL 66.91 RAD 6570.5 VEL 16.026 PTH 2.83 VHP 16.960 DPA 13.64 RAP 56.76 ECC 3.2301 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 16 48 3507.87 -20.31 131.41 329.63 69.84 6 18 18 2007 0 PLANETOCENTRIC CONIC 317.10 62.92 90.00 0 28 45 4468.63 8.60 187.08 3185.57 4266.17 2855.22 100.77 2585.6 -25.32 330.61 70.16 7 49 51 6 56 46 -22.83 108.68 100.00 7 49 51 2 42 35 164.25 3666.2 7.14 170.95 315.85 62.Ö2 100.00 1 31 28 10.97 77.54 -31.16 70.75 9 29 56 2255.2 8 42 21 -28.81 85.95 332.97 110.00 12.36 2 2 22 4169.27 16.52 160.42 312.66 59.64 3 11 52 3569.3 110.00 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1710.4 SR 302.8 SS 471.4 SGT 5071.8 SGR 331.2 SG3 83.7 RRT .5660 RRF .5550 RTF .9793 TOE 1.7821 TRA 9.1158 TC3 -.4312 BAU .7811 CRT .6275 CRS -.5692 CST -.9972 ROE .6092 RRA .2621 RC3 .0003 FAU-.00018 FOE .2935 FRA 1.7850 FC3 .0011 BSP 17150 BDE 1.8834 BRA 9.1195 BC3 .4312 FSP -282 LSA 1784.0 MSA 237.7 SSA 8.5 SG8 5082.6 R23 -.0011 R13 .9793 EL1 1721.1 EL2 234.3 ALF SG1 5075.3 SG2 272.9 THA 2.12 ARRIVAL DATE AUG 5 1966 FLIGHT TIME 212.00 LAUNCH DATE JAN 5 1966 **DISTANCE 598.540** HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 25.386 GAL 24.47 AZL 89.40 MCA 326.64 SMA 114.41 ECC .48913 INC .5950 V1 30.287 RP 107.84 LAP -.33 LOP 70.84 VP 36.074 GAP 29.11 AZP 89.50 TAL 146.59 TAP 113.23 RCA 58.45 APO 170.37 V2 35.141 RC 224.456 GL 1.08 GP -4.99 ZAL 34.39 ZAP 167.33 ETS 206.13 ZAE 132.01 ETE 185.21 ZAC 152.58 ETC 161.71 CLP 168.34 PLANETOCENTRIC CONIC C3 161.922 VML 12.725 DLA 23.00 RAL 68.01 RAD 6570.8 VEL 16.830 PTH 2.91 VMP 18.201 DPA 14.19 RAP 58.61 ECC 3.6648 C3 161,922 VHL 12.725 OLA 23.00 RAL 68.01 RAD 6570.8 VEL 16.830 PTH 2.91 VMP 18.201 OPA 14.19 RAP 58.61 ECC 3.6648

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 28 51 3513.06 -20.19 131.74 333.00 69.71 6 27 24 2913.1 -22.77 124.02
90.00 0 25 26 4528.06 10.42 190.50 319.93 63.52 1 40.54 3928.1 6.78 183.71
100.00 7 7 40 3194.44 -22.52 109.26 333.96 69.92 8 0.54 2594.4 -25.15 101.38
100.00 1 29 18 4521.91 12.73 174.15 318.74 62.72 2 41.20 3721.9 8.98 167.37
110.00 8 51 28 2869.70 -28.48 86.95 336.31 70.25 9 39.17 2269.7 -30.90 78.59
110.00 2 1 59 4219.41 18.22 163.31 315.67 60.56 3 12.19 3619.4 14.16 156.55 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 1678.1 SR 284.4 55 492.8 SGT 5026.7 SGR 314.6 SG3 82.6 TOE 1.7880 TRAID.0329 TC3 -.2876 BAU .6227 CRT .6047 CRS -.5545 CST -.9980 RRT .5774 RRF .5681 RTF .9836 5G8 5D36.5 R23 -.0016 R13 .9836 ROE .6247 RRA .2879 RC3 .0023 FAU-.00238 LSA 1757.2 MSA 228.1 SSA FDE .2956 FRA 1.9332 FC3 .0127 BSP 16962 BDE 1.8940 BRAID.0370 BC3 .2876 FSP -276 7.9 EL1 1687.1 EL2 225.3 ALF 5.96 SG1 5030.0 SG2 256.7 THA 2.08 ARRIVAL DATE AUG 7 1966 FLIGHT TIME 214.00 LAUNCH DATE JAN 5 1966 DISTANCE 597.706 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 104.21 VL 25.359 GAL 27.32 AZL 89.73 HCA 329.86 SMA 114.27 ECC .52513 INC .2722 V1 30.287 RP 107.80 LAP -.14 LOP 74.07 VP 36.067 GAP 31.53 AZP 89.76 TAL 146.39 TAP 116.25 RCA 54.27 APO 174.28 V2 35.153 RC 225.834 GL .44 GP -4.94 ZAL 33.72 ZAP 165.96 ETS 203.52 ZAE 131.32 ETE 185.07 ZAC 154.16 ETC 160.50 CLP 166.84 PLANETOCENTRIC CONIC C3 195.269 VHL 13.974 DLA 22.46 RAL 68.81 RAD 6571.1 VEL 17.793 PTH 2.99 VHP 19.646 DPA 14.69 RAP 60.31 ECC 4.2136
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 5 39 31 3517.47 0 21 12 4585.51 132.03 335.98 69.61 -20.09 90.00 1 37 37 3985.5 8.58 186.97 322.45 64.22 12.14 193.84 90.00 7 17 18 3202.19 1 26 6 4376.03 2602.2 -25.00 101.90 109.77 336.91 69.71 8 10 40 -22.44 100.00 10.73 170.44 1 26 6 2 39 2 9 47 27 3776.0 177.31 321.32 63.52 4376.03 14.40 100.00 -30.66 339.25 69.80 2282.8 8 59 24 2882.75 -26.18 87.84 110.00 15.87 3 11 37 3668.2 4268.23 166.19 318.37 61.57 110.00 2 0 29 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 1645.1 SR 265.6 SS 518.5 CRT .5835 CRS -.5407 CST -.9986 SGT 4973.5 SGR 296.6 SG3 81.4 RRT .5857 RRF .5779 RTF .9873 TOE 1.8054 TRA11.0374 TC3 -.1629 BAU .4254 ROE .6399 RRA .3107 RC3 .0041 FAU-.00507 FOE .3003 FRA 2.1000 FC3 .0225 BSP 16903 BDE 1.9154 BRA11.0417 BC3 .1629 FSP -273 SGB 4982.3 R23 -.0021 R13 .9873 SG1 4976.5 SG2 240.2 THA 2.01 LSA 1731.6 MSA 217.1 55A 7.3 EL1 1652.5 EL2 214.7 ALF 5.47

```
FLIGHT TIME 216.00
                                                                                                                                                         ARRIVAL DATE AUG 9 1966
LAUNCH DATE JAN 5 1966
   HELIOCENTRIC CONIC
                                                                                    DISTANCE 595.110
     RL 147.10 LAL -.00 LOL 104.21 VL 25.337 GAL 30.60 AZL 90.12 MCA 333.08 SMA 114.16 ECC .56638 INC .1193 V1 30.287 RP 107.77 LAP .05 LOP 77.29 VP 36.062 GAP 34.37 AZP 90.11 TAL 146.60 TAP 119.68 RCA 49.50 APO 178.83 VZ 35.164 RC 227.182 GL -.17 GP -4.89 ZAL 33.35 ZAP 164.37 ETS 201.11 ZAE 130.43 ETE 184.91 ZAC 155.53 ETC 159.26 CLP 165.14
    PLANETOCENTRIC CONIC
     C3 237.842 VHL 15.422 DLA 21.91 RAL 69.30 RAD 6571.4 VEL 18.951 PTH 3.07 VHP 21.337 DPA 15.12 RAP 61.83 ECC 4.9143 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     UNCH A7NTH UNCH TIME L-I TIME
90.00 5 48 44 3520.57
                                                                                                                                                                                124.52
                                                                                         338.50
                                                                                                                                                                -22.62
                                                           -20.01
                                                                            132.22
                                                                                                             69.54 6 47 24
                                                                                                                                              2920.6
                      0 15 51 4640.81
7 25 33 3208.36
1 21 43 4428.26
9 6 3 2893.94
1 57 42 4315.44
                                                                                             324.60
                                                                                                                 65.00
                                                                                                                               1 33 12
                                                                                                                                                  4040.8
                                                                                                                                                                    10.28
                                                                                                                                                                                    190.15
                                                            13.76
                                                                            197.09
                                                                                                                                                                                    102.32
        100.00
                                                           -22.29
                                                                            110.17
                                                                                            339.41
                                                                                                                 69.55
                                                                                                                               8 19 2
                                                                                                                                                  2608.4
                                                                                                                                                                   -24.87
        100.00
                                                            15.96
                                                                            180.40
                                                                                             323.53
                                                                                                                 64.38
                                                                                                                               2 35 31
                                                                                                                                                  3828.3
                                                                                                                                                                    12.38
                                                                                                                                                                                    173.43
                                                                                                                               9 54 17
                                                                                                                                                  2293.9
                                                                                                                                                                                    80.33
        110.00
                                                          -27.91
                                                                             88.61
                                                                                            341.73
                                                                                                                 69.42
                                                                                                                                                                   -30.45
                                                                                                                              3 9 37
                                                                                                                                                                   17.49
                                                                            169.02
                                                                                            320.70
                                                                                                                 62.63
                                                                                                                                                 3715.4
        110.00
                                                           21.33
                                                                                                                                                                                    161.99
                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                SGT 4914.4 SGR 277.3 SG3 80.3
RRT .5905 RRF .5840 RTF .9904
SGB 4922.3 R23 -.0026 R13 .9904
                                                                                                                                            ST 1612.5 SR 246.6 S5 549.9
CRT .5652 CRS -.5291 CST -.9990
     TOE 1.8477 TRA12.1453 TC3 -.0541 BAU .1731
     ROE .6552 RRA .3288 RC3 .0056 FAU-.00856
FOE .3102 FRA 2.2903 FC3 .0312 B3P 16797
B0E 1.9605 BRA12.1497 BC3 .0544 FSP -270
                                                                                                                                            LSA 1709.2 MSA 204.6 SSA 6.7
                                                                                 SG1 4917.2 SG2 223.7 THA 1.91
                                                                                                                                             EL1 1618.6 EL2 202.7 ALF 5.02
                                                                                     FLIGHT TIME 218.00
                                                                                                                                                          ARRIVAL DATE AUG 11 1966
                                                                                     DISTANCE 590.191
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 104.21 VL 25.321 GAL 34.42 AZL 90.61 HCA 336.31 SMA 114.08 ECC .61357 INC .6109 V1 30.287 RP 107.74 LAP .25 LOP <u>80.52 VP</u> 36.060 GAP 37.73 AZP 90.56 TAL 147.32 TAP 123.62 RCA 44.08 APO 184.08 V2 35.174 RC 228.500 GL -.75 GP -4.82 ZAL 33.34 ZAP 162.53 ETS 198.89 ZAE 129.29 ETE 184.72 ZAC 156.67 ETC 158.05 CLP 163.19
   PLANETOCENTRIC CONIC
     C3 292.790 VHL 17.111 DLA 21.34 RAL
                                                              69.41 RAD 6571.7 VEL 20.349 PTH
                                                                                                                    3.16 VHP 23.328 OPA
                                                                                                                                                     15.49 RAP
    C3 292.790 VHL 17.111 DLA 21.34 RAL 69.41 RAD 6571.7 VEL 20.349 PTH 3.16 VMP 23.328 DPA 15.49 RAP 63.09 ECC 5.8186

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 56 21 3521.75 -19.98 132.30 340.49 69.51 6 55 3 2921.8 -22.59 124.60
90.00 0 9 8 4693.83 15.26 200.26 326.31 65.85 1 27 22 4093.8 11.87 193.23
100.00 7 32 18 3212.38 -22.20 110.43 341.37 69.45 8 25 50 2612.4 -24.79 102.59
100.00 1 15 53 4478.43 17.41 183.41 325.29 65.31 2 30 31 3878.4 13.94 176.35
110.00 9 11 15 2902.79 -27.70 89.21 343.67 69.12 9 59 38 2302.8 -30.28 80.96
110.00 1 53 24 4360.79 22.72 171.81 322.60 63.75 3 6 5 3760.8 19.01 164.64

DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                               SCT 4847.8 SGR 256.7 SG3 79.3
RRT .5898 RRF .5844 RTF .9930
SG8 4854.5 R23 -.0030 R13 .9930
SG1 4850.1 SG2 207.2 THA 1.79
     TOE 1.9229 TRA13.3602 TC3 .0391 BAU .1554
                                                                                                                                            ST 1578.2 SR 227.6 55 588.1
CRT .5496 CRS -.5193 CST -.9993
     ROE .6709 RRA .3396 RC3 .0087 FAU-.01315
FOE .3268 FRA 2.5076 FC3 .0389 BSP 16649
BDE 2.0365 BRA13.3645 BC3 .0397 FSP -267
                                                                                                                                                                                       6.1
                                                                                                                                            LSA 1688.7 MSA 191.2 SSA
                                                                                                                                             FL1 1583.2 FL2 189.6 ALF
                                                                                                                                                                                        4 60
                                                                                                                                                         ARRIVAL DATE AUG 13 1966
                                                                                     FLIGHT. TIME 220.00
LAUNCH DATE JAN 5 1966
                                                                                    01STANCE 582.224
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 104.21 VL 25.311 GAL 38.89 A7L 91.25 MCA 339.53 SMA 114.04 ECC .66718 INC 1.2465 V1 30.287
RP 107.71 LAP .44 LOP 83.74 VP 36.064 GAP 41.75 A7P 91.17 TAL 148.66 TAP 128.19 RCA 37.95 APO 190.12 V2 35.184
RC 229.788 GL -1.29 GP -4.75 TAL 33.73 TAP 160.37 ETS 196.81 TAE 127.83 ETE 184.49 TAC 157.51 ETC 156.99 CLP 160.93
   PLANETACENTRIC CONTC
     C3 364.415 VHL 19.090 DLA 20.75 RAL 69.09 RAD 6572.0 VEL 22.039 PTH 3.24 VHP 25.682 DPA 15.79 RAP 64.05 ECC 6.9973
                                                       INVILATE INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZMTH LNCH TIME L-I TIME
                                                                                          341.86
                                                                                                                                             2920.4
                                                                                                                                                               -22.62 124.51
                      6 2 13 3520.36
0 0 41 4744.57
7 37 20 3213.68
                                                          -20.02
                                                                           132.21
                                                                                                             69.54 7 0 54
         90.00
                                                                                            327.48
                                                                                                                66.76
                                                                                                                             1 19 46
                                                                                                                                                 4144.6
                                                                           203.34
         90.00
                                                           16.65
                                                                                                                           8 30 53
2 23 43
                                                                                            342.73
                                                                                                                69.41
                                                                                                                                                 2613.7
                                                                                                                                                                  -24.77
                                                                                                                                                                                   102.68
                                                                           110.51
       100.00
                                                          -22.17
                                                                                                                66.29
                                                                                                                                                 3926.5
                                                                                                                                                                   15.39
                                                                                                                                                                                   179.18
                                                                                            326.52
                                                                           186.35
       100.00
                       1 8 16
                                      4526.48
                                                         18.75
                                                                                                                68.92 10 3 16
                                                         -27.55
                                                                                            344.98
                                                                                                                                                 2308.8
                                                                                                                                                                                     81.39
                      9 14 47 2908.77
1 47 18 4404.16
       110.00
                                                                             89.61
                                                                                923.97 64.90 3 0 42
HID-COURSE EXECUTION ACCURACY
SGT 4772.5 SCP 23
                                                                                                                                                 3804,2
                                                                                                                                                                   20.42
       110.00
                                                         24.00
                                                                           174.52
                                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 2.0445 TRA14.6790 TC3 .1180 BAU .5760 ROE" .6875 RRA .3389 RC3 .0073 FAU-.01929 FOE .3530 FRA 2.7555 FC3 .0458 BSP 16360 BDE 2.1570 BRA14.6829 BC3 .1182 FSP -263
                                                                                ROT 4772.5 SGR 234.9 SG3 78.4

RRT .5812 RRF .5766 RTF .9950

SGB 4778.3 R23 -.0033 R13 .9950

SG1 4774.5 SG2 191.1 THA 1.64
                                                                                                                                            ST 1541.0 SR 208.9 SS 634.1
CRT .5366 CRS -.5113 CST -.9995
                                                                                                                                            LSA 1670.0 MSA 177.2 SSA
                                                                                                                                            EL1 1545.1 EL2 175.8 ALF
                                                                                     FLIGHT TIME 70.00
                                                                                                                                                          ARRIVAL DATE MAR 17 1966
LAUNCH DATE JAN 6 1966
                                                                                     DISTANCE 218.571
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 30.540 GAL -16.76 AZL 87.35 MCA 101.17 SMA 152.24 ECC .29046 INC 2.6504 V1 30.287
RP 108.02 LAP 2.60 LOP 206.41 VP 39.818 GAP .18 AZP 90.51 TAL 259.61 TAP .78 RCA 108.02 APO 196.46 V2 35.082
RC 78.316 GL 8.63 GP 13.80 ZAL 168.93 ZAP 88.73 ETS 357.09 ZAE 164.60 ETE 149.91 ZAC 31.29 ETC 172.63 CLP -88.69
   PLANETOCENTRIC CONIC
     C3 81.146 VHL 9.008 DLA -13.09 RAL 292.53 RAD 6569.6 VEL 14.230 PTH 2.59 VHP 4.861 DPA
                                                                                                                                                     -9.19 RAP 298.D1 ECC 2.3355
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-17.68 36.80 174.38 112.48 2 9.20 1430 7 14.40
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                          174.38
                                                                                                             112.48
                      1 33 49 2139.74
10 7 51 5621.77
         90.00
                                                                                                                93.69 11 41 32
                                                                           263.77
                                                                                            184.76
                                                                                                                                                  5021.8
                                                                                                                                                                   28.31
                                                          28.10
         90.00
                                      1899.25
5337.49
                       2 48 21
                                                                             18.44
                                                                                            173.71
                                                                                                               113.35
                                                                                                                              3 20 0
                                                                                                                                                 1299.3
                                                                                                                                                                   -15.89
       100.00
                                                          -19.21
                                                                                                               93.09 13 4 57
115.82 4 10 10
91.44 14 24 9
                                                                                                                                                 4737.5
                                                            29.75
                                                                           242.97
                                                                                            184.87
                                                                                                                                                                   29.86
       100.00
                      11 35 59
                                                                                                                                                 1133.5
                                                                              3.89
                                                                                            171.74
                                                                                                                                                                   -19.56
                                                                                                                                                                                    356.67
                                       1733.48
                                                          -23.22
       110.00
                       3 41 17
                                                                                                                                               4476.0
                                                                                                                                                                  33.98
                                                           34.16
                                                                           223.32
                                                                                            185.08
                      12 59 33
                                        5076.03
       110.00
                                                                               MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SGT 774.1 SGR 418.2 SG3 187.9
RRT -.4093 RRF -.4571 RTF .7280
SGB 879.9 R23 .0770 R13 -.7446
                                                                                                                                            ST 217.0 SR 368.5 SS 112.1
CRT .0791 CRS .2593 CST -.9253
     TDE -.0683 TRA-1.0840 TC3 -.1722 BAU .2042
     RDE -.5750 RRA .2291 RC3 .0760 FAU .10394
FDE .0589 FRA-1.5135 FC3-1.1090 85P 1828
BOE .5790 BRA T.1080 BC3 .1883 FSP -563
                                                                                                                                            LSA 370.0 MSA 241.2 55A 18.0
                                                                                SG1 798.3 SG2 370.0 THA 164.01
                                                                                                                                            EL1 369.1 EL2 215.9 ALF 85.94
     80E .5790 BRA T.1080 BC3 .1883 FSP
```

ARRIVAL DATE MAR 19 1966 FLIGHT TIME 72.00 LAUNCH DATE JAN 6 1966 DISTANCE 224.872 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 30.463 GAL -16.58 AZL 87.45 MCA 104.38 SHA 151.42 ECC .28662 INC 2.5538 VI 30.287 RP 108.06 LAP 2.47 LOP 209.62 VP 39.747 GAP .73 AZP 90.63 TAL 258.90 TAP 3.28 RCA 108.02 APO 194.82 VZ 35.069 RC 80.581 GL 8.42 GP 14.10 ZAL 168.86 ZAP 93.27 ETS 358.16 ZAE 161.69 ETE 153.31 ZAC 29.84 ETC 173.24 CLP -93.37 PLANETOCENTRIC CONIC C3 78.923 VHL 8.884 DLA -13.25 RAL 292.93 RAD 6569.5 VEL 14.152 PTH 2.58 VMP 4.811 DPA -9.10 RAP 296.54 ECC 2.2989 C3 78.923 VHL 8.884 DLA -13.25 RAL 292.93 RAD 6569.5 VEL 14.152 PTH 2.58 VMP 4.811 DPA -9.10 RAP 296.54 ECC 2.2999 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 36 44 2128.10 -17.38 36.08 174.35 112.71 2 12 12 1528.1 -14.15 28.89 90.00 10 8 6 5620.70 28.10 263.69 184.74 93.65 11 41 46 5020.7 28.51 255.03 100.00 2 51 10 1887.93 -18.90 17.74 173.66 113.60 3 22 38 1287.9 -15.55 10.55 10.00 11 36 21 5336.09 29.75 242.86 184.85 93.03 13 5 17 4736.1 29.86 234.06 110.00 3 43 53 1722.84 -22.90 3.23 171.68 116.10 4 12 36 1122.8 -19.21 356.04 110.00 13 0 7 5073.95 34.16 223.16 185.05 91.35 14 24 41 4473.9 33.97 213.92 3 43 53 1722.84 13 0 7 5073.95 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 853.4 SGR 420.4 SG3 192.5 RRT -.4412 RRF -.4807 RTF .7543 SGB 951.4 R23 .0803 R13 -.7679 SG1 877.8 SG2 366.8 THA 165.07 ST 253.7 SR 364.6 S5 111.7 CRT .0585 CRS .2401 CST -.9383 TOE -. 0671 TRA-1.1536 TC3 -.2121 BAU .2407 RDE -. 5607 RRA .2326 RC3 .0838 FAU .10533 LSA 365.9 MSA 256.6 55A 18.2 FOE .0482 FRA-1.3069 FC3-1.1554 BSP 2115 BDE .5647 BRA 1.1770 BC3 .2281 FSP -580 EL1 365.1 EL2 233.0 ALF 86.37 ARRIVAL DATE MAR 21 1966 FLIGHT TIME 74.00 LAUNCH DATE JAN 6 1966 DISTANCE 231.125 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 30.382 GAL -16.38 AZL 87.55 HCA 107.59 SNA 150.57 ECC .28284 INC 2.4545 V1 30.287 RP 108.10 LAP 2.34 LOP 212.83 VP 39.673 GAP 1.26 AZP 90.74 TAL 258.11 TAP 5.70 RCA 107.98 APO 193.16 V2 35.056 RC 82.882 GL 8.19 GP 14.39 ZAL 168.76 ZAP 97.62 ETS 359.25 ZAE 158.86 ETE 155.75 ZAC 28.58 ETC 173.87 CLP -97.87 PLANETOCENTRIC CONIC C3 76.736 VHL 8.760 DLA -13.41 RAL 293.37 RAD 6569.5 VEL 14.074 PTH 2.57 VHP 4.784 DPA -8.98 RAP 295.25 ECC 2.2629
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -8.98 RAP 295.25 ECC 2.2629 -13.81 28.17 112.95 2 15 11 1516.0 2116.04 -17.06 35.34 174.35 90.00 1 39 54 93.62 11 42 7 5019.8 28.31 254.96 10 8 27 5619.80 28.10 263.62 184.76 3 25 30 2 54 14 1876.23 11 36 49 5334.84 3 46 43 1711.85 13 0 49 5071.98 9.85 1276.2 -15.20 113.85 -18.58 17.02 173.66 100.00 92.98 13 5 44 233.97 184.87 4734.8 29.85 29.76 242.77 100.00 4 15 15 1111.9 -18.85 355.40 116.38 -22.57 2.55 171.66 110.00 91.26 14 25 21 4472.0 33.96 213.76 223.00 185.06 110.00 34.16 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 251.3 SR 359.4 SS 111.0 CRT .0443 CRS .2146 CST -.9496 SGT 937.2 SGR 421.4 SG3 195.7 RRT -.4703 RRF -.5032 RTF .7747 TOE -. 0677 TRA-1.2247 TC3 -.2542 BAU .2772 RDE -.5447 RRA .2351 RC3 .0914 FAU .10590 5GB 1027.6 R23 .0844 R13 -.7860 5G1 961.6 SG2 362.5 THA 166.04 LSA 360.4 HSA 272.9 55A 18.3 FOE .0347 FRA-1.2889 FC3-1.1947 BSP 2415 EL1 359.8 EL2 250.9 ALF 86.54 BOE .5489 BRA 1.2470 BC3 .2702 FSP -596 ARRIVAL DATE HAR 23 1966 FLIGHT TIME 76.00 LAUNCH DATE JAN 6 1966 DISTANCE 237.334 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 30.296 GAL -16.18 ATL 87.65 HCA 110.80 SHA 149.69 ECC .27912 INC 2.3516 VI 30.287 RP 108.14 LAP 2.20 LOP 216.04 VP 39.596 GAP 1.75 ATP 90.84 TAL 257.24 TAP 8.04 RCA 107.91 APO 191.47 V2 35.043 RC 85.157 GL 7.95 GP 14.67 TAL 168.62 TAP 101.76 ETS .36 TAE 156.15 ETE 157.57 TAC 27.52 ETC 174.52 CLP-102.16 PLANETOCENTRIC CONIC C3 74.579 VHL 8.636 DLA -13.58 RAL 293.86 RAD 6569.5 VEL 13.997 PTH 2.55 VHP 4.777 DPA -8.83 RAP 294.16 ECC 2.2274 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 43 22 2103.47 -16.73 34.57 174.40 113.19 2 18 25 1503.5 -13.45 27.43 113.19 2 18 25 93.59 11 42 33 114.10 3 28 38 92.94 13 6 16 116.66 4 18 9 91.17 14 26 8 5019.1 28.31 254.91 5619.13 1864.02 184.82 28.11 263.57 1264.0 -14.84 9.13 173.70 2 57 34 -18.24 16.27 100.00 29.85 233.89 4733.8 164.93 100.00 11 37 22 5333.80 29.76 242.69 354.73 1100.4 -18.47 110.00 3 49 48 1700.42 13 1 37 5070.17 -22.23 1.84 171.69 33.95 213.62 4470.2 34.17 222.86 185.11 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1024.7 SGR 421.4 SG3 197.6 RRT -.4968 RRF -.3252 RTF ..7903 SGB 1108.0 R23 .0899 R13 -.7999 SG1 1048.8 SG2 357.3 THA 166.91 ST 259.9 SR 352.9 SS 1D9.8 CRT .0366 CRS .1859 CST -.9584 LSA 353.7 MSA 289.9 SSA 18.4 TOE -.0708 TRA-1.2959 TC3 -.2983 BAU .3134 RDE -.5269 RRA .2365 RC3 .0991 FAU .10568 FDE .0200 FRA-1.2600 FC3-1.2268 BSP 2725 EL1 353.3 EL2 269.5 ALF 86.16 BOE .5316 BRA 1.3173 BC3 .3143 FSP -607 ARRIVAL DATE HAR 25 1966 FLIGHT TIME 78.00 LAUNCH DATE JAN 6 1966 DISTANCE 243.500 RL 147.10 LAL -.00 LOL 105.23 VL 30.207 GAL -15.98 AZL 87.76 HCA 114.00 SHA 148.79 ECC .27545 INC 2.2444 VI 30.287 RP 108.18 LAP 2.05 LOP 219.25 VP 39.517 GAP 2.22 AZP 90.91 TAL 256.30 TAP 10.30 RCA 107.81 APO 189.78 V2 35.030 RC 87.465 GL 7.68 GP 14.95 ZAL 168.45 ZAP 105.68 ETS 1.50 ZAE 153.58 ETE 158.93 ZAC 26.66 ETC 175.20 CLP-106.24 PLANETOCENTRIC CONIC 2.54 VHP 4.786 OPA -8.64 RAP 293.28 ECC 2.1923 C3 72.445 VHL 8.511 DLA -13.77 RAL 294.39 RAD 6569.4 VEL 13.921 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -13.06 1 47 6 2090.24 10 9 23 5618.78 113.43 2 21 57 1490.2 26.64 -16.37 33.76 174.47 90.00 93.58 11 43 2 5018.8 28.31 254.89 263.55 184.91 28.11 90.00 3 32 3 1251.2 -14.45 8.38 173.77 114.36 15.48 100.00 3 1 12 1851.20 11 37 59 5333.05 -17.89 92.91 13 6 52 116.96 4 21 18 91.10 14 26 59 4733.1 29.85 233.83 185.02 100.00 11 37 59 29.76 242.64 1068.4 -18.07 354.03 -21.86 171.74 110.00 3 53 10 1688.44 1.11 4468.6 33.94 213.50 222.74 185.20 34.17 110.00 13 2 30 5068.58 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 289.3 SR 345.2 SS 108.4 CRT .0349 CRS .1533 CST -.9653 TOE -.0764 TRA-1.3669 TC3 -.3443 BAU .3491 SGT 1115.1 SGR 420.3 SG3 198.2 RRT - 5213 RRF - 5469 RTF - 8021 SGB 1191.7 R23 - D967 R13 - 8104 SG1 1138.8 SG2 351.2 THA 167.70 RDE -.5075 RRA .2367 RC3 .1067 FAU .10477 FDE .0044 FRA-1.2222 FC3-1.2520 BSP 3044 LSA 345.8 MSA 307.7 SSA 18.5 EL1 345.7 EL2 288.8 ALF 84.43 FOE .0044 FRA-1.2222 FC3-1.2520 BSP

-613

BOE .5132 BRA 1.3672 BC3 .3604 FSP

```
FLIGHT TIME 80.00
                                                                                                                                  ARRIVAL DATE HAR 27 1966
LAUNCH DATE JAN 6 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 249.626
    RL 147.10 LAL -.00 LOL 105.23 VL 30.116 GAL -15.77 AZL 87.87 HCA 117.21 SMA 147.87 ECC .27185 INC 2.1317 V1 30.287 RP 108.22 LAP 1.90 LOP 222.45 VP 39.435 GAP 2.66 AZP 90.98 TAL 255.29 TAP 12.50 RCA 107.68 APO 188.07 V2 35.016 RC 89.783 GL 7.39 GP 15.26 ZAL 168.25 ZAP 109.36 ETS 2.68 ZAE 151.17 ETE 159.96 ZAC 26.02 ETC 175.92 CLP-110.10
   PLANETOCENTRIC CONIC
    C3 70.330 VML 8.386 DLA -13.97 RAL 294.96 RAD 6569.4 VEL 13.845 PTH 2.53 VMP 4.809 DPA -8.41 RAP 292.61 ECC 2.1574 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                           174.58
                     1 51 11 2076.20
                                                                                                                        1476.2
                                                                                                                                       -12.65
                                                  -15.99
                                                                 32.91
                                                                                                                                                         25.82
        90.00
                                 5618.87
                                                   28.11
                                                                263.55
                                                                               185.04
                                                                                                                            5018.9
                                                                                                                                           28.31
                                                                                                                                                         254.89
        90.00
                   10 9 52
                    3 5 8 1837.60
                                                                                                                                                          7.58
       100.00
                                                  -17.50
                                                                 14.66
                                                                            173.67
                                                                                                                            1237.6
                                                                                                                                          -14.03
       100.00
                   11 38 36
                                 5332.70
                                                  29.76
                                                                242.61
                                                                              185.15
                                                                                                                            4732.7
                                                                                                                                           29.85
                                                                                                                                                         233.81
                    3 56 48
                                                  -21.47
                                                                             171.83
                                                                                                                            1075.8
                                1675.77
                                                                    . 33
                                                                                                                                          -17.64
                                                                                                                                                         353.29
                                                                              185.33
                                                                                                                            4467.3
                                                                                                                                           33.94
       110.00
                  13 3 26
                                  5067.29
                                                   34.17
                                                                222.64
                                                                                                                                                         213.40
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                    SGT 1207.4 SGR 418.2 SG3 197.3
RRT -.5435 RRF -.5686 RTF .8105
                                                                                                                      ST 309.4 SR 336.4 SS 106.4
CRT .0383 CRS .1246 CST -.9693
    TOE -.0845 TRA-1.4364 TC3 -.3918 BAU .3838
    ROE -.4870 RRA .2356 RC3 .1143 FAU .10313
                                                                    SGB 1277.8 R23 .1059 R13 -.8179
SG1 1230.5 SG2 344.5 THA 168.42
    FOE -.0086 FRA-1.1734 FC3-1.2695 BSP 3357
BOE .4942 BRA 1.4556 BC3 .4082 FSP -608
                                                                                                                      LSA 337.9 HSA 325.2 SSA 18.6
                                                                                                                      EL1 337.7 EL2 308.0 ALF 77.70
                                                                        FLIGHT TIME 82.00
                                                                                                                                   ARRIVAL DATE MAR 29 1966
                                                                        DISTANCE 255.715
  HELIOCENTRIC CONIC
       147.10 LAL -.00 LOL 103.23 VL 30.022 GAL -15.56 A7L 87.99 MCA 120.41 SMA 146.95 ECC .26831 INC 2.0125 V1 30.287 108.26 LAP 1.74 LOP 225.65 VP 39.352 GAP 3.08 A7P 91.02 TAL 254.23 TAP 14.64 RCA 107.52 APO 186.38 V2 35.003 92.112 GL 7.06 GP 15.59 ZAL 168.01 ZAP 112.81 ETS 3.90 ZAE 148.91 ETE 160.71 ZAC 25.60 ETC 176.69 CLP-113.74
    RL 147.10 LAL
   PLANETOCENTRIC CONIC
                                                                                                  2.52 VHP 4.844 OPA
    C3 68.232 VHL 8.260 DLA -14.19 RAL 295.58 RAD 6569.3 VEL 13.769 PTM
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
       90.00
                    1 55 37 2061.16
                                                 -15.57
                                                                 32.00
                                                                             174.72
                                                                                             113.95
                                                                                                           2 29 58
                                                                                                                           1461.2
                                                                                                                                         -12.21
                                                                                                                                                          24.94
                 10 10 19 5619.55
3 9 25 1823.07
11 39 13 5332.88
4 0 45 1662.27
13 4 22 5066.44
       90.00
                                                  28.10
                                                                263.60
                                                                              185.21
                                                                                               93.61 11 43 59
                                                                                                                            5019.6
                                                                                                                                           28.31
                                                                                                                                                         254.94
      100.00
                                                  -17.09
                                                                 13.78
                                                                              174.00
                                                                                               114.91
                                                                                                           3 39 48
                                                                                                                            1223.1
                                                                                                                                           -13.59
                                                                                                                                                           6.73
                                                                                              92.91 13 8 5
117.58 4 28 27
91.00 14 28 48
      100.00
                                                  29.76
                                                                242.63
                                                                            185.32
                                                                                                                            4732.9
                                                                                                                                           29.85
                                                                                                                                                         233.82
      110.00
                                                  -21.04
                                                                359.52
                                                                              171.94
                                                                                                                            1062.3
                                                                                                                                         -17.15
                                                                                                                                                         352.51
      110.00
                                                   34.17
                                                                222.57
                                                                              185.49
                                                                                                                            4456.4
                                                                                                                                           33.93
                                                                                                                                                         213.33
                                                                   MID-COURSE EXECUTION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   SGT 1301.9 SGR 415.5 SG3 195.9

RRT -.5654 RRF -.591D RTF .8170

SGB 1366.6 R23 .1161 R13 -.8237

SGI 1324.4 SG2 336.9 THA 169.05
                                                                                                                      5T 330.5 SR 326.2 SS 104.6
CRT .0473 CRS .0824 CST -.9738
    TOE -.0959 TRA-1.5046 TC3 -.4413 BAU .4177
    ROE -.4646 RRA .2337 RC3 .1222 FAU .10116
    FOE -.0258 FRA-1.1229 FC3-1.2836 BSP 3684
BOE .4744 BRA 1.5227 BC3 .4579 FSP -607
                                                                                                                      LSA 347.5 MSA 324.7 SSA 18.7
                                                                                                                      EL1 336.3 EL2 320.2 ALF 37.36
                                                                        FLIGHT TIME 84.00
                                                                                                                                  ARRIVAL DATE MAR 31 1966
LAUNCH DATE JAN 6 1966
                                                                       DISTANCE 261.769
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 29.926 GAL -15.35 AZL 88.11 MCA 123.61 SMA 146.02 ECC .26483 INC 1.8853 VI 30.287 RP 108.31 LAP 1.57 LOP 228.85 VP 39.267 GAP 3.48 AZP 91.04 TAL 253.11 TAP 16.71 RCA 107.35 APO 184.69 VZ 34.990 RC 94.449 GL 6.70 GP 15.96 ZAL 167.73 ZAP 116.03 ETS 5.18 ZAE 146.81 ETE 161.24 ZAC 25.39 ETC 177.52 CLP-117.16
  PLANFTOCFNTRIC CONIC
    C3 66.150 VHL 8.133 DLA -14.45 RAL 296.23 RAO 6569.3 VEL 13.693 PTH 2.50 VHP 4.889 DPA -7.77 RAP 291.90 ECC 2.0887
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                           2 0 29 2044.90
10 10 40 5621.03
3 14 6 1807.38
11 39 44 5333.79
4 5 4 1647.77
13 5 16 5066.17
                                                                           174.89
                                                                                                                      1444.9 -11.72
                                                 -15.12
                                                                31.02
                                                                                                                                                         23.99
       90.00
                                                                263.71
                                                                              185.41
                                                                                                                           5021.0
                                                                                                                                           28.31
                                                                                                                                                        255.05
       90.00
                                                 28.10
                                                                             174.17
                                                                                                                           1207.4
                                                                                                                                         -13.10
                                                                12.83
                                                 -16.64
      100.00
                                                                242.69
                                                                              185.52
                                                                                                                           4733.8
                                                                                                                                          29.85
                                                 29.76
      100.00
                                                 -20.58
                                                                356.64
                                                                             172.09
                                                                                                                           1047.8
                                                                                                                                          -16.69
      110.00
                                                                                                                           4466.2
                                                                222.55
                                                                              185.70
                                                                                                                                        33.93
                                                  34.17
      110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 1397.8 SGR 412.1 SG3 193.9

RRT -.5868 RRF -.6144 RTF .8217

SGB 1457.3 R23 .1283 R13 -.8279

SG1 1419.8 SGZ 328.5 THA 169.62
                                                                                                                       ST 352.4 SR 314.7 SS 102.9
CRT .0609 CRS .0328 CST -.9773
LSA 367.9 MSA 313.2 SSA 18.9
    TDE -.1106 TRA-1.5707 TC3 -.4927 BAU .4507
    RDE -.4409 RRA .2310 RC3 .1306 FAU .09887
                                                    4016
-603
    FOE -. 0441 FRA-1.0686 FC3-1.2939 85P
    BOE .4546 BRA 1.5876 BC3 .5097 FSP
                                                                                                                       EL1 354.8 EL2 312.0 ALF 14.15
                                                                                                                                  ARRIVAL DATE APR 2 1966
                                                                        FLIGHT TIME 86.00
LAUNCH DATE JAN 6 1966
                                                                        DISTANCE 267.791
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 29.828 GAL -15.13 AZL 88.25 MCA 126.80 SMA 145.09 ECC .26143 INC 1.7484 V1 30.287 RP 108.35 LAP 1.40 LOP 232.04 VP 39.181 GAP 3.85 AZP 91.05 TAL 251.93 TAP 18.73 RCA 107.16 APO 183.02 V2 34.977 RC 96.794 GL 6.30 GP 16.39 ZAL 167.41 ZAP 119.02 ET8 6.53 ZAE 144.86 ETE 161.57 ZAC 25.38 ETC 178.42 CLP-120.37
  PLANETOCENTRIC CONIC
    C3 64.083 VHL 8.005 DLA -14.73 RAL 296.93 RAD 6569.2 VEL 13.618 PTH 2.49 VMP 4.943 DPA -7.35 RAP 291.84 ECC 2.0546
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                    NCH 2 5 51
                                                                             175.10
                                                                                                          2 39 38
                                                                                                                           1427.1
                                  2027.13
                                                  -14.62
                                                                 29.95
                                                                                             114.52
                                                                                                                                          -11.19
                                                                                                                                                         22.95
       90.00
                                                                                               93.75 11 44 34
                                                                                                                                          28.31
                                 5623.57
                                                                                                                            5023.6
                  10 10 51
                                                 28.09
                                                                263.90
                                                                              185.65
                                                                                                                                                         255.24
       90.00
                                                                                               115.51 3 49 6
93.02 13 9 3
                               1790.27
5335.66
                                                                              174.36
                                                                                                                           1190.3
                                                                                                                                          -12.57
                                                                                                                                                          4.83
                    3 19 16
                                                  -16.14
                                                                 11.80
                                                                                              115.51
      100.00
                                                                              185.76
                                                                                                                           4735.7
                                                                                                                                          29.85
                                                                                                                                                         234.03
                 11 40 7
                                                 29.75
                                                                242.83
      100.00
                  4 9 47
13 6 5
                                                                                              118.26 4 36 59
91.01 14 30 32
                                                                357.70
                                                                                                                           1032.0
                                                                                                                                         -16.14
                                                                                                                                                        350.78
                                 1632.02
                                                 -20.08
                                                                             172.26
      110.00
                                                                                                                           4466.7
                                                                                                                                         33.93
      110.00
                                  5066.67
                                                  34.17
                                                                222.59
                                                                             185.95
                                                                                                                                                        213.35
   DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                  SGT 1495.2 SGR 408.4 SG3 191.3
RRT -.6079 RRF -.6389 RTF .8250
SGB 1549.9 R23 .1426 R13 -.8308
SGI 1516.6 SG2 319.7 TMA 170.13
                                                                                                                     ST 375.3 SR 302.0 SS 101.5

CRT .0795 CR5 -.0255 CST -.9797

LSA 390.0 MSA 299.8 SSA 19.0

EL1 377.4 EL2 299.3 ALF 9.97
    TOE -.1291 TRA-1.6342 TC3 -.5461 BAU .4829
    ROE -.4159 RRA .2273 RC3 .1395 FAU .09630
    FOE -.0638 FRA-1.0119 FC3-1.3010 8SP 4353
BOE .4554 BRA 1.6499 BC3 .5636 FSP -598
```

ARRIVAL DATE APR 4 1966

```
FLIGHT TIME 88.00
LAUNCH DATE JAN 6 1966
                                                                                 01STANCE 273.784
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 29.729 GAL -14.91 AZL 88.40 HCA 129.99 SHA 144.16 ECC .25811 INC 1.5997 V1 30.287 RP 108.39 LAP 1.23 LOP 235.23 VP 39.094 GAP 4.20 AZP 91.03 TAL 250.71 TAP 20.70 RCA 106.95 APO 181.37 V2 34.964 RC 99.145 GL 5.84 GP 16.89 ZAL 167.06 ZAP 121.78 ETS 7.98 ZAE 143.05 ETE 161.73 ZAC 25.56 ETC 179.41 CLP-123.39
   PLANETOCENTRIC CONTC
    C3 62.031 VML 7.876 DLA -15.06 RAL 297.66 RAD 6569.2 VEL 13.542 PTM 2.48 VHP 5.005 DPA -6.84 RAP 291.96 ECC 2.0209
    LNCH AZMITH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ ELAT INJ E LONG
90.00 2 11 49 2007.50 -14.07 28.78 175.34 114.85 2 45 16 1407.5 -10.60 21.81
                                                                                       175.34
                     2 11 49 2007.50
10 10 47 5627.49
                                                                                                            93.90 11 44 34
                                                                                                                                            5027.5
                                                                                                                                                            28.31
                                                                                                                                                                             255.53
                                                                                         185.94
                                                                        264.18
        90.00
                                                        28.07
                                                                                                          115.84 3 54 30
93.14 13 9 17
118.64 4 41 54
91.08 14 31 15
                                                                                         174.60
                                                                                                                                           1171.4
                                                                                                                                                            -11.96
                                                                                                                                                                              3.74
                                                                         10.68
                                                        -15.58
       100.00
                      3 24 59
                                     1771.42
                                                                                                                                                            29.86
                                                                                                                                                                             234.26
                                                                                         186.05
                                                                                                                                            4738.8
                                                                        243.06
       100.00
                     11 40 18
                                     5338.81
                                                        29.74
                                                                                                                                                           -15.54
                                                                                                                                                                             349.81
                                                                                        172.47
                                                                                                                                           1014.8
       110.00
                     4 15 D 1614.77
13 6 47 5068.22
                                                        -19.52
                                                                        356.67
                                                                                                                                                           33.94
                                                                                                                                                                            213.47
                                                                        222.71
                                                                                         186.25
                                                                                                                                           4468.2
       110.00
                                                        34.17
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                           SGT 1593.5 SGR 404.4 SG3 188.3
RRT -.6288 RRF -.6647 RTF .8272
SGB 1644.1 RZ3 .1594 R13 -.8327
SGI 1614.5 SG2 310.4 TMA 170.58
                                                                                                                                      ST 399.5 SR 287.9 SS 100.5
CRT .1027 CRS -.0936 CST -.9806
    TOE -.1517 TRA-1.6942 TC3 -.6016 BAU .5140
    RDE -.3895 RRA .2225 RC3 .1491 FAU .D9353
FDE -.0851 FRA -.9534 FC3-1.3053 BSP 4693
BDE .4180 BRA 1.7088 BC3 .6198 FSP -592
                                                                                                                                      LSA 413.5 MSA 285.0 SSA 19.1
EL1 401.7 EL2 284.8 ALF 8.55
                                                                                                                                                    ARRIVAL DATE APR 6 1966
                                                                                 FLIGHT TIME 90.00
LAUNCH DATE JAN 6 1966
                                                                                 DISTANCE 279.749
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 29.630 GAL -14.69 A7L 88.56 MCA 133.18 3MA 143.24 ECC .25487 INC 1.4364 V1 30.267 RP 108.43 LAP 1.05 LOP 238.42 VP 39.007 GAP 4.54 AZP 90.98 TAL 249.44 TAP 22.63 RCA 106.73 APO 179.74 V2 34.951 RC 101.502 GL 5.32 GP 17.48 ZAL 166.67 ZAP 124.31 ETS 9.55 ZAE 141.35 ETE 161.72 ZAC 25.93 ETC 180.49 CLP-126.22
  PLANETOCENTRIC CONIC
                                                                                                              2.46 VMP 5.074 OPA
    C3 59.996 VHL 7.746 OLA -15.45 RAL 298.45 RAD 6569.1 VEL 13.467 PTH
    LNCH AZMTH LNCH TIME L-I TIME INU LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        115.16 2 51 36
94.11 11 44 14
116.19 4 0 34
93.32 13 9 13
119.03 4 47 23
91.22 14 31 46
                                                                                                                                           1385.5
                                                                                                                                                           -9.93
                                                                                                                                                                              20.54
                       2 18 31 1985.53
                                                        -13.43
                                                                         27.47
                                                                                       175.62
        90.00
                                                                                                                                                                              255.95
                                                                                                                                            5033.3
                                                                                                                                                              28.32
                                     5633.26
                                                         28.04
                                                                        264.60
                                                                                         186.27
        90.00
                     10 10 21
                                                                                                                                            1150.4
                                                                                         174.87
                                                                                                                                                           -11.31
                                                                                                                                                                               2.54
       100.00
                       3 31 23 1750.39
                                                         -14.95
                                                                          9.43
                                                                                       186.40
172.72
                                                                                                                                                                              234.62
                    11 40 10 5343.64
4 20 47 1595.64
13 7 15 5071.14
                                                                                                                                            4743.6
                                                                                                                                                              29.87
       100.00
                                                        29.72
                                                                        243.42
                                                                                                                                                                              348.73
                                                                                                                                            995.6
                                                                                                                                                          -14.87
       110.00
                                                        -18.89
                                                                        355.54
                                                                        222.94
                                                                                         186.60
                                                                                                                                            4471.1
                                                                                                                                                             33.96
                                                                                                                                                                             213.70
                                      5071.14
                                                        34.16
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                             SGT 1691.7 SGR 400.3 SG3 184.5
RRT -.6487 RRF -.6916 RTF .8280
                                                                                                                                       ST 424.8 SR 272.8 SS 99.6
CRT .1295 CRS -.1618 CST -.9795
    TOE -.1780 TRA-1.7494 TC3 -.6590 BAU .5438
    RDE -. 3624 RRA .2163 RC3 .1592 FAU .09044
    FOE -.1043 FRA -.8900 FC3-1.3050 BSP 5012
BOE .4038 BRA 1.7627 BC3 .6780 FSP -576
                                                                             SGB 1738.5 R23 .1799 R13 -.8333
SG1 1712.2 SG2 301.0 THA 170.99
                                                                                                                                        LSA 438.3 MSA 269.0 55A 19.2
                                                                                                                                        EL1 427.3 EL2 268.9 ALF 7.90
                                                                                                                                                   ARRIVAL DATE APR 8 1986
                                                                                 FLIGHT TIME 92.00
LAUNCH DATE JAN 6 1966
                                                                                DISTANCE 285.689
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 29.529 GAL -14.45 AZL 88.74 MCA 136.37 SMA 142.33 ECC .25172 INC 1.2554 V1 30.287 RP 108.46 LAP .87 LOP 241.60 VP 38.919 GAP 4.86 AZP 90.91 TAL 248.13 TAP 24.51 RCA 106.50 APO 178.15 VZ 34.939 RC 103.862 GL 4.72 GP 18.17 ZAL 166.24 ZAP 126.62 ETS 11.27 ZAE 139.76 ETE 161.55 ZAC 26.48 ETC 181.67 CLP-128.89
   PLANETOCENTRIC CONIC
     C3 57.980 VHL 7.614 DLA -15.91 RAL 299.29 RAD 6569.1 VEL 13.392 PTH 2.45 VHP 5.149 DPA -5.47 RAP 292.66 ECC 1.9542
    C3 57.980 VML 7.614 DLA -15.91 RAL 299.29 RAD 6569.1 VEL 13.392 PTH 2.45 VMP 5.149 DPA -5.47 RAP 292.66 ECC 1.9542 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 10 9 25 5641.48 28.00 265.20 186.67 94.40 11 43 26 5041.5 28.32 256.55 100.00 3 38 38 1726.63 -14.23 8.04 175.19 116.57 4 7 25 1126.6 -10.55 1.18 100.00 11 39 35 5350.71 29.69 243.95 186.81 93.60 13 8 46 4750.7 29.88 235.15 110.00 4 27 18 1574.19 -18.18 354.29 173.00 119.46 4 53 32 974.2 -14.12 347.53 110.00 13 7 25 5075.91 34.16 223.31 187.04 91.44 14 32 0 4755.9 33.98 214.07
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                            RRT --6690 RRF --7204 RTF -8287
SGB 1835.4 R23 -2030 R13 --8339
SGI 1812.1 SGZ 291.5 THA 171.35
                                                                                                                                    ST 452.6 SR 256.0 SS 100.4

CRT .1621 CRS -.2489 CST -.9759

LSA 465.9 MSA 251.1 SSA 19.4

EL1 455.3 EL2 251.1 ALF 7.54
     TOE -.2106 TRA-1.8007 TC3 -.7197 BAU .5733
    RDE -.3337 RRA .2093 RC3 .1706 FAU .08740
    FDE -.1292 FRA -.8296 FC3-1.3050 BSP 5356
BDE .3946 BRA 1.8129 BC3 .7396 FSP -567
                                                                                                                                                    ARRIVAL DATE APR 10 1966
                                                                                  FLIGHT TIME 94.00
LAUNCH DATE JAN 6 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 291.605
    RL 147.10 LAL -.00 LOL 105.23 VL 29.428 GAL -14.22 AZL 88.95 MCA 139.56 SMA 141.42 ECC .24866 INC 1.0519 V1 30.287 RP 108.50 LAP .68 LOP 244.79 VP 38.832 GAP 5.16 AZP 90.80 TAL 246.79 TAP 26.34 RCA 108.26 APO 176.59 V2 34.926 RC 108.225 GL 4.01 GP 19.00 ZAL 165.76 ZAP 128.70 ETS 13.18 ZAE 138.26 ETE 161.21 ZAC 27.19 ETC 182.98 CLP-131.40
   PLANETOCENTRIC CONIC
    G3 55.987 VHL 7.482 DLA -16.45 RAL 300.18 RAD 6569.0 VEL 13.317 PTH 2.43 VMP 5.233 OPA
                                                                                                                                               -4.58 RAP 293.21 ECC 1.9214
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                       176.35
                                                                                                        115.90 3 7 5
94.82 11 41 59
                                                                                                                                            1332.0
                       2 34 53
                                      1931.96
                                                         -11.86
                                                                         24.33
        90.00
                                                                                                                                            5053.0
                                                                                                                                                              28.31
                     10 7 46
                                     5652.98
                                                         27.94
                                                                         266.04
                                                                                         187.14
         90.00
                                                                                                                          4 15 17
                                                                                                                                            1099.4
                                                                                                                                                               -9.67
                                                                                                                                                                              359.63
                       3 46 56
                                                                           6.45
                                                                                         175.57
                                                                                                           116.97
       100.00
                                     1699.36
                                                         -13.40
                                                                                                          116.97 4 15 17 1099.4
93.99 13 7 44 4760.8
119.92 5 0 33 949.8
91.77 14 31 50 4483.1
                                                                         244.69
                                                                                                                                                              29.89
                                                                                                                                                                              235.90
       100.00
                     11 38 23
                                    5360.79
                                                        29.65
                                                                                         187.29
                       4 34 43
                                                                                                                                                           -13.24
                                                                                                                                                                              346.18
       110.00
                                     1549.81
                                                        -17.35
                                                                         352.88
                                                                                         173.35
                                                                                                                                                             34.01
                      13 7 7
                                                                         223.87
                                                                                         187.56
                                      5083.13
       110.00
                                                         34.14
                                                                            MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                       ORBIT DETERMINATION ACCURACY
                                                                            SGT 1893.6 R23 393.7 SG3 176.9

RRT -.0888 RRF -.7505 RTF .8289

SGB 1933.6 R23 .2297 R13 -.8340

SG1 1912.8 SG2 282.5 TMA 171.66
                                                                                                                                       ST 483.1 SR 237.7 SS 102.8
CRT .1992 CRS -.3436 CST -.9686
     TOE -.2495 TRA-1.8464 TC3 -.7832 BAU .6021
                                                                                                                                  ROE -.3038 RRA .2009 RC3 .1832 FAU .08425
    FDE -.1567 FRA -.7685 FC3-1.3028 BSP 5703
BDE .3931 BRA 1.8573 BC3 .8044 FSP -557
```

```
FLIGHT TIME 96.00
                                                                                                                                                ARRIVAL DATE APR 12 1966
LAUNCH DATE JAN 6 1966
                                                                               DISTANCE 297.500
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 29.328 GAL -13.97 A7L 89.18 MCA 142.74 SMA 140.54 ECC .24569 INC .8205 V1 30.287 RP 108.54 LAP .50 LOP 247.97 VP 38.745 GAP 5.44 A7P 90.65 TAL 245.40 TAP 28.14 RCA 106.01 APO 175.07 VZ 34.914
                            3.18 GP 19.99 ZAL 165.22 ZAP 130.55 ETS 15.32 ZAE 136.81 ETE 160.70 ZAC 28.07 ETC 184.44 CLP-135.77
    RC 108.588 GL
   PLANETOCENTRIC CONIC
    C3 54.024 VHL 7.350 DLA -17.12 RAL 301.14 RAD 6569.0 VEL 13.243 PTH 2.42 VHP 5.325 DPA -3.50 RAP 293.85 ECC 1.8891 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     116.31 3 16 49
95.39 11 39 37
117.41 4 24 29
94.54 13 5 54
120.43 5 8 38
92.26 14 31 6
                                                                                    176.84
                                                                                                                                        1298.4
                                                                       22.37
                                                                                                                                                         -7.23
                                                                                                                                                                          15.57
                     2 45 11 1898.37
10 5 8 5668.96
        90.00
                                                      -10.85
                                                                                                                                                          28.30
                                                                       267.19
                                                                                      187.71
                                                                                                                                         5069.0
         90.00
                                                        27.84
                                                                                   176.04
                                                                                                                                        1067.6
                    3 56 41 1667.62
11 36 19 5374.94
                                                                                                                                                          -8.64
                                                                                                                                                                         357.84
                                                                        4.60
       100.00
                                                      -12.41
                                                                       245.74
                                                                                                                                        4774.9
                                                                                                                                                          29.89
                                                                                                                                                                        236.95
       100.00
                                                       29.58
                                                                                      187.68
                                                                                   173.77
                    4 43 17 1521.65
13 6 12 5093.66
                                                                                                                                        921.7
                                                                                                                                                       -12.23
                                                                                                                                                                         344.63
       110.00
                                                      -16.39
                                                                      351.26
                                                                                                                                        4493.7
                                                                                      188.20
                                                                                                                                                          34.05
                                                                                                                                                                         215.45
                                                        34.12
                                                                      224.70
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         HIG-COURSE EXECUTION ACCORACT

SCT 1995.2 SGR 391.8 SG3 172.7

RRT -.7075 RRF -.7816 RTF .8289

SGB 2033.3 R23 .2602 R13 -.8340

SG1 2014.7 SG2 274.2 THA 171.94
                                                                                                                                   ST 517.4 SR 217.7 SS 107.6
CRT .2414 CRS -.4425 CST -.9575
    TOE -.2965 TRA-1.8857 TC3 -.8501 BAU .6303
    ROE -.2725 RRA .1911 RC3 .1972 FAU .08102
FDE -.1879 FRA -.7072 FC3-1.2983 BSP 6057
BDE .4027 BRA 1.8953 BC3 .8727 FSP -546
                                                                                                                                    LSA 530.9 MSA 210.7 SSA 19.9
                                                                                                                                    EL1 520.6 EL2 209.9 ALF 6.93
                                                                                                                                                ARRIVAL DATE APR 14 1966
LAUNCH DATE JAN 6 1966
                                                                                FLIGHT TIME 98.00
                                                                               DISTANCE 303.375
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 109.23 VL 29.227 GAL -13.72 AZL 89.45 MCA 145.92 SMA 139.66 ECC .24282 INC .5523 V1 30.287 RP 108.58 LAP .31 LOP 251.15 VP 38.658 GAP 5.71 AZP 90.46 TAL 243.98 TAP 29.90 RCA 105.75 APO 173.58 V2 34.903 RC 110.951 GL 2.17 GP 21.19 ZAL 164.61 ZAP 132.14 ETS 17.73 ZAE 135.39 ETE 160.00 ZAC 29.11 ETC 186.08 CLP-136.02
   PLANETOCENTRIC CONIC
    C3 52,098 VHL 7.218 DLA -17.93 RAL 302.18 RAD 6568.9 VEL 13.170 PTH 2.41 VMP 5.427 DPA -2.20 RAP 294.58 ECC 1.8574 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 2 57 31 1858.21 -9.63 20.05 177.45 116.76 3 28 29 1258.2 -5.97 13.29
                                                                                                      116.76 3 28 29
96.18 11 35 56
        90.00 10 1 5 5691.14
00.00 4 8 17 1629.86
                                                       27.69
                                                                       268.80
                                                                                       188.39
                                                                                                                                         5091.1
                                                                                                                                                          28.26
                                                                                       176.61
                                                                                                         117.89
                                                                                                                      4 35 27
                                                                                                                                         1029.9
                                                                                                                                                          -7.40
                                                                                                                                                                         355.73
       100.00
                                                       -11.22
                                                                         2.44
                 4 8 17 1629.86
11 33 0 5394.72
4 53 22 1488.57
13 4 24 5108.77
                                                                                                       95.30 13 2 55
120.97 5 18 11
92.95 14 29 33
       100.00
                                                       29.46
                                                                       247.20
                                                                                       188.59
                                                                                                                                        4794.7
                                                                                                                                                         29.88
                                                                                                                                                                         238.42
                                                       -15.24
                                                                                       174.28
                                                                                                                                          888.6
                                                                                                                                                         -11.02
                                                                                                                                                                         342.83
       110.00
                                                                       349.39
                                                                       225.87
                                                                                       168.98
                                                                                                                                        4508.8
                                                                                                                                                          34.10
                                                       34.07
       110.00
                                                                         HID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFFRENTIAL CORRECTIONS
                                                                        SGT 2096.0 SGR 390.8 SG3 167.8
RRT -.7231 RRF -.8127 RTF .8280
                                                                                                                                   ST 556.2 SR 196.1 55 114.2
CRT .2880 CRS -.5356 CST -.9440
    TOE -.3517 TRA-1.9155 TC3 -.9193 BAU .6572
    ROE -. 2402 RRA .1788 RC3 .2125 FAU .07750
    FOE -.2199 FRA -.6414 FC3-1.2878 BSP 6374
                                                                      SGB 2132.1 R23 .2953 R13 -.8333
SG1 2115.2 SG2 267.5 THA 172.19
                                                                                                                                 LSA 570.0 MSA 188.6 SSA 20.2
EL1 559.5 EL2 186.7 ALF 6.53
                                                                                                                                               ARRIVAL DATE APR 16 1966
                                                                               FLIGHT TIME 100.00
LAUNCH DATE JAN 6 1966
                                                                              DISTANCE 309.231
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 29.126 GAL -13.47 A7L 89.76 HCA 149.10 SMA 138.81 ECC .24005 INC .2353 V1 30.287 RP 108.61 LAP .12 LOP 254.32 VP 38.572 GAP 5.97 A7P 90.20 TAL 242.53 TAP 31.63 RCA 105.49 APO 172.13 V2 34.892 RC 113.313 GL .95 GP 22.65 ZAL 163.90 ZAP 133.43 ETS 20.48 ZAE 133.97 ETE 159.10 ZAC 30.31 ETC 187.94 CLP-138.16
   PLANETOCENTRIC CONIC
    C3 50.225 VHL 7.087 DLA -18.95 RAL 303.31 RAD 6568.8 VEL 13.099 PTH 2.39 VHP 5.543 DPA
                                                                                                                                           -.63 RAP 295.35 ECC 1.8266
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ E LAT INJ E LONG
                                                                                                    117.22 3 42 52

97.28 11 30 19

118.40 4 48 52

96.35 12 58 16

121.57 5 29 41

93.94 14 26 48
                                                                                                                                   1208.9
                                                                                                                                                          -4.40
                                                                                  178.23
                      3 12 44 1808.92
9 54 56 5722.23
                                                                                                                                                                         10.52
                                                       -8.11
                                                                       17.23
        90.00
                                                                                                                                                          28.16
                                                       27.44
                                                                      271.04
                                                                                      189.22
                                                                                                                                        5122.2
                                                                                                                                                                        262.45
        90.00
                                                                                                                                                                      353.17
                      4 22 28 1583.87
                                                      -9.74
                                                                      359.82
                                                                                   177.36
                                                                                                                                         983.9
                                                                                                                                                          -5.87
       100.00
                                                                                     189.47
                                                                                                                                        4822.5
                                                                                                                                                          29.84
                                                                                                                                                                       240.48
                    11 27 53 5422.51
                                                       29.27
                                                                      249.24
       100.00
                                                                                    174.95
                                                                                                                                        848.9
                                                                                                                                                          -9.56
                                                                                                                                                                        340.68
                    5 5 33 1448.88
13 1 18 5130.26
                                                       -13.84
                                                                      347.17
       110.00
                                                                                       189.97
                                                                                                                                        4530.3
                                                                                                                                                          34.15
                                                                                                                                                                        218.30
                                                       33.98
                                                                      227.54
                                     5130.26
       110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ST 603.4 SR 171.7 SS 126.0
CRT .3390 CRS -.6245 CST -.9288
                                                                           SGT 2198.8 SGR 392.2 SG3 162.9
RRT -.7368 RRF -.8439 RTF .8277
SGB 2233.6 R23 .3330 R13 -.8331
    TOE -.4208 TRA-1.9365 TC3 -.9925 BAU .6841
    ROE - .2055 RRA .1647 RC3 .2301 FAU .07397
                                                                                                                                  LSA 617.9 MSA 165.1 SSA 20.5
    FDE -.2606 FRA -.5775 FC3-1.2750 BSP 6723
BOE .4683 BRA 1.9435 BC3 1.0189 FSP -514
                                                                           5G1 2218.0 SG2 262.9 THA 172.41
    BOE .4683 BRA 1.9435 BC3 1.0189 FSP
                                                                                                                                  EL1 606.4 EL2 160.7 ALF 5.93
                                                                                FLIGHT TIME 102.00
                                                                                                                                                APRIVAL DATE APR IS 1966
LAUNCH DATE JAN 5 1966
                                                                               DISTANCE 315.071
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 29.026 GAL -13.21 AZL 90.14 MCA 152.27 SMA 137.97 ECC .23738 INC .1433 VI 30.287 RP 108.64 LAP -.07 LOP 257.50 VP 38.486 GAP 6.21 AZP 89.87 TAL 241.05 TAP 33.32 RCA 105.22 APO 170.72 V2 34.881 RC 115.673 GL -.58 GP 24.44 ZAL 163.04 ZAP 134.39 ETS 23.65 ZAE 132.48 ETE 157.96 ZAC 31.69 ETC 190.08 CLP-140.21
   PLANETOCENTRIC CONIC
    C3 48.432 VHL 6.959 DLA -20.25 RAL 304.58 RAD 6568.8 VEL 13.031 PTH 2.38 VMP 5.678 DPA
                                                                                                                                            1.29 RAP 296.12 ECC 1.7971
    ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 32 11 1746.36 -6.14 13.69 179.30 117.70 4 1 17 1146.4 -2.39 7.02
                                                                       13.69 179.30 117.70 4 1 17
274.22 190.24 98.82 11 21 41
356.57 178.37 118.93 5 5 51
252.14 190.56 97.84 12 51 3
344.48 175.84 122.22 5 44 0
229.93 191.22 95.34 14 22 17
MIO-COURSE EXECUTION ACCURACY
GGT 23/13.4 428 3464 463 4474
                                                                                                                                                                         265.68
                                                                                                                                        5166.6
                                                                                                                                                          27.96
                      9 45 34 5766.64
                                                        27.02
                                                                       274.22
         90.00
                      4 40 25 1526.14
11 20 1 5462.10
                                                                                                                                                          -3.93
                                                                                                                                                                         349.98
                                                                       356.57
                                                                                                                                         926.1
                                                        -7.85
       100.00
                                                                                                                                                          29.72
                                                                                                                                                                         243.42
                                                       28.94
                                                                       252.14
                                                                                                                                        4862.1
                    11 20 1
       100.00
                     5 20 40 1400.02 -12.08
12 56 16 5160.97 33.81
                                                                       344.48
                                                                                                                                        800.0
                                                                                                                                                          -7.74
                                                                                                                                                                         338.07
       110.00
                                                                                                                                        4561.0
                                                                                                                                                          34.18
                                                                                                                                                                         220.70
                                                                       229.93
       110.00
                                                                                                                            ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                         9GT 2303.4 SGR 396.1 SG3 157.4
RRT -.7464 RRF -.8739 RTF .8278
SGB 2337.2 R23 .3726 R13 -.8334
SG1 2322.5 SG2 261.5 THA 172.59
                                                                                                                                 ST 662.5 SR 144.2 55 143.4

CRT .3922 CRS -.6970 CST -.9167

LSA 678.1 MSA 141.3 SSA 2D.8

EL1 665.0 EL2 132.2 ALF 5.08
    TOE -.5074 TRA-1.9460 TC3 .0693 BAU .7110
     ROE -. 1682 RRA . 1477 RC . 2499 FAU . 07022
    FOE -.3084 FRA -.5122 FC3-1.2552 BSP 7088
BOE .5345 BRA 1.9516 BC3 1.0981 FSP -499
```

ARRIVAL DATE APR 20 1966

LAUNCH DATE JAN 6 1966 DISTANCE 320.894 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 28.927 GAL -12.94 AZL 90.61 HCA 155.44 SHA 137.15 ECC .23482 INC .6123 V1 30.287 RP 108.68 LAP -.25 LOP 260.67 VP 38.402 GAP 6.44 AZP 89.44 TAL 239.54 TAP 34.98 RCA 104.94 APO 169.35 V2 34.870 RC 118.029 GL -2.53 GP 26.68 ZAL 161.98 ZAP 134.91 ETS 27.30 ZAE 130.85 ETE 156.56 ZAC 33.27 ETC 192.57 CLP-142.20 PLANETOCENTRIC CONIC 2.36 VHP 5.842 DPA 3.66 RAP 296.86 ECC 1.7696 C3 46.765 VHL 6.838 DLA -21.93 RAL 306.02 RAD 6568.7 VEL 12.966 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1063.0 1662.97 5832.49 180.84 118.12 4 26 8 . 30 5 58 25 -3.49 9.00 90.00 101.03 11 8 1 119.45 5 28 25 99.98 12 39 41 122.91 6 2 29 97.35 14 14 59 270.45 5232.5 27.50 278.89 191.48 5 4 14 1450.52 11 7 40 5520.17 5 40 11 1337.86 12 48 13 520 9 30 49 26.24 90.00 -1.38 345.82 -5.34 352.36 179.82 850.5 100.00 4920.2 29.41 737.9 -5.40 191.91 247.71 28.32 256.34 100.00 177.10 192.63 334.78 -9.80 341.10 110.00 4605.6 224.19 34.13 33.48 233.37 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 2405.6 SGR 402.4 SG3 150.7 RRT -,7488 RRF -,9008 RTF .8277 SGB 2439.1 R23 .4125 R13 -.8335 SG1 2424.7 SG2 264.6 THA 172.77 ST 737.8 SR 113.2 SS 166.5 CRT .4427 CRS -.7480 CST -.9108 TOE -.6160 TRA-1.9378 TC3-1.1462 BAU .7364 RDE -.1281 RRA .1259 RC3 .2711 FAU .06599 FDE -.3621 FRA -.4410 FC3-1.2217 BSP 7412 LSA 755.1 MSA 119.0 SSA 20.6 EL1 739.5 EL2 101.2 ALF 3.96 BDE .6292 BRA 1.9419 BC3 1.1778 FSP -476 ARRIVAL DATE APR 22 1966 FLIGHT TIME 106.00 LAUNCH DATE JAN 6 1966 DISTANCE 326.702 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 28.828 GAL -12.67 A7L 91.21 MCA 158.61 SMA 136.35 ECC .23236 INC 1.2110 V1 30.287 RP 108.71 LAP -.44 LOP 263.84 VP 38.319 GAP 6.66 A7P 88.87 TAL 238.00 TAP 36.61 RCA 104.66 APO 168.03 V2 34.860 RC 120.382 GL -5.07 GP 29.51 ZAL 160.50 ZAP 134.87 ETS 31.53 ZAE 128.97 ETE 154.84 ZAC 35.11 ETC 195.53 CLP-144.17 PLANETOCENTRIC CONIC C3 45.314 VHL 6.732 DLA -24.16 RAL 307.71 RAD 6568.7 VEL 12.910 PTH 2.35 VHP 6.052 DPA 6.62 RAP 297.47 ECC 1.7458 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 4 37 8 1541.92 9 5 36 649.68 5 38 17 1344.55 10 47 9 5610.32 6 6 49 1255.04 12 35 6 5272.60 183.29 5 2 50 941.9 4.20 355.60 2.24 118.31 .42 90.00 26.40 308.28 192.90 104.37 9 16 26 49.7 90.00 24.67 119.84 6 0 41 103.14 12 20 39 340.01 744.5 2.22 182.07 -1.77 346.53 100.00 27.09 193.56 254.30 5010.3 28.63 262.76 100.00 123.60 6 27 44 100.29 14 2 59 330.44 336.69 655.0 -2.25 110.00 -6.71 4672.6 33.85 229.40 32.78 238.47 194.92 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 841.5 SR 76.2 SS 200.4 CRT .4674 CRS -.7598 CST -.9140 SGT 2511.3 SGR 413.0 SG3 143.2 RRT -.7443 RRF -.9237 RTF .8293 TOE -.7615 TRA-1.9100 TC3-1.2232 BAU .7622 RDE -. 0822 RRA . 0990 RC3 . 2944 FAU . 06141 SGB 2545.0 R23 .4477 R13 -.8354 SG1 2530.3 SG2 273.7 THA 172.94 FOE -.4299 FRA -.3692 FC3-1.1732 BSP 7778 BOE .7659 BRA 1.9126 BC3 1.2581 FSP -455 LSA 862.2 MSA 101.8 55A 19.6 ARRIVAL DATE APR 24 1966 FLIGHT TIME 108.00 LAUNCH DATE JAN 6 1966 DISTANCE 332.495 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 28.731 GAL -12.38 A7L 92.01 MCA 161.77 SNA 135.56 ECC .23001 INC 2.0053 VI 30.287 RP 108.74 LAP -.63 LOP 267.01 VP 38.237 GAP 6.87 A7P 88.10 TAL 236.43 TAP 38.20 RCA 104.38 APO 166.74 V2 34.851 RC 122.731 GL -8.49 GP 33.17 ZAL 158.41 ZAP 134.06 ETS 36.42 ZAE 126.86 ETE 152.80 ZAC 37.30 ETC 199.11 CLP-146.18 PLANETOCENTRIC CONIC C3 44.267 VHL 6.653 DLA -27.20 RAL 309.81 RAD 6568.7 VEL 12.870 PTM 2.34 VMP 6.339 DPA 10.39 RAP 297.86 ECC 1.7285
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 5 50 6 1317.23 7.59 349.63 188.03 117.36 6 12 3 717.2 11.20 342.81
90.00 8 9 22 862.62 20.34 322.38 193.79 110.14 8 23 45 262.6 22.90 314.64
100.00 6 34 58 1172.24 4.07 337.06 186.10 119.64 6 54 30 572.2 7.88 330.47
100.00 10 7 11 5770.88 24.13 273.76 195.21 108.20 11 43 22 5170.9 26.39 265.69
110.00 6 46 30 1136.02 -2.19 330.44 182.22 124.12 7 5 26 536.0 2.30 324.23 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 988.7 SR 33.2 SS 247.2 CRT .2983 CRS -.5816 CST -.9260 SGT 2617.1 SGR 427.3 SG3 134.0 RRT -.7266 RRF -.9397 RTF .8328 SGB 2651.7 R23 .4750 R13 -.8391 TOE -.9617 TRA-1.8509 TC3-1.2911 BAU .7868 RDE -.0285 RRA .0633 RC3 .3173 FAU .05609 FDE -.5122 FRA -.2922 FC3-1.0970 BSP 8138 BDE .9621 BRA 1.8520 BC3 1.3295 FSP -428 LSA 1015.1 MSA 94.8 SSA 16.1 EL1 988.8 EL2 31.7 ALF .57 SG1 2635.8 SG2 290.6 THA 173.13 ARRIVAL DATE APR 26 1966 FLIGHT TIME 110.00 LAUNCH DATE JAN 6 1966 DISTANCE 338.272 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 28.634 GAL -12.10 A7L 93.12 MCA 164.93 SMA 134.80 ECC .22776 INC 3.1193 VI 30.287 RP 108.76 LAP -.81 LOP 270.18 VP 38.156 GAP 7.07 A7P 86.99 TAL 234.84 TAP 39.77 RCA 104.10 APO 165.50 V2 34.842 RC 125.075 GL -13.27 GP 37.97 ZAL 155.20 ZAP 132.16 ETS 42.05 ZAE 123.63 ETE 150.47 ZAC 40.00 ETC 203.51 CLP-148.38 PLANETOCENTRIC CONIC C3 44.057 VHL 6.638 DLA -31.49 RAL 312.60 RAD 6568.7 VEL 12.862 PTH 2.34 VHP 6.763 DPA 15.26 RAP 297.81 ECC 1.7251 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 194.80 117.53 5 41 41 19.50 852.7 5 17 29 1452.66 15.94 4.01 75.61 117.53 5 41 41 117.53 5 41 41 117.52 9 16 21 123.77 8 13 55 303.10 9 4 17 124.8 19.51 15.95 310.21 194.80 104.39 724.79 852.7 19.50 356.91 5 17 29 1452.66 15.94 4.01 194.80 75.61 724.79 124.8 19.51 303.10 15.95 194.80 9 4 17 310.21 10.07 330.1 313.34 7 58 25 930.07 5.67 319.67 188.62 110.00 112.08 12 55 34 29.54 4983.4 11 22 31 5583.42 26.79 260.62 200.17 HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2721.7 SGR 443.5 SG3 122.0 RRT -.6941 RRF -.9436 RTF .8392 SGB 2757.6 R23 .4907 R13 -.8458 SG1 2739.3 SG2 317.2 THA 173.46 ST 1206.3 SR 34.1 SS 310.7 CRT -.8869 CRS .9471 CST -.9439 TOE-1.2544 TRA-1.7423 TC3-1.3315 BAU .8084 RDE .0361 RRA .0126 RC3 .3331 FAU .04960 FDE -.6101 FRA -.2067 FC3 -.9747 BSP 8472 BDE 1.2549 BRA 1.7424 BC3 1.3725 FSP -390 LSA 1242.1 MSA 100.3 SSA 10.8 EL1 1206.7 EL2 15.7 ALF 178.56

FLIGHT TIME 104.00

```
ARRIVAL DATE APR 28 1966
                                                                                                  FLIGHT TIME 112.00
    HELIOCENTRIC CONIC
                                                                                                 DISTANCE 344.030
     RL 147.10 LAL -.00 LOL 105.23 VL 28.538 GAL -11.80 AZL 94.80 MCA 168.08 SMA 134.05 ECC .22560 INC 4.8049 VI 30.287 RP 108.79 LAP -.99 LOP 273.34 VP 38.077 GAP 7.26 AZP 85.30 TAL 233.22 TAP 41.30 RCA 103.81 APO 164.29 VZ 34.834 RC 127.413 GL -20.22 GP 44.43 ZAL 149.97 ZAP 128.69 ETS 48.56 ZAE 119.38 ETE 148.07 ZAC 43.47 ETC 209.09 CLP-151.09
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC
C3 45.832 VHL 6.770 DLA -37.71 RAL 316.79 RAD 6568.7 VEL 12.930 PTH 2.36 VHP 7.461 DPA 21.67 RAP 296.92 ECC 1.7543
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
63.99 4 24 45 1673.86 18.38 22.82 201.31 123.52 4 52 39 1073.9 22.66 16.01
116.01 10 30 25 5811.48 18.40 273.88 201.32 123.51 12 7 16 5211.5 22.67 267.07
63.99 4 24 45 1673.86 18.38 22.82 201.31 123.52 4 52 39 1073.9 22.66 16.01
116.01 10 30 25 5811.48 18.40 273.88 201.32 123.51 12 7 16 5211.5 22.67 267.07
63.99 4 24 45 1673.86 18.38 22.82 201.31 123.52 4 52 39 1073.9 22.66 16.01
116.01 10 30 25 5811.48 18.40 273.88 201.32 123.51 12 7 16 5211.5 22.67 267.07
116.01 10 30 25 5811.48 18.40 273.88 201.32 123.51 12 7 16 5211.5 22.67 267.07
                                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 2830.3 SGR 458.8 SG3 107.1
RRT -.6275 RRF -.9230 RTF .8536
SGB 2867.3 R23 .4864 R13 -.8600
SG1 2845.2 SG2 355.3 THA 174.10
                                                                                                                                                                 ST 1544.9 $R 100.1 $$ 400.4
CRT -.8583 CRS .9625 CST -.9641
     TDE-1.7272 TRA-1.5496 TC3-1.3058 BAU .8249
     ROE .1148 RRA -.0626 RC3 .3274 FAU .04170
FOE -.7317 FRA -.1147 FC3 -.7877 BSP 8850
BOE 1.7310 BRA 1.5509 BC3 1.3463 FSP -346
                                                                                                                                                                 LSA 1595.0 MSA 114.4 SSA 6.2
                                                                                                                                                                  ELI 1547.3 EL2 51.3 ALF 176.81
                                                                                                  FLIGHT TIME 114.00
                                                                                                                                                                                  ARRIVAL DATE APR 30 1966
LAUNCH DATE JAN 6 1966
                                                                                                 DISTANCE 349.762
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 28.443 GAL -11.49 A7L 97.67 MCA 171.20 SMA 133.33 ECC .22352 INC 7.6700 V1 30.287 RP 108.81 LAP -1.17 LOP 276.51 VP 37.999 GAP 7.43 AZP 82.42 TAL 231.58 TAP 42.78 RCA 103.53 APO 163.13 V2 34.826 RC 129.747 GL -30.62 GP 53.25 ZAL 141.21 ZAP 122.95 ETS 56.42 ZAE 113.06 ETE 146.55 ZAC 48.12 ETC 216.65 CLP-155.38
    PLANETOCENTRIC CONIC
     PLANETOCENTRIC CONIC

C3 53.348 VHL 7.304 OLA -46.76 RAL 324.33 RAO 6568.9 VEL 13.218 PTH 2.41 VHP 8.786 DPA 30.19 RAP 294.25 ECC 1.8780

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

51.10 4 0 3 1861.86 20.31 40.85 213.94 133.07 4 31 5 1261.9 25.65 34.79

128.90 11 55 17 5699.24 20.33 265.70 213.95 133.06 13 30 16 5099.2 25.67 259.64

51.10 4 0 3 1861.86 20.31 40.85 213.94 133.07 4 31 5 1261.9 25.65 34.79

128.90 11 55 17 5699.24 20.33 265.70 213.95 133.06 13 30 16 5099.2 25.67 259.64

51.10 4 0 3 1861.86 20.31 40.85 213.94 133.07 4 31 5 1261.9 25.65 34.79

128.90 11 55 17 5699.24 20.33 265.70 213.95 133.06 13 30 16 5099.2 25.67 259.64
                                                                                                                                                                 ORBIT DETERMINATION ACCURACY
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                          SGT 2932.8 SGR 458.9 SG3 88.3

RRT -.4621 RRF -.8144 RTF .8828

SGB 2968.5 R23 .4493 R13 -.8874

SG1 2940.6 SG2 405.9 THA 175.78
                                                                                                                                                                  ST 2072.6 SR 150.7 SS 522.8 CRT -.8072 CRS .9047 CST -.9817
      TOE-2.5911 TRA-1.1710 TC3-1.1191 BAU .8199
     ROE .1737 RRA -.1842 RC3 .2829 FAU .03183
FOE -.8774 FRA -.0078 FC3 -.5166 85P 9125
80E 2.5969 BRA 1.1855 BC3 1.1495 FSP -285
                                                                                                                                                                 LSA 2138.9 MSA 130.3 SSA 3.1
EL1 2076.2 EL2 88.8 ALF 176.64
                                                                                                                                                                                ARRIVAL DATE MAY 2 1956
                                                                                                 FLIGHT TIME 116.00
LAUNCH DATE JAN 5 1966
                                                                                                DISTANCE 355.441
    HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 28.350 GAL -11.17 AZL 103.62 MCA 174.29 SHA 132.62 ECC .22141 INC13.6221 VI 30.287 RP 108.84 LAP -1.34 LOP 279.67 VP 37.922 GAP 7.59 AZP 76.44 TAL 229.90 TAP 44.18 RCA 103.26 APO 161.98 VZ 34.819 RC 132.074 GL -45.63 GP 65.02 TAL 127.03 ZAP 114.22 ETS 68.99 TAE 103.08 ETE 150.23 TAC 54.26 ETC 229.93 CLP-166.29
    PLANETOCENTRIC CONIC
     C3 83.971 VHL 9.164 DLA -58.20 RAL 341.97 RAO 6569.6 VEL 14.329 PTH 2.61 VHP 11.899 OPA 41.09 RAP 286.94 ECC 2.3820
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                            146.39 5 1 18
146.39 15 24 24
146.39 15 24 24
146.39 15 24 24
146.39 5 1 18
146.39 5 1 18
146.39 15 24 24
                        4 26 49 2068.26
13 49 15 5708.78
4 26 49 2068.26
13 49 15 5708.78
4 26 49 2068.26
13 49 15 5708.78
                                                                                                       240.45
                                                                                                                                                                                       24.43
                                                                                                                                                                  1468.3
                                                                                       59.79
                                                                                                                                                                                                                55.36
          36.77
                                                                    17.63
                                                                                                          240.47
                                                                                                                                                                        5108.8
                                                                                                                                                                                             24.44
                                                                                                                                                                                                               259.17
                                                                                       263.61
         143.23
                                                                     17.84
                                                                                                        240.45
                                                                                                                                                                        1468.3
                                                                                                                                                                                             24.43
                                                                                                                                                                                                                 55.36
                                                                                        59.79
          36.77
                                                                     17.83
                                                                                                          240.47
                                                                                                                                                                        5108.8
                                                                                                                                                                                             24.44
                                                                                                                                                                                                              259.17
                                                                                       263.61
         143.23
                                                                    17.84
                                                                                                                                                                        1468.3
                                                                                                                                                                                             24.43
                                                                                                         240.45
          36.77
                                                                     17.83
                                                                                        59.79
                                                                                                                                                                        5108.8
                                                                  17.84
                                                                                       263.61
                                                                                                          240.47
         143.23
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
                                                                                           HID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                           SCT 3026.9 SGR 469.1 SG3 67.4
RRT .2390 RRF -.0994 RTF .9409
SGB 3063.0 R23 -.3393 R13 .9390
SGI 3029.0 SG2 455.2 THA . 2.17
                                                                                                                                                                  ST 2767.9 SR 193.0 SS 681.6
     TDE-4.4237 TRA -.2761 TC3 -.6465 BAU .7336
                                                                                                                                                                  CRT .7925 CRS -.7195 CST -.9937
     ROE -.2379 RRA -.3451 RC3 .0950 FAU .01997
FDE-1.0571 FRA .1421 FC3 -.2059 BSP 9407
BDE 4.4301 BRA .4420 BC3 .6555 FSP -214
                                                                                                                                                                  LSA 2853.7 MSA 139.7 SSA 1.4
                                                                                                                                                                  EL1 2772.2 EL2 117.5 ALF 3.17
                                                                                                  FLIGHT TIME 118.00
                                                                                                                                                                                 ARRIVAL DATE MAY 4 1966
LAUNCH DATE JAN 6 1966
                                                                                                 DISTANCE 360.916
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 28.258 GAL -10.80 AZL 122.35 HCA 177.17 SMA 131.93 ECC .21884 INC32.3468 V1 30.267 RP 108.86 LAP -1.51 LOP 282.83 VP 37.847 GAP 7.68 AZP 57.68 TAL 228.13 TAP 45.30 RCA 103.06 APO 160.80 VZ 34.812 RC 134.395 GL -59.74 GP 73.33 ZAL 108.03 ZAP 102.60 ETS 119.81 ZAE 84.71 ETE 194.00 ZAC 60.57 ETC 283.89 CLP 139.51
    PLANETOCENTRIC CONIC
                                                                                                                                     3.16 VMP 22.656 DPA 50.77 RAP 262.94 ECC 5.8653
     C3 295.631 VHL 17.194 DLA -60.43 RAL 19.58 RAD 6571.7 VEL 20.419 PTH
                                                                 INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                         6 50 2 2301.55
16 26 8 628.33
                                                                     5.31
                                                                                                                                                  7 28 24
                                                                                                                                                                       1701.5
                                                                                                                                                                                         12.24
                                                                                         69.01
                                                                                                         286.55
                                                                                                                               150.29
                                                                                                                                                                                                                  65.38
         34.10
                                                                                                                                150.29 16 36 36
                                                                                                                                                                          28.3
                                                                                                                                                                                              12.25
                                                                                                                                                                                                               287.97
                                                                                                           286.57
                                                                       5.32
                                                                                       291.61
         145.90
                                                                                                                                150.29
                                                                                                                                                 7 28 24
                                                                                                                                                                        1701.5
                                                                                                                                                                                              12.24
                                                                                                                                                                                                                 65.38
                                                                                         69.01
                                                                                                           286.55
                           6 50 2 2301.55
                                                                       5.31
          34.10
                                                                                                                                150.29 16 36 36
                                                                                                                                                                          28.3
                                                                                                                                                                                                               287.97
                                                                                       291.61
                                                                                                           286.57
                                                                                                                                                                                              12.25
         145.90
                         16 26 8
                                               628.33
                                                                       5.32
                                                                                                                                150.29 7 28 24
150.29 16 36 36
                                                                                                                                                                        1701.5
                                                                                                                                                                                              12.24
                                                                                                                                                                                                                 65.38
                                                                       5.31
                                                                                         69.01
                                                                                                           266.55
                         6 50 2 2301.55
16 26 8 628.33
          34.10
                                                                                                                                                                                                               287.97
                                                                                                                                                                          28.3
                                                                                                                                                                                            12.25
                                                                       5.32
                                                                                       291.61
                                                                                                          286.57
         145.90
    DIFFERENTIAL CORRECTIONS
                                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                          SGT 1922.2 SGR 2401.5 SG3 48.6
RRT .9369 RRF .9584 RTF .9977
SGB 3076.0 R23 -.1509 R13 .9885
                                                                                                                                                                 ST 1345.3 SR 2126.1 SS 814.9
CRT .9871 CRS -.9922 CST -.9994
      TOE-3.8253 TRA 2.1228 TC3 -.0367 BAU
                                                                         .2036
     ROE-6.2936 RRA 1.7229 RC3 .0362 FAU .00199
FDE-1.1972 FRA .5873 FC3 -.0058 BSP 9400
BDE 7.3649 BRA 2.7340 BC3 .0515 FSP -155
                                                                                                                                                                 LSA 2637.6 MSA 192.2 55A
                                                                                           SG1 3029.6 SG2 532.7 THA 51.74
                                                                                                                                                                  EL1 2509.3 EL2 182.2 ALF 57.82
```

ARRIVAL DATE MAY 6 1966

```
FLIGHT TIME 120.00
LAUNCH DATE JAN 6 1966
                                                                       DISTANCE 368.166
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 28.167 GAL -10.81 AZL 24.65 HCA 181.85 SHA 131.26 ECC .22186 INC65.3461 V1 30.287 RP 108.87 LAP -1.68 LOP 286.00 VP 37.774 GAP 8.28 AZP 155.34 TAL 226.90 TAP 48.75 RCA 102.14 APO 160.38 V2 34.806 RC 136.709 GL 52.23 GP -61.11 ZAL 99.61 ZAP 98.11 ETS 190.22 ZAE 63.98 ETE 121.50 ZAC 85.94 ETC 34.93 CLP 106.98
   PLANETOCENTRIC CONIC
    C31011.888 VML 31.810 DLA 46.28 RAL 332.40 RAD 6573.0 VEL 33.663 PTH 3.50 VMP 37.830 DPA -62.10 RAP 166.47 ECC17.6531
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                228.17
                                                                              242.72
                                                                                               43.72 17 54 43
                                                                                                                          4324.8
                                                                                                                                          -5.45
                                                                                                                                                       223.05
                                                      . 32
       51.73
                  16 32 38 4924.79
D 27 4 3486.12
                                                                                                         1 25 10
                                                                                                                           2886.1
                                                                                                                                           -5.44
                                                                                                                                                         111.10
                                                                116.22
                                                                              242.70
                                                                                                43.72
      128.27
                                                      .33
                                                                               242.72
                                                                                                43.72
                                                                                                         17 54 43
                                                                                                                           4324.8
                                                                                                                                           -5.45
                                                                                                                                                         223.05
                                                                228.17
                  16 32 38 4924.79
0 27 4 3486.12
        51.73
                                                      . 32
                                                                                                43.72 1 25 10
                                                                                                                           2886.1
                                                                                                                                           -5.44
                                                                                                                                                         111.10
                                                                               242.70
      128.27
                                                      . 33
                                                                116.22
                                                                                                         17 54 43
                  16 32 38
                                                                                                                           4324.8
                                                                                                                                          -5.45
                                                                                                                                                         223.05
                                                                              242.72
                                                                                               43.72
        51.73
                                  4924.79
                                                      .32
                                                                228.17
                                                                                               43.72
                                                                                                                          2886.1
                                                                                                                                          -5.44
                                                                                                                                                         111.10
                                                                              242.70
                                                                                                          1 25 10
                                                                116.22
      128.27
                   0 27 4
                                 3486.12
                                                      . 33
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 745.2 SGR 2829.9 SG3 44.7
RRT .6567 RRF -.9976 RTF -.6039
                                                                                                                       ST 260.7 SR 2484.2 SS 1531.6
CRT .7728 CRS .9998 CST .7596
LSA 2925.2 MSA 168.3 SSA .7
    TDE-1.0180 TRA 2.3654 TC3 -.0592 BAU 2.4497
    RO-13.7184 RRA 3.2494 RC3 -.1711 FAU-.03331
    FOE 2.5928 FRA -.4904 FC3 .0285 BSP 7558
BDE13.7562 BRA 4.0192 BC3 .1811 FSP -125
                                                                    5GB 2926.4 R23 -.1025 R13 -.9947
                                                                    SG1 2873.5 SG2 553.4 THA 79.81
                                                                                                                       EL1 2492.4 EL2 164.9 ALF 85.34
                                                                                                                                   ARRIVAL DATE MAY 8 1966
                                                                        FLIGHT TIME 122.00
LAUNCH DATE JAN 6 1966
                                                                        DISTANCE 373.243
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 28.077 GAL -10.35 AZL 64.91 HCA 184.34 SMA 130.61 ECC .21834 INC25.0905 VI 30.287 RP 108.89 LAP -1.84 LOP 289.16 VP 37.703 GAP 8.25 AZP 115.03 TAL 224.99 TAP 49.33 RCA 102.09 APO 159.13 V2 34.801
                        58.02 GP -69.28 TAL 111.53 TAP 110.70 ETS 258.20 TAE 93.01 ETE 184.26 TAC 84.83 ETC 101.60 CLP 177.33
    RC 139.015 GL
   PLANETOCENTRIC CONIC
    C3 190.663 VHL 13.808 DLA 42.63 RAL 309.18 RAD 6571.0 VEL 17.663 PTH 2.98 VHP 15.056 DPA -84.86 RAP 58.67 ECC 4.1378
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             47.84 16 37 52
                                                                                                                         4116.5
                  15 19 15 4716.46
                                                                216.31
                                                                             211.58
                                                   -6.95
       56.70
                  22 31 17 3378.99
15 19 15 4716.46
22 31 17 3378.99
15 19 15 4716.46
22 31 17 3378.99
                                                                                                         23 27 36
                                                                                                                            2779.0
                                                                                                                                           -12.26
                                                                                                                                                         107.93
                                                                 113.58
                                                                               211.57
                                                                                                47.83
      123.30
                                                   -6.94
                                                                                                         16 37 52
                                                                                                                            4116.5
                                                                                                                                           -12.28
                                                                                                                                                         210.66
                                                                                                47.84
                                                   -6.95
                                                                216.31
                                                                               211.58
        56.70
                                                                                                         23 27 36
                                                                                                                            2779.0
                                                                                                                                           -12.26
                                                                                                                                                         107.93
                                                   -6.94
                                                                 113.58
                                                                               211.57
                                                                                                47.83
      123.30
                                                                                                47.84 16 37 52
47.83 23 27 36
                                                                                                                            4116.5
                                                                                                                                          -12.28
                                                                                                                                                         210.66
                                                   -6.95
                                                                216.31
                                                                               211.58
       56.70
                                                                               211.57
                                                                                                                            2779.0
                                                                                                                                          -12.26
                                                                                                                                                         107.93
                                                                 113.58
      123.30
                   22 31 17
                                 3378.99
                                                   -6.94
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 2093.5 SR 1015.3 S5 704.2

CRT -.9789 CRS ..9643 CST -.9981

LSA 2422.7 MSA 199.3 SSA 1.3

EL1 2319.1 EL2 187.5 ALF 154.43
                                                                    SGT 2815.8 SGR 1820.0 SG3 58.4
RRT -.9533 RRF -.8971 RTF .9878
    TOE 4.8481 TRA-3.4245 TC3 -.1412 BAU .3646
    ROE-Z.1630 RRA 2.8051 RC3 .0229 FAU .01238
    FDE 1.2735 FRA -.6939 FC3 -.0562 BSP 10483
BDE 5.3087 BRA 4.4267 BC3 .1431 FSP -196
                                                                    SGB 3352.8 R23 -.2346 R13 -.9709
                                                                    SG1 3320.2 SG2 466.1 THA 147.64
                                                                                                                                  ARRIVAL DATE MAY 10 1966
                                                                        FLIGHT TIME 124.00
LAUNCH DATE JAN 6 1966
                                                                       DISTANCE 378.842
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.989 GAL -9.99 AZL 74.26 MCA 187.37 SMA 129.98 ECC .21660 INC15.7429 VI 30.287 RP 108.90 LAP -1.99 LOP 292.32 VP 37.633 GAP 8.37 AZP 105.62 TAL 223.22 TAP 50.59 RCA 101.83 APO 158.13 V2 34.797 RC 141.312 GL 50.53 GP -55.95 TAL 120.25 TAP 122.65 ETS 284.48 TAE 106.08 ETE 204.68 TAC 78.66 ETC 127.85 CLP-164.48
   PLANETOCENTRIC CONIC
    C3 93.857 VHL 9.688 DLA 33.74 RAL 307.51 RAD 6569.8 VEL 14.670 PTH 2.66 VHP 10.011 DPA -72.51 RAP 349.40 ECC 2.5447
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 8 LAT INJ 8 LONG
                                                                                                                                        -14.84
                                                                                                                                                     184.45
                                                                                             57.80 17 37 7
57.79 22 10 34
                   16 24 13 4373.40
21 13 1 3453.10
16 24 13 4573.40
21 13 1 3453.10
                                                                                                                        3773.4
                                                               191.03
                                                                             201.16
                                                  -10.66
        70.84
                                                                                                                            2853.1
                                                                                                                                          -14.82
                                                                                                                                                         115.69
                                                                               201.15
                                                                122.47
                                                  -10.64
                                                                                                57.80
                                                                                                        17 37 7
                                                                                                                            3773.4
                                                                                                                                          -14.84
                                                                                                                                                         184.45
                                                                 191.03
                                                                               201.16
                                                 -10.66
        70.84
                                                                                                         22 10 34
                                                                                                                            2853.1
                                                                                                                                          -14.82
                                                                                                                                                         115.89
                                                                                                57.79
                                                                122.47
                                                                               201.15
       109.16
                                                 -10.64
                                                                                                59.08 22 55 5
56.29 21 35 55
                                                                                                                            2709.8
                                                                                                                                          -19.34
                                                                                                                                                         107.43
                    21 59 55 3309.76
20 36 30 3564.73
                                                                               204.12
                                                                 114.28
       110.00
                                                 -15.36
                                                                                                                            2964.7
                                                                                                                                         -10.41
                                                                                                                                                         121.70
                                                                               198.12
                                                  -6.02
                                                                128.13
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                    SGT 3410.7 SGR 638.1 SG3 80.0
RRT -.8021 RRF -.5344 RTF .9312
                                                                                                                       ST 2029.2 SR 193.0 SS 578.6

CRT -.5116 CRS .3363 CST -.9612

LSA 2109.5 MSA 198.6 SSA 1.6
    TOE 3.1603 TRA-3.7003 TC3 -.5686 BAU .7136
    RDE -.0447 RRA .8961 RC3 .0090 FAU .02628
FDE 1.1070 FRA -.6401 FC3 -.2424 BSP 10772
                                                                    SGB 3469.8 R23 -. 3713 R13 -. 9251
                                                                                                                        EL1 2031.6 EL2 165.6 ALF 177.20
                                                                    SG1 3449.3 SG2 376.7 THA 171.36
    BOE 3.1606 BRA 3.8073 BC3 .5687 FSP -265
                                                                                                                                   ARRIVAL DATE MAY 12 1966
                                                                         FLIGHT TIME 126.00
LAUNCH DATE JAN 6 1966
                                                                        DISTANCE 384.516
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.902 GAL -9.64 AZL 78.13 HCA 190.48 SMA 129.36 ECC .21523 INC11.8664 VI 30.287 RP 108.92 LAP -2.14 LOP 295.48 VP 37.565 GAP 8.51 AZP 101.67 TAL 221.46 TAP 51.93 RCA 101.52 APO 157.21 V2 34.793 RC 143.598 GL 44.38 GP -45.13 ZAL 125.52 ZAP 131.83 ETS 293.30 ZAE 113.93 ETE 206.49 ZAC 74.16 ETC 137.02 CLP-160.95
   PLANETOCENTRIC CONIC
    C3 65.407 VML 8.087 DLA 27.53 RAL 308.68 RAD 6569.2 VEL 13.666 PTH 2.50 VMP 8.238 DPA -61.34 RAP 340.99 ECC 2.0764
    LNCH AZETH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               67.02 20 52 38 62.21 19 1 37 68.62 22 48 17 60.14 19 39 54 71.11 0 53 20 56.19 19 48 10
                                                                                                                           3030.0
                                                                                                                                          -19.99
                                                                                                                                                        132.21
                   19 51 59 3639.03
17 54 35 4021.50
                                                   -17.02
                                                                 139.63
                                                                              198.78
        90.00
                                                                                                                                                          155.24
                                                                                                                            3421.5
                                                                                                                                           -9.37
                                                    -5.69
                                                                 161.99
                                                                               193.31
        90.00
                                                                                                                                           -24.12
                                                                                                                                                          104.78
                                                                                                                            2645.1
                                                                 112.53
                                                                               200.66
                    21 54 12 3245.05
                                                   -21.40
       100.00
                                                                                                                                                          143.56
                                                                                                                            3290.7
                                                                                                                                           -5.51
                                                    -1.55
                                                                 150.11
                                                                               191.02
       100.00
                    18 35 3
                                   3890.71
                                                                                                                            2245.2
                                                                                                                                          -31.33
                                                                                                                                                           76.81
                     D 5 55
                                   2845.20
                                                  -29.03
                                                                  85.26
                                                                               203.76
       110.00
                                                                                                                                                          137.53
                                                                 143.75
                                                                                                                            3263.3
                                                                                                                                               .88
                   18 43 46
                                                   5.36
                                                                               186.74
                                   3863.33
       110.00
                                                                                                                       ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                   SGT 3543.8 SGR 398.3 SG3 99.4 ST 1835.9 SR 170.0 SS 533.3 RRT -.5508 RRF -.1285 RTF .8915 CRT .3709 CRS -.6110 CST -.9617 SGB 3566.1 R23 -.4397 R13 -.8889 LSA 1907.7 MSA 210.4 SSA 2.8 SG1 3550.7 SG2 331.8 THA 176.43 ELI 1837.0 EL2 157.8 ALF 1.98
                                                                                                                      ST 1835.9 SR 170.0 SS 533.3
CRT .3709 CRS -.6110 CST -.9617
     TOE 2.3163 TRA-3.4294 TC3 -.9497 BAU .8306
    ROE .1793 RRA .4711 RC3 -.0181 FAU .03516
FOE 1.0388 FRA -.5802 FC3 -.4654 BSP 11157
     BDE 2.3232 BRA 3.4616 BC3 .9499 FSP -328
```

```
ARRIVAL DATE MAY 14 1966
                                                                                                   FLIGHT TIME 128.00
LAUNCH DATE JAN & 1966
   HELIOCENTRIC CONIC
                                                                                                  DISTANCE 390.210
     RL 147.10 LAL -.00 LOL 105.23 VL 27.817 GAL -9.29 AZL 80.25 MCA 193.61 SMA 128.77 ECC .21407 INC 9.7548 V1 30.287 RP 108.93 LAP -2.28 LOP 298.64 VP 37.498 GAP 8.65 AZP 99.49 TAL 219.68 TAP 53.29 RCA 101.20 APO 156.33 VZ 34.790 RC 145.874 GL 39.94 GP -37.16 ZAL 128.58 ZAP 138.59 ETS 298.66 ZAE 118.86 ETE 204.86 ZAC 71.59 ETC 142.66 CLP-160.24
    PLANETOCENTRIC CONIC
    C3 52.490 VML 7.245 OLA 23.34 RAL 310.33 RAD 6568.9 VEL 13.185 PTH 2.41 VMP 7.452 DPA -52.97 RAP 338.53 ECC 1.8639 D.OB 21.26 35 3286.66 -24.78 116.75 198.14 75.85 22 21.22 2686.7 -26.49 108.50 90.00 16.33 9 4266.41 2.18 175.69 187.61 61.76 17.41 15 3666.4 -1.61 169.06 100.00 23 6 8 2965.68 -27.10 93.76 198.77 76.88 23 55 34 2365.7 -28.64 85.30 100.00 17.36 17.4062.62 4.27 159.55 186.45 60.39 18.43 59 3462.6 .29 155.02 110.00 0.55 2 2637.33 -32.67 70.18 200.12 79.33 1.38 59 2037.3 -33.80 61.12 110.00 18.7 49 3963.75 9.13 149.08 183.47 56.91 19.13 52 3363.7 4.71 142.78
     C3 52.490 VHL 7.245 DLA 23.34 RAL 310.33 RAD 6568.9 VEL 13.185 PTH 2.41 VMP 7.452 DPA -52.97 RAP 338.53 ECC 1.8639
                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                              SGT 3643.0 SGR 322.1 SG3 113.3
RRT -.4014 RRF .0763 RTF .8662
     TOE 1.8766 TRA-3.2199 TC3-1.2682 BAU .8901
                                                                                                                                                                    ST 1702.3 SR 182.4 SS 503.0
     ROE .2055 RRA .3211 RC3 -.0206 FAU .04043
FOE .9729 FRA -.5107 FC3 -.6668 BSP 11426
BOE 1.8878 BRA 3.2359 BC3 1.2684 FSP -368
                                                                                                                                                                     CRT .5543 CRS -.8005 CST -.9424
                                                                                              SGB 3657.2 R23 -.4654 R13 -.8649
                                                                                                                                                                    LSA 1770.7 MSA 220.0 SSA 3.9
                                                                                              SG1 3645.3 SG2 294.9 THA 177.95
                                                                                                                                                                    EL1 1705.3 EL2 151.6 ALF 3.43
                                                                                                                                                                                    ARRIVAL DATE MAY 16 1966
LAUNCH DATE JAN 6 1966
                                                                                                   FLIGHT TIME 130.00
                                                                                                  DISTANCE 395.909
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.733 GAL -8.94 AZL 81.58 HCA 196.75 SHA 128.18 ECC .21309 INC 8.4231 V1 30.287 RP 108.93 LAP -2.42 LOP 301.81 VP 37.434 GAP 8.80 AZP 98.07 TAL 217.90 TAP 54.65 RCA 100.87 APO 155.50 V2 34.787
                                36.71 GP -31.28 ZAL 130.23 ZAP 143.62 ETS 302.70 ZAE 122.05 ETE 202.55 ZAC 70.45 ETC 146.65 CLP-160.41
     RC 148.138 GL
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 45.058 VHL 6.713 DLA 20.50 RAL 312.08 RAD 6568.7 VEL 12.900 PTH 2.35 VHP 7.062 DPA -46.60 RAP 338.02 ECC 1.7415
LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 22 10 38 3115.18 -27.09 104.74 196.45 81.44 23 2 33 2515.2 -28.00 96.19
90.00 16 3 2 4361.61 5.23 181.02 185.79 62.13 17 15 44 3761.6 1.46 174.37
100.00 23 45 24 2809.60 -29.01 82.57 196.76 82.47 24 32 13 2209.6 -29.75 73.84
100.00 17 10 57 4142.42 6.94 163.98 184.86 60.85 18 20 0 3542.4 3.00 157.40
110.00 1 26 10 2506.64 -33.88 60.17 197.38 85.13 2 7 57 1906.6 -34.18 50.94
110.00 17 90 37 4018.15 11.14 152.02 182.32 57.47 18 57 35 3418.2 6.77 145.65
   DIFFERENTIAL CORRECTIONS
                                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                                              SGT 3740.8 SGR 284.3 SG3 122.5
RRT -.3388 RRF .1453 RTF .8503
SGB 3751.5 R23 -.4622 R13 -.8495
                                                                                                                                                                     ST 1609.3 SR 186.7 55 478.1
CRT .6084 CRS -.8653 CST -.9241
     TOE 1.6085 TRA-3.0629 TC3-1.5478 BAU .9324
     RDE .2041 RRA .2461 RC3 -.0095 FAU .D4335
FDE .9062 FRA -.4425 FC3 -.8330 BSP 11777
                                                                                                                                                                    LSA 1673.8 MSA 227.7 SSA 5.2
ELI 1613.4 EL2 147.8 ALF 4.07
     BOE 1.6214 BRA 3.0728 BC3 1.5479 FSP -396
                                                                                              SG1 3742.0 SG2 267.4 THA 178.52
                                                                                                                                                                                   ARRIVAL DATE HAY 18 1966
                                                                                                  FLIGHT TIME 132.00
LAUNCH DATE JAN 6 1966
                                                                                                 DISTANCE 401.608
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.650 GAL -8.58 AZL 82.50 MCA 199.90 SMA 127.62 ECC .21226 INC 7.5026 VI 30.287 RP 108.94 LAP -2.55 LOP 304.97 VP 37.371 GAP 8.94 AZP 97.06 TAL 216.10 TAP 56.00 RCA 100.53 APO 154.71 V2 34.786 RC 150.390 GL 34.31 GP -26.86 TAL 130.97 ZAP 147.46 ETS 305.97 ZAE 124.18 ETE 200.31 ZAC 70.24 ETC 150.18 CLP-160.91
    PLANETOCENTRIC CONIC
     C3 40.102 VHL 6.335 DLA 18.54 RAL 313.85 RAD 6568.5 VEL 12.707 PTH 2.31 VHP 6.858 DPA -41.61 RAP 338.43 ECC 1.6600
    C3 40.102 VHL 6.333 DLA 18.54 RAL 313.85 RAD 6568.5 VEL 12.707 PTH 2.31 VHP 6.858 DPA -41.61 RAP 338.43 ECC 1.6600 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 39 22 3005.33 -27.96 96.82 195.28 85.31 23 29.80 2405.3 -28.31 88.17 90.00 15 48 27 4412.72 6.85 183.90 185.23 62.46 17 2 0 3812.7 3.11 177.22 100.00 0 15 49 2706.98 -29.69 75.02 195.42 86.39 1 0 56 2107.0 -29.88 66.22 100.00 16 58 37 4186.30 8.38 166.43 184.40 61.20 18 8 23 3586.3 4.48 159.82 110.00 1 48 24 2417.33 -34.18 53.22 195.62 89.24 2 28 42 1817.3 -33.90 43.98 110.00 17 42 32 4048.72 12.25 153.69 182.09 57.84 18 50 0 3448.7 7.92 147.27
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                             SCT 3834.1 SGR 263.1 SG3 128.4
RRT -.3133 RRF .1527 RTF .8395
SG6 3843.1 R23 -.4389 R13 -.8389
                                                                                                                                                                    ST 1547.6 SR 190.6 SS 458.7
CRT .6388 CRS -.9023 CST -.9076
     TOE 1.4354 TRA-2.9300 TC3-1.7997 BAU .9649
     ROE .2010 RRA .1990 RC3 .0074 FAU .04468
FOE .8463 FRA -.3760 FC3 -.9646 BSP 12067
BOE 1.4494 BRA 2.9367 BC3 1.7997 FSP -414
                                                                                                                                                                    LSA 1608.4 MSA 234.0 SSA 6.5
EL1 1552.4 EL2 146.2 ALF 4.54
                                                                                             SG1 3835.0 SG2 249.8 THA 178.76
                                                                                                                                                                                   ARRIVAL DATE MAY 20 1966
LAUNCH DATE JAN 6 1966
                                                                                                   FLIGHT TIME 134.00
                                                                                                  DISTANCE 407.305
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.569 GAL -8.22 AZL 83.17 HCA 203.05 SNA 127.07 ECC .21159 INC 6.8252 VI 30.287 RP 108.94 LAP -2.67 LOP 308.13 VP 37.310 GAP 9.08 AZP 96.28 TAL 214.29 TAP 57.34 RCA 100.18 APO 153.96 V2 34.785 RC 152.629 GL 32.48 GP -23.45 ZAL 131.07 ZAP 150.50 ETS 308.66 ZAE 125.66 ETE 198.31 ZAC 70.71 ETC 152.89 CLP-161.57
   PLANETOCENTRIC CONIC
     C3 36.456 VHL 6.038 OLA 17.21 RAL 315.65 RAD 6568.4 VEL 12.563 PTH 2.28 VMP 6.754 DPA -37.58 RAP 339.36 ECC 1.6000 ENCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                     INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
91.30 194.66 88.06 23 48 59 2329.7 -28.23 82.64
                       23 0 10 2929.66
15 42 1 4440.22
          90.00
                                                                   -28.26
                                                                                                                                    62.67
                                                                                                                                                 16 56 1
                                                                                                                                                                          3840.2
                                                                                                                                                                                                  3.99
                                                                                                                                                                                                                   178.76
                                                                      7.71
                                                                                        185.46
                                                                                                            185.20
           90.00
                                                                                                                                    89.18
                                                                                                                                                    1 19 16
                                                                                                                                                                          2035.4
                                                                                                                                                                                               -29.68
                                                                                                                                                                                                                     60.90
                                                                                          69.70
                          0 35 21 2635.39
                                                                   -29.88
                                                                                                            194.70
         100.00
                                                                                                                                    61.42 18 3 36
                                                                                                                                                                          3609.7
                                                                                                                                                                                                  5.26
                                                                                                                                                                                                                   161.12
                          16 53 26
                                                                       9.15
                                                                                        167.75
                                                                                                            184.52
         100.00
                                                                                                                                   92.18 2 44 38
58.03 18 47 36
                                                                                                                                                                          1753.6
                                                                                                                                                                                               -33.44
                          2 5 24 2353.61
17 39 52 4064.27
                                                                   -34.12
                                                                                          44.24
                                                                                                            194.64
                                                                                                            182.34
                                                                                                                                                                          3464.3
                                                                                                                                                                                                  8.50
         110.00
                                                                    12.81
                                                                                        154.54
                                                                                            MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                    ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                            SGT 3928.2 SGR 252.6 SG3 132.0
RRT -.2992 RRF .1331 RTF .8321
SGB 3936.4 R23 -.4014 R13 -.8316
                                                                                                                                                                    ST 1505.9 SR 196.3 $5 443.6
      TOE 1.3160 TRA-2.8128 TC3-2.0391 BAU .9939
                                                                                                                                                                   CRT .6639 CRS -.9287 CST -.8929
     ROE .2003 RRA .1644 RC3 .0262 FAU .04507
FDE .7940 FRA -.3141 FC3-1.0702 89P 12399
                                                                                                                                                                 LSA 1563.9 MSA 239.5 55A 7.8
EL1 1511.6 EL2 146.3 ALF 4.99
                                                                                              SG1 3929.0 SG2 241.0 THA 178.89
     BOE 1.3312 BRA 2.8176 BC3 2.0393 FSP -425
```

ARRIVAL DATE MAY 22 1966

```
FLIGHT TIME 136.00
LAUNCH DATE JAN 6 1966
                                                                                                       DISTANCE 413.000
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 27.489 GAL -7.85 AZL 83.70 MCA 206.20 SMA 126.54 ECC .21108 INC 6.3031 VI 30.287 RP 108.94 LAP -2.78 LOP 311.29 VP 37.251 GAP 9.23 AZP 95.66 TAL 212.46 TAP 58.67 RCA 99.83 APO 153.25 V2 34.784 RC 154.855 GL 31.06 GP -20.77 ZAL 130.69 ZAP 152.97 ETS 310.89 ZAE 126.72 ETE 196.60 ZAC 71.63 ETC 155.13 CLP-162.30
    PLANETOCENTRIC CONIC
     C3 33.587 VHL 5.795 DLA 16.32 RAL 317.49 RAD 6568.3 VEL 12.448 PTH 2.25 VMP 6.707 DPA -34.23 RAP 340.61 ECC 1.5528 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                                     -28.01
           90.00 23 16 5 2875.95
90.00 15 40 43 4452.54
100.00 0 50 31 2584.10
100.00 16 52 54 4219.62
                                                                                                                194.50
                                                                                                                                        90.03 24 4 1
                                                                                                                                                                                2276.0
                                                                                            87.38
                                                                        -28.32
                                                                                                                                                                                                                           179.45
                                                                                                                                                     16 54 55
                                                                                                                                                                                 3852.5
                                                                                                                                                                                                        4.38
                                                                                                                 185.72
                                                                                                                                          62.77
                                                                         8.10
                                                                                            186.16
                                                                                                                                                                                                                             57.12
                                                                                                                 194.48
                                                                                                                                          91.19
                                                                                                                                                          1 33 35
                                                                                                                                                                                 1984.1
                                                                                                                                                                                                       -29.39
                                                                                              65.89
          100.00
                                                                        -29.87
                                                                                                                                         61.52 18 3 13
94.31 2 57 30
58.10 18 48 41
                                                                                                                                                                                                                           161.66
                                                                                                                                                                                 3619.6
                                                                                                                                                                                                        5.59
                                                                                                                184.98
          100.00
                                                                          9.47
                                                                                            168.31
                                                                                                                                                                                                                             35.52
                           2 19 2 2307.13
17 40 52 4069.36
                                                                                                                                                                                 1707.1
                                                                                                                                                                                                      -32.97
                                                                                                                194.25
                                                                       -33.94
                                                                                              44.63
          110.00
                                                                                                                                                                                3469.4
                                                                                                                                                                                                        8.69
                                                                                                                                                                                                                           146.37
                                                                                                                 182.89
          110.00
                                                                         13.00
                                                                                            154.82
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1481.9 SR 204.3 SS 454.0
CRT .6901 CRS -.9496 CST -.8608
                                                                                                 SGT 4016.2 SGR 250.2 SG3 133.9
RRT -. 2847 RRF .. 1071 RTF .. 8258
      TOE 1.2365 TRA-2.6986 TC3-2.2674 BAU 1.0183
      ROE .2022 RRA .1368 RC3 .0455 FAU .04468
FOE .7524 FRA -.2528 FC3-1.1517 B3P 12643
BDE 1.2529 BRA 2.7021 BC3 2.2679 FSP -426
                                                                                                  SGB 4024.0 R23 -.3579 R13 -.8255
                                                                                                                                                                            LSA 1538.3 MSA 244.4 SSA
                                                                                                                                                                                                                                  9.0
                                                                                                                                                                            ELI 1488.7 ELZ 147.2 ALF 5.49
                                                                                                  5G1 4016.8 SGZ 239.8 THA 178.98
                                                                                                                                                                                            ARRIVAL DATE MAY 24 1966
                                                                                                        FLIGHT TIME 138.00
                                                                                                       DISTANCE 418.690
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 27.410 GAL -7.47 AZL 84.11 HCA 209.36 SHA 126.02 ECC .21072 INC 5.8862 V1 30.287 RP 108.94 LAP -2.88 LOP 314.46 VP 37.193 GAP 9.37 AZP 95.13 TAL 210.62 TAP 59.98 RCA 99.47 APO 152.58 V2 34.783 RC 157.067 GL 29.92 GP -18.62 ZAL 129.95 ZAP 155.03 ETS 312.71 ZAE 127.51 ETE 195.14 ZAC 72.87 ETC 157.02 CLP-163.06
     RC 157.067 GL 29.92 GP -18.02 AM 14.07 AM 14.07 AM 14.07 AM 15.78 RAL 319.37 RAD 6568.2 VEL 12.353 PTM 2.23 VMP 6.697 OPA -31.36 RAP 342.07 ECC 1.5139 STAN AM 15.78 RAL 319.37 RAD 6568.2 VEL 12.353 PTM 2.23 VMP 6.697 OPA -31.36 RAP 342.07 ECC 1.5139 CLNCH AZMTH LNCH TINE L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 28 46 2837.61 -28.28 84.57 194.71 91.44 24 16 3 2237.6 -27.78 75.94 90.00 15 43 3 4454.15 8.15 186.26 186.40 62.79 16 57 17 3654.1 4.44 179.54 100.00 1 2 45 2547.17 -29.79 65.15 194.65 92.63 1 45 13 1947.2 -29.11 54.41 100.00 16 55 40 4219.82 9.48 168.32 185.69 61.52 18 6 0 5619.8 5.60 161.68 110.00 2 30 22 2273.03 -33.74 41.98 194.31 95.86 3 8 16 1673.0 -32.56 32.95 110.00 2 30 22 2273.03 -33.74 41.98 194.31 95.86 3 8 16 1673.0 -32.56 32.95 110.00 2 30 22 273.03 12.90 154.68 183.66 58.07 18 52 19 3466.7 8.59 146.23 ORBIT DETERMINATION ACCURACY
     PLANETOCENTRIC CONIC
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1467.1 SR 213.3 SS 425.6
CRT .7158 CRS -.9652 CST -.8711
                                                                                                  SGT 4109.0 SGR 252.2 SG3 135.2
RRT -. 2654 RRF .0798 RTF .8225
       TDE 1.1782 TRA-2.5909 TC3-2.4996 BAU 1.0438
      ROE .2091 RRA .1126 RC3 .0634 FAU .04411
FOE .7135 FRA -.1993 FC3-1.2231 B3P 12999
BOE 1.1999 BRA 2.5933 BC3 2.5004 FSP -434
                                                                                                                                                                             LSA 1522.3 MSA 247.6 SSA 10.3
                                                                                                   SGB 4116.7 R23 -.3100 R13 -.8222
                                                                                                 SG1 4109.5 SG2 243.2 THA 179.06
                                                                                                                                                                         EL1 1475.1 EL2 148.2 ALF 6.00
                                                                                                                                                                                           ARRIVAL DATE MAY 26 1966
                                                                                                        FLIGHT TIME 140.00
LAUNCH DATE JAN 6 1966
                                                                                                       DISTANCE 424.371
     HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 105.23 VL 27.333 GAL -7.08 AZL 84.46 MCA 212.52 SMA 125.52 ECC .21053 INC 5.5436 V1 30.287 RP 108.94 LAP -2.98 LOP 317.62 VP 37.137 GAP 9.52 AZP 94.68 TAL 208.78 TAP 61.29 RCA 99.09 APO 151.94 VZ 34.786 RC 159.265 GL 29.00 GP -16.86 ZAL 128.92 ZAP 156.81 ETS 314.20 ZAE 128.12 ETE 193.89 ZAC 74.35 ETC 158.63 CLP-163.84
     PLANETOCENTRIC CONIC
       C3 29.220 VHL 5.406 DLA 15.49 RAL 321.31 RAD 6568.2 VEL 12.272 PTH 2.21 VHP 6.712 DPA -28.85 RAP 343.69 ECC 1.4809
      C3 29.220 VHL 5.406 DLA 15.49 RAL 321.31 RAD 6568.2 VEL 12.272 PTH 2.21 VHP 6.712 DPA -28.85 RAP 343.69 ECC 1.4809
LNCH AYNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AYNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 23 39 10 2810.67 -28.22 82.60 195.24 92.42 24 26 0 2210.7 -27.59 74.00
90.00 15 48 8 4447.81 7.95 185.89 187.29 62.73 17 2 16 3847.8 4.23 179.19
100.00 1 12 56 2520.94 -29.69 61.20 195.15 93.65 1 54 57 1920.9 -28.87 52.50
100.00 17 0 59 4212.77 9.25 167.92 186.59 61.45 18 11 12 3612.8 5.37 161.28
110.00 2 40 6 2248.23 -33.55 40.07 194.73 96.98 3 17 34 1648.2 -32.22 31.09
110.00 17 50 19 4058.25 12.59 154.21 184.60 57.96 18 57 57 3458.2 8.27 147.78
                           2 40 6 2248.23
17 50 19 4058.25
                                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                           ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                            ST 1431.0 SR 220.1 55 398.1
CRT .7260 CRS -.9727 CST -.8620
                                                                                                  SGT 4266.1 SGR 251.9 SG3 139.2
RRT -.2421 RRF .0279 RTF .6339
SGB 4273.5 R23 -.2375 R13 -.6337
       TOE 1.0937 TRA-2.5276 TC3-2.7944 BAU 1.0920
       RDE .2058 RRA .0874 RC3 .0753 FAU .04510
FDE .6437 FRA -.1885 FC3-1.3361 BSP 14445
                                                                                                                                                                           LSA 1481.6 MSA 243.7 SSA 12.1
EL1 1440.0 EL2 150.4 ALF 6.44
                                                                                                   5G1 4266.5 SG2 244.4 THA 179.18
       BOE 1.1129 BRA 2.5291 BC3 2.7954 FSP
                                                                                -518
                                                                                                                                                                                             ARRIVAL DATE MAY 28 1966
                                                                                                         FLIGHT TIME 142.00
 LAUNCH DATE JAN 6 1966
                                                                                                         DISTANCE 430.059
     HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 105.23 VL 27.257 GAL -6.69 AZL 84.74 MCA 215.67 SMA 125.03 ECC .21048 INC 5.2556 V1 30.287 RP 108.93 LAP -3.06 LOP 320.78 VP 37.083 GAP 9.67 AZP 94.27 TAL 206.91 TAP 62.58 RCA 98.71 APO 151.34 V2 34.788 RC 161.449 GL 28.24 GP -15.40 ZAL 127.63 ZAP 158.36 ETS 315.40 ZAE 128.61 ETE 192.84 ZAC 76.01 ETC 160.02 CLP-164.61
     PLANETOCENTRIC CONIC
       C3 27.469 VHL 5.241 DLA 15.43 RAL 323.33 RAD 6568.1 VEL 12.200 PTH 2.19 VHP 6.742 DPA -26.61 RAP 345.42 ECC 1.4521 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                     RAL 323.33 RAD 8588.1 VEL 18.200 FIN 2.19 VIII 2.18 PO CST TIM .INJ 2 LAT INJ 2 LONG ... INJ LAT INJ LONG INJ RT ASC INJ AZMTM INJ TIME PO CST TIM .INJ 2 LAT INJ 2 LONG ... 28.16 81.31 196.04 93.07 24 34 22 2193.0 -27.44 72.72 7.54 185.14 188.36 62.62 17 9 33 3834.6 3.81 178.45
                        23 47 49 2793.01
             90.00
                            15 55 38
                                                  4434.63
                                                                                                                                                                                    1903.4
                                                                                                                                                                                                                               51.22
                                                                                                                                                            2 3 16
                                                                                                                                                                                                        -28.69
                                                                                                                                           94.32
                              1 21 32 2503.43
                                                                         -29.61
                                                                                               59.91
                                                                                                                  195.94
           100.00
                                                                                                                                           61.32 18 18 31
                                                                                                                                                                                   3599.4
                                                                                                                                                                                                           4.92
                                                                                                                                                                                                                             160.55
                            17 8 32
                                                  4199.44
                                                                            8.81
                                                                                              167.17
                                                                                                                  187.68
           100.00
                                                2231.03
                                                                                                                                                           3 25 47
                                                                                                                                                                                  1631.0
                                                                                                                                                                                                        -31.97
                                                                                                                                                                                                                              29.81
                                                                                                                                           97.75
                                                                         -33.40
                                                                                                                  195.47
                               2 48 36
                                                                                                34.75
                                                                                                                                                       19 5 22
                                                                                                                                                                                3444.6
                                                                                                                                                                                                          7.76
                                                                                                                                                                                                                             147.05
                                                                                                                  185.71
                                                                                                                                           57.78
           110.00
                              17 57 57
                                                  4044.60
                                                                         12.10
                                                                                              153.46
                                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                            ORBIT DETERMINATION ACCURACY
      DIFFERENTIAL CORRECTIONS
                                                                                                                                                                       ST 1480.6 SR 235.7 SS 426.6

CRT .7774 CRS -.9873 CST -.8621

LSA 1538.2 MSA 252.2 SSA 12.6

EL1 1492.0 EL2 147.1 ALF 7.12
                                                                                                  SGT 4258.5 SGR 258.6 SG3 134.5
RRT -.2128 RRF .0551 RTF .8126
SG8 4267.0 R23 -.2340 R13 -.8124
        TOE 1.1370 TRA-2.3491 TC3-2.9393 BAU 1.0800
       ROE .2144 RRA .0726 RC3 .0976 FAU .04151
FOE .6684 FRA -0840 FC3-1.3083 BSP 13209
BOE 1.1570 BRA 2.3502 BC3 2.9409 FSP -409
                                                                                                    SG1 4258.9 SG2 262.5 THA 179.23
```

```
LAUNCH DATE JAN 6 1966
                                                                                    FLIGHT TIME 144.00
                                                                                                                                                       ARRIVAL DATE MAY 30 1966
   HELIOCENTRIC CONIC
                                                                                   DISTANCE 435.734
     RL 147.10 LAL -.00 LOL 105.23 VL 27.183 GAL -6.29 ATL 84.99 HCA 218.83 SMA 124.55 ECC .21061 INC 5.0086 V1 30.287 RP 108.92 LAP -3.14 LOP 323.95 VP 37.031 GAP 9.82 ATP 93.91 TAL 205.04 TAP 63.87 RCA 98.32 APO 150.79 VZ 34.791 RC 163.619 GL 27.60 GP -14.18 TAL 126.11 TAP 159.74 ETS 316.32 TAE 129.02 ETE 191.94 TAC 77.80 ETC 161.22 CLP-165.38
    PLANETOCENTRIC CONIC
     C3 25.933 VHL 5.092 DLA 15.54 RAL 325.44 RAD 6568.0 VEL 12.137 PTH 2.18 VHP 6.787 DPA -24.56 RAP 347.23 ECC 1.4268
    C3 E3.933 VML 3.U9Z DLA 13.54 RAL 323.44 RAD 6568.D VEL 12.137 PTM 2.18 VMP 6.787 DPA -24.56 RAP 347.23 ECC 1.4268 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 23 55 12 2782.67 -28.12 80.56 197.10 93.44 24 41 35 2182.7 -27.35 71.98 90.00 16 5 4 4416.40 6.97 184.11 189.62 62.48 17 18 40 3816.4 3.23 177.43 100.00 1 29 1 2492.82 -29.55 59.12 196.98 94.73 2 10 34 1892.8 -28.58 50.45 100.00 17 17 52 4181.48 8.23 166.16 188.94 61.16 18 27 33 3581.5 4.32 159.56 110.00 2 56 15 2219.87 -33.29 37.90 196.49 98.24 3 33 15 1619.9 -31.80 28.99
                                                                                                               61.16 18 27 33
98.24 3 33 15
57.58 19 14 14
                                                                                           186.99
       110.00
                      18 7
                                       4027.20
                                                           11.47
                                                                          152.51
                                                                                                                                               3427.2
                                                                                                                                                                  7.11
   DIFFERENTIAL CORRECTIONS
                                                                            HID-COURSE EXECUTION ACCURACY
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SGT 4351.1 SGR 277.9 SG3 134.6
RRT -.1831 RRF .0413 RTF .8137
                                                                                                                                          ST 1489.6 SR 246.6 SS 423.5
CRT .8042 CRS -.9927 CST -.8610
     TOE 1.1227 TRA-2.2363 TC3-3.1840 BAU 1.1045
    ROE .2185 RRA .D54D RC3 .1112 FAU .D4058
FOE .6408 FRA -.0424 FC3-1.3548 BSP 13656
BOE 1.1438 BRA 2.2370 BC3 3.1859 FSP -420
                                                                                                                                        LSA 1548.0 MSA 250.5 SSA 13.8
ELI 1502.9 EL2 145.3 ALF 7.65
                                                                               SGB 4360.0 R23 -.1941 R13 -.8135
                                                                               SG1 4351.4 SG2 273.2 THA 179.33
                                                                                    FLIGHT TIME 146.00
                                                                                                                                                        ARRIVAL DATE JUN 1 1966
  HELIOCENTRIC CONIC
                                                                                   DISTANCE 441.405
    RL 147.10 LAL -.00 LOL 105.23 VL 27.110 GAL -5.87 AZL 85.21 MCA 221.99 SMA 124.09 ECC .21092 INC 4.7934 V1 30.287 RP 108.91 LAP -3.20 LOP 327.12 VP 36.981 GAP 9.97 AZP 93.57 TAL 203.15 TAP 65.14 RCA 97.92 APO 150.26 V2 34.794 RC 165.775 GL 27.04 GP -13.14 ZAL 124.38 ZAP 161.00 ETS 317.00 ZAE 129.36 ETE 191.17 ZAC 79.70 ETC 162.28 CLP-166.15
   PLANETOCENTRIC CONIC
    C3 24.568 VHL 4.957 DLA 15.80 RAL 327.65 RAD 6568.0 VEL 12.081 PTH
                                                                                                                  2.16 VHP 6.841 OPA -22.58 RAP 349.10 ECC 1.4043
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 5 32 2778.74 -28.11 80.27 198.40 93.58 0 51 50 2178.7 -27.31 71.70
         90.00
                      16 16 18
                                    4393.67
                                                           6.25
                                                                          182.83
                                                                                           191.05
                                                                                                               62.33
                                                                                                                          17 29 31
                                                                                                                                                3793.7
                                                                                                                                                                  2.50
                                                                                                                                                                                  176.16
                    1 35 36 2488.24
17 28 54 4159.40
3 3 16 2213.99
                                                          -29.52
                                                                            58.79
                                                                                            198.28
                                                                                                               94.91
                                                                                                                            2 17 5
                                                                                                                                                1888.2
                                                                                                                                                                 -28.53
                                                                                                                                                                                    50.12
       100.00
                                                                        164.92
                                                                                                               60.98 18 38 13
       100.00
                                                            7.50
                                                                                           190.37
                                                                                                                                               3559.4
                                                                                                                                                                  3.57
                                                                                                                                                                                  158.34
                                                         -33.23
                                                                                                                                               1614.0
                                                                                                               98.50 3 40 10
57.34 19 24 31
       110.00
                                                                            37.45
                                                                                           197.77
                                                                                                                                                                 -31.70
                                                                                                                                                                                   28.56
       110.00
                     18 17 44
                                      4006.42
                                                           10.71
                                                                         151.38
                                                                                           188.44
                                                                                                                                               3406.4
                                                                                                                                                                   6.32
                                                                                                                                                                                  145.03
                                                                             MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                           ORBIT DETERMINATION ACCURACY
                                                                               SGT 4430.7 SGR 289.0 SG3 133.9
RRT -.1517 RRF .0377 RTF .8131
SGB 4440.1 R23 -.1635 R13 -.8130
    TOE 1.1267 TRA-2.1105 TC3-3.4218 BAU 1.1246
                                                                                                                                          ST 1511.7 SR 258.1 SS 425.8 CRT .8332 CRS -.9962 CST -.8631
    ROE .2230 RRA .0372 RC3 .1239 FAU .03931
    FOE .6221 FRA .0034 FC3-1.3850 BSP 13925
BDE 1.1486 BRA 2.1109 BC3 3.4240 FSP -418
                                                                                                                                        LSA 1572.1 MSA 247.7 SSA 15.0
EL1 1527.1 EL2 141.3 ALF 8.17
                                                                               5G1 4430.9 5G2 28576 THA 179.43
                                                                                   FLIGHT TIME 148.00
                                                                                                                                                       ARRIVAL DATE JUN 3 1966
LAUNCH DATE JAN 6 1966
                                                                                  DISTANCE 447.068
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 27.038 GAL -5.45 AZL 85.40 HCA 225.15 SMA 123.64 ECC .21141 INC 4.6029 VI 30.287 RP 108.90 LAP -3.26 LOP 330.28 VP 36.932 GAP 10.13 AZP 93.25 TAL 201.25 TAP 66.41 RCA 97.50 APO 149.78 V2 34.798 RC 167.915 GL 26.55 GP -12.25 ZAL 122.46 ZAP 162.14 ETS 317.46 ZAE 129.67 ETE 190.51 ZAC 81.69 ETC 163.21 CLP-166.90
   PLANETOCENTRIC CONIC
    C3 23.352 VHL 4.832 DLA 16.19 RAL 329.97 RAD 6567.9 VEL 12.030 PTH 2.15 VHP 6.905 DPA -20.91 RAP 351.03 ECC 1.3843 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          93.52 0 57 27
62.16 17 42 1
94.88 2 22 59
60.79 18 50 25
98.56 3 46 41
57.10 19 36 6
                     0 11 7 2780.51
16 29 14 4367.04
1 41 30 2489.01
                                                                                       199.94
                                                         -28.12
                                                                          80.40
                                                                                                                                            2180.5 -27.33
         90.00
                                                                          181.32
                                                                                                                                               3767.0
                                                                                                                                                                   1.64
                                                           5.40
                                                                                           192.68
         90.00
                                                                            58.84
                                                                                        199.82
                                                                                                                                               1889.0
                                                                                                                                                                -28.54
                                                                                                                                                                                  50.18
                                                        -29.53
       100.00
                                                                                           192.00
                                                                                                                                               3533.8
                                                                                                                                                                   2.71
                                                           6.65
                                                                          163.49
       100.00
                     17 41 31
                                      4133.77
                     3 9 48 2212.75
18 29 43 3982.79
                                                         -33.22
                                                                            37.35
                                                                                          199.31
                                                                                                                                              1612.8
                                                                                                                                                                -31.68
       110.00
                                                                                           190.06
                                                                                                                                               3382.8
                                                                                                                                                                   5.43
                                                                          150.11
       110.00
                                                           9.84
   DIFFERENTIAL CORRECTIONS
                                                                               MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                               5GT 4507.8 SGR 300.7 SG3 133.1
RRT -.1199 RRF .0382 RTF .8131
                                                                                                                                         ST 1541.7 SR 269.7 SS 429.5
CRT .8616 CRS -.9974 CST -.8678
    TOE 1.1406 TRA-1.9780 TC3-3.6622 BAU 1.1441
    RDE .2273 RRA .0216 RC3 .1350 FAU .03798
FOE .6061 FRA .0476 FC3-1.4082 BSP 14194
BOE 1.1630 BRA 1.9781 BC3 3.6647 FSP -416
                                                                                                                                         LSA 1604.6 MSA 243.2 SSA 16.1
EL1 1559.2 EL2 135.4 ALF 8.64
                                                                               SGB 4517.6 R23 -.1371 R13 -.8131
                                                                               SG1 4508.0 SG2 298.5 THA 179.54
                                                                                   FLIGHT TIME 150.00
                                                                                                                                                       ARRIVAL DATE JUN 5 1966
LAUNCH DATE JAN 6 1966
                                                                                   DISTANCE 452.725
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 26.968 GAL -5.02 AZL 85.57 MCA 228.31 SMA 123.20 ECC .21209 INC 4.4323 V1 30.287 RP 108.89 LAP -3.31 LOP 333.45 VP 36.885 GAP 10.29 AZP 92.95 TAL 199.35 TAP 67.66 RCA 97.07 APO 149.33 VZ 34.803 RC 170.040 GL 26.10 GP -11.48 ZAL 120.36 ZAP 163.20 ETS 317.71 ZAE 129.94 ETE 189.93 ZAC 83.74 ETC 164.03 CLP-167.65
   PLANETOCENTRIC CONIC
    C3 22.271 VHL 4.719 DLA 16.69 RAL 332.42 RAD 6567.9 VEL 11.985 PTH
                                                                                                                 2.14 VHP 6.977 DPA -19.25 RAP 353.00 ECC 1.3665
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     0 16 3 2787.49
16 43 48 4336.99
                                                          -28.14
                                                                           80.91
                                                                                          201.71
                                                                                                              93.27
                                                                                                                            1 2 31
                                                                                                                                               2187.5
         90.00
                                                                                                               62.01 17 56 5
                                                           4.45
                                                                          179.64
                                                                                           194.52
                                                                                                                                               3737.0
                                                                                                                                                                    .67
         90.00
                       1 46 51 2494.66
17 55 40 4105.05
                                                         -29.56
                                                                            59.26
                                                                                           201.60
                                                                                                               94.66
                                                                                                                            2 28 26
                                                                                                                                               -1894.7
                                                                                                                                                                -28.60
                                                                                                                                                                                   50.59
       100.00
                                                                                                               60.61 19 4 5
98.43 3 52 56
56.85 19 48 58
                     17 55 40
                                                                                                                                              3505.1
                                                             5.69
                                                                          161.90
                                                                                           193.84
                                                                                                                                                                   1.73
       100.00
                     3 16 0 2215.74
18 43 1 3956.74
                                                         -33.25
                                                                            37.58
                                                                                          201.10
                                                                                                                                               1615.7
                                                                                                                                                                -31.73
                                                                                                                                                                                   28.68
       110.00
                                                                                         191.89
                                                                          148.71
                                                                                                                                             3356.7
                                                          8.87
                                                                                                                                                                  4.44
       110.00
   DIFFERENTIAL CORRECTIONS
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                             9GT 4582.0 SGR 312.6 SG3 132.1
RRT -.0880 RRF .0422 RTF .8139
SGB 4592.7 R23 -.1146 R13 -.8139
    TOE 1.1637 TRA-1.8378 TC3-3.9033 BAU 1.1630
                                                                                                                                           ST 1580.0 SR 281.3 SS 434.8
                                                                              RRT - .0880 RRF .0422 RTF .8139 CRT .8887 CR5 - .9968 C5T - .8746 SGB 4592.7 R23 - .1146 R13 - .8139 L5A 1645.7 MSA 236.7 S5A 17.3 SG1 4582.1 SG2 311.4 THA 179.65 EL1 1599.8 EL2 127.4 ALF 9.05
    RDE .2316 RRA .0072 RC3 .1444 FAU .03663
FDE .5925 FRA .0903 FC3-1.4241 BSP 14448
```

BOE 1.1865 BRA 1.8379 BC3 3.9060 FSP -414

ARRIVAL DATE JUN 7 1966

LAUNCH DATE JAN 6 1966

DISTANCE 458.374 HELIOCENTRIC CONIC #L 147.10 LAL -.00 LOL 105.23 VL 26.898 GAL -4.58 A7L 85.72 MCA 231.48 SMA 122.78 ECC .21296 INC 4.2776 V1 30.287 RP 108.87 LAP -3.35 LOP 336.62 VP 36.839 GAP 10.46 A7P 92.67 TAL 197.44 TAP 68.91 MCA 96.63 APO 148.93 V2 34.808 MC 172.148 GL 25.67 GP -10.80 ZAL 118.07 ZAP 164.19 ETS 317.76 ZAE 130.20 ETE 189.43 ZAC 85.86 ETC 164.77 CLP-168.38 PLANETOCENTRIC CONIC C3 21.314 VML 4.617 DLA 17.29 RAL 334.99 RAD 6567.9 VEL 11.945 PTH 2.13 VMP 7.055 DPA -17.66 RAP 355.00 ECC 1.3508 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 20 26 2799.37 16 59 57 4303.90 81.78 203.73 92.63 1 7 7 2199.4 -27.50 73.14 -28.19 90.00 18 11 41 3703.9 196.58 61.87 -.40 171.15 177.78 90.00 3.39 1 51 47 2504.86 18 11 19 4073.63 203.63 94.27 2 33 32 1904.9 -28.71 51.33 60.01 -29.61 100.00 60.44 19 19 13 153.63 195.89 3473.6 100.00 4.64 160.16 -31.84 29.19 -33.32 203.16 98.12 3 59 2 1622.6 110.00 3 22 0 18 57 36 2222.64 38.11 98.12 3 59 2 56.62 20 3 5 3328.6 3.37 140.94 147.21 193.93 110.00 3928.62 7.82 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFFRENTIAL CORRECTIONS SGT 4649.5 SGR 324.8 SG3 130.8 RRT -. 0562 RRF . 0504 RTF . 8145 ST 1629.0 SR 292.8 55 442.3 CRT .9141 CRS -.9944 CST -.8833 TOE 1.1972 TRA-1.6877 TC3-4.1381 BAU 1.1799 ROE .2359 RRA -.0060 RC3 .1522 FAU .03518 FOE .5822 FRA .1333 FC3-1.4290 83P 14648 BOE 1.2202 BRA 1.6877 BC3 4.1409 FSP -409 LSA 1697.8 MSA 228.6 SSA 18.5 EL1 1651.0 EL2 117.1 ALF 9.38 SGB 4660.9 R23 -.0966 R13 -.8145 SG1 4649.6 SGZ 324.3 THA 179.77 ARRIVAL DATE JUN 9 1966 FLIGHT TIME 154.00 LAUNCH DATE JAN 6 1966 DISTANCE 464.014 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 26.830 GAL -4.12 ATL 85.86 MCA 234.64 SMA 122.37 ECC .21404 INC 4.1359 V1 30.287 RP 108.85 LAP -3.37 LOP 339.80 VP 36.796 GAP 10.63 AZP 92.40 TAL 195.51 TAP 70.15 RCA 96.18 APO 148.56 V2 34.614 RC 174.239 GL 25.25 GP -10.21 ZAL 115.80 ZAP 165.11 ETS 317.60 ZAE 130.43 ETE 189.00 ZAC 88.02 ETC 165.42 CLP-169.11 PLANETOCENTRIC CONIC 2.12 VHP 7.141 DPA -16.13 RAP 357.03 ECC 1.3370 C3 20.477 VHL 4.525 DLA 17.97 RAL 337.72 RAD 6567.8 VEL 11.910 PTH LNCH AZMITH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG -28.24 2215.9 0 24 26 2815.92 206.01 92.23 1 11 22 -27.63 74.37 82.99 90.00 61.76 18 28 51 93.71 2 38 23 60.29 19 35 46 97.65 4 5 5 56.40 20 18 26 17 17 42 4268.12 2.24 175.78 198.88 3668.1 -1.56 169.15 90.00 1 56 24 2519.38 205.92 1919.4 52.38 100.00 -29.68 61.09 18 28 26 4039.88 3 27 52 2233.21 151.78 100.00 3.50 158.30 198.18 3439.9 -.48 -32.00 -33.42 38.92 205.49 1633.2 29.98 110.00 6.70 3298.8 2.24 145.63 196.20 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 1664.0 SR 304.0 SS 449.2 CRT .9363 CRS -.9906 CST -.8927 SGT 4718.2 SGR 336.6 SG3 129.6 RRT -.0254 RRF .0590 RTF .8165 TOE 1.2356 TRA-1.5315 TC3-4.3723 BAU 1.1977 RDE .2400 RRA -.0180 RC3 .1577 FAU .03380 FDE .5716 FRA .1737 FC3-1.4292 BSP 14891 BDE 1.2587 BRA 1.5316 BC3 4.3752 FSP -406 SGB 4730.2 R23 -.0799 R13 -.6165 LSA 1755.5 MSA 218.9 SSA 19.7 SG1 4718.2 SG2 336.5 THA 179.90 EL1 1708.0 EL2 105.3 ALF 9.63 ARRIVAL DATE JUN 11 1966 FLIGHT TIME 156.00 LAUNCH DATE JAN 6 1966 DISTANCE 469.644 HELTOCENTRIC CONTC. RL 147.10 LAL -.00 LOL 105.23 VL 26.764 GAL -3.66 A7L 86.00 MCA 237.81 SMA 121.96 ECC .21533 INC 4.0048 V1 30.287 RP 108.83 LAP -3.39 LOP 342.97 VP 36.753 GAP 1D.81 A7P 92.14 TAL 193.58 TAP 71.39 RCA 95.70 APO 148.23 V2 34.821 RC 176.312 GL 24.81 GP -9.70 TAL 112.95 TAP 165.98 ETS 317.24 TAE 130.66 ETE 188.62 TAC 90.23 ETC 166.01 CLP-169.82 PLANETOCENTRIC CONIC C3 19.756 VHL 4.445 DLA 18.72 RAL 340.59 RAD 6567.8 VEL 11.880 PTH 2.11 VMP 7.234 DPA -14.66 RAP 359.09 ECC 1.3251 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG 0 26 3 2637.00 17 37 2 4229.97 2 0 46 2536.05 18 47 1 4004.15 3 33 42 2247.25 19 30 34 3867.71 91.46 1 15 20 61.70 16 47 32 92.98 2 43 4 60.19 19 53 45 2237.0 208.54 -27.78 90.00 -28.28 84.53 3630.0 -2.78 173.65 201.44 90.00 1.01 1938.0 -29.03 53.74 208.48 100.00 -29.76 62.47 3404.2 -1.69 149.81 156.34 200.72 100.00 2.30 4 11 9 20 35 1 -32.21 97.02 1647.3 204.09 110.00 -33.54 40.00 1.05 5.52 3267.7 110.00 143.96 195.71 56.21 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 4784.0 SGR 348.1 SG3 128.3 RRT .0047 RRF .0692 RTF .8193 SGB 4796.7 R23 .0653 R13 .8193 SGI 4784.0 SG2 348.1 THA .02 ST 1746.8 SR 315.1 55 456.6 CRT .9552 CRS -.9856 CST -.9026 TDE 1.2805 TRA-1.3668 TC3-4.5972 BAU 1.2150 ROE .2443 RRA -.0269 RC3 .1611 FAU .03243 FDE .5619 FRA .2128 FC3-1.4212 83P 15142 BDE 1.3038 BRA 1.3671 BC3 4.6001 FSP -404 LSA 1820.8 MSA 208.0 SSA 20.9 EL1 1772.6 EL2 91.9 ALF 9.80 ARRIVAL DATE JUN 13 1966 FLIGHT TIME 158.00 LAUNCH DATE JAN 6 1966 HELIOCENTRIC CONIC DISTANCE 475.265 RL 147.10 LAL -.00 LOL 105.23 VL 26.698 GAL -3.18 A7L 86.12 MCA 240.97 SMA 121.57 ECC .21686 INC 3.8826 V1 30.287 RP 108.81 LAP -3.39 LOP 346.14 VP 36.713 GAP 11.00 AZP 91.89 TAL 191.65 TAP 72.62 RCA 95.21 APO 147.94 V2 34.828 RC 178.386 GL 24.36 GP -9.23 ZAL 110.14 ZAP 166.80 ETS 316.66 ZAE 130.88 ETE 188.30 ZAC 92.47 ETC 166.54 CLP-170.53 PLANETOCENTRIC CONIC 2.10 VHP 7.335 DPA -13.23 RAP C3 19.152 VML 4.376 DLA 19.53 RAL 343.63 RAD 6567.8 VEL 11.855 PTH LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.52 1 19 4 61.68 19 7 47 0 31 22 2862.51 17 57 57 4189.76 2262.5 -28.31 86.39 211.34 -27.94 77.75 90.00 17 57 57 - .29 171.41 204.27 3589.8 -4.07 164.77 90.00 2 47 38 211.30 92.10 1960.7 -29.22 55.40 100.00 2 4 57 19 7 3 2560.71 -29.83 64.15 60.12 20 13 9 203.53 3366.8 -2.95 147.76 100.00 3966.79 1.03 154.28 96.25 4 17 21 56.06 20 52 49 32.31 3 39 36 41.33 210.97 1664.6 110.00 2264.59 -33.68 142.30 110.00 19 48 53 3835.67 4.31 201.49 3235.7 HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ORBIT DETERMINATION ACCURACY SGT 4840.9 SGR 359.5 SG3 126.8 RRT .0345 RRF .0832 RTF .8215 SGB 4854.2 R23 .0547 R13 .8215 SGI 4840.9 SG2 359.3 THA .15 ST 1821.3 SR 326.3 SS 466.0 CRT .9710 CRS -.9794 CST -.9130 TOE 1.3352 TRA-1.1891 TC3-4.7999 BAU 1.2297 RDE .2489 RRA -.0383 RC3 .1625 FAU .03096 FDE .5551 FRA .2536 FC3-1.3994 BSP 15301 LSA 1897.8 MSA 196.7 SSA 22.1 ELI 1848.7 ELZ 76.9 ALF 9.88

FLIGHT TIME 152.00

BOE 1.3582 BRA 1.1897 BC3 4.8026 FSP -398

ARRIVAL DATE JUN 15 1966

```
FLIGHT TIME 160.00
LAUNCH DATE JAN 6 1966
                                                                                  DISTANCE 480.872
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 26.634 GAL -2.69 AZL 86.23 MCA 244.14 SMA 121.19 ECC .21862 INC 3.7675 V1 30.287 RP 108.78 LAP -3.39 LOP 349.32 VP 36.673 GAP 11.20 AZP 91.65 TAL 189.70 TAP 73.84 RCA 94.70 APO 147.69 V2 34.836 RC 180.400 GL 23.87 GP -8.82 ZAL 107.16 ZAP 167.58 £78 315.87 ZAE 131.09 ETE 188.01 ZAC 94.74 ETC 167.01 CLP-171.23
    PLANETOCENTRIC CONIC
     C3 18.668 VHL 4.321 DLA 20.39 RAL 346.83 RAD 6567.8 VEL 11.834 PTH 2.10 VHP 7.442 DPA -11.84 RAP
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        214.42
                                                                                                         89.43
                                                                                                                           1 22 38
                                                                                                                                            2292.3
                                                                                                                                                               -28.09
                      0 34 26 2892.33
18 20 25 4147.88
                                                                          88.57
                                                         -28.31
         90.00
                                                                                                                         19 29 33
                                                                                                                                              3547.9
                                                                                          207.39
                                                                                                              61.73
                                                          -1.64
                                                                          169.07
         90.00
                     2 9 3 2587.19
19 28 29 3928.25
3 45 38 2285.02
20 8 23 3803.19
                                                                                                                                              1987.2
                                                                                                                                                               -29.41
                                                                                                              91.06
                                                                                                                            2 52 11
                                                                                          214.41
                                                        -29.88
                                                                           66.12
                                                                                                              60.11 20 33 57
                                                                                                                                              3328.2
                                                                                                                                                                -4.25
                                                                                                                                                                               145.64
        100.00
                                                            - .28
                                                                          152.17
                                                                                          206.63
                                                                                                             95.32 4 65
21 11 46
                                                                                                                                              1685.0
                                                                                                                                                               -32.71
                                                                                                                                                                                 33.85
                                                        -33.82
                                                                          42.91
                                                                                          214.15
                                                                                                                                                                -1.42
                                                                                                                                              3203.2
                                                           3.07
                                                                          140.60
                                                                                          204.54
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SGT 4899.9 SGR 370.1 SG3 125.3
RRT .0630 RRF .0964 RTF .8254
SG8 4913.9 R23 .0441 R13 .8254
                                                                                                                                         ST 1898.7 SR 337.1 SS 473.6
CRT .9826 CRS -.9724 CST -.9227
     TOE 1.3918 TRA-1.0054 TC3-4.9881 BAU 1.2456
    ROE .2538 RRA -.0466 RC3 .1612 FAU .02959
FDE .5469 FRA .2913 FC3-1.3723 BSP 15528
BDE 1.4147 BRA 1.0065 BC3 4.9908 FSP -395
                                                                                                                                         LSA 1977.0 MSA 184.9 SSA 23.4
FLI 1927.4 ELZ 61.6 ALF 9.91
                                                                              SG1 4900.0 SG2 369.4 THA
                                                                                                                                         ELI 1927.4 ELZ 61.6 ALF
                                                                                                                         .27
                                                                                                                                                      ARRIVAL DATE JUN 17 1966
                                                                                   FLIGHT TIME 162.00
                                                                                  DISTANCE 486.467
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 26.571 GAL -2.18 AZL 86.34 HCA Z47.31 SHA 120.82 ECC .22064 INC 3.6584 V1 30.287 RP 108.76 LAP -3.37 LOP 352.49 VP 36.636 GAP 11.40 AZP 91.41 TAL 187.76 TAP 75.07 RCA 94.16 APO 147.48 V2 34.845 RC 18Z.414 GL 23.33 GP -8.46 ZAL 104.02 ZAP 168.32 ETS 314.83 ZAE 131.29 ETE 187.75 ZAC 97.04 ETC 167.44 CLP-171.92
   PLANETOCENTRIC CONIC
    UNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 37 18 2926.55 -28.26 91.06 217.77 88.18 1 26 4 9494 1
                                                                                                                                               3504.7
                                                                          166.66
                                                                                           210.81
                                                                                                               61.83
                                                                                                                          19 52 50
                                                                                                                                                                -6.78
        90.00
                      18 44 25 4104.71
                                                          -3.03
                                                                                                                                              2017.3
                                                                                                                                                                                  59.57
                    2 13 8 2617.31
19 51 16 3888.97
3 51 54 2308.29
                                                                                           217.80
                                                                                                              89.89
                                                                                                                                                                -29.59
                                                          -29.89
                                                                            68.36
       100.00
                                                                                                               60.15 20 56 5
                                                                                                                                              3289.0
                                                                                                                                                                -5.57
                                                                                                                                                                                143.47
                                                          -1.61
                                                                          150.02
                                                                                          210.02
       100.00
                                                                                                              94.26 4 30 23
55.86 21 31 49
                                                                                                                                              1708.3
                                                                                                                                                               -32.99
                                                                                                                                                                                 35.61
                                                         -33.95
                                                                            44.72
                                                                                          217.62
       110.00
                                                                          138.91
                                                                                           207.87
                                                                                                                                              3170.8
                                                                                                                                                               -2.66
                                                                                                                                                                                 132.70
                                       3770.76
                                                            1.83
       110.00
                     20 28 58
                                                                             MID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                              $GT 4956.1 $GR 380.2 $G3 123.7

RRT .0906 RRF .1102 RTF .8298

$GB 4970.6 R23 .0348 R13 .8299
                                                                                                                                          ST 1980.2 SR 347.9 SS 480.5
CRT .9907 CRS -.9646 CST -.9316
     TOE 1.4521 TRA -.8119 TC3-5.1497 BAU 1.2610
     RDE .2592 RRA -.0534 RC3 .1575 FAU .02825
                                                                                                                                          LSA 2059.7 MSA 173.6 55A 24.6
    FDE .5386 FRA .3289 FC3-1.3361 BSP 15751
BDE 1.4751 BRA .8136 BC3 5.1521 FSP -393
                                                                              SG1 4956.2 SG2 378.6 THA .40
                                                                                                                                         EL1 2009.9 EL2 46.7 ALF 9.88
                                                                                                                                                     ARRIVAL DATE JUN 19 1966
                                                                                  FLIGHT TIME 164.00
LAUNCH DATE JAN 6 1966
   HELIOCENTRIC CONIC
                                                                                 DISTANCE 492.046
    RL 147.10 LAL -.00 LOL 105.23 VL 26.509 GAL -1.66 AZL 86.45 HCA 250.48 SNA 120.46 ECC .22293 INC 3.5543 VI 30.287 RP 108.73 LAP -3.35 LOP 355.67 VP 36.599 GAP 11.62 AZP 91.19 TAL 185.81 TAP 76.29 RCA 93.61 APO 147.31 VZ 34.854 RC 184.407 GL 22.73 GP -8.13 ZAL 100.75 ZAP 169.03 ETS 313.54 ZAE 131.49 ETE 187.53 ZAC 99.36 ETC 167.81 CLP-172.60
   PLANETOCENTRIC CONIC
    C3 18.076 VHL 4.252 DLA 22.16 RAL 353.73 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 7.682 DPA -9.16 RAP 7.51 ECC 1.2975
LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 0 40 0 2964.43 -28.15 93.84 221.38 86.79 1 29.25 2364.4 -28.30 85.18
90.00 19 9 52 4060.69 -4.44 164.20 214.55 62.01 20 17 33 3460.7 -8.16 157.48
100.00 2 17 16 2650.83 -29.86 70.85 221.46 88.58 3 1 27 2050.8 -29.74 62.05
100.00 2 D 15 18 3849.52 -2.94 147.85 213.72 60.24 21 19 27 3249.5 -6.88 141.28
110.00 3 58 30 2334.13 -34.06 46.72 221.39 93.08 4 37 24 1734.1 -33.26 37.58
110.00 20 50 33 3738.98 .82 137.25 211.49 55.82 21 52 52 3139.0 -3.87 131.04
     C3 18.076 VHL 4.252 DLA 22.16 RAL 353.73 RAD 6567.7 VEL 11.809 PTH 2.09 VHP 7.682 DPA
                                                                                                                                                 -9.16 RAP
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                             SCT 5008.0 SCR 389.6 SC3 122.1

RRT .1172 RRF .1251 RTF .8345

SGB 5023.1 R23 .0269 R13 .8346

SGI 5008.2 SG2 386.9 THA .53
                                                                                                                                         ST 2064.0 SR 358.6 SS 486.4
CRT .9955 CRS -.9562 CST -.9395
     TOE 1.5156 TRA -. 6079 TC3-5.2758 BAU 1.2755
     RDE .2654 RRA -.0588 RC3 .1514 FAU .02691
                                                                                                                                         LSA 2144.2 MSA 163.4 SSA 25.7
     FOE .5302 FRA .3664 FC3-1.2889 BSP 15966
BOE 1.5386 BRA .6108 BC3 5.2780 FSP -390
                                                                                                                                         EL1 2094.6 EL2 33.6 ALF 9.81
                                                                                                                                                      ARRIVAL DATE JUN 21 1966
                                                                                   FLIGHT TIME 166.00
LAUNCH DATE JAN 6 1966
                                                                                  DISTANCE 497.608
   HELIOCENTRIC CONIC
    MELIOCENTRIC CONIC

RL 147.10 LAL -.00 LOL 105.23 VL 26.448 GAL -1.12 A7L 86.55 MCA 253.65 SMA 120.11 ECC .22552 INC 3.4540 V1 30.287

RP 108.70 LAP -3.31 LOP 358.85 VP 36.564 GAP 11.86 A7P 90.97 TAL 183.85 TAP 77.51 RCA 93.02 APO 147.19 VZ 34.863

RC 186.379 GL 22.07 GP -7.83 ZAL 97.34 ZAP 169.69 ETS 311.97 ZAE 131.69 ETE 187.34 ZAC 101.70 ETC 168.14 CLP-173.28
   PLANETOCENTRIC CONIC
                                                                                                                2:09 VHP 7.814 DPA
                                                                                                                                                  -7.85 RAP
     C3 17.982 VHL 4.241 DLA 23.05 RAL 357.42 RAD 6567.7 VEL 11.805 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 42 37 3006.37 -27.95 96.89 225.27 85.28 1 32 43 2406.4 -28.31 88.25
                                                                                                                          20 43 38
                                                                                                                                               3416.3
                                                                                                                                                                -9.53
                                                                                                                                                                                154.94
                                                                                                               62.25
                      19 36 42 4016.31
                                                           -5.86
                                                                          161.70
                                                                                           218.59
         90.00
                      2 21 32 2687.42
20 40 27 3810.49
                                                                                                                            3 6 19
                                                                                                                                               2087.4
                                                                                                                                                                -29.85
                                                                                                                                                                                  54.76
                                                          -29.77
                                                                           73.57
                                                                                           225.40
                                                                                                               87.15
        100.00
                                                                                                               60.38 21 43 58
                                                                                                                                              3210.5
                                                                                                                                                                -8.17
                                                                                                                                                                                139.10
                                                           -4.26
                                                                          145.70
                                                                                           217.71
        100.00
                                                                                                                                                               -33.52
                                                                                                               91.78
                                                                                                                           4 44 52
                                                                                                                                              1762.2
                                                                                                                                                                                 39.72
                        4 9 30
                                      2362.17
                                                          -34.14
                                                                            48.91
                                                                                           225.45
        110.00
                                                                                                               55.82 22 14 48
                                                                                                                                              3108.5
                                                                                                                                                               -5.03
                                                                                                                                                                                129.44
                                                           -.55
                                                                                           215.40
                      21 12 59
                                     3708.51
                                                                          135.66
        110.00
                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                          ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                             SGT 5049.4 SGR 398.6 SGS 120.3
RRT .1440 RRF .1437 RTF .8386
SGB 5065.1 R23 .0225 R13 .8386
SGI 5049.7 SGZ 394.4 THA .66
                                                                                                                                          ST 2153.5 SR 369.4 55 493.5
     TDE 1.5856 TRA -.3886 TC3-5.3491 BAU 1.2864
                                                                                                                                          CRT .9973 CRS -.9473 CST -.9469
     RDE .2726 RRA -.0624 RC3 .1434 FAU .02547
FDE .5241 FRA .4058 FC3-1.2260 B5P 16059
BDE 1.6088 BRA .3936 BC3 5.3510 FSP -382
                                                                                                                                        LSA 2234.4 MSA 155.0 SSA 26.5
                                                                                                                                       ELI 2184.8 EL2 26.7 ALF 9.71
```

ARRIVAL DATE JUN 23 1966 FLIGHT TIME 168.00 LAUNCH DATE JAN 6 1966 DISTANCE 503.150 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 26.388 GAL -.56 AZL 86.64 MCA 256.83 SMA 119.77 ECC .22841 INC 3.3569 V1 30.287 RP 108.67 LAP -3.27 LOP 2.03 VP 36.531 GAP 12.10 AZP 90.77 TAL 181.90 TAP 78.73 RCA 92.41 APO 147.12 V2 34.873 RC 188.330 GL 21.34 GP -7.57 ZAL 93.83 ZAP 170.33 ETS 310.08 ZAE 131.89 ETE 187.17 ZAC 104.06 ETC 168.43 CLP-173.96 PLANETOCENTETC CONTC 2.09 VHP 7.957 DPA -6.58 RAP 11.82 ECC 1.2968 C3 18.036 VHL 4.247 DLA 23.90 RAL 1.25 RAD 6567.7 VEL 11.808 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 0 45 10 3051.87 20 4 43 3972.20 2 26 2 2726.62 21 6 31 3772.68 2451.9 100.19 229.39 83.65 1 36 2 -28.24 91.57 -27.65 90.00 21 10 55 3372.2 -10.87 152.40 222.93 62.55 -7.25 159.21 90.00 229.60 85.63 3 11 29 2126.6 -29.89 67.68 76.47 -29.60 100.00 60.58 22 9 24 90.41 4 52 52 55.85 22 37 23 3172.7 -9.41 136.97 222.00 143.61 100.00 -5.53 -33.75 1792.0 42.02 229.79 110.00 4 13 0 2391.96 21 36 2 3680.10 -34.18 51.24 3080.1 -6.10 127.94 219.58 134.18 110.00 -1.63 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 5096.4 SGR 406.3 \$63 118.5 RRT .1691 RRF .1591 RTF .8454 SGB 5112.6 R23 .0155 R13 .8454 ST 2230.8 SR 379.6 SS 495.4 CRT .9966 CRS -.9380 CST -.9530 TDE 1.6494 TRA -.1646 TC3-5.3904 BAU 1.3001 ROE .2806 RRA -.0649 RC3 .1325 FAU .02425 FOE .5137 FRA .4413 FC3-1.1639 BSP 16293 LSA 2311.5 MSA 148.2 SSA 27.0 EL1 2262.6 EL2 30.9 ALF 9.63 BOE 1.6731 BRA .1770 BC3 5.3920 FSP -382 SG1 5096.9 SGZ 400.4 THA .78 ARRIVAL DATE JUN 25 1966 FLIGHT TIME 170.00 LAUNCH DATE JAN 6 1966 DISTANCE 508.668 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 26.329 GAL .02 AZL 86.74 MCA 260.01 SMA 119.43 ECC .23164 INC 3.2623 VI 30.287 RP 108.63 LAP -3.21 LOP 5.22 VP 36.498 GAP 12.37 AZP 90.57 TAL 179.95 TAP 79.95 RCA 91.77 APO 147.10 V2 34.884 RC 190.259 GL 20.53 GP -7.32 ZAL 90.23 ZAP 170.92 ETS 307.84 ZAE 132.08 ETE 187.02 ZAC 106.43 ETC 168.68 CLP-174.63 PLANETOCENTRIC CONIC 5.21 RAD 6567.7 VEL 11.817 PTH 2.09 VHP 8.110 DPA -5.32 RAP 13.99 ECC 1.3003 C3 18.249 VHL 4.272 DLA 24.71 RAL LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 233.74 2500.6 81.94 1 39 24 -28.07 95.13 D 47 43 3100.64 -27.24 103.70 90.00 62.92 21 39 15 84.05 3 17 2 60.81 22 35 33 3328.9 -12.16 149.88 20 33 46 3026.91 -8.60 156.74 227.57 90.00 2158.0 -29.86 70.75 -29.35 79.51 234.04 2 30 54 2767.96 100.00 3136.8 -10.57 134.94 100.00 21 33 16 3736.82 -6.72 141.62 226.56 88.97 5 1 32 55.90 23 0 25 1823.1 -33.93 44.43 2423.05 -34.17 53.66 234.38 110.00 4 21 9 -2.61 132.84 224.02 3054.5 -7.07 126.59 21 59 31 3654.50 110.00 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SCT 5106.4 SGR 418.1 SG3 116.0 RRT .1934 RRF .2146 RTF .8299 SGB 5123.5 R23 .0541 R13 .8299 SGI 5107.1 SG2 410.1 THA .91 ST 2349.2 SR 393.5 SS 529.6 CRT .9937 CRS -.9316 CST -.9611 TOE 1.7483 TRA .0986 TC3-5.3067 BAU 1.2950 ROE .2928 RRA -.0637 RC3 .1275 FAU .02117 FDE .3384 FRA .3004 FC3-1.0043 83P 15580 BDE 1.7726 BRA .1174 BC3 5.3082 F3P -300 LSA 2435.5 MSA 148.1 \$5A 27.3 EL1 2381.6 EL2 43.4 ALF 9.45 ARRIVAL DATE JUN 27 1966 FLIGHT TIME 172.00 LAUNCH DATE JAN 5 1966 01STANCE 514.164 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 26.272 GAL .62 AZL 86.83 MCA 263.19 SMA 119.11 ECC .23523 INC 3.1694 VI 30.287 RP 108.60 LAP -3.15 LOP 8.40 VP 36.467 GAP 12.65 AZP 90.38 TAL 178.00 TAP 81.18 RCA 91.09 APO 147.13 V2 34.895 RC 192.167 GL 19.66 GP -7.10 TAL 86.58 ZAP 171.48 ETS 305.20 ZAE 132.27 ETE 186.89 ZAC 108.81 ETC 168.89 CLP-175.29 PLANETOCENTRIC CONIC C3 18.636 VHL 4.317 DLA 25.45 RAL 9.27 RAD 6567.8 VEL 11.833 PTH 2.10 VHP 8.275 DPA -4.09 RAP 16.17 ECC 1.3067 LNCH ATHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 80.18 1 42 55 63.33 22 8 15 82.44 3 23 8 61.05 23 1 59 87.51 5 10 55 55.97 23 23 33 2551.9 -27.78 98.85 0 50 23 3151.90 21 3 27 3887.49 2 36 17 2810.49 238.28 107.35 -26.69 90.00 3287.5 -13.36 147.44 232.47 90.00 -9.87 154.37 2210.5 -29.75 73.90 238.68 100.00 -29.01 82.63 133.07 22 0 14 3704.14 4 30 1 2454.68 22 23 1 3632.71 3104.1 -11.61 231.36 100.00 -7.81 139.79 46.89 1854.7 -34.07 110.00 239.21 -34.10 56.13 -7.89 125.43 3032.7 -3.44 131.70 228.68 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SCT 5168.9 SGR 420.1 SG3 114.8 RRT .2172 RRF .1980 RTF .8555 SGB 5185.9 R23 .0114 R13 .8555 SGI 5169.7 SG2 410.0 TMA 1.02 ST 2356.6 SR 399.7 SS 499.0 CRT .9892 CRS -.9180 CST -.9626 TOE 1.7769 TRA .3255 TC3-5.2984 BAU 1.3203 ROE .3004 RRA -.0643 RC3 .1073 FAU .02156 FDE .4964 FRA .5195 FC3-1.0014 B5P 16572 BDE 1.8021 BRA .3317 BC3 5.2995 FSP -371 LSA 2447.1 MSA 143.6 SSA 26.7 EL1 2399.5 EL2 57.7 ALF 9.49 ARRIVAL DATE JUN 29 1956 FLIGHT TIME 174.00 LAUNCH DATE JAN 6 1966 DISTANCE 519.629 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 105.23 VL 26.215 GAL 1.24 A7L 86.92 MCA 266.37 SMA 118.79 ECC .23922 INC 3.0777 V1 30.287 RP 108.57 LAP -3.07 LOP 11.59 VP 36.437 GAP 12.95 A7P 90.20 TAL 176.05 TAP 82.42 RCA 90.37 APO 147.21 V2 34.906 RC 194.054 GL 18.72 GP -6.91 TAL 82.89 ZAP 172.00 ETS 302.11 ZAE 132.46 ETE 186.77 ZAC 111.20 ETC 169.06 CLP-175.96 PLANETOCENTRIC CONIC C3 19.215 VHL 4.384 DLA 26.11 RAL 13.40 RAD 6567.8 VEL 11.857 PTH 2.10 VMP 8.452 DPA -2.88 RAP 18.37 ECC 1.3162 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 78.42 1 46 42 63.76 22 37 41 1 46 42 2605.2 -27.36 102.70 3205.23 -26.02 111.11 242.98 0 53 16 21 33 32 90.00 3248.6 -14.49 145.13 -11.05 152.12 237.60 3646.59 90.00 3 29 55 2253.5 -29.55 77.09 2 42 22 2853.53 -28.58 85.76 243.51 80.85 100.00 61.30 23 28 23 3075.5 -12.51 131.42 -8.74 138.19 236.38 100.00 22 27 8 3675.52 5 21 9 1886.4 -34.16 49.36 4 39 42 2486.39 -53.98 58.60 244.24 86.06 110.00 86.06 5 21 9 56.03 23 46 32 3015.4 -8.53 124.51 22 46 17 -4.10 130.79 233.53 110.00 3615.42 DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY ST 2415.9 SR 408.8 SS 496.9 CRT .9832 CRS -.9070 CST -.9663 SGT 5198.6 SGR 425.5 SG3 112.9 RRT .2406 RRF .2175 RTF .8618 TOE 1.8348 TRA .5908 TC3-5.1688 BAU 1.3280 ROE .3121 RRA -.0614 RC3 .0929 FAU .02028 FOE .4856 FRA .5588 FC3 -.9139 BSP 16663 BOE 1.8612 BRA .5940 BC3 5.1696 FSP -365 LSA 2495.8 MSA 145.2 SSA 25.8 EL1 2449.2 EL2 73.6 ALF 9.45 SGB 5216.D R23 .0091 R13 .8618 SG1 5199.6 SG2 412.9 THA 1.14

```
ARRIVAL DATE JUL 1 1966
                                                                                      FLIGHT TIME 176.00
LAUNCH DATE JAN 6 1966
                                                                                      DISTANCE 525.060
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 26.160 GAL 1.89 AZL 87.01 HCA 269.55 SMA 118.48 ECC .24363 INC 2.9866 V1 30.287 RP 108.53 LAP -2.99 LOP 14.77 VP 36.409 GAP 13.27 AZP 90.02 TAL 174.11 TAP 83.66 RCA 89.62 APO 147.35 V2 34.918 RC 195.918 GL 17.73 GP -6.72 ZAL 79.20 ZAP 172.48 ETS 298.54 ZAE 132.64 ETE 186.67 ZAC 113.60 ETC 169.19 CLP-176.63
    PLANETOCENTRIC CONIC
     C3 20.008 VHL 4.473 DLA 26.67 RAL 17.57 RAD 6567.8 VEL 11.891 PTH 2.11 VHP 8.643 CPA -1.69 RAP 20.58 ECC 1.3293 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 56 34 3259.55 -25.22 114.89 247.82 76.68 1 50 54 2659.6 -26.81 106.58
                                                                                                                              23 7 3
                       22 3 30 3813.43
2 49 22 2895.93
                                                           -12.10
                                                                             150.07
                                                                                              242.91
                                                                                                                   64.20
                                                                                                                                                    3213.4
                                                                                                                                                                      -15.48
                                                                                                                                                                                       143.02
          90.00
                                                                                              248.50
                                                                                                                   79.31
                                                                                                                                3 37 38
                                                                                                                                                    2295.9
                                                                                                                                                                      -29.27
                                                                                                                                                                                         80.21
                                                                               88.81
                                                           -28.08
        100.00
                      22 53 23 3652.29
4 50 19 2517.48
23 8 56 3603.50
                                                              -9.50
                                                                             136.88
                                                                                              241.55
                                                                                                                   61.52 23 54 15
                                                                                                                                                    3052.3
                                                                                                                                                                     -13.21
                                                                                                                                                                                       130.08
        100.00
                                                                                                                   84.64 5 32 16
56.08 24 8 59
                                                                               61.01
                                                                                              249.44
                                                                                                                                                    1917.3
                                                                                                                                                                                         51.79
                                                           -33.81
        110.00
                                                            -4.55
                                                                             130.17
                                                                                              238.54
                                                                                                                                                    3003.5
                                                                                                                                                                      -8.98
                                                                                                                                                                                       123.87
        110.00
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFFRENTIAL CORRECTIONS
                                                                                 RRT .2627 RRF .2367 RTF .8679
SGB 5243.5 R23 .0076 R13 .8679
SGB 5227.1 SG2 414.7 THA 1.25
                                                                                                                                               ST 2444.7 SR 416.9 SS 492.0
CRT .9758 CRS -.8951 CST -.9691
     TOE 1.8833 TRA .8674 TC3-4.9920 BAU 1.3355
     ROE .3249 RRA -.0569 RC3 .0782 FAU .01905
FCE .4751 FRA .5989 FC3 -.8244 8SP 16792
BOE 1.9111 BRA .8692 BC3 4.9926 FSP -360
                                                                                                                                              LSA 2523.8 MSA 149.3 SSA 24.6
EL1 2478.4 EL2 89.9 ALF 9.46
                                                                                                                                                             ARRIVAL DATE JUL 3 1966
                                                                                       FLIGHT TIME 178.00
LAUNCH DATE JAN 6 1966
                                                                                      01STANCE 530.452
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 26.105 GAL 2.57 A7L 87.10 MCA 272.73 SMA 118.18 ECC .24851 INC 2.8955 VI 30.287
RP 108.49 LAP -2.89 LOP 17.96 VP 36.381 GAP 13.61 A7P 89.86 TAL 172.18 TAP 84.91 RCA 88.81 APO 147.55 VZ 34.930
RC 197.761 GL 16.69 GP -6.56 ZAL 75.54 ZAP 172.91 ETS 294.42 ZAE 132.81 ETE 186.57 ZAC 116.01 ETC 169.28 CLP-177.29
   PLANETOCENTRIC CONIC
    PLANETOCENTRIC CONIC
C3 21.039 VHL 1.587 OLA 27.13 RAL 21.74 RAO 6567.9 VEL 11.934 PTH 2.12 VHP 8.850 DPA -.53 RAP 22.80 ECC 1.3462
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
90.00 1 0 36 3313.50 -24.33 118.58 252.75 75.04 1 55 49 2713.5 -26.14 110.39
90.00 22 32 44 3783.52 -12.98 148.31 248.36 64.61 23 35 48 3183.5 -16.30 141.20
100.00 2 57 33 2936.46 -27.54 91.70 253.61 77.89 3 46 30 2336.5 -28.93 83.17
100.00 23 18 28 3635.79 -10.04 135.95 246.84 61.69 24 19 4 3035.8 -13.74 129.12
110.00 5 1 54 2547.38 -33.60 63.32 254.77 83.29 5 44 21 1947.4 -34.16 54.12
110.00 23 30 37 3597.63 -4.78 129.86 243.64 56.11 24 30 34 2997.6 -9.19 123.56
                                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                 SGT 5249.0 SGR 433.2 SG3 109.0
RRT .2843 RRF .2561 RTF .8747
SGB 5266.8 R23 .0061 R13 .8747
SGI 5250.4 SG2 415.2 THA 1.35
                                                                                                                                               ST 2455.4 SR 423.8 55 485.1 CRT .9672 CRS -.8823 CST -.9716
     TOE 1.9237 TRA 1.1575 TC3-4.7688 BAU 1.3414
     RDE .3389 RRA -.0506 RC3 .0636 FAU .01788
FDE .4596 FRA .6394 FC3 -.7358 BSP 16925
                                                                                                                                             LSA 2533.6 MSA 155.6 SSA 23.3
EL1 2489.4 EL2 106.2 ALF 9.50
     BDE 1.9533 BRA 1.1586 BC3 4.7693 FSP -357
                                                                                                                                                           ARRIVAL CATE JUL 5 1966
                                                                                      FLIGHT TIME 180.00
LAUNCH DATE JAN 5 1966
                                                                                    DISTANCE 535.799
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 26.051 GAL 3.28 A7L 87.20 MCA 275.92 SMA 117.89 ECC .25390 INC 2.8038 VI 30.287
RP 108.45 LAP -2.79 LOP 21.15 VP 36.355 GAP 13.99 A7P 89.71 TAL 170.26 TAP 86.18 RCA 87.96 APO 147.82 VZ 34.942
RC 199.580 GL 15.62 GP -6.41 TAL 71.93 TAP 173.28 ETS 289.72 TAE 132.98 ETE 186.49 TAC 118.42 ETC 169.33 CLP-177.96
    PLANETOCENTRIC CONIC
                                                                                                                                                          .61 RAP 25.04 ECC 1.3676
     C3 22.338 VHL 4.726 DLA 27.47 RAL 25.87 RAD 6567.9 VEL 11.988 PTH 2.14 VHP 9.074 DPA
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                  113.98
                                                                                                             73.55 2 1 57
64.94 24 3 7
                                                                                                                                               2765.0 -25.41
                      1 5 52 3364.99
23 0 26 3760.95
3 7 13 2973.85
                                                                            122.06 257.76
                                                                                                                                2 ,1 57
                                                           -23.38
         90.00
                                                                                                                                                                                      139.83
                                                                                              253.88
                                                                                                                                                   3161.0
                                                                                                                                                                    -16.91
                                                                            146.98
          90.00
                                                           -13.64
                                                                                            258.82
                                                                                                                  76.61
                                                                                                                               3 56 46
                                                                                                                                                   2373.8
                                                                                                                                                                    -28.55
                                                                                                                                                                                        85.89
                                                                              94.34
        100.00
                                                           -26.98
                                                                                                                  61.79 24 42 15
82.03 5 57 24
56.11 24 51 0
                                                                                                                                                   3027.3
                                                                                                                                                                    -14.00
                                                                                                                                                                                      128.62
                                                                                              252.17
                                                                            135.47
        100.00
                       23 41 47 3627.33
                                                           -10.31
                                                                                                                                                                                       56.33
                      5 14 28 2575.61
23 51 1 3598.33
                                                                                                                                                                    -34.09
                                                                                              260.21
                                                                                                                                                   1975.6
                                                                              65.49
        110.00
                                                           -33.35
                                                                                              248.79
                                                                                                                                                   2998.3
                                                                                                                                                                    -9.17
                                                                                                                                                                                      123 60
                                                                            129.90
        110.00
                                                           -4.75
                                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                                               ORBIT CETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                 SCT 5266.5 SCR 435.6 SC3 107.1
RRT .3061 RRF .2771 RTF .8812
SCB 5284.5 R23 .0060 R13 .8812
SCI 5268.2 SC2 414.6 THA 1.46
                                                                                                                                              ST 2453.0 SR 429.5 55 478.2
CRT .9572 CRS -.8687 CST -.9737
     TOE 1.9589 TRA 1.4669 TC3-4.4983 BAU 1.3435
     RCE .354D RRA -.0424 RC3 .0500 FAU .01667
FCE .4468 FRA .6826 FC3 -.6459 BSP 16944
BCE 1.9907 BRA 1.4675 BC3 4.4986 FSP -349
                                                                                                                                             LSA 2530.4 MSA 163.7 SSA 21.8
                                                                                                                                             EL1 2487.3 EL2 122.6 ALF 9.54
                                                                                                                                                            ARRIVAL CATE JUL 7 1966
                                                                                      FLIGHT TIME 182.00
LAUNCH DATE JAN 6 1966
                                                                                     DISTANCE 541.093
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.999 GAL 4.03 A7L 87.29 MCA 279.11 SMA 117.60 ECC .25985 INC 2.7111 V1 30.287 RP 108.41 LAP -2.68 LOP 24.35 VP 36.329 GAP 14.39 A7P 89.57 TAL 168.35 TAP 87.46 RCA 87.04 APO 148.16 V2 34.955 RC 201.376 GL 14.52 GP -6.27 ZAL 68.41 ZAP 173.58 ETS 284.44 ZAE 133.14 ETE 186.42 ZAC 120.83 ETC 169.33 CLP-178.64
   PLANETOCENTRIC CONIC
     C3 23.943 VHL 4.893 DLA 27.70 RAL 29.93 RAC 6568.0 VEL 12.055 PTH 2.15 VHP 9.317 CPA
                                                                                                                                                        1.73 RAP 27.28 ECC 1.3940
     LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                  72.28
                                                                                                                               2 10 5
                                                                                                                                                   2810.9
                                                                                                                                                                    -24.67
                                                                                                                                                                                      117.14
                                         3410.90
                                                           -22.46
                                                                             125.11
                                                                                              262.85
                         1 13 14
         90.00
                                                                                                                              24 27 56
                                                                                                                   65.13
                                                                                                                                                    3148.9
                                                                                                                                                                     -17.23
                                                                                                                                                                                       139.08
                                                                             146.26
                                                                                              259.38
                        23 25 27
                                         3748.86
                                                           -13.99
         90.00
                                                                                                                               4 8 41
                                                                                                                                                    2406.9
                                                                                                                                                                     -28.16
                                                                                                                                                                                        88.27
                                                                              96.64
                                                                                              264.11
                                                                                                                   75.51
                       3 18 34
                                        3006.91
                                                           -26.43
        100.00
                         0 6 45
                                                                                                                              1 7 13
                                                                                                                                                    3028.1
                                                                                                                                                                     -13.98
                                                                                                                                                                                      128.67
                                                                             135.51
                                                                                257.49
                                                                                                                   61.78
        100.00
                                         3628.08
                                                           -10.28
                                                                                                                                                    2001.9
                                                                                                                                                                    -33.99
                                                                                                                                                                                        58.37
                                                                               67.49
        110.00
                         5 27 59
                                         2601.87
                                                           -33.08
                                                                                                                                                    3005.9
                                                                                                                                                                    -8.89
                                                                                                                                                                                      124.00
                                                                             130.29
                         0 13 49
                                                            -4.46
        110.00
                                        3605.89
    DIFFERENTIAL CORRECTIONS
                                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                                 SGT 5281.2 SGR 436.7 SG3 105.1
RRT .3264 RRF .2967 RTF .8880
SGB 5299.2 R23 .0053 R13 .8880
SGI 5283.1 SG2 412.6 THA 1.56
                                                                                                                                          ST 2427.6 SR 433.3 SS 468.5

CRT .9458 CRS -.8533 CST -.9754

LSA 2504.0 MSA 173.2 SSA 20.4

EL1 2462.1 EL2 138.7 ALF 9.61
     TOE 1.9800 TRA 1.7874 TC3-4.2042 BAU 1.3458
     ROE .3698 RRA -.0325 RC3 .0372 FAU .01555
FOE .4316 FRA .7260 FC3 -.5624 BSP 17065
     BDE 2.0142 BRA 1.7877 BC3 4.2044 FSP -346
```

```
ARRIVAL CATE JUL 9 1966
                                                                                            FLIGHT TIME 184.00
LAUNCH DATE JAN 6 1966
                                                                                           DISTANCE 546.326
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.947 GAL 4.81 A7L 87.38 MCA 282.30 SMA 117.33 ECC .26642 INC 2.6165 V1 30.287 RP 108.37 LAP -2.56 LOP 27.54 VP 36.305 GAP 14.83 A7P 89.44 TAL 166.46 TAP 88.76 RCA 86.07 APO 148.58 V2 34.968 RC 203.147 GL 13.41 GP -6.15 TAL 64.99 ZAP 173.82 ETS 278.60 ZAE 133.29 ETE 186.35 ZAC 123.23 ETC 169.29 CLP-179.32
    PLANETOCENTRIC CONIC
     C3 25.896 VML 5.089 DLA 27.82 RAL 33.88 RAD 6568.0 VEL 12.136 PTH 2.18 VMP 9.581 DPA
                                                                                                                                                                 2.82 RAP 29.53 ECC 1.4262
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                          2847.2
                                                                                                                                                                                                  119.61
                                                                                                                       71.33 2 21 16
                                                                                                                                                                               -24.04
                                                                                 127.49
                                                                                                   268.04
                          1 23 49 3447.23
                                                                -21.68
          90.00
                                                                                                                                       24 48 56
                                                                                                                                                              3151.1
                                                                                                                                                                                 -17.17
                                                                                                                                                                                                   139.22
                                                                                                     264.78
                                                                                                                          65.09
                                                                                  146.40
          90.00
                         23 46 25
                                           3751.14
                                                                -13.92
                                                                                                                                      4 22 19
1 25 46
6 26 7
                                                                                                                                                                                                    90.27
                                                                                                                                                              2434.8
                                                                                                                                                                                 -27.80
                                                                                                    269.46
                                                                                                                          74.60
                                                                                    98.57
         100.00
                          3 31 44
                                           3034.84
                                                                -25.94
                                                                                                    262.74
                                                                                                                          61.66
                                                                                                                                                              3038.8
                                                                                                                                                                                 -13.65
                                                                                                                                                                                                   129.29
        100.00
                                                                -9.94
                                                                                  136.11
                         0 25 7
                                          3638.76
                                                                                                                                                              2026.0
                                                                                                                                                                                -33.A7
                                                                                                                                                                                                    60.25
                                                                                                    271.25
                                                                                                                          79.82
                                                                -32.81
        110.00
                         5 42 21
                                           2626.04
                                                                                    69.33
                                                                                     MID-COURSE EXECUTION ACCURACY
SGT 5291.7 SGP
                                                                                  131.05
                                                                                                                                                             3020.3
                                                                                                                                                                                 -8.35
                                                                                                                                                                                                   124.77
       110.00
                         0 30 59 3620.32
                                                                -3.91
                                                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                       SGT 5291.7 SGR 436.7 SG3 103.2
RRT .3463 RRF .3163 RTF .8950
                                                                                                                                                        ST 2387.3 SR 435.2 SS 458.3
CRT .9327 CRS -.8364 CST -.9770
     TOE 1.9912 TRA 2.1255 TC3-3.8875 BAU 1.3459
     ROE .3864 RRA -.0208 RC3 .0258 FAU .01448
FOE .4161 FRA .7712 FC3 -.4840 BSP 17164
                                                                                                                                                         LSA 2462.7 MSA 183.7 SSA 19.0
                                                                                       SGB 5309.6 R23 .0049 R13 .8950
                                                                                      SG1 5293.8 SG2 409.5 THA 1.65
                                                                                                                                                        EL1 2421.7 EL2 154.8 ALF 9.69
     BOE 2.0284 BRA 2.1256 BC3 3.8876 FSP -342
                                                                                            FLIGHT TIME 186.00
                                                                                                                                                                       ARRIVAL DATE JUL II 1966
LAUNCH DATE JAN 6 1966
                                                                                           DISTANCE 551.486
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.897 GAL 5.64 AZL 87.48 MCA 285.50 SMA 117.05 ECC .27368 INC 2.5196 VI 30.287 RP 108.33 LAP -2.43 LOP 30.74 VP 36.281 GAP 15.31 AZP 89.33 TAL 164.59 TAP 90.00 RCA 85.02 APO 149.09 VZ 34.981 RC 204.893 GL 12.31 GP -6.03 ZAL 61.69 ZAP 173.97 ETS 272.28 ZAE 133.43 ETE 186.29 ZAC 125.63 ETC 169.20 CLP 179.99
    PLANETOCENTRIC CONIC
     C3 28.251 VHL 5.315 DLA 27.83 RAL 37.70 RAD 6568.1 VEL 12.232 PTH 2.20 VHP 9.869 DPA 3.88 RAP 31.79 ECC 1.4649 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                          1 38 25 3470.88
0 6 12 3770.73
                                                                                                                                                                                -23.60
                                                                                                                         70.73
                                                                                                                                        2 36 16
                                                                                                                                                           2870.9
                                                                                                                                                                                                  121.21
          90.00
                                                                -21.16
                                                                                  129.03
                                                                                                    273.33
                                                                                                                                       193
                                                                                                                                                              3170.7
                                                                                                                                                                                 -16.64
                                                                                                                                                                                                    140.42
                                                                                  147.56
                                                                                                     270.00
                                                                                                                           64.80
                                                                -13.36
          90.00
                                                                                                                           73.89 4 37 37
61.45 1 41 37
78.87 6 41 34
55.94 1 47 3
                         3 46 40
0 40 38
                                                                                                     274.85
                                                                                                                                                              2457.4
                                                                                                                                                                                 -27.49
                                                                                                                                                                                                      91.87
                                            3057.44
                                                                -25.52
                                                                                  100.12
         100.00
                                                                                                     267.89
                                                                                                                                                              3059.4
                                                                                                                                                                                 -13.01
                                                                                                                                                                                                    130.49
                                                                -9.27
                                                                                  137.28
                                            3659.40
        100.00
                                                                                                                                                              2048.2
                                                                                                                                                                                -33.72
                                                                                                                                                                                                      61.96
                          5 57 25 2648.22
                                                                -32.53
                                                                                    71.00
                                                                                                     276.79
        110.00
                                                                                                                                                              3041.4
                                                                                                                                                                                 -7.56
                                                                                                                                                                                                    125.89
                                                                                                     264.12
                           0 46 22
                                                                 -3.11
                                                                                  132.15
        110.00
                                           3641.39
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2335.8 SR 435.1 SS 448.3
CRT .9177 CRS -.8179 CST -.9784
                                                                                       SGT 5296.4 SGR 435.5 SG3 101.3
      TOE 1.9937 TRA 2.4820 TC3-3.5547 BAU 1.3426
     ROE .4036 RRA -.0073 RC3 .0160 FAU .01341
FOE .4006 FRA .8190 FC3 -.4111 BSP 17257
                                                                                       RRT .3658 RRF .3361 RTF .9019
SGB 5314.3 R23 .0045 R13 .9020
SGI 5298.8 SGZ 405.1 THA 1.73
                                                                                                                                                         LSA 2409.9 MSA 194.9 SSA 17.8
EL1 2369.8 EL2 170.4 ALF 9.75
     BOE 2.0342 BRA 2.4821 BC3 3.5548 FSP -337
                                                                                                                                                                      ARRIVAL DATE JUL 13 1966
                                                                                            FLIGHT TIME 188.00
LAUNCH DATE JAN 6 1966
                                                                                            01STANCE 556.562
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.848 GAL 6.52 AZL 87.58 HCA 288.69 5MA 116.79 ECC .28171 INC 2.4196 VI 30.287 RP 108.29 LAP -2.29 LOP 33.94 VP 36.258 GAP 15.84 AZP 89.22 TAL 162.75 TAP 91.45 RCA 83.89 APO 149.69 V2 34.994 RC 206.614 GL 11.22 GP -5.93 ZAL 58.54 ZAP 174.03 ETS 265.61 ZAE 133.56 ETE 186.23 ZAC 128.02 ETC 169.06 CLP 179.29
    PLANETOCENTRIC CONIC
      C3 31.071 VHL 5.574 OLA 27.75 RAL 41.36 RAD 6568.2 VEL 12.347 PTH
                                                                                                                             2.23 VHP 10.185 CPA
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                       2 54 47
1 20 29
                                                                                                                                                                                                   121.98
                                                                                                                          70.45
                                                                                                                                                            2882.5
                                                                                                                                                                                -23.38
          90.00 1 56 45
90.00 0 17 3
                                                                                                    278.72
                                            3482.46
                                                                -20.90
                                                                                  129.78
                                                                                                                                                                                 -15.66
                                                                                                                                                              3206.8
                                                                                                                                                                                                    142.62
                                                                                                     274.99
                                                                                                                           64.29
                                            3806.81
                                                                -12.30
                                                                                  149.68
                                                                                                                                       4 54 20
1 54 53
                                                                                                                                                                                                     93.13
                                                                                                                                                              2475.2
                                                                                                                                                                                 -27.23
                          4 3 5
0 53 23
                                                                                                     280.25
                                                                                                                           73.34
         100.00
                                            3075.19
                                                                -25.18
                                                                                  101.33
                                                                                                                                                                                 -12.08
                                                                                                                                                                                                   132.22
                                                                                                                                                              3089.3
                                            3689.31
                                                                 -8.29
                                                                                  138.96
                                                                                                     272.89
                                                                                                                           61.18
         100.00
                                                                                                                                       6 57 28
                                                                                                                                                                                -33.57
-6.54
                                                                                                                                                                                                     63.54
                                                                                                                                                              2068.6
                           6 12 59 2668.63
D 59 58 3668.64
                                                                                                     282.30
                                                                                                                           78.00
                                            2668.63
                                                               - 12 . 25
                                                                                    72.52
         110.00
                                                                                                                                                                                                   127.34
                                                                                                     269.07
                                                                                                                           55.87
                                                                                                                                         2 1 7
                                                                                                                                                              3068.6
                                                                 -2.07
                                                                                  133.58
         110.00
                                                                                       MID-COURSE EXECUTION ACCURACY
                                                                                                                                                         ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                                                                                         ST 2279.5 SR 433.1 55 439.8
CRT .9007 CRS -.7984 CST -.9801
                                                                                       SGT 5299.1 SGR 433.3 SG3 99.5
RRT .3855 RRF .3568 RTF .9089
SGB 5316.8 R23 .0047 R13 .9089
      TOE 1.9911 TRA 2.8643 TC3-3.2122 BAU 1.3343
     RCE .4214 RRA .0082 RC3 .0082 FAU .01233
FDE .3863 FRA .8706 FC3 -.3435 BSP 17216
BDE 2.0352 BRA 2.8644 BC3 3.2122 FSP -330
                                                                                                                                                         LSA 2352.6 MSA 206.2 SSA 16.6
EL1 2312.9 EL2 185.5 ALF 9.77
                                                                                        SG1 5301.7 SG2 399.6 THA 1.82
                                                                                                                                                                       ARRIVAL DATE JUL 15 1966
                                                                                             FLIGHT TIME 190.00
LAUNCH DATE JAN 6 1966
                                                                                            DISTANCE 561.537
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.799 GAL 7.45 A7L 87.68 HCA 291.89 SMA 116.53 ECC .29060 INC 2.3156 V1 30.287 RP 108.25 LAP -2.15 LOP 37.13 VP 36.237 GAP 16.41 A7P 89.14 TAL 160.95 TAP 92.84 RCA 82.67 APO 150.40 V2 35.007 RC 208.309 GL 10.14 GP -5.83 TAL 55.54 TAP 174.00 ETS 258.78 TAE 133.66 ETE 186.18 TAC 130.40 ETC 168.86 CLP 178.57
    PLANETOCENTRIC CONIC
      C3 34.436 VHL 5.868 DLA 27.58 RAL 44.83 RAD 6568.4 VEL 12.482 PTH
                                                                                                                              2.26 VHP 10.531 OPA
                                                                                                                                                                   5.92 RAP 36.32 ECC 1.5667
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                                                -23.31
                                                                                                                                       3 15 34
                                                                                                                                                              2885.9
                                                                                                                                                                                                    122.21
                          2 17 28 3485.86
                                                                 -20.82
                                                                                  130.00
                                                                                                   284.15
                                                                                                                           70.36
          90.00
                                                                                                                                          1 28 19
                                                                                                                                                               3255.2
                                                                                                                                                                                  -14.30
                                                                                                                                                                                                     145.52
                                            3855.22
                                                                                   152.50
                                                                                                     279.77
                                                                                                                            63.69
                          0 24 3
                                                                 -10.85
          90.00
                                                                                                                                                               2489.0
                                                                                                                                                                                 -27.01
                                                                                                                                                                                                      94.10
                          4 20 34
                                            3089.04
                                                                 -24.91
                                                                                   102.27
                                                                                                     285.63
                                                                                                                            72.92
                                                                                                                                          5 12 3
         100.00
                                                                                                                                         2 5 46
                                                                                                                                                               3127.3
                                                                                                                                                                                 -10.87
                                                                                                                                                                                                     134.39
                                            3727.27
                                                                  -7.04
                                                                                   141.09
                                                                                                     277.74
                                                                                                                           60.87
                          1 3 39
         100.00
                                                                                                                                       7 13 38
2 13 33
                           6 28 50
                                                                 -31.97
                                                                                    73.93
                                                                                                                           77.21
                                                                                                                                                               2087.6
                                                                                                                                                                                -33.40
                                                                                                                                                                                                      65.00
         110.00
                                            2687.63
                                                                  -.82
                                                                                   135.29
                                                                                                     273.90
                                                                                                                            55.83
                                                                                                                                                               3101.4
                                                                                                                                                                                  -5.30
                                                                                                                                                                                                    129.07
                           1 11 52
                                            3701.45
         110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                      MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                      SGI 5299.2 SG2 392.9 THA 1.89 SET SITE A SECURAL SCALE STATE SITE A SECURAL SCALE SITE A SECURAL
      TOE 1.9763 TRA 3.2631 TC3-2.8779 BAU 1.3249
      ROE .4392 RRA .0252 RC3 .0019 FAU .01133
FOE .3708 FRA .9239 FC3 -.2849 BSP 17289
```

BOE 2.0245 BRA 3.2632 BC3 2.8779 FSP -326

```
FLIGHT TIME 192.00
                                                                                                                                     ARRIVAL CATE JUL 17 1966
 LAUNCH DATE JAN 6 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 566.392
    RL 147.10 LAL -.00 LOL 105.23 VL 25.752 GAL 8.45 A7L 87.79 HCA 295.09 SMA 116.29 ECC .30045 INC 2.2067 V1 30.287 RP 108.21 LAP -2.00 LOP 40.34 VP 36.216 GAP 17.04 A7P 89.06 TAL 159.18 TAP 94.27 RCA 81.35 APO 151.22 V2 35.020 RC 209.976 GL 9.10 GP -5.74 TAL 52.70 TAP 173.86 ETS 251.98 TAE 133.75 ETE 186.12 TAC 132.76 ETC 168.60 CLP 177.83
   PLANETOCENTRIC CONIC
     C3 38.442 VHL 6.200 OLA 27.34 RAL 48.12 RAD 6568.5 VEL 12.642 PTH
                                                                                                   2.29 VHP 10.912 CPA
                                                                                                                                 6.89 RAP 38.59 FCC 1.6327
     ENCH AZNTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZNTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                             3 37 18
                                                                                                                             2885.3
        90.00
                     2 39 12 3485.26
                                                   -20.84
                                                                 129.96
                                                                                289.56
                                                                                                 70.38
                                                                                                                                            -23.32
                                                                                                                                                           122.17
                    0 28 32 3911.44
4 38 40 3100.16
1 11 45 3771.77
6 44 45 2705.61
1 22 10 3739.08
                                                                                                             1 33 43
        90.00
                                                    -9.14
                                                                  155.74
                                                                                 284.37
                                                                                                  63.08
                                                                                                                              3311.4
                                                                                                                                             -12.68
                                                                                                                                                            148.85
       100.00
                                                   -24.69
                                                                  103.02
                                                                                 290.96
                                                                                                  72.59
                                                                                                             5 30 20
                                                                                                                              2500.2
                                                                                                                                             -26.84
                                                                                                                                                             94.88
                                                                                                            2 14 37
7 29 50
       100.00
                                                    -5.56
                                                                 143.56
                                                                                 282.43
                                                                                                  60.58
                                                                                                                              3171.8
                                                                                                                                              -9.44
                                                                                                                                                            136.92
                                                                                                  76.47
       110.00
                                                   -31.69
                                                                   75.26
                                                                                293.16
                                                                                                                              2105.6
                                                                                                                                             -33.23
                                                                                                                                                             66.37
                                                     .62
      110.00
                                                                 137.25
                                                                                278.60
                                                                                                  55.82
                                                                                                             2 24 29
                                                                                                                              3139.1
                                                                                                                                             -3.87
                                                                                                                                                            131.04
                                                                      MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                 MID-COURSE EXECUTION ACCORDS:

SCT 5289.2 SGR 424.9 SG3 95.9

RRT .4222 RRF .3953 RTF .9232

SGB 5306.2 R23 .0038 R13 .9232

SGI 5292.2 SG2 385.0 THA 1.95
                                                                                                                         ST 2143.5 SR 422.7 SS 423.7
CRT .8596 CRS -.7536 CST -.9831
    TOE 1.9545 TRA 3.6865 TC3-2.5509 BAU 1.3110
    RDE .4572 RRA .0439 RC3 -.0028 FAU .01036
FDE .3559 FRA .9809 FC3 -.2333 BSP 17337
                                                                                                                         LSA 2213.8 MSA 228.0 SSA 14.6
EL1 2174.4 EL2 212.9 ALF 9.71
    BDE 2.0072 BRA 3.6868 BC3 2.5509 FSP -321
LAUNCH DATE JAN 6 1966
                                                                          FLIGHT TIME 194.00
                                                                                                                                      ARRIVAL DATE JUL 19 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 571.102
    RL 147.10 LAL -.00 LOL 105.23 VL 25.706 GAL 9.51 AZL 87.91 MCA 298.30 SMA 116.04 ECC .31140 INC 2.0919 V1 30.287 RP 108.17 LAP -1.84 LOP 43.54 VP 36.196 GAP 17.74 AZP 89.01 TAL 157.46 TAP 95.76 RCA 79.91 APO 152.18 VZ 35.034 RC 211.617 GL 8.09 GP -5.66 ZAL 50.03 ZAP 173.63 ETS 245.42 ZAE 133.82 ETE 186.07 ZAC 135.10 ETC 168.28 CLP 177.08
   PLANETOCENTRIC CONIC
    C3 43.210 VHL 6.573 OLA 27.03 RAL 51.20 RAD 6568.6 VEL 12.829 PTH 2.34 VHP 11.333 DPA 7.82 RAP 40.86 ECC 1.7111 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     3 0 58 3483.45
0 31 22 3972.26
                                                                                                             3 59 1
                                                  -20.88
                                                                 129.84
                                                                                294.89
                                                                                                  70.42
                                                                                                                             2883.5
                                                                                                                                            -23.36
                                                                                                                                                            122.05
        90.00
                                                                                                  62.55
                                                                                                             1 37 34
                                                                                                                               3372.3
        90.00
                                                   -7.25
                                                                  159.21
                                                                                 288.80
                                                                                                                                              -10.87
                                                                                                                                                             152.40
                                                                                                            5 48 45
2 21 47
7 45 53
2 34 1
                    4 56 55 3109.64
1 18 6 3821.31
                                                   -24.49
                                                                                                                              2509.6
       100.00
                                                                 103.66
                                                                                 296.21
                                                                                                  72.30
                                                                                                                                              -26.68
                                                                                                                                                              95.54
                                                                                                  60.34
                                                                                                                              3221.3
                                                                                                                                              -7.82
      100.00
                                                   -3.90
                                                                 146.30
                                                                                286.97
                                                                                                                                                            139.70
                    7 0 30 2722.92
1 31 0 3780.78
                                                                                                  75.77
                                                                                                                                             -33.05
       110.00
                                                  -31.41
                                                                   76.53
                                                                                298.45
                                                                                                                              2122.9
                                                                                                                                                             67.69
                                                                                                             2 34 1
                                                    2.22
                                                                  139.43
                                                                                                  55.88
                                                                                                                              3180.8
       110.00
                                                                                283.17
                                                                                                                                               -2.28
                                                                                                                                                             133.22
   DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
                                                                     SGT 5278.0 SGR 418.9 SG3 94.3
RRT .4401 RRF .4145 RTF .9303
SGB 5294.6 R23 .0033 R13 .9303
SGI 5281.3 SG2 375.9 THA 2.01
                                                                                                                          ST 2074.9 SR 414.5 S5 418.2
CRT .8355 CRS -.7294 CST -.9848
    TOE 1.9274 TRA 4.1374 TC3-2.2364 BAU 1.2919
    ROE .4751 RRA .0643 RC3 -.0059 FAU .00939
FOE .3418 FRA 1.0422 FC3 -.1861 BSP 17367
                                                                                                                          LSA 2143.7 MSA 237.5 SSA 13.7
    BOE 1.9851 BRA 4.1379 BC3 2.2364 FSP -317
                                                                                                                          EL1 2103.9 EL2 224.7 ALF 9.59
                                                                         FLIGHT TIME 196.00
                                                                                                                                    ARRIVAL DATE JUL 21 1966
LAUNCH CATE JAN 6 1966
                                                                         DISTANCE 575.639
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 25.661 GAL 10.66 AZL 88.03 HCA 301.50 SMA 115.81 ECC .32559 INC 1.9699 VI 30.287 RP 108.13 LAP -1.68 LOP 46.74 VP 36.177 GAP 18.51 AZP 88.97 TAL 155.80 TAP 97.30 RCA 78.33 APO 153.28 V2 35.047 RC 213.230 GL 7.12 GP -5.59 ZAL 47.53 ZAP 173.30 ETS 239.23 ZAE 133.85 ETE 186.02 ZAC 137.42 ETC 167.88 CLP 176.29
   PLANETOCENTRIC CONIC
    C3 48.890 VHL 6.992 DLA 26.67 RAL 54.08 RAD 6568.8 VEL 13.048 PTH 2.38 VHP 11.800 CPA
                                                                                                                                 8.72 RAP 43.13 ECC 1.8046
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ & LAT INJ & LONG
                                                                                                             4 20 12
                                                                                                                             2882.0
                                                                                                                                           -23.38
                                                                                                                                                           121.95
                     3 22 10 3482.03
0 33 6 4035.67
                                                                 129.75
                                                                                300.11
                                                                                                 70.46
                                                  -20.91
        90.00
                                                                                                                                                            156.05
                                                                 162.79
                                                                                293.08
                                                                                                  62.13
                                                                                                             1 40 22
                                                                                                                              3435.7
                                                                                                                                             -8.93
                                                   -5.24
        90.00
                                                                                                 72.05 6 6 57
60.17 2 27 33
                     5 14 59 3118.37
1 22 59 3874.57
                                                                                                                              2518.4
                                                                                                                                             -26.54
                                                                                                                                                             96.15
                                                                 104.24
                                                                                301.36
                                                  -24.31
       100.00
                                                                                                                              3274.6
                                                                 149.23
                                                                                291.34
                                                                                                                                              -6.05
                                                                                                                                                           142.67
       100.00
                                                   -2.10
                                                                                                 75.09 8 1 36
56.02 2 42 17
                                                                                                                              2139.9
                                                                   77.77
                                                                                303.63
                                                                                                                                             -32.85
                                                                                                                                                             68.98
                     7 15 56 2739.89
                                                  -31.12
       110.00
                     1 34 31
                                                                 141.78
                                                                                287.59
                                                                                                                             3225.8
                                                                                                                                               -.55
       110.00
                                  3825.81
                                                   3.93
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                          ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                    SGT 5264.5 SGR 411.9 SG3 92.7
RRT .4581 RRF .4342 RTF .9374
SGB 5280.6 R23 .0031 R13 .9374
                                                                                                                          ST 2012.1 SR 404.7 SS 415.7
    TOE 1.9002 TRA 4.6227 TC3-1.9348 BAU 1.2646
    ROE .4931 RRA .0863 RC3 -.0075 FAU .00837
FOE .3297 FRA 1.1096 FC3 -.1482 BSP 17291
                                                                                                                          CRT .8097 CRS -.7055 CST -.9867
                                                                                                                         LSA 2079.6 MSA 245.4 SSA 13.0
EL1 2038.9 EL2 234.4 ALF 9.38
    BCE 1.9631 BRA 4.6235 BC3 1.9348 FSP
                                                                     SG1 5267.9 SG2 365.9 THA
                                                                                                          2.06
                                                        -310
                                                                         FLIGHT TIME 198.00
                                                                                                                                     ARRIVAL DATE JUL 23 1966
LAUNCH DATE JAN 6 1966
                                                                         DISTANCE 579.963
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 25.617 GAL 11.90 A7L 88.16 MCA 304.71 SMA 115.58 ECC .33719 INC 1.8392 V1 30.287 RP 108.09 LAP -1.51 LOP 49.95 VP 36.159 GAP 19.37 A7P 88.95 TAL 154.20 TAP 98.91 RCA 76.61 APO 154.56 V2 35.060 RC 214.816 GL 6.19 GP -5.52 TAL 45.21 TAP 172.87 ETS 233.51 TAE 133.85 ETE 185.96 TAC 139.70 ETC 167.40 CLP 175.48
   PLANETOCENTRIC CONIC
    C3 55.673 VHL 7.461 DLA 26.27 RAL 56.74 RAD 6569.0 VEL 13.305 PTH 2.43 VHP 12.320 DPA
                                                                                                                                 9.59 RAP 45.38 ECC 1.9162
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 42 30 3481.74 -20.92 129.73 305.19 70.47 4 40 32 2881.7 -23.39 121.93
                                                                                                              1 42 22
                                                                                                                              3500.4
                                                                                                                                              -6.91
                                                                                                                                                            159.74
                    0 34 1
                                  4100.43
                                                     -3.17
                                                                 166.42
                                                                                297.21
                                                                                                  61.85
        90.00
                                                                                                  71.80
                                                                                                              6 24 40
                                                                                                                              2527.0
                                                                                                                                             -26.39
                                                                                                                                                             96.75
                     5 32 33
                                  3126.96
                                                   -24.13
                                                                 104.82
                                                                                306.38
      100.00
                     1 26 40 3930.44
7 30 53 2756.73
                                                                                                 60.11 2 32 10
74.42 8 16 50
                                                                                295.57
                                                                                                                              3330.4
                                                                                                                                              -4.18
                                                                                                                                                            145.76
                                                     - .20
                                                                 152.29
       100.00
                                                   -30.82
                                                                                308.66
                                                                                                                              2156.7
                                                                                                                                           -32.65
                                                                                                                                                             70.25
       110.00
                                                                   144.29 291.88 56.24 2 49 23
MID-COURSE EXECUTION ACCURACY
                                   3873.44
                                                    5.74
                                                                 144.29
                                                                                                                              3273.4
                                                                                                                                              1.27
                                                                                                                                                            138.06
                     1 44 49
       110.00
                                                                                                                          ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
    TOE 1.8646 TRA 5.1366 TC3-1.6565 BAU 1.2329
                                                                  SGT 5245.0 SGR 403.4 SG3 91.1 ST 1948.6 SR 393.1 SS 414.2 RRT ,4749 RRF .4527 RTF .9444 CRT .7815 CRS -.6801 CST -.9885 SG8 5260.5 R23 .0024 R13 .9444 LSA 2014.9 MSA 251.6 SSA 12.2
    RDE .5106 RRA .1096 RC3 -.0083 FAU .00741
    FOE .3172 FRA 1.1812 FC3 -.1152 BSP 17328
```

BOE 1.9333 BRA 5.1378 BC3 1.6565 FSP -306

SG1 5248.5 SG2 354.7 THA 2.10

ELI 1973.1 ELZ 242.2 ALF 9.10

ARRIVAL DATE JUL 25 1966

```
FLIGHT TIME 200.00
LAUNCH DATE JAN 6 1966
                                                                     DISTANCE 584.027
   RL 147.10 LAL -.00 LOL 105.23 VL 25.574 GAL 13.25 A7L 88.30 MCA 307.92 SMA 115.36 ECC .35242 INC 1.6976 V1 30.287 RP 108.05 LAP -1.34 LOP 53.16 VP 36.141 GAP 20.33 A7P 88.96 TAL 152.69 TAP 100.61 RCA 74.71 APO 156.02 V2 35.073 RC 216.375 GL 5.30 GP -5.46 7AL 43.07 7AP 172.34 ETS 228.30 7AE 133.81 ETE 185.90 7AC 141.94 ETC 166.84 CLP 174.62
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                              2.49 VHP 12.902 CPA 10.41 RAP 47.61 ECC 2.0500
    C3 63.801 VHL 7.988 CLA 25.84 RAL 59.19 RAC 6569.2 VEL 13.607 PTH
   ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     4 59 50
                                                                                                                    2882.9
                                                                                                                                     -23.37
                                                                                           70.44
                   4 1 47 3482.87
0 34 18 4165.71
       90.00
                                                -20.89
                                                             129.81
                                                                           310.10
                                                                                                                       3565.7
                                                                                                                                      -4.84
                                                                                                                                                    163.42
                                                                                            61.70
                                                                                                       1 43 44
                                                 -1.07
                                                              170.07
                                                                            301.20
                   0 34 18
       90.00
                                                                                                     6 41 42
2 35 48
8 31 27
                                                                                                                       2535.8
                                                                                                                                     -26.24
                                                                                                                                                     97.36
                                                                                            71.54
                   5 49 26
                                 3135.79
                                                -23.94
                                                              105.40
                                                                            311.23
      100.00
                   1 29 20 3988.02
                                                                                                                       3388.0
                                                                                                                                      -2.23
                                                                                                                                                    148.93
                                                                                            60.15
                                                  1.75
                                                              155.45
                                                                            299.63
      100.00
                                                                                                                       2173.6
                                                                                                                                     -32.43
                                                                                                                                                     71.51
                                                                                            73.77
                   7 45 13 2773.56
                                                -30.51
                                                               80.20
                                                                            313.54
      110.00
                                                                                            56.57
                                                                                                       2 55 26
                                                                                                                       3323.0
                                                                                                                                       3.16
                                                                                                                                                    140.65
                               3923.02
                                                              146.91
                                                                           296.02
                   1 50 3
      110.00
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                 SGT 5221.8 SGR 393.7 SG3 89.6
RRT .4914 RRF .4710 RTF .9512
                                                                                                                   ST 1890.9 SR 380.0 SS 415.5
CRT .7519 CRS -.6551 CST -.9903
    TOE 1.8284 TRA 5.6898 TC3-1.3974 BAU 1.1919
    ROE .5279 RRA .1342 RC3 -.0080 FAU .00641
                                                                 SGB 5236.7 R23 .0018 R13 .9512
SG1 5225.4 SG2 342.6 THA 2.13
                                                                                                                   LSA 1956.3 MSA 255.6 55A 11.5
    FOE .3060 FRA 1.2597 FCB -.0869 BSP 17332
                                                                                                                   EL1 1912.7 EL2 247.6 ALF 8.74
    BOE 1.9031 BRA 5.6914 BC3 1.3974 FSP
                                                   - 301
                                                                                                                              ARRIVAL DATE JUL 27 1966
                                                                      FLIGHT TIME 202.00
LAUNCH DATE JAN 6 1966
                                                                     DISTANCE 587.769
   RL 147.10 LAL -.00 LOL 105.23 VL 25.533 GAL 14.72 AZL 88.46 HCA 311.14 SHA 115.15 ECC .36953 INC 1.5431 VI 30.287 RP 108.01 LAP -1.16 LOP 56.37 VP 36.125 GAP 21.41 AZP 88.98 TAL 151.28 TAP 102.41 RCA 72.60 APO 157.71 V2 35.086 RC 217.906 GL 4.45 GP -5.40 ZAL 41.11 ZAP 171.72 ETS 223.59 ZAE 133.73 ETE 185.84 ZAC 144.13 ETC 166.17 CLP 173.72
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
   C3 73.584 VML 8.578 DLA 25.38 RAL 61.43 RAD 6569.4 VEL 13.962 PTH 2.55 VMP 13.555 DPA 11.19 RAP 49.81 ECC 2.2110 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 4 19 55 3485.43 -20.83 129.97 314.82 70.38 5 18 0 2885.4 -23.32 122.18
                                                                                                                        3630.9
                                                                                             61.70
                                4230.91
                                                  1.04
                                                               173.70
                                                                             305.04
                                                                                                     6 57 55
2 38 33
8 45 21
        90.00
                   0 34
                   6 5 30 3145.01
1 31 7 4046.55
                                                                                                                        2545.0
                                                                                                                                       -26.07
                                                                                                                                                     98.00
                                                                                             71.28
                                                 -23.74
                                                               106.02
                                                                            315.91
       100.00
                                                                                                                        3446.5
                                                                                                                                       - .25
                                                                                                                                                     152.14
                                                                                             60.32
       100.00
                                                  3.73
                                                              158.67
                                                                            303.54
                   7 58 51 2790.40
1 54 15 3973.93
                                                                                                                                      -32.19
                                                                                                                                                     72.77
                                                                                                                        2190.4
                                                                                             73.13
                                                 -30.18
                                                                81.40
                                                                            318.23
       110.00
                                                                                                                                        5.10
                                                                                                                                                    143.32
                                                                                                        3 0 29
                                                                                                                        3373.9
                                                                                             57.01
                                                  9.51
                                                               149.63
                                                                            300.00
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SCT 5194.7 SGR 382.7 SG3 88.1
RRT .5073 RRF .4888 RTF .9577
SGB 5208.8 R23 .0012 R13 .9577
SGI 5198.4 SG2 329.6 THA 2.15
                                                                                                                    ST 1838.5 SR 365.6 S5 419.4
CRT .7216 CR5 -.6306 CST -.9920
    TOE 1.7920 TRA 6.2865 TC3-1.1591 BAU 1.1402
    ROE .5447 RRA .1599 RC3 -.0070 FAU .00534
                                                                                                                    LSA 1903.5 MSA 257.2 SSA 10.8
EL1 1857.7 EL2 250.5 ALF 8.32
    FOE .2962 FRA 1.3460 FC3 -.0628 BSP 17317
BDE 1.8730 BRA 6.2886 BC3 1.1591 FSP -297
                                                                                                                              ARRIVAL CATE JUL 29 1966
                                                                      FLIGHT TIME 204.00
LAUNCH DATE JAN 6 1966
                                                                     DISTANCE 591.110
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 25.494 GAL 16.34 AZL 88.63 MCA 314.35 SMA 114.95 ECC .38880 INC 1.3725 V1 30.287 RP 107.97 LAP -.98 LOP 59.58 VP 36.109 GAP 22.63 AZP 89.04 TAL 149.98 TAP 104.33 RCA 70.26 APO 159.65 V2 35.099 RC 219.410 GL 3.64 GP -5.34 ZAL 39.34 ZAP 171.00 ETS 219.36 ZAE 133.58 ETE 185.76 ZAC 146.26 ETC 165.41 CLP 172.76
   PLANETOCENTRIC CONIC
    C3 85.430 VHL 9.243 DLA 24.90 RAL 63.44 RAD 6569.7 VEL 14.380 PTH 2.61 VMP 14.294 DPA
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      5 34 59
1 44 47
                                                                                                                       2889.2
                                                                          319.32
                                                                                                                                     -23.24
                   4 36 50 3489.25
0 33 11 4295.56
6 20 37 3154.62
                                                             130.22
                                                                                             70.28
                                                 -20.74
        90.00
                                                                                                                                        -.67
                                                                                                                        3695.6
                                                                                                                                                    170.68
                                                                                             61.84
                                                  3.12
                                                               177.31
                                                                             30A . 71
        90.00
                                                                                                      7 13 12
2 40 30
                                                                                                                        2554.6
                                                                                                                                      -25.90
                                                                                                                                                     98.66
                                                                                             71.01
                                                 -23.53
                                                               106.65
                                                                             320.38
       100.00
                                                                                                                                       1.75
                                                                                                                                                    155.37
                                                                                                                        3505.4
                                                  5.70
                                                               161.92
                                                                             307.29
                                                                                             60.61
                                 4105.41
       100.00
                    1 32 5
                                                                                                                        2207.2
                                                                                                                                      -31.94
                                                                                                                                                     74.01
                                                                                                       8 58 28
                    8 11 41 2807.18
                                                                                             72.50
                                                 -29.84
                                                                82.59
                                                                             322.71
       110.00
                                                                                                                        3425.6
                                                                                                                                       7.05
                                                                                                                                                    146.05
                                                                                             57.56
                                                                                                        3 4 37
                                                               152.42
                                                                             303.63
                     1 57 31
                                  4025.62
                                                  11.41
       110.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1793.8 SR 350.1 SS 426.9
CRT .6917 CRS -.6082 CST -.9937
                                                                  SCT 5165.8 SGR 370.7 SG3 86.8
RRT .5230 RRF .5066 RTF .9639
SCB 5179.0 R23 .0006 R13 .9639
     TOE 1.7615 TRA 6.9372 TC3 -.9396 BAU 1.0732
     RDE .5614 RRA .1865 RC3 -.0054 FAU .00414
                                                                                                                    LSA 1859.3 MSA 256.1 SSA 10.2
EL1 1810.4 EL2 250.5 ALF 7.84
     FOE .2887 FRA 1.4423 FC3 -.0420 8SP 17191
                                                                  SG1 5169.4 SGZ 315.8 THA 2.16
     BOE 1.8488 BRA 6.9397 BC3 .9396 FSP -291
                                                                                                                               ARRIVAL DATE JUL 31 1966
                                                                      FLIGHT TIME 206.00
 LAUNCH DATE JAN 6 1966
                                                                      DISTANCE 593.944
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 25.457 GAL 18.14 A7L 88.82 MCA 317.57 SMA 114.76 ECC .41060 INC 1.1819 VI 30.287 RP 107.93 LAP -.80 LOP 62.80 VP 36.095 GAP 24.02 A7P 89.13 TAL 148.84 TAP 106.40 RCA 67.64 APO 161.89 V2 35.111 RC 220.887 GL 2.86 GP -5.29 TAL 37.77 ZAP 170.18 ETS 215.55 ZAE 133.36 ETE 185.68 ZAC 148.31 ETC 164.52 CLP 171.72
   PLANETOCENTRIC CONIC
                                                                                               2.68 VHP 15.132 OPA 12.62 RAP 54.09 ECC 2.6436
     C3 99.869 VHL 9.993 DLA 24.40 RAL 65.24 RAD 6569.9 VEL 14.873 PTH
     LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                         5 50 45
                                                                                                                                     -23.15
                                                                                                                        2894.0
                                                                            323.58
                                                                                              70.17
                     4 52 31
                                  3494.04
                                                 -20.63
                                                               130.53
        90.00
                                                                                                         1 44 28
                                                                                                                         3759.3
                                                                                                                                         1.39
                                                                                                                                                     174.24
                                                                                              62.12
                                                               180.89
                                                                             312.21
                     0 31 49
                                 4359.29
                                                   5.16
                                                                                                      7 27 29
                                                                                                                         2564.5
                                                                                                                                       -25.72
                                                                                                                                                      99.33
                                                               107.30
                                                                             324.61
                                                                                              70.73
                     6 34 44
                                  3164.48
                                                  -23.31
       100.00
                                                                                                                         3564.1
                                                                                                                                         3.73
                                                                                                                                                     158.60
                                                                                              61.02
                                                                                                        2 41 41
                                                                             310.85
                     1 32 17 4164.08
                                                   7.65
                                                               165.19
       100.00
                                                                                                       9 10 42
                                                                                              71.89
                                                                                                                         2223.8
                                                                                                                                       -31.68
                                                                                                                                                      75.24
                     8 23 39 2823.76
                                                 -29.50
                                                                83.76
                                                                             326.94
       110.00
                                                                 MID-COURSE EXECUTION ACCURACY
                    1 59 52 4077.57
                                                                                                                         3477.6
                                                                                                                                        8.99
                                                                                                                                                     148.81
                                                               155.27
                                                  13.29
       110.00
                                                                                                                     ORBIT CETERHINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1751.2 SR 333.5 SS 436.7
CRT .6616 CRS -.5859 CST -.9951
                                                                  SGT 5130.3 SGR 357.3 SG3 85.5
RRT .5373 RRF .5228 RTF .9697
     TOE 1.7291 TRA 7.6395 TC3 -.7432 BAU .9924
     RDE .5773 RRA .2134 RC3 -.0036 FAU .00285
                                                                                                                     LSA 1817.8 MSA 252.8 SSA 9.6
                                                                   SGB 5142.8 R23 -.0000 R13 .9697
     FDE .2818 FRA 1.5480 FC3 -.0247 BSP 17177
                                                                  SG1 5133.9 SG2 301.1 THA 2.15
                                                                                                                     EL1 1765.3 EL2 248.1 ALF 7.33
     BOE 1.8229 BRA 7.6425 BC3 .7432 FSP -287
```

```
LAUNCH CATE JAN 6 1966
                                                                                                 FIRMT TIME 208.00
                                                                                                                                                                               ARRIVAL DATE AUG 2 1966
                                                                                                 CISTANCE 596.134
     HELIOCENTRIC CONIC
      RL 147.10 LAL -.00 LOL 105.23 VL 25.421 GAL 20.14 A7L 89.03 MCA 320.79 SMA 114.59 ECC .43534 INC .9663 V1 30.287 RP 107.89 LAP -.61 LOP 66.02 VP 36.082 GAP 25.60 A7P 89.25 TAL 147.87 TAP 108.65 RCA 64.70 APO 164.47 V2 35.124 RC 222.336 GL 2.13 GP -5.24 ZAL 36.41 ZAP 169.25 ETS 212.12 ZAE 133.05 ETE 185.59 ZAC 150.27 ETC 163.53 CLP 170.60
     PLANETOCENTRIC CONIC
      C3 117.608 VHL 10.845 CLA 23.89 RAL 66.80 RAC 6570.2 VEL 15.458 PTM 2.76 VMP 16.090 CPA 13.26 RAP 56.14 ECC 2.9355
     C3 117.608 VML 10.845 CLA 23.89 RAL 66.80 RAC 6570.2 VEL 15.458 PTM 2.76 VMP 16.090 CPA 13.26 RAP 56.14 ECC 2.9355 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 6 57 3499.44 -20.51 130.87 327.57 70.04 6 5 16 2899.4 -23.04 123.12 90.00 0 29 51 4421.76 7.13 184.41 315.50 62.52 1 43 33 3821.8 3.40 177.73 100.00 6 47 47 3174.34 -23.08 107.95 328.56 70.46 7 40 41 2574.3 -25.54 100.01 100.00 1 31 43 4222.09 9.55 168.45 314.21 61.54 2 42 5 3622.1 5.68 161.80 110.00 8 34 41 2839.90 -29.15 84.89 330.90 71.30 9 22 0 2239.9 -31.42 76.42 110.00 2 1 18 4129.30 15.13 158.16 310.95 58.97 3 10 7 3529.3 10.90 151.60
                                                                                          MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                                           RRT .5504 RRF .5379 RTF .9751
SCB 5102.5 R23 -.0006 R13 .9751
SCB 5094.5 SC2 285.9 THA 2.13
                                                                                                                                                               ST 1713.1 SR 316.0 S5 450.2
CRT .6327 CRS -.5655 CST -.9963
      TOE 1.7030 TRA 8.4074 TC3 -.5665 BAU .8907
      RDE .5929 RRA .2402 RC3 -.0015 FAU .00136
FDE .2770 FRA 1.6664 FC3 -.0100 BSP 17144
                                                                                                                                                            BDE 1.8033 BRA 8.4108 BC3 .5665 FSP -283
                                                                                                                                                                EL1 1725.0 EL2 243.0 ALF 6.79
LAUNCH DATE JAN 6 1966
                                                                                                 FLIGHT TIME 210.00
                                                                                                                                                                               ARRIVAL DATE AUG 4 1966
                                                                                                 DISTANCE 597.495
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.388 GAL 22.39 AZL 89.28 MCA 324.01 SMA 114.42 ECC .46352 INC .7183 V1 30.287
RP 107.86 LAP -.42 LOP 69.23 VP 36.071 GAP 27.43 AZP 89.42 TAL 147.12 TAP 111.13 RCA 61.39 APO 167.46 V2 35.135
RC 223.756 GL 1.43 GP -5.19 ZAL 35.26 ZAP 168.18 ETS 209.00 ZAE 132.63 ETE 185.48 ZAC 152.11 ETC 162.41 CLP 169.37
     C3 139.599 VHL 11.815 DLA 23.36 RAL 68.12 RAD 6570.5 VEL 16.153 PTH 2.84 VMP 17.192 DPA 13.84 RAP 58.09 ECC 3.2974 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 20 5 3505.02 -20.38 131.23 331.24 69.90 6 18 30 2905.0 -22.93 123.49 90.00 0 27 14 4482.65 9.03 187.88 318.57 63.05 1 41 57 3882.7 5.34 181.14 100.00 6 59 40 3183.90 -22.87 108.57 332.21 70.20 7 52 44 2583.9 -25.35 100.66 100.00 1 30 19 4279.01 11.38 171.68 317.33 62.17 2 41 38 3679.0 7.57 164.97 110.00 8 44 42 2855.32 -28.81 85.96 334.55 70.75 9 32 17 2255.3 -31.16 77.54 110.00 2 1 47 4180.35 16.90 161.06 314.18 59.83 3 11 28 3440.4 12.77
    PLANE TOCENTRIC CONIC
                                                                                       MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                ORBIT CETERMINATION ACCURACY
                                                                                                                                                         ST 1678.9 SR 298.0 SS 467.6
CRT .6059 CR5 -.5472 CST -.9973
                                                                                           3GT 5047.6 SGR 326.8 SG3 82.9
RRT .5622 RRF .5515 RTF .9799
      TOE 1.6865 TRA 9.2506 TC3 -.4083 BAU .7620
     ROE .6082 RRA .2662 RC3 .0005 FAU-.00045
FDE .2747 FRA 1.7997 FC3 .0028 BSP 17073
BDE 1.7928 BRA 9.2544 BC3 .4083 FSP -279
                                                                                            SGB 5058.2 R23 -.0011 R13 .9799
                                                                                                                                                                 LSA 1751.9 MSA 238.9 55A 8.4
                                                                                                                                                             EL1 1688.8 EL2 235.7 ALF 6.26
                                                                                           SG1 5051.0 SG2 270.1 THA 2.09
                                                                                                FLIGHT TIME 212.00
                                                                                                                                                                              ARRIVAL DATE AUG 6 1966
LAUNCH DATE JAN 6 1966
                                                                                                DISTANCE 597.783
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.359 GAL 24.95 AZL 89.57 HCA 327.23 SNA 114.27 ECC .49573 INC `.4287 VI 30.287 RP 107.82 LAP -.23 LOP 72.45 VP 36.061 GAP 29.56 AZP 89.64 TAL 146.64 TAP 113.87 RCA 57.63 APO 170.92 VZ 35.147 RC 225.148 GL .76 GP -5.14 ZAL 34.36 ZAP 166.97 ETS 206.17 ZAE 132.08 ETE 185.35 ZAC 153.82 ETC 161.19 CLP 168.01
    PLANFTOCENTRIC CONIC
     C3 167.128 VHL 12.928 OLA 22.83 RAL 69.17 RAD 6570.8 VEL 16.984 PTH 2.92 VHP 18.467 CPA 14.38 RAP 59.92 ECC 3.7505 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
          90.00 5 31 52 3510.32
90.00 0 23 50 4541.70
                                                                                                        334.56
                                                                                                                               69.78
                                                                                                                                               6 30 22
                                                                                                                                                                    2910.3
                                                                                      131.57
                                                                   -20.25
                                                                                                                                 63.68
                                                                                                                                              1 39 32
                                                                                                                                                                      3941.7
                                                                                                          321.36
                                                                    10.83
                                                                                      191.28
                                                                                                                                             8 3 34
2 40 16
                                                                                                                                 69.97
                                                                                                                                                                      2592.8
                                                                                                                                                                                         -25.18
                                                                                                                                                                                                             101.26
                          7 10 21 3192.75
1 28 2 4334.49
                                                                                      109.15
                                                                                                          335.51
         100.00
                                                                  -22.66
                                                                                                                                 62.90
                                                                                                          320.19
                                                                                                                                                                      3734.5
         100.00
                                                                    13.12
                                                                                      174.88
                                                                                                                                ru.25 9 41 27
60.78 3
                           8 53 38 2869.67
2 1 15 4230.33
                                                                                                                                                                     2269.7
                                                                                                                                                                                                               78.59
                                                                                        86.95
                                                                                                         337.84
         110.00
                                                                 -28.48
                                                                  18.58
                                                                                      163.95
                                                                                                          317.15
                                                                                                                                                3 11 46
                                                                                                                                                                      3630.3
                                                                                                                                                                                       14.55
                                                                                                                                                                                                             157.16
         110.00
                                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                ORBIT DETERMINATION ACCURACY
    CIFFERENTIAL CORRECTIONS
                                                                                           SCT 5001.4 SCR 309.7 SC3 81.8
RRT .5722 RRF .5632 RTF .9841
SCB 5010.9 R23 -.0016 R13 .9841
SCI 5004.5 SG2 253.8 THA 2.03
                                                                                                                                                           ST 1648.4 SR 279.5 SS 489.8

CRT .5820 CRS -.5518 CST -.9980

LSA 1727.0 MSA 228.8 SSA 7.8

EL1 1656.5 EL2 226.1 ALF 5.74
     TOE 1.6865 TRAID.1826 TC3 -.2674 BAU .5974
     RDE .6234 RRA .2906 RC3 .0026 FAU-.00272
FDE .2761 FRA 1.9513 FC3 .0141 BSP 16896
BDE 1.7981 BRA10.1868 BC3 .2674 FSP -274
                                                                                                 FLIGHT TIME 214.00
                                                                                                                                                                               ARRIVAL DATE AUG 8 1966
LAUNCH DATE JAN 6 1966
                                                                                                DISTANCE 596.664
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 105.23 VL 25.333 GAL 27.87 AZL 89.92 MCA 330.45 SMA 114.14 ECC .53262 INC .0822 V1 30.287 RP 107.79 LAP -.04 LOP 75.68 VP 36.054 GAP 32.04 AZP 89.93 TAL 146.50 TAP 116.95 RCA 53.35 APO 174.94 V2 35.158 RC 226.511 GL .13 GP -5.09 ZAL 33.74 ZAP 165.57 ETS 203.56 ZAE 131.36 ETE 185.21 ZAC 155.36 ETC 159.88 CLP 166.48
    PLANETOCENTRIC CONIC
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 42 15 3514.81 -20.15 131.86 337.47 69.67 64.0 50 2014
                                                                                                                                               1 36 9
                                                                                                                                                                      3998.6
                                                                                                                                                                                                              187.72
                           0 19 31
                                            4598.54
                                                                    12.53
                                                                                      194.61
                                                                                                          323.84
                                                                                                                                 64.4D
                                                                                                                                                                                           8.98
          90.00
                          7 19 44 3200.48
1 24 43 4388.21
                                                                                                                                              8 13 4
                                                                                                                                                                                                             101.79
                                                                                                                                                                      2600.5
                                                                                                                                                                                          -25.03
         100.00
                                                                   -22.48
                                                                                      109.66
                                                                                                          338.39
                                                                                                                                 69.76
                                                                                                                                              2 37 51
9 49 23
                                                                                                                                 63.71
                                                                                                                                                                      3788.2
                                                                                                                                                                                          11.12
                                                                    14.77
                                                                                      178.02
                                                                                                          322.72
                                                                                                                                                                                                             171.13
         100.00
                           9 1 21 2882.58
                                                                   -28.18
                                                                                        87.83
                                                                                                          340.71
                                                                                                                                 69.80
                                                                                                                                                                      2282.6
                                                                                                                                                                                        -30.67
                                                                                                                                                                                                              79.52
         110.00
                            1 59 35
                                                                  20.17
                                                                                     166.82
                                                                                                          319.81
                                                                                                                                 61.80
                                                                                                                                                3 10 54
                                                                                                                                                                      3678.9
                                                                                                                                                                                         16.24
                                                                                                                                                                                                              159.90
                                             4278.87
         110.00
                                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                           MID-COURSE EXECUTION ACCURACY

SCT 4947.3 SGR 291.2 SG3 80.7

RRT .5789 RRF .5714 RTF .9878

SGB 4955.9 R23 -.0021 R13 .9878

SGB 4950.2 SG2 237.3 THA 1.96

EL1 1623.7 EL2 215.0 ALF 5.25
    DIFFERENTIAL CORRECTIONS
      TOE 1.6992 TRAIL.2046 TC3 -.1449 BAU .3915
     ROE .6383 RRA .3115 RC3 .0043 FAU-.00558
FCE .2804 FRA 2.1223 FC3 .0237 BSP 16817
BCE 1.8152 BRA11.2089 BC3 .1450 FSP -271
```

```
ARRIVAL DATE AUG 10 1966
                                                                       FLIGHT TIME 216.00
LAUNCH DATE JAN 6 1966
                                                                       DISTANCE 593.694
  HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 105.23 VL 25.311 GAL 31.25 AZL 90.34 HCA 333.68 SMA 114.04 ECC .57489 INC .3384 V1 30.287
RP 107.75 LAP .15 LOP 78.90 VP 36.049 GAP 34.97 AZP 90.30 TAL 146.79 TAP 120.46 RCA 48.48 APO 179.60 VZ 35.169
RC 227.845 GL -.47 GP -5.03 ZAL 33.42 ZAP 163.95 ETS 201.15 ZAE 130.43 ETE 185.03 ZAC 156.69 ETC 158.55 CLP 164.74
  PLANETOCENTRIC CONIC
    C3 246.526 VML 15.701 DLA 21.75 RAL 70.36 RAD 6571.4 VEL 19.179 PTH 3.09 VMP 21.694 CPA 15.27 RAP 63.08 ECC 5.0572
   LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   5 51 7 3517.96
0 14 3 4653.30
7 27 41 3206.59
1 20 10 4439.90
9 7 43 2893.60
1 56 37 4325.66
                                                                                                         6 49 45
                                                                                                                        2918.0
                                                                                                                                       -22.67
       90.00
                                                 -20.07
                                                               132.06
                                                                             339.90
                                                                                             69.60
                                                                                                                                                        190.87
                                                                                                                                          10.65
                                                               197.84
                                                                              325.93
                                                                                               65.20
                                                                                                          1 31 36
                                                                                                                           4053.3
        90.00
                                                 14.12
                                                                                                                                                        102.20
                                                                                                                           2606.6
                                                                                                                                          -24.91
      100.00
                                                 -22.33
                                                                110.05
                                                                              340.60
                                                                                               69.60
                                                                                                         8 21 7
                                                                 81.09 324.87 64.59 2 34 10
88.58 343.11 69.43 9 55 57
69.64 322.08 62.88 3 8 43
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                        174.11
                                                                                                                           3839.9
                                                                                                                                          12.75
                                                               181.09
                                                 16.30
      100.00
                                                                                                                                         -30.46
                                                                                                                          2293.6
      110.00
                                                -27.92
                                                                 88.58
                                                                                                                                          17.84
                                                                                                                                                        162.59
                                                                                                                          3725.7
                                                21.65
                                                               169.64
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1585.4 SR 241.5 SS 549.0
CRT .5408 CRS -.5051 CST -.9990
                                                                   SGT 4886.9 SGR 271.4 SG3 79.7
RRT .5814 RRF .5752 RTF .9908
   TOE 1.7366 TRA12.3300 TC3 -.0386 BAU .1287
   ROE .6534 RRA .3270 RC3 .0057 FAU-.00916
FDE .2897 FRA 2.3174 FC3 .0322 BSP 16719
                                                                   SGB 4894.4 R23 -.0025 R13 .9908
SG1 4889.4 SG2 220.7 THA 1.85
                                                                                                                       LSA 1682.7 MSA 204.3 SSA 6.6
                                                                                                                       EL1 1590.9 ELZ 202.5 ALF 4.79
    BOE 1.8555 BRA12.3343 BC3 .0390 FSP
                                                    -268
                                                                                                                                  ARRIVAL DATE AUG 12 1966
                                                                        FLIGHT TIME 218.00
LAUNCH DATE JAN 6 1966
                                                                       DISTANCE 588.282
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 105.23 VL 25.296 GAL 35.18 AZL 90.87 MCA 336.90 SMA 113.96 ECC .62321 INC .8687 V1 30.287 RP 107.72 LAP .34 LOP 82.13 VP 36.048 GAP 38.44 AZP 90.80 TAL 147.60 TAP 124.50 RCA 42.94 APO 184.98 V2 35.179 RC 229.148 GL -1.03 GP -4.97 ZAL 33.47 ZAP 162.06 ETS 198.92 ZAE 129.23 ETE 184.83 ZAC 157.78 ETC 157.27 CLP 162.74
  PLANETOCENTRIC CONIC
   C3 304.161 VHL 17.440 DLA 21.18 RAL 70.40 RAD 6571.7 VEL 20.627 PTH 3.17 VHP 23.746 DPA 15.62 RAP 64.30 ECC 6.0057 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                         2919.2
                                                                                             69.57 6 56 59
                                                                                                                                          -22.65
                                                                                                                                                        124.43
                   5 58 20 3519.17
                                                 -20.05
                                                               132.13
                                                                              341.79
        90.00
                                                                                                                                                         193.91
                                                                                                                                           12.22
                                                                                                          1 25 36
                                                                                                                           4105.6
                    0 7 11
                                  4705.56
                                                   15.58
                                                                200.97
                                                                               327.56
                                                                                               66.06
        90.00
                   7 34 3 3210.55
1 14 9 4489.40
                                                                                                                                                         102.47
                                                                                                         8 27 33
2 28 59
                                                                                                                           2610.6
                                                                                                                                          -24.63
                                                 -22.24
                                                                110.31
                                                                               342.67
                                                                                               69.50
      100.00
                                                                                                                                                        176.99
                                                                                                                                          14.27
                                                                                                                           3889.4
                                                  17.72
                                                               184.08
                                                                              326.56
                                                                                               65.53
      100.00
                                                                                               69.14 10 0 57
                                                                                                                                                          80.93
                   9 12 35 2902.26
1 52 6 4370.46
                                                                                                                           2302.3
                                                                                                                                          -30.29
                                                 -27.71
                                                                 89.17
                                                                              344.95
      110.00
                                                                                                          3 4 56
                                                                                                                                                         165.21
                                                                                                                           3770.5
                                                                                                                                           19.33
      110.00
                                                  23.01
                                                                172.41
                                                                              323.90
                                                                                               64.00
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                       ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                       ST 1551.8 SR 222.6 S5 588.2
CRT .5245 CR5 -.4946 CST -.9993
                                                                   SGT 4818.8 SGR 250.4 SG3 78.7
RRT .5777 RRF .5725 RTF .9933
SGB 4825.3 R23 -.0029 R13 .9933
    TOE 1.8083 TRA13.5627 TC3 .0524 BAU .2146
    ROE .6691 RRA .3340 RC3 .0067 FAU-.01397
FOE .3059 FRA 2.5401 FC3 .0398 BSP 16553
BOE 1.9281 BRA13.5668 BC3 .0528 FSP -265
                                                                                                                       LSA 1663.5 MSA 190.5 SSA 6.0
                                                                    SG1 4821.0 SG2 204.3 THA 1.72
                                                                                                                       EL1 1556.2 EL2 189.0 ALF 4.37
                                                                                                                                 ARRIVAL DATE AUG 14 1966
                                                                       FLIGHT TIME 220.00
LAUNCH DATE JAN 6 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 579.677
   RL 147.10 LAL -.00 LOL 105.23 VL 25.288 GAL 39.79 A7L 91.56 MCA 340.13 SMA 113.92 ECC .67798 INC 1.5612 VI 30.287 RP 107.69 LAP .53 LOP 85.36 VP 36.052 GAP 42.59 A7P 91.47 TAL 149.06 TAP 129.19 RCA 36.69 APO 191.16 V2 35.189 RC 230.420 GL -1.56 GP -4.89 7AL 33.94 7AP 159.84 ET5 196.82 7AE 127.72 ETE 184.59 7AC 158.55 ETC 156.17 CLP 160.42
   PLANETOCENTRIC CONIC
   C3 379.408 VHL 19.478 DLA 20.60 RAL 69.99 RAD 6572.0 VEL 22.377 PTH 3.25 VHP 26.174 DPA 15.90 RAP 65.20 ECC 7.2441
    ENCH AZMTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                       2917.8
                                                                                                                                                        124.34
                  6 3 44 3517.78
23 54 36 4755.43
7 38 38 3211.77
                                                                           343.05
                                                                                            69.60
                                                                                                          7 2 21
                                                                                                                                          -22.68
        90.00
                                                  -20.08
                                                               132.04
                                                                                                                                         13.67
                                                                                                                                                        196.85
                                                  16.94
                                                                204.01
                                                                              328.64
                                                                                               66.96
                                                                                                         25 13 51
                                                                                                                           4155.4
        90.00
                                                                                                        8 32 9
2 21 56
                                                 -22.21
                                                               110.39
                                                                              343.91
                                                                                               69.46
                                                                                                                          2611.8
                                                                                                                                         -24.81
                                                                                                                                                        102.55
       100.00
                                                                              327.69
                                                                                               66.50
                                                                                                                           3936.7
                                                                                                                                          15.69
                                                                                                                                                        179.78
                                                  19.03
                                                                186.98
      100.00
                    1 6 19
                                  4536.67
                                                                                               68.94 10 4 11
                                                                                                                                                         81.34
                   9 15 43 2908.04
                                                                              346.15
                                                                                                                           2308.0
                                                                                                                                         -30.18
                                                -27.57
                                                                 89.56
      110.00
                                                                 175.09 325.16 65.15 2 59 17
HID-COURSE EXECUTION ACCURACY
                                                                                                                                          20.71
                                                                                                                           3813.2
                                                                                                                                                        167.75
                    1 45 43
                                  4413.16
                                                  24.26
                                                                175.09
      110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1514.3 SR 204.1 SS 635.3
CRT .5106 CRS -.4857 CST -.9995
                                                                    SGT 4741.3 SGR 228.3 SG3 77.9
RRI .5647 RRF .5602 RIF .9953
SGB 4746.7 R23 -.0032 RI3 .9953
    TDE 1.9269 TRA14.8946 TC3 .1288 BAU .6542
   ROE .6857 RRA .3282 RC3 .0072 FAU-.02043
FOE .3318 FRA 2.7936 FC3 .0466 BSP 16265
BDE 2.0453 BRA14.8982 BC3 .1290 FSP -261
                                                                                                                      LSA 1645.3 MSA 176.4 SSA 5.5
                                                                                                                       FL1 1517.9 FL2 175.0 ALF 3.99
                                                                    SG1 4743.0 SG2 188.3 THA 1.56
                                                                                                                                  ARRIVAL DATE MAR 18 1966
                                                                        FLIGHT TIME 70.00
LAUNCH DATE JAN 7 1966
                                                                       DISTANCE 219.791
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 30.648 CAL -17.05 AZL 87.41 MCA 101.76 SMA 153.41 ECC .29587 INC 2.5923 V1 30.287 RP 108.04 LAP 2.54 LOP 208.01 VP 39.896 GAP .53 AZP 90.53 TAL 260.58 TAP 2.34 RCA 108.02 APO 198.80 V2 35.076 RC 79.446 GL 8.31 GP 14.04 ZAL 169.51 ZAP 91.63 ETS 357.75 ZAE 162.55 ETE 152.45 ZAC 29.93 ETC 173.14 CLP -91.68
   PLANETOCENTRIC CONIC
    C3 84.173 VHL 9.175 DLA -13.34 RAL 293.07 RAD 6569.6 VEL 14.336 PTH 2.61 VHP 4.951 DPA -9.14 RAP 296.63 ECC 2.3853
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                          2 9 51
                                                                                                                        1539.5
                     1 34 12 2139.52
                                                  -17.68
                                                                36.78
                                                                              175.45
                                                                                             112.49
        90.00
                                                                                                        11 37 54
                                                                                                                                                         256.34
                                                                                               94.30
                                                                                                                            5038.6
                                                                                                                                          28.32
                    10 3 55 5638.61
                                                  28.02
                                                                264.99
                                                                              186.06
        90.00
                                                                              174.77
                                                                                              113.35
                                                                                                           3 20 14
                                                                                                                           1299.6
                                                                                                                                          -15.89
                                                                                                                                                          11.24
                    2 48 34 1899.56
                                                  -19.22
                                                                 18.46
       100.00
                                                                                                        13 1 28
                                                                                                                           4753.8
                                                                                                                                          29.88
                                                                                                                                                         235.38
                                                                                               93.72
       100.00
                   11 32 14 5353.81
                                                  29.68
                                                                244.18
                                                                              186.19
                                                                                                          4 10 4
                                                                                                                          1134.9
                                                                                                                                         -19.60
                                                                                              115.78
       110.00
                    3 41 9
                                 1734.88
                                                 -23.26
                                                                  3.98
                                                                              172.78
                                                                                               92.14 14 21 0
                                                                                                                                           34.04
                   12 56 8 5091.25
                                                                                                                           4491.2
      110.00
                                                 34.12
                                                                224.51
                                                                              185.46
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                   SGT 807.2 SGR 416.1 SG3 179.4

RRT -.4144 RRF -.4537 RTF .7359

SGB 908.1 R23 .0749 R13 -.7501

SG1 830.1 SG2 368.3 THA 164.90
                                                                                                                      ST 224.0 SR 365.6 SS 104.9
CRT .0853 CRS .1941 CST -.9428
    TOE -.0740 TRA-1.1370 TC3 -.1863 BAU .2264
    RDE -.5811 RRA .2311 RC3 .0761 FAU .10167
                                                                                                                      LSA 366.8 MSA 245.0 55A
    FOE .0291 FRA-1.2344 FC3-1.0457 BSP 1952
BOE .5858 BRA 1.1603 BC3 .2012 FSP -536
                                                                                                                                                            17.9
```

EL1 366.4 EL2 222.7 ALF 85.25

ARRIVAL CATE MAR 20 1966

LAUNCH DATE JAN 7 1966

```
DISTANCE 226.053
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 30.563 GAL -16.85 AZL 87.51 MCA 104.97 SMA 152.49 ECC .29179 INC 2.4922 V1 30.287 RP 108.08 LAP 2.41 LOP 211.23 VP 39.819 GAP 1.08 AZP 90.64 TAL 259.81 TAP 4.78 RCA 108.00 APO 196.99 VZ 35.063 RC 81.719 GL 8.08 GP 14.32 ZAL 169.44 ZAP 96.03 ETS 358.83 ZAE 159.71 ETE 155.13 ZAC 28.63 ETC 173.75 CLP -96.22
   PLANETOCENTRIC CONIC
    C3 81.808 VHL 9.045 DLA -13.50 RAL 293.51 RAD 6569.6 VEL 14.253 PTH 2.59 YHP 4.912 CPA -9.04 RAP 295.30 ECC 2.3464
    LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   1 37 17 2127.6
10 4 16 5637.57
2 51 33 1888.03
11 32 41 5352.42
3 43 54 1724.05
12 56 49 5089.16
                                                                                               112.72
                                                                                                                             1527.7
                                                                   36.05
                                                                                                              2 12 44
                                                                                 175.44
                                                                                                                                              -14.14
                                                                                                                                                               28.86
        90.00
                                                   -17.37
                                                                                                             11 38 14
        90.00
                                                    28.02
                                                                  264.91
                                                                                 186.06
                                                                                                  94.26
                                                                                                                                5037.6
                                                                                                                                               28.32
                                                                                                                                                              256.26
                                                                                                             3 23 I
                                                                                 174.75
                                                                                                                               1288.0
                                                                                                                                                               10.55
       100.00
                                                   -18.90
                                                                   17.74
                                                                                                  113.60
                                                                                                                                               -15.55
                                                                                                 93.67 13 1 54
116.07 4 12 38
92.05 14 21 38
       100.00
                                                    29.69
                                                                  244.07
                                                                                 186.20
                                                                                                                              4752.4
                                                                                                                                               29.88
                                                                                                                                                              235.27
                                                                                                                              1124.1
                                                  -22.94
                                                                    3.30
                                                                                 172.75
                                                                                                                                              -19.25
                                                                                                                                                              356.11
       110.00
                                                    34.13
                                                                  224.34
                                                                                 186.46
                                                                                                                               4489.2
                                                                                                                                               34.04
                                                                                                                                                              215.10
       110.00
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                      SGT 886.7 SGR 417.6 SG3 183.2
RRT -.4434 RRF -.4757 RTF .7583
SGB 980.1 R23 .0787 R13 -.7701
                                                                                                                          ST 240.9 SR 361.4 SS 104.5
CRT .0702 CRS .1682 CST -.9536
LSA 362.3 MSA 260.7 SSA 18.0
    TOE -.0746 TRA-1.2070 TC3 -.2250 BAU .2625
    ROE -.5659 RRA .2339 RC3 .0833 FAU .10263
    FOE .0167 FRA-1.2224 FC3-1.0861 BSP 2238
BOE .5708 BRA 1.2294 BC3 .2400 FSP -553
                                                                                                                           EL1 362.1 EL2 239.8 ALF 85.22
                                                                      SG1 909.7 SG2 364.9 THA 165.89
LAUNCH DATE JAN 7 1966
                                                                           FLIGHT TIME 74.00
                                                                                                                                       ARRIVAL DATE MAR 22 1966
                                                                          DISTANCE 232.268
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 30.474 GAL -16.64 AZL 87.61 HCA 108.18 SMA 151.54 ECC .28777 INC 2.3891 VI 30.287
RP 108.12 LAP 2.27 LOP 214.44 VP 39.739 GAP 1.59 AZP 90.75 TAL 258.96 TAP 7.14 RCA 107.93 APO 195.15 VZ 35.050
RC 84.008 GL 7.85 GP 14.59 ZAL 169.33 ZAP 100.23 ETS 359.93 ZAE 156.39 ETE 157.12 ZAC 27.51 ETC 174.38 CLP-100.57
   PLANETOCENTRIC CONIC
                                                                                                     2.58 VHP 4.894 OPA
                                                                                                                                   -8.90 RAP 294.15 ECC 2.3081
    C3 79.484 VHL 8.915 DLA -13.66 RAL 293.98 RAD 6569.6 VEL 14.172 PTH
    LNCH AZMTH LNCH TIME L-I TIME IN LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 40 37 2115.34 -17.04 35.29 175.47 112.96 2 15 53 1515.3 -13.79 28.13
                   10 4 43 5636.71
2 54 47 1876.07
                                                                                                             11 38 40
                                                                                 186.11
                                                                                                   94.23
                                                                                                                                5036.7
                                                                                                                                               28.32
                                                                                                                                                              256.20
        90.00
                                                    24.03
                                                                  264.85
                                                                                                               3 26 3
                                                                   17.01
                                                                                 174.77
                                                                                                  113.85
                                                                                                                                1276.1
                                                                                                                                               -15.20
                                                                                                                                                                 9.84
      100.00
                                                    -18.58
                                                                                                                                                              235.18
      100.00
                   11 33 15 5351.21
3 46 54 1712.84
                                                    29.69
                                                                  243.98
                                                                                 186.24
                                                                                                   93.62 13 2 26
                                                                                                                                4751.2
                                                                                                                                               29.88
                                                                                                             4 15 27
                                                   -22.60
                                                                                 172.76
                                                                                                  116.35
                                                                                                                               1112.8
                                                                                                                                               -18.88
                                                                                                                                                              355.45
      110.00
                                                                    2.61
                   12 57 37
                                                                                 186.50
                                                                                                   91.96 14 22 24
                                                                                                                                4487.2
                                                                                                                                                34.03
                                                                                                                                                              214.95
                                                                  224.19
      110.00
                                   5087.20
                                                     34.13
   DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                            ORBIT DETERMINATION ACCURACY
                                                                      SGT 970.2 SGR 418.0 SG3 185.6
RRT -.4697 RRF -.4970 RTF .7756
                                                                                                                           ST 258.7 SR 355.9 SS 103.8
CRT .0613 CRS .1395 CST -.9618
    TOE -.0775 TRA-1.2777 TC3 -.2658 BAU .2984
    ROE -.5490 RRA .2355 RC3 .0905 FAU .10279
FOE .0034 FRA-1.1994 FC3-1.1196 BSP .2536
BOE .5544 BRA 1.2992 BC3 .2808 FSP -566
                                                                      SGB 1056.4 R23 .0838 R13 -.7856
                                                                                                                            LSA 356.8 MSA 277.1 SSA 18.1
                                                                                                                           EL1 356.7 EL2 257.7 ALF 84.65
                                                                      SG1 993.0 SG2 360.6 THA 166.78
                                                                                                                                      ARRIVAL DATE MAR 24 1966
                                                                          FLIGHT TIME 76.00
LAUNCH DATE JAN 7 1966
   HELIOCENTRIC CONIC
                                                                          DISTANCE 238.439
   RL 147.10 LAL -.00 LOL 106.24 VL 30.381 GAL -16.44 AZL 87.72 HCA 111.38 SMA 150.57 ECC .28381 INC Z.2822 V1 30.287 RP 108.16 LAP 2.13 LOP 217.64 VP 39.656 GAP 2.08 AZP 90.83 TAL 258.04 TAP 9.42 RCA 107.84 APO 193.31 V2 35.036 RC 86.309 GL 7.59 GP 14.86 ZAL 169.19 ZAP 104.21 ETS 1.05 ZAE 154.39 ETE 158.61 ZAC 26.60 ETC 175.03 CLP-104.71
   PLANETOCENTRIC CONIC
    C3 77.193 VHL 8.786 DLA -13.84 RAL 294.50 RAD 6569.5 VEL 14.090 PTH 2.57 VHP 4.893 DPA -8.74 RAP 293.22 ECC 2.2704
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 10 5 13 5636.11 28.03 264.81 186.19 94.21 11 39 9 5036.1 28.32 256.16 100.00 2 58 17 1863.99 -18.23 16.24 174.83 114.11 3 29 20 1263.6 -14.82 9.11 100.00 11 33 52 5350.23 29.70 243.91 186.32 93.58 13 3 2 4750.2 29.88 235.11
                                                                                                 116.65 4 18 29
91.88 14 23 15
                                                                                                                              1101.2
                                                                                                                                             -18.49
                                                                                                                                                              354.77
                                                                    1.89
                                                                                 172.80
       110.00
                     3 50 8
                                 1701.16
                                                  -22.25
                                                                                                                                               34.02
                                                                                                                                                              214.81
                                                                  224.05
                                                                                 186.57
                                                                                                                               4485.4
                   12 58 30
                                   5085.42
                                                    34.14
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   CIFFERENTIAL CORRECTIONS
                                                                                                                          ST 277.5 SR 349.2 SS 102.7
CRT .0582 CRS .1069 CST -.9682
LSA 350.2 MSA 294.1 SSA 18.3
                                                                      SGT 1056.8 SGR 417.3 SG3 186.8

RRT -.4940 RRF -.5180 RTF .7889

SGB 1136.2 R23 .0902 R13 -.7975

SG1 1079.3 SG2 355.3 THA 167.60
    TOE -.0827 TRA-1.3484 TC3 -.3084 BAU .3339
    ROE -.5304 RRA. .2361 RC3 .0976 FAU .10224
    FOE -.0108 FRA-1.1674 FC3-1.1467 BSP 2843
BOE .5368 BRA 1.3690 BC3 .3235 FSP -574
                                                                                                                           EL1 350.2 EL2 276.2 ALF 82.95
                                                                                                                                      ARRIVAL DATE MAR 26 1966
                                                                          FLIGHT TIME 78.00
LAUNCH DATE JAN 7 1966
                                                                          DISTANCE 244.568
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 30.286 GAL -16.23 A7L 87.83 MCA 114.59 SMA 149.59 ECC .27991 INC 2.1707 V1 30.287 RP 108.20 LAP 1.97 LOP 220.85 VP 39.571 GAP 2.54 A7P 90.90 TAL 257.04 TAP 11.63 RCA 107.72 APO 191.46 V2 35.023 RC 88.623 GL 7.31 GP 15.14 7AL 169.01 7AP 107.96 ETS 2.21 7AE 151.95 ETE 159.75 7AC 25.90 ETC 175.71 CLP-108.63
   PLANETOCENTRIC CONIC
    C3 74.928 VHL 8.656 DLA -14.03 RAL 295.05 RAD 6569.5 VEL 14.010 PTH 2.56 VMP 4.908 DPA -8.54 RAP 292.49 ECC 2.2331
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                113.46
                                                                                                              2 22 58
                                                                                                                              1488.9
                                                                                                                                             -13.02
                                                                                                                                                               26.57
                                  2088.90
                                                   -16.33
                                                                   33.68
                                                                                175.63
        90.00
                     1 48 9
                                                                                                             11 39 41
                                                                                                                                5035.9
                    10 5 45 5635.87
                                                                                                   94.20
                                                                                                                                                28.32
                                                                                                                                                              256.14
                                                    28.03
                                                                  264.79
                                                                                 186.31
        90.00
                                                                                                              3 32 54
                                                                                                                                1250.4
                                                                                                                                               -14.42
                                                                                                                                                                 8.33
                     3 2 4
                                  1850.44
                                                   -17.86
                                                                   15.44
                                                                                 174.92
                                                                                                  114.37
       100.00
                                                                                                             13 3 42
                                                                                                                                4749.6
                                                                                                                                               29.88
                                                                                                                                                              235.06
                                                                                                  93.55
                   11 34 32 5349.56
                                                    29.70
                                                                  243.86
                                                                                 186.44
       100.00
                                                                                                             4 21 47
                                                                                                                               1088.9
                                                                                                                                              -18.08
                                                                                                                                                              354.05
                                   1688.89
                                                   -21.87
                                                                    1.13
                                                                                 172.88
                                                                                                 116.95
       110.00
                     3 53 38
                                                                                                  91.81 14 24 11
                                                                                                                               4483.9
                                                                                                                                                34.01
                                                                                                                                                              214.69
                   12 59 27 5083.88
                                                    34.14
                                                                  223.93
                                                                                 186.68
       110.00
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 1145.7 SGR 415.6 SG3 186.6
RRT -.5159 RRF -.5388 RTF .7984
                                                                                                                           ST 296.9 SR 341.4 SS 101.1
CRT .0602 CRS .0795 CST -.9716
    TOE -.0902 TRA-1.4183 TC3 -.3526 BAU .3684
```

FLIGHT TIME 72.00

568 1218.8 R23 .0987 R13 -.8060

SG1 1167.6 SG2 349.4 THA 168.34

RDE -.5105 RRA .2352 RC3 .1046 FAU .10095

FOE -.0221 FRA-1.1243 FC3-1.1664 BSP 3144 BDE .5184 BRA 1.4377 BC3 .3678 FSP -571

BDE .5184 BRA 1.4377 BC3 .3678 FSP

ARRIVAL CATE MAR 28 1966 FLIGHT TIME 80.00 LAUNCH DATE JAN 7 1966 DISTANCE 250.658 HELIOCENTRIC CONIC . RL 147.10 LAL -.00 LOL 106.24 VL 30.188 GAL -16.02 AZL 87.95 HCA 117.79 SHA 148.60 ECC .27609 INC 2.0533 VI 30.287 RP 108.24 LAP 1.82 LOP 224.05 VP 39.484 GAP 2.97 AZP 90.96 TAL 255.99 TAP 13.78 RCA 107.57 APO 189.62 V2 35.010 RC 90.946 GL 7.00 GP 15.44 ZAL 168.80 ZAP 111.49 ETS 3.39 ZAE 149.66 ETE 160.60 ZAC 25.41 ETC 176.43 CLP-112.33 PLANETOCENTRIC CONIC C3 72.688 VHL 8.526 CLA -14.24 RAL 295.65 RAD 6569.4 VEL 13.930 PTH 2.54 VHP 4.936 CPA -8.29 RAP 291.98 ECC 2.1963 LNCH AZATH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZATH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 25.72 1474.5 -12.60 175.76 113.72 2 26 59 32.80 1 52 25 2074.46 -15.94 90.00 11 40 12 5036.1 28.32 256.16 186.46 94.21 264.81 90.00 10 6 16 5636.13 28.03 7.51 3 36 47 -14.00 1236.5 175.04 114.65 -17.47 14.59 100.00 5 6 10 1836.47 235.05 186.59 93.55 13 4 21 4749.4 29.88 11 35 12 5349.35 3 57 26 1675.89 29.70 243.85 100.00 117.26 4 25 22 91.75 14 25 8 353.30 1075.9 -17.64 . 34 172.98 117.26 -21.47 110.00 34.01 214.60 34.14 223.84 186.83 4482.7 110.00 13 0 25 50A2.69 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 317.3 SR 332.2 SS 99.7 CRT .0674 CRS .0383 CST -.9754 LSA 341.7 MSA 322.3 SSA 18.5 SGT 1236.9 SGR 413.1 SG3 185.9 RRT -.5374 RRF -.5603 RTF .8058 TDE -.1008 TRA-1.4872 TC3 -.3986 BAU .4023 RDE -.4889 RRA .2337 RC3 .1119 FAU .09931 FOE -.0375 FRA-1.0793 FC3-1.1829 BSP 3460 BOE .4992 BRA 1.5055 BC3 .4140 FSP -572 SGB 1304.0 R23 .1081 R13 -.8126 EL1 337.8 EL2 311.3 ALF 62.06 SG1 1258.3 SG2 342.4 THA 169.00 FLIGHT TIME 82.00 ARRIVAL DATE MAR 30 1966 LAUNCH DATE JAN 7 1966 01STANCE 256.712 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 106.24 VL 30.088 GAL -15.80 AZL 88.07 HCA 120.99 SMA 147.60 ECC .27234 INC 1.9288 V1 30.287 RP 108.29 LAP 1.65 LOP 227.25 VP 39.396 GAP 3.38 AZP 90.99 TAL 254.88 TAP 15.87 RCA 107.40 APO 187.80 V2 34.996 6.67 GP 15.78 TAL 168.55 TAP 114.78 ETS 4.63 TAE 147.52 ETE 161.21 TAC 25.14 ETC 177.20 CLP-115.82 RC 93.279 GL PLANETOCENTRIC CONIC C3 70.469 VHL 8.395 DLA -14.47 RAL 296.29 RAD 6569.4 VEL 13.850 PTH 2.53 VHP 4.974 DPA -7.98 RAP 291.67 ECC 2.1597 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 24.81 1 57 3 10 6 43 -12.14 175.92 113.99 2 31 21 1459.0 90.00 2058.96 -15.51 31.86 256.22 28.02 94.24 11 40 40 5037.0 28.32 5637.05 264.88 186.64 90.00 3 10 38 11 35 49 -17.04 13.68 175.20 114.94 3 41 0 1221.5 -13.54 6.64 100.00 1821.50 93.56 13 4 58 235.07 5349.74 29.70 243.87 186.77 4749.7 29.88 100.00 4 1 33 117.59 4 29 15 1062.0 -17.17 352.50 -21.03 359.50 173.11 1662.01 110.00 91.72 14 26 5 34.01 13 1 23 4482.0 214.54 34.15 223.78 187.01 5081.98 110.00 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 338.7 SR 321.7 SS 98.4 CRT .0797 CRS -.0097 CST -.9780 SGT 1329.9 SGR 409.8 SG3 184.5 RRT -.5583 RRF -.5825 RTF .8112 SGB 1391.6 R23 .1192 R13 -.8174 TDE -.1147 TRA-1.5545 TC3 -.4464 BAU .4354 ROE -.4657 RRA .2313 RC3 .1196 FAU .09731 LSA 356.4 MSA 317.0 SSA 18.6 EL1 345.6 EL2 314.2 ALF 28.55 FOE -.0541 FRA-1.0302 FC3-1.1955 BSP 3783 BOE .4797 BRA 1.5716 BC3 .4621 FSP -570 SG1 1350.7 SG2 334.7 THA 169.59 ARRIVAL CATE APR 1 1966 FLIGHT TIME 84.00 LAUNCH DATE JAN 7 1966 **CISTANCE 262.733** RL 147.10 LAL -.00 LOL 106.24 VL 29.986 GAL -15.58 A7L 88.20 HCA 124.19 SHA 146.60 ECC .26867 INC 1.7959 VI 30.287 RP 108.33 LAP 1.49 LOP 230.44 VP 39.307 GAP 3.76 A7P 91.01 TAL 253.72 TAP 17.90 RCA 107.21 APO 185.99 V2 34.983 RC 95.621 GL 6.29 GP 16.16 7AL 168.26 7AP 117.84 ETS 5.94 7AE 145.54 ETE 161.63 7AC 25.06 ETC 178.04 CLP-119.10 PLANETOCENTRIC CONIC C3 68.270 VHL 8.263 CLA -14.74 RAL 296.97 RAD 6569.3 VEL 13.770 PTH 2.52 VHP 5.022 CPA -7.61 RAP 291.55 ECC 2.1235 ENCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 176.11 114.27 1442.1 2 2 7 10 7 3 2 36 9 -15.05 30.85 2042.15 114.27 2 36 9 94.31 11 41 2 5038.8 28.32 256.35 5638.84 28.01 265.01 186.86 1205.3 -13.04 5.70 175.38 3 45 37 3 15 32 1805.29 -16.57 12.70 115.24 115.24 3 45 37 93.61 13 5 31 235.16 4750.9 5350.92 29.69 243.96 186.99 100.00 11 36 20 117.93 4 35 July 71 71 14 27 0 351.64 1047.1 -16.66 4 6 3 1647.06 13 2 18 5081.92 -20.56 358.60 173.27 110.00 4481.9 34.01 34.15 223.78 187.24 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1424.4 SGR 406.0 SG3 182.5 RRT -.5788 RRF -.6059 RTF .8151 SGB 1481.1 R23 .1323 R13 -.8209 ST 351.1 SR 309.9 55 97.4 TDE -.1321 TRA-1.6196 TC3 -.4961 BAU .4675 CRT .0964 CRS -.0650 CST -.9795 RDE -.4412 RRA .2280 RC3 .1276 FAU .09502 LSA 376.9 MSA 305.7 SSA 18.7 FOE -.0718 FRA -.9788 FC3-1.2050 BSP 4111 BCE .4606 BRA 1.6355 BC3 .5122 FSP -567 SG1 1444.7 SG2 326.4 THA 170:12 EL1 365.3 EL2 304.9 ALF 16.08 ARRIVAL DATE APR 3 1966 FLIGHT TIME 86.00 LAUNCH DATE JAN 7 1966 DISTANCE 268.723 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 106.24 VL 29.883 GAL -15.36 A7L 88.35 HCA 127.38 SMA 145.61 ECC .26509 INC 1.6526 VI 30.287 RP 108.37 LAP 1.31 LOP 233.64 VP 39.217 GAP 4.13 A7P 91.00 TAL 252.51 TAP 19.89 RCA 107.01 APO 184.21 V2 34.970 RC 97.969 GL 5.87 GP 16.61 7AL 167.93 7AP 120.69 ETS 7.32 7AE 143.69 ETE 161.86 7AC 25.18 ETC 178.95 CLP-122.18 PLANETOCENTRIC CONIC 2.50 VMP 5.078 CPA -7.15 RAP 291.61 ECC 2.0877 C3 66.091 VHL 8.130 DLA -15.04 RAL 297.69 RAD 6569.3 VEL 13.691 PTH INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG LNCH AZMTH LNCH TIME L-I TIME -11.09 2 41 27 1423.7 22.75 2 7 43 10 7 11 -14.53 29.75 176.33 114.58 90.00 2023.73 94.41 11 41 13 115.56 3 50 42 93.69 13 5 54 118.29 4 38 8 91.75 14 27 50 5041.8 28.32 256.57 265.22 187.12 28.00 90.00 5641.78 1187.6 -12.49 4.57 3 20 54 -16.06 11.64 175.59 115.56 100.00 1787.58 4753.2 29.88 235.33 244.13 187.26 29.58 100.00 11 36 41 5353.16 -16.10 118.29 1030.8 350.72 173.47 110.00 4 10 58 1630.80 -20.04 357.63 187.51 4482.7 34.01 214.60 34.14 223.84 110.00 13 3 7 5082.71 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1520.2 SGR 401.8 SG3 180.0 RRT -.5993 RRF -.6308 RTF .8177 ST 384.6 SR 296.9 SS 96.7 CRT .1174 CRS -.1275 CST -.9795 TOE -.1532 TRA-1.6818 TC3 -.5478 BAU .4988 LSA 399.5 MSA 292.3 SSA 18.9 SGB 1572.4 R23 .1478 R13 -.8232 SG1 1540.0 SG2 317.5 THA 170.60 EL1 388.3 EL2 292.0 ALF 12.08

LAUNCH DATE JAN 7 1966

HELIOCENTRIC CONIC

ARRIVAL CATE APR 5 1966

Ē

DISTANCE 274.684 RL 147.10 LAL -.00 LOL 106.24 VL 29.779 GAL -15.13 AZL 88.50 MCA 130.57 SHA 144.63 ECC .Z6159 INC 1.4967 V1 30.287 RP 108.41 LAP 1.14 LOP 236.83 VP 39.126 GAP 4.47 AZP 90.97 TAL 251.25 TAP 21.82 RCA 106.80 APO 182.46 VZ 34.957 5.39 GP 17.13 TAL 167.56 TAP 123.31 ETS 8.82 TAE 141.97 ETE 161.94 TAC 25.49 ETC 179.94 CLP-125.07 RC 100.323 GL PLANETOCENTRIC CONIC C3 63.932 VHL 7.996 DLA -15.38 RAL 298.45 RAD 6569.2 VEL 13.612 PTH 2.49 VHP 5.141 DPA -6.60 RAP 291.85 ECC 2.0522 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 114.90 2 47 21 94.57 11 41 8 176.59 2 47 21 1403.3 -10.47 21.57 2 13 57 2003.32 10 7 2 5646.25 -13.95 28.53 90.00 256.90 90.00 27.98 265.55 187.42 5046.2 28.32 115.90 3 56 21 93.83 13 6 4 118.67 4 43 16 91.84 14 28 31 3 26 53 1768.01 11 36 47 5356.79 175.84 1168.0 -11.87 100.00 -15.48 10.48 3.55 187.57 235.60 100.00 29.67 244.40 4756.6 29.88 173.69 110.00 4 16 23 1612.93 -19.46 356.56 1012.9 -15.48 349.70 110.00 13 3 46 5084.63 34.14 223.99 187.83 4484.6 34.02 214.75 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SCT 1616.1 SGR 397.3 SG3 176.9 RRT -.6187 RRF -.6568 RTF .8189 SGB 1664.2 R23 .1666 R13 -.8242 SG1 1635.4 SG2 308.4 THA 171.03 ST 409.2 SR 282.9 S5 95.9 CRT .1420 CRS -.1899 CST -.9778 TDE -.1777 TRA-1.7395 TC3 -.6012 BAU .5286 RDE -.3888 RRA .2179 RC3 .1453 FAU .08966 FDE -.1072 FRA -.8667 FC3-1.2142 BSP 4756 BDE .4275 BRA 1.7531 BC3 .6185 FSP -549 LSA 423.4 MSA 277.6 SSA 19.0 EL1 412.9 EL2 277.5 ALF 10.30 LAUNCH DATE JAN 7 1966 FLIGHT TIME 90.00 ARRIVAL DATE APR 7 1966 HELIOCENTRIC CONIC DISTANCE 280.620 RL 147.10 LAL -.00 LOL 106.24 VL 29.674 GAL -14.90 AZL 88.67 HCA 133.76 SMA 143.66 ECC .25818 INC 1.3251 V1 30.287 RP 108.44 LAP .96 LOP 240.01 VP 39.035 GAP 4.80 AZP 90.92 TAL 249.95 TAP 23.71 RCA 106.57 APO 180.74 VZ 34.945 RC 102.682 GL 4.84 GP 17.75 ZAL 167.15 ZAP 125.71 ETS 10.44 ZAE 140.36 ETE 161.85 ZAC 25.98 ETC 181.02 CLP-127.79 PLANETOCENTRIC CONIC C3 61.796 VHL 7.861 OLA -15.79 RAL 299.26 RAD 6569.2 VEL 13.533 PTH 2.47 VHP 5.211 DPA -5.95 RAP 292.23 ECC 2.0170 LNCH AZHTH LNCH TIME L-I TIME INI LAT INI LONG INI RT ASC INI AZHTH INI TIME PO CST TIM INI 2 LAT INI 2 LONG 90.00 2 20 58 1980.41 -13.29 27.17 176.90 115.24 2 53 58 1380.4 -9.78 20.25 115.24 28.31 90.00 10 6 28 5652.73 266.02 187.78 94.81 11 40 41 5052.7 257.37 27.94 3 33 35 4 2 41 100.00 1746.12 -14.82 9.18 176.13 116.26 1146.1 -11.18 2.29 94.05 13 5 55 119.09 4 48 59 92.00 14 28 59 11 36 32 5362.26 4 22 26 1593.08 100.00 29.64 244.80 173.95 187.93 4762.3 29.89 236.01 -18.81 355.39 993.1 -14.78 348.59 110.00 4488.1 34.03 13 4 11 5088.06 34.13 224.26 188.21 215.01 110.00 DIFFERENTIAL CORRECTIONS HID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY SGT 1713.9 SGR 393.0 SG3 173.8 RRT -.6390 RRF -.6847 RTF .8198 ST 436.0 SR 267.2 SS 96.7 CRT .1716 CRS -.2694 CST -.9737 TOE -.2078 TRA-1.7940 TC3 -.6574 BAU .5581 RDE -. 3605 RRA .2114 RC3 .1555 FAU .08685 FDE -.1292 FRA -.8110 FC3-1.2167 BSP 5089 BDE .4161 BRA 1.8064 BC3 .6755 FSP -542 SCB 1758.4 R23 .1877 R13 -.8250 SG1 1732.8 SG2 299.0 THA 171.41 LSA 449.8 MSA 261.0 SSA 19.2 EL1 439.7 EL2 261.0 ALF 9.31 ARRIVAL CATE APR 9 1966 FIRSHT TIME 92.00 LAUNCH DATE JAN 7 1956 HELIOCENTRIC CONIC DISTANCE 286.531 RL 147.10 LAL -.00 LOL 106.24 VL 29.570 GAL -14.66 AZL 88.87 MCA 136.95 SMA 142.70 ECC .25487 INC 1.1345 V1 30.287 RP 108.48 LAP .77 LOP 243.20 VP 38.945 GAP 5.11 AZP 90.83 TAL 248.61 TAP 25.56 RCA 106.33 APO 179.06 V2 34.932 RC 105.043 GL 4.20 GP 18.47 ZAL 166.69 ZAP 127.89 ETS 12.22 ZAE 138.85 ETE 161.61 ZAC 26.63 ETC 182.22 CLP-130.35 PLANETOCENTRIC CONIC C3 59.684 VHL 7.726 DLA -16.27 RAL 300.12 RAD 6569.1 VEL 13.455 PTH 2.46 VMP 5.288 DPA -5.16 RAP 292.75 ECC 1.9823 ENCH ATHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 115.61 5 1 32 95.14 11 39 43 116.65 4 9 52 94.35 13 5 18 119.53 4 55 25 92.25 14 29 8 1354.4 177.26 -8.98 2 28 57 1954.36 -12.52 18.76 25.64 10 5 21 5661.90 27.89 266.68 188.20 5061.9 28.30 258.04 90.00 3 41 11 1721.30 -14.07 7.72 176.48 1121.3 -10.38 .88 100.00 11 35 48 5370.19 188.37 4770.2 29.89 236.59 29.60 245.39 100.00 -18.06 174.26 970.8 -13.99 347.34 4 29 14 1570.76 354.09 110.00 13 4 14 4493.5 34.05 215 44 5093.49 34.12 224.68 188.67 110.00 ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS MID-COURSE EXECUTION ACCURACY ST 465.1 SR 250.2 55 98.7 CRT .2059 CRS -.3553 CST -.9666 LSA 478.9 MSA 242.9 SSA 19.4 EL1 469.0 EL2 242.8 ALF 8.65 SGT 1812.9 SGR 389.0 SG3 170.4 RRT -.6589 RRF -.7143 RTF .8202 SGB 1854.2 R23 .2123 R13 -.8253 TOE -. 2437 TRA-1.8436 TC3 -. 7164 BAU . 5869 ROE -.3311 RRA .2036 RC3 .1667 FAU .08392 FOE -.1532 FRA -.7547 FC3-1.2173 BSP 5429 -533 BOE .4111 BRA 1.8548 BC3 .7356 FSP SG1 1831.4 5G2 289.7 THA 171.74 FLIGHT TIME 94.00 ARRIVAL DATE APR 11 1966 LAUNCH DATE JAN 7 1966 DISTANCE 292.420 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 106.24 VL 29.465 GAL -14.42 A7L 89.08 HCA 140.13 SMA 141.75 ECC .25165 INC .9198 VI 30.287 RP 108.52 LAP .59 LOP 246.38 VP 38.854 GAP 5.40 A7P 90.71 TAL 247.23 TAP 27.36 RCA 106.08 APO 177.42 V2 34.920 RC 107.406 GL 3.46 GP 19.34 TAL 166.18 TAP 129.85 ETS 14.21 TAE 137.41 ETE 161.21 TAC 27.44 ETC 183.54 CLP-132.77 PLANETOCENTRIC CONIC C3 57.603 VHL 7.590 DLA -16.85 RAL 301.04 RAD 6569.0 VEL 13.378 PTH 2.45 VHP 5.372 DPA -4.21 RAP 293.38 ECC 1.9480 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1924.26 -11.63 23.88 177.69 116.00 3 10 16 1324.3 -8.04 17.04 2 38 12 10 3 26 5674.65 27.80 267.61 188.70 95.59 11 38 1 5074.6 28.29 258.97 1692.75 -13.19 6.06 176.89 117.07 4 18 9 1092.6 -9.46 359.26 3 49 57 94.78 13 4 4 120.01 5 2 46 92.62 14 28 49 188.88 174.63 29.54 246.21 4781.4 29.49 237.43 11 34 23 5381.39 4 37 1 1545,30 13 3 48 5101.60 -17.20 352.62 945.3 -13.06 345.93 34.08 4501.5 34.09 225.31 189.23 216.07 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS SGT 1912.8 SGR 385.8 SG3 166.8 RRT - .6782 RRF - .7454 RTF .8203 SGB 1951.3 R23 .2406 R13 -.8253 SGI 1931.0 SG2 280.8 THA 172.04 ST 497.4 5R 231.6 SS 102.6 CRT .2446 CRS -.4452 CST -.9562 LSA 511.2 MSA 223.3 SSA 19.6 EL1 501.4 EL2 222.7 ALF 8.11 TDE -.2862 TRA-1.8873 TC3 -.7784 BAU .6151 ROE - .3004 RRA .1945 RC3 .1790 FAU .08091

FILCHT TIME 88.00

FDE -.1801 FRA -.6979 FC3-1.2161 BSP 5770 BOE .4150 BRA 1.8973 BC3 .7987 FSP -524 BOE .4150 BRA 1.8973 BC3 .7987 FSP

```
ARRIVAL DATE APR 13 1966
                                                                         FLIGHT TIME 96.00
LAUNCH DATE JAN 7 1966
                                                                         DISTANCE 298.288
   RL 147.10 LAL -.00 LOL 106.24 VL 29.360 GAL -14.17 AZL 89.33 MCA 143.31 SMA 140.82 ECC .24854 INC .6748 V1 30.287 RP 108.56 LAP .40 LOP 249.56 VP 38.764 GAP 5.68 AZP 90.54 TAL 245.82 TAP 29.13 RCA 105.82 APO 175.83 V2 34.909 RC 109.770 GL 2.58 GP 20.39 ZAL 165.61 ZAP 131.56 ETS 16.43 ZAE 136.02 ETE 160.64 ZAC 28.41 ETC 185.01 CLP-135.05
  HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
    C3 55.558 VML 7.454 CLA -17.55 RAL 302.02 RAC 6569.0 VEL 13.301 PTH 2.43 VMP 5.465 DPA -3.07 RAP 294.09 ECC 1.9143
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             116.42
                                                                                                                          1288.8
                   2 49 5 1886.84
10 0 25 5692.31
                                                  -10.57
                                                                 21.82
                                                                               178.21
                                                                                                            3 20 34
        90.00
                                                                                                                             5092.3
                                                                                                                                             28.25
                                                                                189.30
                                                                                                96.22
                                                                                                          11 35 18
                                                                 268.88
                                                  27.68
        90.00
                                                                                                                                             -8.37
                                                                                                                                                           357.38
                   4 0 13 1659.34
11 31 59 5397.04
4 46 1 1515.82
13 2 40 5113.33
                                                                  4.13
                                                                               177.39
                                                                                               117.52
                                                                                                            4 27 52
                                                                                                                             1059.3
                                                 -12.15
       100.00
                                                                                                                                                           238.59
                                                                                                95.38 13 1 56
                                                                                                                             4797.0
                                                                                                                                            29.88
                                                                 247.37
                                                                               189.50
       100.00
                                                  29.45
                                                                                               120.53 5 11 17
93.16 14 27 53
                                                                                                                                            -12.02
                                                                                                                                                           344.31
                                                                                                                             915.8
                                                                 350.93
                                                                               175.08
                                                 -16.19
       110.00
                                                                                                                                                           216.98
                                                                                                                                             34.12
                                                                                                                            4513.3
                                                                 226.23
                                                                               189.91
                                                  34.05
       110.00
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                        ST 534.0 SR 211.2 SS 108.9
CRT .2881 CRS -.5352 CST -.9430
                                                                    SGT 2013.6 SGR 383.6 SG3 163.0
RRT -.6961 RRF -.7775 RTF .8202
SGB 2049.8 R23 .2727 R13 -.8253
    TOE -.3373 TRA-1.9241 TC3 -.8435 BAU .6427
    ROE -.2684 RRA .1836 RC3 .1928 FAU .07780
FOE -.2107 FRA -.6406 FC3-1.2123 BSP 6117
BOE .4310 BRA 1.9328 BC3 .8653 FSP -514
                                                                                                                        LSA 548.1 MSA 202.2 SSA 19.8
                                                                                                                         EL1 538.1 EL2 200.7 ALF 7.56
                                                                     SG1 2031.6 SG2 272.9 THA 172.31
                                                                                                                                    ARRIVAL DATE APR 15 1966
                                                                         FLIGHT TIME 98.00
LAUNCH DATE JAN 7 1966
                                                                         DISTANCE 304.138
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 29.255 GAL -13.91 A7L 89.61 HCA 146.49 SMA 139.92 ECC .24554 INC .3900 V1 30.287 PP 108.59 LAP .22 LOP 252.74 VP 38.675 GAP 5.94 A7P 90.33 TAL 244.38 TAP 30.87 RCA 105.56 APO 174.27 V2 34.897 RC 112.133 GL 1.52 GP 21.65 TAL 164.95 ZAP 133.02 ETS 18.95 ZAE 134.64 ETE 159.88 ZAC 29.53 ETC 186.66 CLP-137.22
   PLANETOCENTRIC CONIC
    C3 53.560 VHL 7.318 DLA -18.41 RAL 303.10 RAD 6568.9 VEL 13.226 PTH 2.42 VHP 5.570 DPA -1.70 RAP 294.87 ECC 1.8815
    ENCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  3 2 14 1846.24
9 55 50 5716.82
4 12 31 1619.42
11 28 13 5418.89
4 56 41 1481.04
13 0 33 5130.02
                                                                                                                           1246.2
                                                                                                                                             -5.59
                                                                                                                                                             12.62
                                                                              178.88
                                                                                              116.88 3 33 0
                                                   -9.27
                                                                 19.37
        90.00
                                                                                                                                              28.18
                                                                                                                                                            262.05
                                                                                                 97.09
                                                                                                           11 31 7
                                                                                                                              5116.8
                                                    27.49
                                                                 270.65
                                                                                190.02
        90.00
                                                                                                          4 39 31
12 58 32
                                                                                                                                              -7.05
                                                                                                                                                            355.15
                                                                                                118.01
                                                                                                                              1019.4
                                                                                178.02
                                                  -10.88
                                                                   1.84
       100.00
                                                                                                                                                            240.21
                                                                                                                                             29.85
                                                                                                 96.22
                                                                                                                              4818.9
                                                  29.30
                                                                 248.98
                                                                                190.26
       100.00
                                                                                                 121.09 5 21 22
93.93 14 26 3
                                                                                                                                                            342.42
                                                                                                121.09
                                                                                                                              881.0
                                                                                                                                           -10.75
                                                  -14.98
                                                                 348.97
                                                                                175.64
       110.00
                                                                                                                                                            218.28
                                                                 227.53
                                                                                190.74
                                                                                                                              4530.0
                                                                                                                                              34.15
                                                  33.98
       110.00
                   13 0 33
                                  5130.02
                                                                                                                         ORBIT DETERMINATION ACCURACY
                                                                    MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                         ST 575.9 SR 189.2 SS 117.3
CRT .3358 CRS -.6173 CST -.9292
                                                                     SGT 2113.4 SGR 382.4 SG3 158.5

RRT -.7109 RRF -.8095 RTF .8193

SGB 2147.7 R23 .3095 R13 -.8245

SG1 2131.1 SG2 266.7 TMA 172.55
    TOE -.3973 TRA-1.9511 TC3 -.9110 BAU .6691
    ROE -.2353 RRA .1702 RC3 .2079 FAU .07442
                                                                                                                         LSA 590.2 HSA 180.1 SSA 20.1
EL1 579.7 EL2 177.0 ALF 6.95
    FOE -.2426 FRA -.5791 FC3-1.2029 BSP .6432
BDE .4618 BRA 1.9585 BC3 .9344 FSP -496
                                                                                                                                    ARRIVAL DATE APR 17 1966
                                                                         FLIGHT TIME 100.00
LAUNCH DATE JAN 7 1966
                                                                        DISTANCE 309.971
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 29.151 GAL -13.65 A7L 89.95 HCA 149.67 SHA 139.03 ECC .24264 INC .0490 V1 30.287 RP 108.63 LAP .03 LOP 255.91 VP 38.586 GAP 6.19 A7P 90.05 TAL 242.90 TAP 32.57 RCA 105.29 APO 172.76 V2 34.886 RC 114.493 GL .21 GP 23.19 TAL 164.18 TAP 134.18 ETS 21.82 TAE 133.24 ETE 158.91 TAC 30.82 ETC 188.54 CLP-139.30
   PLANETOCENTRIC CONIC
    C3 51.628 VML 7.185 DLA -19.50 RAL 304.27 RAD 6568.9 VEL 13.153 PTH 2.40 VMP 5.689 DPA
                                                                                                                                -. 04 RAP 295.68 ECC 1.8497
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                         -3.91
                   3 18 33 1793.61
9 48 53 5751.24
4 27 42 1570.50
11 22 26 5449.58
5 9 37 1439.12
12 57 0 5153.73
                                                                                                                         1193.6
                                                                                                                                                              9.66
                                                                             179.75
                                                                                             117.35 3 48 27
                                                                 16.36
                                                   -7.63
        90.00
                                                                                                                                             28.04
                                                                                190.89
                                                                                                 98.29
                                                                                                           11 24 44
                                                                                                                              5151.2
                                                    27.17
                                                                 273.12
                                                                                                                                                           352.43
                                                                                178.85
                                                                                                118.54
                                                                                                            4 53 52
                                                                                                                              970.5
                                                                                                                                              -5.42
                                                                 359.07
                                                   -9.31
       100.00
                                                                                                           12 53 16
                                                                                                                              4849.6
                                                                                                                                             29.77
                                                                                                                                                           242.49
                                                                                191.18
                                                                                                 97.38
                                                                 251.22
                                                  29.05
                                                                                                 121.71 5 33 36
95.01 14 22 53
                                                                                                                                                           340.16
                                                                                176.37
                                                                                                                              839.1
                                                                                                                                             -9.20
                                                                                                121.71
       110.00
                                                  -13.49
                                                                  346.63
                                                                                                                                             34.18
                                                                                                                                                           220.14
                                                                                                                              4553.7
                                                                                191.79
                                                                 229.37
                                                  33.86
                                                                    HID-COURSE EXECUTION ACCURACY
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                     SGT 2215.7 SGR 383.5 SG3 153.9
RRT - .7233 RRF - .8417 RTF .8192
SGB 2248.6 R23 .3485 R13 - .8245
                                                                                                                         ST 627.2 SR 164.3 SS 131.0
CRT .3877 CRS -.6918 CST -.9161
LSA 642.2 MSA 157.0 SSA 20.4
     TOE -.4724 TRA-1.9690 TC3 -.9824 BAU .6956
     RDE -.1997 RRA .1547 RC3 .2250 FAU .07100
    FOE -.2832 FRA -.5194 FC3-1.1905 BSP 6782
BOE .5129 BRA 1.9751 BC3 1.0079 FSP -484
                                                                                                                         EL1 630.6 ELZ 150.6 ALF 6.15
                                                                     SG1 2233.2 SG2 262.8 THA 172.76
                                                                                                                                     ARRIVAL DATE APR 19 1966
                                                                          FLIGHT TIME 102.00
                                                                         DISTANCE 315.787
    RL 147.10 LAL -.00 LOL 106.24 VL 29.048 GAL -13.38 AZL 90.35 HCA 152.84 SMA 138.16 ECC .23986 INC .3512 V1 30.287

RP 108.66 LAP -.16 LOP 259.08 VP 38.499 GAP 6.42 AZP 89.69 TAL 241.39 TAP 34.23 RCA 105.02 APO 171.29 V2 34.875

RC 116.852 GL -1.41 GP 25.08 ZAL 163.24 ZAP 134.97 ETS 25.12 ZAE 131.76 ETE 157.71 ZAC 32.28 ETC 190.71 CLP-141.29
   PLANETOCENTRIC CONIC
     C3 49.794 VHL 7.057 DLA -20.88 RAL 305.58 RAD 6568.8 VEL 13.083 PTH 2.39 VHP 5.830 DPA
                                                                                                                                  1.99 RAP 296.49 ECC 1.8195
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                117.82
                                                                                                             4 8 26
                                                                                                                           1126.1
                                                                                                                                               -1.74
                     3 39 40 1726.13
9 38 15 5800.72
                                                     -5.50
                                                                  12.55
                                                                                180.94
         90.00
                                                                                                 99.98 11 14 56
                                                                                                                              5200.7
                                                                                                                                              27.75
                                                                                                                                                            268.15
                                                    26.64
                                                                  276.64
                                                                                 191.95
         90 00
                    4 47 5 1508.58
11 13 32 5493.50
                                                                                                                               908.6
                                                                                                                                               -3.34
                                                                                                                                                            349.01
                                                                                                 119.07
                                                                                                             5 12 13
                                                     -7.27
                                                                  355.59
                                                                                 179.98
       100.00
                                                                                                                                             29.57
                                                                                                                                                            245.74
                                                                                                 99.01 12 45 5
                                                                                                                              4893.5
                                                   28.62
                                                                  254.42
                                                                                192.33
       100.00
                                                                                                                                             -7.26
                                               -11.61
33.63
                                                                                                            5 48 55
                                                                                                 122.38
                                                                                                                               787.2
                                                                  343.78
                                                                                177.36
                      5 25 48
                                   1387.21
                                                                                                 122.38 5 48 55
96.54 14 17 45
       110.00
                                                                                                                                                            222.78
                                                                                                                                              34.17
                                                                                                                             4587.6
                                                                               193.13
                    12 51 18
                                                                  231.99
                                   5187.63
       110.00
                                                                                                                        ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                      MID-COURSE EXECUTION ACCURACY
                                                                    SGT 2318.8 SGR 387.2 SG3 148.7

RRT -.7308 RRF -.8722 RTF .8195

SGB 2350.9 R23 .3890 R13 -.8250

SG1 2336.2 SG2 262.3 THA 172.95
                                                                                                                        ST 691.4 SR 136.3 SS 150.2
CRT .4415 CRS -.7508 CST -.9077
     TOE -.5661 TRA-1.9739 TC3-1.0565 BAU .7219
     ROE -.1616 RRA .1360 RC3 .2441 FAU .06733
FOE -.3309 FRA -.4577 FC3-1.1707 BSP 7133
BOE .5887 BRA 1.9785 BC3 1.0844 FSP -470
                                                                                                                       LSA 707.6 MSA 134.1 SSA 20.6
EL1 694.1 EL2 121.8 ALF 5.13
```

```
LAUNCH DATE JAN 7 1966
                                                                         FLIGHT TIME 104.00
                                                                                                                                    ARRIVAL CATE APR 21 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 321.589
    RL 147.10 LAL -.00 LOL 106.24 VL 28.946 GAL -13.11 A7L 90.86 MCA 156.01 SMA 137.31 ECC .23718 INC .8562 V1 30.287 RP 108.69 LAP -.35 LOP 262.25 VP 38.412 GAP 6.65 A7P 89.22 TAL 239.86 TAP 35.87 RCA 104.74 APO 169.87 V2 34.865 RC 119.206 GL -3.48 GP 27.45 7AL 162.03 7AP 135.32 ETS 28.92 7AE 130.11 ETE 156.24 7AC 33.95 ETC 193.24 CLP-143.24
   PLANETOCENTRIC CONIC
    4.49 RAP 297.22 ECC 1.7918
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                  4 8 40 1634.64
9 21 16 5875.07
5 13 11 1426.41
10 59 26 5558.53
5 46 55 1320.63
12 42 11 5237.08
        90.00
                                                   -2.58
                                                                  7.42
                                                                               182.70
                                                                                               118.21
                                                                                                            4 35 55
                                                                                                                           1034.6
        90.00
                                                    25.65
                                                                 281.87
                                                                                193.23
                                                                                                           10 59 11
                                                                                                                              5275.1
                                                                                                102.42
                                                                                                                                             27.11
       100.00
                                                    -4.53
                                                                 351.03
                                                                                181.62
                                                                                                119.58
                                                                                                            5 36 58
                                                                                                                               826.4
                                                                                                                                               -.56
                                                                                                                                                           344.50
                                                                                               101.35 12.32 5
123.08 6 8 56
98.74 14 9 28
                                                                                                                             4958.5
       100.00
                                                    27.84
                                                                                193.74
                                                                 259.09
                                                                                                                                             29.12
                                                    -9.16
                                                                 340.18
                                                                                178.78
                                                                                               123.08
                                                                                                                               720.6
       110.00
                                                                                                                                                           333.88
                                                                 235.78
                                                                                194.84
                                                                                                                           4637.1
                                                                                                                                             34.03
      110.00
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 2420.5 SGR 393.2 SG3 142.3
RRT -.7306 RRF -.8993 RTF .8198
SGB 2452.2 R23 .4291 R13 -.8255
                                                                                                                        ST 774.0 SR 104.5 55 175.5
CRT .4930 CRS -.7909 CST -.9064
    TDE -.6846 TRA-1.9603 TC3-1.1305 BAU .7468
    RDE -.1204 RRA .1121 RC3 .2645 FAU .06318
    FOE -.3851 FRA -.3908 FC3-1.1369 BSP 7456
BOE .6951 BRA 1.9635 BC3 1.1610 FSP -448
                                                                                                                       LSA 792.2 MSA 113.6 55A 20.4
EL1 775.8 EL2 90.7 ALF 3.86
                                                                     SG1 2437.7 SG2 266.6 THA 173.15
LAUNCH DATE JAN 7 1966
                                                                         FLIGHT TIME 106.00
                                                                                                                                     ARRIVAL DATE APR 23 1966
   HELIOCENTRIC CONIC
                                                                         DISTANCE 327.375
    RL 147.10 LAL -.00 LOL 106.24 VL 28.844 GAL -12.83 AZL 91.50 MCA 159.17 SMA 136.48 ECC .23462 INC 1.5036 V1 30.287 RP 108.72 LAP -.53 LOP 265.42 VP 38.327 GAP 6.86 AZP 88.59 TAL 238.30 TAP 37.47 RCA 104.46 APO 168.50 V2 34.856 RC 121.557 GL -6.20 GP 30.44 ZAL 160.39 ZAP 135.06 ETS 33.31 ZAE 128.17 ETE 154.46 ZAC 35.88 ETC 196.26 CLP-145.19
   PLANETOCENTRIC CONIC
    C3 46.7D2 VHL 6.834 DLA -25.06 RAL 308.88 RAD 6568.7 VEL 12.964 PTH 2.36 VHP 6.229 DPA 7.62 RAP 297.82 ECC 1.7686 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                             118.26 5 18 8
106.15 9 2 52
119.89 6 13 19
104.85 12 9 45
123.75 6 36 43
101.97 13 55 43
       90.00
                   4 53 11 1496.54
                                                    1.88
                                                                359.71
                                                                              185.58
                                                                                                                           896.5
        90.00
                    8 51 2
                                   710.20
                                                    23.58
                                                                 312.38
                                                                                194.59
                                                                                                                               110.2
                                                                                                                                                            304.28
                                                                                                                                              25.57
                  5 51 2 1308.23
10 35 23 5661.78
6 16 13 1230.77
12 27 11 5312.01
      100.00
                                                    -.54
                                                                 344.53
                                                                                184.23
                                                                                                                               708.2
                                                                                                                                             3.44
                                                                                                                                                           338.01
                                                   26.25
      100.00
                                                                 266.35
                                                                                195.40
                                                                                                                              5061.8
                                                                                                                                            28.03
                                                                                                                                                           258.00
      110.00
                                                   -5.79
                                                                 335.40
                                                                                180.97
                                                                                                                              630.8
                                                                                                                                                           329.17
                                                                                                                                             -1.32
      110.00
                                                   32.26
                                                                 241.43
                                                                               197.04
                                                                                                                             4712.0
                                                                                                                                              33.57
                                                                                                                                                           232.44
  DIFFERENTIAL CORRECTIONS
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                     SGT 2525.0 SGR 403.4 SG3 135.0
RRT -.7221 RRF -.9215 RTF .8221
                                                                                                                         ST 888.0 SR 66.6 SS 211.7
CRT .5186 CRS -.7940 CST -.9139
    TDE -.8438 TRA-1.9248 TC3-1.2026 BAU .7718
    RDE -.0732 RRA .0823 RC3 .2863 FAU .05863
FDE -.4537 FRA -.3227 FC3-1.0868 BSP 7812
BDE .8469 BRA 1.9265 BC3 1.2362 FSP -427
                                                                     SGB 2557.0 R23 .4635 R13 -.8281
                                                                                                                      LSA 909.7 MSA 99.3 SSA 18.6
EL1 888.6 EL2 56.9 ALF 2.24
                                                                     SG1 2541.9 SG2 277.2 THA 173.34
                                                                         FLIGHT TIME 108.00
LAUNCH DATE JAN 7 1966
                                                                                                                                    ARRIVAL DATE APR 25 1966
   HELIOCENTRIC CONIC
                                                                        DISTANCE 333.147
    RL 147.10 LAL -.00 LOL 106.24 VL 28.744 GAL -12.54 A7L 92.37 HCA 162.33 SMA 135.67 ECC .23217 INC 2.3706 V1 3D.287 RP 108.75 LAP -.72 LOP 268.59 VP 38.243 GAP 7.06 A7P 87.74 TAL 236.72 TAP 39.05 RCA 104.17 APO 167.17 V2 34.846
    RC 123,903 GL -9.88 GP 34.31 7AL 158.01 7AP 133.97 ETS 38.36 7AE 125.75 ETE 152.37 7AC 38.17 ETC 199.95 CLP-147.20
   PLANETOCENTRIC CONIC
    C3 45.790 VHL 6.767 DLA -28.33 RAL 311.13 RAD 6568.7 VEL 12.929 PTH 2.36 VMP 6.543 DPA 11.60 RAP 298.13 ECC 1.7536
    LNCH ATMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ ATMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            114.79
                                                                                                                          518.5
                   6 54 53 1118.47
7 7 15 1078.38
7 1 17 1097.70
9 43 32 5862.42
                                                                                                           7 13 31
7 25 13
                                                                                                                                          17.39
                                                                               193.18
                                                                                                                                                          331.20
                                                   14.17
                                                                 338.39
        89.27
                                                                 335.47
                                                                                               114.78
                                                                               193.19
                                                                                                                              478.4
                                                                                                                                             17.41
                                                                                                                                                           328.27
                                                  14.18
        90.73
                                                                 332.94
                                                                               189.25
                                                                                               119.23
                                                                                                                              497.7
                                                                                                           7 19 35
                                                                                                                                             10.41
                                                                                                                                                          326.26
      100.00
                                                    6.56
                                                                                              110.71 11 21 14
                                                   22.05
                                                                 279.77
                                                                               196.66
                                                                                                                             5262.4
      100.00
                                                                                                                                            24.67
                                                                                                                                                          271.95
                   7 1 10 1098.05
12 0 8 5434.82
                                                                                               124.18 7 19 28
106.89 13 30 43
      110.00
                                                     -.74
                                                                 328.46
                                                                               184.74
                                                                                                                             498.1
                                                                                                                                              3.75
                                                                                                                                                          322.25
      110.00
                                                   30.17
                                                                250.38
                                                                               199.73
                                                                                                                           4834.8
                                                                                                                                             32.18
                                                                                                                                                          241.75
   DIFFERENTIAL CORRECTIONS
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                        ORBIT DETERMINATION ACCURACY
                                                                    SGT 2630.8 5GR 417.2 SG3 125.9
RRT -.7004 RRF -.9353 RTF .8269
SGB 2663.7 R23 .4885 R13 -.8331
                                                                                                                        ST 1050.1 SR 23.3 55 261.2
CRT .2711 CRS -.5192 CST -.9289
    TOE-1.0652 TRA-1.8552 TC3-1.2633 BAU .7958
    ROE - .0182 RRA .0427 RC3 .3066 FAU .05331
FOE - .5368 FRA - .2499 FC3-1.0079 BSP 8180
                                                                                                                        LSA 1078.0 M5A 95.7 55A 14.6
EL1 1050.1 EL2 22.4 ALF .34
    BOE 1.0654 BRA 1.8557 BC3 1.3000 FSP
                                                                    SG1 2647.2 SG2 296.0 THA 173.58
                                                       -402
LAUNCH DATE JAN 7 1966
                                                                         FLIGHT TIME 110.00
                                                                                                                                    ARRIVAL DATE APR 27 1966
  HELIOCENTRIC CONIC
                                                                        DISTANCE 338.904
   RL 147.10 LAL -.00 LOL 106.24 VL 28.644 GAL -12.25 AZL 93.60 MCA 165.49 SMA 134.88 ECC .22982 INC 3.5997 V1 30.287 RP 108.78 LAP -.90 LOP 271.76 VP 38.160 GAP 7.26 AZP 86.51 TAL 235.10 TAP 40.59 RCA 103.89 APO 165.88 V2 34.838 RC 126.245 GL -15.03 GP 39.41 ZAL 154.35 ZAP 131.72 ETS 44.15 ZAE 122.53 ETE 150.03 ZAC 41.00 ETC 204.47 CLP-149.46
  PLANETOCENTRIC CONIC
    C3 45.928 VHL 6.777 DLA -32.93 RAL 314.18 RAD 6568.7 VEL 12.934 PTH 2.36 VHP 7.016 DPA 16.75 RAP 297.94 ECC 1.7559
   LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 72.44 4 58 41 1529.10 16.26 10.02 197.40 119.04 5 24 11 929.1 20.01 3.00
                    9 27 50
                                                                                                            9 38 59
      107.56
                                   669.26
                                                   16.28
                                                                 306.15
                                                                               197.41
                                                                                               119.03
                                                                                                                               69.3
                                                                                                                                             20.02
                                                                                                                                                           299.13
       72.44
                    4 58 41
                               1529.10
                                                  16.26
                                                                  10.02
                                                                               197.40
                                                                                               119.04
                                                                                                           5 24 11
                                                                                                                              929.1
                                                                                                                                            20.01
                                                                                                          9 38 59
8 47 3
      107.56
                    9 27 50
                                   669.26
                                                  16.28
                                                                 306.15
                                                                               197.41
                                                                                               119.03
                                                                                                                              69.3
                                                                                                                                            20.02
                                                                                                                                                           299.13
                     8 33 6
                                   837.74
                                                    9.13
                                                                 314.77
                                                                               193.01
                                                                                               123.08
                                                                                                                              237.7
                                                                                                                                           13.43
                                                                                                                                                          308.30
                   10 52 36 5696.66
                                                 23.68
                                                                267.94
                                                                               201.46
                                                                                               115.41
                                                                                                          12 27 33
                                                                                                                             5096.7
                                                                                                                                            26.90
      110.00
                                                                                                                                                          260.26
                                                                                                                 ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ST 1288.7 SR 42.1 SS 328.0

CRT -.8363 CRS .9512 CST -.9480

LSA 1326.4 MSA 103.5 SSA 9.5

EL1 1289.2 EL2 23.1 ALF 178.43
                                                                    SGT 2733.1 SGR 432.1 3G3 114.1
RRT -.6554 RRF -.9334 RTF .8353
    TOE-1.3921 TRA-1.7280 TC3-1.2895 BAU .8154
    ROE .0472 RRA -.0140 RC3 .3172 FAU .04675
FOE -.6356 FRA -.1682 FC3 -.8812 BSP 8491
BOE 1.3929 BRA 1.7280 BC3 1.3280 FSP -364
                                                                    SGB 2767.1 R23 .5006 R13 -.8416
```

SG1 2748.0 SG2 324.6 THA 174.00

ARRIVAL DATE APR 29 1966 FLIGHT TIME 112.00 DISTANCE 344.641 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 106.24 VL 28.546 GAL -11.94 AZL 95.49 HCA 168.63 SMA 134.12 ECC .22757 INC 5.4911 V1 30.287 RP 108.80 LAP -1.08 LOP 274.92 VP 38.080 GAP 7.44 AZP 84.62 TAL 233.47 TAP 42.10 RCA 103.60 APO 164.64 V2 34.830 RC 128.581 GL -22.54 GP 46.26 ZAL 148.43 ZAP 127.78 ETS 50.84 ZAE 117.95 ETE 147.77 ZAC 44.64 ETC 210.28 CLP-152.38 PLANETOCENTRIC CONIC 2.38 VHP 7.817 DPA 23.51 RAP 296.76 ECC 1.8001 C3 48.619 VHL 6.973 DLA -39.60 RAL 318.91 RAD 6568.8 VEL 13.038 PTH LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1129.2 23.12 4 43 59 125.61 4 15 9 1729.23 18.61 27.58 204.88 61.08 12 25 28 4 43 59 5185.7 23.14 265.25 125.60 18.62 271.90 204.89 10 49 5785.68 118.92 1129.2 23.12 20.93 4 15 9 10 49 2 204.88 125.61 1729.23 18.61 27.58 61.08 125.60 12 25 28 125.61 4 43 59 125.60 12 25 28 5185.7 23.14 265.25 204.89 18.62 271.90 5785.68 118.92 1129.2 23.12 20.93 4 15 9 1729.23 10 49 2 5785.68 18.61 27.58 .204.88 61.08 5185.7 23.14 265.25 204.89 271.90 18.62 118.92 ORBIT DETERMINATION ACCURACY HID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS SGT 2838.8 SGR 444.6 SG3 99.3 RRT -.5664 RRF -.8954 RTF .8534 ST 1658.2 SR 105.3 SS 421.4 CRT -.8223 CRS .9380 CST -.9681 LSA 1710.1 MSA 118.0 SSA 5.3 TOE-1.9304 TRA-1.5019 TC3-1.2373 BAU .8277 ROE .1213 RRA -.0986 RC3 .3014 FAU .03875 FDE -.7579 FRA -.0798 FC3 -.6900 BSP 8831 SGB 2873.4 R23 .4901 R13 -.8591 SG1 2850.1 SG2 365.0 THA 174.85 ELI 1660.5 ELZ 59.8 ALF 177.01 -319 BOE 1.9342 BRA 1.5052 BC3 1.2735 FSP ARRIVAL DATE MAY 1 1966 LAUNCH DATE JAN 7 1966 FLIGHT TIME 114.00 DISTANCE 350.348 HELIOCENTRIC CONIC RL 147.10 LAL -.00 LOL 106.24 VL 28.449 GAL -11.63 A7L 98.79 MCA 171.75 SMA 133.37 ECC .22538 INC 8.7937 V1 30.287 RP 108.82 LAP -1.26 LOP 278.09 VP 38.000 GAP 7.60 A7P 81.30 TAL 231.80 TAP 43.55 RCA 103.32 APO 163.43 V2 34.822 RC 130.911 GL -33.69 GP 55.56 TAL 138.69 TAP 121.47 ETS 59.16 TAE 111.09 ETE 146.86 TAC 49.47 ETC 218.43 CLP-157.39 PLANETOCENTRIC CONIC C3 58.981 VHL 7.680 DLA -49.11 RAL 327.77 RAD 6569.1 VEL 13.429 PTH 2.45 VMP 9.384 DPA 32.41 RAP 293.44 ECC 1.9707 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 135.87 4 31 13 135.87 13 50 34 135.87 4 31 13 135.87 4 31 13 135.87 13 50 34 135.87 4 31 13 135.87 13 50 34 219.47 1312.5 25.55 39.62 45.37 3 59 20 1912.50 19.92 48.04 5098.0 25.56 259.41 5697.97 19.93 265.16 219.49 131.96 12 15 36 1312.5 25.55 39.62 219.47 3 59 20 1912.50 19.92 45.37 48.04 5098.0 25.56 254.41 219.49 12 15 36 5697.97 19.93 265.16 1312.5 25.55 39.62 3 59 20 1912.50 12 15 36 5697.97 19.92 45.37 219.47 5098.0 25.56 259.41 131.96 19.93 265.16 219.49 MID-COURSE EXECUTION ACCURACY ORBIT DETERMINATION ACCURACY DIFFERENTIAL CORRECTIONS ST 2227.5 SR 130.5 SS 549.4 CRT -.6793 CRS .7967 CST -.9847 SGT 2945.4 SGR 442.3 SG3 81.2 TDE-2.9457 TRA-1.0546 TC3-1.0088 BAU .8141 RRT -.3299 RRF -.7148 RTF .8899 SGB 2978.4 R23 .4398 R13 -.8931 ROE .1377 RRA -.2334 RC3 .2201 FAU .02889 FDE -.9078 FRA .0245 FC3 -.4241 BSP 9188 BOE 2.9489 BRA 1.0802 BC3 1.0325 FSP -262 LSA 2294.1 MSA 132.8 SSA 2.6 EL1 2229.3 EL2 95.7 ALF 177.72 5G1 2949.0 SG2 417.0 THA 177.11 ARRIVAL DATE MAY 3 1966 FLIGHT TIME 116.00 LAUNCH DATE JAN 7 1966 DISTANCE 355.990 RL 147.10 LAL -.00 LOL 106.24 VL 28.354 GAL -11.30 AZL 106.00 MCA 174.81 SMA 132.65 ECC .22313 INC16.0009 V1 30.287 RP 108.85 LAP -1.43 LOP 281.25 VP 37.922 GAP 7.75 AZP 74.06 TAL 230.10 TAP 44.91 RCA 103.05 APO 162.25 V2 34.816 RC 133.236 GL -49.16 GP 67.61 ZAL 123.48 ZAP 112.15 ETS 74.35 ZAE 100.14 ETE 153.60 ZAC 55.63 ETC 234.58 CLP-171.91 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 102.643 YHL 10.131 DLA -59.96 RAL 349.10 RAD 6570.0 YEL 14.966 PTH 2.70 YHP 13.243 DPA LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 148.68 5 21 16 148.68 15 54 53 1522.5 22.40 249.78 5 21 16 4 45 53 2122.51 63.13 15.62 34.66 22.42 260.24 5742.48 15.63 264.31 249.80 14 19 10 145.34 59.06 5 21 16 1522.5 22.40 4 45 53 2122.51 15.62 63.13 249.78 148.68 5 21 16 148.68 15 54 53 148.68 5 21 16 148.68 15 54 53 148.68 34.66 260.24 5142.5 22.42 264.31 249.80 15.63 14 19 10 5742.48 145.34 59.06 1522.5 22.40 2122.51 63.13 249.78 4 45 53 15.62 34.66 260.24 5142.5 22.42 264.31 249.80 14 19 10 5742.48 145.34 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 2836.7 SR 415.3 SS 709.2 CRT .9561 CRS -.9236 CST -.9954 SGT 3008.6 SGR 567.6 SG3 61.8 RRT .5857 RRF .3261 RTF .9561 SGB 3061.7 R23 -.3049 R13 .9511 TOE-5.0155 TRA .0743 TC3 -.4933 BAU .6801 RDE -.7040 RRA -.3479 RC3 .0475 FAU .01697 1.3 LSA 2950.1 MSA 139.4 SSA FOE-1.0899 FRA .1919 FC3 -.1432 BSP 9349 BOE 5.0647 BRA .3557 BC3 .4956 FSP -195 SG1 3027.3 SG2 457.2 THA 6.45 EL1 2864.4 EL2 120.4 ALF 7.98 ARRIVAL DATE MAY 5 1966 FLIGHT TIME 118.00 LAUNCH DATE JAN 7 1966 DISTANCE 361.331 RL 147.10 LAL -.00 LOL 106.24 VL 28.260 GAL -10.90 A7L 131.14 MCA 177.57 SMA 131.95 ECC .22012 INC41.1408 V1 30.287 RP 108.87 LAP -1.60 LOP 284.42 VP 37.846 GAP 7.80 A7P 48.88 TAL 228.29 TAP 45.86 RCA 102.90 APO 160.99 V2 34.809 RC 135.553 GL -59.35 GP 70.28 ZAL 104.67 ZAP 100.45 ETS 139.56 ZAE 78.70 ETE 212.16 ZAC 60.82 ETC 304.16 CLP 122.52 HELIOCENTRIC CONIC PLANETOCENTRIC CONIC C3 450.372 VHL 21.222 DLA -56.81 RAL 25.15 RAD 6572.2 VEL 23.910 PTH 3.31 VHP 27.725 DPA 50.15 RAP 254.08 ECC 8.4120 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 1723.8 7 58 21 9.29 63.38 293.43 146.77 2323.76 2.61 67.40 38.46 7 19 37 16 44 39 93.9 9.30 291.47 146.77 293.45 16 33 5 693.94 2.62 295.48 141.54 7 58 21 1723.8 9.29 63.38 2323.76 67.40 293.43 146.77 7 19 37 2.61 16 44 39 93.9 9.30 291.47 293.45 146.77 295.48 16 33 5 693.94 2.62 7 58 21 16 44 39 63.38 146.77 1723.8 9.29 67.40 293.43 7 19 37 2323.76 2.61 38.46 146.77 93.9 9.30 291.47 295.48 293.45 16 33 5 - 693.94 2.62 141.54 ORBIT DETERMINATION ACCURACY MID-COURSE EXECUTION ACCURACY DIFFERENTIAL CORRECTIONS ST 453.4 SR 2218.7 S5 871.4 CRT .8780 CRS -.9950 CST -.9213 SGT 1073.7 SGR 2818.5 SG3 46.1 TDE-1.2398 TRA 2.0675 TC3 -.0082 BAU .6034 ROE-7.9796 RRA 3.5835 RC3 .0999 FAU-.00607 FDE-1.2698 FRA .8226 FC3 .0117 8SP 8452 BOE 8.0754 BRA 4.1371 BC3 .1002 FSP -137 RRT .8288 RRF .9820 RTF .9195 LSA 2416.1 MSA 223.9 SSA SGB 3016.1 R23 -.1260 R13 .9920 EL1 2254.4 EL2 213.6 ALF 79.73 SG1 2961.4 SG2 571.7 THA 71.77

-

Ξ

```
FLIGHT TIME 120.00
LAUNCH DATE JAN 7 1966
                                                                                                                                         ARRIVAL DATE NAY 7 1966
                                                                           DISTANCE 368.525
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 28.167 GAL -10.89 A7L 37.13 MCA 182.21 SMA 131.26 ECC .22297 INC52.8672 V1 30.287 RP 108.88 LAP -1.76 LOP 287.58 VP 37.772 GAP 8.38 AZP 142.85 TAL 227.02 TAP 49.23 RCA 102.00 APO 160.53 VZ 34.804 RC 137.863 GL 56.48 GP -67.17 ZAL 101.68 ZAP 100.05 ETS 198.01 ZAE 71.52 ETE 128.33 ZAC 86.73 EYC 43.50 CLP 116.71
   PLANETOCENTRIC CONTC
    C3 699.595 VHL 26.450 DLA 48.14 RAL 325.49 RAD 6572.7 VEL 28.651 PTH 3.43 VHP 31.033 DPA -69.34 RAP 159.40 ECC12.5136 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                    -.67
                                                                                  234.90
234.89
                                                                                                                                              -6.61
                                                                                                41.87 17 14 42
41.87 1 1 31
                  15 52 35 4926.54
0 4 6 3445.11
       49.30
                                                                   229.41
                                                                                                                                 4326.5
                                                                                                                                                                224.46
       130.70
                                                       - . 65
                                                                   113.35
                                                                                                    1 1 31
41.87 17 14 42
41.87 1 1 3
                                                                                                                                 2845.1
                                                                                                                                                  -6.60
                                                                                                                                                                108.40
                  15 52 35
                                                                                  234.90
        49.50
                                   4926.54
                                                       - .67
                                                                   229.41
                                                                                                                                 4326.5
                                                                                                                                                  -6.61
                                                                                                                                                                224.46
       130.70
                     0 4 6 3445.11
                                                       -.65
                                                                   113.35
                                                                                  234.89
                                                                                                                                 2845.1
                                                                                                                                                  -6.60
                                                                                                                                                                108.40
                                                                                                    41.87 17 14 42
41.87 1 1 31
        49.30
                   15 52 35 4926.54
                                                      - . 67
                                                                   229.41
                                                                                  234.90
                                                                                                                                  4326.5
                                                                                                                                                  -6.61
                                                                                                                                                                 224.46
                                                                     MIO-COURSE EXECUTION ACCURACY
       130.70
                     0 4 6
                                   3445.11
                                                       -.65
                                                                   113.35
                                                                                                                                 2845.1
                                                                                                                                                  -6.60
                                                                                                                                                                 108.40
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                     SGT 589.7 SGR 3002.3 SG3 45.4
RRT .1257 RRF -.9941 RTF -.0197
SGB 3059.7 R23 -.1110 R13 -.9936
                                                                                                                            ST 294.7 SR 2553.5 SS 1268.6

CRT -.7643 CRS .9994 CST .7870

LSA 2860.0 MSA 192.2 SSA .9
    TOE 1.1726 TRA 1.5333 TC3 -.0357 BAU 1.4442
    RO-11.6199 RRA 4.4075 RC3 -.1502 FAU-.01710
FOE 2.1648 FRA -.6445 FC3 .0212 BSP 9953
BDEII.6789 BRA 4.6665 BC3 .1544 FSP -158
                                                                       SG1 3003.3 SG2 584.9 THA 88.53
                                                                                                                             ELI 2563.5 EL2 189.3 ALF 95.07
LAUNCH DATE JAN 7 1966
                                                                           FLIGHT TIME 122.00
                                                                                                                                         ARRIVAL DATE MAY 9 1966
  HELIOCENTRIC CONIC
                                                                           DISTANCE 373.772
   RL 147.10 LAL -.00 LOL 106.24 VL 28.075 GAL -10.46 AZL 66.87 MCA 184.89 SMA $30.60 ECC .21996 INC23.1310 V1 30.287 RP 108.90 LAP -1.92 LOP 290.74 VP 37.699 GAP 8.40 AZP 113.06 TAL 225.15 TAP 50.04 RCA 101.87 APO 159.33 V2 34.799 RC 140.164 GL 56.82 GP -67.19 ZAL 113.32 ZAP 112.80 ETS 264.52 ZAE 95.47 ETE 190.20 ZAC 83.85 ETC 109.00 CLP-178.00
  PLANETOCENTRIC CONIC
    C3 167.928 VHL 12.959 DLA 41.20 RAL 309.01 RAD 6570.8 VEL 17.007 PTH 2.92 VHP 14.006 DPA -83.60 RAP 29.83 ECC 3.7637
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 58.72 15 23 13 4672.02 -7.69 213.08 210.15 49.39 16 11 5 4072.0 -12.84 207.28
                                                                                                    49.39 23 14 26
49.39 16 41 5
49.39 23 14 26
49.39 16 41 5
49.39 23 14 26
      121.28
                    22 18 4
                                   3381.62
                                                     -7.67
                                                                                  210.14
                                                                                                                                 2781.6
                                                                   114.46
                                                                                                                                                 -12.83
                                                                                                                                                                 108.66
        58.72
                  15 23 13 4672.02
                                                     -7.69
                                                                   213.08
                                                                                  210.15
                                                                                                                                  4072.0
                                                                                                                                                                 207.28
                                                                                                                                                 -12.84
                  22 18 4 3381.62
15 23 13 4672.02
       121.26
                                                     -7.67
                                                                   114.46
                                                                                  210.14
                                                                                                                                 2781.6
                                                                                                                                                 -12.83
                                                                                                                                                                104.66
        58.72
                                                     -7.69
                                                                   213.08
                                                                                  210.15
                                                                                                                                 4072.0
                                                                                                                                                                207.28
                                                                                                                                                -12.84
                   22 18 4
                                   3381.62
                                                     -7.67
                                                                                                                                 2781.6
       121.28
                                                                   114.46
                                                                                  210.14
                                                                                                                                                 -12.83
                                                                                                                                                                 108.66
  DIFFERENTIAL CORRECTIONS
                                                                     HID-COURSE EXECUTION ACCURACY
                                                                                                                             ORBIT DETERMINATION ACCURACY
                                                                                                                             ST 2114.8 SR 772.9 55 664.7

CRT -.9683 CRS ..9420 CST -.9960

LSA 2339.4 MSA 196.9 SSA 1.3
    TOE 4.5528 TRA-3.6754 TC3 -.1968 BAU .4468
                                                                       SGT 2996.2 SGR 1525.8 SG3 60.4
RRT -.9466 RRF -.8622 RTF .9786
    RDE-1.4776 RRA 2.3429 RC3 .0295 FAU .01486
    FOE 1.2119 FRA -.6852 FC3 -.0766 BSP 10333
BOE 4.7866 BRA 4.3586 BC3 .1990 FSP -200
                                                                       SGB 3362.3 R23 -.2625 R13 -.9635
                                                                       SG1 3333.2 SG2 442.1 THA 153.77
                                                                                                                             EL1 2244.2 EL2 181.9 ALF 160.38
LAUNCH DATE JAN 7 1966
                                                                           FLIGHT TIME 124.00
                                                                                                                                       ARRIVAL DATE MAY 11 1966
  HELIOCENTRIC CONIC
                                                                          DISTANCE 379.375
   RL 147.10 LAL -.00 LOL 106.24 VL 27.985 GAL -10.10 A7L 74.83 MCA 187.93 SMA 129.96 ECC .21820 INC15.1716 V1 30.287 RP 108.91 LAP -2.07 LOP 293.90 VP 37.629 GAP 8.52 A7P 105.03 TAL 223.37 TAP 51.30 RCA 101.60 APO 158.31 VZ 34.795 RC 142.456 GL 49.45 GP -54.26 ZAL 121.37 ZAP 124.19 ETS 285.51 ZAE 107.32 ETE 205.22 ZAC 78.15 ETC 130.11 CLP-164.20
  PLANETOCENTRIC CONIC
    C3. 90.057 VHL 9.490 DLA 32.79 RAL 308.16 RAD 6569.8 VEL 14.540 PTH 2.64 VHP 9.799 DPA -70.55 RAP 348.22 ECC 2.4821
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                               58.82 17 46 53
58.82 17 46 53
58.82 17 46 53
58.82 17 46 53
58.82 21 57 49
61.06 23 23 51
55.90 21 4 10
                                                                              201.11
                                                                                                                                                            180.88
                                                                                                                                             -14.77
       72.73 16 34 46 4327.74
107.27 20 59 48 3480.59
                                                    -10.71
                                                                   187.54
                                                                                                                                3727.7
       107.27
                                                   -10.70
                                                                   124.63
                                                                                 201.10
                                                                                                                                 2880.6
                                                                                                                                                -14.75
                                                                                                                                                               117.97
                                                                              201.11
                  16 34 46 4327.74
20 59 48 3480.59
        72.73
                                                   -10.71
                                                                   187.54
                                                                                                                                 3727.7
                                                                                                                                               -14.77
                                                                                                                                                               180.88
                                   3480.59
                                                   -10.70
                                                                   124.63
                                                                                201.10
                                                                                                                                 2880.6
                                                                                                                                               -14.75
                                                                                                                                                               117.97
       107.27
                                 3201.44
                                                                              206.08
                    22 30 30
                                                -19.04
                                                                   108.04
                                                                                                                                 2601.4
                                                                                                                                               -22.75
                                                                                                                                                               100.87
      110.00
                   20 3 15
                                                    -2.60
                                                                   132.86
                                                                                 195.88
                                                                                                                                 3054.9
                                                                                                                                                -7.05
                                                                                                                                                               126.61
       110.00
                                  3654.88
                                                                     MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                      SCT 3423.7 SCR 602.1 SC3 80.8
RRT -.7828 RRF -.4890 RTF .9228
SCB 3476.2 R23 -.3889 R13 -.9171
                                                                                                                            5T 1974.1 SR 180.6 S5 561.3
CRT -.3832 CRS .1803 CST -.9776
    TOE 2.9887 TRA-3.7131 TC3 -.6131 BAU
                                                        .7382
   RCE .0072 RRA .8381 RC3 .0074 FAU .02744
FOE 1.0748 FRA -.6271 FC3 -.2638 BSP 10852
BOE 2.9887 BRA 3.8065 BC3 .6131 FSP -268
                                                                                                                            LSA 2050.3 MSA 202.7 SSA 1.9
                                                                                                                            EL1 1975.4 EL2 166.7 ALF 177.98
                                                                       SG1 3456.3 SG2 371.1 THA 172.07
LAUNCH DATE JAN 7 1966
                                                                           FLIGHT TIME 126.00
                                                                                                                                        ARRIVAL DATE HAY 13 1966
                                                                          DISTANCE 385.040
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 27.897 GAL -9.75 A7L 78.36 MCA 191.04 SMA 129.33 ECC .21679 INC11.6410 V1 30.287 RP 108.92 LAP -2.21 LOP 297.06 VP 37.560 GAP 8.66 A7P 101.43 TAL 221.60 TAP 52.64 RCA 101.29 APO 157.37 VZ 34.791 RC 144.737 GL 43.62 GP -44.05 ZAL 126.26 ZAP 132.89 ETS 293.47 ZAE 114.59 ETE 206.29 ZAC 74.17 ETC 138.44 CLP-161.27
  PLANETOCENTRIC CONIC
   C3 64.678 VHL 8.042 DLA 26.96 RAL 309.45 RAD 6569.2 VEL 13.639 PTH 2.49 VHP 8.223 DPA -59.96 RAP 341.42 ECC 2.0644
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                199.94
       90.00
                  20 9 8 3576.74
                                                   -18.64
                                                                  135.77
                                                                                                   68.29 21 8 45
                                                                                                                                 2976.7
                                                                                                                                               -21.42
                                                                                                                                                              128.20
                                                                                                    61.93 18 43 38
69.64 22 57 51
                  17 35 40 4078.41
22 4 26 3205.05
                                                                                                                                 3478.4
        90.00
                                                    -3.88
                                                                   165.19
                                                                                  192.98
                                                                                                                                                 -7.60
                                                                                                                                                                158.49
      100.00
                                                                                                                                 2605.1
                                                    -22.37
                                                                   109.95
                                                                                  201.47
                                                                                                                                                -24.94
                                                                                                                                                                102.10
                  18 23 3 3925.33

D 11 26 2819.97

18 36 29 3883.17
                                                                                                    60.11 19 28 29
72.02 0 58 26
56.30 19 41 12
                                                                                 191.04
                                                                                                                                 3325.3
                                                                                                                                                             145.48
      100.00
                                                     -.38
                                                                   152.01
                                                                                                                                                -4.35
                                                                                204.26
      110.00
                                                    -29.58
                                                                   83.49
                                                                                                                                 2220.0
                                                                                                                                                -31.74
                                                                                                                                                                 74.96
      110.00
                                                                   144.80
                                                                                 187.02
                                                                                                                                 3283.2
                                                      6.11
                                                                                                                                                  1.64
                                                                                                                                                                138.57
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                           ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                    SGT 3548.9 SGR 396.3 SG3 98.4
RRT - .5601 RRF - .1260 RTF .8842
                                                                                                                           ST 1793.8 SR 171.4 SS 518.6
CRT .3689 CRS -.6222 CST -.9571
    TDE 2.2330 TRA-3.4504 TC3 -.9745 BAU .8427
   ROE .1819 RRA .4676 RC3 -.0147 FAU .03545
FOE 1.0065 FRA -.5617 FC3 -.4745 BSP 11169
                                                                     SGB 3570.9 R23 -.4509 R13 -.8816
SG1 3555.9 SG2 327.6 THA 176.39
                                                                                                                          LSA 1862.9 MSA 214.1 55A 3.0
ELI 1794.9 EL2 159.2 ALF 2.03
```

BOE 2.2404 BRA 3.4820 BC3 .9746 FSP -323

ARRIVAL DATE MAY 15 1966

```
FLIGHT TIME 128.00
LAUNCH DATE JAN 7 1966
                                                                                                  DISTANCE 390.723
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 106.24 VL 27.810 GAL -9.39 A7L 80.35 MCA 194.17 SMA 128.72 ECC .21559 INC 9.6529 V1 30.287 RP 108.93 LAP -2.35 LOP 300.22 VP 37.492 GAP 8.80 A7P 99.36 TAL 219.81 TAP 53.98 RCA 100.97 APO 156.47 V2 34.788 RC 147.008 GL 39.39 GP -36.51 7AL 129.11 7AP 139.34 ETS 298.51 7AE 119.21 ETE 204.58 7AC 71.96 ETC 143.78 CLP-160.69
    PLANETOCENTRIC CONIC
     C3 52.560 VHL 7.250 OLA 23.02 RAL 311.11 RAD 6568.9 VEL 13.188 PTH 2.41 VHP 7.500 DPA -51.97 RAP 339.37 ECC 1.8650
     C3 52.560 VHL 7.250 DLA 23.02 RAL 311.11 RAD 6568.9 VEL 13.188 PTH 2.41 VMP 7.500 DPA -51.97 RAP 339.37 ECC 1.8550 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 21 30 30 3270.28 -25.05 115.63 198.92 76.35 22 25 1 2670.3 -26.68 107.34 90.00 16 27 36 4283.46 2.73 176.64 188.23 61.80 17 39 0 3683.5 -1.06 170.01 100.00 23 9 22 2951.54 -27.32 92.77 199.50 77.37 23 58 33 2351.5 -28.78 84.27 100.00 17 31 26 4077.43 4.77 160.37 187.10 60.46 18 39 23 3477.4 .80 153.83 110.00 0 57 9 2626.62 -32.80 69.37 200.78 79.79 1 40 56 2026.6 -33.86 60.29 110.00 18 4 4 3975.12 9.55 149.69 184.17 57.02 19 10 19 3375.1 5.14 143.38
                          18 4 4
                                                                                              HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                   ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                                     ST 1668.4 SR 182.3 SS 489.1
CRT .5358 CRS -.7971 CST -.9369
                                                                                              SGT 3648.1 SGR 324.2 SG3 111.0
RRT -.4300 RRF .0548 RTF .8594
SGB 3662.5 R23 -.4726 R13 -.8580
     TOE 1.8248 TRA-3.2494 TC3-1.2799 BAU .8994
     ROE .2047 RRA .3262 RC3 -.0148 FAU .04018
FOE .9408 FRA -.9907 FC3 -.6618 BSP 11450
BDE 1.8363 BRA 3.2658 BC3 1.2800 FSP -359
                                                                                                                                                                     LSA 1733.8 MSA 223.5 55A 4.2
                                                                                              SG1 3650.8 SG2 292.5 THA 177.80
                                                                                                                                                                     EL1 1671.3 EL2 153.6 ALF
                                                                                                                                                                                    ARRIVAL DATE MAY 17 1966
                                                                                                    FLIGHT TIME 130.00
LAUNCH DATE JAN 7 1966
                                                                                                   DISTANCE 396.411
   HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 106.24 VL 27.725 GAL -9.04 AZL 81.63 HCA 197.32 SMA 128.13 ECC .21457 INC 8.3740 V1 30.287

RP 108.94 LAP -2.48 LOP 303.39 VP 37.427 GAP 8.94 AZP 98.00 TAL 218.01 TAP 55.33 RCA 100.64 APO 155.63 V2 34.786

RC 149.266 GL 36.29 GP -30.90 ZAL 130.64 ZAP 144.17 ETS 302.37 ZAE 122.23 ETE 202.34 ZAC 71.04 ETC 147.79 CLP-160.88
     PLANETOCENTRIC CONIC

C3 45.382 VHL 6.737 DLA 20.31 RAL 312.86 RAD 6568.7 VEL 12.913 PTH 2.35 VMP 7.133 DPA -45.85 RAP 339.02 ECC 1.7469

LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 22 12 0 3109.03 -27.16 104.30 197.31 81.65 23 3 49 2509.0 -28.03 95.74

90.00 16 0 4 4371.36 5.54 181.57 186.62 62.19 17 12 56 3771.4 1.78 174.91

100.00 23 46 31 2804.22 -29.06 82.17 197.61 82.67 24 33 15 2204.2 -29.77 73.44

100.00 17 8 14 4151.40 7.23 164.48 185.70 60.92 18 17 25 3551.4 3.30 157.90

110.00 1 26 51 2502.63 -33.90 59.86 198.21 85.31 2 8 33 1902.6 -34.18 50.63

110.00 17 48 19 4025.76 11.41 152.43 183.18 57.56 18 55 25 3425.8 7.05 146.05
    PLANETOCENTRIC CONIC
                                                                                               HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ST 1581.7 SR 187.0 $5 465.2
CRT .5917 CRS -.8628 CST -.9178
                                                                                              SGT 3743.9 SGR 287.2 SG3 119.4
RRT -.3709 RRF .1190 RTF .8436
SGB 3754.9 R23 -.4668 R13 -.8426
      TOE 1.5728 TRA-3.0936 TC3-1.5491 BAU .9398
      ROE .2045 RRA .2520 RC3 -.0034 FAU .04277
                                                                                                                                                                     LSA 1643.1 MSA 231.0 SSA
              .8763 FRA -.4221 FC3 -.8158 BSP 11758
                                                                                                                                                                    EL1 1585.6 EL2 150.3 ALF 4.04
                                                                                               SG1 3745.4 SG2 266.6 THA 178.36
      BOE 1.5861 BRA 3.1039 BC3 1.5491 FSP -384
                                                                                                                                                                                   ARRIVAL DATE MAY 19 1966
                                                                                                   FLIGHT TIME 132.00
LAUNCH DATE JAN. 7 1966
                                                                                                   DISTANCE 402.099
     RL 147.10 LAL -.00 LOL 106.24 VL 27.64) GAL -8.67 AZL 82.52 MCA 200.46 SMA 127.56 ECC .21370 INC 7.4786 V1 30.287 RP 108.94 LAP -2.61 LOP 306.55 VP 37.364 GAP 9.08 AZP 97.01 TAL 216.20 TAP 56.67 RCA 100.30 APO 154.82 V2 34.785 RC 151.511 GL 33.97 GP -26.65 ZAL 131.31 ZAP 147.89 ETS 305.49 ZAE 124.28 ETE 200.17 ZAC 71.01 ETC 150.98 CLP-161.39
    PLANETOCENTRIC CONIC
      C3 40.506 VHL 6.364 DLA 18.44 RAL 314.64 RAD 6568.6 VEL 12.723 PTH 2.31 VMP 6.938 DPA -41.02 RAP 339.51 ECC 1.6666
     C3 40.506 VHL 6.364 DLA 18.44 RAL 314.64 RAD 6568.6 VEL 12.723 PTH 2.31 VMP 6.936 DPA -41.02 RAP 339.51 ECC 1.6666 LNCM AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 22 39 36 3004.04 -27.97 96.72 196.22 85.36 23 29 40 2404.0 -28.31 88.08 90.00 15 46 38 4419.08 7.05 184.26 186.15 62.50 17 0 17 3819.1 3.51 177.58 100.00 0 15 57 2706.00 -29.70 74.94 196.36 86.43 1 1 3 2106.0 -29.88 66.14 100.00 16 56 54 4192.35 8.58 166.77 185.32 61.26 18 6 46 3592.3 4.68 160.16 110.00 1 48 20 2416.95 -34.18 53.19 196.56 89.25 2 28 37 1816.9 -33.90 43.95 110.00 17 41 0 4054.16 12.45 153.98 183.01 57.90 18 48 34 3454.2 8.12 147.56
                          16 56 54 4192.35
1 48 20 2416.95.
17 41 0 4054.16
                                                                                             HID-COURSE EXECUTION ACCURACY
                                                                                                                                                                     ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                              SGT 3839.5 SGR 266.8 SG3 124.8
RRT -.3430 RRF .1276 RTF .8329
SGB 3848.7 R23 -.4413 R13 -.8322
                                                                                                                                                                     ST 1522.0 SR 191.8 SS 446.4
      TOE 1.4050 TRA-2.9637 TC3-1.7969 BAU .9731
                                                                                                                                                                     CRT .6239 CRS -.9014 CST -.9002
      RDE .2030 RRA .2041 RC3 .0130 FAU .04396
FDE .8184 FRA -.3574 FC3 -.9395 BSP 12097
                                                                                                                                                                     LSA 1579.9 MSA 237.5 SSA 6.7
                                                                                              5G1 3840.6 5G2 250.5 THA 178.63
                                                                                                                                                                     EL1 1526.7 EL2 149.4 ALF 4.54
      BOF 1.4196 BRA 2.9707 BC3 1.7969 FSP
                                                                           -401
                                                                                                                                                                                     ARRIVAL DATE MAY 21 1966
                                                                                                    FLIGHT TIME 134.00
 LAUNCH DATE JAN 7 1966
                                                                                                   DISTANCE 407.786
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 106.24 VL 27.558 GAL -8.30 AZL 83.19 HCA 203.62 SMA 127.00 ECC .21300 INC 6.8133 VI 30.287

RP 108.94 LAP -2.72 LOP 309.71 VP 37.302 GAP 9.22 AZP 96.25 TAL 214.38 TAP 58.00 RCA 99.95 APO 154.06 V2 34.784

RC 153.743 GL 32.19 GP -23.35 ZAL 131.37 ZAP 150.85 ETS 308.07 ZAE 125.71 ETE 198.24 ZAC 71.59 ETC 153.58 CLP-162.03
    PLANETOCENTRIC CONIC
      C3 36.875 VHL 6.072 DLA 17.17 RAL 316.44 RAD 6568.4 VEL 12.580 PTH 2.28 VHP 6.837 DPA -37.08 RAP 340.49 ECC 1.6069
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                           195.65
                                                                                                                                     88.01 23 48 37
62.71 16 54 55
                                                                                                                                                                           2331.1
                                                                                                                                                                                               -28.23
            90.00 22 59 46 2931.06
                                                                      -28.25
                                                                                          91.41
                                                                                                                                                                            3844.6
                                                                                                                                                                                                   4.13
                                                                                                                                                                                                                     179.01
                                                                                          185.71
                                                                                                              186.25
            90.00
                          15 40 50
                                              4444.59
                                                                        7.85
                                                                                                                                                                                                -29.68
                                                                                                                                                                            2036.9
                                                                                                                                                                                                                       61.02
                                                                                                                                                    1 18 52
                                                                                                              195.70
                                                                                                                                     89.12
                             O 34 55
                                              2636.90
                                                                      -29.88
                                                                                           69.81
                                                                                                                                     89.12 1 18 52
61.46 18 2 32
92.10 2 44 10
58.09 18 46 36
          100.00
                                                                                                                                                                                                                     161.35
                                                                                                                                                                           3614.0
                                                                                                                                                                                                   5.41
                           16 52 18
                                                4213.99
                                                                         9.29
                                                                                          167.99
                                                                                                              185.48
          100.00
                                                                                                                                                                                                -33.46
                                                                                                                                                                                                                      39.20
                                                                                                                                                                           1755.3
                             2 4 54
                                                                                                              195.65
                                                2355.34
                                                                      -34.13
                                                                                           48.38
          110.00
                                                                                                                                                                         3468.3
                                                                                                                                                                                                  8.65
                                                                                                                                                                                                                    148.32
                                                                                         154.76
                                                                                                              183.30
          110.00
                            17 38 46
                                               4068.31
                                                                      12.96
                                                                                              MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      ORBIT DETERMINATION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                                                                                                      ST 1482.4 SR 198.2 55 431.9
CRT .6512 CRS -.9289 CST -.8849
                                                                                              SGT 3932.5 SGR 256.7 SG3 128.2
RRT -.3235 RRF .1127 RTF .8255
       TOE 1.2900 TRA-2.8454 TC3-2.0315 BAU 1.0016
      ROE .2033 RRA .1684 RC3 .0310 FAU .04425
FOE .7684 FRA -.2967 FC3-1.0388 BSP 12412
BOE 1.3059 BRA 2.8504 BC3 2.0317 FSP -411
                                                                                                                                                                 CRT .6512 CR5 -.9269 C...
LSA 1537.6 M5A 242.9 SSA 8.0
ELI 1488.1 ELZ 149.9 ALF 5.03
                                                                                              SGB 3940.8 R23 -.4024 R13 -.8250
                                                                                               SG1 3933.4 SG2 242.8 THA 178.79
```

```
LAUNCH DATE JAN 7 1966
                                                                       FLIGHT TIME 136.00
                                                                                                                                ARRIVAL DATE MAY 23 1966
   HELIOCENTRIC CONIC
                                                                       DISTANCE 413.471
    RL 147.10 LAL -.00 LOL 106.24 VL 27.477 GAL -7.93 AZL 83.70 MCA 206.77 SMA 126.46 ECC .21245 INC 6.2969 V1 30.287 RP 108.94 LAP -2.83 LOP 312.87 VP 37.242 GAP 9.36 AZP 95.63 TAL 212.54 TAP 59.31 RCA 99.60 APO 153.33 V2 34.784 RC 155.962 GL 30.79 GP -20.75 ZAL 130.97 ZAP 153.26 ETS 310.20 ZAE 126.75 ETE 196.58 ZAC 72.59 ETC 155.75 CLP-162.75
   PLANETOCENTRIC CONIC
    C3 33.995 VHL 5.831 DLA 16.32 RAL 318.28 RAD 6568.3 VEL 12.465 PTH 2.25 VHP 6.79D OPA -33.79 RAP 341.77 ECC 1.5595
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            89.92 24 3 18
62.80 16 54 12
                                                                                                                                      -28.03
                  23 15 19 2878.97
                                                 -28.32
                                                               87.60
                                                                            195.52
                                                                                                                         2279.0
                                                                                                                                                        78.94
       90.00
                                                   8.19
                                4455.61
                  15 39 56
                                                                186.34
                                                                              186.70
                                                                                                                          3855.6
                                                                                                                                          4.48
                                                                                                                                                       179.62
        90.00
                                                                                                                          1987.1
       100.00
                    0 49 45 2587.12
                                                  -29.88
                                                                 66.11
                                                                              195.51
                                                                                              91.07
                                                                                                         1 32 52
                                                                                                                                        -29.41
                                                                                                                                                        57.34
                  16 52 7
                               4222.69
                                                               168.48
                                                                              185.96
                                                                                              61.55 18 2 30
                                                                                                                          3622.7
                                                                                                                                          5.70
                                                                                                                                                      161.83
                                                   9.57
                 2 18 16 2310.15
17 40 5 4072.42
                                                                                              94.18 2 56 47
58.14 18 47 58
                                                  -33.96
                                                                 44.86
                                                                              195.29
                                                                                                                          1710.2
                                                                                                                                      -33.01
                                                                                                                                                        35.75
                                                                                                                                                       148.54
      110.00
                                                                154.99
                                                                             183.87
                                                                                                                          3472.4
                                                                                                                                          8.80
   DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   SGT 4023.1 SGR 253.9 SG3 130.2
RRT -.3032 RRF .0907 RTF .8200
SGB 4031.1 R23 -.3570 R13 -.8196
                                                                                                                      ST 1458.1 SR 206.5 SS 421.8
CRT .6783 CRS -.9500 CST -.8722
    TOE 1.2107 TRA-2.7321 TC3-2.2596 BAU 1.0272
    ROE .2056 RRA .1394 RC3 .0490 FAU .04394
FDE .7266 FRA -.2392 FC3-1.1189 BSP 12710
BDE 1.2281 BRA 2.7357 BC3 2.2602 FSP -417
                                                                                                                     LSA 1511.8 MSA 247.5 55A 9.3
EL1 1464.9 EL2 151.0 ALF 5.55
                                                                   SG1 4023.8 SG2 241.9 THA 178.90
                                                                       FLIGHT TIME 138.00
                                                                                                                                 ARRIVAL DATE MAY 25 1966
LAUNCH DATE JAN 7 1966
  HELIOCENTRIC CONIC
                                                                       DISTANCE 419.152
   RL 147.10 LAL -.00 LOL 106.24 VL 27.397 GAL -7.54 AZL 84.12 HCA 209.92 SMA 125.94 ECC .21207 INC 5.8822 VI 30.287 RP 108.94 LAP -2.93 LOP 316.04 VP 37.184 GAP 9.50 AZP 95.10 TAL 210.69 TAP 60.62 RCA 99.23 APO 152.65 VZ 34.785 RC 158.168 GL 29.68 GP -18.65 ZAL 130.21 ZAP 155.30 ETS 311.95 ZAE 127.53 ETE 195.16 ZAC 73.89 ETC 157.57 CLP-163.50
  PLANETOCENTRIC CONIC
   C3 31.609 VHL 5.622 DLA 15.80 RAL 320.16 RAD 6568.3 VEL 12.369 PTH 2.23 VHP 6.779 DPA -30.96 RAP 343.25 ECC 1.5202 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                84.87
                                                                           195.76
                                                                                              91.29 24 15 7
62.81 16 56 49
                                                 -28.29
                                                                                                                          2241.7
                                                                                                                                         -27.81
                  23 27 46 2841.65
15 42 33 4456.26
       90.00
                                                                                                                                                        76.23
                                                                             187.39
                                                                                                                          3856.3
       90.00
                                                   8.21
                                                               186.38
                                                                                                                                          4.50
                                                                                                                                                       179.66
                    1 1 47 2551.14
16 55 9 4222.00
                                                                                              92.47
                                                                 63.44
                                                                             195.70
                                                                                                          1 44 18
                                                                                                                          1951.1
                                                                                                                                         -29.14
      100.00
                                                 -29.40
                                                                                                                                                        54.70
                                                                                              61.54 18 5 31
95.69 3 7 23
                  16 55 9
      100.00
                                                   9.55
                                                               168.44
                                                                             186.68
                                                                                                                          3622.0
                                                                                                                                           5.67
                                                                                                                                                       161.80
                                                                                             95.69 3 7 23
58.10 18 51 48
                   2 29 26 2276.86
      110.00
                                                 -33.76
                                                                42.28
                                                                            195.37
                                                                                                                          1676.9
                                                                                                                                         -32.61
                                                                                                                                                        33.24
                  17 43 59
                                                               154.80
                                                                              184.64
                                                                                                                          3469.0
                                                                                                                                          8.67
      110.00
                                 4069.05
                                                 12.98
                                                                                                                                                       148.36
  DIFFERENTIAL CORRECTIONS
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   $67 4111.4 $GR 256.4 $G3 131.3

RRT -.2789 RRF .0697 RTF .8159

$GB 4119.4 R23 -.3105 R13 -.8155
                                                                                                                      ST 1445.7 SR 216.2 SS 415.1
CRT .7063 CRS -.9662 CST -.8624
    TOE 1.1570 TRA-2.6199 TC3-2.4859 BAU 1.0509
   RDE .2091 RRA .1146 RC3 .0664 FAU .04324
FDE .6919 FRA -.1848 FC3-1.1844 BSP 12994
BDE 1.1757 BRA 2.6224 BC3 2.4868 FSP -419
                                                                                                                      LSA 1498.7 MSA 251.0 SSA 10.5
                                                                   SG1 4112.0 SG2 246.1 THA 179.00
                                                                                                                      EL1 1453.9 EL2 152.2 ALF 6.10
                                                                       FLIGHT TIME 140.00
                                                                                                                                ARRIVAL DATE MAY 27 1966
LAUNCH DATE JAN 7 1966
                                                                      DISTANCE 424.826
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 27.319 GAL -7.15 AZL 84.46 HCA 213.08 SMA 125.43 ECC .21185 INC 5.5399 VI 30.287
RP 108.94 LAP -3.02 LOP 319.20 VP 37.128 GAP 9.65 AZP 94.65 TAL 208.83 TAP 61.91 RCA 98.86 APO 192.00 V2 34.787
RC 160.359 GL 28.76 GP 16.92 ZAL 129.16 ZAP 157.05 ETS 313.37 ZAE 128.14 ETE 193.96 ZAC 75.41 ETC 159.13 CLP-164.26
  PLANETOCENTRIC CONIC
    C3 29.576 VHL 5.438 DLA 15.54 RAL 322.11 RAD 6568.2 VEL 12.286 PTH 2.21 VHP 6.792 DPA -28.47 RAP 344.88 ECC 1.4867
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                            92.25 24 24 56
62.74 17 2 1
93.47 1 53 54
                                                                                                                        2215.4
                                                                                                                                     -27.62
                  23 38 0 2615.40
15 47 51 4449.13
                                                -28.23
                                                               82.95
                                                                           196.30
                                                                                                                                                       74.34
       90.00
                                                               185.97
                                                                             188.29
                                                                                                                         3849.1
                                                                                                                                         4.28
                                                                                                                                                      179.26
                                                   7.99
       90.00
                  I 11 49 2525.55
17 0 40 4214.21
                                                -29.71
                                                                61.54
                                                                             196.21
                                                                                                                         1925.6
                                                                                                                                        -28.91
                                                                                                                                                       52.83
      100.00
                                                                                              61.46 18:10 54
                                                               168.00
                                                                             187.59
                                                                                                                         3614.2
                                                                                                                                                      161.36
                                                  9.30
      100.00
                                                                         195.81
                   2 39 3 2252.61
                                                                                              96.78
                                                                                                         3 16 36
                                                                                                                         1652.6
                                                                                                                                       -32.28
                                                 -33.58
                                                                40.41
      110.00
                                                                                              96.78 3 16 36
57.98 18 57 35
                                                               154.30
                  17 49 55
                                                                             185.59
                                                                                                                         3459.9
                                                                                                                                         8.33
                                                                                                                                                       147.87
                                                 12.66
      110.00
                                 4059.92
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4244.0 SGR 256.2 SGS 134.0
RRT -.2518 RRF .0317 RTF .8229
SGB 4251.9 R23 -.2476 R13 -.8226
                                                                                                                     ST 1421.3 SR 224.6 55 396.1
    TOE 1.0900 TRA-2.5381 TC3-2.7566 BAU 1.0904
   RDE .2113 RRA .0899 RC3 .0793 FAU .04355
FOE .6375 FRA -.1603 FC3-1.2749 89P 14043
                                                                                                                     CRT .7232 CRS -.9754 CST -.8535
                                                                                                                     L5A 1471.4 M5A 249.4 35A 12.1
EL1 1430.7 EL2 154.1 ALF 6.60
    BOE 1.1103 BRA 2.5396 BC3 2.7578 FSP -473
                                                                   SG1 4244.5 SG2 249.8 THA 179.12
LAUNCH DATE JAN 7 1966
                                                                       FLIGHT TIME 142.00
                                                                                                                                 ARRIVAL DATE MAY 29 1966
                                                                      DISTANCE 430.503
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 27.242 GAL -6.75 AZL 84.75 HCA 216.24 SMA 124.94 ECC .21178 INC 5.2511 V1 30.287 RP 108.93 LAP -3.10 LOP 322.37 VP 37.074 GAP 9.79 AZP 94.24 TAL 206.96 TAP 63.19 RCA 98.48 APO 151.39 V2 34.789 RC 162.536 GL 28.01 GP -15.49 ZAL 127.85 ZAP 158.58 ETS 314.50 ZAE 128.64 ETE 192.93 ZAC 77.10 ETC 160.47 CLP-165.02
  PLANETOCENTRIC CONIC
   C3 27.798 VHL 5.272 DLA 15.49 RAL 324.14 RAD 6568.1 VEL 12.214 PTH 2.19 VHP 6.822 DPA -26.24 RAP 346.61 ECC 1.4575
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                          197.11
                                                                                           92.88 24 33 12
62.63 17 9 25
       90.00
                   23 46 34 2798.14
                                                 -28.18
                                                                81.69
                                                                                                                       2198.1
                                                                                                                                      -27,49
                                                                                                                                                       73.09
                   15 55 30
                                 4435.41
                                                   7.56
                                                               185.19
                                                                             189.36
                                                                                                                          3835.4
                                                                                                                                          3.64
                                                                                                                                                       178.49
       90.00
                                                                             197.01
                                                                                              94.13
                                                                                                         2 2 8
                                                                                                                          1908.4
                                                                                                                                        -28.74
                                                                                                                                                        51.58
      100.00
                    1 20 20 2508.41
                                                 -29.63
                                                                60.28
                                                                                              61.33 18 18 21
                                                                             188.68
                                                                                                                          3600.4
                                                                                                                                          4.95
                                                                                                                                                       160.60
      100.00
                  17 8 21
                                 4200.37
                                                   8.84
                                                               167.22
                    2 47 29
                                                 -33.44
                                                                            196.55
                                                                                              97.54
                                                                                                         3 24 45
                                                                                                                          1635.7
                                                                                                                                        -32.04
                                                                                                                                                        30.16
                                2235.71
                                                                39.11
                                                                                              97.54 3 24 45
57.80 19 5 7
      110.00
                                                                                                                                                       147.12
                  17 57 41
                                 4045.84
                                                 12.15
                                                               153.53
                                                                             186.70
                                                                                                                          3445.8
                                                                                                                                          7.81
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                   SGT 4261.1 SGR 272.4 SG3 130.8
                                                                                                                     57 1458.3 SR 239.0 55 416.3
    TOE 1.1167 TRA-2.3749 TC3-2.9249 BAU 1.0876
                                                                                                                   CRT .7697 CRS -.9879 CST -.8532
LSA 1513.8 MSA 255.5 SSA 12.8
EL1 1470.0 EL2 151.4 ALF 7.27
    RDE .2187 RRA .0732 RC3 .0989 FAU .04072
                                                                   RRT -.2190 RRF .0516 RTF .8063
   FOE .6485 FRA -.0733 FC3-1.2681 BSP 13223
BOE 1.1379 BRA 2.3761 BC3 2.9265 FSP -396
                                                                   SGB 4269.8 R23 -.2346 R13 -.8060
                                                                   3G1 4261.6 SG2 265.7 THA 179.19
```

```
ARRIVAL DATE MAY 31 1966
                                                                      FLIGHT TIME 144.00
LAUNCH DATE JAN 7 1966
                                                                      DISTANCE 436.170
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 27.167 GAL -6.34 AZL 85.00 HCA 219.40 SMA 124.46 ECC .21190 INC 5.0027 V1 30.287 RP 108.92 LAP -3.17 LOP 325.53 VP 37.021 GAP 9.94 AZP 93.87 TAL 205.07 TAP 64.47 RCA 98.08 APO 150.83 V2 34.792
   RC 164.699 GL 27.37 GP -14.29 TAL 126.33 TAP 159.95 ETS 315.36 TAE 129.05 ETE 192.05 TAC 78.93 ETC 161.64 CLP-165.78
  PLANETOCENTRIC CONIC
    C3 26.233 VHL 5.122 CLA 15.61 RAL 326.26 RAD 6568.1 VEL 12.149 PTM 2.18 VHP 6.865 DPA -24.20 RAP 348.43 ECC 1.4317 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                          93.24 24 40 21
62.49 17 18 41
                                                 -28.15
                                                                          198.17
                  23 53 53 2788.09
16 5 4 4416.67
1 27 45 2498.07
                                                               80.96
        90.00
                                                                                                                                         3.23
                                                                                                                                                      177.44
                                                                                                                         3816.7
                                                                             190.62
                                                  6.97
                                                               184.13
        90.00
                                                                                                     2 9 23
18 27 31
                                                                                                                                                       50.83
                                                                                                                         1898.1
                                                                                                                                       -28.64
                                                                59.51
                                                                             198.06
                                                                                              94.53
                                                 -29.58
       100.00
                                                                                                                                                      159.58
                                                                                                                                         4.33
                                                                             189.94
                                                                                              61.16
                                                                                                                         3581.9
                                                  8.24
                                                               166.19
                  17 17 49
                               4181.93
      100.00
                                                                                                      3 32 11
19 14 6
                                                                                                                                       -31.87
                                                                                                                                                       29.35
                                                                                              98.03
                                                                                                                         1624.8
                  2 55 6 2224.76
18 6 58 4028.00
                                                                             197.58
                                                                38.27
                                                 -33.34
       110.00
                                                                                                                         3428.0
                                                                                                                                         7.14
                                                                                              57.58
                                                               152.55
                                                                             187.98
                                                  11.50
      110.00
                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                     ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1466.9 SR 250.0 SS 413.4
                                                                   SGT 4353.1 SGR 281.4 SG3 130.9
    TOE 1.1029 TRA-2.2598 TC3-3.1690 BAU 1.1121
                                                                                                                     CRT .7973 CRS -.9932 CST -.8522
                                                                   RRT -. 1866 RRF . 0401 RTF . 8075
    RDE .2228 RRA .0541 RC3 .1117 FAU .03981
FOE .6219 FRA -.0329 FC3-1.3138 BSP 13668
BOE 1.1252 BRA 2.2605 BC3 3.1709 FSP -408
                                                                                                                     LSA 1523.4 MSA 253.7 55A 14.0
                                                                   5GB 4362.2 R23 -.1948 R13 -.8074
                                                                                                                     ELI 1480.5 ELZ 149.5 ALF
                                                                                                                                                         7.82
                                                                   SG1 4353.4 SG2 276.4 THA 179.31
                                                                                                                                ARRIVAL DATE JUN 2 1966
                                                                       FLIGHT TIME 146.00
LAUNCH DATE JAN 7 1966
                                                                      DISTANCE 441.832
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 27.093 GAL -5.92 AZL 85.21 MCA 222.56 SMA 123.99 ECC .21219 INC 4.7855 V1 30.287 RP 108.91 LAP -3.23 LOP 328.70 VP 36.971 GAP 10.09 AZP 93.53 TAL 203.18 TAP 65.73 RCA 97.68 APO 150.30 V2 34.796 RC 166.847 GL 26.81 GP -13.26 TAL 124.59 ZAP 161.19 ETS 315.99 ZAE 129.40 ETE 191.29 ZAC 80.85 ETC 162.66 CLP-166.53
   PLANETOCENTRIC CONIC
    C3 24.841 VHL 4.984 DLA 15.88 RAL 328.48 RAD 6568.0 VEL 12.092 PTH 2.16 VMP 6.918 DPA -22.32 RAP 350.31 ECC 1.4088 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -27.37
                                                                                             93.38 0 50 34
                   0 4 10 2784.38
16 16 26 4393.47
                                                                                                                        2184.4
                                                 -28.13
                                                                80.69
                                                                            199.48
        90.00
                                                                                                                          3793.5
                                                                                                                                          2.49
                                                                                                                                                      176.15
                                                                                              62.32 17 29 40
                                                               182.81
                                                                             192.06
                                                  6.24
        90.00
                   16 16 26
                                                                                                                          1893.7
                                                                                                                                        -28.59
                                                                                              94.70
                                                                                                        2 15 52
                                                 -29.55
                                                                 59.19
                                                                             199.36
                                 2493.67
                                                                                              60.98 18 38 18
98.28 3 39 4
57.35 19 24 28
       100.00
                    1 34 18
                                                                                                                          3559.4
                                                                                                                                          3.57
                                                                                                                                                      158.34
                                                   7.50
                                                               154.92
                                                                             191.38
       100.00
                    17 28 59
                                 4159.40
                    3 2 5
                                                                                                                                        -31.78
                                                                                                                         1619.0
                                                                 37.83
                                                                             198.86
       110.00
                                 2219.01
                                                 -33.28
                                                                                                                                          6.34
                                                                                                                          3406.8
                                                               151.40
                                                                            189.43
                   18 17 41
                                                 10.72
       110.00
                                 4006.83
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                   NID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1488.5 SR 261.7 SS 415.9
CRT .8273 CRS -.9964 CST -.8548
                                                                   SGT 4431.9 SGR 292.3 5G3 130.4
RRT -.1532 RRF .0384 RTF .8070
    TOE 1.1076 TRA-2.1315 TC3-3.4065 BAU 1.1321
    ROE .2273 RRA .0369 RC3 .1238 FAU .03855
FOE .6043 FRA .0119 FC3-1.3436 BSP 13936
                                                                                                                     LSA 1547.3 MSA 250.9 SSA 15.2
EL1 1504.4 EL2 145.5 ALF 8.35
                                                                   SGB 4441.5 R23 -.1645 R13 -.8069
                                                                   5G1 4432.1 5G2 288.9 THA 179.42
    BOE 1.1307 BRA 2.1318 BC3 3.4088 FSP -406
                                                                                                                                ARRIVAL DATE JUN 4 1966
                                                                       FLIGHT TIME 148.00
LAUNCH DATE JAN 7 1966
                                                                      DISTANCE 447.487
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 27.020 GAL -5.50 AZL 85.41 HCA 225.72 SMA 123.53 ECC .21267 INC 4.5929 V1 30.287 RP 108.89 LAF -3.29 LOP 331.87 VP 36.922 GAP 10.24 AZP 93.21 TAL 201.27 TAP 66.99 RCA 97.26 APO 149.81 V2 34.800 RC 168.980 GL 26.32 GP -12.38 ZAL 122.66 ZAP 162.32 ETS 316.39 ZAE 129.72 ETE 190.64 ZAC 82.86 ETC 163.57 CLP-167.27
   PLANE TOCENTRIC CONIC
     C3 23.600 VML 4.858 DLA 16.28 RAL 330.82 RAD 6568.0 VEL 12.041 PTH 2.15 VMP 6.980 DPA -20.55 RAP 352.24 ECC 1.3884
                                               INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZMTH LNCH TIME L-I TIME
                                                                                            -27.38
                                                                                                                                                       72.24
                                                                                                                       2186.3
                                                                            201.02
                                                  -28.14
                                                                80.83
        90.00
                     0 9 43 2786.30
                                                                                                                                                      174.63
                                                                                                                                          1.62
                                                                             193.70
                                                                                                                          3766.4
                                                    5.38
                                                               181.29
                   16 29 30
                                 4366.40
        90.00
                                                                                                                                                       50.58
                                                                                                                                        -28.60
                                                                                                                         1894.6
                                                                 59.25
                                                                             200.90
                                 2494.58
                                                  -29.56
                     1 40 11
       100.00
                                                                                                                                                      156.91
                                                               163.47
                                                                              193.01
                                                                                                                          3533.4
                                                                                                                                          2.69
                    17 41 43
                                                   6.64
                                 4133.36
       100.00
                                                                                                                                                       28.84
                                                                             200.41
                                                                                                                          1617.9
                                                                                                                                        -31.76
                                                                 37.74
                                                  -33.27
                     3 8 37 2217.86
       110.00
                                                                                                                                                      143.79
                                                                                                                          3382.8
                                                                                                                                          5.43
                    18 29 46
                                                                              191.07
                                                                150.11
                                 3982.85
                                                   9.84
       110.00
                                                                                                                      ORBIT DETERMINATION ACCURACY
                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                     ST 1518.0 SR 273.3 SS 419.8
CRT .8567 CRS -.9974 CST -.8600
                                                                   SGT 4508.1 SGR 303.8 SG3 129.6
RRT -.1196 RRF .0402 RTF .8073
SGB 4518.3 R23 -.1382 R13 -.8072
     TOE 1.1221 TRA-1.9963 TC3-3.6469 BAU 1.1514
     ROE .2316 RRA .0210 RC3 .1342 FAU .03726
FDE .5890 FRA .0548 FC3-1.3668 83P 14196
                                                                                                                     LSA 1579.4 MSA 246.0 SSA 16.4
EL1 1536.1 EL2 139.3 ALF 8.84
                                                                   SG1 4508.2 SG2 301.6 THA 179.54
     BOE 1.1458 BRA 1.9964 BC3 3.6494 FSP -404
                                                                                                                                 ARRIVAL DATE JUN 6 1966
                                                                        FLIGHT TIME 150.00
 LAUNCH DATE JAN 7 1966
                                                                       DISTANCE 453.136
    HELIOCENTRIC CONTC
    RL 147.10 LAL -.00 LOL 106.24 VL 26.949 GAL -5.06 A7L 85.58 MCA 228.88 SMA 123.09 ECC .21334 INC 4.4200 V1 30.287

RP 108.88 LAP -3.33 LOP 335.04 VP 36.874 GAP 10.40 A7P 92.91 TAL 199.36 TAP 68.23 RCA 96.83 APO 149.36 V2 34.805

RC 171.098 GL 25.86 GP -11.61 TAL 120.54 ZAP 163.37 ETS 316.58 ZAE 130.00 ETE 190.08 ZAC 84.93 ETC 164.37 CLP-168.01
    PLANETOCENTRIC CONIC
     C3 22.495 VML 4.743 DLA 16.78 RAL 333.28 RAD 6567.9 VEL 11.995 PTH 2.14 VMP 7.051 DPA -18.88 RAP 354.21 ECC 1.3702
                                                INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
     LNCH AZHTH LNCH TIME L-I TIME
                                                                                                                          2193.4
                                                                                                                                        -27.45
                                                                            202.80
                                                                                            93.05 i 1 12
62.00 17 56 28
                     0 14 38 2793.41
                                                  -28.17
                                                                81.34
                                                                                                          1 1 12
        90.00
                                                                                                                          3735.9
                                                                                                                                            .63
                                                                                                                                                       172.93
                                                    4.41
                                                                179.58
                                                                              195.54
                                  4335.93
                    16 44 12
         90.00
                                                                                                                                         -28.66
                                                                                                                                                        51.00
                                                                                               94.44
                                                                                                          2 27 12
                                                                                                                          1900.3
                     1 45 31
                                                  -29.59
                                                                 59.68
                                                                              202.69
                                 2500.33
        100.00
                                                                                               60.60 19 4 24
                                                                                                                          3504.2
                                                                                                                                           1.71
                                                                                                                                                       155.31
                                                    5.67
                                                                161.86
                                                                              194.85
                    17 56 O
                                  4104.25
        100.00
                                                                                                                                                        29.06
                                                                                               98.20 3 51 51
                                                                                                                          1620.9
                                                                                                                                         -31.81
                                                                              202.21
                      3 14 50 2220.90
                                                  -33.30
                                                                 37.98
        110.00
                                                                                                                                                      142.40
                                                                                                                                           4.43
                                                   8.86
                                                                148.69
                                                                              192.90
                                                                                               56.85
                                                                                                         19 49 7
                                                                                                                          3356.4
                    18 43 11
                                  3956.44
        110.00
                                                                    MID-COURSE EXECUTION ACCURACY
                                                                                                                      ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                      ST 1555.9 SR 284.9 SS 425.2
CRT .8848 CRS -.9965 CST -.8675
                                                                    SGT 4580.9 SGR 315.6 SG3 128.7

RRT - .0864 RRF .0453 RTF .8081

SGB 4591.8 R23 -.1159 R13 -.8081
     TOE 1.1459 TRA-1.8533 TC3-3.8877 BAU 1.1700
     RDE .2358 RRA .0064 RC3 .1431 FAU .03592
FDE .5761 FRA .0967 FC3-1.3823 BSP 14440
BOE 1.1700 BRA 1.8533 BC3 3.8904 FSP -402
                                                                                                                     LSA 1620.2 MSA 239.3 SSA 17.5
                                                                                                                      EL1 1576.3 EL2 131.1 ALF 9.27
                                                                    SG1 4581.0 SG2 314.5 THA 179.66
```

```
LAUNCH DATE JAN 7 1966
                                                                      FLIGHT TIME 152.00
                                                                                                                               ARRIVAL DATE JUN 8 1966
   HELIOCENTRIC CONIC
                                                                      CISTANCE 458.777
    RL 147.10 LAL -.00 LOL 106.24 VL 26.879 GAL -4.61 A7L 85.74 HCA 232.04 SMA 122.67 ECC .21421 INC 4.2629 V1 30.287 RP 108.86 LAP -3.36 LOP 338.21 VP 36.829 GAP 10.57 A7P 92.63 TAL 197.43 TAP 69.47 RCA 96.39 APO 148.94 V2 34.811 RC 173.196 GL 25.43 GP -10.95 ZAL 118.24 ZAP 164.34 ETS 316.57 ZAE 130.26 ETE 189.59 ZAC 87.06 ETC 165.09 CLP-168.73
   PLANETOCENTRIC CONIC
    C3 21.517 VHL 4.639 OLA 17.39 RAL 335.87 RAD 6567.9 VEL 11.954 PTH 2.13 VHP 7.128 DPA -17.29 RAP 356.22 ECC 1.3541 LNCH AZMTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                   0 19 2 2805.41
17 0 30 4302.42
                                                 -28.21
                                                                          204.83
                                                                                          92.61 1 5 48
                                                               82.22
        90.00
                                                                                                                     2205.4 -27.55
                                                                             197.61
        90.00
                                                  3.34
                                                               177.70
                                                                                             61.86
                                                                                                      18 12 13
                                                                                                                        3702.4
                                                                                                                                         -.45
                                                                                                                                                     171.07
                   1 50 27 2510.62
18 11 47 4072.44
       100.00
                                                                60.44
                                                                             204.73
                                                                                             94.04
                                                                                                       2 32 18
                                                                                                                        1910.6
                                                                                                                                       -28.77
                                                                                                                                                      51.75
       100.00
                  18 11 47
                                                   4.60
                                                               160.10
                                                                             196.92
                                                                                             60.43 19 19 39
                                                                                                                        3472.4
                                                                                                                                          .63
                                                                                                                                                     153.56
                  3 20 50 2227.84
18 57 53 3927.99
                                                                                                       3 57 58
                                                -33.37
                                                                38.51
                                                                             204.28
                                                                                             97.89
                                                                                                                        1627.8
                                                                                                                                       -31.92
                                                                                                                                                      29.58
                                                                                             56.61 20 3 21
       110.00
                                                              147.17
                                                                             194.95
                                                                                                                        3328.0
                                                                                                                                         3.35
                                                                                                                                                     140.91
   DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 4648.5 SGR 327.7 SG3 127.6
RRT -.0537 RRF .0540 RTF .8090
                                                                                                                    ST 1603.6 SR 296.5 SS 432.6
CRT .9110 CRS -.9939 CST -.8768
    TOE 1.1794 TRA-1.7009 TC3-4.1242 BAU 1.1872
    ROE .2400 RRA -.0069 RC3 .1502 FAU .03451
FOE .5661 FRA .1384 FC3-1.3884 B3P 14646
B0E 1.2035 BRA 1.7009 BC3 4.1270 FSP -397
                                                                                                                   L5A 1671.2 MSA 230.9 S5A 18.7
EL1 1626.3 EL2 120.5 ALF 9.61
                                                                  SGB 4660.0 R23 -.0978 R13 -.8090
                                                                  5G1 4648.5 5G2 327.2 THA 179.78
                                                                      FLIGHT TIME 154.00
                                                                                                                               ARRIVAL DATE JUN 10 1966
                                                                      DISTANCE 464.410
  HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 26.811 GAL -4.15 AZL 85.88 MCA 235.21 SMA 122.25 ECC .21529 INC 4.1187 VI 30.287
RP 108.84 LAP -3.38 LOP 341.38 VP 36.785 GAP 10.74 AZP 92.35 TAL 195.50 TAP 70.71 RCA 95.93 APO 148.57 V2 34.817
    RC 175.278 GL 24.99 GP -10.36 7AL 115.75 7AP 165.25 ET8 316.35 7AE 130.50 ETE 189.16 7AC 89.24 ETC 165.73 CLP-169.45
   PLANETOCENTRIC CONIC
    C3 20.661 VHL 4.545 OLA 18.07 RAL 338.61 RAO 6567.8 VEL 11.918 PTH
                                                                                               2.12 VHP 7.213 DPA -15.76 RAP 358.25 ECC 1.3400
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 23 1 2822.09 -28.25 83.44 207.11 92.00 1 10 3 2222.1 -27.67 74.82
                   17 18 25 4266.23
       90.00
                                                  2.18
                                                              175.68
                                                                                             61.76 18 29 31
                                                                             199.93
                                                                                                                                        -1.62
                 1 55 4 2525.24
18 29 2 4038.32
3 26 44 2238.44
19 13 52 3897.87
      100.00
                                                 -29.71
                                                                61.52
                                                                            207.03
                                                                                                         2 37 9
                                                                                             93.48
                                                                                                                        1925.2
                                                                                                                                       -28.91
                                                                                                                                                      52.81
      100.00
                                                  3.45
                                                                            199.22
                                                                                             60.29 19 36 21
                                                              158.21
                                                                                                                        3438.3
                                                                                             97.42 4 4 2
56.39 20 18 50
      110.00
                                                -33.46
                                                                39.32
                                                                            206.61
                                                                                                                        1638.4
                                                                                                                                       -32.08
      110.00
                                                                           197.23
                                                 6.66
                                                              145.58
                                                                                                                        3297.9
                                                                                                                                       2.20
                                                                                                                                                     139.33
  DIFFERENTIAL CORRECTIONS
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                  SGT 4716.6 SGR 359.3 SG3 126.5
RRT -.0219 RRF .0629 RTF .8114
SGB 4728.8 R23 -.0808 R13 -.8114
    TOE 1.2182 TRA-1.5422 TC3-4.3595 BAU 1.2049
                                                                                                                    ST 1657.9 SR 307.7 SS 439.4 CRT .9340 CRS -.9899 CST -.8870
    ROE .2440 RRA -.0190 RC3 .1552 FAU .03317
                                                                                                                   LSA 1728.3 MSA 220.7 SSA 19.9
    FOE .5557 FRA .1775 FC3-1.3901 BSP 14894
    BOE 1.2424 BRA 1.5424 BC3 4.3623 FSP -396
                                                                  SG1 4716.6 SG2 339.2 THA 179.91
                                                                                                                    EL1 1682.7 EL2 108.3 ALF
                                                                                                                                                        9.87
                                                                     FLIGHT TIME 156.00
                                                                                                                              ARRIVAL DATE JUN 12 1966
LAUNCH DATE JAN 7 1986
                                                                    DISTANCE 470.033
  HELIOCENTRIC' CONTC.
   RL 147.10 LAL -.00 LOL 106.24 VL 26.743 GAL -3.68 A7L 86.01 HCA 238.37 SMA 121.84 ECC .21659 INC 3.9852 V1 30.287 RP 108.82 LAP -3.39 LOP 344.55 VP 36.742 GAP 10.92 A7P 92.09 TAL 193.56 TAP 71.93 RCA 95.45 APO 148.25 V2 34.824 RC 177.341 GL 24.55 GP -9.84 ZAL 113.09 ZAP 166.11 ETS 315.92 ZAE 130.74 ETE 188.79 ZAC 91.46 ETC 166.30 CLP-170.15
  PLANETOCENTRIC CONIC
    C3 19.924 VHL 4.464 DLA 18.83 RAL 341.51 RAD 6567.8 VEL 11.887 PTH 2.11 VHP 7.306 DPA -14.28 RAP
                                                                                                                                          .31 ECC 1.3279
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ. RT.ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                        91.23 1 14 1
61.70 18 48 22
92.75 2 41 51
60.18 19 54 29
96.79 4 10 9
56.21 20 35 33
                                                                                                                                   -27.82
                    0 26 38 2843.32
                                                -28.29
                                                              84.99 , 209.66
                                                                                                                     2243.3
                                                                                                                                                     76.35
       90.00
                                                                         202.50
       90.00
                  17 37 55 4227.66
                                                   .93
                                                              173.52
                                                                                                                       3627.7
                                                                                                                                      -2.86
                                                                                                                                                    166.89
                   1 59 27 2544.00
                                                -29.78
                                                               62.91
                                                                           209.60
                                                                                                                       1944.0
                                                                                                                                     -29.08
                                                                                                                                                     54.18
      100.00
      100.00
                 18 47 47 4002.21
                                                  2.23
                                                              156.23
                                                                           201.78
                                                                                                                       3402.2
                                                                                                                                      -1.75
                                                                                                                                                    149.71
                                                                          209.23
                3 32 37 2252.52
19 31 6 3866.45
                                                -33.58
                                                               40.40
                                                                                                                        1652.5
                                                                                                                                     -32.28
                                                                                                                                                     31 41
                                                              143.92
                                                                           199.76
                                                                                                                       3266.5
                                                                                                                                       1.00
                                                                                                                                                    137.69
                                                  5.48
  DIFFERENTIAL CORRECTIONS
                                                                MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                 SGT 4781.4 SGR 350.7 SG3 125.2
RRT .0087 RRF .0737 RTF .8143
SGB 4794.2 R23 .0666 R13 .8143
SGI 4781.4 SGZ 350.7 THA .04
                                                                                                                  ST 1720.3 SR 318.8 SS 447.0 CRT .9536 CRS -.9847 CST -.8978
    TOE 1.2637 TRA-1.3747 TC3-4.5851 BAU 1.2220
    ROE .2481 RRA -.0299 RC3 .1581 FAU .03181
   FOE .5466 FRA .2159 FC3-1.3822 BSP 15135
                                                                                                                  LSA 1793.5 MSA 209.4 SSA 21.2
   BOE 1.2879 BRA 1.3751 BC3 4.5878 FSP
                                                   -393
                                                                                                                  EL1 1747.0 EL2 94.5 ALF 10.05
LAUNCH DATE JAN 7 1966
                                                                      FLIGHT TIME 158.00
                                                                                                                              ARRIVAL DATE JUN 14 1966
                                                                     OISTANCE 475.646
   RL 147.10 LAL -.00 LOL 106.24 VL 26.677 GAL -3.20 AZL 86.14 HCA 241.54 SMA 121.45 ECC .21812 INC 3.8605 V1 30.287 RP 108.79 LAP -3.39 LOP 347.73 VP 36.701 GAP 11.11 AZP 91.84 TAL 191.62 TAP 73.15 RCA 94.96 APO 147.94 V2 34.832 RC 179.385 GL 24.09 GP -9.38 ZAL 110.26 ZAP 166.92 ETS 315.27 ZAE 130.96 ETE 188.47 ZAC 93.71 ETC 166.81 CLP-170.85
  PLANETOCENTRIC CONIC
   C3 19.306 VHL 4.394 DLA 19.65 RAL 344.57 RAD 6567.8 VEL 11.861 PTH 2.10 VMP 7.405 DPA -12.85 RAP 2.39 ECC 1.3177
                                              INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
   LNCH AZMTH LNCH TIME L-I TIME
                                                                         212.47
                                                                                         90.29 1 17 46
61.69 19 8 48
                                                                                                                                    -27.98
                                                                                                                        2269.0
       90.00
                   0 29 57 2868.99
                                                -28.32
                                                              86.87
                                                                                                       1 17 46
                                                                                                                                                     78.22
       90.00
                  17 59 1
                                 4187.05
                                                 -.38
                                                              171.26
                                                                           205.36
                                                                                                                        3587.0
                                                                                                                                      -4.16
                                                                                                                                                    164.62
                                                                                            2 3 40 2566.78
                                                -29.84
                                                               64.60
                                                                         212.44
                                                                                                                        1966.8
                                                                                                                                     -29.26
                                                                                                                                                     55.A5
      100.00
                 19 7 58
                                 3964.49
                                                  .95
                                                              154.16
                                                                           204.62
                                                                                                                        3364.5
                                                                                                                                      -3.03
                                                                                                                                                    147.64
      100.00
                   3 38 33
                               2269.90
                                                -33.71
                                                               41.74
                                                                           212.13
                                                                                                                        1669.9
                                                                                                                                     -32.52
                                                                                                                                                     32.71
      110.00
      110.00
                 19 49 34
                                3834.13
                                                 4.25
                                                              142.22
                                                                            202.56
                                                                                                                        3234.1
                                                                                                                                       - .24
                                                                                                                                                    136.01
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                  ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                                                                  ST 1790.9 SR 329.7 SS 454.8
CRT .9697 CRS -.9784 CST -.9086
                                                                SGT 4842.6 SGR 361.7 SG3 123.9
RRT .0385 RRF .0860 RTF .8178
SGB 4856.0 R23 .0543 R13 .8178
    TOE 1.3158 TRA-1.1975 TC3-4.7953 BAU 1.2383
   ROE .2525 RRA -.0393 RC3 .1587 FAU .03046
FOE .5384 FRA .2539 FC3-1.3658 8SP 15362
BOE 1.3398 BRA 1.1981 BC3 4.7979 FSP -391
                                                                                                                  LSA 1866.4 MSA 197.4 SSA 22.5
                                                                 SG1 4842.6 SG2 361.5 THA .17
                                                                                                                  EL1 1819.3 EL2 79.3 ALF 10.14
```

```
ARRIVAL CATE JUN 16 1966
                                                                               FLIGHT TIME 160.00
LAUNCH DATE JAN 7 1966
                                                                               DISTANCE 481.247
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 26.612 GAL -2.70 A7L 86.26 MCA 244.71 SHA 121.07 ECC .21990 INC 3.7429 VI 30.287 RP 108.77 LAP -3.38 LOP 350.91 VP 36.662 GAP 11.31 A7P 91.60 TAL 189.66 TAP 74.37 RCA 94.44 APO 147.69 V2 34.840 RC 181.409 GL 23.59 GP -8.98 TAL 107.26 TAP 167.69 ETS 314.40 TAE 131.18 ETE 188.18 TAC 96.00 ETC 167.27 CLP-171.54
   PLANETOCENTRIC CONIC
    C3 18.810 VHL 4.337 DLA 20.50 RAL 347.80 RAD 6567.8 VEL 11.840 PTH 2.10 VMP 7.512 DPA -11.45 RAP 4.49 ECC 1.3096 LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                                       -28.12
                                                                                     215.57
                                                                                                      89.18
                                                                                                                       1 21 20
                                                       -28.31
                                                                       89.06
                       0 33 1 2899.02
        90.00
                                                                                                                                                                          162.24
                                                                                                          61.73 19 30 46
                                                                                                                                         3544.7
                                                                                                                                                         -5.51
                                                        -1.74
                                                                       168.90
                                                                                       208.51
                     18 21 41
                                     4144.74
         90.00
                                                                                                          90.82 2 51 1
60.11 20 35 1
95.08 4 22 50
55.93 21 12 35
                                                                                                                                         1993.4
                                                                                                                                                         -29.45
                                                                                                                                                                           57.80
                      2 7 48 2593.41
                                                        -29.88
                                                                        66.58
                                                                                       215.57
       100.00
                                                                                                                                                                         145.49
                                                                                                                                         3325.6
                                                                                                                                                         -4.34
                                     3925.59
                                                          -.37
                                                                      152.02
                                                                                       207.74
                    19 29 36
       100.00
                                                                                                                                                                           34.25
                                                                                                                                         1690.4
                                                                                                                                                        -32.78
                    3 44 39 2290.38
20 9 14 3801.38
                                                        -33.85
                                                                        43.33
                                                                                       215.33
       110.00
                                                                                                                                       3201.4
                                                                                                                                                         -1.49
                                                                                                                                                                         134.30
                                                                       140.50
                                                                                       205.64
                                                        3.00
       110.00
                                                                           HID-COURSE EXECUTION ACCURACY
                                                                                                                                     ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                          SGT 4895.6 SGR 372.4 SG3 122.4
RRT .0678 RRF .1010 RTF .8208
SGB 4909.7 R23 .0452 R13 .8208
SGI 4895.6 SG2 371.6 THA .30
                                                                                                                                    ST 1871.1 SR 340.7 SS 463.8
CRT .9820 CRS -.9711 CST -.9192
LSA 1948.6 MSA 185.4 SSA 23.7
    TOE 1.3756 TRA-1.0077 TC3-4.9779 BAU 1.2524
    ROE .2574 RRA -.0473 RC3 .1573 FAU .02902
    FOE .5320 FRA .2930 FC3-1.3358 BSP 15512
BOE 1.3994 BRA 1.0089 BC3 4.9804 FSP -385
                                                                                                                                     ELI 1900.8 EL2 63.3 ALF 10.15
                                                                                                                                                 ARRIVAL DATE JUN 18 1966
                                                                                FLIGHT TIME 162.00
LAUNCH DATE JAN 7 1966
                                                                                DISTANCE 486.833
    RL 147.10 LAL -.00 LOL 106.24 VL 26.548 GAL -2.19 A7L 86.37 MCA 247.88 SMA 120.69 ECC .22193 INC 3.6313 VI 30.287 RP 108.74 LAP -3.36 LOP 354.08 VP 36.624 GAP 11.51 A7P 91.37 TAL 187.71 TAP 75.59 RCA 93.91 APO 147.48 V2 34.849 RC 183.413 GL 23.03 GP -8.61 ZAL 104.10 ZAP 168.42 ETS 313.29 ZAE 131.39 ETE 187.93 ZAC 98.30 ÈTC 167.68 CLP-172.23
   HELIOCENTRIC CONIC
   PLANETOCENTRIC CONIC
                                                                                                             2.09 VHP 7.627 OPA -10.09 RAP
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 35 54 2933.28 -28.25 91.57 218.94 87.93 1 24 47 2333.3 -28.24 82.90 90.00 18 45 55 4101.16 -3.15 166.46 211.96 61.84 19 54 16 3501.2 -6.89 159.78
    C3 18.440 VHL 4.294 DLA 21.39 RAL 351.20 RAD 6567.7 VEL 11.825 PTH
                                                                                                                                          2023.7
                                                                                                                                                          -29.62
                                                                                                                        2 55 39
                       2 11 55 2623.69
19 52 35 3885.98
3 51 0 2313.71
                                                                                                           89.64
                                                        -29.89
                                                                         68.83
                                                                                       218.98
        100.00
                                                                                                           60.15 20 57 21
                                                                                                                                          3286.0
                                                                                                                                                           -5.67
                                                                                                                                                                           143.30
                                                                                     211.16
                                                         -1.71
                                                                        149.85
                     19 52 35
        100.00
                                                                                                                      4 29 33
                                                                                                                                          1713.7
                                                                                                                                                          -33.05
                                                                                                                                                                            36.02
                                                                                                           94.01
                                                        -33.98
                                                                         45.14
                                                                                       218.82
        110.00
                                                                                                           55.86 21 32 48
                                                                                                                                          3168.7
                                                                                                                                                           -2.74
                                                                                                                                                                           132.59
                      20 29 59
                                                                       138.80
                                                                                        209.00
                                                        1.76
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                     ST 1952.6 SR 351.4 S5 470.8
CRT .9904 CRS -.9631 CST -.9287
                                                                            SGT 4950.2 SGR 382.4 SG3 121.0
RRT .0956 RRF .1153 RTF .8254
     TOE 1.4365 TRA -.8109 TC3-5.1391 BAU 1.2675
     ROE .2628 RRA -.0539 RC3 .1532 FAU .02770
                                                                           SGB 4964.9 RZ3 .0361 R13 .8254
SGI 4950.3 SGZ 380.6 THA .43
    FOE .5242 FRA .3300 FC3-1.3003 BSP 15725
BDE 1.4603 BRA .8127 BC3 5.1414 FSP -382
                                                                                                                                     LSA 2031.5 MSA 173.8 SSA 25.0
                                                                                                                                     ELI 1983.4 EL2 47.8 ALF 10.11
                                                                                                                                                 ARRIVAL DATE JUN 20 1966
                                                                                 FLIGHT TIME 164.00
LAUNCH DATE JAN 7 1966
                                                                                DISTANCE 492.405
    RL 147.10 LAL -.00 LOL 106.24 VL 26.486 GAL -1.66 AZL 86.48 HCA 251.05 SHA 120.33 ECC .22425 INC 3.5245 V1 30.287 RP 108.71 LAP -5.33 LOP 357.26 VP 36.587 GAP 11.73 AZP 91.15 TAL 185.75 TAP 76.80 RCA 93.35 APO 147.31 V2 34.858 RC 185.395 GL 22.43 GP -8.28 ZAL 100.80 ZAP 169.11 ETS 311.91 ZAE 131.60 ETE 187.72 ZAC 100.63 ETC 168.04 CLP-172.90
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 18.203 VHL 4.266 DLA 22.28 RAL 354.76 RAD 6567.7 VEL 11.815 PTH 2.09 VHP 7.751 DPA -8.76 RAP
                                                                                                                                                             8.75 ECC 1.2996
     LNCH AFMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AFMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 38 38 2971.63 -28.12 94.37 222.58 86.53 1 28 10 2371.6 -28.31 85.71 90.00 19 11 36 4056.75 -4.57 163.98 215.73 62.02 20 19 13 3456.7 -8.28 157.26 100.00 2 16 6 2657.37 -29.85 71.34 222.67 88.32 3 0 23 2057.4 -29.76 62.53 100.00 20 16 50 3846.23 -3.06 147.67 214.89 60.25 21 20 56 3246.2 -6.99 141.09
                                                                                                                                          1739.6
                                                                                                           92.82
                                                                                                                      4 36 40
                        3 57 40 2339.59
20 51 45 3736.78
                                                         -34.08
                                                                          47.15
                                                                                        222.62
        110.00
                                                                                                            55.82 21 54 2
                                                                                                                                          3136.8
                                                                                                                                                           -3.95
                                                                                                                                                                           130.92
                                                                        137.13
                                                                                        212.65
                      20 51 45
        110.00
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                           MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                      ST 2037.1 SR 362.1 SS 477.2
CRT .9954 CRS -.9546 CST -.9373
LSA 2116.9 M5A 163.3 SSA 26.1
                                                                             RRT .1227 RRF .1309 RTF .8304
SGB 5016.5 R23 .0286 R13 .8305
     TOE 1.5008 TRA -. 6037 TC3-5.2648 BAU 1.2817
     ROE .2689 RRA -.0590 RC3 .1468 FAU .02638
FDE .5166 FRA .3669 FC3-1.2547 8SP 15932
BDE 1.5247 8RA .6066 BC3 5.2668 FSP -380
                                                                                                                                      EL1 2068.7 EL2 34.3 ALF 10.04
                                                                             SG1 5001.4 SG2 388.7 THA
                                                                                                                   .55
                                                                                                                                                  ARRIVAL DATE JUN 22 1966
                                                                                 FLIGHT TIME 166.00
 LAUNCH DATE JAN 7 1966
                                                                                 DISTANCE 497.959
     RL 147.10 LAL -.00 LOL 106.24 VL 26.424 GAL -1.11 A7L 86.58 MCA 254.22 SMA 119.98 ECC .22686 INC 3.4217 V1 30.287 RP 108.68 LAP -3.29 LOP .44 VP 36.552 GAP 11.97 A7P 90.93 TAL 183.79 TAP 78.01 RCA 92.76 APO 147.19 V2 34.868 RC 187.357 GL 21.75 GP -7.99 ZAL 97.37 ZAP 169.76 ETS 310.24 ZAE 131.80 ETE 187.52 ZAC 102.98 ETC 168.36 CLP-173.57
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
      C3 18.106 VHL 4.255 DLA 23.16 RAL 358.48 RAD 6567.7 VEL 11.811 PTH 2.09 VHP 7.884 DPA -7.46 RAP 10.90 ECC 1.2980
                                                       INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
      LNCH AZMTH LNCH TIME L-I TIME
                                                                                                                                                         -28.31
                                                                                                                                                                             88.79
                                                                                                                         1 31 30
                                                                                                                                          2413.9
                                                                                         226.49
                                                                                                            85.01
                       0 41 16 3013.86
19 38 41 4012.02
                                                         -27.91
                                                                          97.44
                                                                                                                                                                           154.70
                                                                                                            62.27 20 45 33
                                                                                                                                           3412.0
                                                                                                                                                            -9.66
                                                                                         219.81
                                                                         161.46
           90.00
                       19 38 41
                                                         -5.99
                                                                                                                                                           -29.86
                                                                                                                                                                             65.26
                                                                                                                         3 5 20
                                                                                                                                           2094.1
                                                                                                            86.89
                                                                          74.06
                                                                                         226.64
                       2 20 26 2694.13
                                                         -29.74
                                                                                                                                                                           138.90
                                                                                         218.93
                                                                                                            60.40 21 45 39
                                                                                                                                           3207.0
                                                                                                                                                            -8.29
                      20 42 12
                                       3806.98
                                                         -4.38
                                                                         145.51
         100.00
                                                                                                                                                                             40.15
                                                                                                                        4 44 15
                                                                                                                                           1767.7
                                                                                                                                                           -33.56
                                                                                                            91.53
                        4 4 47
                                                                          49.34
                                                                                         226.71
                                       2367.67
                                                        -34.15
         110.00
                                                                                                            55.82 22 16 7
                                                                                                                                                                            129.32
                                                                                                                                                            -5.11
                                                                                                                                          3106.2
                                                                         135.54
                                                                                         216.60
         110.00
                      21 14 21
                                       3706.20
                                                          -.64
                                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                            MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                             SGT 5043.3 SGR 400.5 SG3 117.8
RRT .1493 RRF .1486 RTF .8348
SGB 5059.2 R23 .0235 R13 .8348
SGI 5043.7 SG2 395.9 THA .68
                                                                                                                                     ST 2124.7 SR 372.7 S5 483.7
CRT .9973 CRS -.9455 CST -.9449
      TOE 1.5697 TRA -.3821 TC3-5.3403 BAU 1.2931
      ROE .2760 RRA -.0624 RC3 .1384 FAU .02499
FOE .5099 FRA .4058 FC3-1.1947 BSP 16042
BOE 1.5938 BRA .3871 BC3 5.3421 FSP -374
                                                                                                                                     LSA 2205.1 MSA 154.8 SSA 26.9
EL1 2157.0 EL2 27.1 ALF 9.92
```

LAUNCH SATE JAN 7 1966

```
HELISCENTRIC CONIC
                                                                                         CISTANCE 503.493
      RL 147.10 LAL -.00 LGL 106.24 VL 26.364 GAL -.55 AZL 86.68 MCA 257.40 SMA 119.63 ECC .22978 INC 3.3220 V1 30.287
RP 108.65 LAP -3.24 LOP 3.62 VP 36.519 GAP 12.21 AZP 90.73 TAL 181.83 TAP 79.23 RCA 92.14 APO 147.12 V2 34.878
RC 189.297 GL 21.01 GP -7.72 ZAL 93.83 ZAP 170.38 ETS 308.25 ZAE 132.01 ETE 187.35 ZAC 105.35 ETC 168.64 CLP-174.24
    PLANETOCENTRIC CONIC
     C5 18.160 VHL 4.261 CLA 24.02

LNCH AZMTH LNCH TIME L-1 TIME

90.00 0 43 52 3059.65

90.00 20 6 57 3967.61

100.00 2 25 2 2733.47

100.00 21 8 28 3769.02

110.00 4 12 26 2397.47

110.00 21 37 34 3677.79
     C3 18.160 VHL 4.261 CLA 24.02 RAL 2.35 RAC 6567.7 VEL 11.813 PTH 2.09 VHP 8.027 CPA
                                                                                                                                                              -6.18 RAP 13.06 FCC 1.2989
                                                           RAL 2.35 RAC 6567.7 VEL 11.813 PTM 2.09 VMP 8.027 CPA -6.18 RAP 13.06 ECC 1.2989
INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
-27.59 100.75 230.65 83.37 1 34 52 2459.7 -28.22 92.14
-7.39 158.95 224.20 62.59 21 13 5 3367.6 -11.01 152.13
-29.56 76.97 230.87 85.37 3 10 35 2133.5 -29.89 68.18
-5.65 143.41 223.25 60.60 22 11 17 3169.0 -9.53 136.76
-34.18 51.67 231.08 90.15 4 52 23 1797.5 -33.78 42.45
-1.72 134.06 220.82 55.85 22 38 52 3077.8 -6.19 127.82
    CIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5091.3 SGR 408.1 SG3 115.9

RRT .1737 RRF .1639 RTF .8423

SGB 5107.6 R23 .0170 R13 .8424

SGI 5091.8 SGZ 401.9 THA .80
                                                                                                                                                   5T 2198.2 5R 382.8 55 484.8
CRT .9966 CRS -.9362 CST -.9514
     TOE 1.6309 TRA -.1586 TC3-5.3843 BAU 1.3076
    ROE .2839 RRA -.0647 RC3 .1274 FAU .02378
FCE .4991 FRA .4386 FC3-1.1338 83P 16322
BOE 1.6554 BRA .1713 BC3 5.3858 F3P -375
                                                                                                                                                   LSA 2278.4 MSA 147.5 SSA 27.5
EL1 2231.0 EL2 31.3 ALF 9.85
LAUNCH DATE JAN 7 1966
                                                                                          FLIGHT TIME 170.00
                                                                                                                                                                   ARRIVAL DATE JUN 26 1966
   HELIOCENTRIC CONIC
                                                                                         DISTANCE 509.005
    PLANETOCENTRIC CONIC
                     0 46 29 3108.63
20 36 13 3924.19
2 30 1 2774.83
21 35 22 3733.21
4 20 43 2428.46
                                                                                                                       60.83 22 37 35
                                                                                             227.86
        100.00
                                                               -6.84
                                                                                141.42
                                                                                                                                                          3133.2
                                                                                                                                                                            -10.68
                                                                                                                                                                                               134.73
                                                                                               235.71
                                                                                                                       88.72 5 1 12
55.91 23 2 1
                                                              -34.16
        110.00
                                                                                  54.09
                                                                                                                                                          1828.5
                                                                                                                                                                            -33.96
                                                                                                                                                                                                 44.85
                       22 1 9 3652.35
        110.00
                                                                                132.73
                                                                                                  225.29
                                                                                                                                                          3052.4
                                                                                                                                                                              -7.15
                                                                                                                                                                                               126.47
   DIFFERENTIAL CORRECTIONS
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                  SGT 5125.9 SGR 415.9 SG3 114.6

RRT .2008 RRF .1889 RTF .8460

SGB 5142.7 R23 .0182 R13 .8461

SGI 5126.6 SG2 407.4 THA .94
                                                                                                                                                    5T 2288.9 SR 393.7 SS 493.9
CRT .9936 CRS -.9267 CST -.9576
     TOE 1.7091 TRA .0951 TC3-5.3497 BAU 1.3146
     ROE .2937 RRA -. 0644 RC3 .1158 FAU .02232
    FOE .4975 FRA .4826 FC3-1.0514 BSP 16274
BOE 1.7342 BRA .1148 BC3 5.3510 FSP -362
                                                                                                                                                   LSA 2369.9 MSA 144.7 SSA 27.4
                                                                                                                                                    EL1 2322.1 EL2 43.8 ALF
                                                                                                                                                                                                    9.70
                                                                                         FLIGHT TIME 172.00
                                                                                                                                                                 ARRIVAL DATE JUN 28 1966
LAUNCH DATE JAN 7 1966
                                                                                        01STANCE 514.490
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOU 106.24 VL 26.247 GAL .65 A7L 86.87 HCA 263.76 SMA 118.97 ECC .23669 INC 3.1290 V1 30.287 RP 108.58 LAP -3.11 LOP 9.99 VP 36.455 GAP 12.76 A7P 90.34 TAL 177.91 TAP 81.67 RCA 90.81 APO 147.13 V2 34.900 RC 193.113 GL 19.31 GP -7.26 ZAL 86.52 ZAP 171.50 ETS 303.15 ZAE 132.40 ETE 187.07 ZAC 110.12 ETC 169.08 CLP-175.57
   PLANETOCENTRIC CONTC
    C3 18.772 VHL 4.333 OLA 25.55 RAL 10.45 RAD 6567.8 VEL 11.839 PTH 2.10 VHP 8.346 OPA -3.69 RAP 17.43 ECC 1.3089
    C3 18.772 VHL 4.333 DLA 25.55 RAL 10.45 RAD 6567.8 VEL 11.839 PTH 2.10 VHP 8.346 DPA -3.69 RAP 17.43 ECC 1.3089 LNCH A7HTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7HTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 0 49 13 3160.28 -26.60 107.94 239.60 79.90 1 41 53 2560.3 -27.72 99.46 90.00 21 6 12 3882.53 -10.03 154.08 233.83 63.38 22 10 54 3282.5 -13.52 147.15 100.00 2 35 33 2817.49 -28.94 83.14 240.02 82.18 3 22 30 2217.5 -29.72 74.42 100.00 22 2 33 3700.56 -7.92 139.59 232.71 61.08 23 4 14 3100.6 -11.72 132.86 110.00 4 29 47 2460.07 -34.09 56.55 240.58 87.26 5 10 47 1860.1 -34.09 47.31 110.00 22 24 48 3630.74 -3.52 131.60 230.00 55.98 23 25 19 3030.7 -7.96 125.33
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                   SCT 5157.7 SGR 421.6 SG3 112.6

RRT .2228 RRF .2035 RTF .8525

SGB 5174.9 R23 .0127 R13 .8525

SG1 5158.6 SG2 411.0 THA 1.05
                                                                                                                                                   ST 2338.4 SR 402.7 S5 489.5
CRT .9889 CR5 -.9154 CST -.9614
    TOE 1.7615 TRA .3447 TC3-5.2784 BAU 1.3249
    ROE .3038 RRA -.0630 RC3 .1021 FAU .02110
FOE .4831 FRA .5190 FC3 -.9731 85P 16461
BOE 1.7875 BRA .3504 BC3 5.2794 FSP -360
                                                                                                                                                   LSA 2418.3 MSA 143.6 SSA 27.0
EL1 2372.0 EL2 58.9 ALF 9.67
LAUNCH DATE JAN 7 1966
                                                                                         FLIGHT TIME 174.00
                                                                                                                                                                  ARRIVAL DATE JUN 30 1966
   HELIOCENTRIC CONIC
                                                                                        DISTANCE 519.945
    DISTANCE 519.945 ;

RL 147.10 LAL -.00 LOL 106.24 VL 26.190 GAL 1.28 AZL 86.97 MCA 266.94 SMA 118.65 ECC .24072 INC 3.0345 V1 30.287

RP- 108.55 LAP -3.03 LOP 13.18 VP 36.425 GAP 13.06 AZP 90.16 TAL 175.96 TAP 82.90 RCA 90.09 APO 147.22 V2 34.912

RC 194.989 GL 18.36 GP -7.06 ZAL 82.81 ZAP 172.00 ETS 299.96 ZAE 132.59 ETE 186.96 ZAC 112.52 ETC 169.23 CLP-176.23
   PLANETOCENTRIC CONIC
    C3 19.364 VHL 4.400 DLA 26.20 RAL 14.62 RAD 6567.8 VEL 11.864 PTH 2.10 VHP 8.524 OPA -2.48 RAP 19.63 ECC 1.3187
    LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ AT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                      0 52 13 3213.78
21 36 28 3843.68
2 41 49 2860.42
22 29 33 3672.27
                                                                                              244.34
                                                                                                                                                                        -27.28
                                                                                                                                                                                          103.31
                                                                                                                                     1 45 46
                                                                                                                      78.14
         90.00
                                                             -25.90
                                                                                                                                                         2613.8
                                                                               111.71
                                                                                                                       63.82 22 40 32
         90.00
                                                                               151.43
                                                                                                239.01
                                                                                                                                                         3243.7
                                                                                                                                                                           -14.63
                                                                                                                                                                                             144.83
                                                             -11.20
                                                                                 86.26
                                                                                                                                     3 29 29
                                                                                                                                                         2260.4
                                                                                                                                                                                               77.60
        100.00
                                                            -28.50
                                                                                                 244.89
                                                                                                                       80.59
                                                                                                                                                                           -29.51
                                                                                                                      61.33 23 30 45
85.82 5 21 13
56.04 23 48 23
        100.00
                                                             -8.85
                                                                               138.01
                                                                                                237.77
                                                                                                                                                         3072.3
                                                                                                                                                                           -12.61
                                                                                                                                                                                            131.24
                        4 39 42 2491.60
22 48 9 3613.86
                                                            -33.96
                                                                                 59.01
                                                                                                245.65
                                                                                                                                                         1891.6
                                                                                                                                                                                              49.77
        110.00
                                                                                                                                                                           -34.16
                      22 48 9
                                                                               130.71
                                                                                                 234.90
                                                                                                                                                         3013.9
                                                                                                                                                                             -8.59
        110.00
                                                             -4.16
                                                                                                                                                                                              124.43
   DIFFERENTIAL CORRECTIONS
                                                                                   MID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                   SGT 5188.9 SGR 426.8 SG3 110.7
RRT .2455 RRF .2222 RTF .8591
SGB 5206.4 R23 .0103 R13 .8591
SGI 5189.9 SG2 413.7 THA 1.16
                                                                                                                                                   ST 2382.2 SR 411.5 SS 486.6
CRT .9827 CRS -.9041 CST -.9651
    TOE 1.8151 TRA .6103 TC3-5.1514 BAU 1.3338
    ROE .3154 RRA -.0598 RC3 .0877 FAU .01988
FOE .4716 FRA .5573 FC3 -.8887 BSP 16618
                                                                                                                                                   LSA 2461.5 MSA 145.5 SSA 26.1
    BOE 1.8423 BRA .6132 BC3 5.1521 FSP -357
                                                                                                                                                    EL1 2416.3 EL2 75.1 ALF 9.64
```

FLIGHT TIME 168.00

ARRIVAL CATE JUL 2 1966

```
FLIGHT TIME 176.00
LAUNCH DATE JAN 7 1966
    RL 147.10 LAL -.00 LOL 106.24 VL 26.134 GAL 1.94 A7L 87.06 MCA 270.12 SMA 118.34 ECC .24519 INC 2.9405 V1 30.287 RP 108.51 LAP -2.94 LOP 16.37 VP 36.396 GAP 13.38 A7P 89.99 TAL 174.01 TAP 84.13 RCA 89.33 APO 147.36 V2 34.924 RC 196.842 GL 17.36 GP -6.88 TAL 79.09 TAP 172.46 ETS 296.28 TAE 132.77 ETE 186.86 TAC 114.92 ETC 169.35 CLP-176.89
                                                                                       DISTANCE 525.366
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC

C3 20.174 VHL 4.492 DLA 26.75 RAL 18.82 RAD 6567.8 VEL 11.898 PTH 2.11 VHP 8.716 DPA -1.30 RAP 21.85 ECC 1.3320

LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG

90.00 D 55 40 3268.12 -25.09 115.48 249.20 76.42 1 50 8 2668.1 -26.71 107.19

90.00 22 6 33 3808.81 -12.24 149.80 244.37 64.27 23 10 2 3208.8 -15.61 142.74

100.00 2 49 4 2902.55 -28.00 89.29 249.91 79.08 3 37 27 2302.5 -29.22 80.69

100.00 22 55 50 3649.62 -9.59 136.73 242.99 61.55 23 56 40 3049.6 -13.32 129.92

110.00 4 50 33 2522.42 -33.78 61.40 250.89 84.41 5 32 36 1922.4 -34.18 52.18

110.00 23 10 51 3602.51 -4.59 130.12 239.95 56.09 24 10 53 3002.5 -9.01 123.82
   PLANETOCENTRIC CONIC
                                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                                   MID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                                  ST 2407.9 SR 419.2 55 480.9
CRT .9751 CR5 -.8917 CST -.9680
                                                                                   SGT 5215.3 SGR 430.9 SG3 108.8
     TOE 1.8608 TRA .8892 TC3-4.9723 BAU 1.3412
                                                                                   RRT .2673 RRF .2407 RTF .8658
SGB 5233.1 R23 .0081 R13 .8658
SG1 5216.6 SG2 415.1 THA 1.27
     ROE .3281 RRA -.0549 RC3 .0731 FAU .01869
FOE .4584 FRA .5963 FC3 -.8019 BSP 16767
BOE 1.8895 BRA .8909 BC3 4.9728 FSP -353
                                                                                                                                                  LSA 2486.3 MSA 149.9 55A 24.8
                                                                                                                                                   EL1 2442.4 EL2 91.6 ALF 9.65
                                                                                                                                                                ARRIVAL DATE JUL 4 1966
                                                                                         FLIGHT TIME 178.00
LAUNCH DATE JAN 7 1966
    RL 147.10 LAL -.00 LOL 106.24 VL 26.079 GAL 2.63 A7L 87.15 MCA 273.31 SMA 118.04 ECC .25014 INC 2.8464 V1 30.287 RP 108.47 LAP -2.84 LOP 19.56 VP 36.369 GAP 13.73 A7P 89.84 TAL 172.07 TAP 85.38 RCA 88.52 APO 147.57 V2 34.936 RC 198.673 GL 16.31 GP -6.71 7AL 75.41 ZAP 172.86 ETS 292.07 ZAE 132.95 ETE 186.76 ZAC 117.34 ETC 169.43 CLP-177.55
                                                                                        DISTANCE 530.747
   HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
     C3 21.229 VHL 4.608 DLA 27.19 RAL 23.03 RAD 6567.9 VEL 11.942 PTH 2.13 VMP 8.925 DPA -.14 RAP 24.08 ECC 1.3494
LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                    1 55 19
                                                                               119.15
                                                                                               254.17
                                        3321.79
3779.55
                                                              -24.18
                          Ø 59 57
          90.00
                                                                                                                                                                          -16.41
                                                                                                                                                                                            140.96
                                                                                                                                  23 38 47
                                                                                                                                                        3179.6
                                                                               148.08
                                                                                                249.86
                                                                                                                      64.67
                        22 35 48
                                                              -13.10
          90.00
                                                                                                                                                                          -28.87
                                                                                                                                                                                             83.62
                                                                                                                                    3 46 38
                                                                                                                                                        2342.6
                        2 57 35 2942.58
23 20 51 3634.00
                                                                                                                      77.67
                                                                                 92.13
                                                                                                 255.06
                                                              -27.45
        100.00
                                                                                                                      61.71 24 21 25
                                                                                                                                                        3034.0
                                                                                                                                                                          -13.80
                                                                                                                                                                                            129.01
                                                                              135.84
                                                                                                 248.31
                                                              -10.09
        100.00
                                                                                                                                                                       -34.15
                                                                                                                                                                                             54.48
                                                                                                                                    5 44 57
                                                                                                                                                        1952.0
                          5 2 25 2551.96
23 32 31 3597.38
                                                                                                                      83.08
                                                                                 63.67
                                                                                                256.26
                                                             -33.56
        110.00
                                                                                                                      56.11 24 32 28
                                                                                                                                                        2997.4
                                                                                                                                                                          -9.20
                                                                                                                                                                                            123.54
                                                                               129.85
                                                                                                245.09
                        23 32 31
        110.00
                                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                    SGT 5237.6 SGR 434.0 SG3 107.0
RRT .2887 RRF .2599 RTF .8729
SGB 5255.6 R23 .0066 R13 .8729
SGI 5239.1 SG2 415.4 THA 1.38
                                                                                                                                                   ST 2416.4 SR 425.8 SS 473.9
CRT .9661 CRS -.8783 CST -.9705
      TOE 1.8988 TRA 1.1832 TC3-4.7452 BAU 1.3469
     ROE .3420 RRA -.0482 RC3 .0587 FAU .01754
FDE .4448 FRA .6369 FC3 -.7152 BSP 16891
                                                                                                                                                   LSA 2493.9 MSA 156.6 55A 23.4
                                                                                                                                                   EL1 2451.2 EL2 108.3 ALF
                                                                                                                                                                                                 9.68
      BDE 1.9294 BRA 1.1842 BC3 4.7456 FSP -350
                                                                                                                                                                ARRIVAL DATE JUL 6 1966
                                                                                         FLIGHT TIME 180.00
LAUNCH DATE JAN 7 1966
                                                                                         DISTANCE 536.082
     RL 147.10 LAL -.00 LOL 106.24 VL 26.025 GAL 3.35 AZL $2,25 HCA 276.50 SHA 117.75 ECC .25560 INC 2.7516 V1 30.287 RP 108.43 LAP -2.73 LOP 22.75 VP 36.342 GAP 14.11 AZP 89,69 TAL 170.15 TAP 86.64 RCA 87.65 APO 147.85 V2 34.948 RC 200.481 GL 15.22 GP -6.56 ZAL 71.78 ZAP 173.20 ETS 287,832 ZAE 133.13 ETE 186.68 ZAC 119.75 ETC 169.46 CLP-178.22
    HELIOCENTRIC CONIC
    PLANETOCENTRIC CONIC
                                                                                                                                                            1.00 RAP 26.32 ECC 1.3713
      C3 22.560 VHL 4.750 DLA 27.51 RAL 27.19 RAD 6567.9 VEL 11.997 PTH Z.14 VHP 9.151 DPA
      LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ A7MTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 5 39 3372.51 -23.23 122.56 259.22 73.34 2 1 51 2772.5 -25.29 114.50 90.00 23 3 19 3758.22 -13.72 146.82 255.41 64.98 24 5 57 3158.2 -16.98 139.66
                        23 3 19 3758.22
3 7 39 2979.22
23 44 0 3626.74
5 15 18 2579.75
23 52 51 3598.98
                                                                                                                                                        2379.2
                                                                                                                                  3 57 18
                                                                                                 260.31
                                                                                                                      76.43
                                                                                 94.71
                                                              -26.89
                                                                                                                                                                          -14.02
                                                                                                                                                                                            128.59
                                                                                                                                                        3026.7
                                                                                135.43
                                                                                                 253.67
                                                                                                                       61.79 24 44.27
                                                              -10.33
         100.00
                                                                                                                                                        1979.8
                                                                                                                                                                          -34.08
                                                                                                                                                                                              56.65
                                                                                                                                  5 5A 17
                                                                                 65.81
                                                                                                 261.74
                                                                                                                       81.84
                                                              -33.31
                                                                                                                      56.11 24 52 50
                                                                                                                                                        2999.0
                                                                                                                                                                           -9.14
                                                                                                                                                                                             123.63
                                                                                129.93
                                                                                                 250.27
                                                               -4.72
         110.00
                                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                                     MID-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                    RRT .3101 RRF .2807 RTF .8795
SGB 5272.1 R23 .0065 R13 .8795
SGI 5255.8 SG2 414.6 THA 1.48
                                                                                                                                                    ST 2411.7 SR 431.0 SS 466.9
CRT .9557 CRS -.8639 CST -.9727
       TOE 1.9313 TRA 1.4960 TC3-4.4709 BAU 1.3485
      ROE .3571 RRA -.0395 RC3 .0455 FAU .01633
FOE .4318 FRA .6801 FC3 -.6268 BSP 16910
                                                                                                                                                    LSA 2488.4 MSA 165.3 SSA 21.8
                                                                                                                                                    EL1 2446.7 EL2 125.0 ALF 9.72
       BOE 1.9640 BRA 1.4965 BC3 4.4711 FSP -343
                                                                                                                                                                 ARRIVAL DATE JUL 8 1966
                                                                                          FLIGHT TIME 182.00
 LAUNCH DATE JAN 7 1966
                                                                                         DISTANCE 541.363
      RL 147.10 LAL -.00 LOL 106.24 VL 25.972 GAL 4.10 A7L 87.34 MCA 279.69 SMA 117.46 ECC .26164 INC 2.6555 VI 30.287 RP 108.39 LAP -2.62 LOP 25.94 VP 36.317 GAP 14.52 A7P 89.35 TAL 168.23 TAP 87.92 RCA 86.73 APO 148.20 V2 34.961 RC 202.264 GL 14.12 GP -6.42 TAL 68.24 TAP 173.48 ETS 282.03 TAE 133.29 ETE 186.61 TAC 122.16 ETC 169.45 CLP-178.89
     HELIOCENTRIC CONIC
     PLANETOCENTRIC CONIC
      LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 1 13 40 3416.84 -22.33 125.50 264.36 72.12 2 10 36 2816.8 -24.57 117 RR
                          23 27 53 3748.22
3 19 28 3011.28
                                                               -14.00
                                                                                 146.22
           90.00
                                                                                                                                                                           -28.11
                                                                                                                                                                                               88.58
                                                                                                                                     4 9 39
                                                                                                                                                          2411.3
                                                                                  96.95
                                                                                                  265.65
                                                                                                                       75.36
                                                               -26.36
          100.00
                                                                                                                                                          3029.0
                                                                                                                                                                           -13.95
                                                                                                                                                                                             128.72
                                                                                                                                     1 9 11
                                                                                 135.56
                                                                                                  259.02
                                                                                                                       61.77
                                                               -10.25
                                           3629.01
          100.00
                          0 8 41
                                                                                                                                    6 12 33
1 15 39
                                                                                                                                                                           -33.97
                                                                                                                                                                                               58.65
                                                                                                                                                          2005.5
                                                                                                                       80.71
                                                                                   67.77
                                                                                                   267.28
                                          2605.50
                                                               -33.05
                          5 29 8
          110.00
                                                                                                                                                                            -8.82
                                                                                                                                                                                             124.09
                                                                                                                                                          3007.6
                                                                                 130.38
                                                                                                                        56.07
                                                                                                  255.46
                          0 15 31
                                            3607.56
          110.00
                                                                                                                                                   ORBIT DETERMINATION ACCURACY
                                                                                     MIO-COURSE EXECUTION ACCURACY
     DIFFERENTIAL CORRECTIONS
                                                                                   SGI 5267.8 SGR 437.1 SG3 103.3

RRT .3301 RRF .2999 RTF .8867

SGB 5285.9 R23 .0057 R13 .8867

SGI 5269.8 SG2 412.4 THA 1.58
                                                                                                                                                    ST 2383.6 SR 434.3 SS 457.1
CRT .9437 CRS -.8477 CST -.9745
       TOE 1.9487 TRA 1.8202 TC3-4.1737 BAU 1.3505
       RDE .3728 RRA -.0291 RC3 .0330 FAU .01525
                                                                                                                                                   LSA 2459.3 MSA 175.2 55A 20.4
EL1 2418.7 EL2 141.6 ALF 9.79
       FOE .4165 FRA .7233 FC3 -.5454 BSP 17024
BOE 1.9840 BRA 1.8205 BC3 4.1738 FSP -340
```

LAUNCH DATE JAN 7 1966

HELIOCENTRIC CONIC

Ē

FLIGHT TIME 184.00

DISTANCE 546.580

ARRIVAL DATE JUL 18 1966

```
FLIGHT TIME 192.00
LAUNCH DATE JAN 7 1966
                                                                            DISTANCE 566.559
  HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.724 GAL 8.59 AZL 87.87 HCA 295.68 SMA 116.14 ECC .30291 INC 2.1314 V1 30.287 RP 108.19 LAP -1.92 LOP 41.94 VP 36.203 GAP 17.20 AZP 89.08 TAL 159.06 TAP 94.73 RCA 80.96 APO 151.32 V2 35.027
                          8.70 GP -5.90 TAL 52.49 TAP 173.63 ETS 250.44 TAE 133.90 ETE 186.31 TAC 134.11 ETC 168.62 CLP 177.59
    RC 210.800 GL
   PLANE TOCENTRIC CONIC
    C3 39.087 VHL 6.252 CLA 27.26 RAL 49.50 RAC 6568.5 VEL 12.667 PTH 2.30 VMP 11.013 DPA
                                                                                                                                        7.22 RAP 39.92 ECC 1.6433
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                      70.48 3 41 17
62.96 1 33 3
72.61 5 33 25
60.53 2 14 51
76.42 7 32 19
55.83 2 25 20
                                                                                   291.29
                                                                                                                                 2881.3
                                                                                                                                                                  121.91
                    2 43 16 3481.32
D 27 39 3923.78
                                                                     129.71
                                                                                                   70.48
                                                                                                                                                   -23.40
                                                      -20.93
        90.00
                                                                                                                                     3323.8
                                                                                                                                                    -12.32
                                                                                                                                                                     149.58
                                                                                     285.89
                                                                     156.45
        90.00
                                                      -8.76
                                                                                                                                                                      94.82
                                                                     102.96
                                                                                     292.66
                                                                                                                                     2499.3
                                                                                                                                                    -26.85
                                                     -24.70
                     4 41 46 3099.31
1 11 50 3781.03
       100.00
                                                                                                                                                                     137.44
                                                                                                                                     3181.0
                                                                                                                                                     -9.14
                                                                                     283.99
                                                                    144.07
       100.00
                                                       -5.25
                                                 -31.68
                                                                                                                                                                      66.46
                                                                                                                                     2106.8
                                                                                                                                                    -33.22
                     6 47 12 2706.78
1 22 54 3746.32
                                                                      75.35
                                                                                     294.85
       110.00
                                                                                                                                                    -3.39
                                                                                                                                                                    131.42
                                                                                                                                   3146.3
                                                                                     280.18
       110.00
                                                                     137.63
                                                       . 90
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                ST 2094.6 SR 421.0 SS 413.7
CRT .8518 CRS -.7413 CST -.9825
                                                                        SCT 5272.0 SGR 423.8 SG3 94.5
RRT .4240 RRF .3969 RTF .9230
SGB 5289.0 R23 .0038 R13 .9230
     TOE 1.9022 TRA 3.7420 TC3-2.5127 BAU 1.3131
    RDE .4591 RRA .0494 RC3 -.0045 FAU .01014
FDE .3399 FRA .9803 FC3 -.2246 BSP 17289
BDE 1.9569 BRA 3.7423 BC3 2.5127 FSP -317
                                                                                                                                LSA 2163.7 MSA 232.1 SSA 14.5
ELI 2125.4 EL2 217.4 ALF 9.82
                                                                         SG1 5275.0 SG2 383.6 THA 1.96
                                                                                                                                             ARRIVAL DATE JUL 20 1966
                                                                             FLIGHT TIME 194.00
LAUNCH DATE JAN 7 1966
                                                                             015TANCE 571.238
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.678 GAL 9.67 A7L 87.99 MCA 298.88 SMA 115.90 ECC .31405 INC 2.0116 V1 30.287
RP 108.15 LAP -1.76 LOP 45.14 VP 36.183 GAP 17.91 A7P 89.03 TAL 157.34 TAP 96.22 RCA 79.50 APO 152.30 V2 35.040
RC 212.427 GL 7.70 GP -5.82 ZAL 49.82 ZAP 173.38 ETS 244.16 ZAE 133.97 ETE 186.26 ZAC 136.45 ETC 168.27 CLP 176.83
   PLANETOCENTRIC CONIC
    ENCH AZMITH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMITH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 5 11 3479.19 -20.97 129.67 205.64
                                                                       103.57 297.93 72.34 5 52 2
146.87 288.52 60.30 2 21 47
76.60 300.16 75.73 7 48 30
39.86 284.75 55.90 2 34 41
MID-COURSE EXECUTION ACCURACY
SGT 5260.2 SGR 417 7
                                                                                                                                                      -10.47
                                                                                                                                                                     153.17
                                                                                     290.32
                                                                                                        62.45
                                                                                                                    1 36 43
                                                                                                                                     3385.6
                     0 30 18
                                     3985.56
                                                        -6.83
                                                                     159.96
         90.00
                                                                                                                                                    -26.70
                                                                                                                                                                      95.45
                                                                                                                                     2508.3
                                                       -24.52
                                                                     103.57
       100.00
                      5 0 14
                                     3108.26
                                                                                                                                                                     140.28
                      1 17 55 3831.72
7 3 7 2723.78
                                                                                                                                     3231.7
                                                                                                                                                     -7.47
       100.00
                                                       -3.55
                                                                     146.87
                                                                                                                                                    -33.04
                                                                                                                                                                      67.75
                                                                                                                                     2123.8
                                                      -31.40
                                                                      76.60
       110.00
                                                                                                                                                                      133.65
                                                                                                                                                      -1.96
                      1 31 32
                                     3788.97
                                                       2.53
                                                                     139.86
                                                                                                                                     3189.0
       110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 2027.2 SR 412.3 55 408.8
                                                                         SCT 5260.2 SGR 417.5 SG3 92.9 ST 2027.2 SR 412.3 SS 408.8 RRT .4415 RRF .4157 RTF .9303 CRT .8260 CRS -.7157 CST -.9843 SGB 5276.7 R23 .0033 R13 .9303 LSA 2094.7 MSA 241.7 SSA 13.7 SG1 5263.4 SG2 374.4 THA 2.02 EL1 2055.9 ELZ 229.1 ALF 9.66
     TOE 1.8709 TRA 4.1987 TC3-2.1984 BAU 1.2930
     RDE .4767 RRA .0700 RC3 -.0072 FAU .00919
     FOE .3257 FRA 1.0425 FC3 -.1808 BSP 17318
BOE 1.9307 BRA 4.1993 BC3 2.1984 FSP -312
                                                                                                                                            ARRIVAL DATE JUL 22 1966
LAUNCH DATE JAN 7 1966
                                                                              FLIGHT TIME 196.00
                                                                             DISTANCE 575.737
    HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.632 GAL 10:84 AZL 88.12 MCA 302.09 SMA 115.67 ECC .32647 INC 1.8842 V1 30.287 RP 108.11 LAP -1.60 LOP 48.35 VP 36.164 GAP 18.70 AZP 89.00 TAL 155.68 TAP 97.77 RCA 77.91 APO 153.43 V2 35.053 RC 214.027 GL 6.73 GP -5.74 ZAL 47.33 ZAP 173.03 ETS 238.25 ZAE 134.00 ETE 186.20 ZAC 138.76 ETC 167.83 CLP 176.04
    PLANETOCENTRIC CONIC
                                                                                                                                         9.04 RAP 44.46 ECC 1.8203
     C3 49.842 VML 7.060 DLA 26.57 RAL 55.44 RAD 6568.8 VEL 13.084 PTH 2.39 VMP 11.916 DPA
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                   70.56 4 24 24 62.06 1 39 23 72.10 6 10 22 60.15 2 27 21
                                                                                                                                  2877.7
                                                                                                                                                   -23.47
                       3 26 26 3477.69
                                                                                   301.87
                                                       -21.01
                                                                    129.47
         90.00
                                                                                                                                     3449.6
                                                                                                                                                       -8.50
                                     4049.63
                                                        -4.80
                                                                     163.58
                                                                                     294.61
                      0 31 54
         90.00
                                                                                                                                                     -26.56
                                                                                                                                     2516.7
                                                       -24.35
                                                                   104.13
                                                                                     303.09
                      5 18 26 3116.65
        100.00
                                                                                                                                                       -5.67
                                                                                     292.90
                                                                                                                                     3285.9
                                     3885.90
                                                        -1.71
                                                                     149.85
        100.00
                      1 22 35
                                                                       77.81 305.34 75.06 8 4 19
142.26 289.18 56.05 2 42 46
MID-COURSE EXECUTION ACCURACY
                                                                                                                                                                      69.02
                                                                                                                                     2140.5
                                                                                                                                                    -32.85
                      7 18 39 2740.50
                                                       -31.11
        110.00
                                                                                                                                     3234.8
                                                                                                                                                        -.21
                                     3834.82
                                                                     142.26
                       1 38 52
        110.00
                                                                                                                                 ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                                                                                 ST 1955.3 SR 402.0 SS 406.8
CRT .7984 CRS -.6902 CST -.9863
                                                                          SGT 5245.4 SGR 410.1 SG3 91.5
     TOE 1.8385 TRA 4.6896 TC3-1.8979 BAU 1.2647
                                                                          RRT .4589 RRF .4351 RTF .9375
SGB 5261.4 R23 .0031 R13 .9375
SG1 5248.8 SG2 364.1 THA 2.06
     RDE .4944 RRA .0923 RC3 -.0085 FAU .00819
                                                                                                                                 LSA 2031.5 MSA 249.6 SSA 12.9
     FDE .3133 FRA 1.1107 FC3 -.1422 BSP 17241
BDE 1.9038 BRA 4.6905 BC3 1.8979 FSP -306
                                                                                                                                 EL1 1991.7 EL2 238.9 ALF
                                                                                                                                             ARRIVAL DATE JUL 24 1966
                                                                               FLIGHT TIME 198.00
 LAUNCH DATE JAN 7 1966
                                                                              DISTANCE 580.016
    HELIOCENTRIC CONIC
     RL 147.10 LAL -.00 LOL 106.24 VL 25.589 GAL 12.10 AZL 88.25 MCA 305.30 SMA 115.44 ECC .34034 INC 1.7473 VI 30.287 RP 108.07 LAP -1.43 LOP 51.56 VP 36.145 GAP 19.57 AZP 88.99 TAL 154.09 TAP 99.39 RCA 76.15 APO 154.73 VZ 35.067 RC 215.599 GL 5.81 GP -5.67 ZAL 45.02 ZAP 172.59 ETS 232.78 ZAE 134.00 ETE 186.14 ZAC 141.04 ETC 167.32 CLP 175.23
    PLANETOCENTRIC CONIC
                                                                                                                                          9.89 RAP 46.72 ECC 1.9353
                                                                                                          2.44 VHP 12.446 DPA
     C3 56.834 VHL 7.539 DLA 26.15 RAL 58.10 RAD 6569.0 VEL 13.349 PTH
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 3 46 45 3477.88 -21.01 129.46 306.95 70.57 4 44 43 2877.5 -23.47 121.65 90.00 0 32 44 4114.84 -2.71 167.23 298.74 61.80 1 41 18 3514.8 -6.46 160.56
                                                                                                        71.85
                                                                                                                     6 28 9
                                                                                                                                      2525.0
                                                                                                                                                      -26.42
                       5 36 4
                                    3125.05
                                                       -24.17
                                                                      104.69
                                                                                      308.11
        100.00
                       1 26 5 3942.50
7 33 39 2757.16
1 45 0 3883.16
                                                                                                                    2 31 48
                                                                                                                                      3342.5
                                                                                                                                                       -3.77
                                                         .21
                                                                      152.95
                                                                                     297.12
                                                                                                        60.11
                                                                                                                     8 19 36
                                                                                                                                      2157.2
                                                                                                                                                                      70.28
                                                       -30.81
                                                                        79.02
                                                                                      310.38
                                                                                                        74.41
                                                                                                                    2 49 43
                                                                                                                                      3283.2
                                                                                                                                                         1.64
                                                                                                                                                                      138.56
                                                       6.11
                                                                                                        56.30
                                                                      144.80
                                                                                     293.46
        110.00
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                                  ORBIT DETERMINATION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                         SGT 5225.3 SGR 401.2 SG3 90.0 ST 1903.9 SR 389.9 S5 406.1

RRT 4793 RRF 4551 RTF 9447 CRT .7682 CR5 -.6633 CST -.9882

SGB 5240.7 R23 .0024 R13 .9447 LSA 1968.9 MSA 255.7 SSA 12.1

SGI 5228.8 SG2 352.8 THA 2.10 EL1 1927.8 EL2 246.6 ALF 9.09
     TOE 1.7982 TRA 5.2109 TC3-1.6206 BAU 1.2314
     ROE .5116 RRA .1158 RC3 -.0088 FAU .00723
FOE .3006 FRA 1.1836 FC3 -.1101 BSP 17267
BOE 1.8696 BRA 5.2121 BC3 1.6207 FSP -302
```

Ē

```
ARRIVAL DATE JUL 25 1966
LAUNCH DATE JAN 7 1966
                                                                            DISTANCE 584.024
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.546 GAL 13.47 AZL 88.40 MCA 308.51 SMA 115.22 ECC .35588 INC 1.5989 VI 30.287 RP 108.03 LAP -1.25 LOP 54.77 VP 36.128 GAP 20.55 AZP 89.00 TAL 152.59 TAP 101.10 RCA 74.22 APO 156.23 V2 35.080 RC 217.144 GL 4.92 GP -5.61 ZAL 42.89 ZAP 172.05 ETS 227.78 ZAE 133.96 ETE 186.08 ZAC 143.27 ETC 166.70 CLP 174.37
   PLANETOCENTRIC CONIC
    C3 65.225 VML 8.076 OLA 25.70 RAL 60.53 RAD 6569.2 VEL 13.659 PTH 2.50 VMP 13.039 DPA 10.69 RAP 48.95 ECC 2.0734 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 5 58 3478.77
0 32 56 4180.40
                                                                                                      70.54 5 3 56
61.69 1 42 37
                                                     -20.98
                                                                    129.54
                                                                                   311.85
                                                                                                                  5 3 56
                                                                                                                                   2878.8
                                                                                                                                                    -23.45
         90.00
                                                                                    302.73
                                                                                                                                    3580.4
                                                                                                                                                     -4.37
                                                                     170.89
         90.00
                                                        -.59
                      5 52 58 3133.78
1 28 37 4000.63
                                                                                                      71.60 6 45 12
60.18 2 35 17
                                                                                    312.96
                                                                                                                                    2533.8
                                                                                                                                                    -26.27
                                                                                                                                                                    97.22
                                                     -23.98
                                                                     105.27
       100.00
                                                                                                                                    3400.6
                                                                                    301.19
                                                                                                                                                     -1.81
                                                                                                                                                                   149.62
       100.00
                                                       2.18
                                                                    156.14
                                                                                                      73.76 8 34 14
56.65 2 55 37
                      7 48 1 2773.85
1 50 4 3933.32
                                                     -30.50
                                                                      80.22
                                                                                    315.25
                                                                                                                                    2173.9
                                                                                                                                                   -32.42
                                                                                                                                                                    71.53
       110.00
                                                                                    297.60
                                                                                                                                    3333.3
                                                                                                                                                      3.55
       110.00
                                                      7.99
                                                                     147.46
                                                                       HID-COURSE EXECUTION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                              ORBIT DETERMINATION ACCURACY
                                                                        SCT 5201.4 SGR 391.2 SG3 88.5
RRT .4912 RRF .4709 RTF .9516
SGB 5216.1 R23 .DD17 R13 .9516
SGI 5205.0 SGZ 340.5 THA 2.12
    TOE 1.7570 TRA 5.7716 TC3-1.3634 BAU 1.1888
                                                                                                                               ST 1848.5 SR 376.4 SS 408.0
    ROE .5285 RRA .1404 RC3 -.0083 FAU .00623
FOE .2891 FRA 1.2634 FC3 -.0827 BSP 17268
                                                                                                                               CRT .7368 CRS -.6368 CST -.9901
                                                                                                                              LSA 1912.5 MSA 259.4 55A 11.4
EL1 1869.5 EL2 251.7 ALF 8.69
    BOE 1.8348 BRA 5.7733 BC3 1.3634 FSP
                                                           -298
                                                                             FLIGHT TIME 202.00
                                                                                                                                           ARRIVAL DATE JUL 28 1966
LAUNCH DATE JAN 7 1966
                                                                            DISTANCE 587.698
   HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 25.505 GAL 14.97 AZL 88.56 MCA 311.72 SMA 115.01 ECC .37334 INC 1.4366 V1 30.287 RP 107.99 LAP -1.07 LOP 57.98 VP 36.111 GAP 21.65 AZP 89.04 TAL 151.18 TAP 102.91 RCA 72.07 APO 157.95 V2 35.092 RC 218.662 GL 4.08 GP -5.55 ZAL 40.95 ZAP 171.43 ETS 223.24 ZAE 133.86 ETE 186.01 ZAC 145.45 ETC 165.99 CLP 173.46
   PLANETOCENTRIC CONIC
    C3 75.335 VHL 8.680 OLA 25.23 RAL 62.74 RAO 6569.5 VEL 14.024 PTH
                                                                                                        2.56 VHP 13.706 DPA
    UNCH AZHTH LNCH TIME L-I TIME
90.00 4 23 59 3481.54
                                                  INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                     -20.92
                                                                                  316.56
                                                                                                      70.47 5 22 0
                                                                                                                                   2881.5
                                                                    129.72
                                                                                                                                                 -23.39
                    0 32 36 4245.75
6 8 59 3142.98
1 30 16 4059.55
8 1 37 2790.59
                                                                                    306.56
                                                                                                      61.72
                                                                                                                   1 43 22
                                                                                                                                    3645.8
                                                        1.52
                                                                     174.53
                                                                                                                                                     -2.28
                                                                                                                                                                    167.90
                                                                                                      71.34 7 1 22
60.37 2 37 56
73.12 8 48 8
57.12 3 0 32
                                                                                                                                    2543.0
                                                     -23.78
                                                                     105.88
                                                                                    317.63
                                                                                                                                                    -26.11
                                                                                                                                                                     97.86
                                                       4.17
                                                                                    305.09
                                                                                                                                    3459.5
                                                                                                                                                                   152.85
       100.00
                                                                    159.38
                                                                                                                                                       .19
                                                     -30.18
                                                                                    319.93
                                                                                                                                    2190.6
                                                                                                                                                    -32.19
                                                                                                                                                                    72.78
                                                                      81.42
                                                                                                                                    3364 .7
                      1 54 8
                                    3984.70
                                                       9.91
                                                                    150.21
                                                                                    301.58
                                                                                                                                                     5.50
                                                                                                                                                                    143.88
   DIFFERENTIAL CORRECTIONS
                                                                         MID-COURSE EXECUTION ACCURACY
                                                                                                                               ORBIT DETERMINATION ACCURACY
                                                                        RRT .5065 RRF .4882 RTF .9582
SG0 5187.6 R23 .0011 R13 .9582
SG1 5177.2 SG2 327.3 THA 2.14
                                                                                                                               ST 1798.6 SR 361.6 SS 412.7
CRT .7045 CRS -.6111 CST -.9920
     TOE 1.7155 TRA 6.3770 TC3-1.1271 BAU 1.1352
     ROE .5451 RRA .1660 RC3 -.0071 FAU .00517
                                                                                                                               LSA 1862.3 MSA 260.6 SSA 10.7
F14 1816.9 FL2 254.1 ALF 8.22
           .2790 FRA 1.3513 FC3 -.0594 BSP 17253
    FDE
    BOE 1.8000 BRA 6.3791 BC3 1.1272 FSP -293
                                                                                                                                          ARRIVAL DATE JUL 30 1966
                                                                            FLIGHT TIME 204.00
LAUNCH DATE JAN 7 1966
                                                                            DISTANCE 590.953
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LQL 106.24 VL 25.466 GAL 16.63 AZL 88.74 HCA 314.94 SMA 114.81 ECC .39303 INC 1.2570 V1 30.287
RP 107.95 LAP -.89 LOP 61.19 VP 36.096 GAP 22.90 AZP 89.11 TAL 149.91 TAP 104.85 RCA 69.69 APO 159.94 V2 35.105
RC 220.152 GL 3.28 GP -5.50 ZAL 39.20 ZAP 170.70 ETS 219.14 ZAE 133.70 ETE 185.93 ZAC 147.57 ETC 165.16 CLP 172.48
   PLANETOCENTRIC CONIC
    C3 87.596 VHL 9.359 DLA 24.74 RAL 64.74 RAD 6569.7 VEL 14.455 PTH 2.63 VHP 14.460 DPA 12.18 RAP 53.33 ECC 2.4416
    ENCH AZHTH ENCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                     70.37 5 30
49 1 43 34
45 35
                  4 40 46 3485.57

O 31 44 4310.45

6 24 2 3152.60

1 31 8 4118.65

8 14 24 2807.30

1 57 15 4036.72
                                                                                321.04
                                                                                                                                   2885.6
                                                                                                                                                  -23.32
                                                                    129.98
        90.00
                                                     -20.83
                                                                                                                                   3710.4
                                                                                                                                                     -.19
        90.00
                                                                                    310.22
                                                      3.60
                                                                    178.15
                                                                                                      71.07
                                                                                                               7 16 35
2 39 47
                                                                                                                                   2552:6
                                                                                                                                                   -25.94
       100.00
                                                    -23.57
                                                                    106.52
                                                                                    322.08
                                                                                                                                   3518.7
                                                                                                                                                     2.19
       100.00
                                                      6.15
                                                                    162.65
                                                                                    308.82
                                                                                                      60.69
                                                                                                                                                  -31.94
                                                                                                                 9 1 12
                                                                                                                                   2207.3
       110.00
                                                                                    324.38
                                                                                                      72.49
                                                    -29.84
                                                                     82.60
                                                                                                                  3 4 32
       110.00
                                                                    153.03
                                                                                    305.40
                                                                                                      57.69
                                                                                                                                   3436.7
                                                                                                                                                     7.47
                                                     11.81
                                                                        MID-COURSE EXECUTION ACCURACY
                                                                                                                              ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                        SCT 5143.7 SGR 367.4 SG3 85.9
RRT .5214 RRF .5053 RTF .9645
SGB 5156.8 R23 .0006 R13 .9645
SGI 5147.3 SG2 313.3 THA 2.14
                                                                                                                               ST 1756.3 SR 345.8 SS 420.8
CRT .6728 CRS -.5876 CST -.9937
     TOE 1.6794 TRA 7.0369 TC3 -.9101 BAU 1.0658
    RDE .5613 RRA .1924 RC3 -.0053 FAU .00396
FDE .2712 FRA 1.4495 FC3 -.0392 BSP 17134
BDE 1.7707 BRA 7.0396 BC3 .9101 FSP -287
                                                                                                                               LSA 1820.4 MSA 259.0 SSA 10.1
                                                                                                                               EL1 1771.9 EL2 253.6 ALF
                                                                            FLIGHT TIME 206.00
                                                                                                                                           ARRIVAL DATE AUG 1 1966
LAUNCH DATE JAN 7 1966
   HELIOCENTRIC CONIC
                                                                            DISTANCE 593.680
   RL 147.10 LAL -.00 LOL 106.24 VL 25.428 GAL 18.46 AZL 88.94 MCA 318.16 SMA 114.63 ECC .41531 INC 1.0560 V1 30.287 RP 107.91 LAP -.70 LOP 64.41 VP 36.082 GAP 24.32 AZP 89.21 TAL 148.78 TAP 106.94 RCA 67.02 APO 162.23 V2 35.117 RC 221.615 GL 2.52 GP -5.44 ZAL 37.65 ZAP 169.87 ETS 215.43 ZAE 133.47 ETE 185.85 ZAC 149.61 ETC 164.21 CLP 171.44
    RC 221.615 GL
   PLANETOCENTRIC CONIC
    C3 102.566 VML 10.128 DLA 24.24 RAL 66.51 RAD 6570.0 VEL 14.964 PTH 2.70 VMP 15.318 DPA 12.85 RAP 55.44 ECC 2.6880
    ENCH AZMTH LNCH TIME L-I TIME INJUAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                     4 56 16 3490.58
                                                     -20.71
                                                                                                      70.25
                                                                                                                 5 54 27
                                                                                                                                   2890.6
                                                                                                                                                                122.53
                                                                    130.30
                                                                                  325.27
                                                                                                                                                   -23.22
        90.00
                    0 30 19 4374.10
6 38 2 3162.49
1 31 14 4177.41
8 26 17 2823.80
1 59 28 4088.87
                                                                                                                                    3774.1
                                                                                                                  1 43 13
                                                                                                                                                                   175.06
                                                                    181.72
                                                                                    313.71
                                                                                                      62.20
                                                                                                                                                     1.86
        90.00
                                                       5.63
                                                                    107.17
                                                                                                                7 30 44
                                                     -23.35
                                                                                    326.28
                                                                                                      70.79
                                                                                                                                   2562.5
                                                                                                                                                   -25.76
                                                                                                                                                                    99.20
       100.00
                                                                                                                2 40 52
9 13 21
                                                                                                                                   3577.4
                                                       8.09
                                                                    165.93
                                                                                    312.37
                                                                                                      61.13
                                                                                                                                                     4.18
                                                                                                                                                                   159.33
       100.00
                                                                     83.76
                                                                                    328.59
                                                                                                      71.88
                                                                                                                                   2223.8
                                                                                                                                                   -31.68
                                                     -29.50
       110.00
                                                                    155.90
                                                                                    309.05
                                                                                                      58.37
                                                                                                                  3 7 37
                                                                                                                                   3488.9
                                                                                                                                                    9.41
                                                     13.69
       110.00
                                                                      55.90
MID-COURSE EXECUTION ACCURACY
SGT 5107.6 SGR 353.6 SG3 84.6
RRT .5349 RRF .5207 RTF .9703
SGR 5119.8 R23 -.0000 R13 .9703
                                                                                                                         ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                             ST 1716.3 SR 329.0 SS 431.6
CRT .6411 CRS -.5644 CST -.9951
     TOE 1.6418 TRA 7.7503 TC3 -.7160 BAU .9817
    RDE .5770 RRA .2188 RC3 -.0034 FAU .00266
FDE .2639 FRA 1.5575 FC3 -.0224 BSP 17118
BDE 1.7403 BRA 7.7534 BC3 .7160 FSP -284
                                                                     SGB 5119.8 R23 -.0000 R13 .9703
SGI 5111.1 SG2 298.6 THA 2.13
                                                                                                                              LSA 1781.8 MSA 255.0 SSA
                                                                                                                            EL1 1729.5 EL2 250.5 ALF 7.16
```

FLIGHT TIME 200.00

ARRIVAL CATE AUG 3 1966

```
FLIGHT TIME 208.00
LAUNCH DATE JAN 7 1966
                                                                     CISTANCE 595.733
   RL 147.10 LAL -.00 LOL 106.24 VL 25.393 GAL 20.51 A7L 89.17 MCA 321.38 SMA 114.45 ECC .44063 INC .8278 V1 30.287 RP 107.87 LAP -.52 LOP 67.62 VP 36.069 GAP 25.95 A7P 89.35 TAL 147.84 TAP 109.22 RCA 64.02 APO 164.88 V2 35.130 RC 223.050 GL 1.79 GP -5.39 TAL 36.32 TAP 168.92 ETS 212.06 TAE 133.15 ETE 185.75 TAC 151.55 ETC 163.13 CLP 170.30
  HELIOCENTRIC CONIC
  PLANETOCENTRIC CONIC
                                                                                              2.77 VHP 16.300 DPA 13.47 RAP 57.47 ECC 2.9912
    C3 120.991 VML 11.000 CLA 23.72 RAL 68.04 RAD 6570.3 VEL 15.567 PTH
    LNCH AZHTH LNCH TIME L-1 TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                     2896.2
                                                                                                                                     -23.11
                   5 10 30 3496.17
0 28 18 4436.37
                                                                                           70.11 6 8 46
                                                                           329.22
        90.00
                                                -20.58
                                                             130.56
                                                                                                                        3836.4
                                                                                                                                        3.87
                                                                                                                                                    178.55
                                                                                                       1 42 14
                                                                                             62.64
                                                  7.59
                                                              185.24
                                                                            316.99
        90.00
                                                                                                     7 43 47
2 41 9
9 24 32
                                                                                                                        2572.4
                                                                                                                                      -25.57
                                                                                                                                                     99.88
                   6 50 55 3172.39
1 30 34 4235.37
8 37 12 2839.87
2 0 46 4140.67
                                                                                             70.52
      100.00
                                                 -23.13
                                                              107.82
                                                                            330.20
                                                                                                                        3635.4
                                                                                                                                       6.12
                                                                                                                                                     162.54
                                                                                             61.68
                                                 9.98
                                                              169.20
                                                                            315.71
      100.00
                                                                                                                        2239.9
                                                                                                                                     -31.42
                                                                                                                                                     76.42
                                                                                             71.30
                                                 -29.15
                                                               84.89
                                                                            332.52
      110.00
                                                                                            59.16
                                                                                                        3 9 47
                                                                                                                        3540.7
                                                                                                                                       11.32
                                                                                                                                                    152.22
                                                              158.80
                                                                            312.49
      110.00
                                                 15.52
                                                                 MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
  DIFFERENTIAL CORRECTIONS
                                                                 SGT 5067.5 SGR 338.5 SG3 83.3
RRT .5471 RRF .5349 RTF .9757
                                                                                                                   ST 1680.8 SR 311.3 SS 445.9
CRT .6109 CRS -.5431 CST -.9963
    TOE 1.6106 TRA 8.5308 TC3 -.5414 BAU .8758
    ROE .5922 RRA .2449 RC3 -.0013 FAU .00112
                                                                 SGB 5078.8 R23 -.0006 R13 .9757
SG1 5070.9 SG2 283.2 THA 2.10
                                                                                                                    LSA 1749.0 MSA 248.6 55A 8.9
    FOE .2586 FRA 1.6786 FC3 -.0080 BSP 17069
                                                                                                                    EL1 1691.8 EL2 244.9 ALF 6.59
    BOE 1.7160 BRA 8.5343 BC3 .5414 FSP -280
                                                                                                                               ARRIVAL DATE AUG 5 1966
                                                                      FLIGHT TIME 210.00
LAUNCH DATE JAN 7 1966
                                                                     DISTANCE 596.919
  HELIOCENTRIC CONIC
   RL 147.10 LAL -.00 LOL 106.24 VL 25.361 GAL 22.82 AZL 89.43 HCA 324.60 SMA 114.29 ECC .46949 INC .5650 V1 30.287 RP 107.84 LAP -.33 LOP 70.84 VP 36.057 GAP 27.83 AZP 89.54 TAL 147.13 TAP 111.73 RCA 60.63 APO 167.94 V2 35.141 RC 224.456 GL 1.10 GP -5.34 ZAL 35.21 ZAP 167.83 ETS 208.99 ZAE 132.71 ETE 185.63 ZAC 153.37 ETC 161.92 CLP 169.06
  PLANETOCENTRIC CONIC
    C3 143.875 VHL 11.995 DLA 23.19 RAL 69.32 RAD 6570.6 VEL 16.285 PTH 2.85 VHP 17.430 DPA 14.04 RAP 59.41 ECC 3.3678 LNCH AZHTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZHTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                        6 21 46
                                                                           332.85
                                                                                                                        2901.9
                                                                                                                                     -23.00
                                                              131.03
                                                                                            69.98
                    5 23 24 3501.91
                                                 -20.45
                                                                                                                         3896.9
                                                                                                                                        5.80
                                                                                                                                                     181.95
                                                                                             63.19
                                                                                                        1 40 34
                                                                             320.03
                    0 25 37
                                 4496.94
                                                  9.47
                                                              188.70
                                                                                                        7 55 39
                                                                                                                         2582.0
                                                                                                                                       -25.39
                                                                                                                                                     100.53
                                                                             333.60
                                                                                             70.25
                    7 2 37 3181.97
                                                 -22.91
                                                              108.45
                                                                                                     2 40 37
                                                                                             62.33
                                                                                                                         3692.1
                                                                                                                                        8.00
                                                                                                                                                     165.70
                    1 29 5
                                                                             316.61
                                4292.12
                                                 11.80
                                                              172.43
       100.00
                                                                                                     9 34 40
3 10 59
                                                                                                                        2255.2
                                                                                                                                       -31.16
                                                                                                                                                      77.54
                                                                                             70.75
                    8 47 4 2855.20
                                                 -28.81
                                                                85.95
                                                                             336.12
                                                                                                                        3591.7
                                                                                                                                       13.17
                                                                                                                                                     155.01
                                                                                             60.04
                                                                             315.70
                    2 1 7
                                 4191.66
                                                 17.28
                                                               161.71
                                                                  MID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                  SGT 5023.3 SGR 322.2 SG3 82.2
RRT .5577 RRF .5474 RTF .9804
SGB 5033.6 R23 -.0011 R13 .9804
                                                                                                                    ST 1648.8 SR 293.1 55 464.1
    TOE 1.5883 TRA 9.3879 TC3 -.3858 BAU .7421
                                                                                                                    CRT .5828 CRS -.5240 CST -.9973
    ROE .6072 RRA .2699 RC3 .0008 FAU-.00073
FOE .2557 FRA 1.8150 FC3 .0044 BSP 17003
BOE 1.7004 BRA 9.3918 BC3 .3858 FSP -276
                                                                                                                    LSA 1721.1 MSA 239.9 SSA
                                                                                                                                                         8.3
                                                                  5G1 5026.5 SG2 267.3 THA 2.05
                                                                                                                    EL1 1657.8 EL2 236.9 ALF
                                                                                                                                                         6.04
                                                                                                                               APRIVAL DATE AUG 7 1966
                                                                      FLIGHT TIME 212.00
LAUNCH DATE JAN 7 1966
    RL 147.10 LAL -.00 LOL 106.24 VL 25.331 GAL 25.44 AZL 89.74 MCA 327.82 SHA 114.14 ECC .50249 INC .2563 VI 30.287
RP 107.80 LAP -.14 LOP 74.07 VP 36.048 GAP 30.01 AZP 89.78 TAL 146.70 TAP 114.52 RCA 56.79 APO 171.49 V2 35.153
                                                                      DISTANCE 596.978
   HELIOCENTRIC CONIC
                           .45 GP -5.29 ZAL 34.35 ZAP 166.60 ETS 206.18 ZAE 132.13 ETE 185.50 ZAC 155.05 ETC 160.60 CLP 167.67
    RC 225.834 GL
   PLANETOCENTRIC CONIC
    C3 172.583 VHL 13.137 DLA 22.66 RAL 70.33 RAD 6570.9 VEL 17.144 PTH 2.94 VHP 18.740 DPA 14.55 RAP 61.23 ECC 3.8403 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 5 34 55 3507.34 -20.32 131.38 336.10 69.85 6 33 22 2907.3 -22.89 123.64
                                                                                             59.85 6 32 --

51.84 1 38 5
                                                                                                                        3955.5
                                                                                                                                         7.64
        90.00
                     0 22 9
                                 4555.54
                                                  11.25
                                                               192.09
                                                                             322.79
                                                                                                                                       -25.22
                                                                                                                                                     101.13
                                                                                                        8 6 15
                                                                                                                        2590.8
                                                                                             70.02
       100.00
                    7 13 4
                               3190.84
                                                 -22.70
                                                               109.03
                                                                             337.04
                                                                                                       2 39 8
                                                                                                                                        9.80
                                                                                                                                                     168.81
                                                                                                                        3747.3
                                                 13.52
                                                               175.62
                                                                             321.63
                                                                                             63.08
                                                                                                     9 43 38
       100.00
                    1 26 41
                                 4347.28
                                                                                                                                       -30.91
                                                                                                                                                      78.47
                                                                                                                        2269.4
                     8 55 48 2869.44
2 0 26 4241.44
                                                                                             70.25
                                                 -28.49
                                                                86.93
                                                                             339.35
       110.00
                                                                                                                      3641.4
                                                                                                                                       14.94
                                                                                                                                                     157.78
                                                                                             61.00
                                                                                                         3 11 8
                                                 18.95
                                                               164.60
                                                                             318.63
       110.00
                                                                   HID-COURSE EXECUTION ACCURACY
                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                                                                    ST 1620.1 SR 274.5 SS 487.3
CRT .5581 CRS -.5079 CST -.9981
                                                                  SGT 4976.0 SGR 304.7 SG3 81.1
RRT .5663 RRF .5577 RTF .9847
SGB 4985.3 R23 -.0016 R13 .9847
    TOE 1.5830 TRAID.3354 TC3 -.2473 BAU
                                                     .5706
    ROE .6221 RRA .2928 RC3 .0028 FAU-.00307
FOE .2566 FRA 1.9703 FC3 .0154 BSP 16822
BOE 1.7009 BRA10.3396 BC3 .2473 FSP -271
                                                                                                                    LSA 1698.5 MSA 229.3 SSA
                                                                                                                                                         7.7
                                                                   SG1 4979.0 SG2 251.0 THA 1.99
                                                                                                                     EL1 1627.4 EL2 226.7 ALF
                                                                                                                                                         5.51
                                                                                                                                ARRIVAL DATE AUG 9 1966
                                                                       FLIGHT TIME 214.00
 LAUNCH DATE JAN 7 1966
                                                                       DISTANCE 595.560
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.306 GAL 28.44 AZL 90.11 HCA 331.05 SMA 114.01 ECC .54029 INC .1108 VI 30.287 RP 107.77 LAP .05 LOP 77.29 VP 36.041 GAP 32.57 AZP 90.10 TAL 146.62 TAP 117.67 RCA 52.41 APO 175.62 VZ 35.164 RC 227.182 GL -.17 GP -5.24 ZAL 33.77 ZAP 165.17 ETS 203.58 ZAE 131.38 ETE 185.34 ZAC 156.55 ETC 159.19 CLP 166.11
   PLANETOCENTRIC CONIC
                                                                                                3.02 VHP 20.268 DPA 15.01 RAP 62.88 ECC 4.4394
     C3 208.984 VHL 14.456 DLA 22.12 RAL 71.04 RAD 6571.2 VEL 18.174 PTM
     LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
                                                                                                                                      -22.79
                                                                                                         6 43 31
                                                                                                                         2911.9
                                                                                                                                                     123.95
                                                                            338.94
                                                                                              69.74
                     5 44 59
                                 3511.94
                                                 -20.22
                                                               131.67
        90.00
                                                                                                          1 34 36
                                                                                                                         4011.9
                                                                                                                                         9.39
                                                                                                                                                     188.48
                                                                              325.22
                                                                                              64.58
                                                               195.39
                     0 17 44
                                  4611.92
                                                  12.92
        90.00
                                                                                                                         2598.6
                                                                                                                                       -25.07
                                                                                                                                                     101.66
                                                               109.53
                                                                              339.85
                                                                                              69.81
                                                                                                         8 15 29
                     7 22 10
                                3198.56
                                                 -22.52
       100.00
                                                                                                                         3800.5
                                                                                                                                        11.51
                                                                                                                                                     171.84
                                4400.54
2882.22
                                                               178.75
                                                                              324.12
                                                                                              63.91
                                                                                                         2 36 35
                    1 23 14
                                                  15.14
       100.00
                                                                                                                                                       79.49
                                                                                              69.81
                                                                                                        9 51 19
                                                                                                                         2282.2
                                                                                                                                       -30.67
                                                                             342.16
                     9 3 17
                                                 -28.19
                                                                87.81
       110.00
                                                                                              62.04
                                                                                                         3 10 6
                                                                                                                         3689.6
                                                                                                                                        16.61
                                                                                                                                                      160.51
                                                               167.47
                                                                             321.24
                     1 58 36
                                 4289.65
                                                  20.51
       110.00
                                                                                                                     ORBIT DETERMINATION ACCURACY
                                                                  MID-COURSE EXECUTION ACCURACY
    DIFFERENTIAL CORRECTIONS
                                                                   SGT 4920.9 SGR 285.7 SG3 80.1
RRT .5711 RRF .5640 RTF .9883
                                                                                                                     ST 1590.3 SR 255.6 SS 515.0 CRT .5352 CRS -.4929 CST -.9987
     TOE 1.5905 TRA11.3744 TC3 -.1273 BAU .3559
     ROE .6368 RRA .3115 RC3 .0045 FAU-.00599
     FOE .2602 FRA 2.1456 FC3 .0248 BSP 16745
BOE 1.7133 BRA11.3787 BC3 .1274 FSP -268
                                                                                                                     LSA 1677.0 MSA 217.1 55A 7.1
                                                                   5GB 4929.2 R23 -. 0020 R13 .9883
                                                                  SG1 4923.6 SG2 234.4 THA 1.90
                                                                                                                     EL1 1596.2 EL2 215.1 ALF 5.01
```

```
FLIGHT TIME 216.00
                                                                                                                                                ARRIVAL DATE AUG 11 1966
LAUNCH DATE JAN 7 1966
                                                                               DISTANCE 592.196
   HELIOCENTRIC CONIC
    RL 147.10 LAL -.00 LOL 106.24 VL 25.285 GAL 31.91 AZL 90.57 MCA 334.27 SMA 113.91 ECC .58360 INC .5654 V1 30.287 RP 107.74 LAP .25 LOP 80.52 VP 36.036 GAP 35.59 AZP 90.51 TAL 146.98 TAP 121.25 RCA 47.43 APO 180.39 VZ 35.174 RC 228.500 GL -.76 GP -5.18 ZAL 33.51 ZAP 163.51 ETS 201.17 ZAE 130.41 ETE 185.15 ZAC 157.84 ETC 157.76 CLP 164.33
   PLANETOCENTRIC CONIC
    C3 255:654 VHL 15.989 DLA 21.58 RAL 71.40 RAD 6571.5 VEL 19.416 PTH 3.10 VMP 22.061 DPA 15.41 RAP 64.32 ECC 5.2074 LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH. INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG
    LNCH AZHTH LNCH TIME L-I TIME
                                                                                     341.29
                                                                                                      69.66 6 52 4
65.39 1 29 56
                                                                                                                                                      -22.73
         90.00
                      5 53 29 3515.16
                                                       -20.14
                                                                       131.88
                                                                                                                                        2915.2
                                                                                                                                                                         124.16
         90.00
                       0 12 10 4665.89
                                                        14.47
                                                                       198.59
                                                                                       327.25
                                                                                                                                         4065.9
                                                                                                                                                         11.03
                                                                                                                                                                         191.60
                                                                                                                    8 23 12
2 32 44
                                                                                                                                                                         102.07
       100.00
                      7 29 47
                                    3204.65
                                                       -22.38
                                                                       109.93
                                                                                       342.18
                                                                                                          69.65
                                                                                                                                         2604.6
                                                                                                                                                         -24.95
       100.00
                      1 18 33
                                      4451.64
                                                        16.64
                                                                       181.80
                                                                                       326.20
                                                                                                          64.80
                                                                                                                                         3851.6
                                                                                                                                                         13.11
                                                                                                                                                                         174.79
                                                                                                                    9 57 35
3 7 45
       110.00
                      9 9 22 2893.08
                                                      -27.93
                                                                        88.55
                                                                                       344.47
                                                                                                          69.44
                                                                                                                                         2293.1
                                                                                                                                                        -30.47
                                                                                                                                                                          80.27
       110.00
                      1 55 27
                                     4335.96
                                                        21.97
                                                                       170.27
                                                                                       323.45
                                                                                                          63.13
                                                                                                                                        3736.0
                                                                                                                                                         18.18
                                                                                                                                                                         163.18
                                                                           MID-COURSE EXECUTION ACCURACY
                                                                                                                                    ORBIT DETERMINATION ACCURACY
   DIFFERENTIAL CORRECTIONS
                                                                           SGT 4859.2 SGR 265.5 SG3 79.1
RRT .5712 RRF .5653 RTF .9913
SGB 4866.5 R23 -.0024 R13 .9913
                                                                                                                                    ST 1559.7 SR 236.6 SS 548.6 CRT .5152 CRS -.4800 CST -.9991
    TOE 1.6235 TRAI2.5179 TC3 -.0234 BAU .0822
    ROE .6518 RRA .3241 RC3 .0058 FAU-.00980
FDE .2690 FRA 2.3455 FC3 .0332 BSP 16625
BDE 1.7495 BRA12.5221 BC3 .0241 FSP -266
                                                                                                                                   LSA 1657.7 MSA 203.8 SSA 6.5
                                                                           SG1 4861.6 SG2 217.8 THA 1.79
                                                                                                                                   ELI 1564.5 EL2 202.1 ALF
                                                                                                                                                                            4.54
LAUNCH DATE JAN 7 1966
                                                                                FLIGHT TIME 218.00
                                                                                                                                                ARRIVAL DATE AUG 13 1966
   HELIOCENTRIC CONIC
                                                                                DISTANCE 586.268
    RL 147.10 LAL -.00 LOL 106.24 VL 25.271 GAL 35.96 AZL 91.14 MCA 337.50 SMA 113.84 ECC .63306 INC 1.1386 V1 30.287 RP 107.71 LAP .44 LOP 83.74 VP 36.036 GAP 39.17 AZP 91.05 TAL 147.90 TAP 125.39 RCA 41.77 APO 185.91 VZ 35.184 RC 229.788 GL -1.31 GP -5.11 ZAL 33.62 ZAP 181.58 ETS 198.92 ZAE 129.17 ETE 184.94 ZAC 158.87 ETC 156.41 CLP 162.28
   PLANETOCENTRIC CONTC
    C3 316.129 VHL 17.780 OLA 21.02 RAL 71.37 RAO 6571.8 VEL 20.915 PTH 3.19 VMP 24.177 DPA 15.75 RAP 65.50 ECC 6.2027 LNCH A7MTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ 2 LAT INJ 2 LONG 90.00 6 0 17 3516.42 -20.11 131.96 343.08 69.63 6 58 53 2916.4 -22.70 124.25 90.00 0 5 8 4717.33 15.91 201.68 328.79 66.26 1 23 45 4117.3 12.57 194.60
                     7 35 45 3200.56
1 12 21 4500.42
9 13 52 2901.58
1 50 42 4380.17
                                                                                                         69.55 8 29 14
65.75 2 27 21
69.16 10 2 14
       100.00
                                                       -22.29
                                                                       110.18
                                                                                       343.95
                                                                                                                                         2608.6
                                                                                                                                                         -24.87
                                                                                                                                                                         102.33
       100.00
                                                       18.03
                                                                       184.75
                                                                                       327.81
                                                                                                                                         3900.4
                                                                                                                                                         14.61
                                                                                                                                                                         177.64
       110.00
                                                       -27.73
                                                                        89.13
                                                                                       346.21
                                                                                                                                         2301.6
                                                                                                                                                         -30.30
                                                                                                                                                                          80.88
                                                                           MID-COURSE EXECUTION ACCURACY
                       1 50 42
       110.00
                                     4380.17
                                                        23.30
                                                                       173.01
                                                                                                                                         3780.2
                                                                                                                                                         19.64
                                                                                                                                                                         165.78
   DIFFERENTIAL CORRECTIONS
                                                                                                                                    ORBIT DETERMINATION ACCURACY
                                                                           SGT 4789.5 SGR 244.1 SG3 78.2
RRT .5640 RRF .5591 RTF .9937
                                                                                                                                   ST 1526.5 SR 217.7 S5 588.9
CRT .4981 CRS -.4688 CST -.9994
    TOE 1.6916 TRA13.7674 TC3
                                          .0652 BAU .2771
    ROE .6674 RRA .3271 RC3 .0067 FAU-.01485
FOE .2849 FRA 2.5736 FC3 .0407 B3P 16452
B0E 1.8185 BRA13.7712 BC3 .0656 FSP -263
                                                                           SGB 4795.7 R23 -.0028 R13 .9937
SG1 4791.5 SG2 201.4 THA 1.65
                                                                                                                                   LSA 1639.6 MSA 189.7 SSA 5.9
EL1 1530.4 EL2 188.3 ALF 4.13
                                                                                                                                               ARRIVAL DATE AUG 15 1966
LAUNCH DATE JAN 7 1966
                                                                               FLIGHT TIME 220.00
   HELIOCENTRIC CONIC
                                                                               DISTANCE 576.997
    RL 147.10 LAL -.00 LOL 106.24 VL 25.265 GAL 40.72 AZL 91.89 MCA 340.72 SMA 113.81 ECC .68899 INC 1.8933 V1 30.287
RP 107.68 LAP .63 LOP 86.97 VP 36.041 GAP 43.46 AZP 91.79 TAL 149.49 TAP 130.21 RCA 35.40 APO 192.22 VZ 35.194
RC 231.045 GL -1.82 GP -5.02 ZAL 34.17 ZAP 159.30 ETS 196.81 ZAE 127.59 ETE 184.68 ZAC 159.58 ETC 155.27 CLP 159.89
   PLANETOCENTRIC CONIC
    C3 395.201 VHL 19.880 DLA 20.44 RAL 70.88 RAO 6572.1 VEL 22.727 PTH 3.27 VHP 26.680 DPA 16.01 RAP 66.33 ECC 7.5040
    LNCH AZMTH LNCH TIME L-I TIME INJ LAT INJ LONG INJ RT ASC INJ AZMTH INJ TIME PO CST TIM INJ Z LAT INJ Z LONG
                                                                                                                                                                    124.16
                                                                                                                                                      -22.73
                       6 5 10 3515.07
25 52 21 4766.26
                                                                                   344.22
                                                                                                     69.67 7 3 45
67.17 25 11 47
                                                       -20.14
                                                                      151.67
                                                                                                                                    2915.1
         90.00
                    23 52 21
                                                        17.23
                                                                       204.67
                                                                                      329.77
                                                                                                                                        4166.3
                                                                                                                                                         13.99
                                                                                                                                                                        197.49
                    100.00
                                                      -22.26
                                                                       110.25
                                                                                      345.06
                                                                                                         69.52 8 33 22
                                                                                                                                        2609.7
                                                                                                                                                        -24.85
                                                                                                                                                                        102.41
                     1 4 16
                                                                      187.61
                                                                                      328.84
                                                                                                         66.72
                                                                                                                      2 20 3
                                                                                                                                        3946.8
                                                                                                                                                         15.99
                                                                                                                                                                        180.39
       100.00
                                                       19.30
                                                                                                         68.97 10 5 1
                      9 16 34 2907.17
1 44 4 4422.15
                                                                        89.50
                                                                                      347.29
                                                                                                                                        2307.2
                                                                                                                                                        -30.19
                                                                                                                                                                         81.28
                     9 16 34
                                                      -27.59
                                                                          MID-COURSE EXECUTION ACCURACY
                                                                       175.67
                                                                                                                                        3822.2
                                                                                                                                                         20.99
                                                                                                                                                                        164.30
                                                        24.52
   DIFFERENTIAL CORRECTIONS
                                                                                                                                  ORBIT DETERMINATION ACCURACY
                                                                          SGT 4709.5 SGR 221.6 SG3 77.4
RRT .5459 RRF .5417 RTF .9955
SGB 4714.7 R23 -.0031 R13 .9955
    TDE 1.8072 TRA15.1109 TC3 .1392 BAU .7365
                                                                                                                                   ST 1488.5 SR 199.3 SS 637.0 CRT .4832 CRS -.4587 CST -.9996
    ROE .6841 RRA .3159 RC3 .0070 FAU-.02163
FDE .3104 FRA 2.8326 FC3 .0474 8SP 16167
BDE 1.9323 BRA15.1142 BC3 .1394 FSP -260
                                                                                                                                  LSA 1621.9 MSA 175.4 SSA 5.4
```

SG1 4711.1 SGZ 185.6 THA 1.47

EL1 1491.7 EL2 174.1 ALF 3.75

	,		
•			
		٠.	